

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS
HAWAIIAN HOMES COMMISSION MEETING/WORKSHOP AGENDA
91-5420 Kapolei Parkway, Kapolei, O‘ahu, Hawai‘i, Interactive Conference Technology (ICT)
Monday, March 21, 2022, at 9:30 a.m. to be continued, if necessary, on
Tuesday, March 22, 2022, at 9:30 a.m.
Livestream available at www.dhhl.hawaii.gov/live

Note: Commission Meeting Packets will be available at dhhl.hawaii.gov by Thursday, March 17, 2022.

I. ORDER OF BUSINESS

- A. Roll Call
- B. Approval of Agenda
- C. Approval of Minutes for February 22 & 23, 2022
- D. Public Testimony on Agendized Items – see information below

II. ITEMS FOR DECISION MAKING

A. CONSENT AGENDA

Homestead Services Division

- D-2 Approval of Consent to Mortgage (see exhibit)
- D-3 Approval of Streamline Refinance of Loans (see exhibit)
- D-4 Approval of Homestead Application Transfers / Cancellations (see exhibit)
- D-5 Commission Designation of Successors to Application Rights – Public Notice 2013, 2018 & 2020 (see exhibit)
- D-6 Approval to Certify Applications of Qualified Applicants for the Month of February 2022 (see exhibit)
- D-8 Reinstatement of Deferred Application – **FRANCIS K.P. PALEA**
- D-9 Approval of Designation of Successors to Leasehold Interest and Designation of Persons to Receive the Net Proceeds (see exhibit)
- D-10 Approval of Assignment of Leasehold Interest (see exhibit)
- D-11 Approval of Amendment of Leasehold Interest (see exhibit)
- D-12 Approval to Issue Non-Exclusive Licenses for Rooftop Photovoltaic Systems for Certain Lessees (see exhibit)
- D-14 Approval for Request for Withdrawal of a Portion of Lot – **BRETT B.K. YAMADA**, Agricultural Lease No. 3571, Lot No. 184, Panaewa, Hawaii

B. REGULAR AGENDA

Office of the Chairman

- C-4 Approval of Lease Awards Ka‘uluokaha‘i Residential Subdivision-Turnkey Homes and Vacant Lot Oahu Increment B, Kapolei, Oahu. Approval of Lease Awards Kakaina Residential Subdivision- Vacant Lots, Waimanalo, Oahu. Approval of Lease Award Residential Subdivision-Hawaii Community College Home, Keaukaha, Hawaii Island (see exhibit)

Land Development Division

- E-1 Approval to Increase Construction Budgets for DHHL-USDA RD Water Improvement Projects at Anahola Farm Lots Water System and Hoolehua Water System Using NAHASDA Funds.

Planning Office

- G-1 Adoption of the Kapolei Regional Plan Update (2022) and Authorization to Disseminate the Regional Plan Update

Administrative Services Office

- H-1 Transfer of Hawaiian Home Receipts Fund at the End of the Third Quarter, FY 2022

III. EXECUTIVE SESSION

The Commission anticipates convening an executive meeting pursuant to Section 92-5(a)(4), HRS, to consult with its attorney on questions and issues pertaining to the Commission's powers, duties, privileges, immunities, and liabilities on the following matters:

1. Discussion on Lease Successorship Claim for Marian Kahale (Deceased), Lease No. 4051, Lot No. 61, Waimanalo, Oahu

IV. ITEMS FOR INFORMATION/DISCUSSION

A. REGULAR ITEMS

Homestead Services Division

- D-7 Approval to Cancel Applications of Non-Qualified Applicants (see exhibit)
- D-13 Commission Designation of Successor – **MARIAN I. KAHALE**, Residential Lease No. 4051, Lot No. 64, Waimanalo, Oahu
- D-1 HSD Status Reports
 - A.-Homestead Lease and Application Totals and Monthly Activity Reports
 - B.-Delinquency Reports

Land Development Division

- E-2 For Information Only --Waimanalo Projects Update
- E-3 For Information Only – Draft Environmental Assessment (DEA) Ma'ili Residential Development, Waianae, Oahu (Former Voice of America Site), and Anticipated Finding of No Significant Impact (AFONSI), TMK Nos. (1) 8-7-010: 030 and 031

B. WORKSHOPS

Office of the Chairman

- C-1 For Information Only – Legislative Updates 2022
- C-2 For Information Only – Draft Native Hawaiian Housing Block Grant Annual Housing Plan 2022-2023

- C-3 Appointment of Investigative Committee Pursuant to HRS section 92-2.5 and HAR section 10-2-16(b)(1) to Investigate, Review, Discuss, Vet, and Recommend Courses of Action to Address or Resolve the Outstanding Items from Act 14 (1995)
- C-5 For Information Only – Background and Status of Telecommunication and Broadband Services on Hawaiian Home Lands

Planning Office

- G-2 For Information Only – Draft DHHL South Molokai Shoreline Erosion Management Plan (SM-SEMP)
- G-3 For Information Only – The Importance of Land Stewardship in the Face of Climate Change in Hawai‘i
- G-4 For Information Only – Status Update on Plan Implementation in the Waimānalo Region

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS
HAWAIIAN HOMES COMMISSION MEETING/WORKSHOP AGENDA

91-5420 Kapolei Parkway, Kapolei, O‘ahu, Hawai‘i, ICT - Zoom
Tuesday, March 22, 2022 at 9:30 a.m.

I. ORDER OF BUSINESS

- A. Roll Call
- B. Public Testimony on Agendized Items - see information below

II. ITEMS FOR INFORMATION/DISCUSSION

A. GENERAL AGENDA

Requests to Address the Commission

- J-1 Kūhiō Lewis – Council for Native Hawaiian Advancement Rental and Mortgage Relief Programs
- J-2 Allen Cardines – Nānākuli Neighborhood Security Watch
- J-3 Bo Kahui – La‘i Opua
- J-4 Blossom Feiteira - Various
- J-5 Velma Mariano – Paukukalo Park
- J-6 Christie Keliikoa – Honokowai Project
- J-7 Richard Malaki – Nānākuli Neighborhood Security Watch
- J-8 Ainaaloha Ioane – King’s Landing

Office of the Chairman

- C-5 Update on issues related to Telecommunications and Broadband services on Hawaiian Home Lands

III. ITEMS FOR DECISION MAKING

- F-1 Approval to Issuance of Non-Exclusive License as Easement for Access (Ingress & Egress) purposes from a portion of Hawaiian home lands identified by TMK No. (3)6-4-008:024 (more commonly known as Kahili Road) to Jason K. & Melita A. DeLuz (Fee owners by Entirety of TMK No. (3)6-4-001:004, Puukapu, Island of Hawaii
- F-2 Approval to Issue First Amendment to Right of Entry No. 701, Hawaiian Telcom, Makuu, Island of Hawaii, TMKs: (3)1-5-119:051; (3)1-5-118:048; (3)1-5-120:036; and (3)1-5-121:046

IV. EXECUTIVE SESSION

The Commission anticipates convening an executive meeting pursuant to Section 92-5(a)(4), HRS, to consult with its attorney on questions and issues pertaining to the Commission’s powers, duties, privileges, immunities, and liabilities on the following matters:

- 1. Update on issues related to Telecommunications and Broadband services on Hawaiian Home Lands;
- 2. Discussion on *In re Paniolo Cable Company, LLC*, Case No. 18-01319 (RJF) before the U.S. Bankruptcy Court, District of Hawai‘i; and

3. Discussion on *United States of America vs. Sandwich Isles Communications, Inc., et al.*, Case No. 18-00145 (JMS-RT) before the U.S. District Court for the District of Hawai‘i

V. ANNOUNCEMENTS AND ADJOURNMENT

- A. Next HHC Meeting – March 21 & 22, 2022, Tuesday & Wednesday
- B. Adjournment

William J. Aila Jr., Chairman
Hawaiian Homes Commission

COMMISSION MEMBERS

Randy K. Awo, Maui
Patricia A. Teruya, O‘ahu
Pauline N. Namu‘o, O‘ahu
Michael L. Kaleikini, East Hawai‘i

Zachary Z. Helm, Moloka‘i
David B. Ka‘apu, West Hawai‘i
Dennis L. Neves, Kaua‘i
Russell K. Ka‘upu, O‘ahu

Pursuant to the Governor’s Proclamation Relating to the COVID-19 Delta Response, Hawai‘i Revised Statutes Chapter 92 regarding public agency meetings and records is currently suspended in part through till March 25, 2022 to the extent necessary to minimize the potential spread of COVID-19 and its variants.

If you need an auxiliary aid/service or other accommodation due to a disability, contact Michael Lowe at 620-9512, or michael.l.lowe@hawaii.gov, as soon as possible, preferably by March 14, 2022. If a response is received after then, we will try to obtain the auxiliary aid/service or accommodation, but we cannot guarantee that the request will be fulfilled. Upon request, this notice is available in alternate formats.

Public Testimony on Agendized Items can be provided either as: (1) written testimony or (2) live, oral testimony online by submitting a form **at least 24 hours prior**, at <https://dhhl.hawaii.gov/hhc/testimony/>, with your name, phone number, email address, and the agenda item on which you would like to testify. Once your request has been received, you will receive an email with the Zoom link via which to testify. You will need a computer with internet access, video camera and microphone to participate. If you require access by phone only, please indicate that in your request. Testimony will be limited to a maximum of three (3) minutes per person.

ITEM C-4 EXHIBIT

APPROVAL OF LEASE AWARDS KAULUOKAHAI RESIDENTIAL SUBDIVISION INCREMENT B
TURNKEY HOMES-KAPOLEI, OAHU

<u>NAME</u>	<u>APPL DATE</u>	<u>LOT NO</u>	<u>TAX MAP KEY</u>	<u>LEASE NO</u>
IRIS R. HEICK	11/28/1986	103	(1) 9-1-017-110	12978
RICHARD J. KAU	02/05/1987	99	(1) 9-1-017-110	12979

APPROVAL OF LEASE AWARD KAULUOKAHAI RESIDENTIAL SUBDIVISION INCREMENT B
VACANT LOT-KAPOLEI, OAHU

<u>NAME</u>	<u>APPL DATE</u>	<u>LOT NO</u>	<u>TAX MAP KEY</u>	<u>LEASE NO</u>
CHOYE J.K. LINO	08/24/1987	1	(1) 9-1-017-110	12980

APPROVAL OF LEASE AWARDS KAKAINA RESIDENTIAL SUBDIVISION VACANT LOT-
WAIMANALO, OAHU

<u>NAME</u>	<u>APPL DATE</u>	<u>LOT NO</u>	<u>TAX MAP KEY</u>	<u>LEASE NO</u>
MAMINETTE P. KAPULE	12/20/1971	37	(1) 4-1-041-037	12981
DAISY M. HOUGHTAILING	05/08/1972	38	(1) 4-1-041-038	12982
BERNARDSON C. MEDINA	08/07/1962	9	(1) 4-1-041-009	12983

APPROVAL OF LEASE AWARD HAWAII COMMUNITY COLLEGE HOME RESIDENTIAL LOT-
KEAUKAHA, HAWAII ISLAND

<u>NAME</u>	<u>APPL DATE</u>	<u>LOT NO</u>	<u>TAX MAP KEY</u>	<u>LEASE NO</u>
WAYNE KEAO KELIIKOA	6/4/1974	63A2	(3) 2-1-021-100	12984

ITEM D-2 EXHIBIT

APPROVAL OF CONSENT TO MORTGAGE

LESSEE	LEASE NO.	AREA
AHUNA, Dean E. K.	9246	Kaniohale, Hawaii
ALAPAI, Pua	9321	Kaniohale, Hawaii
ALBERT, Mary K. P.	2462	Waimanalo, Oahu
ANDERS, Robert M.	4973	Waimea, Hawaii
AURIO, Kacie K.	12113	Kaupea, Oahu
AUWAE, Dallas M.	7342	Nanakuli, Oahu
CALIZAR, Jennifer	3932	Waimanalo, Oahu
DAMASO, Lorilee L.	12161	Kaumana, Hawaii
FU, Luann L.	9591	Kalawahine, Oahu
GOSS, Theresa	6318	Keaukaha, Hawaii
GUTIERREZ, Ashley K.	8690	Anahola, Kauai
HEW LEN, Jaden K.	8483	Princess Kahanu Estates, Oahu
HIRAHARA, Aulii L.H.	9589	Kalawahine, Oahu
HOOGERWERF, Laura Ann L.	12611	Kanehili, Oahu
IOPA, Precious K. K. W.	8580	Nanakuli, Oahu
KAAIALII, John K.	280	Nanakuli, Oahu
KAEO, Samuel K.	7659	Waiohuli, Maui

KAHALIOUMI, Keenan K.	4263	Keaukaha, Hawaii
KALAMA, Lionel K.	8486	Princess Kahanu Estates, Oahu
KAMANAO, Jamie K.	12836	Kauluokahi, Oahu
KAOLULO, Martin J. K.	4111	Waimanalo, Oahu
KATO, Keala Ona Alii C.	12670	Kanehili, Oahu
KAU, Richard R.	12979	Kauluokahi, Oahu
KEKAHUNA, Lauae K.	6973B	Makuu, Hawaii
KIHUNE, Mychelle	12216	Waiehu 4, Maui
LEONG, Keone	12666	Kanehili, Oahu
LIANA, Bronson E. K.	11593	Kanehili, Oahu
LIKE, Raelene K.	12381	Kauluokahi, Oahu
LOVELL, Frank K.	10078	Waiehu 3, Maui
MAN, Jan-Maxine P.	8748	Nanakuli, Oahu
MCCLOSKEY, Celon K.	12978	Kauluokahi, Oahu
MCKEAGUE, Malama W.	10013	Keaukaha, Hawaii
NUUANU, Lordell K.	8381	Princess Kahanu Estates, Oahu
OSBORNE, Shawnette K.	12334	Kauluokahi, Oahu
PAISHON, Bianca P.	8566	Nanakuli, Oahu
PUKAHI-VIERNES, Lucianne Z. P.	5109A	Panaewa, Hawaii
RAPOZO, Jill H.	9287	Kaniohale, Hawaii
SETO, Duncan K.	11311	Kaumana, Hawaii
SHIM, Timothy Ah-Loe	7686	Waiohuli, Maui

ITEM D-3 EXHIBIT

APPROVAL OF STREAMLINE REFINANCE OF LOANS

LESSEE	LEASE NO.	AREA
BARROZO, Florence L.	5135	Nanakuli, Oahu

ITEM D-4 EXHIBIT

HOMESTEAD APPLICATION TRANSFERS / CANCELLATIONS

APPLICANT	AREA
AKAHI, Keoni K.	Maui IW Agr
AMARAL, Darrin P.	Maui IW Res
CACABELOS, Alexander K.	Hawaii IW Agr
CUSON, Annie K.	Waimanalo Area / Oahu IW Res
HEWAHEWA, Darren K.	Maui IW Res
IOPA, Precious Kuuipo K.	Oahu IW Res
KAMANA, Lopena	Oahu IW Res
KEPA, Kahaionamaka	Oahu IW Res
KUANONI, Samson K.	Maui IW Res
LEE, Lyron Jean L.	Hawaii IW Res
NAKI, Nadine E.L.	Oahu IW Res
NUUANU, Alice M.	Oahu IW Res
OSORIO, Emil M. III	Oahu IW Res
PAKELE, Raynie L.M.	Oahu IW Res
PANG, Rylen K.	Oahu IW Res

WATSON, Aaron
WHITE, Hazel M.

Oahu IW Res
Maui IW Agr

* IW = Islandwide

ITEM D-5 EXHIBIT

COMMISSION DESIGNATION OF SUCCESSOR – PUBLIC NOTICE 2013, 2018 & 2020

APPLICANT	AREA
AKAHI, Keoni K.	Maui IW Agr
CASTRO, Lambert	Maui IW Res
LAA, Carl V.	Oahu IW Res
LAA, Carl V.	Hawaii IW Agr

* IW = Islandwide

ITEM D-6 EXHIBIT

APPROVAL TO CERTIFY APPLICATIONS OF QUALIFIED APPLICANTS FOR THE MONTH OF
FEBRUARY 2022

APPLICANT	AREA
CHONG, Nolan K.	Oahu IW Agr
CHONG, Nolan K.	Oahu IW Res
CHOW, Wesley K.	Kauai IW Res
DAVIS, Priscilla H.	Kauai IW Agr
HOOIKAIIKA, Ellen K.	Kauai IW Pas
HOOIKAIIKA, Ellen K.	Kauai IW Res
HOOPAI, Kalelepono J.K.	Maui IW Agr
HOOPAI, Kalelepono J.K.	Maui IW Res
HOSAKA, Shana L.	Oahu IW Res
HOSAKA, Shana L.	Maui IW Pas
KEKUA, Tilsha-Rae	Oahu IW Res
KEKUA, Tilson	Oahu IW Res
KIAHA, Shanely M.	Maui IW Pas
LANI, Florence K.	Maui IW Res
LAWELAWE, William K., Jr.	Hawaii IW Res
LEATUAUI, Hawaii Loa Aloha Hue-Lani L.	Maui IW Agr
LEATUAUI, Hawaii Loa Aloha Hue-Lani L.	Maui IW Res
PALEA, Francis K.P.	Nanakuli Area / Oahu IW Res

* IW = Islandwide

ITEM D-7 EXHIBIT

APPROVAL TO CANCEL APPLICATIONS OF NON-QUALIFIED APPLICANTS

APPLICANT	AREA
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BRANDT, September D.K.	Oahu IW Res
BRANDT, September D.K.	Hawaii IW Pas
CAMBRA, John W.	Hawaii IW Agr
CAMBRA, John W.	Oahu IW Res
FOX, Wendell F.	Oahu IW Res
FOX, Wendell F.	Hawaii IW Agr
KAMOKU, Laura A.	Hawaii IW Res
KAMOKU, Laura A.	Hawaii IW Agr
MARTIN, Renee L.	Kauai IW Res
NEUMAN, Debbie-Lee K.	Oahu IW Res
NEUMAN, Debbie-Lee K.	Oahu IW Agr
QUEBATAY, Sheldean L.M.	Oahu IW Res
QUEBATAY, Sheldean L.M.	Oahu IW Agr
STITH, Anita L.	Hawaii IW Agr
STITH, Anita L.	Oahu IW Res

* IW = Islandwide

ITEM D-9 EXHIBIT

APPROVAL OF DESIGNATION OF SUCCESSORS TO LEASEHOLD INTEREST AND DESIGNATION OF PERSONS TO RECEIVE THE NET PROCEEDS

LESSEE	LEASE NO.	AREA
KAMAKAHI, George N., II	4157-A	Panaewa, Hawaii
NAPEAHI, Robert K., Jr.	3272	Keaukaha, Hawaii

ITEM D-10 EXHIBIT

APPROVAL OF ASSIGNMENT OF LEASEHOLD INTEREST

LESSEE	LEASE NO.	AREA
AEA, Eleanor E.	3112	Kapaakea, Molokai
AHUNA-KAAI, Chenoa N.	3896	Hoolehua, Molokai
AIPOALANI, Jan M.	3376	Nanakuli, Oahu
AUWAE, Theodore A. M. T.	280	Nanakuli, Oahu
CHAN, Marie A.	9321	Kaniohale, Hawaii
INN, Morris K.	11925	Kaupea, Oahu
KEAMO, Lucinda K.	6229	Panaewa, Hawaii
KEAMO, Renee K.	6229	Panaewa, Hawaii
MANE, Moru, Jr.	12394	Kanehili, Oahu
KAIMIKAUA, Pualani E. C.	12394	Kanehili, Oahu
MATSUSHIMA, Janet A.	1696Z	Nanakuli, Oahu
MCCANDLESS, Eve H.	3974	Waimanalo, Oahu
PAISHON, Caesar K., IV	8566	Nanakuli, Oahu
POMAIKAI, Samuel A., III	3777	Nanakuli, Oahu
CASTRO, Marshelle L.	7795	Hoolehua, Molokai

MANNERS, Moses H.	12969	Kauluokahai, Oahu
WAIPA, Susan K.	6266	Panaewa, Hawaii

ITEM D-11 EXHIBIT

APPROVAL OF AMENDMENT OF LEASEHOLD INTEREST

LESSEE	LEASE NO.	AREA
AEA, Eleanor E.	3112	Kapaakea, Molokai
AUWAE, Theodore A. M. T.	280	Nanakuli, Oahu
BRANDT, Gladys L. K. K.	3896	Hoolehua, Molokai
CHAI, Roman K.	428	Nanakuli, Oahu
KAMAKAHI, George N., II	4157-A	Panaewa, Hawaii
KANOA, Victor John H., Sr.	3709	Waimanalo, Oahu
KUPAU, April M. K.	3978	Waimanalo, Oahu
MATSUSHIMA, Janet A.	1696Z	Nanakuli, Oahu
MCCANDLESS, Eve H.	3974	Waimanalo, Oahu
NAPEAHI, Robert K., Jr.	3272	Keaukaha, Hawaii

ITEM D-12 EXHIBIT

APPROVAL TO ISSUE A NON-EXCLUSIVE LICENSE FOR ROOFTOP PHOTOVOLTAIC
SYSTEMS FOR CERTAIN LESSEES

LESSEE	LEASE NO.	AREA
KAIMIKAUA, Trevor R. A.	12394	Kanehili, Oahu
KAYATANI, Shannon H. K.	2121	Kewalo, Oahu
TURALDE, Ladd K. K.	11318	Kekaha, Kauai
WESTBROOK, Chantyll K.	9986	Nanakuli, Oahu

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

March 21-22, 2022

To: Chairman and Members, Hawaiian Homes Commission

From: Lehua Kinilau-Cano, HHL Legislative Analyst

Subject: For Information Only – Legislative Updates 2022

RECOMMENDATION/ACTION:

None; For information only.

DISCUSSION

DHHL LEGISLATIVE PROPOSALS

Legislative proposals approved by the Hawaiian Homes Commission were submitted for inclusion in the Administration's legislative package for the 2022 Regular Session. The following table reflects the Legislative Proposal, Description and Progress. The measures italicized were either withdrawn or have not advanced by the deadline and are essentially dead.

Legislative Proposal	Description	Progress
Proposal HHL-01(22) Independent Legal Counsel	Allows DHHL to retain independent legal counsel	SB2607 – Referred to JHA, FIN
Proposal HHL-02(22) Representation on CWRM	Adds the Chairman of the HHC or designee to CWRM	SB872 – Referred to WAL, JHA
Proposal HHL-03(22) Tax Exemption	Exempts any homestead development for DHHL from general excise taxes	SB3101 – Referred to JHA, FIN
<i>Proposal HHL-04(22) Cesspool Upgrade or Conversion</i>	<i>Establishes a low interest loan program for lessees with cesspools to be upgraded or converted</i>	<i>Withdrawn after consultation with the Department of Health</i> HB2088 – Referred to EET/AEN, WAM HB2195 – Referred to HTH/AEN, WAM
Proposal HHL-05(22) and HHL-06(22) County Boards of Water Supply	Clarifies requirements on the County Boards of Water Supply to reserve water credits for DHHL	SB1122 – WAL, JHA, FIN
Proposal HHL-07(22) Infrastructure Maintenance	Requires the Counties within 60 days to maintain infrastructure	SB879 – Referred to HSG, JHA, FIN
Proposal HHL-08(22) Historic Preservation Reviews	Allows DHHL to assume review of historic properties or burial sites for its lands	HB2135 – Referred to HWN/WTL, WAM SB3103 – Referred to WAL, JHA

<i>Proposal HHL-09(22) Gambling Study</i>	<i>Authorizes DHHL to commission a study on limited casino gaming</i>	<i>HB1962 – Referred to JHA/CPC SB2608 – Recommendation to Pass with Amendments Not Adopted</i>
<i>Proposal HHL-10(22) Interim Rules</i>	<i>Allows DHHL, after beneficiary consultation, to issue interim rules</i>	<i>HB2136 – GVR Deferred SB3104 – Referred to JDC</i>
<i>Proposal HHL-11(22) Compliance and Enforcement</i>	<i>Establishes a compliance and enforcement program with DHHL</i>	<i>Withdrawn after consultation with the AG HB2171 – Referred to PSM, WAM/JDC SB3139 – Referred to CMV, JHA, FIN SCR46/SR41 – Referred to HWN</i>
<i>Proposal HHL-12(22) Adoption</i>	<i>Allows an adopted individual to benefit both by natural and adoptive parent</i>	<i>HB2137 – Referred to JHA, FIN SB3105 – Referred to JDC</i>

THE STATE BUDGET

The House Finance Committee passed HB1600, the Governor’s Supplemental Budget request with amendments. The Governor’s Supplemental Budget request for FY 2023 included \$15,795,216 in general funds to cover the department’s existing personnel, administrative and operating costs and an additional \$5 million for the statewide loan capitalization program. The budget also included \$35 million in CIP funding for FY 2023. The House Draft 1 of HB1600 includes the \$15,795,216 in general funds as proposed in the Governor’s Supplemental Budget request, but reduced the \$5 million in loan capitalization since funding for homeowner financing is included in the proposed \$600 million in funding for DHHL. Chair Luke indicated that since the \$600 million is aimed at addressing DHHL’s waitlist, \$10 million is being included to address existing homestead communities. The House Finance committee included \$35 million in CIP funding for FY 2023 as proposed in the Governor’s Supplemental Budget request and specifically noted that \$41.5 million would be included in the Rental Housing Revolving fund to finance the redevelopment of DHHL property at 820 Isenberg St. in Honolulu for rental housing for native Hawaiian beneficiaries. This funding proposed for DHHL is in addition to the \$600 million. A chart highlighting the budget information is attached as Exhibit ‘A’.

MEASURE TRACKING

Staff has prepared a measure tracking spreadsheet listing all measures that impact the department that are still moving in the Legislature. The current spreadsheet with the status of each measure as of 03-13-22 is attached as Exhibit ‘B’.

In addition to the bills and resolutions that specifically reference the department, staff monitors and prepares testimony as appropriate on measures that would impact Hawaiian Home lands or the department as a state agency.

RECOMMENDED MOTION/ACTION

None; For information only.

DHHL's "Sufficient Funds" & Executive Supplemental Budget FY 2023 – Operating

	FY2023 DHHL	FY2023 GOV	FY2023 HB1600, HD1
A & O Budget Request (A)	(206) \$30,023,876	(200) \$15,795,216	(200) \$15,795,216
Operating R&M for Existing Infrastructure (A)	\$4,323,000		\$10,000,000
Loan Capitalization (A)		\$5,000,000	
Rehab Projects (A)	^\$14,704,100		
Total HHC A & O Budget Request	\$49,050,976	\$20,795,216	\$25,795,216

^ Includes \$1,960,000 requested by homestead leaders.



DHHL's "Sufficient Funds" & Executive Supplemental Budget FY 2023 – CIP

	FY2023 DHHL	FY2023 GOV	FY2023 HB1600, HD1
CIP R&M for Existing Infrastructure (C)	\$47,650,000	\$5,000,000	\$5,000,000
Lot Development (C)	\$86,300,000	\$30,000,000	\$30,000,000
Loans (C)	\$73,100,000		
Rehab Projects (C)	*\$56,440,000		
Total	\$263,490,000	\$35,000,000	\$35,000,000

*Total reflects projects requested by homestead leaders.



Exhibit A

Measure #	Report Title	Measure Title	Description	Status	Introducer(s)	Current Referral	Comp.
HB1179 HD1	Gorse; Mauna Kea; Pilot Program; DHHL; Appropriation	RELATING TO INVASIVE SPECIES.	Establishes a pilot program within the Aina Mauna legacy program of the department of Hawaiian home lands to remove and harvest gorse from Mauna Kea and develop it as a marketable product to expand economic opportunities for native Hawaiians. Requires reports to the legislature. Appropriates funds. Sunsets 6/30/2025. (HD1)	S 3/8/2022: Referred to HWN/AEN, WAM.	TODD, ILAGAN, KAPELA, LOWEN, MORIKAWA, NAKASHIMA, TARNAS	HWN/AEN, WAM	
HB1403 HD1	Puna; Alternate Route Site Selection Survey; Department of Transportation; Appropriation	RELATING TO AN ALTERNATE ROUTE SITE SELECTION SURVEY IN PUNA.	Requires the department of transportation, in collaboration with the county of Hawaii, to conduct site surveys on the island of Hawaii to identify the most suitable location for an alternate route in Puna below Highway 130. Excludes lands under the jurisdiction of the department of Hawaiian home lands from site surveys. Appropriates funds. Effective 7/1/2050. (HD1)	S 3/11/2022: The committee(s) on TRS has scheduled a public hearing on 03-15-22 3:00PM; Conference Room 224 & Videoconference.	ILAGAN	TBS, WAM	
HB1600 HD1	State Budget	RELATING TO THE STATE BUDGET.	Adjusts and requests appropriations for fiscal biennium 2021-2023 funding requirements for operations and capital improvement projects of executive branch agencies and programs. (HD1)	H 3/14/2022: Reported from FIN (Stand. Com. Rep. No. 1027-22) as amended in HD 1, recommending passage on Second Reading and placement on the calendar for Third Reading.	SAIKI (introduced by request of another party)	FIN	SB2176
HB2088 HD3	Hawaii Green Infrastructure Authority; Counties; Property Assessed Financing; Cesspool Upgrade and Conversion; Property Resilience; Environmental and Economic Development Financing; Appropriation	RELATING TO FINANCING.	Creates the environmental and economic development revolving loan fund under the administration of the Hawaii green infrastructure authority. Allows property owners to finance qualifying improvements through a non-ad valorem property assessment. Appropriates funds. Effective 7/1/2100. (HD3)	S 3/11/2022: Referred to EET/AEN, WAM.	SAIKI (introduced by request of another party)	EET/AEN, WAM	SB3056

Measure #	Report Title	Measure Title	Description	Status	Introducer(s)	Current Referral	Comp.
HB2135 HD2	Historic Preservation; DHHL; DLNR; Reviews of Proposed State Projects	RELATING TO HISTORIC PRESERVATION REVIEWS.	Allows DHHL to assume historic preservation review of the effect of any proposed state project for lands under its jurisdiction under certain conditions and subject to certain exceptions for state projects affecting properties listed or nominated for inclusion in the Hawaii register of historic places or located in a designated historic district. Effective 7/1/2050. Repealed on 6/30/2027. (HD2)	S 3/11/2022: Referred to HWN/WTL, WAM.	SAKI (Introduced by request of another party)	HWN/WTL, WAM	SB3103
HB2171 HD2	Law Enforcement; Corrections and Rehabilitation; Training Center; DPS; DOT; AG; Office of Homeland Security; Appropriation	RELATING TO PUBLIC SAFETY.	Establishes a department of law enforcement to consolidate and administer criminal law enforcement and investigations functions of the State effective upon approval and reestablishes the department of public safety as an independent department of corrections and rehabilitation to administer the corrections, rehabilitation, and reentry of the inmate population effective 1/1/2023. Transfers the law enforcement functions of the department of public safety to the department of law enforcement effective 1/1/2023, and the law enforcement functions of the department of transportation, the non-statutorily mandated functions of the investigations division of the department of the attorney general, and the office of homeland security to the department of law enforcement effective 7/1/2023. Establishes a training center. Appropriates funds. Effective 7/1/3000. (HD2)	S 3/11/2022: The committee(s) on PSM has scheduled a public hearing on 03-15-22 1:00PM; Conference Room 229 & Videoconference.	SAKI (Introduced by request of another party)	PSM, WAM/JDC	SB3139

Measure #	Report Title	Measure Title	Description	Status	Introducer(s)	Current Referral	Comp.
HB2195 HD2	Cesspool Compliance Pilot Grant Project; Appropriation	RELATING TO CESSPOOLS.	Establishes a cesspool compliance pilot grant project to assist low- and moderate-income property owners, including lessees on Hawaiian home lands, with the costs of upgrading, converting, or connecting a cesspool. Applies to cesspools identified as failing by the department of health. Appropriates funds. Effective 7/1/2100. (HD2)	S 3/11/2022: Referred to HTH/AEN, WAM.	KITAGAWA, BRANCO, ELI, HASHIMOTO, HOLT, ILAGAN, JOHANSON, LOWEN, MATAYOSHI, MATSUMOTO, NISHIMOTO, PERRUSO, SAYAMA, TAM, TODD, WILDBERGER, YAMASHITA, B. Kobayashi	HTH/AEN, WAM	
HB2288 HD2	Department of Hawaiian Home Lands, Land Transfer	RELATING TO LAND.	Transfers certain land to the department of Hawaiian home lands. Effective 7/1/2050. (HD2)	S 3/11/2022: Referred to HRE/HWN, WAM.	BRANCO, HASHIMOTO, HOLT, ILAGAN, MORIKAWA, SAYAMA, TARNAS, Belatti, Luke	HRE/HWN, WAM	
HB2511 HD2	DHHL; Native Hawaiian Rehabilitation Fund; Report; Appropriation	RELATING TO THE DEPARTMENT OF HAWAIIAN HOME LANDS.	Appropriates funds into and out of the native Hawaiian rehabilitation fund for DHHL to fulfill its fiduciary duties to beneficiaries. Requires DHHL to submit an annual report to the legislature. (HD2)	S 3/11/2022: The committee(s) on HWN has scheduled a public hearing on 03-15-22 1:01PM; Conference Room 016 & Videoconference.	SAIKI, AQUINO, BELATTI, BRANCO, CLARK, CULLEN, ELI, GANADEN, GATES, HAR, HASHEM, HASHIMOTO, HOLT, ICHİYAMA, ILAGAN, JOHANSON, KAPELA, KITAGAWA, B. KOBAYASHI, D. KOBAYASHI, LOPRESTI, LOWEN, LUKE, MARTEN, MATAYOSHI, MCKELVEY, MIZUNO, MORIKAWA, NAKAMURA, NAKASHIMA, NISHIMOTO, OHNO, ONISHI, PERRUSO, QUINLAN, SAYAMA, TAKAYAMA, TAKUMI, TAM, TARNAS, TODD, TOKIOKA, WILDBERGER, WOODSON, YAMANE, YAMASHITA	HWN, WAM	SB3359
SB872 SD1	Commission on Water Resource Management; Hawaiian Homes Commission; Representation; Membership	RELATING TO THE COMMISSION ON WATER RESOURCE MANAGEMENT.	Adds the chairperson of the Hawaiian Homes Commission or the chairperson's designee to serve as an ex officio, voting member on the Commission on Water Resource Management. Takes effect 7/1/2050. (SD1)	H 3/10/2022: Referred to WAL, JHA, referral sheet 24	SHIMABUKURO, KANUHA, KEOHOKALO, MISALUCHA, Gabbard	WAL, JHA	
SB879 SD1	Counties; Infrastructure Maintenance; Department of Hawaiian Home Lands.	RELATING TO COUNTIES.	Gives counties jurisdiction over the infrastructure of the Department of Hawaiian Home Lands housing developments in their boundaries under specific conditions. Requires counties, under specific conditions, to commence maintenance on that certain infrastructure within sixty days. (SD1)	H 3/10/2022: Referred to HSG, JHA, FIN, referral sheet 24	SHIMABUKURO, KEOHOKALO, MISALUCHA, Acasio	HSG, JHA, FIN	

Measure #	Report Title	Measure Title	Description	Status	Introducer(s)	Current Referral	Comp.
SB2567 SD1	DHHL; Beneficiary List; Database; Appropriation	RELATING TO NATIVE HAWAIIAN BENEFICIARIES.	Requires the Department of Hawaiian Home Lands to digitize its applicant, beneficiary, and lessee records by creating an interactive digital database software program to be completed and available for use no later than 7/1/2023. Appropriates moneys. Effective 7/1/2050. (SD1)	H 3/11/2022: Bill scheduled to be heard by HET on Wednesday, 03-16-22 2:00PM in House conference room 309 Via Videoconference.	DECOITE, CHANG, FEVELLA, KEOHOKALOIE, Acasio, Riviere	HET, JHA, FIN	
SB2607 SD1	Department of Hawaiian Home Lands; Legal Counsel	RELATING TO INDEPENDENT LEGAL COUNSEL.	Allows the Department of Hawaiian Home Lands to retain independent legal counsel as needed. Authorizes the Department of Hawaiian Home Lands to use the services of the Attorney General as needed and when the interests of the State and the Department of Hawaiian Home Lands are aligned. Provides that funds owed to independent legal counsel shall be paid by the State. Takes effect 7/30/2075. (SD1)	H 3/10/2022: Referred to JHA, FIN, referral sheet 24	KEOHOKALOIE, CHANG, MISALUCHA, RHOADS, SHIMABUKURO, Acasio, Ihara, Keith-Agaran, Riviere	JHA, FIN	
SB2623 SD2	Department of Hawaiian Home Lands; Lessees; Waitlists	RELATING TO THE HAWAIIAN HOMES COMMISSION ACT.	Excludes from any waiting list maintained by the Department of Hawaiian Home Lands any lessee or successor who sells or transfers their lease on a tract of Hawaiian home lands. (SD2)	H 3/11/2022: Bill scheduled to be heard by JHA on Tuesday, 03-15-22 2:00PM in House conference room 325 Via Videoconference.	DECOITE, CHANG, INOUE, KEOHOKALOIE, RIVIERE, Baker, Kanuha, Keith-Agaran, Kim, San Buenaventura	JHA, FIN	
SB3101 SD2	Department of Hawaiian Home Lands; Homestead Development; General Excise Tax; Use Tax; Exemption	RELATING TO TAX EXEMPTION.	Exempts any homestead development for the Department of Hawaiian Home Lands from the general excise tax and use tax. Effective 7/1/2050. (SD2)	H 3/10/2022: Referred to JHA, FIN, referral sheet 24	KOUCHI (Introduced by request of another party)	JHA, FIN	HB2133
SB3103 SD1	Historic Preservation; DHHL; Project Reviews of Proposed State Projects	RELATING TO HISTORIC PRESERVATION REVIEWS.	Allows the Department of Hawaiian Home Lands to assume historic preservation review of the effect of any proposed project for lands under its jurisdiction, except for projects affecting properties listed or nominated for inclusion in the Hawaii register of historic places or the national register of historic places. Effective 7/1/2050. (SD1)	H 3/10/2022: Referred to WAL, JHA, referral sheet 24	KOUCHI (Introduced by request of another party)	WAL, JHA	HB2135

Measure #	Report Title	Measure Title	Description	Status	Introducer(s)	Current Referral	Comp.
SB3139 <u>SD2</u>	PSD; AG; DOT; Office of Homeland Security; Law Enforcement; Corrections and Rehabilitation; Appropriation	RELATING TO PUBLIC SAFETY.	Establishes a Department of Law Enforcement to consolidate and administer criminal law enforcement and investigations functions of the State. Reestablishes the Department of Public Safety as an independent Department of Corrections and Rehabilitation to administer state corrections and rehabilitation, and reentry of the inmate population. Transfers the law enforcement functions of the Department of Public Safety to the Department of Law Enforcement, and the law enforcement functions of the Department of Transportation, the non-statutorily mandated functions of the Investigations Division of the Department of the Attorney General, and the Office of Homeland Security to the Department of Law Enforcement. Appropriates funds to the Department of Law Enforcement and Department of Corrections and Rehabilitation. Effective 7/1/2050. (SD2)	H 3/11/2022: Bill scheduled to be heard by CMV on Wednesday, 03-16-22 10:00AM in House conference room 430 Via Videoconference.	KOUCHI (Introduced by request of another party)	CMV, JHA, FIN	HB2171
SB3195 <u>SD2</u>	DHHL; Hawaiian Home Lands; Geothermal Resources; Appropriation	RELATING TO THE DEPARTMENT OF HAWAIIAN HOME LANDS.	Appropriates moneys to the Department of Hawaiian Home Lands for the investigation, exploration, and identification of geothermal resources on Hawaiian home lands. Effective 7/1/2050. (SD2)	H 3/11/2022: Bill scheduled to be heard by EEP on Tuesday, 03-15-22 9:00AM in House conference room 325 Via Videoconference.	DELA CRUZ, CHANG, GABBARD, INOUE, KEITH-AGARAN, KIDANI, RHOADS, WAKAI	EEP, JHA, FIN	
SB3247 <u>SD2</u>	DHHL; Housing Waitlist	RELATING TO HAWAIIAN HOME LANDS.	Requires the Department of Hawaiian Home Lands to build rental units, apartments, and rent-with-option-to-buy housing units to address the housing needs of Native Hawaiians on the waitlist for homestead leases. Effective 7/1/2050. (SD2)	H 3/10/2022: Referred to HSG, JHA, FIN, referral sheet 24	DECOITE, CHANG, INOUE, KEITH-AGARAN, MISALUCHA, RHOADS, Dela Cruz, Kidani, San Buenaventura, Wakai	HSG, JHA, FIN	

Measure #	Report Title	Measure Title	Description	Status	Introducer(s)	Current Referral	Comp.
SB3359, SD2	DHHL; Native Hawaiian Rehabilitation Fund; Appropriation	RELATING TO THE DEPARTMENT OF HAWAIIAN HOME LANDS.	Requires the Department of Hawaiian home Lands to submit certain annual reports to the Legislature regarding the native Hawaiian rehabilitation fund. Appropriates moneys into and out of the fund for Hawaiian home lands lots, related projects, and down payment assistance and mortgage payment assistance to the department's beneficiaries. Effective 7/1/2050. (SD2)	H 3/10/2022: Referred to JHA, FIN, referral sheet 24	KEOHOKALOIE, ACASIO, CHANG, DECOITE, DELA CRUZ, FEVELLA, INOUE, KANUHA, KEITH-AGARAN, KIDANI, LEE, SAN BUENAVENTURA, SHIMABUKURO, Baker, Gabbard, Riviére	JHA, FIN	HB2511
HC62	Department of Hawaiian Home Lands; Hawaiian Homes Commission Act; Beneficiary Consultation	URGING THE DEPARTMENT OF HAWAIIAN HOME LANDS TO NOTIFY BENEFICIARIES THROUGH BENEFICIARY CONSULTATION PRIOR TO DISPOSING OF HAWAIIAN HOME LANDS AND TO EXERCISE OTHER PROTECTIONS OF BENEFICIARY INTERESTS.		H 3/11/2022: Offered	ELI, KAPELA, LOWEN, MCKELVEY, NAKASHIMA, TAM		HR56
HC63	Hawaiian Home Lands; Waitlist	REQUESTING THAT THE DEPARTMENT OF HAWAIIAN HOME LANDS IMPLEMENT PROGRAMS TO SUPPORT VERY LOW INCOME NATIVE HAWAIIAN BENEFICIARIES.		H 3/11/2022: Offered	ELI		HR57
HC116	DHHL; DLNR; Hawaiian Home Lands; Natural Resources; Exchange	REQUESTING THE CONVENING OF A LAND TRANSFER TASK FORCE TO REVIEW CERTAIN LANDS FOR EXCHANGE BETWEEN THE DEPARTMENT OF HAWAIIAN HOME LANDS AND DEPARTMENT OF LAND AND NATURAL RESOURCES.		H 3/11/2022: Offered	BRANCO, CLARK, GANADEN, GATES, HASHIMOTO, MARTEN, NAKASHIMA, OHNO, PERRUSSO, TAKAYAMA, TAM, WILDBERGER		HR116
HC145	DLNR; Working Group; Crown Lands; Native Hawaiians	REQUESTING THE DEPARTMENT OF HAWAIIAN HOME LANDS TO ESTABLISH A WORKING GROUP TO RETURN CROWN LANDS TO NATIVE HAWAIIANS.		H 3/11/2022: Offered	WILDBERGER, KAPELA, D. KOBAYASHI, PERRUSSO, TAM		HR145
HR112	Requests the creation of a Department of Hawaiian Home Lands Construction Oversight Committee.	REQUESTING THE STATE HOUSE OF REPRESENTATIVES TO CREATE A DEPARTMENT OF HAWAIIAN HOME LANDS HOUSING CONSTRUCTION OVERSIGHT COMMITTEE.		H 3/11/2022: Offered	WARD, ILAGAN		

Measure #	Report Title	Measure Title	Description	Status	Introducer(s)	Current Referral	Comp.
<u>SCR15</u>	Hawaiian Home Lands; Waitlist	REQUESTING THAT THE DEPARTMENT OF HAWAIIAN HOME LANDS IMPLEMENT PROGRAMS TO SUPPORT VERY LOW INCOME NATIVE HAWAIIAN BENEFICIARIES.		S 3/10/2022: The committee(s) on HWN recommend(s) that the measure be PASSED, WITH AMENDMENTS. The votes in HWN were as follows: 5 Aye(s); Senator(s) Shimabukuro, Keohokaloie, Acasio, Ihara; Aye(s) with reservations: Senator(s) Fevella ; 0 No(es); none; and 0 Excused: none.	SHIMABUKURO, CHANG, FEVELLA, INOUE, KEOHOKALOIE, MISALUCHA, Baker, Dela Cruz, Gabbard, Kidani, San Buenaventura, Wakai	HWN	SR9
<u>SCR46</u>	Department of Hawaiian Home Lands; Enforcement; Police	REQUESTING THE HAWAIIAN HOMES COMMISSION TO CONDUCT A FEASIBILITY STUDY ON THE CREATION OF AN ENFORCEMENT DIVISION FOR THE DEPARTMENT OF HAWAIIAN HOME LANDS.		S 3/11/2022: The committee(s) on HWN has scheduled a public hearing on 03-15-22 1:01PM; Conference Room 016 & Videoconference.	KANUHA, CHANG, INOUE, MISALUCHA, SHIMABUKURO, WAKAI, Baker, Gabbard, Kidani, Nishihara, San Buenaventura	HWN	SR41
<u>SCR47</u>	Kaā'ū Water System; Progress Report	REQUESTING THE DEPARTMENT OF HAWAIIAN HOME LANDS, IN CONJUNCTION WITH THE COUNTY OF HAWAII DEPARTMENT OF WATER SUPPLY, TO PROVIDE A PROGRESS REPORT REGARDING THE DEVELOPMENT OF THE KĀĀ'U WATER SYSTEM.		S 3/11/2022: The committee(s) on HWN has scheduled a public hearing on 03-15-22 1:01PM; Conference Room 016 & Videoconference.	KANUHA, ACASIO, CHANG, GABBARD, INOUE, KEITH-AGARAN, MISALUCHA, SAN BUENAVENTURA, Nishihara, Shimabukuro, Wakai	HWN	SR42
<u>SCR91</u>	Department of Hawaiian Home Lands; Hawaiian Homes Commission Act; Hawaiian Home Lands Recovery Act	URGING THE UNITED STATES TO SATISFY ITS OBLIGATIONS TO THE DEPARTMENT OF HAWAIIAN HOME LANDS AND THE HAWAIIAN HOME LANDS TRUST UNDER THE HAWAIIAN HOME LANDS RECOVERY ACT.			KEOHOKALOIE, BAKER, GABBARD, KEITH-AGARAN, MISALUCHA, SHIMABUKURO, Nishihara, Riviere, Wakai		SR81
<u>SCR112</u>	Hawaiian Home Lands; Beneficiaries; Damages; Governor	URGING THE GOVERNOR TO COMPLY WITH THE HAWAII SUPREME COURT RULING IN KALIMA V. STATE OF HAWAII AND STOP OPPOSING THE PAYMENT OF DAMAGES TO BENEFICIARIES HARMED BY THE STATE'S BREACH OF TRUST.		S 3/11/2022: Offered.			
<u>SCR125</u>	DLNR; Working Group; Crown Lands; Native Hawaiians	REQUESTING THE DEPARTMENT OF HAWAIIAN HOME LANDS TO ESTABLISH A WORKING GROUP TO RETURN CROWN LANDS TO NATIVE HAWAIIANS.		S 3/11/2022: Offered.	ACASIO, FEVELLA, Gabbard, Shimabukuro		SR99
<u>SCR188</u>	Department of Hawaiian Home Lands; Hawaiian Homes Commission Act; Beneficiary Consultation	URGING THE DEPARTMENT OF HAWAIIAN HOME LANDS TO NOTIFY BENEFICIARIES THROUGH BENEFICIARY CONSULTATION PRIOR TO DISPOSING OF HAWAIIAN HOME LANDS AND TO EXERCISE OTHER PROTECTIONS OF BENEFICIARY INTERESTS.		S 3/11/2022: Offered.	KEOHOKALOIE, CHANG, GABBARD, SHIMABUKURO, Nishihara, San Buenaventura		SR110
					FEVELLA, ACASIO, CHANG, Riviere, Wakai		SR183

STATE OF HAWAI'I
DEPARTMENT OF HAWAIIAN HOME LANDS

March 21-22, 2022

To: Chairman and Members, Hawaiian Homes Commission

From: Lehua Kinilau-Cano, HHL Legislative Analyst

Subject: For Information Only - Draft Native Hawaiian Housing
Block Grant Annual Housing Plan 2022-2023

RECOMMENDED MOTION/ACTION:

None. For information only.

DISCUSSION

Each year, as part of its compliance with 24 CFR Part 1006, Title VIII of the Native American Housing Assistance and Self-Determination Act (NAHASDA), the Department of Hawaiian Home Lands (DHHL) must file an approved annual housing plan (AHP) with the U.S. Department of Housing and Urban Development (HUD). As part of that process, the department releases the draft housing plan.

Notable changes to the AHP:

- Down Payment/Closing Cost Assistance or matching funds through an IDA for new construction or home purchase.
- DHHL Kupuna Rental Assistance Program for kupuna who are sixty-two years of age or older and head of household starting with those who have been on DHHL's waiting list the longest.
- DHHL Disability Rental Assistance Program for persons with a disability who are at least eighteen years of age, but not yet sixty-two and head of household starting with those who have been on DHHL's waiting list the longest.

For DHHL's Use: July 1, 2022 thru June 30, 2023 Annual Housing Plan

NATIVE HAWAIIAN HOUSING PLAN

(NAHASDA §§ 803(b)(1), 803(c)(1) and 820(a)(2))

This form meets the requirements for a Native Hawaiian Housing Plan (NHHP) and Annual Performance Report (APR) required by the United States Department of Housing and Urban Development. The information requested does not lend itself to confidentiality.

Regulatory and statutory citations are provided throughout this form as applicable. The Department of Hawaiian Home Lands (DHHL) is encouraged to review these citations when completing the NHHP and APR sections of the form.

Under Title VIII of the Native American Housing Assistance and Self-Determination Act of 1996 (NAHASDA) (25 U.S.C. 4101 et seq.), HUD will provide grants under the Native Hawaiian Housing Block Grant (NHHBG) program to DHHL to carry out affordable housing activities for Native Hawaiian families who are eligible to reside on the Hawaiian Home Lands. To be eligible for the grants, DHHL must submit a NHHP that meets the requirements of the Act. To align the NHHBG program with recent improvements made to the Indian Housing Block Grant program, HUD is requiring DHHL to submit the NHHP to HUD at least 75 days prior to the start of its 12-month fiscal year. The APR is due no later than 60 days after the end of DHHL's fiscal year (24 CFR § 1006.410).

The NHHP and the APR (previously two separate forms) are now combined into one form. The sections pertaining to the NHHP are submitted **before** the beginning of the 12-month fiscal year, leaving the APR (shaded) sections blank. If the NHHP has been updated or amended, use the most recent version when preparing the APR. After the 12-month fiscal year, enter the results from the 12-month fiscal year in the shaded sections of the form to complete the APR. More details on how to complete the NHHP and APR sections of the form can be found in the body of this form. In addition, DHHL may find it helpful to refer to the IHP/APR form guidance available at http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/ih/codetalk/nahasda/guidance until a guidance specific to the NHHP/APR form is made available.

FORM COMPLETION OPTIONS: The NHHP/APR form may be completed either in hard copy or electronically. Hard copy versions may be completed either by hand or typewriter. Alternatively, the form may be completed electronically as it is a Word document. It is recommended that the form be completed electronically because it is more efficient to complete, submit, and review the form. Furthermore, electronic versions of the form may be submitted to HUD as an email attachment. To document official signatures on the electronic version, you should sign a hard copy of the pages and either fax (808-457-4694) that signed page or email (claudine.c.allen@hud.gov) it as an attachment to the Office of Native American Programs – Attention: Claudine Allen in the HUD Honolulu Field Office. The sections of the NHHP that require an official signature are the Cover Page and Sections 13 and 14, if applicable. For the APR, the Cover Page requires an official signature.

The NHHP data is used to verify that planned activities are eligible, expenditures are reasonable, and DHHL certifies compliance with related requirements. The APR data is used to audit the program accurately and monitor DHHL's progress in completing approved activities, including reported expenditures, outputs, and outcomes. This form is exempt from OMB Approval pursuant to 5 CFR 1320.3(4)(c).

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE NUMBER</u>
COVER PAGE.....	3
SECTION 1: FIVE YEAR PLAN.....	5
SECTION 2: HOUSING NEEDS	10
SECTION 3: PROGRAM DESCRIPTIONS	15
SECTION 4: AFFORDABLE HOUSING RESOURCES	47
SECTION 5: BUDGETS.....	53
SECTION 6: OTHER SUBMISSION ITEMS	56
SECTION 7: NATIVE HAWAIIAN HOUSING PLAN CERTIFICATION OF COMPLIANCE	58
SECTION 8: SELF-MONITORING.....	59
SECTION 9: INSPECTIONS	60
SECTION 10: AUDITS	61
SECTION 11: PUBLIC AVAILABILITY	62
SECTION 12: JOBS SUPPORTED BY NAHASDA.....	63
SECTION 13: NHHP WAIVER REQUESTS.....	64
SECTION 14: NHHP AMENDMENTS.....	65

Note: The page numbers in the Table of Contents can update automatically as the NHHP or APR is completed. To update the page numbers, right-click anywhere in the table, select "Update Field" and select "update page numbers only."

Native Hawaiian Housing Block Grant (NHHBG)

Exempt from OMB Approval. 5 CFR 1320.3 (c) (4)

NHHP/APR

U.S. Department of Housing and Urban Development

Office of Public and Indian Housing

Office of Native American Programs

COVER PAGE

(1) Grant Number: **15HBGHI0001; 17HBGHI0001; 18HBGHI0001; 19HBGHI0001; 20HBGHI0001; 21HBGHI0001; 22HBGHI0001**

(2) Recipient Fiscal Year: **2023**

(3) Federal Fiscal Year: **2022**

(4) ☒ Initial Plan (Complete this Cover Page then proceed to Section 1)

(5) ☐ Amended Plan (Complete this Cover Page and Section 14)

(6) ☐ Annual Performance Report (Complete items 24-27 and proceed to Section 3)

(7) Name of Recipient: Department of Hawaiian Home Lands		
(8) Contact Person: Lehua Kinilau-Cano, HHL Legislative Analyst		
(9) Telephone Number with Area Code: 808-620-9486		
(10) Mailing Address: PO Box 1879		
(11) City: Honolulu	(12) State: HI	(13) Zip Code: 96805
(14) Fax Number with Area Code (if available): 808-620-9529		
(15) Email Address (if available): Nicole.L.Kinilau-Cano@hawaii.gov		

(16) Tax Identification Number: 99-0266483
(17) DUNS Number: 809935661
(18) CCR/SAM Expiration Date: 06/05/2022
(19) NHHBG Annual Grant Amount: \$2,000,000
(20) Name of Authorized NHHP Submitter: William J. Aila, Jr.
(21) Title of Authorized NHHP Submitter: Chairman, Hawaiian Homes Commission
(22) Signature of Authorized NHHP Submitter:
(23) NHHP Submission Date: 04/22/2022
(24) Name of Authorized APR Submitter:
(25) Title of Authorized APR Submitter:
(26) Signature of Authorized APR Submitter:
(27) APR Submission Date:

Certification: The information contained in this document is accurate and reflects the activities actually planned or accomplished during the program year. Activities planned and accomplished are eligible under applicable statutes and regulations.

Warning: If you knowingly make a false statement on this form, you may be subject to civil or criminal penalties under 18 U.S.C 1001. In addition, any person who knowingly and materially violates any required disclosure of information, including intentional disclosure, is subject to a civil money penalty not to exceed \$10,000 for each violation.

SECTION 1: FIVE YEAR PLAN

The Five Year Plan is intended to cover the Department of Hawaiian Home Lands' (DHHL) long range plans for affordable housing. Each housing plan must contain, for the five-year period beginning with the fiscal year for which the plan is first submitted, the following information.

Five Year Period: **2022** through **2026**

MISSION STATEMENT (NAHASDA § 803(b)(2)(A))

A Mission Statement describes the mission of the DHHL to serve the needs of Native Hawaiian low-income families.

Enter the DHHL's Mission Statement here:

To manage the Hawaiian Home Lands Trust effectively and to develop and deliver land to native Hawaiians. We will partner with others toward developing self-sufficient and healthy communities.

GOALS, OBJECTIVES AND PROGRAMS/ACTIVITIES (NAHASDA § 803(b)(2)(B) and (C))

DHHL must provide a statement of the goals, objectives, and programs/activities planned for the beneficiaries over the five year period. The goals are the intended result of the NHHBG activity and are based on the types of outcomes that the DHHL will report in the APR. The objectives are the means or approach that the DHHL will use to reach the goal. The programs/activities are the specific programs/activities that will be funded in order to achieve the goal and the objective.

Goals May Include:

- | | |
|--|--|
| (1) Reduce over-crowding | (6) Assist affordable housing for college students |
| (2) Assist renters to become homeowners | (7) Provide accessibility for disabled/elderly persons |
| (3) Improve quality of substandard units | (8) Improve energy efficiency |
| (4) Address homelessness | (9) Reduction in crime reports |
| (5) Create new affordable rental units | (10) Other |

Objectives May Include:

- | | |
|--|---|
| (1) [RESERVED – DO NOT USE THIS NUMBER] | (14) Lending subsidies for homebuyers |
| (2) [RESERVED – DO NOT USE THIS NUMBER] | (15) Other homebuyer assistance activities |
| (3) Acquisition of rental housing | (16) Rehabilitation assistance to existing homeowners |
| (4) Construction of rental housing | (17) Tenant based rental assistance |
| (5) Rehabilitation of rental housing | (18) Other Housing Service |
| (6) Acquisition of land for rental housing development | (19) Housing Management Services |
| (7) Development of emergency shelters | (20) Operation and maintenance of NHHBG units |
| (8) Conversion of other structures to affordable housing | (21) Crime Prevention and Safety |
| (9) Other rental housing development | (22) Model Activities |
| (10) Acquisition of land for homebuyer unit development | (23) [RESERVED – DO NOT USE THIS NUMBER] |
| (11) New construction of homebuyer units | (24) Infrastructure to support housing |
| (12) Acquisition of homebuyer units | (25) [RESERVED – DO NOT USE THIS NUMBER] |
| (13) Downpayment/Closing cost assistance | |

Use the sections below to describe the DHHL's goals, objectives, and programs/activities during the five year period.

Goal(s) Number: I.	(2) Assist renters to become homeowners
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Select from the goals listed above.

Objective(s) Number: Ia.	(24) Infrastructure to support housing
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Select from the objectives listed above.

Program/Activity Description: Infrastructure Development (Statewide)	To develop lots statewide.
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Describe the planned program/activity and indicate how it will enable DHHL to meet its mission, goals, and objectives.

Goal(s) Number: II.	(2) Assist renters to become homeowners
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Select from the goals listed above.

Objective(s) Number: IIa.	(13) Downpayment/Closing cost assistance
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Select from the objectives listed above.

Program/Activity Description: Downpayment/Closing cost assistance (Statewide)	This activity provides NHHBG-funded down payment assistance or individual development accounts to lessee families for new construction or home purchase. This activity also provides down payment/closing cost assistance where NHHBG funds are not the primary loan source.
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Describe the planned program/activity and indicate how it will enable DHHL to meet its mission, goals, and objectives.

Goal(s) Number: III.	(2) Assist renters to become homeowners
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Select from the goals listed above.

Objective(s) Number: IIIa.	(14) Lending subsidies for homebuyers
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Select from the objectives listed above.

Program/Activity Description: Homeowner Financing (Statewide)	To provide NHHBG-funded home loans to lessee families for new construction or home purchase.
--	--

Describe the planned program/activity and indicate how it will enable DHHL to meet its mission, goals, and objectives.

Goal(s) Number: IV.	(3) Improve quality of substandard units
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Select from the goals listed above.

Objective(s) Number: IVa.	(16) Rehabilitation assistance to existing homeowners
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Select from the objectives listed above.

Program/Activity Description: Home Assistance Program (Statewide)	This activity provides four types of assistance: (1) a deferred, no payment loan up to \$100,000; (2) a small repayment loan (up to \$100,000) for costs exceeding the original \$100,000 amount; (3) a demolition/new build loan for properties where cost to repair exceed the appraised or tax assessed value; or (4) individual development accounts to lessee families for home repair.
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Describe the planned program/activity and indicate how it will enable DHHL to meet its mission, goals, and objectives.

Goal(s) Number: V.	(4) Address homelessness
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Select from the goals listed above.

Objective(s) Number: Va.	(17) Tenant based rental assistance
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Select from the objectives listed above.

Program/Activity Description: Waimanalo Kupuna Housing Rental Assistance	The use of NHHBG funds in the project is primarily to supplement tenants rent at the Waimanalo Kupuna Housing so their maximum contribution does not exceed 30% of their gross monthly income. Built in 2002 utilizing Low Income Housing Tax Credits, this subsidy will assist in stabilizing rental increases over the remainder of the project's LIHTC existence.
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Describe the planned program/activity and indicate how it will enable DHHL to meet its mission, goals, and objectives.

Goal(s) Number: VI.	(4) Address homelessness
--------------------------------	--------------------------

Select from the goals listed above.

Objective(s) Number: VIa.	(17) Tenant based rental assistance
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Select from the objectives listed above.

Program/Activity Description: Rental Vouchers	This activity establishes the use of rental housing vouchers for eligible beneficiaries. Provides financial assistance to families facing eviction, experiencing homelessness or at risk of homelessness.
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Describe the planned program/activity and indicate how it will enable DHHL to meet its mission, goals, and objectives.

Goal(s) Number: VII.	(2) Assist renters to become homeowners
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Select from the goals listed above.

Objective(s) Number: VIIa.	(18) Other Housing Service
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Select from the objectives listed above.

Program/Activity Description: Housing Counseling	At minimum, every family that receives NHHBG assistance will be offered financial literacy education; case management assistance; and servicing by housing counseling vendor.
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Describe the planned program/activity and indicate how it will enable DHHL to meet its mission, goals, and objectives.

Goal(s) Number: VIII.	(10) Other
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Select from the goals listed above.

Objective(s) Number: VIIIa.	(18) Other Housing Service
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Select from the objectives listed above.

Program/Activity Description: Homeowner Assistance	This activity is aimed at mitigating financial hardships by providing financial assistance to promote housing stability.
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Describe the planned program/activity and indicate how it will enable DHHL to meet its mission, goals, and objectives.

Goal(s) Number: IX.	(3) Improve quality of substandard units
--------------------------------	--

Select from the goals listed above.

Objective(s) Number: IXa.	(24) Infrastructure to support housing
--------------------------------------	--

Select from the objectives listed above.

Program/Activity Description: Potable Water Development (Statewide)	This activity will support the development and delivery of potable water to new and existing homesteads.
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Describe the planned program/activity and indicate how it will enable DHHL to meet its mission, goals, and objectives.

Goal(s) Number: X.	(4) Address homelessness
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Select from the goals listed above.

Objective(s) Number: Xa.	(8) Conversion of other structures to affordable housing
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Select from the objectives listed above.

Program/Activity Description: Housing Conversion	This activity supports the conversion of existing land and structures to affordable housing.
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Describe the planned program/activity and indicate how it will enable DHHL to meet its mission, goals, and objectives.

Goal(s) Number: XI.	(1) Reduce over-crowding; (2) Assist renters to become homeowners
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Select from the goals listed above.

Objective(s) Number: XIa.	(10) Acquisition of land for homebuyer unit development; (12) Acquisition of homebuyer units
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Select from the objectives listed above.

Program/Activity Description: Property Acquisition (Oahu – Priority)	This activity will support land and/or unit purchase(s) for housing.
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Describe the planned program/activity and indicate how it will enable DHHL to meet its mission, goals, and objectives.

Goal(s) Number: XII.	(9) Reduction in crime reports
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Select from the goals listed above.

Objective(s) Number: XIIa.	(21) Crime Prevention and Safety
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Select from the objectives listed above.

Program/Activity Description: Crime Prevention	This activity will provide NHHBG funding for safety, security, and law enforcement measures and activities appropriate to protect residents of homestead communities from crime.
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Describe the planned program/activity and indicate how it will enable DHHL to meet its mission, goals, and objectives.

ONE YEAR PLAN & ANNUAL PERFORMANCE REPORT

SECTION 2: HOUSING NEEDS

(NAHASDA § 803(c)(2)(B))

- (1) Type of Need:** Check the appropriate box(es) below to describe the estimated types of housing needs and the need for other assistance for low-income Native Hawaiian families (columns B and C) and non-low-income Native Hawaiian families, including non-Native Hawaiian essential families [809(a)(2)(B) and (C)] (column D) eligible to be served by DHHL.

(A) Type of Need	Check All That Apply		
	(B) Low-Income Native Hawaiian Families on Hawaiian Home Lands	(C) Low-Income Native Hawaiian Families on Wait List	(D) Non-Low- Income Native Hawaiian Families
(1) Overcrowded Households	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(2) Renters Who Wish to Become Owners	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(3) Substandard Units Needing Rehabilitation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(4) Homeless Households	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(5) Households Needing Affordable Rental Units	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(6) College Student Housing	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(7) Disabled Households Needing Accessibility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(8) Units Needing Energy Efficiency Upgrades	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(9) Infrastructure to Support Housing	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(10) Other (specify below)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(2) Other Needs. *(Describe the "Other" needs below. Note: this text is optional for all needs except "Other.")*:

The Hawaiian Homes Commission Act of 1920, as amended, established the Hawaiian Home Lands Trust and defined the population eligible to reside on Hawaiian home lands as those native Hawaiians with no less than 50% Hawaiian blood and their successors or assignees of less than 50% Hawaiian blood. With approximately 9,209 leases on homesteads stretching from Hawaii Island to Kauai, the Department of Hawaiian Home Lands was created at statehood to assist the commission in meeting its fiduciary obligations.

DHHL, through SMS Research, completed its 2020 Beneficiary Survey detailed in the *DHHL Beneficiaries Study Lessee Report, 2020* and the *DHHL Beneficiaries Study Applicant Report, 2020*.

The native Hawaiian subset for the purpose of this plan is determined as follows:

9,209	Lessees residing on the DHHL lands — as of January 31, 2022 ¹
23,464	Unduplicated waitlist as of January 31, 2022 ²
21,399	Estimated Potential Applicants based on SMS 2019 respondents ³
54,072	Total native Hawaiian individuals/households

The *DHHL Beneficiaries Study Lessee Report, 2020* detailed the following about HUD Median Income: “While the median household income has consistently increased, the percentage of Lessee households classified as earning 80 percent or less of the Department of Housing and Urban Development (HUD) Area Median Income (AMI) has risen. In 2008, 46 percent of Lessee households were considered low income according to the HUD guidelines. By 2014, this had increased to 55 percent. The percentage of Lessee households considered low income stayed about the same at 56 percent in 2020.”

The *DHHL Beneficiaries Study Applicant Report, 2020* noted the following about HUD Income Categories: “In 2020, the percent of applicant households below 80 percent of HUD AMI level is back up to 51 percent.”

5,157	Lessees residing on the DHHL Lands – 9,209 x 56%
11,967	Applicants – 23,464 x 51%
12,197	Potential Applicants – 21,399 x 57% (SMS 2019 Study)
29,321	Total native Hawaiian households eligible for NAHASDA

If we extrapolate and say that the average DHHL turnkey home is \$350,000, then the sufficient funding amount for NAHASDA would look like this:

11,967	Applicants – 23,464 x 51%
12,197	Potential Applicants – 21,399 x 57% (SMS 2019 Study)
24,164	x \$350,000 = \$8,457,400,000.00 sufficient funding for NAHASDA

Additional Research - 2017 HUD Report

Some of the key findings of the *Housing Needs of Native Hawaiians: A Report From the Assessment of American Indian, Alaska Native, and Native Hawaiian Housing Needs* prepared for HUD and dated May 2017 include the following:

- Native Hawaiian households tend to be larger. In 2010, the average size of a Native Hawaiian’s household was 4.1 people compared with 2.7 people for residents of Hawaii households.

1 Homestead Services Division, 2/22/22 Commission submittal. Includes lessees residing on residential, agricultural and pastoral lots, one lessee per lease, one house per lease/lot, as applicable. 776 Undivided Interest lessees omitted.

2 *Ibid.*

3 The SMS Hawaii Housing Policy Study, 2019 included a category for native Hawaiians with at least 50% blood quantum and not DHHL lessees or applicants.

- Although improvements were made during the 2000-to-2010 decade, Native Hawaiians living in Hawaii continue to be more economically disadvantaged: they have lower incomes, higher rates of assistance receipt, and higher poverty rates than do other residents of Hawaii.
- Native Hawaiian households also experience higher rates of overcrowding (15 percent) compared with residents of Hawaii households (8 percent).
- Homelessness among Native Hawaiians is prevalent. Although not typically chronically homeless, they are overrepresented in Hawaii's homeless population. Homeless Native Hawaiians often have jobs but cannot afford housing, so they double up (hidden homeless) or live in tents, shelters, cars, or garages.
- HHCA beneficiary households on the waiting list are more economically disadvantaged than are Native Hawaiian households overall, residents of Hawaii households, and Native Hawaiian households living on the home lands.
 - HHCA beneficiary households on the waiting list have the lowest median income of all four groups by a substantial margin: \$48,000 compared with more than \$60,000 for all other groups.
 - HHCA beneficiaries on the waiting list also receive public cash assistance at more than twice the rate of the other groups: about 20 percent of households on the waiting list received public cash assistance compared with about 7 percent of Native Hawaiians and those living on the home lands and 3 percent for residents of Hawaii.
- HHCA beneficiary households on the waiting list face more significant housing challenges across all dimensions than do the other groups.
 - Nearly 40 percent of HHCA beneficiary households on the waiting list were overcrowded compared with only 19 percent of households on sampled Hawaiian home lands, 15 percent of the state's Native Hawaiian households, and 8 percent of residents of Hawaii households.
 - About 10 percent of HHCA beneficiary households on the waiting list lack complete plumbing compared with 1 percent for all other groups.
 - Nearly one-half (46 percent) of HHCA beneficiary households on the waiting list experience cost burden compared with 40 percent of Native Hawaiian households, 42 percent of residents of Hawaii households, and only 21 percent of households on the sampled Hawaiian home lands. The much lower rate of cost burden among home lands households is due, at least in part, to the financial benefits of home lands leases, which reduce monthly housing costs, including minimal lease payments for the land and a 7-year exemption from real estate property tax.

Native Hawaiian Rehabilitation

The statistics shared in preceding paragraphs are not new to the native Hawaiians. Over 100 years ago, moved by the poor living conditions and low incomes of his people, Prince Jonah Kuhio Kalanianaʻole created the Ahahui Puuhonua o Na Hawaii, an organization comprised of royal men of lesser rank than himself who collectively served as the catalyst toward the chronicling of the despair and destitution of the makaainana (commoner) in 1911.

The work of the Ahahui Puuhonua o Na Hawaii and its members provided Prince Kuhio the much-needed data to create support, both in Hawaii and abroad in Washington, D.C. to pass the HHCA.

Through the Prince's leadership and participation in each of these community endeavors, the legacy of the Prince lives on for us today. This housing plan, a descendant of Kuhio's legacy thru the HHCA, is but a small piece of a much broader articulation of need in the State of Hawaii today. By focusing on housing, this most basic of needs acknowledged in the Western world, the department attempts to participate in the rehabilitation of the Hawaiian people. Should every Hawaiian have a safe, affordable, decent home, with fresh water for bathing and eating and cooking and food grown or gathered nearby, we could claim success. But with over \$8 billion in need and as the average 59-year-old applicant dies on the waiting list, it does not seem likely we will be able to make such a claim without immediate and swift monetary assistance in the next few years.

(3) Planned Program Benefits. *(Describe below how your planned programs and activities will address the needs of low income families identified above. Also describe how your planned programs will address the various types of housing assistance needs. NAHASDA § 803(c)(2)(B)):*

The planned programs and activities are aimed at assisting as many native Hawaiian households that earn 80% or less of HUD AMI to realize homeownership as part of the ongoing lot awards and production. The 2017 HUD Report noted that "many renters (63 percent) on the HHCA beneficiary waiting list who would prefer to own a home are unable to do so because they cannot afford a downpayment or save enough for a house." Thus, focus will be on homeowner financing, leveraged loans with USDA Rural Housing, or other downpayment assistance options to provide new awardees with the opportunity for safe, affordable and decent housing.

While the 2017 HUD Report noted that HHCA beneficiary households on the waiting list face more significant housing challenges, lessees, especially in our older homestead communities face aging substandard housing. The 2020 Beneficiary Study Lessee Report identified 2,538 lessees that earn 80% or less of HUD AMI with a house needing either minor or major repairs. The planned home assistance program is geared to addressing this need.

DHHL recognizes the need for increased housing stability, especially as families have experienced financial hardships associated with the Coronavirus pandemic and took swift action first by approving the postponement of mortgage loan payments for all DHHL direct loans and loans assigned to DHHL. DHHL also initially utilized NAHASDA funds to provide emergency rental and homeowner assistance and has since received other federal funds for this purpose. The planned rental voucher program will build upon the initial temporary relocation and emergency assistance by expanding to kupuna (elders) and disabled native Hawaiians who have been on the waiting list the longest in an effort to provide financial assistance for those at risk of homelessness or facing financial hardship.

The 2017 HUD Report identified homelessness among Native Hawaiians as a significant problem, but also acknowledged that data is not available for only Native Hawaiians. In an effort to fill this gap, DHHL entered into a Memorandum of Understanding with Partners in Care – Oahu Continuum of Care to understand how pervasive the situation of homelessness might be among its beneficiaries and especially those on its homestead applicant waiting list. The conversion of an existing structure to a transitional housing facility for beneficiaries is intended to begin addressing this need.

DHHL's Oahu Island Plan noted that approximately 1,390 acres of land suitable for residential development is necessary to meet the homestead needs of all applicants on the residential list that are not otherwise accommodated assuming full implementation of the Oahu Island Plan. One of the program activities would be to identify land or units for housing.

Infrastructure to support housing on land currently under DHHL's jurisdiction or future land or units acquired is a separate program activity. In addition to existing developments, these areas will likely be expanded to cover lands recently transferred to DHHL in Ewa, Oahu. Water is just as critical to homestead development as land. DHHL secured approved water reservations for DHHL's foreseeable groundwater needs statewide and the potable water infrastructure improvements would allow for improved and increased potable water service delivery.

All NAHASDA assisted activities will be supported by housing counseling for both homeowners and renters.

(4) Geographic Distribution. *(Describe below how the assistance will be distributed throughout the geographic area and how this geographic distribution is consistent with the needs of low income families, including the needs for various categories of housing assistance. NAHASDA § 803(c)(2)(B)(i)):*

The 2020 Beneficiary Study Applicant Report provided HUD Income Categories by Island as follows:

80% or > AMI	Oahu		Maui		Hawaii		Kauai		Molokai		Lanai		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
	6824	61%	1282	12%	2048	18%	600	5%	368	3%	36	.3%	11,158	99.3%

This distribution is similar to the % of DHHL Applicants by Island:

	Oahu	Maui	Hawaii	Kauai	Molokai	Lanai	Total
% App	57%	12%	21%	6%	3%	.3%	99.3%

NAHASDA-Assisted units by island to date align closely to this distribution and is expected to continue, but notes that assistance to neighbor islands is above the percent of households classified as earning 80 percent or less of the HUD AMI:

	Oahu	Maui	Hawaii	Kauai	Molokai	Lanai	Total
% Assisted	49%	15%	19%	8%	7%	2%	100%

SECTION 3: PROGRAM DESCRIPTIONS

(NAHASDA § [803(c)(2)(A)], [802(c)], [820(b)], 24 CFR §1006.410(b)(2) and (3))

Planning and Reporting on Program Year Activities

For the NHHP, the purpose of this section is to describe each program that will be operating during the 12-month fiscal year. Each program must include the eligible activity, its planned outputs, intended outcome, who will be assisted, and types and levels of assistance. Each of the eligible activities has a specific, measurable output. The first column in the table below lists all eligible activities, the second column identifies the output measure for each eligible activity, and the third column identifies when to consider an output as completed for each eligible activity. Copy and paste text boxes 1.1 through 1.10 as often as needed so that all of your planned programs are included.

For the APR, the purpose of this section is to describe your accomplishments, actual outputs, actual outcomes, and any reasons for delays.

Eligible Activities May Include (citations below reference sections in NAHASDA)

Eligible Activity	Output Measure	Output Completion
(1) RESERVED – DO NOT USE THIS NUMBER		
(2) RESERVED – DO NOT USE THIS NUMBER		
(3) Acquisition of Rental Housing [810(b)(1)]	Units	When recipient takes title to the unit
(4) Construction of Rental Housing [810(b)(1)]	Units	All work completed and unit passed final inspection
(5) Rehabilitation of Rental Housing [810(b)(1)]	Units	All work completed and unit passed final inspection
(6) Acquisition of Land for Rental Housing Development [810(b)(1)]	Acres	When recipient takes title to the land
(7) Development of Emergency Shelters [810(b)(1)]	Households	Number of households served at any one time, based on capacity of the shelter
(8) Conversion of Other Structures to Affordable Housing [810(b)(1)]	Units	All work completed and unit passed final inspection
(9) Other Rental Housing Development [810(b)(1)]	Units	All work completed and unit passed final inspection
(10) Acquisition of Land for Homebuyer Unit Development [810(b)(1)]	Acres	When recipient takes title to the land
(11) New Construction of Homebuyer Units [810(b)(1)]	Units	All work completed and unit passed final inspection
(12) Acquisition of Homebuyer Units [810(b)(1)]	Units	When recipient takes title to the unit
(13) Down Payment/Closing Cost Assistance [810(b)(1)]	Units	When binding commitment signed
(14) Lending Subsidies for Homebuyers (Loan) [810(b)(1)]	Units	When binding commitment signed
(15) Other Homebuyer Assistance Activities [810(b)(1)]	Units	When binding commitment signed
(16) Rehabilitation Assistance to Existing Homeowners [810(b)(1)]	Units	All work completed and unit passed final inspection
(17) Tenant Based Rental Assistance [810(b)(2)]	Households	Count each household once per year
(18) Other Housing Service [810(b)(2)]	Households	Count each household once per year

(19) Housing Management Services [810(b)(3)]	Households	Count each household once per year
(20) Operation and Maintenance of NHHBG-Assisted Units [810(b)(3)]	Units	Number of units in inventory at Fiscal Year End
(21) Crime Prevention and Safety [810(b)(4)]	Dollars	Dollars spent (report in Uses of Funding Table only)
(22) Model Activities [810(b)(5)]	Dollars	Dollars spent (report in Uses of Funding Table only)
(23) RESERVED – DO NOT USE THIS NUMBER		
(24) Infrastructure to Support Housing [810(b)(1)]	Improved Lots	All work completed and lot passed final inspection
(25) RESERVED – DO NOT USE THIS NUMBER		

Outcome May Include:

(1) Reduce over-crowding	(7) Create new affordable rental units
(2) Assist renters to become homeowners	(8) Assist affordable housing for college students
(3) Improve quality of substandard units	(9) Provide accessibility for disabled/elderly persons
(4) Improve quality of existing infrastructure	(10) Improve energy efficiency
(5) Address homelessness	(11) Reduction in crime reports
(6) Assist affordable housing for low income households	(12) Other – must provide description in boxes 1.4 (NHHP) and 1.5 (APR)

NHHP: PLANNED FISCAL YEAR ACTIVITIES (NAHASDA § 803(c)(2)(A))

For each planned activity, complete all the non-shaded sections below. It is recommended that for each program name you assign a unique identifier to help distinguish individual programs. This unique number can be any number of your choosing, but it should be simple and clear so that you and HUD can track tasks and results under the program and collect appropriate file documentation tied to this program.

- One way to number your programs is chronologically. For example, you could number your programs 2014-1, 2014-2, 2014-3, etc.
- Or, you may wish to number the programs based on type. For example rental 1, rental 2, homebuyer 1, homebuyer 2, etc. This type of numbering system might be appropriate if you have many programs that last over several years.
- Finally, you may wish to use an outline style of numbering. For example, all programs under your first eligible activity would start with the number 1 and then be consecutively numbered as 1.1, 1.2, 1.3, etc. The programs under the second eligible activity would be numbered as 2.1, 2.2., 2.3, etc.

APR: REPORTING ON PROGRAM YEAR PROGRESS (NAHASDA § 820(b))

Complete the shaded section of text below to describe your completed program tasks and actual results. Only report on activities completed during the 12-month fiscal year. Financial data should be presented using the same basis of accounting as the Schedule of Expenditures of Federal Awards (SEFA) in the annual OMB Circular A-133⁷ audit. For unit accomplishments, only count units when the unit was completed and occupied during the year. For households, only count the household if it received the assistance during the previous 12-month fiscal year.

⁷DHHL should note that new Federal government regulations on Administrative Requirements, Cost Principles, and Audit Requirements were promulgated on December 26, 2013 at 2 C.F.R. Part 200. HUD intends to update its regulations by December 26, 2014 to implement these new requirements in its programs. In the meantime, applicable OMB Circulars and the regulations at 2 C.F.R. Part 225 will continue to apply to existing grants. After HUD implements the new requirements in 2 C.F.R. Part 200 (after December 26, 2014), all grants will be subject to 2 C.F.R. Part 200, as implemented by HUD.

<p>1.1 Program Name and Unique Identifier: 2022 Capital Improvement Projects (AHP I)</p>
<p>1.2 Program Description <i>(This should be the description of the planned program.):</i></p> <p>This activity develops lots for residential use on Trust Lands statewide.</p>
<p>1.3 Eligible Activity Number <i>(Select one activity from the Eligible Activity list. Do not combine homeownership and rental housing in one activity, so that when housing units are reported in the APR they are correctly identified as homeownership or rental.):</i></p> <p>(24) Infrastructure to Support Housing [810(b)(1)]</p>
<p>1.4 Intended Outcome Number <i>(Select one outcome from the Outcome list. Each program can have only one outcome. If more than one outcome applies, create a separate program for each outcome.):</i></p> <p>(2) Assist renters to become homeowners</p>
<p>Describe Other Intended Outcome <i>(Only if you selected "Other" above.):</i></p>
<p>1.5 Actual Outcome Number <i>(In the APR identify the actual outcome from the Outcome list.):</i></p>
<p>Describe Other Actual Outcome <i>(Only if you selected "Other" above.):</i></p>
<p>1.6 Who Will Be Assisted <i>(Describe the types of households that will be assisted under the program. Please note: assistance made available to families whose incomes exceed 80 percent of the median should be included as a <u>separate</u> program within this section.):</i></p> <p>Undivided interest lessees and applicants meeting the 80% AMI income guidelines will receive vacant or improved lots for new home construction.</p>
<p>1.7 Types and Level of Assistance <i>(Describe the types and the level of assistance that will be provided to each household, as applicable.):</i></p> <p>This activity covers the cost of the infrastructure for projects, including planning, design, engineering, construction, and construction management services. The level of NAHASDA funding for this activity is expected to slightly increase because in addition to the existing contract for engineering services in East Kapolei IIC, Oahu, planning is expected to begin for the lands transferred to DHHL in Ewa, Oahu. Other proposed developments may also require infrastructure funding.</p>
<p>1.8 APR: <i>(Describe the accomplishments for the APR in the 12-month fiscal year in accordance with 24 CFR § 1006.410(b)(2) and (3)):</i></p>

1.9: Planned and Actual Outputs for 12-Month Fiscal Year

Type of Output to be Completed in Fiscal Year Under this Program. Enter <u>one</u> of following choices in accordance with the Eligible Activity: Units; Households; Improved Lots; Acres	Planned Number of Outputs to be completed in Fiscal Year Under this Program	APR: Actual Number of Outputs Completed in Fiscal Year
Improved Lots	0	

1.10: APR: If the program is behind schedule, explain why. (24 CFR § 1006.410(b)(2))

1.11: APR: Describe the manner in which DHHL would change its housing plan as a result of its experiences. (24 CFR § 1006.410(b)(4)). NOTE: It is sufficient to provide one response to this item rather than an individual response for each NHHBG-funded program.

NOTE: Remember to complete all the text boxes in Section 3 for each NHHBG-funded program. If you are completing an electronic version of this form, you may copy and paste text boxes 1.1 through 1.11 as needed to describe each of your programs. If you are completing this form in hard copy, you may photocopy Section 3 as needed to describe each of your programs.

1.1 Program Name and Unique Identifier: Down Payment/Closing Cost Assistance (AHP II)

1.2 Program Description *(This should be the description of the planned program.):*

This activity utilizes NHHBG funds for down payment/closing cost assistance or to provide matching funds through an individual development account to eligible NAHASDA families for new construction or home purchase.

1.3 Eligible Activity Number *(Select one activity from the Eligible Activity list. Do not combine homeownership and rental housing in one activity, so that when housing units are reported in the APR they are correctly identified as homeownership or rental.):*

(13) Down Payment/Closing Cost Assistance [810(b)(1)]

1.4 Intended Outcome Number *(Select one outcome from the Outcome list. Each program can have only one outcome. If more than one outcome applies, create a separate program for each outcome.):*

(2) Assist renters to become homeowners

Describe Other Intended Outcome *(Only if you selected "Other" above.):*

1.5 Actual Outcome Number *(In the APR identify the actual outcome from the Outcome list.):*

Describe Other Actual Outcome *(Only if you selected "Other" above.):*

1.6 Who Will Be Assisted *(Describe the types of households that will be assisted under the program. Please note: assistance made available to families whose incomes exceed 80 percent of the median should be included as a separate program within this section.):*

Undivided interest lessees, applicants, or successors/transferees meeting the 80% AMI income guidelines will have the opportunity to qualify for assistance.

1.7 Types and Level of Assistance *(Describe the types and the level of assistance that will be provided to each household, as applicable.):*

Down payment/closing cost assistance or matching funds through an individual development account with a 5:1 match for every dollar saved up to 5% of the construction cost or home purchase depending on the lender's requirements will be made available to eligible NAHASDA families. For the USDA program, down payment/closing cost assistance up to 20% of the cost of construction or home purchase will be available to eligible NAHASDA families.

1.8 APR: *(Describe the accomplishments for the APR in the 12-month fiscal year in accordance with 24 CFR § 1006.410(b)(2) and (3)):*

1.9: Planned and Actual Outputs for 12-Month Fiscal Year

Type of Output to be Completed in Fiscal Year Under this Program. Enter <u>one</u> of following choices in accordance with the Eligible Activity: Units; Households; Improved Lots; Acres	Planned Number of Outputs to be completed in Fiscal Year Under this Program	APR: Actual Number of Outputs Completed in Fiscal Year
Units	0	

1.10: APR: If the program is behind schedule, explain why. (24 CFR § 1006.410(b)(2))

1.11: APR: Describe the manner in which DHHL would change its housing plan as a result of its experiences. (24 CFR § 1006.410(b)(4)). **NOTE:** It is sufficient to provide one response to this item rather than an individual response for each NHHBG-funded program.

NOTE: Remember to complete all the text boxes in Section 3 for each NHHBG-funded program. If you are completing an electronic version of this form, you may copy and paste text boxes 1.1 through 1.11 as needed to describe each of your programs. If you are completing this form in hard copy, you may photocopy Section 3 as needed to describe each of your programs.

<p>1.1 Program Name and Unique Identifier: Homeowner Financing (AHP III)</p>
<p>1.2 Program Description <i>(This should be the description of the planned program.):</i></p> <p>This activity utilizes the Department's Direct Loan program, providing homeowner financing to eligible NAHASDA families for new construction or home purchase. DHHL is working to identify families in upcoming project areas for direct loans.</p>
<p>1.3 Eligible Activity Number <i>(Select one activity from the Eligible Activity list. Do not combine homeownership and rental housing in one activity, so that when housing units are reported in the APR they are correctly identified as homeownership or rental.):</i></p> <p>(14) Lending Subsidies for Homebuyers (Loan) [810(b)(1)]</p>
<p>1.4 Intended Outcome Number <i>(Select one outcome from the Outcome list. Each program can have only one outcome. If more than one outcome applies, create a separate program for each outcome.):</i></p> <p>(2) Assist renters to become homeowners</p>
<p>Describe Other Intended Outcome <i>(Only if you selected "Other" above.):</i></p>
<p>1.5 Actual Outcome Number <i>(In the APR identify the actual outcome from the Outcome list.):</i></p>
<p>Describe Other Actual Outcome <i>(Only if you selected "Other" above.):</i></p>
<p>1.6 Who Will Be Assisted <i>(Describe the types of households that will be assisted under the program. Please note: assistance made available to families whose incomes exceed 80 percent of the median should be included as a separate program within this section.):</i></p> <p>Molokai: 2 families</p> <p>Maui: 4 families</p> <p>Hawaii: 5 families</p> <p>Oahu: 10 families</p> <p>Kauai: 7 families</p> <p>Lanai: 2 families</p>
<p>1.7 Types and Level of Assistance <i>(Describe the types and the level of assistance that will be provided to each household, as applicable.):</i> Financing for home loans statewide utilizing NHHBG funds up to the appraised value for projects in areas listed in 1.6.</p>
<p>1.8 APR: <i>(Describe the accomplishments for the APR in the 12-month fiscal year in accordance with 24 CFR § 1006.410(b)(2) and (3)):</i></p>

1.9: Planned and Actual Outputs for 12-Month Fiscal Year

Type of Output to be Completed in Fiscal Year Under this Program. Enter <u>one</u> of following choices in accordance with the Eligible Activity: Units; Households; Improved Lots; Acres	Planned Number of Outputs to be completed in Fiscal Year Under this Program	APR: Actual Number of Outputs Completed in Fiscal Year
Units	5	

1.10: APR: If the program is behind schedule, explain why. (24 CFR § 1006.410(b)(2))

1.11: APR: Describe the manner in which DHHL would change its housing plan as a result of its experiences. (24 CFR § 1006.410(b)(4)). **NOTE:** It is sufficient to provide one response to this item rather than an individual response for each NHHBG-funded program.

NOTE: Remember to complete all the text boxes in Section 3 for each NHHBG-funded program. If you are completing an electronic version of this form, you may copy and paste text boxes 1.1 through 1.11 as needed to describe each of your programs. If you are completing this form in hard copy, you may photocopy Section 3 as needed to describe each of your programs.

<p>1.1 Program Name and Unique Identifier: Home Assistance Program (HAP) (AHP IV)</p>
<p>1.2 Program Description <i>(This should be the description of the planned program.):</i></p> <p>This program covers the department's attempt to address substandard and/or aging housing on the homelands by providing assistance to low income households to repair their existing homes, including home replacement (demolition & construction), energy retrofit, building code compliance, and home repair.</p>
<p>1.3 Eligible Activity Number <i>(Select one activity from the Eligible Activity list. Do not combine homeownership and rental housing in one activity, so that when housing units are reported in the APR they are correctly identified as homeownership or rental.):</i></p> <p>(16) Rehabilitation Assistance to Existing Homeowners [810(b)(1)]</p>
<p>1.4 Intended Outcome Number <i>(Select one outcome from the Outcome list. Each program can have only one outcome. If more than one outcome applies, create a separate program for each outcome.):</i></p> <p>(3) Improve quality of substandard units</p>
<p>Describe Other Intended Outcome <i>(Only if you selected "Other" above.):</i></p>
<p>1.5 Actual Outcome Number <i>(In the APR identify the actual outcome from the Outcome list.):</i></p>
<p>Describe Other Actual Outcome <i>(Only if you selected "Other" above.):</i></p>
<p>1.6 Who Will Be Assisted <i>(Describe the types of households that will be assisted under the program. Please note: assistance made available to families whose incomes exceed 80 percent of the median should be included as a separate program within this section.):</i></p> <p>Lessee families at or below the 80% AMI income guidelines identified over the past few years are being assisted.</p>
<p>1.7 Types and Level of Assistance <i>(Describe the types and the level of assistance that will be provided to each household, as applicable.):</i></p> <p>Deferred, no-payment loans, subject to conditional recapture, as defined by HAP will be provided. NAHASDA eligible families will receive \$100,000 to repair their home according to Housing Quality Standards that would prioritize repairs for the home. Those families whose homes have been identified as needing more than \$100,000 to fix repairs are offered 1% loans on the amount that exceeds the first \$100,000, up to an additional \$100,000. A demolition/new build loan is the third option offered for properties where cost to repair exceed the appraised or tax assessed value. An individual development account with a 5:1 match for every dollar saved up to 20% of the cost of home repair.</p>
<p>1.8 APR: <i>(Describe the accomplishments for the APR in the 12-month fiscal year in accordance with 24 CFR § 1006.410(b)(2) and (3)):</i></p>

1.9: Planned and Actual Outputs for 12-Month Fiscal Year

Type of Output to be Completed in Fiscal Year Under this Program. Enter <u>one</u> of following choices in accordance with the Eligible Activity: Units; Households; Improved Lots; Acres	Planned Number of Outputs to be completed in Fiscal Year Under this Program	APR: Actual Number of Outputs Completed in Fiscal Year
Units	2	

1.10: APR: If the program is behind schedule, explain why. (24 CFR § 1006.410(b)(2))

1.11: APR: Describe the manner in which DHHL would change its housing plan as a result of its experiences. (24 CFR § 1006.410(b)(4)). NOTE: It is sufficient to provide one response to this item rather than an individual response for each NHHBG-funded program.

NOTE: Remember to complete all the text boxes in Section 3 for each NHHBG-funded program. If you are completing an electronic version of this form, you may copy and paste text boxes 1.1 through 1.11 as needed to describe each of your programs. If you are completing this form in hard copy, you may photocopy Section 3 as needed to describe each of your programs.

<p>1.1 Program Name and Unique Identifier: Waimanalo Kupuna Housing Rental Assistance (AHP V)</p>
<p>1.2 Program Description <i>(This should be the description of the planned program.):</i></p> <p>This activity provides funds primarily to supplement tenants rent at the Waimanalo Kupuna Housing so their maximum contribution does not exceed 30% of their gross monthly income.</p>
<p>1.3 Eligible Activity Number <i>(Select one activity from the Eligible Activity list. Do not combine homeownership and rental housing in one activity, so that when housing units are reported in the APR they are correctly identified as homeownership or rental.):</i></p> <p>(17) Tenant Based Rental Assistance [810(b)(2)]</p>
<p>1.4 Intended Outcome Number <i>(Select one outcome from the Outcome list. Each program can have only one outcome. If more than one outcome applies, create a separate program for each outcome.):</i></p> <p>(5) Address homelessness</p>
<p>Describe Other Intended Outcome <i>(Only if you selected "Other" above.):</i></p>
<p>1.5 Actual Outcome Number <i>(In the APR identify the actual outcome from the Outcome list.):</i></p>
<p>Describe Other Actual Outcome <i>(Only if you selected "Other" above.):</i></p>
<p>1.6 Who Will Be Assisted <i>(Describe the types of households that will be assisted under the program. Please note: assistance made available to families whose incomes exceed 80 percent of the median should be included as a separate program within this section.):</i></p> <p>The tenants of the rental housing project, with up to 85 units, on Trust Lands in Waimanalo will be assisted.</p>
<p>1.7 Types and Level of Assistance <i>(Describe the types and the level of assistance that will be provided to each household, as applicable.):</i></p> <p>This elderly housing project was first occupied in 2002 and constructed with funds from the state's Low Income Housing Trust Fund and Rental Housing Trust Fund along with funds from DHHL and the Office of Hawaiian Affairs. Many of the elderly are living on fixed income and cannot afford current rental rates under Hawaii Housing and Finance Development Corporation (HHFDC) which oversees the project and approves the rates from the developer. The subsidy covers the difference between the NAHASDA required 30% cap on tenant's adjusted gross income and the approved LITHC rent. The subsidy payments shall be used exclusively to assist tenants and for the Project's operating expenses including property management fees; maintenance expenses; utilities; partnership management fees; interest on loans (whether or not currently payable); and all other costs reasonably related to the Project, such as accrued development and legal fees and costs, to ensure these costs are not passed on to the Project tenants.</p>
<p>1.8 APR: <i>(Describe the accomplishments for the APR in the 12-month fiscal year in accordance with 24 CFR § 1006.410(b)(2) and (3)):</i></p>

1.9: Planned and Actual Outputs for 12-Month Fiscal Year

Type of Output to be Completed in Fiscal Year Under this Program. Enter <u>one</u> of following choices in accordance with the Eligible Activity: Units; Households; Improved Lots; Acres	Planned Number of Outputs to be completed in Fiscal Year Under this Program	APR: Actual Number of Outputs Completed in Fiscal Year
Units in Inventory	60	

1.10: APR: If the program is behind schedule, explain why. (24 CFR § 1006.410(b)(2))

1.11: APR: Describe the manner in which DHHL would change its housing plan as a result of its experiences. (24 CFR § 1006.410(b)(4)). **NOTE:** It is sufficient to provide one response to this item rather than an individual response for each NHHBG-funded program.

NOTE: Remember to complete all the text boxes in Section 3 for each NHHBG-funded program. If you are completing an electronic version of this form, you may copy and paste text boxes 1.1 through 1.11 as needed to describe each of your programs. If you are completing this form in hard copy, you may photocopy Section 3 as needed to describe each of your programs.

1.1 Program Name and Unique Identifier: Rental Vouchers (AHP VI-A)
1.2 Program Description <i>(This should be the description of the planned program.):</i> This activity provides funds for rental housing vouchers (first month rent/deposit/emergency rent) for temporary relocation assistance.
1.3 Eligible Activity Number <i>(Select one activity from the Eligible Activity list. Do not combine homeownership and rental housing in one activity, so that when housing units are reported in the APR they are correctly identified as homeownership or rental.):</i> (17) Tenant Based Rental Assistance [810(b)(2)]
1.4 Intended Outcome Number <i>(Select one outcome from the Outcome list. Each program can have only one outcome. If more than one outcome applies, create a separate program for each outcome.):</i> (6) Assist Affordable Housing for Low-Income Households
Describe Other Intended Outcome <i>(Only if you selected "Other" above.):</i>
1.5 Actual Outcome Number <i>(In the APR identify the actual outcome from the Outcome list.):</i>
Describe Other Actual Outcome <i>(Only if you selected "Other" above.):</i>
1.6 Who Will Be Assisted <i>(Describe the types of households that will be assisted under the program. Please note: assistance made available to families whose incomes exceed 80 percent of the median should be included as a <u>separate</u> program within this section.):</i> Native Hawaiian families eligible to reside on the Hawaiian Home Lands whose income is at or below 80% AMI.
1.7 Types and Level of Assistance <i>(Describe the types and the level of assistance that will be provided to each household, as applicable.):</i> This activity will provide for temporary relocation assistance for duration of time to construct or repair primary residence.
1.8 APR: <i>(Describe the accomplishments for the APR in the 12-month fiscal year in accordance with 24 CFR § 1006.410(b)(2) and (3)):</i>

1.9: Planned and Actual Outputs for 12-Month Fiscal Year

Type of Output to be Completed in Fiscal Year Under this Program. Enter <u>one</u> of following choices in accordance with the Eligible Activity: Units; Households; Improved Lots; Acres	Planned Number of Outputs to be completed in Fiscal Year Under this Program	APR: Actual Number of Outputs Completed in Fiscal Year
Households	2	

1.10: APR: If the program is behind schedule, explain why. (24 CFR § 1006.410(b)(2))

1.11: APR: Describe the manner in which DHHL would change its housing plan as a result of its experiences. (24 CFR § 1006.410(b)(4)). NOTE: It is sufficient to provide one response to this item rather than an individual response for each NHHBG-funded program.

NOTE: Remember to complete all the text boxes in Section 3 for each NHHBG-funded program. If you are completing an electronic version of this form, you may copy and paste text boxes 1.1 through 1.11 as needed to describe each of your programs. If you are completing this form in hard copy, you may photocopy Section 3 as needed to describe each of your programs.

<p>1.1 Program Name and Unique Identifier: Emergency Rental and Utilities Assistance Program (AHP VI-B)</p>
<p>1.2 Program Description <i>(This should be the description of the planned program.):</i></p> <p>This activity provides funds for rental housing vouchers (rent/security deposit) for emergency assistance (rent, rental arrears, utilities, or utility arrears) to mitigate financial hardships associated with the Coronavirus pandemic to ensure housing stability.</p>
<p>1.3 Eligible Activity Number <i>(Select one activity from the Eligible Activity list. Do not combine homeownership and rental housing in one activity, so that when housing units are reported in the APR they are correctly identified as homeownership or rental.):</i></p> <p>(17) Tenant Based Rental Assistance [810(b)(2)]</p>
<p>1.4 Intended Outcome Number <i>(Select one outcome from the Outcome list. Each program can have only one outcome. If more than one outcome applies, create a separate program for each outcome.):</i></p> <p>(5) Address homelessness</p>
<p>Describe Other Intended Outcome <i>(Only if you selected "Other" above.):</i></p>
<p>1.5 Actual Outcome Number <i>(In the APR identify the actual outcome from the Outcome list.):</i></p>
<p>Describe Other Actual Outcome <i>(Only if you selected "Other" above.):</i></p>
<p>1.6 Who Will Be Assisted <i>(Describe the types of households that will be assisted under the program. Please note: assistance made available to families whose incomes exceed 80 percent of the median should be included as a separate program within this section.):</i></p> <p>Native Hawaiian families eligible to reside on the Hawaiian Home Lands whose income is at or below 80% AMI.</p>
<p>1.7 Types and Level of Assistance <i>(Describe the types and the level of assistance that will be provided to each household, as applicable.):</i></p> <p>DHHL will contract with a service provider to provide emergency rental assistance (rent, rental arrears, utilities, or utility arrears) for a period not to exceed 12 months except that assistance may be provided for an additional 6 months only if necessary to ensure housing stability for a household subject to availability of funds. The maximum monthly assistance for an eligible household to receive will be the greater of either the maximum monthly amount set by each County for similar emergency rental and utilities assistance programs or the Fair Market Rent within the island or zip code area.</p>
<p>1.8 APR: <i>(Describe the accomplishments for the APR in the 12-month fiscal year in accordance with 24 CFR § 1006.410(b)(2) and (3)):</i></p>

1.9: Planned and Actual Outputs for 12-Month Fiscal Year

Type of Output to be Completed in Fiscal Year Under this Program. Enter <u>one</u> of following choices in accordance with the Eligible Activity: Units; Households; Improved Lots; Acres	Planned Number of Outputs to be completed in Fiscal Year Under this Program	APR: Actual Number of Outputs Completed in Fiscal Year
Households	50	

1.10: APR: If the program is behind schedule, explain why. (24 CFR § 1006.410(b)(2))

1.11: APR: Describe the manner in which DHHL would change its housing plan as a result of its experiences. (24 CFR § 1006.410(b)(4)). NOTE: It is sufficient to provide one response to this item rather than an individual response for each NHHBG-funded program.

NOTE: Remember to complete all the text boxes in Section 3 for each NHHBG-funded program. If you are completing an electronic version of this form, you may copy and paste text boxes 1.1 through 1.11 as needed to describe each of your programs. If you are completing this form in hard copy, you may photocopy Section 3 as needed to describe each of your programs.

<p>1.1 Program Name and Unique Identifier: DHHL Kupuna Rental Assistance Program (AHP VI-C)</p>
<p>1.2 Program Description <i>(This should be the description of the planned program.):</i></p> <p>This activity provides funds for rental housing vouchers (rent/security deposit) for kupuna (elders) who are sixty-two years of age or older and head of household starting with those who have been on DHHL's waiting list the longest to ensure housing stability.</p>
<p>1.3 Eligible Activity Number <i>(Select one activity from the Eligible Activity list. Do not combine homeownership and rental housing in one activity, so that when housing units are reported in the APR they are correctly identified as homeownership or rental.):</i></p> <p>(17) Tenant Based Rental Assistance [810(b)(2)]</p>
<p>1.4 Intended Outcome Number <i>(Select one outcome from the Outcome list. Each program can have only one outcome. If more than one outcome applies, create a separate program for each outcome.):</i></p> <p>(5) Address homelessness</p>
<p>Describe Other Intended Outcome <i>(Only if you selected "Other" above.):</i></p>
<p>1.5 Actual Outcome Number <i>(In the APR identify the actual outcome from the Outcome list.):</i></p>
<p>Describe Other Actual Outcome <i>(Only if you selected "Other" above.):</i></p>
<p>1.6 Who Will Be Assisted <i>(Describe the types of households that will be assisted under the program. Please note: assistance made available to families whose incomes exceed 80 percent of the median should be included as a separate program within this section.):</i></p> <p>Native Hawaiian kupuna (elders) who are sixty-two years of age or older and head of household starting with those who have been on DHHL's waiting list the longest that are eligible to reside on the Hawaiian Home Lands whose income is at or below 80% AMI.</p>
<p>1.7 Types and Level of Assistance <i>(Describe the types and the level of assistance that will be provided to each household, as applicable.):</i></p> <p>DHHL will contract with a service provider to provide rental assistance that will be reviewed on an annual basis subject to availability of funds. The monthly rental assistance will be the difference between 30% of the household's monthly adjusted income which will be paid by the kupuna (elder) of an eligible household and the Fair Market Rent within the zip code area.</p>
<p>1.8 APR: <i>(Describe the accomplishments for the APR in the 12-month fiscal year in accordance with 24 CFR § 1006.410(b)(2) and (3)):</i></p>

1.9: Planned and Actual Outputs for 12-Month Fiscal Year

Type of Output to be Completed in Fiscal Year Under this Program. Enter <u>one</u> of following choices in accordance with the Eligible Activity: Units; Households; Improved Lots; Acres	Planned Number of Outputs to be completed in Fiscal Year Under this Program	APR: Actual Number of Outputs Completed in Fiscal Year
Households	20	

1.10: APR: If the program is behind schedule, explain why. (24 CFR § 1006.410(b)(2))

1.11: APR: Describe the manner in which DHHL would change its housing plan as a result of its experiences. (24 CFR § 1006.410(b)(4)). **NOTE:** It is sufficient to provide one response to this item rather than an individual response for each NHHBG-funded program.

NOTE: Remember to complete all the text boxes in Section 3 for each NHHBG-funded program. If you are completing an electronic version of this form, you may copy and paste text boxes 1.1 through 1.11 as needed to describe each of your programs. If you are completing this form in hard copy, you may photocopy Section 3 as needed to describe each of your programs.

<p>1.1 Program Name and Unique Identifier: DHHL Disability Rental Assistance Program (AHP VI-D)</p>
<p>1.2 Program Description <i>(This should be the description of the planned program.):</i></p> <p>This activity provides funds for rental housing vouchers (rent/security deposit) for persons with a disability who are at least eighteen years of age, but not yet sixty-two and head of household starting with those who have been on DHHL's waiting list the longest to ensure housing stability.</p>
<p>1.3 Eligible Activity Number <i>(Select one activity from the Eligible Activity list. Do not combine homeownership and rental housing in one activity, so that when housing units are reported in the APR they are correctly identified as homeownership or rental.):</i></p> <p>(17) Tenant Based Rental Assistance [810(b)(2)]</p>
<p>1.4 Intended Outcome Number <i>(Select one outcome from the Outcome list. Each program can have only one outcome. If more than one outcome applies, create a separate program for each outcome.):</i></p> <p>(5) Address homelessness</p>
<p>Describe Other Intended Outcome <i>(Only if you selected "Other" above.):</i></p>
<p>1.5 Actual Outcome Number <i>(In the APR identify the actual outcome from the Outcome list.):</i></p>
<p>Describe Other Actual Outcome <i>(Only if you selected "Other" above.):</i></p>
<p>1.6 Who Will Be Assisted <i>(Describe the types of households that will be assisted under the program. Please note: assistance made available to families whose incomes exceed 80 percent of the median should be included as a separate program within this section.):</i></p> <p>Native Hawaiian persons with a disability who are at least eighteen years of age, but not yet sixty-two and head of household starting with those who have been on DHHL's waiting list the longest that are eligible to reside on the Hawaiian Home Lands whose income is at or below 80% AMI.</p>
<p>1.7 Types and Level of Assistance <i>(Describe the types and the level of assistance that will be provided to each household, as applicable.):</i></p> <p>DHHL will contract with a service provider to provide rental assistance that will be reviewed on an annual basis subject to availability of funds. The monthly rental assistance will be the difference between 30% of the household's monthly adjusted income which will be paid by the person with a disability of an eligible household and the Fair Market Rent within the zip code area.</p>
<p>1.8 APR: <i>(Describe the accomplishments for the APR in the 12-month fiscal year in accordance with 24 CFR § 1006.410(b)(2) and (3)):</i></p>

1.9: Planned and Actual Outputs for 12-Month Fiscal Year

Type of Output to be Completed in Fiscal Year Under this Program. Enter <u>one</u> of following choices in accordance with the Eligible Activity: Units; Households; Improved Lots; Acres	Planned Number of Outputs to be completed in Fiscal Year Under this Program	APR: Actual Number of Outputs Completed in Fiscal Year
Households	10	

1.10: APR: If the program is behind schedule, explain why. (24 CFR § 1006.410(b)(2))

1.11: APR: Describe the manner in which DHHL would change its housing plan as a result of its experiences. (24 CFR § 1006.410(b)(4)). NOTE: It is sufficient to provide one response to this item rather than an individual response for each NHHBG-funded program.

NOTE: Remember to complete all the text boxes in Section 3 for each NHHBG-funded program. If you are completing an electronic version of this form, you may copy and paste text boxes 1.1 through 1.11 as needed to describe each of your programs. If you are completing this form in hard copy, you may photocopy Section 3 as needed to describe each of your programs.

<p>1.1 Program Name and Unique Identifier: Housing Counseling (AHP VII)</p>
<p>1.2 Program Description <i>(This should be the description of the planned program.):</i></p> <p>Independent, expert advice customized to the need of the Native Hawaiian lessee, applicant or household to address housing barriers in order to achieve housing goals through homeownership counseling or rental housing counseling and include the following processes: intake, financial and housing affordability analysis, an action plan, and a reasonable effort to have follow-up communication when possible.</p>
<p>1.3 Eligible Activity Number <i>(Select one activity from the Eligible Activity list. Do not combine homeownership and rental housing in one activity, so that when housing units are reported in the APR they are correctly identified as homeownership or rental.):</i></p> <p>(18) Other Housing Service [810(b)(2)]</p>
<p>1.4 Intended Outcome Number <i>(Select one outcome from the Outcome list. Each program can have only one outcome. If more than one outcome applies, create a separate program for each outcome.):</i></p> <p>(6) Assist Affordable Housing for Low-Income Households</p>
<p>Describe Other Intended Outcome <i>(Only if you selected "Other" above.):</i></p>
<p>1.5 Actual Outcome Number <i>(In the APR identify the actual outcome from the Outcome list.):</i></p>
<p>Describe Other Actual Outcome <i>(Only if you selected "Other" above.):</i></p>
<p>1.6 Who Will Be Assisted <i>(Describe the types of households that will be assisted under the program. Please note: assistance made available to families whose incomes exceed 80 percent of the median should be included as a <u>separate</u> program within this section.):</i></p> <p>Native Hawaiian lessee, applicants or households who received or are eligible to receive NAHASDA assistance including but not limited to homeowner financing, home repair assistance, rental and homeowner assistance.</p>
<p>1.7 Types and Level of Assistance <i>(Describe the types and the level of assistance that will be provided to each household, as applicable.):</i></p> <p>Families who received NAHASDA assistance will receive either homeownership or rental housing counseling. Homeownership counseling is housing counseling related to homeownership and residential mortgage loans that covers the decision to purchase a home, issues arising during or affecting the period of ownership of a home (including financing, refinancing, default, and foreclosure/lease cancellation, and other financial dispositions), and the sale/transfer or other disposition of a home. Rental housing counseling is counseling related to the rental of residential property, which may include counseling regarding future homeownership opportunities and may also include the decision to rent, responsibilities of tenancy, affordability of renting and eviction prevention. At a minimum, initial contact will be made with lessee, applicants or households who received NAHASDA assistance informing them of housing counseling services.</p>

1.8 APR: (Describe the accomplishments for the APR in the 12-month fiscal year in accordance with 24 CFR § 1006.410(b)(2) and (3)):

1.9: Planned and Actual Outputs for 12-Month Fiscal Year

Type of Output to be Completed in Fiscal Year Under this Program. Enter <u>one</u> of following choices in accordance with the Eligible Activity: Units; Households; Improved Lots; Acres	Planned Number of Outputs to be completed in Fiscal Year Under this Program	APR: Actual Number of Outputs Completed in Fiscal Year
Households	100	

1.10: APR: If the program is behind schedule, explain why. (24 CFR § 1006.410(b)(2))

1.11: APR: Describe the manner in which DHHL would change its housing plan as a result of its experiences. (24 CFR § 1006.410(b)(4)). NOTE: It is sufficient to provide one response to this item rather than an individual response for each NHHBG-funded program.

NOTE: Remember to complete all the text boxes in Section 3 for each NHHBG-funded program. If you are completing an electronic version of this form, you may copy and paste text boxes 1.1 through 1.11 as needed to describe each of your programs. If you are completing this form in hard copy, you may photocopy Section 3 as needed to describe each of your programs.

1.1 Program Name and Unique Identifier: Homeowner Assistance (AHP VIII)

1.2 Program Description *(This should be the description of the planned program.):*

This activity provides funds for homeowner assistance (mortgage, utilities, insurance, or association fees) to mitigate financial hardships associated with the Coronavirus pandemic to promote housing stability and/or to prevent lease cancellation.

1.3 Eligible Activity Number *(Select one activity from the Eligible Activity list. Do not combine homeownership and rental housing in one activity, so that when housing units are reported in the APR they are correctly identified as homeownership or rental.):*

(18) Other Housing Service [810(b)(2)]

1.4 Intended Outcome Number *(Select one outcome from the Outcome list. Each program can have only one outcome. If more than one outcome applies, create a separate program for each outcome.):*

(6) Assist Affordable Housing for Low-Income Households

Describe Other Intended Outcome *(Only if you selected "Other" above.):*

1.5 Actual Outcome Number *(In the APR identify the actual outcome from the Outcome list.):*

Describe Other Actual Outcome *(Only if you selected "Other" above.):*

1.6 Who Will Be Assisted *(Describe the types of households that will be assisted under the program. Please note: assistance made available to families whose incomes exceed 80 percent of the median should be included as a separate program within this section.):*

Native Hawaiian families eligible to reside on the Hawaiian Home Lands whose income is at or below 80% AMI.

1.7 Types and Level of Assistance *(Describe the types and the level of assistance that will be provided to each household, as applicable.):*

DHHL will contract with a service provider to provide homeowner assistance (mortgage, utilities, insurance or association fees) for a period not to exceed 12 months except that assistance may be provided for an additional 6 months only if necessary to ensure housing stability and/or to prevent lease cancellation on a home subject to availability of funds. The maximum monthly assistance for an eligible household to receive will be the maximum amount set by each County for similar homeowner assistance programs.

1.8 APR: *(Describe the accomplishments for the APR in the 12-month fiscal year in accordance with 24 CFR § 1006.410(b)(2) and (3)):*

1.9: Planned and Actual Outputs for 12-Month Fiscal Year

Type of Output to be Completed in Fiscal Year Under this Program. Enter <u>one</u> of following choices in accordance with the Eligible Activity: Units; Households; Improved Lots; Acres	Planned Number of Outputs to be completed in Fiscal Year Under this Program	APR: Actual Number of Outputs Completed in Fiscal Year
Households	20	

1.10: APR: If the program is behind schedule, explain why. (24 CFR § 1006.410(b)(2))

1.11: APR: Describe the manner in which DHHL would change its housing plan as a result of its experiences. (24 CFR § 1006.410(b)(4)). NOTE: It is sufficient to provide one response to this item rather than an individual response for each NHHBG-funded program.

NOTE: Remember to complete all the text boxes in Section 3 for each NHHBG-funded program. If you are completing an electronic version of this form, you may copy and paste text boxes 1.1 through 1.11 as needed to describe each of your programs. If you are completing this form in hard copy, you may photocopy Section 3 as needed to describe each of your programs.

<p>1.1 Program Name and Unique Identifier: Existing Potable Water Infrastructure Improvements (AHP IX)</p>
<p>1.2 Program Description <i>(This should be the description of the planned program.):</i></p> <p>This activity will utilize NHHBG funding for engineering services for Anahola Farm Lots Water System and construction management services for the Molokai Water System Improvements. These funds will be leveraged with funding from USDA to improve potable water infrastructure for systems in Anahola, Kauai and Hoolehua, Molokai.</p>
<p>1.3 Eligible Activity Number <i>(Select one activity from the Eligible Activity list. Do not combine homeownership and rental housing in one activity, so that when housing units are reported in the APR they are correctly identified as homeownership or rental.):</i></p> <p>(24) Infrastructure to Support Housing [810(b)(1)]</p>
<p>1.4 Intended Outcome Number <i>(Select one outcome from the Outcome list. Each program can have only one outcome. If more than one outcome applies, create a separate program for each outcome.):</i></p> <p>(4) Improve quality of existing infrastructure</p>
<p>Describe Other Intended Outcome <i>(Only if you selected "Other" above.):</i></p>
<p>1.5 Actual Outcome Number <i>(In the APR identify the actual outcome from the Outcome list.):</i></p>
<p>Describe Other Actual Outcome <i>(Only if you selected "Other" above.):</i></p>
<p>1.6 Who Will Be Assisted <i>(Describe the types of households that will be assisted under the program. Please note: assistance made available to families whose incomes exceed 80 percent of the median should be included as a separate program within this section.):</i></p> <p>New and existing lessees in homestead areas with approved USDA DHHL applications would be assisted with potable water infrastructure improvements.</p>
<p>1.7 Types and Level of Assistance <i>(Describe the types and the level of assistance that will be provided to each household, as applicable.):</i></p> <p>Improved potable water service delivery and/or new potable water service delivery for lessees in homestead areas with an approved DHHL USDA water application.</p>
<p>1.8 APR: <i>(Describe the accomplishments for the APR in the 12-month fiscal year in accordance with 24 CFR § 1006.410(b)(2) and (3)):</i></p>

1.9: Planned and Actual Outputs for 12-Month Fiscal Year

Type of Output to be Completed in Fiscal Year Under this Program. Enter <u>one</u> of following choices in accordance with the Eligible Activity: Units; Households; Improved Lots; Acres	Planned Number of Outputs to be completed in Fiscal Year Under this Program	APR: Actual Number of Outputs Completed in Fiscal Year
Improved Lots	0	

1.10: APR: If the program is behind schedule, explain why. (24 CFR § 1006.410(b)(2))

1.11: APR: Describe the manner in which DHHL would change its housing plan as a result of its experiences. (24 CFR § 1006.410(b)(4)). **NOTE:** It is sufficient to provide one response to this item rather than an individual response for each NHHBG-funded program.

NOTE: Remember to complete all the text boxes in Section 3 for each NHHBG-funded program. If you are completing an electronic version of this form, you may copy and paste text boxes 1.1 through 1.11 as needed to describe each of your programs. If you are completing this form in hard copy, you may photocopy Section 3 as needed to describe each of your programs.

<p>1.1 Program Name and Unique Identifier: Housing Conversion (AHP X)</p>
<p>1.2 Program Description <i>(This should be the description of the planned program.):</i></p> <p>This activity supports the environmental review and studies, engineering and design, and procurement of a developer to convert existing structures to affordable housing.</p>
<p>1.3 Eligible Activity Number <i>(Select one activity from the Eligible Activity list. Do not combine homeownership and rental housing in one activity, so that when housing units are reported in the APR they are correctly identified as homeownership or rental.):</i></p> <p>(8) Conversion of Other Structures to Affordable Housing [810(b)(1)]</p>
<p>1.4 Intended Outcome Number <i>(Select one outcome from the Outcome list. Each program can have only one outcome. If more than one outcome applies, create a separate program for each outcome.):</i></p> <p>(5) Address homelessness</p>
<p>Describe Other Intended Outcome <i>(Only if you selected "Other" above.):</i></p>
<p>1.5 Actual Outcome Number <i>(In the APR identify the actual outcome from the Outcome list.):</i></p>
<p>Describe Other Actual Outcome <i>(Only if you selected "Other" above.):</i></p>
<p>1.6 Who Will Be Assisted <i>(Describe the types of households that will be assisted under the program. Please note: assistance made available to families whose incomes exceed 80 percent of the median should be included as a <u>separate</u> program within this section.):</i></p> <p>Undivided interest lessees and applicants at or below the 80% AMI income guidelines who are homeless would be assisted through transitional housing.</p>
<p>1.7 Types and Level of Assistance <i>(Describe the types and the level of assistance that will be provided to each household, as applicable.):</i></p> <p>The assistance will provide funding for environmental review and studies, engineering and design, and procurement of a developer to rehabilitate an existing building for transitional housing.</p>
<p>1.8 APR: <i>(Describe the accomplishments for the APR in the 12-month fiscal year in accordance with 24 CFR § 1006.410(b)(2) and (3)):</i></p>

1.9: Planned and Actual Outputs for 12-Month Fiscal Year

Type of Output to be Completed in Fiscal Year Under this Program. Enter <u>one</u> of following choices in accordance with the Eligible Activity: Units; Households; Improved Lots; Acres	Planned Number of Outputs to be completed in Fiscal Year Under this Program	APR: Actual Number of Outputs Completed in Fiscal Year
Units	0	

1.10: APR: If the program is behind schedule, explain why. (24 CFR § 1006.410(b)(2))

1.11: APR: Describe the manner in which DHHL would change its housing plan as a result of its experiences. (24 CFR § 1006.410(b)(4)). **NOTE:** It is sufficient to provide one response to this item rather than an individual response for each NHHBG-funded program.

NOTE: Remember to complete all the text boxes in Section 3 for each NHHBG-funded program. If you are completing an electronic version of this form, you may copy and paste text boxes 1.1 through 1.11 as needed to describe each of your programs. If you are completing this form in hard copy, you may photocopy Section 3 as needed to describe each of your programs.

<p>1.1 Program Name and Unique Identifier: Property Acquisition (AHP XI)</p>
<p>1.2 Program Description <i>(This should be the description of the planned program.):</i></p> <p>This activity provides funds for the Department to acquire vacant land or existing housing.</p>
<p>1.3 Eligible Activity Number <i>(Select one activity from the Eligible Activity list. Do not combine homeownership and rental housing in one activity, so that when housing units are reported in the APR they are correctly identified as homeownership or rental.):</i></p> <p>(10) Acquisition of Land for Homebuyer Unit Development [810(b)(1)]</p>
<p>1.4 Intended Outcome Number <i>(Select one outcome from the Outcome list. Each program can have only one outcome. If more than one outcome applies, create a separate program for each outcome.):</i></p> <p>(1) Reduce over-crowding</p>
<p>Describe Other Intended Outcome <i>(Only if you selected "Other" above.):</i></p>
<p>1.5 Actual Outcome Number <i>(In the APR identify the actual outcome from the Outcome list.):</i></p>
<p>Describe Other Actual Outcome <i>(Only if you selected "Other" above.):</i></p>
<p>1.6 Who Will Be Assisted <i>(Describe the types of households that will be assisted under the program. Please note: assistance made available to families whose incomes exceed 80 percent of the median should be included as a separate program within this section.):</i></p> <p>Native Hawaiian families eligible to reside on Hawaiian Home Lands at or below the 80% AMI income guidelines will be assisted when land or existing housing is acquired and either lot preparation is completed or rental units are made available.</p>
<p>1.7 Types and Level of Assistance <i>(Describe the types and the level of assistance that will be provided to each household, as applicable.):</i></p> <p>Land and/or existing housing will be considered for purchase to provide lots or rental units to increase affordable housing inventory.</p>
<p>1.8 APR: <i>(Describe the accomplishments for the APR in the 12-month fiscal year in accordance with 24 CFR § 1006.410(b)(2) and (3)):</i></p>

1.9: Planned and Actual Outputs for 12-Month Fiscal Year

Type of Output to be Completed in Fiscal Year Under this Program. Enter <u>one</u> of following choices in accordance with the Eligible Activity: Units; Households; Improved Lots; Acres	Planned Number of Outputs to be completed in Fiscal Year Under this Program	APR: Actual Number of Outputs Completed in Fiscal Year
Acres	2	

1.10: APR: If the program is behind schedule, explain why. (24 CFR § 1006.410(b)(2))

1.11: APR: Describe the manner in which DHHL would change its housing plan as a result of its experiences. (24 CFR § 1006.410(b)(4)). **NOTE:** It is sufficient to provide one response to this item rather than an individual response for each NHHBG-funded program.

NOTE: Remember to complete all the text boxes in Section 3 for each NHHBG-funded program. If you are completing an electronic version of this form, you may copy and paste text boxes 1.1 through 1.11 as needed to describe each of your programs. If you are completing this form in hard copy, you may photocopy Section 3 as needed to describe each of your programs.

1.1 Program Name and Unique Identifier: Crime Prevention (AHP XII)

1.2 Program Description *(This should be the description of the planned program.):*

This activity provides funds for the Department to plan, coordinate with law enforcement and homestead communities and where appropriate implement safety and security measures to protect residents of homestead communities from crime. The 2020 Beneficiary Study Lessee Report noted that residents of DHHL Homestead communities generally know and look out for one another and want to remain in their neighborhood with close to eight out of ten residents reporting that they feel safe in their community day and night. Nevertheless, recent incidents like the investigation of illegal activity such as an illegal game room, unauthorized campers necessitating cleanup and the installation of a fence, or illegal dumping requiring removal of intentionally abandoned vehicles and gate installation should be addressed through appropriate crime prevention personnel and measures.

1.3 Eligible Activity Number *(Select one activity from the Eligible Activity list. Do not combine homeownership and rental housing in one activity, so that when housing units are reported in the APR they are correctly identified as homeownership or rental.):*

(21) Crime Prevention and Safety [810(b)(4)]

1.4 Intended Outcome Number *(Select one outcome from the Outcome list. Each program can have only one outcome. If more than one outcome applies, create a separate program for each outcome.):*

(11) Reduction in crime reports

Describe Other Intended Outcome *(Only if you selected "Other" above.):*

1.5 Actual Outcome Number *(In the APR identify the actual outcome from the Outcome list.):*

Describe Other Actual Outcome *(Only if you selected "Other" above.):*

1.6 Who Will Be Assisted *(Describe the types of households that will be assisted under the program. Please note: assistance made available to families whose incomes exceed 80 percent of the median should be included as a separate program within this section.):*

Homestead communities with a larger percentage of Native Hawaiians with incomes at or below 80% AMI would benefit from funding for programs and services aimed at reducing illegal activity.

1.7 Types and Level of Assistance *(Describe the types and the level of assistance that will be provided to each household, as applicable.):*

The assistance will be tailored to meet the needs and concerns of each homestead community.

1.8 APR: *(Describe the accomplishments for the APR in the 12-month fiscal year in accordance with 24 CFR § 1006.410(b)(2) and (3)):*

1.9: Planned and Actual Outputs for 12-Month Fiscal Year

Type of Output to be Completed in Fiscal Year Under this Program. Enter <u>one</u> of following choices in accordance with the Eligible Activity: Units; Households; Improved Lots; Acres	Planned Number of Outputs to be completed in Fiscal Year Under this Program	APR: Actual Number of Outputs Completed in Fiscal Year
Dollars	\$100,000	

1.10: APR: If the program is behind schedule, explain why. (24 CFR § 1006.410(b)(2))

1.11: APR: Describe the manner in which DHHL would change its housing plan as a result of its experiences. (24 CFR § 1006.410(b)(4)). NOTE: It is sufficient to provide one response to this item rather than an individual response for each NHHBG-funded program.

NOTE: Remember to complete all the text boxes in Section 3 for each NHHBG-funded program. If you are completing an electronic version of this form, you may copy and paste text boxes 1.1 through 1.11 as needed to describe each of your programs. If you are completing this form in hard copy, you may photocopy Section 3 as needed to describe each of your programs.

SECTION 4: AFFORDABLE HOUSING RESOURCES

This section of the NHP is designed to provide the public with basic background information on the characteristics shaping DHHL's affordable housing programs. Each portion of the text below has several required components that must be discussed. DHHL is encouraged to carefully review the instructions for each section and provide text covering all required elements.

Housing Market (NAHASDA § 803(c)(2)(D)(i) and (ii)) *(Describe the key characteristics of the housing market in the State of Hawaii, currently, and in the period of time covered by the plan. Include a description of the availability of housing from other public sources and private market housing, and how this supply of housing affected the DHHL's program/activity choices.):*

The Hawaii Housing Planning Study, 2019 pointed out that the most distinctive characteristic of Hawaii's housing market is high prices. Hawaii also continues to have the highest average rents in the nation, followed by the District of Columbia and New York. For the past decade, Hawaii's median gross rent has consistently been 50 to 55 percent higher than the national median gross rent.

In addition, the Study noted the slowing of residential housing construction. Total housing units grew by about 5,600 units per year (2.2%) between 2009 and 2011. Between 2011 and 2014, growth slowed to 2,800 units per year – half what it was in the previous five years. Between 2014 and 2017, growth slowed further to about 2,675 units per year. In recent years, Hawaii has been building more units that aren't being used for Hawaii families.

The Study also reported that Hawaii has typically been in the top 15 percent of states losing housing units to vacancies. Hawaii ranked 12th for percent of total housing units held for seasonal, recreational, and occasional use in 2017. Only two states ranked higher than the counties of Hawaii, Kauai, and Maui with respect to the percent of total units held off the market for seasonal use. Across the State, there were differences in the percent of total housing units counted as housing stock. In Honolulu, 6.8 percent of all units were unavailable. In the other counties, that figure was significantly higher as in 19 percent for Kauai County, 16 percent in the County of Hawaii, and 13 percent for Maui County.

The Study further indicated that one in ten households statewide devotes 30 to 40 percent of their income to shelter costs. For nearly one-quarter of households statewide (23.1%), shelter payments take up more than 40 percent of their income each month. Most disturbing is the evidence that Hawaii's shelter to income ratios are higher than most of the nation. In 2019, the percentage of mortgage holders whose monthly housing cost was greater than 30 percent of monthly income was 40.3 percent, the highest in the nation. The percentage of renters paying more than 30 percent was 55.6 percent, ranking Hawaii third in the nation after Florida (59.0%) and California (57.2%). When you factor Hawaii's Housing Wage (\$36.13) with the average wage of a renter in the state (\$16.16), it is understandable that there are many households with high shelter-to-income. In 2018, Hawaii had the largest shortfall (-\$19.98) between the average renter wage (amount renters earn) and the two-bedroom housing wage (amount required to afford an average two-bedroom rental unit).

Hawaii's crowding rate has long been among the highest in the nation. In 2017, Hawaii was ranked first in crowding for owner-occupied units (6.3%) and second for renter-occupied conditions (12.8%).

The department's NHHBG funded mortgage loans provide single family housing for the same or lower price than a studio in a multi-family high rise built by another housing agency in the urban core. Without NHHBG funding, the department would be unable to build or finance housing for the 80% AMI or below target population.

Cooperation (NAHASDA § 803(c)(2)(D)(iii) *(Describe the structure, coordination, and means of cooperation between DHHL and other relevant partners and organizations [including private nonprofit organizations experienced in the planning and development of affordable housing] in the development, submission, or implementation of its housing plan. In addition, DHHL must indicate if it plans to use loan guarantees under Section 184A of the Housing and Community Development Act of 1992 and any other housing assistance provided by the Federal Government.):*

The department currently partners with a number of housing agencies and organizations either thru subject matter meetings or formal MOUs or agreements.

The Section 184A Loan Guarantee Program, which is similar to the Section 184 Loan Guarantee Program giving Native Americans access to private mortgage financing by providing loan guarantees to lenders, was implemented in 2007. Currently, 1st Tribal Lending, Bank of Hawai'i, Homebridge Financial Services, Inc., HomeStreet Bank, RoundPoint Mortgage Servicing Corporation, and Cardinal Financial Company are approved lenders for the Section 184A loan program.

DHHL has been utilizing the FHA 247 loan program since 1987. Over \$515 million in mortgage loans are outstanding through the FHA 247 loan program to lessees on Hawaiian home lands. The Veterans Affairs direct loan, Rural Development (U.S. Department of Agriculture) loan programs, and low-income housing tax credits are other financing options and tools utilized on Hawaiian home lands.

Demolition and Disposition (NAHASDA § 803(c)(2)(D)(viii), 24 CFR 1006.101(b)(4)(viii)) *(Describe any planned demolition or sale of NHHBG-assisted housing units, or any other demolition or disposition that will be carried out with NHHBG funds. Be certain to include a financial analysis of the proposed demolition, the timetable for any planned demolition or disposition and any other information that is required by HUD with respect to the demolition or disposition.):*

There are no 1937 Act housing on Hawaiian home lands. The DHHL does not anticipate demolishing any units funded by the NHHBG.

Coordination (NAHASDA § 803(c)(2)(D)(ix) *(Describe how DHHL will coordinate with partners to promote employment and self-sufficiency opportunities for residents of affordable housing.)*):

The State of Hawai'i Department of Human Services (DHS) administers individual and family financial assistance programs that provide cash payments to help individuals and families meet their basic needs. The programs include Temporary Assistance to Needy Families (TANF), Temporary Assistance to Other Needy Families (TAONF), General Assistance (GA), Aid to the Aged, Blind and Disabled (AABD) and the Food Stamps program. Medical assistance is provided through the Hawai'i QUEST and Medicaid fee-for-services programs. Vocational rehabilitation services are provided to persons with disabilities. Whenever the DHHL staff is made aware of a lessee in need, the families are referred to DHS or to an appropriate non-profit service provider.

Safety (NAHASDA § 803(c)(2)(D)(x)) *(Describe how DHHL will promote crime prevention and resident involvement in affordable housing.)*:

The DHHL continues to coordinate efforts with the Police Narcotics Division, the Sherriff's Office and the Attorney General's Office—Investigative Division to do surveillance and to evict the offending occupants whenever there is evidence of drug problems or other crimes in the homestead areas. If investigation results in a conviction, the lessee is taken to a contested case hearing for lease cancellation.

Capacity (NAHASDA § 803(c)(2)(D)(xi)) *(Describe the structure, capacity, and key personnel of the entities that will carry out the program/activities of the housing plan.):*

The DHHL was created by the State Legislature in 1964 to administer the Hawaiian home lands program and manage the Hawaiian home lands trust. The DHHL is one of eighteen principal agencies of the Executive Branch of the State of Hawai'i.

The DHHL serves native Hawaiians or individuals of no less than 50% Hawaiian blood, as defined by the Hawaiian Homes Commission Act of 1920, as amended, and their successors and assigns. These native Hawaiians are the beneficiaries of the Hawaiian home lands trust consisting of a land trust of over 200,000 acres, settlement monies from the State for the mismanagement of trust lands, funds received from the State general fund for operating costs, and revenues and earnings from the land leasing program.

The DHHL is governed by a nine-member board of commissioners headed by the Chairman, who also serves as the executive officer of the DHHL. The Governor of the State of Hawai'i appoints each commissioner and Chairman to a four-year term. The terms of the commissioners are staggered.

Currently, there are 121 full time employees in DHHL with six offices statewide. DHHL's main administrative office is located in Kapolei, Oahu and the five (5) district offices are located on neighbor islands. There are two (2) district offices on the Big Island, one in Hilo (East Hawaii) and one in Waimea (West Hawai'i), Hawai'i; one (1) district office in Lihue, Kauai; one (1) district office in Wailuku, Maui; and one (1) district office in Kalamaula, Molokai. DHHL is organized into five offices and three divisions under the Hawaiian Homes Commission and Office of the Chairman. The various offices and divisions are described as follows:

Office of the Chairman (OCH) — 18 staff members

The Office of the Chairman consists of the Chairman of the Hawaiian Homes Commission, who is also the Director of Department of Hawaiian Home Lands; the Deputy to the Chairman, the Executive Assistant; the NAHASDA Manager, NAHASDA Program Specialist, NAHASDA Compliance Specialist, Mortgage Loan Specialist, NAHASDA Clerk; and executive staff.

Administrative Services Office (ASO) – 8 staff members

The Administrative Services Office provides DHHL staff support in the areas of personnel, budgeting, program evaluation, information and communication systems, risk management, facilities management, clerical services and other administrative services. This office also provides support services in preparation of legislative proposals and testimonies, coordinates the preparation of reports to the legislature and facilitates the rule-making process.

Fiscal Office (FO) – 12 staff members

The Fiscal Office provides accounting support for DHHL.

Planning Office (PO) – 7 staff members

The Planning Office conducts research and planning studies required in the development of policies, programs, and projects to benefit native Hawaiians. The PO coordinates and develops the Regional Plans, administers the Native Hawaiian Development Program, provides capacity building training for homestead organizations, and provides community based grants for the implementation of Regional priority projects, community based economic development, and membership development.

Information and Community Relations Office (ICRO) – 4 staff members

The Information and Community Relations Office disseminates information to the public on Department issues, oversees community relations with the various homestead communities and coordinates DHHL's ceremonies. They also publish DHHL's annual reports to the State Legislature.

Homestead Services Division (HSD) – 45 staff members

HSD is composed of three branches: 1) Homestead Applications, 2) District Operations, and 3) Loan Services. HSD is the largest division in DHHL, has staff on all islands, and services more than 25,000 applicants and 9,000 lessees on five islands.

Land Management Division (LMD) – 6 staff members

LMD is responsible for managing Hawaiian home lands that are not used for homestead purposes. Unencumbered lands are managed and disposed of for long and short term uses in order to generate revenues and keep the lands productive while minimizing the occurrence of vegetative overgrowth, squatting or illegal dumping. LMD is responsible for properly managing the lands in DHHL's inventory.

Land Development Division (LDD) – 13 staff members

LDD is charged with the responsibility of developing trust lands for homesteading and income-producing purposes. This is accomplished through the development of properties for residential, agricultural, pastoral, and economic development uses. LDD has three operating branches: 1) Design and Construction – concentrating on the design and construction of off-site and on-site improvements for the various subdivisions; 2) Master-Planned Community – expediting the construction of housing options through partnerships with private sector and exploring other housing opportunities; and, 3) Housing Project—providing turn-key homes and assisting lessees of vacant lots in arranging financing and in contracting with a builder, including self-help and Habitat programs.

The following is a listing of the key personnel responsible for the implementation of DHHL and NAHASDA assisted programs:

Hawaiian Homes Commission (HHC)

William J. Aila, Jr., Chairman

David Kaapu, West Hawaii Commissioner

Michael Kaleikini, East Hawaii Commissioner

Randy Awo, Maui Commissioner

Zachary Helm, Molokai Commissioner

Pauline Namuo, Oahu Commissioner

Patricia (Patty) Kahanamoku-Teruya, Oahu Commissioner

Russell Kaupu, Oahu Commissioner

Dennis Neves, Kauai Commissioner

Department of Hawaiian Home Lands

William J. Aila, Jr., Director

Tyler Iokepa Gomes, Deputy to the Chairman

Jobie Masagatani, Executive Assistant

Rodney Lau, Administrative Services Officer

Pearl Teruya, Fiscal Management Officer

Andrew Choy, Planning Program Manager

Cedric Duarte, Info Community & Relations Officer

Lehua Kinilau-Cano, Legislative Analyst
Cynthia Rezentes, NAHASDA Program Specialist
Malia Cox, NAHASDA Compliance Specialist
Aloha Kaikaina, NAHASDA Mortgage Loan Assistant
Nadine Pomroy, Clerk (NAHASDA)
Oriana Leao, Kāko‘o to Deputy Tyler Gomes
Michelle Hitzeman, HALE Manager
Juan Garcia, HSD Administrator
Nina Fisher, East Hawaii Homestead District Supervisor
James Du Pont, West Hawaii Homestead District Supervisor
Erna Kamibayashi, Kauai Homestead District Supervisor
Antonette Eaton, Maui Homestead District Supervisor
Dean Oshiro, Housing Services Loan Manager
Kip Akana, Enforcement Officer
Stewart Matsunaga, Acting Land Development Division Administrator
Kehaulani Quartero, Labor Compliance Specialist

SECTION 5: BUDGETS

(1) Sources of Funding (NAHASDA § 803(c)(2)(C)(i) and 820(b)(1)) (Complete the non-shaded portions of the chart below to describe your estimated or anticipated sources of funding for the 12-month fiscal year. **APR Actual Sources of Funding -- Please complete the shaded portions of the chart below to describe your actual funds received. Only report on funds actually received and under a grant agreement or other binding commitment during the 12-month fiscal year.**)

SOURCE	NHHP					APR					
	(A) Estimated amount on hand at beginning of fiscal year	(B) Estimated amount to be received during 12- month fiscal year	(C) Estimated total sources of funds (A + B)	(D) Estimated funds to be expended during 12- month fiscal year	(E) Estimated unexpended funds remaining at end of fiscal year (C minus D)	(F) Actual amount on hand at beginning of fiscal year	(G) Actual amount received during 12- month fiscal year	(H) Actual total sources of funding (F + G)	(I) Actual funds expended during 12- month fiscal year	(J) Actual unexpended funds remaining at end of 12- month fiscal year (H minus I)	(K) Actual unexpended funds obligated but not expended at end of 12- month fiscal year
1. NHHBG Funds	14,000,000	22,300,000	36,300,000	18,355,000	17,965,000						
2. NHHBG Program Income	0	140,000	140,000	140,000	0						
LEVERAGED FUNDS											
3. Other Federal Funds	0	25,000	25,000	25,000	0						
4. LIHTC											
5. Non-Federal Funds											
TOTAL	14,000,000	22,465,000	36,465,000	18,500,000	17,965,000						

Notes:

- For the NHHP, fill in columns A, B, C, D, and E (non-shaded columns). For the APR, fill in columns F, G, H, I, J, and K (shaded columns).
- Total of Column D should match the total of Column N from the **Uses Table** on the following page.
- Total of Column I should match the Total of Column Q from the Uses Table on the following page.**
- For the NHHP, describe any estimated leverage in Line 3 below. For the APR, describe actual leverage in Line 4 below (APR).

(2) Uses of Funding (NAHASDA § 803(c)(2)(C)(iii)) (Note that the budget should not exceed the total funds on hand (Column C) and insert as many rows as needed to include all the programs identified in Section 3. **Actual expenditures in the APR section are for the 12-month fiscal year.**)

PROGRAM NAME (tie to program names in Section 3 above)	Unique Identifier	NHHP			APR		
		(L) Prior and current year NHHBG (only) funds to be expended in 12- month fiscal year	(M) Total all other funds to be expended in 12- month fiscal year	(N) Total funds to be expended in 12- month fiscal year (L + M)	(O) Total NHHBG (only) funds expended in 12-month fiscal year	(P) Total all other funds expended in 12- month fiscal year	(Q) Total funds expended in 12-month fiscal year (O+P)
2022 CIP	AHP I	250,000		250,000			
Down Payment Asst.	AHP II	100,000		100,000			
Homeowner Financing	AHP III	1,335,000	165,000	1,500,000			
HAP	AHP IV	600,000		600,000			
Rental Operating Subsidy	AHP V	250,000		250,000			
Rental Vouchers	AHP VI-A	50,000		50,000			
Emergency Rental	AHP VI-B	1,500,000		1,500,000			
Kupuna Rental	AHP VI-C	1,000,000		1,000,000			
Disability Rental	AHP VI-D	500,000		500,000			
Housing Counseling	AHP VII	500,000		500,000			
Homeowner Assistance	AHP VIII	500,000		500,000			
Water Infrastructure Improvements	AHP IX	250,000		250,000			
Housing Conversion	AHP X	1,000,000		1,000,000			
Property Acquisition	AHP XI	10,000,000		10,000,000			
Crime Prevention	AHP XII	100,000		100,000			
Planning and Administration Loan Repayment – describe in 3 and 4 below.		400,000		400,000			
TOTAL		18,335,000	165,000	18,500,000			

Notes:

- Total of Column L cannot exceed the NHHBG funds from Column C, Row 1 from the Sources Table on the previous page.
- Total of Column M cannot exceed the total from Column C, Rows 2-10 from the Sources Table on the previous page.
- Total of Column O cannot exceed total NHHBG funds received in Column H, Row 1 from the Sources Table on the previous page.
- Total of Column P cannot exceed total of Column H, Rows 2-10 of the Sources Table on the previous page.
- Total of Column Q should equal total of Column I of the Sources Table on the previous page.

(3) Estimated Sources or Uses of Funding (NAHASDA § 803(c)(2)(C)). *(Provide any additional information about the estimated sources or uses of funding, including leverage (if any). You must provide the relevant information for any planned loan repayment. The text must describe which specific loan is planned to be repaid and the NAHASDA-eligible activity and program associated with this loan):*

The department anticipates \$140,000 in program income. The estimated \$25,000 in other federal funds is the repayment of the NHHBG subsidy when the lessee transfers their interest in the lease to a non-income eligible Native Hawaiian purchaser.

(4) APR (NAHASDA § 820(b)(1)) *(Enter any additional information about the actual sources or uses of funding, including leverage (if any)).*

SECTION 6: OTHER SUBMISSION ITEMS

- (1) Useful Life/Affordability Period(s)** (NAHASDA § 813, 24 CFR § 1006.305) *(Describe your plan or system for determining the useful life/affordability period of the housing assisted with NHHBG funds. A record of the current, specific useful life/affordability period for housing units assisted with NHHBG funds must be maintained in DHHL's files and available for review for the useful life/affordability period.):*

DHHL has established the following affordability periods to describe the term during which DHHL will keep the unit affordable:

<u>NHHBG Funds Invested</u>	<u>Affordability Period</u>
Up to \$24,999	5 years
\$25,000 to \$100,000	10 years
\$100,001 to \$200,000	20 years
\$200,001 and above	30 years

The affordability period is based on the total amount of NHHBG funds invested in the development and/or rehabilitation of a housing unit. Resale and recapture provisions will be included as a condition of the Hawaiian homestead lease to enforce the affordability restriction for each assisted housing unit.

- (2) Model Housing and Over-Income Activities** (NAHASDA § 810(b)(5) and 809(a)(2)(B), 24 CFR § 1006.225 and 1006.301(b)) *(If you wish to undertake a model housing activity or wish to serve non-low-income households during the 12-month fiscal year, those activities may be described here. Each approved model activity must be included as a separate program in Section 3 (Program Descriptions) and the APR portions of Section 3 must be completed in the APR submission for any approved model activity.):*

None.

- (3) Anticipated Planning and Administration Expenses** (NAHASDA § 802(d), 24 CFR § 1006.230)

Do you intend to exceed your allowable spending cap for Planning and Administration? Yes ☐ No ☒

If yes, describe why the additional funds are needed for Planning and Administration.

Native Hawaiian Housing Block Grant (NHHBG)

NHHP/APR

Exempt from OMB Approval. 5 CFR 1320.3 (c) (4)
U.S. Department of Housing and Urban Development
Office of Public and Indian Housing
Office of Native American Programs

(4) Actual Planning and Administration Expenses (NAHASDA § 802(d), 24 CFR § 1006.230)

Did you exceed your spending cap for Planning and Administration? Yes ☐ No ☐

If yes, did you receive HUD approval to exceed your spending cap on Planning and Administration? Yes ☐ No ☐

If you did not receive approval for exceeding your spending cap on Planning and Administration costs, describe the reason(s) for exceeding the cap.

SECTION 7: NATIVE HAWAIIAN HOUSING PLAN CERTIFICATION OF COMPLIANCE (NAHASDA § 803(c)(2)(E))

By signing the NHHP, you certify that you have all required policies and procedures in place in order to operate any planned NHHBG programs.

- (1) In accordance with applicable statutes, the recipient certifies that it will comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.) or with the Fair Housing Act (42 U.S.C. 3601 et seq.) in carrying out the NHHBG program, to the extent that such Acts are applicable, and other applicable federal statutes.

Yes ☒ No ☐

The following certifications will only apply where applicable based on program activities.

- (2) The recipient will require adequate insurance coverage for housing units that are owned and operated or assisted with grant amounts provided under NAHASDA, in compliance with such requirements as may be established by HUD.

Yes ☒ No ☐ Not Applicable ☐

- (3) Policies are in effect and are available for review by HUD and the public governing the eligibility, admission, and occupancy of families for housing assisted with grant amounts provided under NAHASDA.

Yes ☒ No ☐ Not Applicable ☐

- (4) Policies are in effect and are available for review by HUD and the public governing rents charged, including the methods by which such rents or homebuyer payments are determined, for housing assisted with grant amounts provided under NAHASDA.

Yes ☒ No ☐ Not Applicable ☐ and

- (5) Policies are in effect and are available for review by HUD and the public governing the management and maintenance of housing assisted with grant amounts provided under NAHASDA.

Yes ☒ No ☐ Not Applicable ☐

SECTION 8: SELF-MONITORING

(NAHASDA § 819(b), 24 CFR § 1006.401)

(1) Do you have a procedure and/or policy for self-monitoring?

Yes ☐ No ☐

(2) Did you conduct self-monitoring, including monitoring sub-recipients?

Yes ☐ No ☐

(3) Self-Monitoring Results. *(Describe the results of the monitoring activities, including inspections for this program year.):*

SECTION 9: INSPECTIONS

(NAHASDA § 819(b))

(1) **Inspection of Units** *(Use the table below to record the results of inspections of assisted housing.)*

(A)		(B)	Results of Inspections	
Activity		Total number of units inspected	(C)	Total number of units (Inventory)
NAHASDA-Assisted Units: Running inventory as of Fiscal Year Beginning (July 1) a 12-month total.				
a.	New Construction Completed			
b.	Rehab/Repair Completed			
c.	Rental Assistance (if applicable)			
d.	Other			
Total				

(2) Did you comply with your inspection policy: Yes ☐ No: ☐

(3) If no, why not:

SECTION 10: AUDITS

(24 CFR § 1006.375(d))

This section is used to indicate whether an Office of Management and Budget Circular A-133* audit is required, based on a review of your financial records.

Did you expend \$500,000* or more in total Federal awards during the APR reporting period?

Yes ☐ No ☐

If Yes, an audit is required to be submitted to the Federal Audit Clearinghouse and the Office of Native American Programs.

If No, an audit is not required.

*DHHL should note that new Federal government regulations on Administrative Requirements, Cost Principles, and Audit Requirements were promulgated on December 26, 2013 at 2 C.F.R. Part 200. HUD intends to update its regulations by December 26, 2014 to implement these new requirements in its programs. Audits covering recipients' fiscal years that begin in January 2015 will be subject to the revised audit requirements. In the meantime, applicable OMB Circulars and the regulations at 2 C.F.R. Part 225 will continue to apply to grants until implementation of the new requirements.

SECTION 11: PUBLIC AVAILABILITY

(NAHASDA § 820(d), 24 CFR § 1006.410(c))

- (1) Did you make this APR available to the beneficiaries of the Hawaiian Homes Commission Act before it was submitted to HUD?

Check one: Yes ☐ No ☐

- (2) If you answered "No" to question #1, provide an explanation as to why not and indicate when you will do so.

- (3) Summarize any comments received from the beneficiaries (NAHASDA § 820(d)(2)).

SECTION 12: JOBS SUPPORTED BY NAHASDA
(NAHASDA § 820)

Use the table below to record the number of jobs supported with NHHBG funds each year (including DHHL staff, Subrecipient staff, Contractors, etc.).

Native Hawaiian Housing Block Grant Assistance (NHHBG)	
(1) Number of Permanent Jobs Supported	
(2) Number of Temporary Jobs Supported	

(3) Narrative *(optional)*:

SECTION 13: NHHP WAIVER REQUESTS

(NAHASDA § 802(b)(2), 24 CFR 1006.20(b))

THIS SECTION IS ONLY REQUIRED IF DHHL IS REQUESTING A WAIVER OF A NHHP SECTION OR A WAIVER OF THE NHHP SUBMISSION DUE DATE. Fill out the form below if you are requesting a waiver of one or more sections of the NHHP. **NOTE:** This is NOT a waiver of the NHHBG program requirements but rather a request to waive some of the NHHP submission items because DHHL cannot comply due to circumstances beyond its control.

- (1) List below the sections of the NHHP where you are requesting a waiver and/or a waiver of the NHHP due date. (List the requested waiver sections by name and section number):

- (2) Describe the reasons that you are requesting this waiver (Describe completely why you are unable to complete a particular section of the NHHP or could not submit the NHHP by the required due date.):

- (3) Describe the actions you will take in order to ensure that you are able to submit a complete NHHP in the future and/or submit the NHHP by the required due date. (This section should completely describe the procedural, staffing or technical corrections that you will make in order to submit a complete NHHP in the future and/or submit the NHHP by the required due date.):

(4) Recipient:	
(5) Authorized Official's Name and Title:	
(6) Authorized Official's Signature:	
(7) Date (MM/DD/YYYY):	

SECTION 14: NHHP AMENDMENTS

(24 CFR § 1006.101(d))

Use this section for NHHP amendments only.

Fill out the text below to summarize your NHHP amendment. Copy and paste Section 14 for each amendment. This amendment is only required to be submitted to the HUD Office of Native American Programs when the recipient is adding a new activity that was not described in the current One-Year Plan that has been determined to be in compliance by HUD. All other amendments will be reflected in the APR and do not need to be submitted to HUD.

NOTE: A Cover Page is strongly recommended but not required with a NHHP Amendment submission.

APR: REPORTING ON PROGRAM YEAR PROGRESS (NAHASDA § 820(b))

Complete the shaded section of text below to describe your completed program tasks and actual results. Only report on activities completed during the 12-month fiscal year. Financial data should be presented using the same basis of accounting as the Schedule of Expenditures of Federal Awards (SEFA) in the annual OMB Circular A-133' audit. For unit accomplishments, only count units when the unit was completed and occupied during the year. For households, only count the household if it received the assistance during the previous 12-month fiscal year.

*DHHL should note that new Federal government regulations on Administrative Requirements, Cost Principles, and Audit Requirements were promulgated on December 26, 2013 at 2 C.F.R. Part 200. HUD intends to update its regulations by December 26, 2014 to implement these new requirements in its programs. In the meantime, applicable OMB Circulars and the regulations at 2 C.F.R. Part 225 will continue to apply to existing grants. After HUD implements the new requirements in 2 C.F.R. Part 200 (after December 26, 2014), all grants will be subject to 2 C.F.R. Part 200, as implemented by HUD.

(1) Program Name and Unique Identifier:**(2) Program Description** (*This should be the description of the planned program.*):**(3) Eligible Activity Number** (*Select one activity from the Eligible Activities list in Section 3. Do not combine homeownership and rental housing in one activity, so that when units are reported in the APR they are correctly identified as homeownership or rental.*):

Native Hawaiian Housing Block Grant (NHHBG)

NHHP/APR

Exempt from OMB Approval. 5 CFR 1320.3 (c) (4)
U.S. Department of Housing and Urban Development
Office of Public and Indian Housing
Office of Native American Programs

(4) Intended Outcome Number (*Select one Outcome from the Outcome list in Section 3.:*)

Describe Other Intended Outcome (*Only if you selected "Other" above.:*)

(5) Actual Outcome Number (*Select one Outcome from the Outcome list in Section 3.:*)

Describe Other Actual Outcome (*Only if you selected "Other" above.:*)

(6) Who Will Be Assisted (*Describe the types of households that will be assisted under the program. Please note: assistance made available to families whose incomes exceed 80 percent of the median income should be included as a separate program within this Section.:*)

(7). Types and Level of Assistance (*Describe the types and the level of assistance that will be provided to each household, as applicable.:*)

(8). APR: (*Describe the accomplishments for the APR in the 12-month fiscal year. In accordance with 24 CFR § 1006.410(b)(2) and (3), provide an analysis and explanation of cost overruns or high unit costs.:*)

Native Hawaiian Housing Block Grant (NHHBG)

NHHP/APR

Exempt from OMB Approval. 5 CFR 1320.3 (c) (4)
U.S. Department of Housing and Urban Development
Office of Public and Indian Housing
Office of Native American Programs

(9). Planned and Actual Outputs for 12-Month Fiscal Year

Planned Number of Units to be Completed in Year Under this Program	Planned Number of Households To Be Served in Year Under this Program	Planned Number of Acres To Be Purchased in Year Under this Program	APR: Actual Number of Units Completed in Fiscal Year	APR: Actual Number of Households Served in Fiscal Year	APR: Actual Number of Acres Purchased in Fiscal Year

(10). APR: If the program is behind schedule, explain why. (24 CFR § 1006.410(b)(2))

(11) Amended Sources of Funding (NAHASDA § 803(c)(2)(C)(i)) (Complete the non-shaded portions of the chart below to describe your estimated or anticipated sources of funding for the 12-month fiscal year. **APR Actual Sources of Funding -- Please complete the shaded portions of the chart below to describe your actual funds received. Only report on funds actually received and under a grant agreement or other binding commitment during the 12-month fiscal year.**)

SOURCE	NHHP					APR					
	(A) Estimated amount on hand at beginning of fiscal year	(B) Estimated amount to be received during 12- month fiscal year	(C) Estimated total sources of funds (A + B)	(D) Estimated funds to be expended during 12- month fiscal year	(E) Estimated unexpended funds remaining at end of fiscal year (C minus D)	(F) Actual amount on hand at beginning of fiscal year	(G) Actual amount received during 12- month fiscal year	(H) Actual total sources of funding (F + G)	(I) Actual funds expended during 12- month fiscal year	(J) Actual unexpended funds remaining at end of 12- month fiscal year (H minus I)	(K) Actual unexpended funds obligated but not expended at end of 12- month fiscal year
6. NHHBG Funds											
7. NHHBG Program Income											
LEVERAGED FUNDS											
8. Other Federal Funds											
9. LIHTC											
10. Non-Federal Funds											
TOTAL											

Notes:

- For the NHHP, fill in columns A, B, C, D, and E (non-shaded columns). **For the APR, fill in columns F, G, H, I, J, and K (shaded columns).**
- Total of Column D should match the total of Column N from the **Uses Table** on the following page.
- Total of Column I should match the Total of Column Q from the Uses Table on the following page.**

(13) Estimated Sources or Uses of Funding (NAHASDA § 803(c)(2)(C)). (Provide any additional information about the estimated sources or uses of funding, including leverage (if any). You must provide the relevant information for any planned loan repayment listed in the Uses Table on the previous page. The text must describe which specific loan is planned to be repaid and the NAHASDA-eligible activity and program associated with this loan):

(14) APR (NAHASDA § 820(b)(1)) (Enter any additional information about the actual sources or uses of funding, including leverage (if any). You must provide the relevant information for any actual loan repayment listed in the Uses Table on the previous page. The text must describe which loan was repaid and the NAHASDA-eligible activity and program associated with this loan.):

Native Hawaiian Housing Block Grant (NHHBG)

Exempt from OMB Approval. 5 CFR 1320.3 (c) (4)

U.S. Department of Housing and Urban Development**NHHP/APR**

Office of Public and Indian Housing

Office of Native American Programs

(15) Recipient:	
(16) Authorized Official's Name and Title:	
(17) Authorized Official's Signature:	I certify that all other sections of the NHHP approved on _____ are accurate and reflect the activities planned.
(18) Date (MM/DD/YYYY):	

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

March 21-22, 2022

TO: Chairman and Members, Hawaiian Homes Commission

FROM: William J. Ailā, Jr., Chairman

SUBJECT: Appointment of Investigative Committee Pursuant to HRS section 92-2.5 and HAR section 10-2-16(b)(1) to Investigate, Review, Discuss, Vet, and Recommend Courses of Action to Address or Resolve the Outstanding Items from Act 14 (1995)

RECOMMENDED MOTION/ACTION

None. For information only.

DISCUSSION:

An investigative committee of the Hawaiian Home Commission is appointed effective March 23, 2022. The purpose of this committee is to investigate, review, discuss, vet, and recommend courses of action to address or resolve the outstanding items from Act 14 (1995). The committee's work may include but is not limited to helping to identify criteria for selecting and/or rating parcels for potential acquisition; to confirm and/or reaffirm priority parcels for additional due diligence; and to identify the scope of due diligence studies and what information would be most useful to the Commission in making informed decisions related to resolving Act 14 (1995). The attached Exhibit 1 summarizes the outstanding items.

The members of the Committee include Commissioners David Kaapu, Pauline Namuo, Dennis Neves, and the Chairman.

RECOMMENDATION:

None. For information only.

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

January 28-29, 2019

To: Chairman and Members, Hawaiian Homes Commission
Thru: M. Kaleo Manuel, Acting Planning Program Manager
From: Andrew H. Choy, Planner *AC*
Subject: Act 14 Land Claim Settlement Update

Recommended Action

For information only.

Discussion

Purpose

During an address at a CNHA Conference, Governor Ige committed to seeking resolution to all outstanding claims related to Act 14. This submittal provides a brief background of Act 14 and highlights the status of outstanding claims.

Background

In 1991, the Task Force on the Department of Hawaiian Home Lands' Land Title and Related Claims ("Task Force") was convened by Governor John Waihe'e, as one of the first action steps in the Governor's Action Plan to Address Controversies under the Hawaiian Home Lands Trust and the Public Land Trust. The Task Force comprised of the heads of the Office of State Planning ("OSP"), the Department of Hawaiian Home Lands ("DHHL"), the Department of Land and Natural Resources ("DLNR"), and the Department of the Attorney General ("AG"). The Task Force's objective was to investigate and resolve DHHL's land use claims against the State. In the years following, the Task Force issued a slew of recommendations for settlement of DHHL's claims, which resulted in settlement packages enacted by the

Legislature in 1992 and 1993¹. Additionally, by a separate administrative initiative, the State initiated the transfer of 16,518 acres of useable lands to DHHL.

On December 1, 1994, the Task Force produced a Memorandum of Understanding ("MOU"), executed by all parties, setting forth its final recommendations to repair the Hawaiian home lands trust and resolve DHHL's claims against the State that arose between August 21, 1959 and July 1, 1988. The MOU, however, did not bind the State to its terms. Consequently, on June 29, 1995, the Legislature passed Act 14, SpSLH 1995 ("Act 14"), to fully effectuate the settlement of DHHL's aforementioned claims against the State.

Act 14's Settlement Items

Section 6 of Act 14 sets forth the State's agreed upon terms to resolve and satisfy the controversies and claims encompassed by the Act. Act 14's settlement items can be grouped into two forms of compensation: funds and land.

Funds

The funding component of the Act 14 settlement provided a total \$606,277,558 in monetary compensation to DHHL. Specifically Act 14 provides for the following:

- Establishment of the Hawaiian home lands trust fund;
- Required the State make twenty annual deposits of \$30,000,000 or their discounted value equivalent if the State opted to make prepayments into the trust fund;
- Payment of \$2,348,558 as an advance toward all rent due to DHHL for the continued use of trust lands under Nanaikapono elementary school between April 4, 1996 and October 27, 2002;
- Payment of \$2,390,000 for the State's uncompensated use of Hawaiian home lands between 1959 and 1995; and
- Payment of \$1,539,000 for moneys owed to DHHL as its thirty percent entitlement for the use of Hanapepe, Kauai, public lands formerly under lease for sugarcane

¹ Act 316, Sess. Laws of Hawaii 1992 and Act 352, Sess. Laws of Hawaii 1993.

cultivation, pursuant to section 1 of article XII of the Hawai'i State Constitution.

By the end of fiscal year ending June 30, 2015, the State satisfied the funding component of Act 14. The land component of Act 14, however, remains unresolved; the status of each outstanding item is provided below.

Land

The land component of the Act 14 settlement is found in Section 6, subsection 2 of the act, and provides as follows:

- Transfer of lands and resolution of claims for the uncompensated use of Hawaiian home lands in Waimanalo, Oahu.
- Transfer of lands and resolution of claims in the Anahola, Kamalomalo'o, and Moloa'a areas of Kauai.
- The initiation of a land exchange to remedy uncompensated use of Hawaiian home lands for state roads claims and highways; and
- First selection of up to 200 acres of land by DHHL upon the return to the State of any ceded lands comprising of all or a portion of Bellows Air Force Station ("Bellows") on Oahu.

Section 17 of Act 14 specifically allows "actions to enforce the provisions of th[e] Act."

Outstanding Act 14 Settlement Items

State Initiated Transfer of 16,518 acres

In October 2010, the Board of Land and Natural Resources (BLNR) staff submittal item D-12 sought to convey 817.072 acres of Government Lands Statewide to DHHL to complete the total transfer of 16,518 acres. The BLNR made amendments to the recommendation motion before unanimously approving the item.

Status: Partially complete. Some parcels in the table in Exhibit A of Item D-12 have been conveyed to DHHL while others are at various stages of transfer. Approximately 696.898 acres are yet to be transferred.

Waimanalo Regional Settlement

This claim involves Hawaiian home lands taken by the Territory of Hawai'i and later sold to private parties, areas of Waimanalo set aside as "beach park" land, and trust lands alienated by the right-of-way for Kalaniana'ole Highway.

Act 14 contemplates a transfer of land to satisfy this claim. A portion of the remedy under this regional settlement includes the first selection of up to 200 acres of land by DHHL upon the return of all or a portion of Bellows to the State. At present, the US military does not intend to return Bellows.

Status: The transfer of land contemplated under this settlement item has not occurred. Approximately 200 acres are outstanding.

Anahola Regional Settlement

DHHL's claims remaining regarding Anahola, Kamalomalo'o, and Moloa'a areas of Kauai involves Hawaiian home lands taken by the Territory of Hawai'i and later sold to private parties, totaling 85.644 acres.

Act 14 contemplates a transfer of land to DHHL from the State to satisfy this claim.

Status: The transfer of land contemplated under this settlement item has not occurred. Approximately 85.644 acres are outstanding.

Roads and Highways Settlement

Use of Hawaiian Home Lands as State Highways

This claim involves the uncompensated use of Hawaiian home lands as state highways on various islands. Act 14 calls for the initiation of a land exchange to remedy this claim.

Status: To date, no lands have been conveyed to DHHL to satisfy the State's commitment to compensate the trust for its use of Hawaiian home lands as state highways on various islands totaling a claimed amount of 346.203 acres.

Conclusion

The table below summarizes the total amount of acreage that is owed to DHHL, should DHHL and Governor Ige move towards settling all outstanding claims related to Act 14.

Outstanding Claim	Approximate Acreage
State Initiated Transfer of 16,518 acres	696.898
Waimanalo Regional Settlement	200.000
Anahola Regional Settlement	85.644
Roads and Highways Settlement	346.203
Total	1,328.745

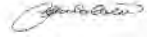
Recommended Action

None. For information only.

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

March 21, 2022

TO: Chairman and Members, Hawaiian Homes Commission



Contact & Awards Division

FROM: Michelle Hitzeman, HALE Manager
Moana Freitas, Case Management Specialist
Kaila Bolton, Case Management Specialist
Contact & Awards Division

SUBJECT: Approval of Lease Award

RECOMMENDED MOTION/ACTION

Approve the awards of Department of Hawaiian Home Lands Residence Lot Leases to the applicants listed below for ninety-nine (99) years, subject to the purchase of the existing improvements on the lot by way of a loan or cash.

DISCUSSION

Ka'uluokaha'i Increment B Residential Subdivision – Turnkey Home, Kapolei, Oahu

<u>NAME</u>	<u>APPL DATE</u>	<u>LOT NO</u>	<u>TAX MAP KEY</u>	<u>LEASE NO</u>
IRIS R. HEICK	11/28/1986	103	(1) 9-1-017-110	12978
RICHARD J. KAU	02/05/1987	99	(1) 9-1-017-110	12979

Ka'uluokaha'i Increment B Residential Subdivision – Vacant Lot, Kapolei, Oahu

<u>NAME</u>	<u>APPL DATE</u>	<u>LOT NO</u>	<u>TAX MAP KEY</u>	<u>LEASE NO</u>
CHOYE J.K. LINO	08/24/1987	1	(1) 9-1-017-110	12980

Kakaina Residential Subdivision – Vacant Lot, Waimanalo, Oahu

<u>NAME</u>	<u>APPL DATE</u>	<u>LOT NO</u>	<u>TAX MAP KEY</u>	<u>LEASE NO</u>
MAMINETTE P. KAPULE	12/20/1971	37	(1) 4-1-041-037	12981
DAISY M. HOUGHTAILING	05/08/1972	38	(1) 4-1-041-038	12982
BERNARDSON C. MEDINA	08/07/1962	9	(1) 4-1-041-009	12983

Hawaii Community College Home – Keaukaha, Hawaii

<u>NAME</u>	<u>APPL DATE</u>	<u>LOT NO</u>	<u>TAX MAP KEY</u>	<u>LEASE NO</u>
WAYNE KEAO KELIIKOA	6/4/1974	63A2	(3) 2-1-021-100	12984

ITEM C-4

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

March 21 & 22, 2022

TO: Chairman and Members, Hawaiian Homes Commission

FROM: Jobie Masagatani, Executive Assistant

SUBJECT: C-5 For Information Only – Background and Status of Telecommunication and
Broadband Services on Hawaiian Home Lands

This submittal will be sent under separate cover

ITEM NO. C-5 Dummy


HOMESTEAD SERVICES DIVISION AGENDA

March 21, 2022

DIV.	ITEM NO.	SUBJECT
	D-1	HSD Status Reports Exhibits: A - Homestead Lease & Application Totals and Monthly Activity Reports B - Delinquency Report
ODO/APPL. LOANS		
LOANS	D-2	Approval of Consent to Mortgage (see exhibit)
	D-3	Approval of Streamline Refinance of Loans (see exhibit)
APPL	D-4	Approval of Homestead Application Transfers / Cancellations (see exhibit)
	D-5	Commission Designation of Successors to Application Rights – Public Notice 2013, 2018 & 2020 (see exhibit)
	D-6	Approval to Certify Applications of Qualified Applicants for the Month of February 2022 (see exhibit)
	D-7	Approval to Cancel Applications of Non-Qualified Applicants (see exhibit)
	D-8	Reinstatement of Deferred Application – FRANCIS K.P. PALEA
DO	D-9	Approval of Designation of Successors to Leasehold Interest and Designation of Persons to Receive the Net Proceeds (see exhibit)
	D-10	Approval of Assignment of Leasehold Interest (see exhibit)
	D-11	Approval of Amendment of Leasehold Interest (see exhibit)
	D-12	Approval to Issue Non-Exclusive Licenses for Rooftop Photovoltaic Systems for Certain Lessees (see exhibit)
	D-13	Commission Designation of Successor – MARIAN I. KAHALE , Residential Lease No. 4051, Lot No. 64, Waimanalo, Oahu
EHDO	D-14	Approval for Request for Withdrawal of a Portion of Lot – BRETT B.K. YAMADA , Agricultural Lease No. 3571, Lot No. 184, Panaewa, Hawaii

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

March 21, 2022

TO: Chairman and Members, Hawaiian Homes Commission
From: Juan Garcia, HSD Administrator 
SUBJECT: **Homestead Services Division Status Reports**

RECOMMENDED MOTION/ACTION

NONE

DISCUSSION

The following reports are for information only:

- Exhibit A: Homestead Lease & Application Totals and Monthly Activity Reports
- Exhibit B: Delinquency Report

March 21, 2022

SUBJECT: Homestead Lease and Application Totals and Monthly Activity Reports

LEASE ACTIVITY REPORT

Month through February 28, 2022

	As of 1/31/22	Add	Cancel	As of 2/28/22
Residential	8,480	0	4	8,476
Agricultural	1,092	0	1	1,091
Pastoral	413	0	0	413
Total	9,985	0	5	9,980

The cumulative number of Converted Undivided Interest Lessees represents an increase of 538 families moving into homes. Their Undivided Interest lease was converted to a regular homestead lease.

	As of 1/31/22	Converted	Rescinded/ Surrendered/ Cancelled	As of 2/28/22
Undivided	776	0	0	776

Balance as of 2/28/2022

Awarded	1,434
Relocated to UNDV	7
Rescinded	117
Surrendered	6
Cancelled	4
Converted	<u>538</u>
Balance to Convert	776

Lease Report For the Month Ending February 28, 2022

	RESIDENCE			AGRICULTURE			PASTURE			TOTAL LEASES		
	Last Month	Add	Cancel	TOTAL	Last Month	Add	Cancel	TOTAL	Last Month	Add	Cancel	TOTAL
OAHU												
Kakaina	29	0	0	29	0	0	0	0	0	0	0	29
Kalawahine	90	0	0	90	0	0	0	0	0	0	0	90
Kanehili	399	0	0	399	0	0	0	0	0	0	0	399
Kapolei	177	0	0	177	0	0	0	0	0	0	0	177
Kauluokahai	141	0	0	141	0	0	0	0	0	0	0	141
Kaupea	325	0	0	325	0	0	0	0	0	0	0	325
Kaupuni	19	0	0	19	0	0	0	0	0	0	0	19
Kowalo	249	0	1	248	0	0	0	0	0	0	0	248
Kumuhaui	52	0	0	52	0	0	0	0	0	0	0	52
Luahuafe	147	0	0	147	31	0	0	31	0	0	0	178
Malu'ohai	226	0	0	226	0	0	0	0	0	0	0	226
Nanakuli	1,045	0	0	1,045	0	0	0	0	0	0	0	1,045
Papakolea	64	0	0	64	0	0	0	0	0	0	0	64
Princess Kahanu Estates	271	0	0	271	0	0	0	0	0	0	0	271
Waiahole	0	0	0	0	16	0	0	16	0	0	0	16
Waianae	421	0	0	421	12	0	0	12	0	0	0	433
Waimanalo	719	0	3	716	2	0	0	2	0	0	3	718
TOTAL	4,374	0	4	4,370	61	0	0	61	0	0	4	4,431
MAUI												
Hikina	31	0	0	31	0	0	0	0	0	0	0	31
Kahikini	0	0	0	0	0	0	0	0	75	0	0	75
Keokea	0	0	0	0	65	0	1	64	0	0	0	64
Leialii	103	0	0	103	0	0	0	0	0	0	0	103
Paukukalo	178	0	0	178	0	0	0	0	0	0	0	178
Waiehu 1	39	0	0	39	0	0	0	0	0	0	0	39
Waiehu 2	109	0	0	109	0	0	0	0	0	0	0	109
Waiehu 3	114	0	0	114	0	0	0	0	0	0	0	114
Waiehu 4	97	0	0	97	0	0	0	0	0	0	0	97
Waiohuli	593	0	0	593	0	0	0	0	0	0	0	593
TOTAL	1,264	0	0	1,264	65	0	1	64	75	0	1	1,403
EAST HAWAII												
Discovery Harbour	2	0	0	2	0	0	0	0	0	0	0	2
Kamaea	0	0	0	0	0	0	0	0	25	0	0	25
Kaunalo	42	0	0	42	0	0	0	0	0	0	0	42
Keaukaha	472	0	0	472	0	0	0	0	0	0	0	472
Kurtistown	3	0	0	3	0	0	0	0	0	0	0	3
Makua	0	0	0	0	120	0	0	120	0	0	0	120
Panaua	13	0	0	13	260	0	0	260	0	0	0	273
Pihonua	17	0	0	17	0	0	0	0	0	0	0	17
Puueo	0	0	0	0	12	0	0	12	0	0	0	12
University Heights	4	0	0	4	0	0	0	0	0	0	0	4
Waialea	286	0	0	286	0	0	0	0	0	0	0	286
TOTAL	839	0	0	839	392	0	0	392	25	0	0	1,256
WEST HAWAII												
Honokaa	0	0	0	0	0	0	0	0	24	0	0	24
Huonua	0	0	0	0	0	0	0	0	5	0	0	5
Kamoku	0	0	0	0	0	0	0	0	16	0	0	16
Kanihale	223	0	0	223	0	0	0	0	0	0	0	223
Kawaihae	192	0	0	192	0	0	0	0	1	0	0	193
Laiopua	277	0	0	277	0	0	0	0	0	0	0	277
Lalamilo	30	0	0	30	0	0	0	0	0	0	0	30
Nienie	0	0	0	0	0	0	0	0	21	0	0	21
Puukapu/Waimea/Kuhio VII	117	0	0	117	110	0	0	110	218	0	0	445
Puupulehu	33	0	0	33	0	0	0	0	0	0	0	33
TOTAL	872	0	0	872	110	0	0	110	285	0	0	1,267
KAUAI												
Anahola	530	0	0	530	46	0	0	46	0	0	0	576
Hanapepe	47	0	0	47	0	0	0	0	0	0	0	47
Kekaha	117	0	0	117	0	0	0	0	0	0	0	117
Puu Opae	0	0	0	0	0	0	0	0	1	0	0	1
TOTAL	694	0	0	694	46	0	0	46	1	0	0	741
MOLOKAI												
Hoolahua	153	0	0	153	345	0	0	345	21	0	0	519
Kalamaula	166	0	0	166	70	0	0	70	3	0	0	239
Kapaakea	47	0	0	47	0	0	0	0	3	0	0	50
Moomomi	0	0	0	0	3	0	0	3	0	0	0	3
One Aii	27	0	0	27	0	0	0	0	0	0	0	27
TOTAL	393	0	0	393	418	0	0	418	27	0	0	838
LANAI												
Lanai	44	0	0	44	0	0	0	0	0	0	0	44
TOTAL	44	0	0	44	0	0	0	0	0	0	0	44
STATEWIDE TOTAL	8,480	0	4	8,476	1,092	0	1	1,091	413	0	5	9,980

AREA WAITING LIST

DISTRICT AREA	RESIDENCE			AGRICULTURE			PASTURE			TOTAL
	Last Month	Add	Cancel	TOTAL	Last Month	Add	Cancel	TOTAL		
Oahu District	936	0	3	933	0	0	0	0	0	933
Maui District	50	0	0	50	4	0	0	4	5	59
Hawaii District	129	0	0	129	28	0	0	28	46	203
Kauai District	51	0	0	51	3	0	0	3	27	81
Molokai District	20	0	0	20	17	0	0	17	1	38
TOTAL	1,186	0	3	1,183	52	0	0	52	79	1,314

ISLANDWIDE WAITING LIST

[illegible]

AREA AND ISLANDWIDE LISTS

	RES	AG	PAS	TOTAL	ADDITIONS	CANCELLATIONS
OAHU	10,990	3,889	0	14,879	New Applications	New Lease Awards
MAUI	3,899	4,697	628	9,224	Application Transfers	Application Transfers
HAWAII	5,970	7,300	1,951	15,221	Lease Rescissions	Succ'd and Cancel Own
KAUAI	1,694	2,252	330	4,276	App Reinstatements	Public Notice Cancel
MOLOKAI	840	1,102	207	2,149	HHC Adjustments	Voluntary Cancellations
LANAI	74	0	0	74	TOTAL	Lease Successorships
TOTAL	23,467	19,240	3,116	45,823		HHC Adjustments
						Dec'd No Successor
						Additional Acreage
						NHQ Unqualified
						TOTAL

HOMESTEAD AREA AND ISLANDWIDE APPLICATIONS WAITING LIST MONTHLY REPORT FOR THE MONTH ENDING

February 28, 2022

	RESIDENCE				AGRICULTURE				PASTURE			
	Last Month	Add	Cancel	TOTAL	Last Month	Add	Cancel	TOTAL	Last Month	Add	Cancel	TOTAL
OAHU DISTRICT												
Nanakuli	161	0	1	160	0	0	0	0	0	0	0	0
Waianae	141	0	1	140	0	0	0	0	0	0	0	0
Luahalei	0	0	0	0	0	0	0	0	0	0	0	0
Papakolea/Kewalo	67	0	1	66	0	0	0	0	0	0	0	0
Waimanalo	554	0	0	554	0	0	0	0	0	0	0	0
Subtotal Area	936	0	3	933	0	0	0	0	0	0	0	0
Islandwide	10,059	13	15	10,057	3,891	2	4	3,889	0	0	0	0
TOTAL OAHU APPS	10,995	13	18	10,990	3,891	2	4	3,889	0	0	0	0
MAUI DISTRICT												
Paukukalo	50	0	0	50	0	0	0	0	0	0	0	0
Kula	0	0	0	0	4	0	0	4	5	0	0	5
Subtotal Area	50	0	0	50	4	0	0	4	5	0	0	5
Islandwide	3,843	11	5	3,849	4,689	8	4	4,693	621	2	0	623
TOTAL MAUI APPS	3,893	11	5	3,899	4,693	8	4	4,697	626	2	0	628
HAWAII DISTRICT												
Keaukaha/Waiakea	69	0	0	69	0	0	0	0	0	0	0	0
Panaewa	0	0	0	0	16	0	0	16	0	0	0	0
Humuula	0	0	0	0	0	0	0	0	0	0	0	0
Kawaihae	16	0	0	16	0	0	0	0	0	0	0	0
Waimea	44	0	0	44	12	0	0	12	46	0	0	46
Subtotal Area	129	0	0	129	28	0	0	28	46	0	0	46
Islandwide	5,843	2	4	5,841	7,274	1	3	7,272	1,906	0	1	1,905
TOTAL HAWAII APPS	5,972	2	4	5,970	7,302	1	3	7,300	1,952	0	1	1,951
KAUAI DISTRICT												
Anahola	43	0	0	43	3	0	0	3	20	0	0	20
Kekaha/Puu Opae	8	0	0	8	0	0	0	0	7	0	0	7
Subtotal Area	51	0	0	51	3	0	0	3	27	0	0	27
Islandwide	1,641	3	1	1,643	2,248	2	1	2,249	302	1	0	303
TOTAL KAUAI APPS	1,692	3	1	1,694	2,251	2	1	2,252	329	1	0	330
MOLOKAI DISTRICT												
Kalamaula	4	0	0	4	0	0	0	0	0	0	0	0
Hooilehua	8	0	0	8	17	0	0	17	1	0	0	1
Kapaakea	7	0	0	7	0	0	0	0	0	0	0	0
One Alii	1	0	0	1	0	0	0	0	0	0	0	0
Subtotal Area	20	0	0	20	17	0	0	17	1	0	0	1
Islandwide	821	0	1	820	1,085	0	0	1,085	206	0	0	206
TOTAL MOLOKAI APPS	841	0	1	840	1,102	0	0	1,102	207	0	0	207
LANAI DISTRICT												
Islandwide	74	0	0	74	0	0	0	0	0	0	0	0
TOTAL LANAI APPS	74	0	0	74	0	0	0	0	0	0	0	0
TOTAL AREA ONLY	1,186	0	3	1,183	52	0	0	52	79	0	0	79
TOTAL ISLANDWIDE	22,281	29	26	22,284	19,187	13	12	19,188	3,035	3	1	3,037
TOTAL STATEWIDE	23,467	29	29	23,467	19,239	13	12	19,240	3,114	3	1	3,116

DELINQUENCY REPORT - STATEWIDE

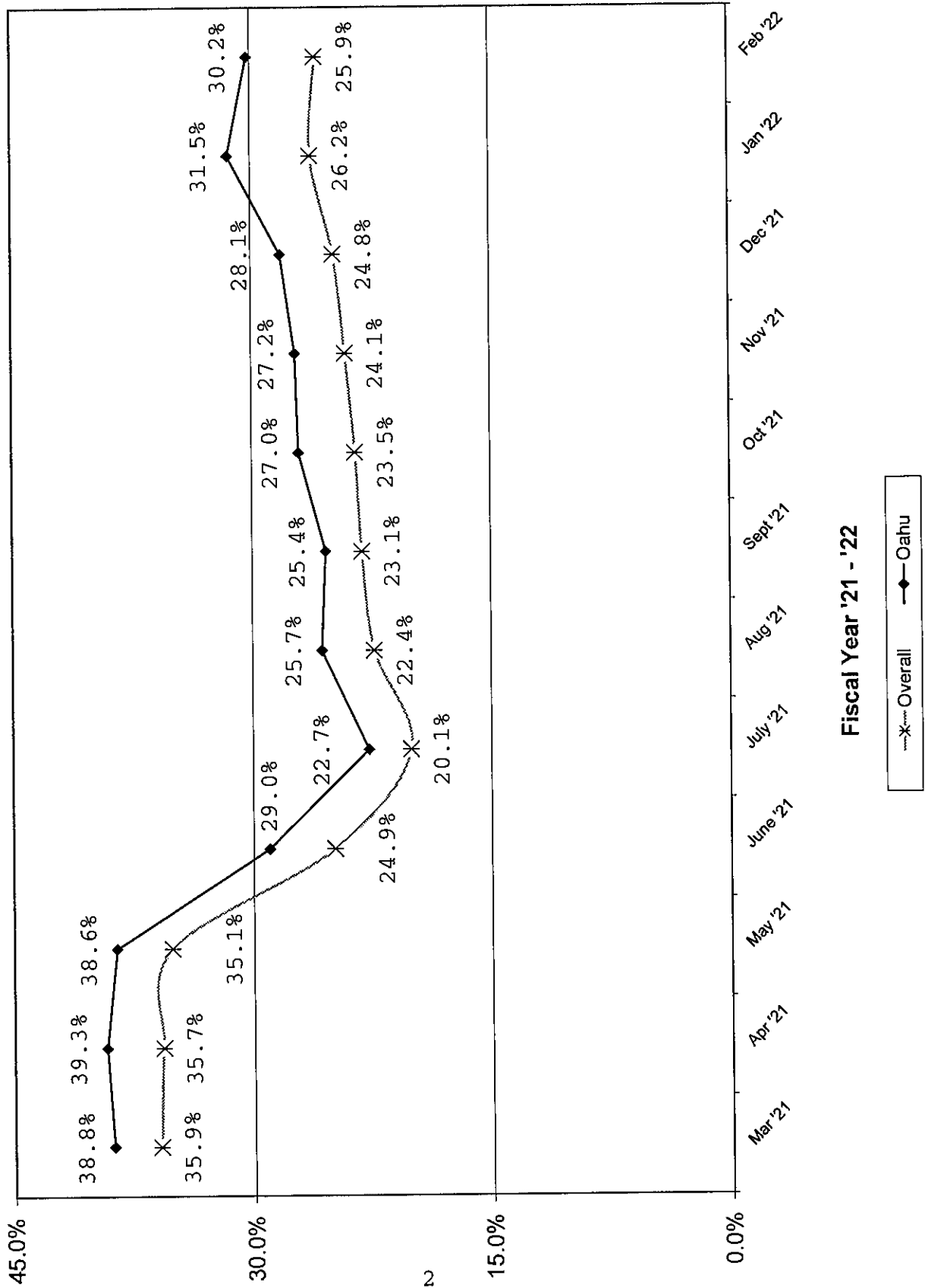
March 21, 2022
(\$Thousands)

	Total Outstanding (000s)		Total Delinquency (000s)		30 Days (low)		60 Days (Medium)		90 Days (High)		180 Days (Severe)		% of Totals 2/28/2022	
	No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.	No.	\$
DIRECT LOANS														
OAHU	388	37,730	131	11,397	25	1,547	11	1,114	23	2,195	72	6,540	33.8%	30.2%
EAST HAWAII	202	11,978	58	3,973	8	319	5	177	5	360	40	3,117	28.7%	33.2%
WEST HAWAII	83	8,429	10	983	4	395	2	225	0	0	4	364	12.0%	11.7%
MOLOKAI	83	7,307	18	840	4	215	3	140	1	0	10	484	21.7%	11.5%
KAUAI	90	7,063	20	1,122	6	470	4	89	3	110	7	454	22.2%	15.9%
MAUI	99	13,321	31	3,932	7	661	6	905	3	615	15	1,751	31.3%	29.5%
TOTAL DIRECT	945	85,827	268	22,248	54	3,607	31	2,651	35	3,280	148	12,710	28.4%	25.9%
	100.0%	100.0%	28.4%	25.9%	5.7%	4.2%	3.3%	3.1%	3.7%	3.8%	15.7%	14.8%		
Advances (Including RPT)	259	7,046	259	7,046	0	0	0	0	259	7,046			100%	100%
DHHL LOANS & Advances	1,204	92,874	527	29,294	54	3,607	31	2,651	294	10,327	148	12,710	43.8%	31.5%
LOAN GUARANTEES as of June 30, 2021														
SBA	2	77	0	0	0	0	0	0	0	0	0	0	0.0%	0.0%
USDA-RD	279	32,123	49	6,335	0	0	0	0	49	6,335			17.6%	19.7%
Habitat for Humanity	47	1,536	24	733	0	0	0	0	24	733			51.1%	47.7%
Maui County	5	74	0	0	0	0	0	0	0	0			0.0%	0.0%
Nanakuli NHS	1	7	1	7	0	0	0	0	1	7			100.0%	100.0%
City & County	12	264	11	260	0	0	0	0	11	260			91.7%	98.5%
FHA Interim	6	961	0	0	0	0	0	0	0	0			0.0%	0.0%
OHA	2	9	2	9	0	0	0	0	2	9			100.0%	100.0%
TOTAL GUARANTEE	354	35,051	87	7,344	0	0	0	0	87	7,344			24.6%	21.0%
PMI Loans	132	18,740	3	713	1	201	1	215	1	297			2.3%	3.8%
HUD REASSIGNED for Recovery	136	16,005	116	14,712	2	39	2	219	4	375	108	14,078	85.3%	91.9%
FHA Insured Loans	2,916	515,341	219	32,689	0	0	0	0	219	32,689			7.5%	6.3%
TOTAL INS. LOANS	3,184	550,086	338	48,114	3	240	3	434	224	33,361	108	14,078	10.6%	8.7%
OVERALL TOTALS(EXC Adv/RP)	4,483	670,965	693	77,706	57	3,847	34	3,085	346	43,986	256	26,788	15.5%	11.6%
ADJUSTED TOTALS	4,742	678,011	952	84,752	57	3,847	34	3,085	605	51,032	256	26,788		12.5%

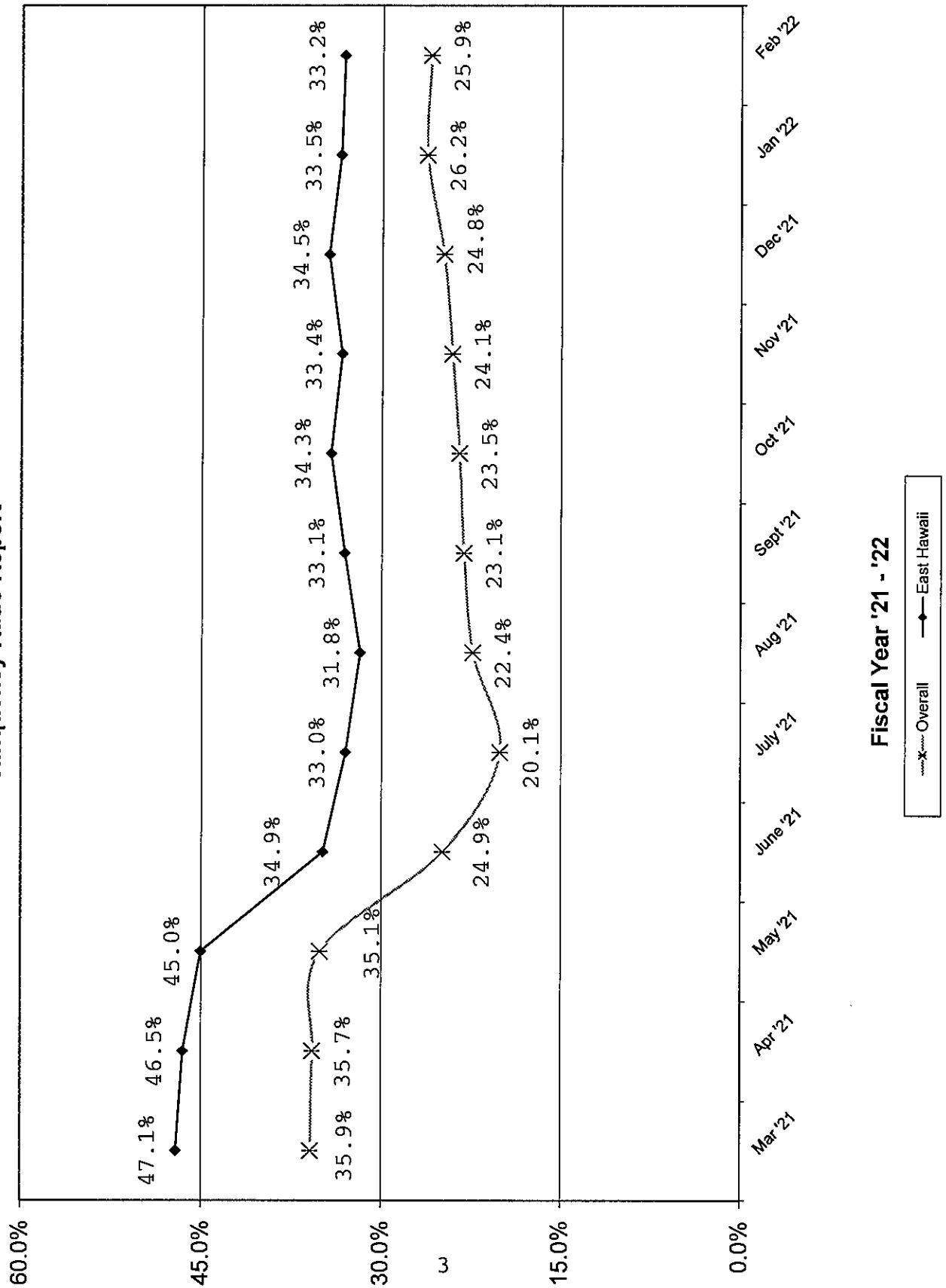
Note: HUD 184A loan program has 507 loans, with a total outstanding principal balance of \$112,122,650 as of June 30, 2021. 27 Loans, totaling \$6,600,376 are delinquent.

The deferred interest for 504 loans comes out to \$2,356,329.53 as of 2/28/2022.

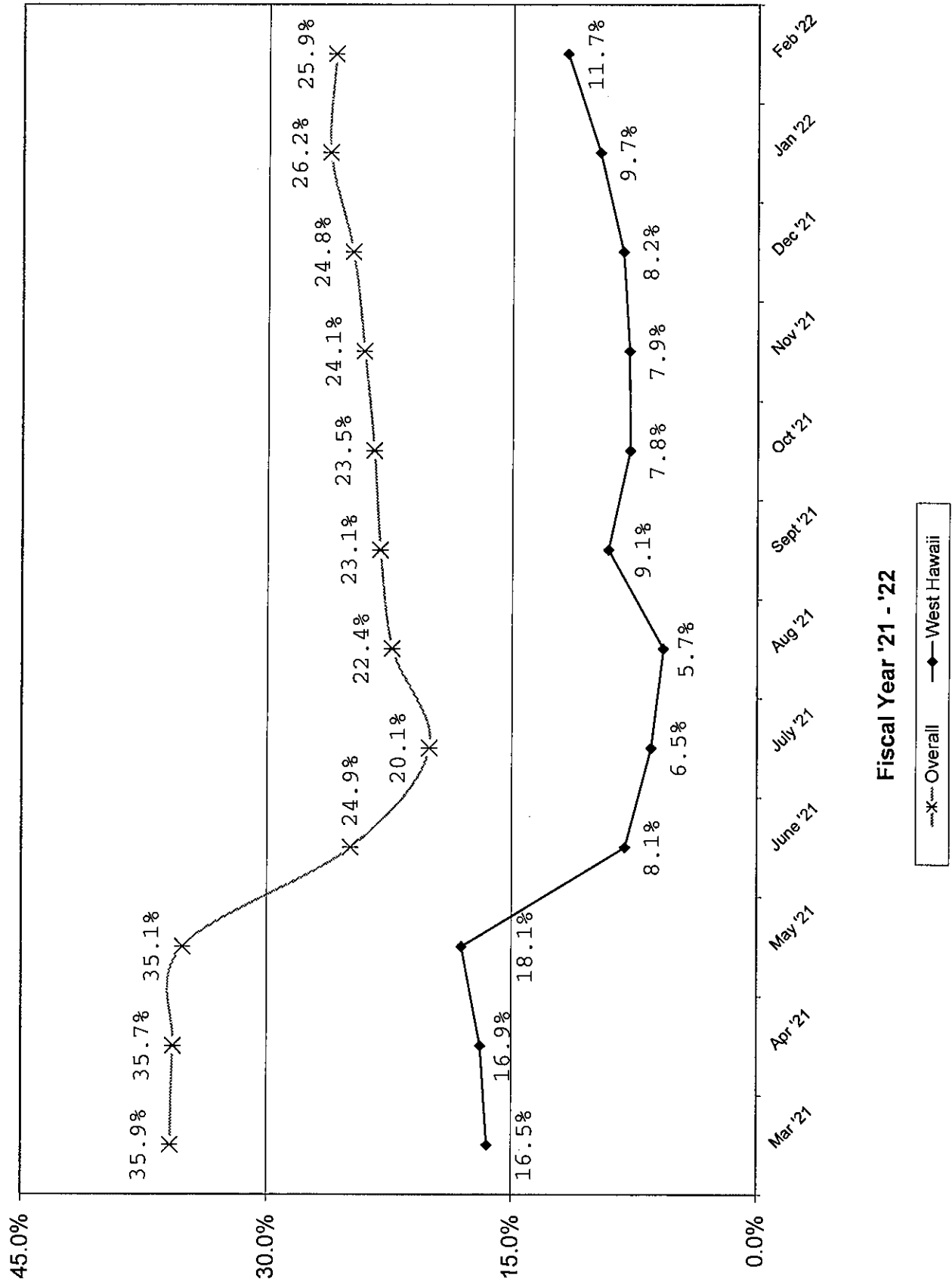
OAHU Direct Loans Delinquency Ratio Report



EAST HAWAII Direct Loans Delinquency Ratio Report



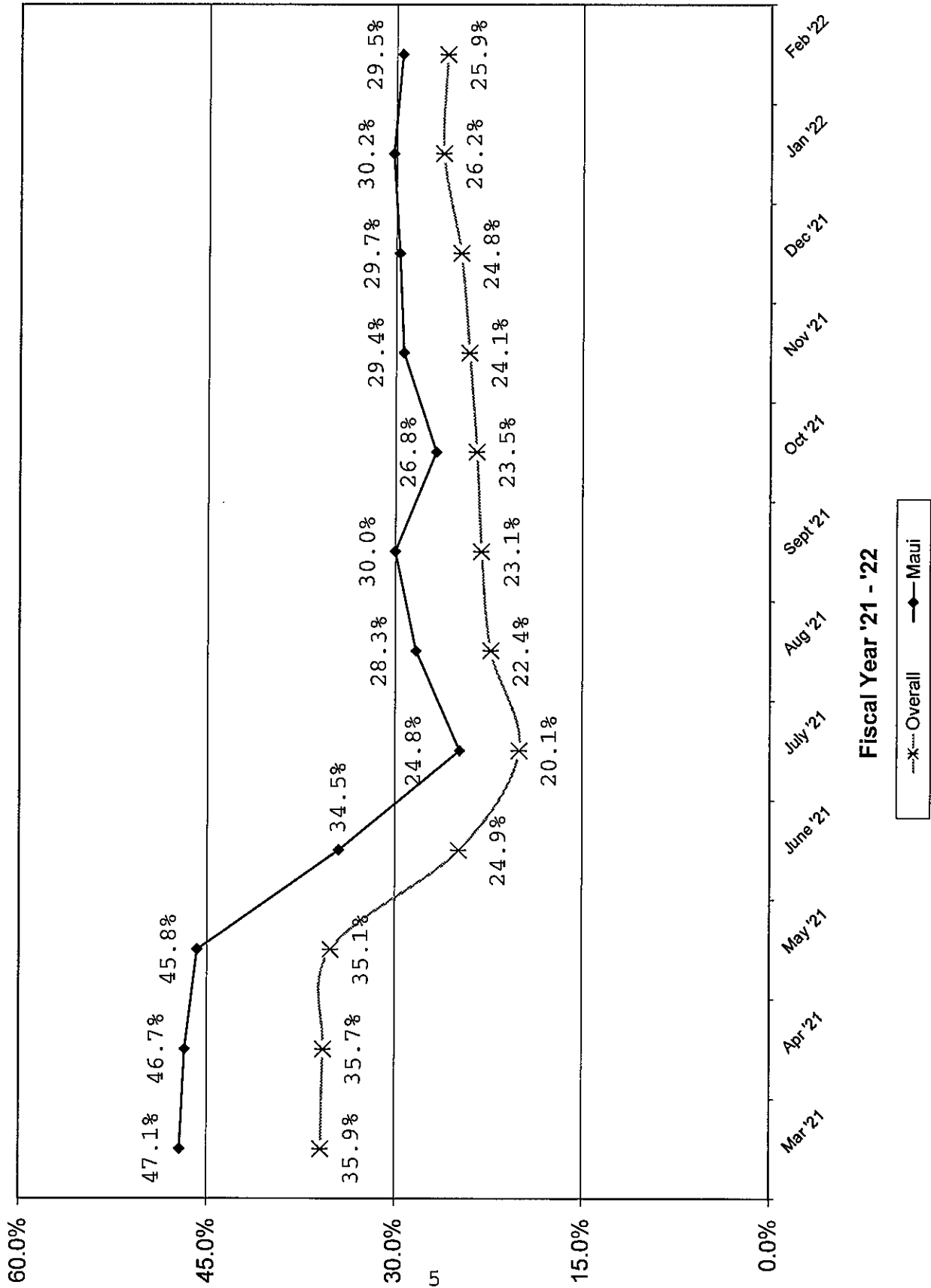
WEST HAWAII
Direct Loans
Delinquency Ratio Report



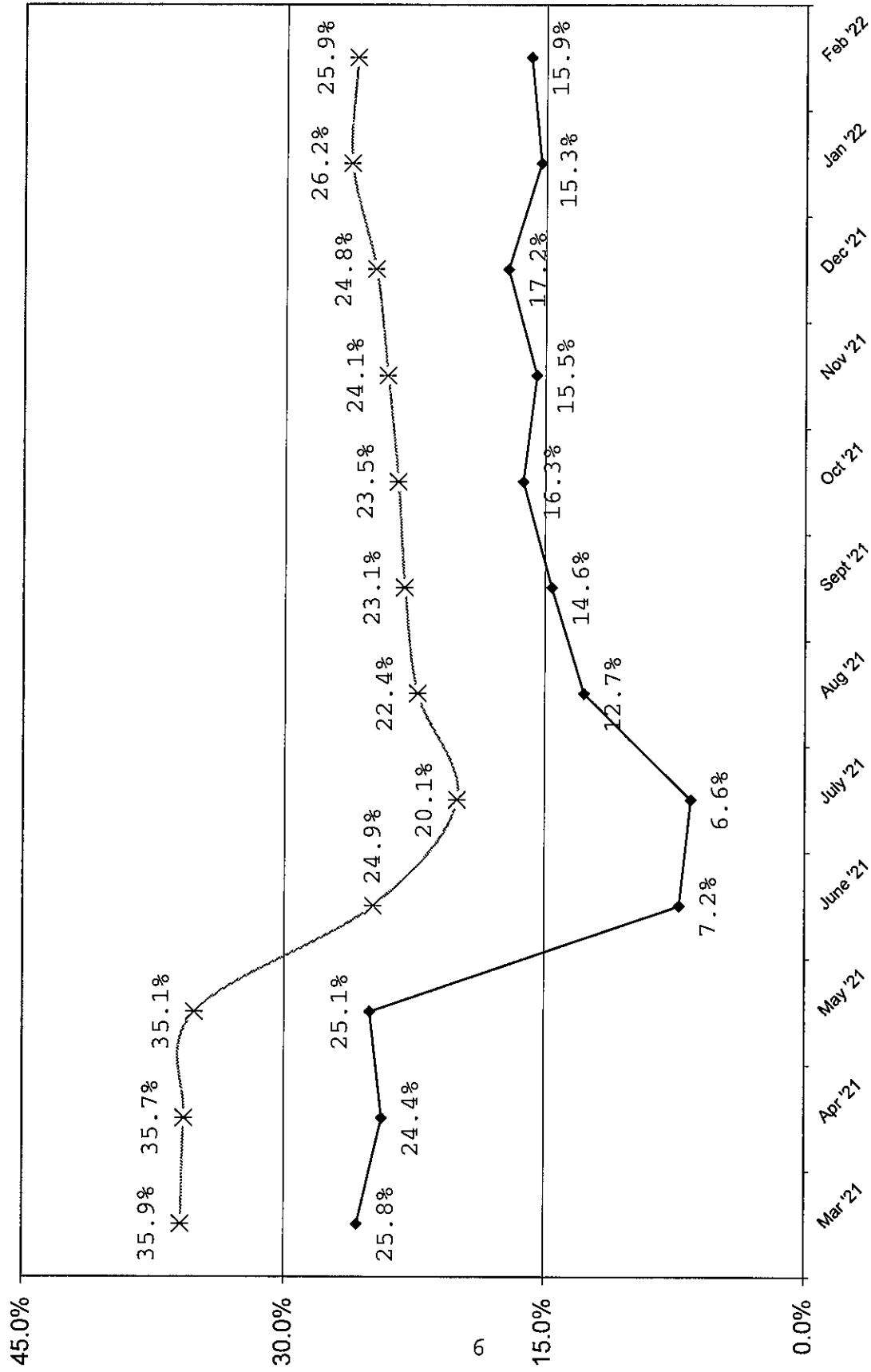
Fiscal Year '21 - '22

---x--- Overall —◆— West Hawaii

MAUI
Direct Loans
Delinquency Ratio Report



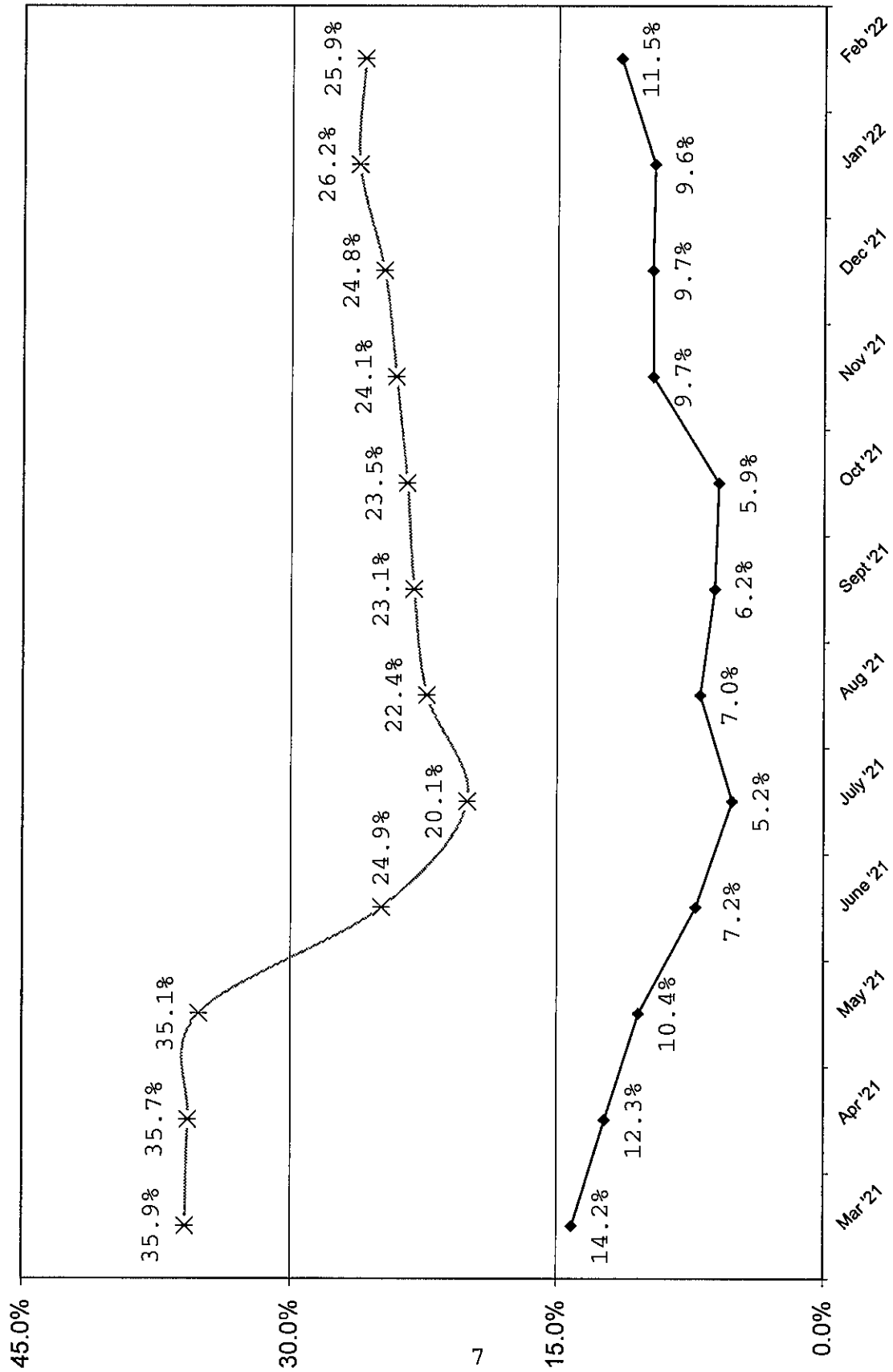
KAUAI Direct Loans Delinquency Ratio Report



Fiscal Year '21 - '22

-----x----- Overall —◆— Kauai

MOLOKAI
Direct Loans
Delinquency Ratio Report



Fiscal Year '21 - '22

---x--- Overall —◆— Molokai

STATE OF HAWAII

DEPARTMENT OF HAWAIIAN HOME LANDS

March 21, 2022

TO: Chairman and Members, Hawaiian Homes Commission

THROUGH: Juan Garcia, HSD Administrator
Homestead Services Division

FROM: Dean Oshiro, Loan Services Manager

SUBJECT: **Approval of Consent to Mortgage**

RECOMMENDED MOTION/ACTION

To approve the following consents to mortgages for Federal Housing Administration (FHA) insured loans, Department of Veterans Affairs (VA) loans, United States Department of Agriculture, Rural Development (USDA, RD) guaranteed loans, United States Housing and Urban Development (HUD 184A) guaranteed loans and Conventional (CON) loans insured by private mortgage insurers.

DISCUSSION

<u>PROPERTY</u>	<u>LESSEE</u>	<u>LENDER</u>	<u>LOAN AMOUNT</u>
<u>OAHU</u>			
Princess Kahanu Estates Lease No. 8486 TMK: 1-8-7-042:114	KALAMA, Lionel K. (Purchase)FHA	Mid America Mortgage Inc.	\$ 358,000
Kanehili Lease No. 12666 TMK: 1-9-1-151:011	LEONG, Keone (Cash Out Refi) FHA	Bank of Hawaii	\$ 465,000
Nanakuli Lease No. 8748 TMK: 1-8-9-017:012	MAN, Jan-Maxine P. (Cash Out Refi) FHA	Mann Mortgage LLC	\$ 227,000

OAHU

Kaupea Lease No. 12113 TMK: 1-9-1-140:016	AURIO, Kacie K. (Cash Out Refi) FHA	Mid America Mortgage Inc.	\$ 458,000
Princess Kahanu Estates Lease No. 8483 TMK: 1-8-7-042:111	HEW LEN, Jaden K. (Cash Out Refi) FHA	Mann Mortgage LLC	\$ 227,000
Kanehili Lease No. 11593 TMK: 1-9-1-152:121	LIANA, Bronson E. K. (Cash Out Refi) FHA	Mid America Mortgage Inc.	\$ 357,000
Waimanalo Lease No. 4111 TMK: 1-4-1-030:042	KAOLULO, Martin J. K. (Cash Out Refi) FHA	HighTechLen- ding Inc.	\$ 428,175
Waimanalo Lease No. 2462 TMK: 1-4-1-019:023	ALBERT, Mary K. P. (Cash Out Refi) FHA	Mid America Mortgage Inc.	\$ 334,000
Kauluokahi Lease No. 12334 TMK: 1-9-1-017:088	OSBORNE, Shawnette K. (Rate Term Refi) HUD 184A	HomeStreet Bank	\$ 343,000
Nanakuli Lease No. 8566 TMK: 1-8-9-012:036	PAISHON, Bianca P. (Purchase) HUD 184A	Bank of Hawaii	\$ 261,000
Kanehili Lease No. 12611 TMK: 1-9-1-152-084	HOOGERWERF, Laura Ann L. (Cash Out Refi) FHA	Bank of Hawaii	\$ 371,000
Kauluokahi Lease No. 12836 TMK: 1-9-1-017:110	KAMANAO, Jamie K. (Cash Out Refi) FHA	HighTechLen- ding Inc.	\$ 506,025

ITEM NO. D-2

OAHU

Kalawahine Lease No. 9589 TMK: 1-2-4-043:085	HIRAHARA, Aulii L. H. (Cash Out Refi) FHA	HighTechLen- ding Inc.	\$ 389,250
Kanehili Lease No. 12670 TMK: 1-9-1-151:006	KATO, Keala Ona Alii C. (Purchase) VA	Department of Veterans Affairs	\$ 354,400
Nanakuli Lease No. 280 TMK: 1-8-9-006:093	KAAIALII, John K. (Purchase) FHA	HomeStreet Bank	\$ 461,910
Nanakuli Lease No. 7342 TMK: 1-8-9-016:054	AUWAE, Dallas M. (Purchase) HUD 184A	Bank of Hawaii	\$ 415,000
Princess Kahanu Estates Lease No. 8381 TMK: 1-8-7-043:024	NUUANU, Lordell K. (Cash Out Refi) FHA	HomeStreet Bank	\$ 233,550
Kalawahine Lease No. 9591 TMK: 1-2-4-043:002	FU, Luann L. (Cash Out Refi) FHA	HomeStreet Bank	\$ 231,214
Kauluokahi Lease No. 12979 TMK: 1-9-1-017:110	KAU, Richard R. (Purchase) FHA	Bank of Hawaii	\$ 422,273
Kauluokahi Lease No. 12978 TMK: 1-9-1-017:110	MCCLOSKEY, Celon K. (Purchase) VA	Department of Veterans Affairs	\$ 422,300
Kauluokahi Lease No. 12381 TMK: 1-9-1-017:110	LIKE, Raelene K. (Cash Out Refi) FHA	Bank of Hawaii	\$ 444,000

ITEM NO. D-2

OAHU

Nanakuli Lease No. 8580 TMK: 1-8-9-012:028	IOPA, Precious K. K. W. (Cash Out Refi) FHA	Mid America Mortgage Inc.	\$ 214,000
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Waimanalo Lease No. 3932 TMK: 1-4-1-030:021	CALIZAR, Jennifer (Cash Out Refi) FHA	Mid America Mortgage Inc.	\$ 198,000
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MAUI

Waiohuli Lease No. 7659 TMK: 2-2-2-027:046	KAEO, Samuel K. (Cash Out Refi) FHA	Mid America Mortgage Inc.	\$ 221,000
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Waiohuli Lease No. 7686 TMK: 2-2-2-028:167	SHIM, Timothy Ah-Loe (Cash Out Refi) HUD 184A	HomeBridge Financial Services, Inc.	\$ 375,250
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Waiehu 4 Lease No. 12216 TMK: 2-3-2-026:019	KIHUNE, Mychelle (Cash Out Refi) HUD 184A	HomeBridge Financial Services, Inc.	\$ 245,000
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Waiehu 3 Lease No. 10078 TMK: 2-3-2-024:049	LOVELL, Frank K. (Cash Out Refi) FHA	HomeStreet Bank	\$ 410,010
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KAUAI

Anahola Lease No. 8690 TMK: 4-4-8-019:037	GUTIERREZ, Ashley K. (Purchase) FHA	SecurityNat- ional Mortg- age Company	\$ 590,000
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HAWAII

Kaumana Lease No. 11311 TMK: 3-2-5-004:027	SETO, Duncan K. (Cash Out Refi) FHA	Mid America Mortgage Inc.	\$ 307,000
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ITEM NO. D-2

HAWAII

Makuu Lease No. 6973B TMK: 3-1-5-120:038	KEKAHUNA, Lauae K. (Cash Out Refi) FHA	V.I.P. Mortgage Inc.	\$ 298,000
Kaniohale Lease No. 9287 TMK: 3-7-4-022:074	RAPOZO, Jill H. (Cash Out Refi) FHA	V.I.P. Mortgage Inc.	\$ 274,000
Kaniohale Lease No. 9246 TMK: 3-7-4-022:033	AHUNA, Dean E. K. (Cash Out Refi) FHA	HomeBridge Financial Services, Inc.	\$ 275,000
Panaewa Lease No. 5109A TMK: 3-2-2-061:005	PUKAHI-VIERNES, Lucianne Z. P. (Cash Out Refi) FHA	V.I.P. Mortgage Inc.	\$ 262,000
Waimea Lease No. 4973 TMK: 3-6-4-008:029	ANDERS, Robert M. (Cash Out Refi) FHA	V.I.P. Mortgage Inc.	\$ 394,000
Kaniohale Lease No. 9321 TMK: 3-7-4-023:008	ALAPAI, Pua (Purchase) FHA	HomeStreet Bank	\$ 322,818
Keaukaha Lease No. 10013 TMK: 3-2-1-023:049	MCKEAGUE, Malama W. (Cash Out Refi) HUD 184A	HomeStreet Bank	\$ 300,000
Keaukaha Lease No. 4263 TMK: 3-2-1-021:070	KAHALIOUMI, Keenan K. (Cash Out Refi) FHA	V.I.P. Mortgage Inc.	\$ 360,000
Kaumana Lease No. 12161 TMK: 3-2-5-005:139	DAMASO, Lorilee L. (Cash Out Refi) FHA	HomeStreet Bank	\$ 172,282

ITEM NO. D-2

HAWAII

Keaukaha
Lease No. 6318
TMK: 3-2-1-021:099

GOSS,
Theresa (Cash Out
Refi) FHA

HomeStreet \$ 181,650
Bank

ITEM NO. D-2

<u>RECAP</u>	<u>NO.</u>	FHA	<u>AMOUNT</u>	<u>NO.</u>	VA <u>AMOUNT</u>
FY Ending 6/30/21	535	\$	172,610,901	26	\$ 8,186,829
Prior Months	309	\$	101,657,150	7	\$ 3,500,687
This Month	31		10,393,157	2	776,700
Total FY '21-'22	340	\$	112,050,307	9	\$ 4,277,387
			HUD 184A <u>AMOUNT</u>		USDA-RD <u>AMOUNT</u>
FY Ending 6/30/21	77	\$	23,021,162	13	\$ 5,288,000
Prior Months	44	\$	12,714,233	5	\$ 1,134,606
This Month	6		1,939,250	0	0
Total FY '21-'22	50	\$	14,653,483	5	\$ 1,134,606

ITEM NO. D-2

STATE OF HAWAII

DEPARTMENT OF HAWAIIAN HOME LANDS

March 21, 2022

TO: Chairman and Members, Hawaiian Homes Commission

THROUGH: Juan Garcia, HSD Administrator
Homestead Services Division

FROM: Dean Oshiro, Loan Services Branch Manager

SUBJECT: **Approval of Streamline Refinance of Loans**

RECOMMENDED MOTION/ACTION

To approve the refinancing of loans from the Hawaiian Home General Loan Fund.

DISCUSSION

The following lessees have met the "Streamline/Interest rate reduction loan" criteria, which was approved by the Hawaiian Homes Commission at its August 19, 2013 meeting. This criteria includes twelve (12) consecutive monthly payments, borrower's current interest rate is higher than the current DHHL interest rate, current with their Homeowners Insurance, Real Property Tax, Lease Rent, county sewer/refuse fees, and does not have any advances made by DHHL on the borrowers behalf.

HSD's recommendation for approval is based on actual payment history, over the past twelve (12) months and the review of the above-mentioned criteria. Streamline/Interest Rate Loan refinancing will provide lessees a chance to simply reduce their interest rate and payments without DHHL having to credit and/or income qualify the borrower.

The following lessee(s) has met the aforementioned criteria and is recommended for Streamline/Interest rate reduction loan refinance program:


<u>LESSEE</u>	<u>LEASE NO. & AREA</u>	<u>REFINANCING LOAN TERMS</u>
Barrozo, Florence L.	5135, Nanakuli	NTE \$45,000 @4% interest per annum, NTE \$616 monthly, repayable over 7 years.

Loan Purpose: Refinance Contract of Loan No. 17961.
Original loan amount of \$56,122 at
8.75% per annum, \$561 monthly,
repayable over 15 years. A Contested
Case Hearing was not held for this
account.

STATE OF HAWAII

DEPARTMENT OF HAWAIIAN HOME LANDS

March 21, 2022

TO: Chairman and Members, Hawaiian Homes Commission
THROUGH: Juan Garcia, HSD Administrator 
FROM: Nicole F. Bell, Specialist V
Application Branch, Homestead Services Division
SUBJECT: **Approval of Homestead Application Transfers/Cancellations**

RECOMMENDED MOTION/ACTION

To approve the transfers and cancellations of applications from the Application Waiting Lists for reasons described below:

DISCUSSION

1. Requests of Applicants to Transfer

NONE FOR SUBMITTAL

2. Deceased Applicants

NONE FOR SUBMITTAL

3. Awards of Leases

WAIMANALO AREA / OAHU ISLANDWIDE RESIDENTIAL LEASE LIST

CUSON, Annie K.

Assigned Residential Lease
#3039, Lot 102 in Waimanalo,
Oahu dated 10/21/2021. Remove
application dated 04/02/1969.

OAHU ISLANDWIDE RESIDENTIAL LEASE LIST

IOPA, Precious Kuuipo K.	Assigned Residential Lease #8580, Lot 4 in Nanakuli, Oahu dated 11/01/2021. Remove application dated 07/27/2009.
KAMANA, Lopena	Assigned Residential Lease #3893, Lot 216-B in Nanakuli, Oahu dated 12/28/2020. Remove application dated 06/06/2013.
NAKI, Nadine E.L.	Assigned Residential Lease #4079, Lot 34A in Waimanalo, Oahu dated 11/01/2021. Remove application dated 11/04/2005.
NUUANU, Alice M.	Assigned Residential Lease #5191, Lot 54 in Nanakuli, Oahu dated 09/15/2021. Remove application dated 01/14/2002.
OSORIO, Emil M., III	Assigned Residential Lease #3611, Lot 104 in Waimanalo, Oahu dated 11/17/2021. Remove application dated 04/05/1994.
PAKELE, Raynie L.M.	Assigned Residential Lease #3647, Lot 45 in Waimanalo, Oahu dated 11/01/2021. Remove application dated 05/19/2004.
PANG, Rylen K.	Assigned Residential Lease #1792, Lot 202 in Nanakuli, Oahu dated 12/16/2020. Remove application dated 05/15/2018.
WATSON, Aaron	Assigned Residential Lease #4502, Lot 162-A-1 in Nanakuli, Oahu dated 12/30/2020. Remove application dated 04/13/2017.

MAUI ISLANDWIDE AGRICULTURAL LEASE LIST

WHITE, Hazel M. Assigned Agricultural Lease
#5820, Lot 153 in Hoolehua,
Molokai dated 09/25/2020.
Remove application dated
10/01/1991.

MAUI ISLANDWIDE RESIDENTIAL LEASE LIST

AMARAL, Darrin P. Assigned Residential Lease
#5981, Lot 37 in Waimanalo, Oahu
dated 10/21/2021. Remove
application dated 11/03/1987.

HEWAHEWA, Darren K. Assigned Residential Lease
#10072, Lot 43 in Waiehu 3, Maui
dated 11/17/2021. Remove
application dated 05/10/2010.

KUANONI, Samson K. Assigned Residential Lease
#12231, Lot 30 in Waiehu 4, Maui
dated 12/17/2021. Remove
application dated 05/20/2019.

HAWAII ISLANDWIDE AGRICULTURAL LEASE LIST

CACABELOS, Alexander K. Assigned Agricultural Lease
#6999, Lot U2-55 in Makuu,
Hawaii dated 11/01/2021. Remove
application dated 05/13/1997.

4. Native Hawaiian Qualification

NONE FOR SUBMITTAL

5. Voluntary Cancellation

NONE FOR SUBMITTAL

6. Successorship

OAHU ISLANDWIDE RESIDENTIAL LEASE LIST

KEPA, Kahaionamaka	Succeeded to Oahu Islandwide Residential application of Parent, Joel K. Kepa, dated 08/12/1985. Remove application dated 01/11/2010.
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MAUI ISLANDWIDE AGRICULTURAL LEASE LIST

AKAHI, Keoni K.	Succeeded to Maui Islandwide Agricultural application of Grandparent, Gaelic Delara, dated 04/21/1986. Remove application dated 04/23/1992.
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HAWAII ISLANDWIDE RESIDENTIAL LEASE LIST

LEE, Lyron Jean L.	Succeeded to Hawaii Islandwide Residential application of Uncle, David K. Pua Jr., dated 03/17/1997. Remove application dated 11/22/2006.
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7. Additional Acreage

NONE FOR SUBMITTAL

8. HHC Adjustments

NONE FOR SUBMITTAL


Last Month's Transaction Total	21
Last Month's Cumulative FY 2021-2022 Transaction Total	274
Transfers from Island to Island	0
Deceased	0
Cancellations:	
Awards of Leases	14
NHQ	0
Voluntary Cancellations	0
Successorship	3
Additional Acreage	0
HHC Adjustments	0
This Month's Transaction Total	17
This Month's Cumulative FY 2021-2022 Transaction Total	291

STATE OF HAWAII

DEPARTMENT OF HAWAIIAN HOME LANDS

March 21, 2022

TO: Chairman and Members, Hawaiian Homes Commission

THROUGH: Juan Garcia, HSD Administrator 

FROM: Nicole F. Bell, Specialist V
Application Branch, Homestead Services Division

SUBJECT: **Commission Designation of Successors to Application Rights - Public Notice 2013, 2018 & 2020**

RECOMMENDED MOTION/ACTION

1. To designate the following individuals as successors to the application rights of deceased applicants who did not name a qualified successor.

2. To approve the certification of applications to successorship rights of qualified successors. The Department has verified the native Hawaiian blood quantum requirement of each prospective successor according to section 10-3-2 of the Hawaii Administrative Rules.

DISCUSSION

The following qualified applicants passed away on or after October 26, 1998, without naming qualified successors. Pursuant to 10-3-8(c) of the *Hawaii Administrative Rules*, a public notice listing the names of deceased applicants and calling for possible successors to their application rights was published in the Honolulu Star-Advertiser, The Maui News, Hawaii Tribune Herald, West Hawaii Today, and The Garden Island on the last two consecutive Sundays of November for the year the Department received notification. Requests to succeed to the decedents' application rights were submitted within the required 180 days following the last date of publication. Prospective successors were the sole respondents and are deemed by the Department to have met the requirements of successorship according to section 10-3-8(b) of the *Hawaii Administrative Rules*. HSD recommends approval of the following designees:


1a. Deceased Applicant:	Rita K. Laa
Date of death:	January 1, 2018
Successor to app rights:	Carl V. Laa
Relationship to decedent:	Child
Island:	Oahu
Type:	Islandwide Residential
Date of Application:	August 25, 1986
Date of Public Notice:	November, 2018
1b. Island:	Hawaii
Type:	Islandwide Agricultural
Date of Application:	August 25, 1986
2. Deceased Applicant:	Gaelic Delara
Date of death:	October 19, 2008
Successor to app rights:	Keoni K. Akahi
Relationship to decedent:	Grandchild
Island:	Maui
Type:	Islandwide Agricultural
Date of Application:	April 21, 1986
Date of Public Notice:	November, 2013
3. Deceased Applicant:	Randolph Castro Sr.
Date of death:	August 28, 2018
Successor to app rights:	Lambert Castro
Relationship to decedent:	Child
Island:	Maui
Type:	Islandwide Residential
Date of Application:	October 16, 1992
Date of Public Notice:	November, 2020

Previous Cumulative Total for Current FY	66
Current Month's Total	4
Fiscal Year Total: July 2021-June 2022	70

STATE OF HAWAII

DEPARTMENT OF HAWAIIAN HOME LANDS

March 21, 2022

TO: Chairman and Members, Hawaiian Homes Commission
THROUGH: Juan Garcia, HSD Administrator 
FROM: Nicole F. Bell, Specialist V
Application Branch, Homestead Services Division
SUBJECT: **Approval to Certify Applications of Qualified Applicants for the month of February 2022**

RECOMMENDED MOTION/ACTION

To approve the certification of applications of qualified applicants for the month of February 2022. The Department has verified the native Hawaiian blood quantum requirement of each applicant according to section 10-3-2 of the Hawaii Administrative Rules.

DISCUSSION

At its October 2020 regular meeting, the Hawaii Homes Commission adopted the recommendation of the HHC Investigative Committee on the Native Hawaiian Qualification Process to recall to the HHC, pursuant to Hawaii Administrative Rules § 10-2-16(a), the authority to accept the Native Hawaiian Quantum (NHQ) determination for an individuals as a function requiring the exercise of judgement or discretion. The recommendation included a process to implement the Commission's review and acceptance of NHQ determinations. These applicants have been deemed by the Department to have met the native Hawaiian blood quantum requirement through the kumu 'ohana process.

NANAKULI AREA / OAHU ISLANDWIDE AGRICULTURAL LEASE LIST

PALEA, Francis K.P.

1/9/1963

OAHU ISLANDWIDE AGRICULTURAL LEASE LIST

CHONG, Nolan K.

2/1/2022

OAHU ISLANDWIDE RESIDENTIAL LEASE LIST

KEKUA, Tilsha-Rae	1/26/2022
KEKUA, Tilson	1/26/2022
HOSAKA, Shana L.	1/27/2022
CHONG, Nolan K.	2/1/2022

MAUI ISLANDWIDE AGRICULTURALAL LEASE LIST

LEATUAUI, Hawaii Loa Aloha Hue-Lani L.	1/20/2022
HOOPAI, Kalelepono J.K.	1/24/2022

MAUI ISLANDWIDE PASTORAL LEASE LIST

KIAHA, Shanely M.	11/19/2021
HOSAKA, Shana L.	1/27/2022

MAUI ISLANDWIDE RESIDENTIAL LEASE LIST

LEATUAUI, Hawaii Loa Aloha Hue-Lani L.	1/20/2022
HOOPAI, Kalelepono J.K.	1/24/2022
LANI, Florence K.	1/28/2022

HAWAII ISLANDWIDE RESIDENTIAL LEASE LIST

LAWELAWA, William K., Jr.	1/13/2022
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KAUAI ISLANDWIDE AGRICULTURAL LEASE LIST

DAIVS, Priscilla H.	1/25/2022
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KAUAI ISLANDWIDE PASTORAL LEASE LIST

HOOIKAIKA, Ellen K.	1/28/2022
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KAUAI ISLANDWIDE RESIDENTIAL LEASE LIST

CHOW, Wesley K.	1/18/2022
HOOIKAIKA, Ellen K.	1/28/2022

Previous Cumulative Total for Current FY	45,174
Current Month's Total	18
Fiscal Year Total: July 2021-June 2022	45,192

STATE OF HAWAII

DEPARTMENT OF HAWAIIAN HOME LANDS

March 21, 2022

TO: Chairman and Members, Hawaiian Homes Commission
THROUGH: Juan Garcia, HSD Administrator
FROM: Nicole F. Bell, Specialist V
Application Branch, Homestead Services Division
SUBJECT: **Approval to Cancel Applications of Non-Qualified Applicants**

RECOMMENDED MOTION/ACTION

To approve the cancellations of applications from the Application Waiting Lists due to Native Hawaiian Qualification. The Department has been unable to verify the following applicant's native Hawaiian blood quantum requirement per the *Hawaiian Homes Commission Act, 1920*, as amended.

DISCUSSION

OAHU ISLANDWIDE AGRICULTURAL LEASE LIST

NEUMAN, Debbie-Lee K.	Applicant unable to substantiate native Hawaiian ancestry, cancel application dated 8/27/1992.
QUEBATAY, Sheldean L.M.	Applicant unable to substantiate native Hawaiian ancestry, cancel application dated 3/16/2000.

OAHU ISLANDWIDE RESIDENTIAL LEASE LIST

BRANDT, September D.K.	Applicant unable to substantiate native Hawaiian ancestry, cancel application dated 1/23/1995.
CAMBRA, John W.	Applicant unable to substantiate native Hawaiian ancestry, cancel application dated 6/28/1994.

FOX, Wendell F.	Applicant unable to substantiate native Hawaiian ancestry, cancel application dated 8/23/2005.
NEUMAN, Debbie-Lee K.	Applicant unable to substantiate native Hawaiian ancestry, cancel application dated 8/27/1992.
QUEBATAY, Sheldean L.M.	Applicant unable to substantiate native Hawaiian ancestry, cancel application dated 3/16/2000.
STITH, Anita L.	Applicant unable to substantiate native Hawaiian ancestry, cancel application dated 11/14/1986.

HAWAII ISLANDWIDE AGRICULTURAL LEASE LIST

CAMBRA, John W.	Applicant unable to substantiate native Hawaiian ancestry, cancel application dated 6/28/1994.
FOX, Wendell F.	Applicant unable to substantiate native Hawaiian ancestry, cancel application dated 4/23/1987.
KAMOKU, Laura A.	Applicant unable to substantiate native Hawaiian ancestry, cancel application dated 5/23/1990.
STITH, Anita L.	Applicant unable to substantiate native Hawaiian ancestry, cancel application dated 11/14/1986.

HAWAII ISLANDWIDE PASTORAL LEASE LIST

BRANDT, September D.K.	Applicant unable to substantiate native Hawaiian ancestry, cancel application dated 1/23/1995.
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HAWAII ISLANDWIDE RESIDENTIAL LEASE LIST

KAMOKU, Laura A.	Applicant unable to substantiate native Hawaiian ancestry, cancel application dated 5/23/1990.
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KAUAI ISLANDWIDE RESIDENTIAL LEASE LIST

MARTIN, Renee L.


Applicant unable to substantiate
native Hawaiian ancestry, cancel
application dated 7/10/1985.

Previous Cumulative Total for Current FY	95
Current Month's Total	15
Fiscal Year Total: July 2021-June 2022	110

STATE OF HAWAII

DEPARTMENT OF HAWAIIAN HOME LANDS

March 21, 2022

TO: Chairman and Members, Hawaiian Homes Commission
THROUGH: Juan Garcia, HSD Administrator 
FROM: Nicole F. Bell, Specialist V
Application Branch, Homestead Services Division
SUBJECT: **Reinstatement of Deferred Application - FRANCIS K.P. PALEA**

RECOMMENDED MOTION/ACTION

To reinstate an application that was deferred due to the applicant not responding to two successive contacts as required by the department's administrative rules.

DISCUSSION

Section 10-3-10(b) of the *Hawaii Administrative Rules* states in part that "Whenever an applicant does not respond to any two successive requests from the department for updated information, the department shall place such applicant on a deferred status until such time as updated information is received."

The following applicant was deferred and has since contacted the department with updated information:

NANAKULI AREA/ OAHU ISLANDWIDE RESIDENTIAL LEASE LIST

<u>APPLICANT</u>	<u>APPLICATION DATE</u>	<u>HHC ACTION TO DEFER</u>	<u>CONTACT DATE WITH DEPARTMENT</u>
PALEA, Francis K.P.	01/09/1963	01/30/1997	02/10/2022


Previous Cumulative Total for Current FY	2
Current Month's Total	<u>1</u>
Fiscal Year Total: July 2021-June 2022	3


STATE OF HAWAII

DEPARTMENT OF HAWAIIAN HOME LANDS

March 21, 2022

TO: Chairman and Members, Hawaiian Homes Commission

THROUGH: Juan Garcia, Administrator 
Homestead Services Division

FROM: Ross K. Kapeliela, Acting ODO Supervisor 
Homestead Services Division

SUBJECT: **Approval of Designation of Successors to Leasehold
Interest and Designation of Persons to Receive the Net
Proceeds**

RECOMMENDED MOTION/ACTION

1. To approve the designation of successor to the leasehold interest and person to receive the net proceeds, pursuant to Section 209, Hawaiian Homes Commission Act, 1920, as amended;

2. To approve and accept that designated successors are of no less than the required 25% or 50% Hawaiian ancestry as appropriate pursuant to Section 209, Hawaiian Homes Commission Act, 1920 as amended.

*See attached list of Lessees.

Leasehold Interest:

Ratified for March 2022	2
Previous FY 2021 - 2022	<u>62</u>
FY 2021 - 2022 Total to Date	64

Ratified for FY '20 - '21	92
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Net Proceeds

Ratified for March 2022	0
Previous FY 2021- 2022	<u>0</u>
FY 2021 - 2022 Total to Date	0

Ratified for FY '20 - '21	0
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**LIST OF LESSEES WHO DESIGNATED SUCCESSORS TO THEIR
LEASEHOLD INTEREST
FOR MONTH OF MARCH 2022**


<u>Deceased Lessee</u>	<u>Designated Successor</u>
1. George N. Kamakahi, II Lot No.: 99-A Area: Panaewa, Hawaii Agr. Lease No. 4157-A	<u>PRIMARY:</u> Gail S. Kamakahi, Wife <u>ALTERNATE: Joint Tenants</u> Gabriel Kamakahi, Son Given Kamakahi, Son <u>DESIGNEE TO RECEIVE NET PROCEEDS:</u> N/A
2. Robert K. Napeahi, Jr. Lot No.: 276-A Area: Keaukaha, Hawaii Res. Lease No. 3272	<u>PRIMARY: Tenants in Common</u> Joseph Napeahi, Son Laures Ulep, Daughter <u>ALTERNATE:</u> N/A <u>DESIGNEE TO RECEIVE NET PROCEEDS:</u> N/A


STATE OF HAWAII

DEPARTMENT OF HAWAIIAN HOME LANDS

March 21, 2022

TO: Chairman and Members, Hawaiian Homes Commission

THROUGH: Juan Garcia, Administrator
Homestead Services Division 

FROM: Ross K. Kapeliela, Acting ODO Supervisor 
Homestead Services Division

SUBJECT: **Approval of Assignment of Leasehold Interest**

RECOMMENDED MOTION/ACTION

1. To approve the assignment of the leasehold interest, pursuant to Section 208, Hawaiian Homes Commission Act, 1920, as amended, and subject to any applicable terms and conditions of the assignment, including but not limited to the approval of a loan.

2. To approve and accept that the transferees are of no less than the required 25% or 50% Hawaiian ancestry as appropriate pursuant to Section 208, Hawaiian Homes Commission Act, 1920, as amended.

DISCUSSION

Sixteen (16) assignments of lease.

1. Lessee Name: Eleanor E. Aea
Res. Lease No. 3112, Lot No. 10
Lease Date: 12/13/1957
Area: Kapaakea, Molokai
Property Sold & Amount: No, N/A
Improvements: 4 bedroom, 2 bath dwelling

Transferee Name: Matthias I. K. S. Asano
Relationship: Grandson
Loan Assumption: No
Applicant: Yes, Molokai IW Res., 12/5/2012

Reason for Transfer: "Giving lease to relative."

2. Lessee Name: Chenoa N. Ahuna-Kaai
Agr. Lease No. 3896, Lot No. 36-A-1
Lease Date: 7/23/1971
Area: Hoolehua, Molokai
Property Sold & Amount: No, N/A
Improvements: 3 bedroom, 2 bath dwelling

Transferee Name: Alvah K. Kaai
Relationship: Sister
Loan Assumption: No
Applicant: No

Reason for Transfer: "Giving lease to relative." Special
Condition: Transferee to occupy homestead within 60 days of
lease execution. Transferee currently lives on Oahu.

3. Lessee Name: Jan M. Aipoalani
Res. Lease No. 3376, Lot No. 174-B
Lease Date: 10/27/1961
Area: Nanakuli, Oahu
Property Sold & Amount: No, N/A
Improvements: 3 bedroom, 1 bath dwelling

Transferee Name: Jubby J. P. Miller
Relationship: Sister
Loan Assumption: No
Applicant: Yes, Hawaii IW Res., 8/25/1987

Reason for Transfer: "Giving lease to relative."

4. Lessee Name: Theodore A. M. T. Auwae
Res. Lease No. 280, Lot No. 48-A-1
Lease Date: 5/12/1930
Area: Nanakuli, Oahu
Property Sold & Amount: Yes, \$505,000.00
Improvements: 4 bedroom, 2 bath dwelling

Transferee Name: John K. Kaaialii
Relationship: None
Loan Assumption: No
Applicant: Yes, Oahu IW Res., 8/27/1997

Reason for Transfer: "Moving off island." Special
Condition: Transferee to obtain funds to pay purchase
price.

5. Lessee Name: Marie A. Chan
Res. Lease No. 9321, Lot No. 8
Lease Date: 4/1/1999
Area: Kaniohale, Hawaii
Property Sold & Amount: Yes, \$375,000.00
Improvements: 3 bedroom, 2 bath dwelling
- Transferee Name: Pua Alapai
Relationship: None
Loan Assumption: No
Applicant: Yes, Hawaii IW Res., 11/30/1990
- Reason for Transfer: "Medical reasons." Special Condition:
Transferee to obtain funds to pay purchase price.
6. Lessee Name: Morris K. Inn
Res. Lease No. 11925, Lot No. 17250
Lease Date: 8/23/2007
Area: Kaupea, Oahu
Property Sold & Amount: Yes, \$230,000.00
Improvements: 4 bedroom, 2-1/2 bath dwelling
- Transferee Name: Wade L. M. Inn
Relationship: Son
Loan Assumption: No
Applicant: No
- Reason for Transfer: "Giving lease to relative." Special
Condition: Transferee to obtain funds to pay purchase
price.
7. Lessee Name: Lucinda K. Keamo & Renee K. Keamo
Agr. Lease No. 6229, Lot No. 82-A
Lease Date: 11/1/1985
Area: Panaewa, Hawaii
Property Sold & Amount: No, N/A
Improvements: 4 bedroom, 2 bath dwelling
- Transferee Name: Norman N. Keamo
Relationship: Brother
Loan Assumption: No
Applicant: Yes, Hawaii IW Ag., 2/2/2015
- Reason for Transfer: "Giving lease to relative."

8. Lessee Name: Moru Mane, Jr.
Res. Lease No. 12394, Lot No. 18459
Lease Date: 4/21/2012
Area: Kanehili, Oahu
Property Sold & Amount: Yes, \$610,000.00
Improvements: 5 bedroom, 3 bath dwelling
- Transferee Name: Pualani E. C. Kaimikaua
Relationship: None
Loan Assumption: No
Applicant: Yes, Oahu IW Res., 10/29/2021
- Reason for Transfer: "Moving off island." Special
Condition: Transferee to obtain funds to pay purchase
price. See simultaneous transfer below.
9. Lessee Name: Pualani E. C. Kaimikaua
Res. Lease No. 12394, Lot No. 18459
Lease Date: 4/21/2012
Area: Kanehili, Oahu
Property Sold & Amount: Yes, \$610,000.00
Improvements: 5 bedroom, 3 bath dwelling
- Transferee Name: Trevor R. A. Kaimikaua
Relationship: Grandson
Loan Assumption: No
Applicant: No
- Reason for Transfer: "Giving lease to relative." Special
Condition: Transferee to obtain funds to pay purchase
price.
10. Lessee Name: Janet A. Matsushima
Res. Lease No. 1696Z, Lot No. 52
Lease Date: 11/29/1946
Area: Nanakuli, Oahu
Property Sold & Amount: No, N/A
Improvements: 2 bedroom, 2 bath dwelling
- Transferee Name: Alvin S. Matsushima, Jr.
Relationship: Son
Loan Assumption: No
Applicant: No
- Reason for Transfer: "Giving lease to relative."

11. Lessee Name: Eve H. McCandless
Res. Lease No. 3974, Lot No. 37
Lease Date: 2/25/1972
Area: Waimanalo, Oahu
Property Sold & Amount: Yes, \$600,000.00
Improvements: 4 bedroom, 2 bath dwelling

Transferee Name: Adren K. Kela
Relationship: None
Loan Assumption: No
Applicant: Yes, Oahu IW Res., 8/21/1995

Reason for Transfer: "Getting older need to live with relatives." Special Condition: Transferee to obtain funds to pay purchase price.

12. Lessee Name: Caesar K. Paishon, IV
Res. Lease No. 8566, Lot No. 12
Lease Date: 10/15/1994
Area: Nanakuli, Oahu
Property Sold & Amount: Yes, \$255,000.00
Improvements: 3 bedroom, 2 bath dwelling

Transferee Name: Bianca P. Paishon
Relationship: Daughter
Loan Assumption: No
Applicant: No

Reason for Transfer: "Giving lease to relative." Special Condition: Transferee to obtain funds to pay purchase price.

13. Lessee Name: Samuel A. Pomaikai, III
Res. Lease No. 3777, Lot No. 313
Lease Date: 3/21/1969
Area: Nanakuli, Oahu
Property Sold & Amount: No, N/A
Improvements: 4 bedroom, 1 bath dwelling

Transferee Name: Samuel A. Pomaikai, III & Ember L. Pomaikai
Relationship: Lessee & Wife
Loan Assumption: No
Applicant: Yes, Oahu IW Res., 10/21/1998 (Ember)

Reason for Transfer: "Adding spouse to lease."

14. Lessee Name: Marshelle L. Castro
Agr. Lease No. 7795, Lot No. 20
Lease Date: 2/1/1987
Area: Hoolehua, Molokai
Property Sold & Amount: No, N/A
Improvements: None

Transferee Name: Richard A. K. H. Maikui
Relationship: None
Loan Assumption: No
Applicant: No

Reason for Transfer: "Medical reasons."

15. Lessee Name: Moses H. Manners
Res. Lease No. 12969, Lot No. 43
Lease Date: To be determined
Area: Kauluokahai, Oahu
Property Sold & Amount: No, N/A
Improvements: None

Transferee Name: Moses H. Manners & Darlene Bee-Manners
Relationship: Lessee & Wife
Loan Assumption: No
Applicant: Yes, Hawaii IW Res., 6/13/1994 (Darlene Bee-Manners)

Reason for Transfer: " Adding relative to lease."

16. Lessee Name: Susan K. Waipa
Agr. Lease No. 6266, Lot No. 161-B
Lease Date: 11/1/1985
Area: Panaewa, Hawaii
Property Sold & Amount: No, N/A
Improvements: None

Transferee Name: David Baca & Kyle-James Waipa
Relationship: Sons
Loan Assumption: No
Applicant: No

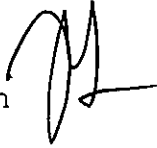
Reason for Transfer: "Giving lease to relative."


Assignments for the Month of March '22	16
Previous FY '21 - '22 balance	<u>155</u>
FY '21 - '22 total to date	171
Assignments for FY '20 - '21	201

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

March 21, 2022

TO: Chairman and Members, Hawaiian Homes Commission

THROUGH: Juan Garcia, Administrator 
Homestead Services Division

FROM: Ross K. Kapeliela, Acting ODO Supervisor 
Homestead Services Division

SUBJECT: **Approval of Amendment of Leasehold Interest**

RECOMMENDED MOTION/ACTION

To approve the amendment of the leasehold interest listed below.

DISCUSSION

Ten (10) amendments of lease.

1. Lessee: Eleanor E. Aea
Res. Lease No.: 3112
Lot No., Area, Island: 10, Kapaakea, Molokai
Amendment: To amend the lease title and Lessor's name, to update the property description, to incorporate the currently used terms, conditions, and covenants to the lease, and to extend the lease term to an aggregate term of 199 years.

2. Lessee: Theodore A. M. T. Auwae
Res. Lease No.: 280
Lot No., Area, Island: 48-A-1, Nanakuli, Oahu
Amendment: To update the property description.

3. Lessee: Gladys L. K. K. Brandt
Agr. Lease No.: 3896
Lot No., Area, Island: 36-A-1, Hoolehua, Molokai
Amendment: To amend the lease to incorporate the currently used terms, conditions, and covenants to the lease.
4. Lessee: Roman K. Chai
Res. Lease No.: 428
Lot No., Area, Island: 201, Nanakuli, Oahu
Amendment: To amend the lease title and Lessor's name, to incorporate the currently used terms, conditions, and covenants to the lease, and to extend the lease term to an aggregate term of 199 years.
5. Lessee: George N. Kamakahi, II
Agr. Lease No.: 4157-A
Lot No., Area, Island: 99-A, Panaewa, Hawaii
Amendment: To update the property description and to incorporate the currently used terms, conditions, and covenants to the lease.
6. Lessee: Victor John H. Kanoa, Sr.
Res. Lease No.: 3709
Lot No., Area, Island: 17, Waimanalo, Oahu
Amendment: To amend the tenancy to reflect tenant in severalty due to the death of a joint tenant and to incorporate the currently used terms, conditions, and covenants to the lease.

7. Lessee: April M. K. Kupau
 Res. Lease No.: 3978
 Lot No., Area, Island: 71, Waimanalo, Oahu
 Amendment: To update the property description
 and to amend the tenancy to reflect
 tenant in severalty due to the
 death of a joint tenant.

8. Lessee: Janet A. Matsushima
 Res. Lease No.: 1696Z
 Lot No., Area, Island: 52, Nanakuli, Oahu
 Amendment: To amend the lease title and
 Lessor's name, to incorporate the
 currently used terms, conditions,
 and covenants to the lease, and to
 extend the lease term to an
 aggregate term of 199 years.

9. Lessee: Eve H. McCandless
 Res. Lease No.: 3974
 Lot No., Area, Island: 37, Waimanalo, Oahu
 Amendment: To incorporate the currently used
 terms, conditions, and covenants to
 the lease.

10. Lessee: Robert K. Napeahi, Jr.
 Res. Lease No.: 3272
 Lot No., Area, Island: 276-A, Keaukaha, Hawaii
 Amendment: To amend the lease to incorporate
 the currently used terms,
 conditions, and covenants to the
 lease and to extend the lease term
 to an aggregate term of 199 years.

Amendments for the Month of March '22	10
Previous FY '21 - '22 balance	<u>98</u>
FY '21 - '22 total to date	108
 Amendments for FY '20 - '21	 112


ITEM NO. D-11


STATE OF HAWAII

DEPARTMENT OF HAWAIIAN HOME LANDS

March 21, 2022

TO: Chairman and Members, Hawaiian Homes Commission

THROUGH: Juan Garcia, Administrator 

FROM: Ross K. Kapeliela, Acting ODO Supervisor 
Homestead Services Division

SUBJECT: **Approval to Issue a Non-Exclusive License for Rooftop Photovoltaic Systems for Certain Lessees**

RECOMMENDED MOTION/ACTION

To approve the issuance of a non-exclusive license to allow the Permittee to provide adequate services related to the installation, maintenance, and operation of a photovoltaic system on the premises leased by the respective Lessees.

The non-exclusive license is necessary as the Lessee can not issue his/her own licenses.

DISCUSSION

Four (4) non-exclusive licenses.

1. Lessee: Trevor R. A. Kaimikaua
Res. Lease No.: 12394
Lot No., Area, Island: 18459, Kanehili, Oahu
Permittee: Sunrun Installation Services, Inc.
2. Lessee: Shannon H. K. Kayatani
Res. Lease No.: 2121
Lot No., Area, Island: 31, Kewalo, Oahu
Permittee: Sunrun Installation Services, Inc.

3. Lessee: Ladd K. K. Turalde
Res. Lease No.: 11318
Lot No., Area, Island: 19, Kekaha, Kauai
Permittee: Sunrun Installation Services, Inc.
4. Lessee: Chantyll K. Westbrook
Res. Lease No.: 9986
Lot No., Area, Island: 236A-1, Nanakuli, Oahu
Permittee: Sunrun Installation Services, Inc.


Non-Exclusive License for the Month of March '22	4
Previous FY '21 - '22 balance	<u>37</u>
FY '21 - '22 total to date	41
Non-Exclusive License for FY '20 - '21	64


STATE OF HAWAII

DEPARTMENT OF HAWAIIAN HOME LANDS

March 21, 2022

TO: Chairman and Members, Hawaiian Homes Commission

THROUGH: Juan Garcia, Administrator
Homestead Services Division 

FROM: Ross K. Kapeliela, Acting ODO Supervisor 
Homestead Services Division

SUBJECT: **Commission Designation of Successor - MARIAN I. KAHALE
Residential Lease No. 4051, Lot No. 64, Waimanalo,
Oahu**

RECOMMENDED MOTION/ACTION

1. To approve the designation of Asulu Laybon (Asulu) and Shareen Dumlao (Shareen), as successors to Residential Lease No. 4051, Lot No. 64, Waimanalo, Oahu, for the remaining term of the lease;

2. To approve and accept that Asulu and Shareen are of no less than the required 25% Hawaiian ancestry and are therefore qualified successors pursuant to Section 209 of the Hawaiian Homes Commission Act, 1920, as amended;

3. To stipulate that Asulu's and Shareen's rights and interest in the Lease do not vest until Asulu and Shareen have signed that: (i) Transfer Through Successorship of Lease; (ii) Lease Addendum; and such necessary and appropriate instruments; and that if Asulu and Shareen do not sign all such documents on or before **May 31, 2022** (the Deadline), that the Commission's selection of Asulu and Shareen as successors is automatically revoked;

4. To authorize the Department to extend the Deadline up to 60 days for good cause;

5. To declare that if Asulu's and Shareen's selection as successors is revoked; then under Section 209 (a) of the Hawaiian Homes Commission Act, as amended, "the lease shall resume its status as unleased Hawaiian home lands and the department is authorized to lease the land to a native Hawaiian as provided [by the] Act."

DISCUSSION

As the original lessee, Marian Ida Kahele (Decedent) received Lease No. 4051 for Waimanalo Residential Lot No. 64, dated October 12, 1973 (Lease).

On a *Designation of Successor* form dated January 21, 2009, the Decedent named her sister, Leetha L. Faleafine (Leetha), to succeed to the Lease in the event of the Decedent's passing. Upon receipt on January 26, 2009, the Department time stamped the designation form and subsequently sent a May 1, 2009, letter to the Decedent apprising her that the Department had accepted her designation.

On April 3, 2019, the Decedent passed away and Leetha began the lease successorship process by submitting the Decedent's death certificate to the Department on February 13, 2020.

Also, on February 13, 2020, the Department received Leetha's completed *Successorship to Lease Response Form* which indicated her intent to succeed to the Lease.

On March 24, 2020, the Department began reviewing documents to verify Leetha's quantum qualification and familial relationship to the Decedent. Although Leetha is a Waimanalo area residential applicant with an application date of April 18, 1972, inexplicably, there are no genealogy documents in her file. The Department's APPX system shows that she is a "p" or "pending" applicant—likely a reflection of the fact that she is missing documentation in her file.

On April 8, 2020, the Department contacted Leetha to ask for genealogy documentation. Leetha agreed to send in the information, however, the Department never received the requested documentation.

On November 5, 2020, while conducting a page-by-page review of the Decedent's file, staff discovered Leetha's birth certificate which enabled the Department to verify her quantum and familial relationship to the Decedent.

An Amendment of Lease was subsequently submitted for Commission approval at its December 21, 2020, regular meeting.

On December 22, 2020, the approved Amendment of Lease was submitted for drafting.

The completed lease draft was returned to the Homestead Services Division on January 11, 2021.

The lease document was subsequently transmitted to the Department of the Attorney General on January 14, 2021, for review and approval as to form.

On January 20, 2021, Leetha's family informed the Department that Leetha had passed away on January 5, 2021.

After legal review and approval, the Department received the approved lease document from the Department of the Attorney General on January 26, 2021.

The Department received Leetha's death certificate on February 16, 2021.

As the Decedent did not name alternate successors, Leetha's passing meant the Lease no longer had a named successor. Accordingly, pursuant to Administrative Rule 10-3-63, the Department published legal notices in the Honolulu Star-Advertiser, the Hawaii Tribune Herald, West Hawaii Today, The Maui News, and The Garden Island newspapers on June 7, 14, 21, and 28, 2021, calling for all interested, eligible and qualified heirs of the Decedent, to submit their successorship claims to the Lease.

In response to the notices, the Department received successorship claims from the Decedent's daughter, Katherine Kahale-Taylor, on July 7, 2021, and from the Decedent's son, Kirk Kahale, on August 16, 2021--both of whom have been determined to exceed the required 25% Hawaiian ancestry and are therefore eligible for successorship to the Lease.

Although verified at no less than 25% Hawaiian ancestry derived solely from Leetha's 50% quantum alone, to preserve their right to succeed to the Lease, Leetha's daughters, Asulu and Shareen, also submitted their own successorship claims to the Lease on September 23, 2021, in response to the legal notice.

Pursuant to Section 209 of the Hawaiian Homes Commission Act of 1920, as amended (Act), when a lessee fails to designate a successor, the Commission is authorized to terminate this lease or to continue the lease by designating a successor. Section 209 states in part that the department may select from only the following qualified relatives of the decedent:

1. Husband or wife; or
2. If there is no husband or wife, then the children; or
3. If there is no husband, wife, or child, then the grandchildren; or
4. If there is no husband, wife, child, or grandchild, then the brothers or sisters; or
5. If there is no husband, wife, child, grandchild, brother, or sister, then from the following relatives of the lessee who are native Hawaiian: father and mother, widows or widowers of the children, widows or widowers of the brothers and sisters, or nieces and nephews.

As nieces to the Decedent, Leetha's children do not meet the native Hawaiian quantum requirement to succeed to their aunt (see Item 5 above), however, the issue at hand is the fact that Leetha's children would certainly have been afforded the opportunity to succeed to the Lease at 25% Hawaiian ancestry had Leetha executed the Lease document before her untimely passing. A mere twenty-one days elapsed between Leetha's passing and the Department's receipt of the approved *Transfer Through Successorship* document from the Department of the Attorney General. All that remained was for Leetha to execute the document.

The Department believes the intent of the Decedent to have her Lease pass to her sister, Leetha, is unequivocal as evidenced by the Decedent's signed designation, unchanged since January 21, 2009. Furthermore, Leetha's response form indicated that she had every intent to succeed to her sister's Lease. Ultimately, while the Decedent's children are certainly qualified to succeed to the Lease, the Decedent listed no other successors, primary or alternate, on her designation form.

Collectively, the Decedent, Leetha, Leetha's children and Leetha's grandchildren lived on the subject lot for more than 30 years which may help to explain why the Decedent clearly intended her Lease to pass to her sister, Leetha and conceivably, to Leetha's own family.

Accordingly, for the reasons detailed above, the Department believes the transfer through successorship to Leetha and by extension, to her daughters Asulu and Shareen, should be

allowed to proceed despite the fact that Leetha did not execute the document before her passing.

Improvements to the homestead lot consist of a 5-bedroom, 3-bath, single family dwelling constructed in 1974.

There is an outstanding mortgage attached to the lease in the amount of \$149,500, real property taxes are current, and the lease rent is also current.


The Department respectfully requests approval of its recommendation.


STATE OF HAWAII

DEPARTMENT OF HAWAIIAN HOME LANDS

March 21, 2022

TO: Chairman and Members, Hawaiian Homes Commission

THRU: Juan Garcia, Administrator 
Homestead Services Division

FROM: 
Olinda L. Fisher, EHDO District Supervisor
Homestead Services Division

SUBJECT: **Approval for Request for Withdrawal of a Portion of
Lot - Brett B.K. Yamada, Agricultural Lease No.3571,
Lot No. 184, Panaewa, Hawaii**

RECOMMENDED MOTION/ACTION

1. To approve the request of Brett B.K. Yamada to withdraw a portion of Lot No. 184, TMK: (3) 2-2-061:003, Panaewa, Hawaii, covered under Agricultural Lease No. 3571 (Lease).

2. To approve the amendment of the Lease to reflect the new description of the lot.

DISCUSSION

Brett B.K. Yamada (Brett) submitted to the Department a signed Agreement to Withdraw Lot Portion, dated January 19, 2021 (see "Exhibit A"). The withdrawal portion of Lot No. 184 is located towards the rear of the lot and is approximately 3.37 acres in size. The remaining front portion of the lot consisting of approximately 6.63 acres in size will be retained by Brett ("Exhibit B").

Brett is wanting to return the portion back to the Department for future development.

The Department will be responsible for all cost associated with the subdivision of Lot No. 184. Upon the final subdivision of lot, the Department will use the acquired portion,

as described in the Hawaii Island Plan approved by the Hawaiian Homes Commission, for a future access road for neighboring Lot No. 185 and the development for more homestead lots.

Following the subdivision of Lot No. 184, the Lease will be amended to reflect the new lot description.

The Department request the approval of its recommendation.

DAVID Y ICE
GOVERNOR
STATE OF HAWAII

JOSE GREEN
LT. GOVERNOR
STATE OF HAWAII



WILLIAM J. AILA JR.
CHAIRMAN
HAWAIIAN HOMES COMMISSION

TYLER J. GONZ
DEPUTY CHAIRMAN
HAWAIIAN HOMES COMMISSION

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS
91 5420 KAPOLEI PARKWAY
KAPOLEI, HAWAII 96707

AGREEMENT TO WITHDRAW LOT PORTION

I, Brett B.K. Yamada, hereby freely and voluntarily submit this acknowledgement to the withdrawal of a portion of my interest in and to Department of Hawaiian Home Lands Agricultural Lot Lease No. 3571, demising Lot No. 184, situate at TMK: 2-2-061:003 (see attached proposed map), in Panaewa, Hilo, Hawaii ("Lease") for the following reason(s):

To provide for future access road and development of additional lots as set forth in the Hawaii Island Plan approved by the Hawaiian Homes Commission.

I understand that the withdrawal of a portion of my interest in and to the Lease is not effective until:

1. The withdrawal is accepted by the Chairman of the Hawaiian Homes Commission ("Commission");
2. The withdrawal is ratified by the Hawaiian Homes Commission; and
3. A Land Survey is completed and a Lease Amendment document is executed by the Department of Hawaiian Home Lands ("Department") and me.

Until the Subdivision of the property is completed and recorded by the Bureau of Conveyances and "Lease Amendment" document is executed, I remain responsible and liable for the following:

1. The premises demised under the Lease;
2. Payment of real property taxes on the premises demised under the Lease;
3. Payment of all taxes, assessments and charges of any kind arising out of the improvements on the premises demised under the Lease;
4. Maintaining insurance policies on any and all structures located on the premises demised under the Lease.

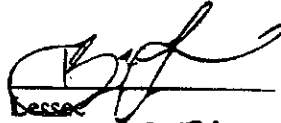
Agreement to Withdraw Lot Portion

Lessee Name: Brett B. K Yamada

Lease No. 3571 Lot No. 184

Page 2

I further understand that, once the Commission ratifies my Lease Amendment to my interest in and to Lot 184, the Department will acquire the 3.373 acres of said property for the development of future roads and lots as described in the Hawaii Island Plan for Lot 185. In which the remaining 6.627 acres will be demised under Lease No. 3571, Lot No. 184-A. I do further request that any future improvements, including roads and utilities, may be utilized for access when any easement(s) may affect my Lot 184-A.


Lessee

Lease No. 3571

Lot No. 184

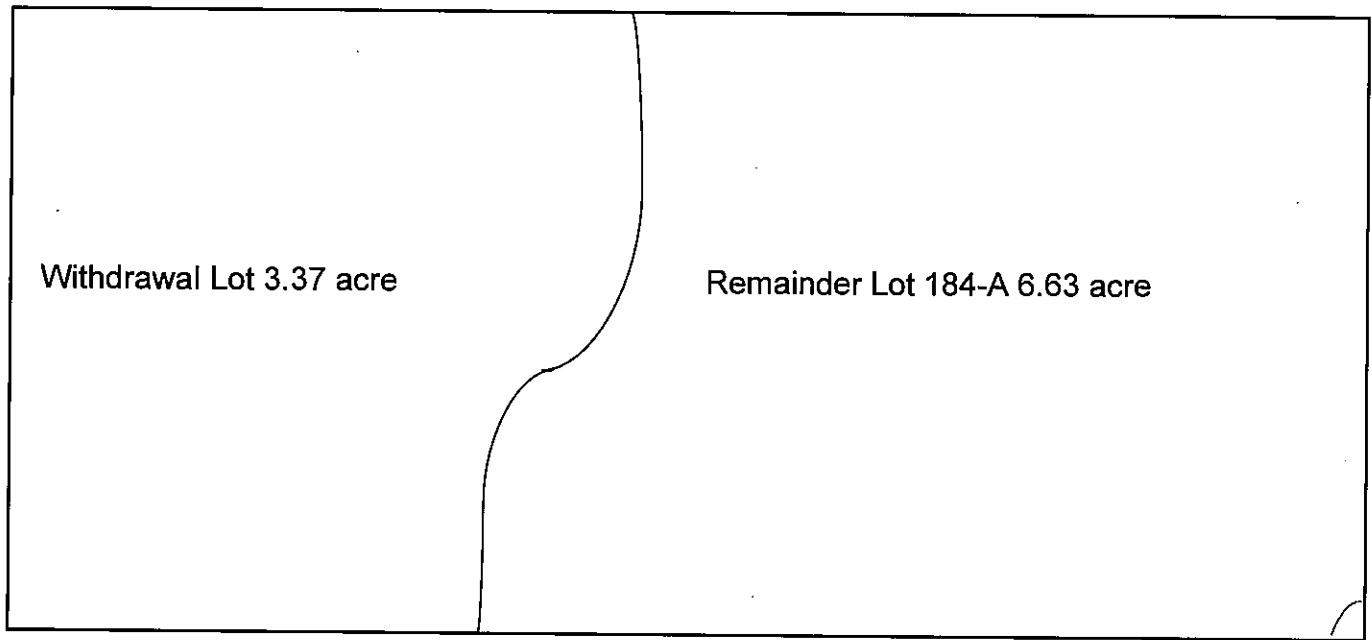
Date: 1/19/2021

Agreement to Withdraw Lot Portion Accepted / Rejected

William J. Aila Jr.
Chairman, Hawaiian Homes Commission

Date: _____

Ratified by the Hawaiian Homes Commission
on _____



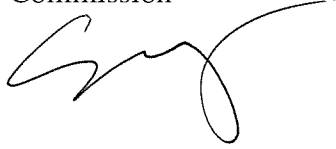
Road Lot easement 79 sf

STATE OF HAWAII

DEPARTMENT OF HAWAIIAN HOME LANDS

March 21, 2022

TO: Chairman and Members, Hawaiian Homes Commission

FROM: Stewart Matsunaga, Acting Administrator 
Land Development Division

SUBJECT: Approval to Increase Construction Budgets for DHHL-USDA RD Water Improvement Projects at Anahola Farm Lots Water System and Hoolehua Water System using NAHASDA Funds

RECOMMENDED MOTION/ACTION

1. Recommend Approval to increase construction budget for DHHL-USDA RD Anahola Farm Lots Water System, Island of Kaua'i, water improvement project by \$1,200,000 from NAHASDA (Native Hawaiian Housing Block Grant) funds to cover additional construction expenses.
2. Recommend Approval to increase construction budget for DHHL-USDA RD Hoolehua Water System, Island of Moloka'i, water improvement project by \$3,300,000 from NAHASDA (Native Hawaiian Housing Block Grant) funds to cover additional construction expenses.

DISCUSSION

ANAHOLA FARM LOTS WATER SYSTEM (PUBLIC WATER SYSTEM #432)

1. On November 19-20, 2018, a multi-divisional submittal HHC Item H-1, enclosed herewith as Exhibit "A", was approved by the Hawaiian Homes Commission to accept US Department of Agriculture Rural Development loan and grant financing package and the Letter of Conditions (LOC) totaling \$12,995,806, for construction of improvements to the Anahola Farm Lots Water System.
2. On July 19, 2021, Land Development Division, with the assistance of Planning Office provided Item No. E-3, a status report on the US Department of Agriculture Rural Development Loan/Grant Financing for the DHHL-owned Anahola Farm Lots Water System on the Island of Kaua'i. Item No. E-3, dated July 19-20, 2021, is enclosed herewith as Exhibit "B".

3. As of December 2021, approximately 60% of the authorized financing package has been invoiced and is summarized below:
 - a. Phase 1 improvements, which is replacement of the water distribution lines, is constructed by Kaiwa Construction (Kaiwa). Total contract amount is \$3,211,408. Kaiwa's work was substantially complete as of July 2021. Final construction and close out is expected at end of April 2022. Kaiwa and Bowers+Kubota Consulting, Construction Manager, continue to work to ensure the full implementation and connectivity of the smart meter installation.
 - b. Phase 2 improvements, which is to replace the existing steel storage tank with a new concrete tank, is under construction by Kiewit Infrastructure West Co. (Kiewit). Total contract amount is \$6,692,786. Kiewit is near 60 % completion and is expected to be fully completed in Fall 2022. Currently, the new concrete water tank is in process of being constructed.
4. Major construction challenges include the following:
 - a. Unforeseen site conditions, such as removal of debris from well, removal and disposal of contaminated soils under the existing water tank, and culvert cleaning
 - b. Escalation costs due to the pandemic-related costs (increased material and shipping costs), extensive time to modify original construction contracts to include USDA Special Conditions
 - c. Original planning, engineering and construction management costs were underestimated.

Therefore, after expending LOC budget contingencies, an additional \$1,200,000 is needed to complete the DHHL/USDA Anahola Farm Lots Water System improvements, as shown below:

a. Engineering/Construction management services	\$300,000
b. Construction Differing/Unforeseen site conditions	\$300,000
c. Project Contingency	\$600,000

HOOLEHUA WATER SYSTEM (PUBLIC WATER SYSTEM # 230)

1. On November 19-20, 2018, a multi-divisional submittal HHC Item H-2, enclosed herewith as Exhibit "C" was approved by the Hawaiian Homes Commission to accept US Department of Agriculture Rural Development grant and loan financing package totaling \$31,362,333 for engineering, construction and contingency funding for improvements to the aged Hoolehuela Water System.
2. On July 19, 2021, Land Development Division, with the assistance of Planning Office provided Item E-2, a status report on the US Department of Agriculture Rural Development Loan/Grant Financing for the DHHL-owned Hoolehuela Water System on the Island of Moloka'i. Item No. E-2, dated July 19-20, 2021, is enclosed herewith as Exhibit "D".

3. As of December 2021, approximately 50% of the authorized financing package has been invoiced and is summarized below.
 - a. Package 1: Hoolehua area water system improvements in six different locations is contracted with Goodfellow Bros in the original amount of \$19,554,000. Construction completion is expected in early 2023.
 - b. Package 2: Kalamaula area water improvements is contracted with Goodfellow Bros in the original amount of \$3,048,540. Package 2 is at 95% completion.
 - c. Package 3: Solar Photovoltaic installation was allocated \$4,000,000. Its disposition is discussed below. This funding allocation was shifted to immediately required Change Orders.
 - d. Package 4: Equipment and Supplies procurement is in process. Approximately \$900,000 in equipment and supplies have been purchased to improve the operations of the Molokai District Office. Smart meter procurement is in process.
4. Major construction challenges include the following:
 - a. Differing and unforeseen site conditions such as vegetation overgrowth within existing easements,
 - b. Escalation costs due to the pandemic-related costs (increased material and shipping costs), extensive time to modify original construction contracts to include USDA Special Conditions
 - c. Original engineering and construction management costs were underestimated.

Therefore, after having expended LOC Budgeted contingencies, an additional \$3,300,000 is estimated to complete the DHHL/USDA Hoolehua Water System improvements, as shown below:

a. Engineering/Construction management services	\$ 300,000
b. Construction Differing/Unforeseen site conditions	\$1,000,000
c. Project Contingency	\$2,000,000

5. Electrical costs to run pumps at DHHL well field at the highest cost item as described in Cost of Water Study for the Hoolehua Water System. Hence, Package 3, which was allocated \$4,000,000 in the LOC budget sought energy savings through a Solar Photovoltaic (PV) system. DHHL and various consultants vetted many forms of Solar PV. The most savings would be realized if a standalone Solar PV field was constructed in close proximity to the wells and pumps, and outfitted with battery storage. However, a standalone Solar PV with batteries, would entail disengaging completely from the Hawaiian Electric Company (HECO) grid. Since DHHL is a large customer, HECO was concerned that by DHHL coming off the grid, that the HECO system had potential of destabilizing electricity on Molokai, leading to compromised delivery of power and potentially increased cost to all consumers, including DHHL beneficiaries.

Other options are being explored. However, due to immediately required construction change orders to address unforeseen site conditions, engineering design changes, and the need for continued construction management services,, it was determined that a Solar PV program could be pursued independently after the construction of Package 1 and Package 2 is completed.

RECOMMENDATION

Land Development Division recommends approval of the motions stated above.

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

November 19 - 20, 2018

TO: Chairman and Members, Hawaiian Homes Commission

FROM: Rodney Lau, Administrative Services Officer
Norman Sakamoto, Administrator, Land Development
Division
Kaleo Manuel, Acting Planning Program Manager
Gigi Cairel, Grants Specialist

Subject: Approve to Accept the US Department of Agriculture
Rural Development Loan/Grant Financing for the
DHHL-owned Anahola Farm Lots Water System on the
Island of Kaua'i

RECOMMENDED MOTION/ACTION:

That the Hawaiian Homes Commission (HHC) approves to accept the subsequent \$4,100,000 loan and subsequent \$1,999,946 grant, as part of a financing package awarded to the Department of Hawaiian Home Lands (DHHL) by the US Department of Agriculture Rural Development (USDA RD) to fund capital improvements to the DHHL-owned Anahola Farm Lots Water System (Public Water System #432) on the Island of Kaua'i;

That the HHC delegates authority to the Chairman to negotiate final terms and conditions of the USDA RD loan, including execution of related documents.

BACKGROUND:

The DHHL-owned Anahola Farm Lots Water System serves 75 lessees and their families in the Bayview residential homestead and Anahola Farm Lots. Total population served is approximately 385 people. This water system also provides potable water to one non-homestead lot and has an interconnection tie to the County of Kaua'i, where DHHL may draw water from the County and vice versa for emergency purposes. All other homestead areas on Kaua'i receive potable water from the County of Kaua'i, including residential homesteads in Anahola, Pi'ilani Mai Ke Kai, Hanapepe, and Kekaha.

The Anahola Farm Lots Water System is supplied by a groundwater source from the DHHL Anahola well which was

constructed over 35 years ago by the Department of Land and Natural Resources. Major water system facilities include a half-acre site containing the well, control building, and a 0.5 million gallon (MG) steel storage tank; nearly two miles of distribution lines; and an emergency interconnection between the DHHL Anahola Farm Lots Water System and the County of Kaua'i. The well water is treated at the source with sodium hypochlorite. The system is classified by the Department of Health (DOH) as a Public Water System Grade 1 distribution system and requires a DOH certified operator with a Grade 1 operator license. The operations and maintenance services are provided by a DHHL contractor.

Water quality delivered by the Anahola water system currently meets all Federal and State drinking water quality standards. On a quarterly basis, the DHHL contracted operator conducts water quality testing, as required by DOH. Every three years, DOH conducts a sanitary survey to check site and facility conditions for compliance with Technical, Managerial and Financial capacity standards. Since there have been no significant deficiencies, DOH conducts its sanitary survey every five years. In prior DOH sanitary surveys, DOH provided recommendations to non-significant findings, which DHHL has remediated and corrected over the years, except for storage tank replacement. In the 2018 DOH survey, the Anahola system had no significant deficiencies, yet has six non-significant deficiencies such as recordkeeping and properly updating documents such as the mutual aid agreement with County of Kaua'i and the DHHL Vulnerability Assessment/Emergency Response Plan.

Need for project

The needs for this capital improvement project are many and include:

- (1) Since 1999, DOH has continuously recommended that DHHL replace the Anahola water storage because it is severely rusted on the roof and sides. The rust has degraded to loose flakes. DOH reported algal/fungal growth on the tank sides since 2008. Further, the tank's structural integrity is at risk. The tank has more than reached its useful life of over 30 years old.
- (2) The 2013 DOH sanitary survey noted the lack of security at the interconnect tie between the DHHL Anahola water system and the County. DOH recommended fencing the area and locking the standpipe caps and valves to prevent tampering with a public water supply.
- (3) Aging infrastructure where system components need major repairs or complete replacement.
- (4) Low water pressure in mauka areas and high water pressure in areas makai-side of Kūhio highway
- (5) High level of unaccounted for water due to leaks.

Improvements are needed to improve overall reliability and functionality of the water system. The improvements will not add new users to the system nor expand the service area beyond the Bayview residential homestead and Anahola Farm Lots. Due to the location of the Anahola water system, there is little to no opportunity to physically expand the water system or serve new homestead lots in the near term.

Project description/scope

The scope of this project is to implement much needed improvements to the Anahola Farm Lots Water System including the following.

- Increase operational efficiency
- Replace the storage tank
- Address water pressure issues
- Repair or replace components that have reached their useful life cycle
- Improve water system safety and security

The design and construction of the proposed Anahola Farm Lots Water Project is divided into two phases.

Phase 1 will address water distribution system improvements as follows.

- install a new dual water pressure zone which will increase the water pressure to customers in the mauka area and reduce the extreme high pressures to customers in the makai area, below Kūhio Highway.
- replace aging asbestos concrete pipes with Kaua'i County standard material that have a longer life expectancy.
- replace all fire hydrants, water meters and backflow preventers.
- improve the security in and around the interconnection facility at Kūhio Highway used for emergencies.

Phase 2 construction is to replace the water storage tank and improve the well site.

- construct a temporary 100,000 gallon steel tank.
- demolish the existing 500,000 gallon steel storage tank.
- construct a new concrete storage tank.
- Improve the well site, including replacement of well pump, install a booster pump, install an emergency diesel generator, install an improved chlorination system and install a Supervisory Control and Data Acquisition (SCADA) system. Currently, the well controls are operated manually; the SCADA

system will allow for remote operations and notifications of problems.

Project costs

In 2016, the project cost estimate was \$8.8M. DHHL sought federal funds from the USDA RD Water and Environment Program (WEP) (1) to access USDA RD set-aside grant funds that were available only to DHHL water and waste projects; and (2) to leverage DHHL resources for major capital improvements. USDA awarded \$3M and DHHL committed \$3.8M of its own funds. Total project cost was then reduced to \$6.8M.

In 2018, USDA RD approached and encouraged DHHL to consider applying for additional funds for anticipated project cost overruns. USDA RD had a national "call out" for projects due to the sudden availability of federal dollars that needed to be obligated by the end of the federal fiscal year, September 2018. DHHL submitted an application to seek an additional \$6.1M, thus bringing the total project cost to \$13M. USDA RD subsequently awarded the additional \$6.1M in the form of a loan/grant combination - \$4.1M Loan and \$2M Grant.

TABLE 1
Project Budget

Project Budget Category	2016	2018	Difference
Legal/Administration	\$150,000	\$150,000	\$0
Engineering	\$1,632,860	\$1,628,363	<\$4,497>
Construction	\$4,675,600	\$9,610,477	\$4,934,617
Contingency	\$397,400	\$1,566,966	\$1,169,566
TOTAL	\$6,855,860	\$12,955,806	\$6,099,946

TABLE 2
Summary of USDA Funds

YEAR	USDA awards	DHHL contribution	TOTAL
June 2016	Grant \$3,025,137	\$3,770,723	\$6,795,860
September 2018	Loan \$4,100,000 Grant \$1,999,946	-0-	\$6,099,946
TOTAL	\$9,125,083	\$3,770,723	\$12,895,806
DHHL	Loan re-payment	\$4,100,000	
TOTAL DHHL Contribution		\$7,870,723	

Loan terms (for planning purposes):
Period 35 years
Note: payments in first two years is interest only
Interest rate 3.1250%*
Amortization \$49/\$1000
Estimated annual payments \$200,900*

*Note: The precise payment amount will be based on the interest rate at which time the loan is closed and may be different than as stated above. See Exhibit A for the amortization schedule.

The following factors contributed to the differences in cost estimates.

- The 2016 engineering cost estimates were grossly undervalued for this type of project located on a neighbor island in the State of Hawai'i.
- Project costs generally have gone up in the 2-year period - 2016 and 2018.
- The lengthy DHHL procurement and contracting process.
- Guidance from USDA to increase Contingency to 20%.
- Guidance from USDA that they were flush with funds that must be obligated by September 2018.
- Guidance from USDA that there is no guarantee that USDA will fund future DHHL cost overruns for this Anahola water project.

During this period, the project scope remained the same.

Based on the factors above, DHHL was conservative in making the request to USDA RD for the additional \$6.1M. Since the \$6.1M award from USDA RD, DHHL again evaluated the project costs based on the actual final low bid numbers from Phase 1 at \$3.1M. Phase 2 is estimated at \$5.2M. With engineering design costs and contingency, this brings up the project cost estimate from \$6.8M (2016) to \$11.62M (2018). At this time, it appears the shortfall is \$4.8M, not \$6.1M. Thus, DHHL may have remaining funds amounting to \$1.3M.

Per USDA RD regulations, "remaining funds may be used for eligible loan and grant purposes, provided the use will not result in major changes to the original scope of work and the purpose of the loan and grant remains the same." DHHL has developed a list of items should there be such remaining funds when construction is complete for the original scope. Additional items include the following (in order of priority):

- Any cost overruns experienced during construction
- Replace grass area with pavement at the well/tank site

- Expand the existing control building to enclose well pumps and booster pumps to protect against moisture damage
- Add security measures, including enhanced lighting, to the well/tank site
- Exterior coating to the tank
- Purchase water truck for emergency use
- Stock equipment on island including pumps, motors, etc.

DHHL will seek preliminary approval from USDA RD to add these items in the event there are remaining funds.

TABLE 3
Updated Project Costs

Project Budget Category	USDA Award	DHHL Revised Costs	Difference
Legal/Administration	\$150,000	\$150,000	\$0
Engineering	\$1,628,363	\$1,628,363	\$0
Construction	\$9,610,477	\$8,300,000	<\$1,310,477>
Contingency	\$1,566,966	\$1,566,966	\$0
TOTAL	\$12,955,806	\$11,645,329	<\$1,310,477>

Project Status

At this time, the following is the status of this project.

- Phase 1 (water lines) - Construction contract executed.
- Phase 2 (tank replacement) - Currently is in the bidding process. Bid opening expected in early December 2018.

DISCUSSION

DHHL is seeking approval to accept the 2018 USDA RD loan/grant package to finance the proposed improvements to the Anahola water system. Should DHHL not proceed with the 2018 subsequent USDA RD loan/grant funds and, instead, proceed with the earlier 2016 USDA RD grant funds, the following are the impacts.

- DHHL may move forward with the 2016 USDA RD grant award (\$3,025,137) and DHHL contribution (\$3,770,723).
- There would be no need for DHHL to address USDA RD loan conditions - loan security, interim financing, change to use the federal bid and contract documents.
- DHHL may proceed with the Anahola water system improvements project with minimal disruption and time delays to the project.
- DHHL will continue to use the State bid and contract documents.

- DHHL will need to identify a new source of funds for the estimated project cost shortfall of \$4.8M and any future unforeseen cost overrun.
- DHHL will need to identify a new source of funds for the additional needs, not in the original 2016 scope - includes paving the well/tank site, enclose the well pump, coating of the tank, and purchase of equipment/supplies.

Should DHHL accept the 2018 USDA RD loan/grant package, there are major issues that need to be negotiated and resolved with USDA RD. The USDA RD loan is a new component to the overall financing package and with it comes new funding conditions. The major issues of concern to DHHL are as follows.

- Loan security, collateral, and general obligation bond financing
- Interim financing
- USDA priority order to disburse funds
- Use of State of Hawaii procurement and contracting documents versus federal standard documents

DHHL is optimistic that USDA RD will concur with our proposed alternatives.

Loan Security, Collateral, General Obligation Bond Financing

When a borrower is a public body, USDA's first preference for security are general obligation bonds, which is evidence of the full faith and credit of the borrower. DHHL is unable to provide such security. Instead, DHHL proposes to pledge all revenues from its "available lands" as security in lieu of general obligation bonds, subordinate to the DHHL Revenue Bonds, series 2017 and DHHL Certificates of Participation Series 2017 A (COPS). This proposal would place USDA RD in third position to all revenues from DHHL "available lands."

Status: DHHL will send this proposed alternative to USDA RD for its review and concurrence.

Interim Financing

USDA RD loans are long term (35 years) permanent take-out loans. USDA RD requires its borrowers to seek Interim Financing for the construction period. However, should a borrower be unable to obtain such interim financing with reasonable terms, borrower may request an exception whereby USDA RD would disburse the loans funds directly on a monthly or quarterly basis.

Status: DHHL is pursuing an exception to this USDA RD requirement to obtain Interim Financing.

USDA priority order to disburse funds

This federal requirement is in regards to USDA's priority order on how project funds are to spent and how USDA RD disburses the federal funds.

First priority	Applicant contribution
Second priority	USDA RD loan (awarded in 2018)
Third priority	USDA RD grant (awarded in 2016)
Fourth priority	USDA RD grant (awarded in 2018)

Further, there's a stipulation that should there be remaining funds upon construction completion (ie project comes under budget), USDA may de-obligate such funds. Any reduction in funds will be applied to the USDA RD grant funds first. Generally, the older grant funds from 2016 (\$3,025,127) will be de-obligated first, then the grant funds from 2018 (\$1,999,946). If un-used grant funds are totally de-obligated, then any un-used loan funds will be applied as an extra payment towards the USDA RD loan.

Status: The next opportunity to re-assess costs is when final bid tabulations for all phases are received by the DHHL. Secondly, as project construction nears completion, another assessment of project costs may be made to determine if there will be any remaining funds. Should this project come under budget, DHHL has planned for additional items to re-direct any remaining USDA funds.

Use of federal docs (EJCDC) versus State of Hawaii docs

At the time this project started in 2016, USDA RD obligated only grant funds to DHHL. USDA RD regulations required DHHL, as a state agency, to use its own State of Hawaii documents as opposed to the federal standard documents, called the Engineers Joint Contract Documents Committee or "EJCDC". Now in 2018, with the award of federal loan funds, DHHL is no longer exempted from using the EJCDC documents. The challenge is that DHHL has already executed bid and contract documents using the State templates. Changing existing State documents in mid-stream to the federal EJCDC documents will result in time delays and, possibly, loss of the vendors.

The construction contract for Phase 1 is executed, using State of Hawaii documents. DHHL is currently in the bid process for Phase 2 and expects bid opening by early December 2018. Again, State of Hawaii documents were used throughout the procurement process. Should this matter on the EJCDC not be resolved in a timely manner, DHHL may need to consider starting a new procurement process, thus further delaying the project timeline.

EJCDC documents include, but are not limited to, the following:
(a) contract documents between DHHL and engineer, construction contractor, inspector/construction management services; (b) Bid

forms; (c) Notice of Award; (d) Standard General Conditions; (e) Change Orders; etc.

Status: DHHL is proposing to USDA that we continue using the State documents throughout the project period and, as needed, include any federal EJCDC requirements by amendment.

CONCLUSION

The department is in continuous communication with USDA RD to address these matters above and is working diligently and collaboratively to find mutually-agreeable alternatives. The primary benefit to accessing the USDA RD federal funds today for the existing Anahola Farm Lots Water System is to leverage DHHL resources that would otherwise be used for new homestead lots to address the applicant wait list. Secondly, by utilizing the USDA RD funds, DHHL is creating templates for future use of the USDA RD WEP program to finance more DHHL water projects to develop new homestead lots.

RECOMMENDATION


Staff respectfully requests approval of the recommended motion as stated above.

	Anahola			Base Interst	3.125%					
				Adj Interest	37.500%					
	Installment			N	33.000	PV	4,100,000.00			
calculated	200,896.58			Monthly interest	10,677.08					
rounded	200,900.00			Annual Interest	128,125.00					
				Cumulative		Cumulative				
Year	P/I	Interest		Interest Pd	Principal	Principal Pd	Principal Bal	Pl pmts	Due Date	
1	128,125.00	128,125.00		128,125.00		-	4,100,000.00		8/31/2021	
2	128,125.00	128125.000		256,250.00		-	4,100,000.00		8/31/2022	
3	200,900.00	128,125.00		384,375.00	72,775.00	72,775.00	4,027,225.00	1	8/31/2023	
4	200,900.00	125,850.78		510,225.78	75,049.22	147,824.22	3,952,175.78	2	8/31/2024	
5	200,900.00	123,505.49		633,731.27	77,394.51	225,218.73	3,874,781.27	3	8/31/2025	
6	200,900.00	121,086.91		754,818.18	79,813.09	305,031.82	3,794,968.18	4	8/31/2026	
7	200,900.00	118,592.76		873,410.94	82,307.24	387,339.06	3,712,660.94	5	8/31/2027	
8	200,900.00	116,020.65		989,431.59	84,879.35	472,218.41	3,627,781.59	6	8/31/2028	
9	200,900.00	113,368.17		1,102,799.76	87,531.83	559,750.24	3,540,249.76	7	8/31/2029	
10	200,900.00	110,632.81		1,213,432.57	90,267.19	650,017.43	3,449,982.57	8	8/31/2030	
11	200,900.00	107,811.96		1,321,244.53	93,088.04	743,105.47	3,356,894.53	9	8/31/2031	
12	200,900.00	104,902.95		1,426,147.48	95,997.05	839,102.52	3,260,897.48	10	8/31/2032	
13	200,900.00	101,903.05		1,528,050.53	98,996.95	938,099.47	3,161,900.53	11	8/31/2033	
14	200,900.00	98,809.39		1,626,859.92	102,090.61	1,040,190.08	3,059,809.92	12	8/31/2034	
15	200,900.00	95,619.06		1,722,478.98	105,280.94	1,145,471.02	2,954,528.98	13	8/31/2035	
16	200,900.00	92,329.03		1,814,808.01	108,570.97	1,254,041.99	2,845,958.01	14	8/31/2036	
17	200,900.00	88,936.19		1,903,744.20	111,963.81	1,366,005.80	2,733,994.20	15	8/31/2037	
18	200,900.00	85,437.32		1,989,181.52	115,462.68	1,481,468.48	2,618,531.52	16	8/31/2038	
19	200,900.00	81,829.11		2,071,010.63	119,070.89	1,600,539.37	2,499,460.63	17	8/31/2039	
20	200,900.00	78,108.14		2,149,118.77	122,791.86	1,723,331.23	2,376,668.77	18	8/31/2040	
21	200,900.00	74,270.90		2,223,389.67	126,629.10	1,849,960.33	2,250,039.67	19	8/31/2041	
22	200,900.00	70,313.74		2,293,703.41	130,586.26	1,980,546.59	2,119,453.41	20	8/31/2042	
23	200,900.00	66,232.92		2,359,936.33	134,667.08	2,115,213.67	1,984,786.33	21	8/31/2043	
24	200,900.00	62,024.57		2,421,960.90	138,875.43	2,254,089.10	1,845,910.90	22	8/31/2044	
25	200,900.00	57,684.72		2,479,645.62	143,215.28	2,397,304.38	1,702,695.62	23	8/31/2045	
26	200,900.00	53,209.24		2,532,854.86	147,690.76	2,544,995.14	1,555,004.86	24	8/31/2046	
27	200,900.00	48,593.90		2,581,448.76	152,306.10	2,697,301.24	1,402,698.76	25	8/31/2047	
28	200,900.00	43,834.34		2,625,283.10	157,065.66	2,854,366.90	1,245,633.10	26	8/31/2048	
29	200,900.00	38,926.03		2,664,209.13	161,973.97	3,016,340.87	1,083,659.13	27	8/31/2049	
30	200,900.00	33,864.35		2,698,073.48	167,035.65	3,183,376.52	916,623.48	28	8/31/2050	
31	200,900.00	28,644.48		2,726,717.96	172,255.52	3,355,632.04	744,367.96	29	8/31/2051	
32	200,900.00	23,261.50		2,749,979.46	177,638.50	3,533,270.54	566,729.46	30	8/31/2052	
33	200,900.00	17,710.30		2,767,689.76	183,189.70	3,716,460.24	383,539.76	31	8/31/2053	
34	200,900.00	11,985.62		2,779,675.38	188,914.38	3,905,374.62	194,625.38	32	8/31/2054	
35	200,707.42	6,082.04		2,785,757.42	194,625.38	4,100,000.00	0.00	33	8/31/2055	
Totals	5,022,307.42	2,785,757.42			4,100,000.00					
Year 35 numbers have been adjusted due to rounding of payments.										
Assumptions:										
(1) USDA RD Funding package										
DHHL contribution - \$3,770,723										
USDA Grant (2016) - \$3,055,137										
USDA Grant (2018) - \$1,999,946										
USDA Loan (2018) - \$4,100,000										
TOTAL - \$12,925,806										
(2) USDA Loan Terms										
Re-payment over a period of 35 years.										
Payments due the first two years will consist of interest only.										
Payments for the remaining 33 years will be equal amortized annual installments, beginning two years after loan closing.										
For planning purposes, use a 3.1250% interest rate and an amortization factor of \$49/\$1000, which provides for an annual payment of \$200,900.										
The precise payment amount will be based on the interest rate at loan closing.										
(3) Assumes construction completed by August 2021. First payment due August 31, 2021.										
HHC ITEM E-1										
EXHIBIT A										

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

July 19-20, 2021

TO: Chairman and Members, Hawaiian Homes Commission

FROM: Stewart Matsunaga, Acting Administrator 
Land Development Division

SUBJECT: Item E-3 -- For Information Only
Status Report on the US Department of Agriculture Rural Development
Loan/Grant Financing for the DHHL-owned Anahola Farm Lots Water System on
the Island of Kaua'i

RECOMMENDED MOTION/ACTION

For information only

DISCUSSION

1. On November 19-20, 2018, a multi-divisional submittal HHC Item H-1 was approved by the Hawaiian Homes Commission to accept US Department of Agriculture Rural Development grant and loan financing package totaling \$12,995,806 for construction of improvements to the aged Anahola Farm Lots Water System. HHC Item H-1 is attached as Exhibit "A" which provides the background details of the 1) initial grant award, then 2) loan and grant financing package due to increased cost of construction.
2. The Anahola Farm Lots Water System improvements are divided into two phases of construction. Ka'iwa Construction, Inc. is responsible for Phase 1 waterline improvements, replacing old transite, asbestos-concrete pipes with new County standard ductile iron pipe and installation of new fire hydrants, backflow preventers and "smart" meters to remotely provide accurate water meter readings. Ka'iwa Construction, Inc.'s original contract amount is \$3,211,408. A Supplemental Contract for escalation costs is in process in the amount of \$166,301. The escalation costs are attributed to the protracted time taken to modify construction contracts to include USDA RD Special Conditions, after the original Ka'iwa Construction, Inc. was encumbered.

Phase 1 was substantially complete as of July 8, 2021. Smart meters have been installed and contractor and DHHL staff are coordinating the various software training and implementation from the smart meter through Utility Star.

ITEM NO. E-1
Exhibit B

3. Kiewit Infrastructure West Co. (KIWC) is responsible for Phase 2 water tank site improvements, including the demolition of a 500,000 gallon steel water tank, installation of a temporary 100,000 gallon tank, construction of a new 500,000 gallon concrete water tank. In addition, control building improvements and installation of new well pump and booster pump will be provided in the Phase 2 construction. Kiewit Infrastructure West Co. contract amount is \$ 6,692,786. Construction is expected to be completed in Summer of 2022.

To date, KIWC has expended approximately \$2,000,000. The temporary 100,000 gallon steel bolted tank has been installed and control building improvements are nearly complete. Unfortunately, in May 2021, the pump shaft for the well broke, ahead of its scheduled replacement. KIWC is in process of making the repairs.

Fortunately, DHHL has an Interconnection Agreement and operating facility with the County of Kaua'i to provide water to each organization in these emergency times. Potable water from County of Kaua'i water system is pumped from the Interconnection facility near the intersection of Kuhio Highway and Mahuahua Road, up to the water tank site. Conversely, if the County of Kaua'i water system is inoperable, like during Hurricane Iniki, DHHL's Anahola Farm Lots Water System can provide relief to the County of Kauai, and to the many DHHL beneficiaries in Anahola.

4. Other project expenses include planning, engineering and project management costs, which are estimated at \$3,000,000. Therefore, DHHL estimates a short fall of roughly \$500,000. The Hawaiian Homes Commission has authorized \$500,000 in the FY22 Development Budget for additional expenses for Anahola Farm Lots Water System.
5. Under the USDA Loan/Grant program, DHHL is responsible to first expend \$3,770,737 prior to loan fund and grant fund reimbursements. DHHL is pleased to report that expenditures for engineering, construction and construction management have exceeded DHHL's obligation.

After expending additional \$3,085,137 in loan funding, then DHHL can start receiving reimbursement from USDA RD grants up to \$6,099,946. Please see Exhibit "A" for the USDA RD funding award.

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

November 19 - 20, 2018

TO: Chairman and Members, Hawaiian Homes Commission

FROM: Rodney Lau, Administrative Services Officer
Norman Sakamoto, Administrator, Land Development
Division
Kaleo Manuel, Acting Planning Program Manager
Gigi Cairel, Grants Specialist

Subject: Approve to Accept the US Department of Agriculture
Rural Development Loan/Grant Financing for the
DHHL-owned Anahola Farm Lots Water System on the
Island of Kaua'i

RECOMMENDED MOTION/ACTION:

That the Hawaiian Homes Commission (HHC) approves to accept the subsequent \$4,100,000 loan and subsequent \$1,999,946 grant, as part of a financing package awarded to the Department of Hawaiian Home Lands (DHHL) by the US Department of Agriculture Rural Development (USDA RD) to fund capital improvements to the DHHL-owned Anahola Farm Lots Water System (Public Water System #432) on the Island of Kaua'i;

That the HHC delegates authority to the Chairman to negotiate final terms and conditions of the USDA RD loan, including execution of related documents.

BACKGROUND:

The DHHL-owned Anahola Farm Lots Water System serves 75 lessees and their families in the Bayview residential homestead and Anahola Farm Lots. Total population served is approximately 385 people. This water system also provides potable water to one non-homestead lot and has an interconnection tie to the County of Kaua'i, where DHHL may draw water from the County and vice versa for emergency purposes. All other homestead areas on Kaua'i receive potable water from the County of Kaua'i, including residential homesteads in Anahola, Pi'ilani Mai Ke Kai, Hanapepe, and Kekaha.

The Anahola Farm Lots Water System is supplied by a groundwater source from the DHHL Anahola well which was

constructed over 35 years ago by the Department of Land and Natural Resources. Major water system facilities include a half-acre site containing the well, control building, and a 0.5 million gallon (MG) steel storage tank; nearly two miles of distribution lines; and an emergency interconnection between the DHHL Anahola Farm Lots Water System and the County of Kaua'i. The well water is treated at the source with sodium hypochlorite. The system is classified by the Department of Health (DOH) as a Public Water System Grade 1 distribution system and requires a DOH certified operator with a Grade 1 operator license. The operations and maintenance services are provided by a DHHL contractor.

Water quality delivered by the Anahola water system currently meets all Federal and State drinking water quality standards. On a quarterly basis, the DHHL contracted operator conducts water quality testing, as required by DOH. Every three years, DOH conducts a sanitary survey to check site and facility conditions for compliance with Technical, Managerial and Financial capacity standards. Since there have been no significant deficiencies, DOH conducts its sanitary survey every five years. In prior DOH sanitary surveys, DOH provided recommendations to non-significant findings, which DHHL has remediated and corrected over the years, except for storage tank replacement. In the 2018 DOH survey, the Anahola system had no significant deficiencies, yet has six non-significant deficiencies such as recordkeeping and properly updating documents such as the mutual aid agreement with County of Kaua'i and the DHHL Vulnerability Assessment/Emergency Response Plan.

Need for project

The needs for this capital improvement project are many and include:

- (1) Since 1999, DOH has continuously recommended that DHHL replace the Anahola water storage because it is severely rusted on the roof and sides. The rust has degraded to loose flakes. DOH reported algal/fungal growth on the tank sides since 2008. Further, the tank's structural integrity is at risk. The tank has more than reached its useful life of over 30 years old.
- (2) The 2013 DOH sanitary survey noted the lack of security at the interconnect tie between the DHHL Anahola water system and the County. DOH recommended fencing the area and locking the standpipe caps and valves to prevent tampering with a public water supply.
- (3) Aging infrastructure where system components need major repairs or complete replacement.
- (4) Low water pressure in mauka areas and high water pressure in areas makai-side of Kūhio highway
- (5) High level of unaccounted for water due to leaks.

Improvements are needed to improve overall reliability and functionality of the water system. The improvements will not add new users to the system nor expand the service area beyond the Bayview residential homestead and Anahola Farm Lots. Due to the location of the Anahola water system, there is little to no opportunity to physically expand the water system or serve new homestead lots in the near term.

Project description/scope

The scope of this project is to implement much needed improvements to the Anahola Farm Lots Water System including the following.

- Increase operational efficiency
- Replace the storage tank
- Address water pressure issues
- Repair or replace components that have reached their useful life cycle
- Improve water system safety and security

The design and construction of the proposed Anahola Farm Lots Water Project is divided into two phases.

Phase 1 will address water distribution system improvements as follows.

- install a new dual water pressure zone which will increase the water pressure to customers in the mauka area and reduce the extreme high pressures to customers in the makai area, below Kūhio Highway.
- replace aging asbestos concrete pipes with Kaua'i County standard material that have a longer life expectancy.
- replace all fire hydrants, water meters and backflow preventers.
- improve the security in and around the interconnection facility at Kūhio Highway used for emergencies.

Phase 2 construction is to replace the water storage tank and improve the well site.

- construct a temporary 100,000 gallon steel tank.
- demolish the existing 500,000 gallon steel storage tank.
- construct a new concrete storage tank.
- Improve the well site, including replacement of well pump, install a booster pump, install an emergency diesel generator, install an improved chlorination system and install a Supervisory Control and Data Acquisition (SCADA) system. Currently, the well controls are operated manually; the SCADA

system will allow for remote operations and notifications of problems.

Project costs

In 2016, the project cost estimate was \$8.8M. DHHL sought federal funds from the USDA RD Water and Environment Program (WEP) (1) to access USDA RD set-aside grant funds that were available only to DHHL water and waste projects; and (2) to leverage DHHL resources for major capital improvements. USDA awarded \$3M and DHHL committed \$3.8M of its own funds. Total project cost was then reduced to \$6.8M.

In 2018, USDA RD approached and encouraged DHHL to consider applying for additional funds for anticipated project cost overruns. USDA RD had a national "call out" for projects due to the sudden availability of federal dollars that needed to be obligated by the end of the federal fiscal year, September 2018. DHHL submitted an application to seek an additional \$6.1M, thus bringing the total project cost to \$13M. USDA RD subsequently awarded the additional \$6.1M in the form of a loan/grant combination - \$4.1M Loan and \$2M Grant.

TABLE 1
Project Budget

Project Budget Category	2016	2018	Difference
Legal/Administration	\$150,000	\$150,000	\$0
Engineering	\$1,632,860	\$1,628,363	<\$4,497>
Construction	\$4,675,600	\$9,610,477	\$4,934,617
Contingency	\$397,400	\$1,566,966	\$1,169,566
TOTAL	\$6,855,860	\$12,955,806	\$6,099,946

TABLE 2
Summary of USDA Funds

YEAR	USDA awards	DHHL contribution	TOTAL
June 2016	Grant \$3,025,137	\$3,770,723	\$6,795,860
September 2018	Loan \$4,100,000 Grant \$1,999,946	-0-	\$6,099,946
TOTAL	\$9,125,083	\$3,770,723	\$12,895,806
DHHL	Loan re-payment	\$4,100,000	
TOTAL	DHHL Contribution	\$7,870,723	

Loan terms (for planning purposes):
Period 35 years
Note: payments in first two years is interest only
Interest rate 3.1250%*
Amortization \$49/\$1000
Estimated annual payments \$200,900*

*Note: The precise payment amount will be based on the interest rate at which time the loan is closed and may be different than as stated above. See Exhibit A for the amortization schedule.

The following factors contributed to the differences in cost estimates.

- The 2016 engineering cost estimates were grossly under-valued for this type of project located on a neighbor island in the State of Hawai'i.
- Project costs generally have gone up in the 2-year period - 2016 and 2018.
- The lengthy DHHL procurement and contracting process.
- Guidance from USDA to increase Contingency to 20%.
- Guidance from USDA that they were flush with funds that must be obligated by September 2018.
- Guidance from USDA that there is no guarantee that USDA will fund future DHHL cost overruns for this Anahola water project.

During this period, the project scope remained the same.

Based on the factors above, DHHL was conservative in making the request to USDA RD for the additional \$6.1M. Since the \$6.1M award from USDA RD, DHHL again evaluated the project costs based on the actual final low bid numbers from Phase 1 at \$3.1M. Phase 2 is estimated at \$5.2M. With engineering design costs and contingency, this brings up the project cost estimate from \$6.8M (2016) to \$11.62M (2018). At this time, it appears the shortfall is \$4.8M, not \$6.1M. Thus, DHHL may have remaining funds amounting to \$1.3M.

Per USDA RD regulations, "remaining funds may be used for eligible loan and grant purposes, provided the use will not result in major changes to the original scope of work and the purpose of the loan and grant remains the same." DHHL has developed a list of items should there be such remaining funds when construction is complete for the original scope. Additional items include the following (in order of priority):

- Any cost overruns experienced during construction
- Replace grass area with pavement at the well/tank site

- Expand the existing control building to enclose well pumps and booster pumps to protect against moisture damage
- Add security measures, including enhanced lighting, to the well/tank site
- Exterior coating to the tank
- Purchase water truck for emergency use
- Stock equipment on island including pumps, motors, etc.

DHHL will seek preliminary approval from USDA RD to add these items in the event there are remaining funds.

TABLE 3
Updated Project Costs

Project Budget Category	USDA Award	DHHL Revised Costs	Difference
Legal/Administration	\$150,000	\$150,000	\$0
Engineering	\$1,628,363	\$1,628,363	\$0
Construction	\$9,610,477	\$8,300,000	<\$1,310,477>
Contingency	\$1,566,966	\$1,566,966	\$0
TOTAL	\$12,955,806	\$11,645,329	<\$1,310,477>

Project Status

At this time, the following is the status of this project.

- Phase 1 (water lines) - Construction contract executed.
- Phase 2 (tank replacement) - Currently is in the bidding process. Bid opening expected in early December 2018.

DISCUSSION

DHHL is seeking approval to accept the 2018 USDA RD loan/grant package to finance the proposed improvements to the Anahola water system. Should DHHL not proceed with the 2018 subsequent USDA RD loan/grant funds and, instead, proceed with the earlier 2016 USDA RD grant funds, the following are the impacts.

- DHHL may move forward with the 2016 USDA RD grant award (\$3,025,137) and DHHL contribution (\$3,770,723).
- There would be no need for DHHL to address USDA RD loan conditions - loan security, interim financing, change to use the federal bid and contract documents.
- DHHL may proceed with the Anahola water system improvements project with minimal disruption and time delays to the project.
- DHHL will continue to use the State bid and contract documents.

- DHHL will need to identify a new source of funds for the estimated project cost shortfall of \$4.8M and any future unforeseen cost overrun.
- DHHL will need to identify a new source of funds for the additional needs, not in the original 2016 scope - includes paving the well/tank site, enclose the well pump, coating of the tank, and purchase of equipment/supplies.

Should DHHL accept the 2018 USDA RD loan/grant package, there are major issues that need to be negotiated and resolved with USDA RD. The USDA RD loan is a new component to the overall financing package and with it comes new funding conditions. The major issues of concern to DHHL are as follows.

- Loan security, collateral, and general obligation bond financing
- Interim financing
- USDA priority order to disburse funds
- Use of State of Hawaii procurement and contracting documents versus federal standard documents

DHHL is optimistic that USDA RD will concur with our proposed alternatives.

Loan Security, Collateral, General Obligation Bond Financing

When a borrower is a public body, USDA's first preference for security are general obligation bonds, which is evidence of the full faith and credit of the borrower. DHHL is unable to provide such security. Instead, DHHL proposes to pledge all revenues from its "available lands" as security in lieu of general obligation bonds, subordinate to the DHHL Revenue Bonds, series 2017 and DHHL Certificates of Participation Series 2017 A (COPS). This proposal would place USDA RD in third position to all revenues from DHHL "available lands."

Status: DHHL will send this proposed alternative to USDA RD for its review and concurrence.

Interim Financing

USDA RD loans are long term (35 years) permanent take-out loans. USDA RD requires its borrowers to seek Interim Financing for the construction period. However, should a borrower be unable to obtain such interim financing with reasonable terms, borrower may request an exception whereby USDA RD would disburse the loans funds directly on a monthly or quarterly basis.

Status: DHHL is pursuing an exception to this USDA RD requirement to obtain Interim Financing.

USDA priority order to disburse funds

This federal requirement is in regards to USDA's priority order on how project funds are to spent and how USDA RD disburses the federal funds.

First priority	Applicant contribution
Second priority	USDA RD loan (awarded in 2018)
Third priority	USDA RD grant (awarded in 2016)
Fourth priority	USDA RD grant (awarded in 2018)

Further, there's a stipulation that should there be remaining funds upon construction completion (ie project comes under budget), USDA may de-obligate such funds. Any reduction in funds will be applied to the USDA RD grant funds first. Generally, the older grant funds from 2016 (\$3,025,127) will be de-obligated first, then the grant funds from 2018 (\$1,999,946). If un-used grant funds are totally de-obligated, then any un-used loan funds will be applied as an extra payment towards the USDA RD loan.

Status: The next opportunity to re-assess costs is when final bid tabulations for all phases are received by the DHHL. Secondly, as project construction nears completion, another assessment of project costs may be made to determine if there will be any remaining funds. Should this project come under budget, DHHL has planned for additional items to re-direct any remaining USDA funds.

Use of federal docs (EJCDC) versus State of Hawaii docs

At the time this project started in 2016, USDA RD obligated only grant funds to DHHL. USDA RD regulations required DHHL, as a state agency, to use its own State of Hawaii documents as opposed to the federal standard documents, called the Engineers Joint Contract Documents Committee or "EJCDC". Now in 2018, with the award of federal loan funds, DHHL is no longer exempted from using the EJCDC documents. The challenge is that DHHL has already executed bid and contract documents using the State templates. Changing existing State documents in mid-stream to the federal EJCDC documents will result in time delays and, possibly, loss of the vendors.

The construction contract for Phase 1 is executed, using State of Hawaii documents. DHHL is currently in the bid process for Phase 2 and expects bid opening by early December 2018. Again, State of Hawaii documents were used throughout the procurement process. Should this matter on the EJCDC not be resolved in a timely manner, DHHL may need to consider starting a new procurement process, thus further delaying the project timeline.

EJCDC documents include, but are not limited to, the following:
(a) contract documents between DHHL and engineer, construction contractor, inspector/construction management services; (b) Bid

forms; (c) Notice of Award; (d) Standard General Conditions; (e) Change Orders; etc.

Status: DHHL is proposing to USDA that we continue using the State documents throughout the project period and, as needed, include any federal EJCDC requirements by amendment.

CONCLUSION

The department is in continuous communication with USDA RD to address these matters above and is working diligently and collaboratively to find mutually-agreeable alternatives. The primary benefit to accessing the USDA RD federal funds today for the existing Anahola Farm Lots Water System is to leverage DHHL resources that would otherwise be used for new homestead lots to address the applicant wait list. Secondly, by utilizing the USDA RD funds, DHHL is creating templates for future use of the USDA RD WEP program to finance more DHHL water projects to develop new homestead lots.

RECOMMENDATION

Staff respectfully requests approval of the recommended motion as stated above.

Anahola		Base Interest	3.125%						
		Adj Interest	37.500%						
calculated	200,896.58	Installment	N	33.000	PV	4,100,000.00			
rounded	200,900.00	Monthly Interest	10,677.08						
		Annual Interest	128,125.00						
		Cumulative		Cumulative					
Year	P/I	Interest	Interest Pd	Principal	Principal Pd	Principal Bal	Pi pmts	Due Date	
1	128,125.00	128,125.00	128,125.00		-	4,100,000.00		8/31/2021	
2	128,125.00	128,125.00	256,250.00		-	4,100,000.00		8/31/2022	
3	200,900.00	128,125.00	384,375.00	72,775.00	72,775.00	4,027,225.00	1	8/31/2023	
4	200,900.00	125,850.78	510,225.78	75,049.22	147,824.22	3,952,175.78	2	8/31/2024	
5	200,900.00	123,505.49	633,731.27	77,394.51	225,218.73	3,874,781.27	3	8/31/2025	
6	200,900.00	121,086.91	754,818.18	79,813.09	305,031.82	3,794,968.18	4	8/31/2026	
7	200,900.00	118,592.76	873,410.94	82,307.24	387,339.06	3,712,660.94	5	8/31/2027	
8	200,900.00	116,020.65	989,431.59	84,879.35	472,218.41	3,627,781.59	6	8/31/2028	
9	200,900.00	113,368.17	1,102,799.76	87,531.83	559,750.24	3,540,249.76	7	8/31/2029	
10	200,900.00	110,632.81	1,213,432.57	90,267.19	650,017.43	3,449,982.57	8	8/31/2030	
11	200,900.00	107,811.96	1,321,244.53	93,088.04	743,105.47	3,356,894.53	9	8/31/2031	
12	200,900.00	104,902.95	1,426,147.48	95,997.05	839,102.52	3,260,897.48	10	8/31/2032	
13	200,900.00	101,903.05	1,528,050.53	98,996.95	938,099.47	3,161,900.53	11	8/31/2033	
14	200,900.00	98,809.39	1,626,859.92	102,090.61	1,040,190.08	3,059,809.92	12	8/31/2034	
15	200,900.00	95,619.06	1,722,478.98	105,280.94	1,145,471.02	2,954,528.98	13	8/31/2035	
16	200,900.00	92,329.03	1,814,808.01	108,570.97	1,254,041.99	2,845,958.01	14	8/31/2036	
17	200,900.00	88,936.19	1,903,744.20	111,963.81	1,366,005.80	2,733,994.20	15	8/31/2037	
18	200,900.00	85,437.32	1,989,181.52	115,462.68	1,481,468.48	2,618,531.52	16	8/31/2038	
19	200,900.00	81,829.11	2,071,010.63	119,070.89	1,600,539.37	2,499,460.63	17	8/31/2039	
20	200,900.00	78,108.14	2,149,118.77	122,791.86	1,723,331.23	2,376,668.77	18	8/31/2040	
21	200,900.00	74,270.90	2,223,389.67	126,629.10	1,849,960.33	2,250,039.67	19	8/31/2041	
22	200,900.00	70,313.74	2,293,703.41	130,586.26	1,980,546.59	2,119,453.41	20	8/31/2042	
23	200,900.00	66,232.92	2,359,936.33	134,667.08	2,115,213.67	1,984,786.33	21	8/31/2043	
24	200,900.00	62,024.57	2,421,960.90	138,875.43	2,254,089.10	1,845,910.90	22	8/31/2044	
25	200,900.00	57,684.72	2,479,645.62	143,215.28	2,397,304.38	1,702,695.62	23	8/31/2045	
26	200,900.00	53,209.24	2,532,854.86	147,690.76	2,544,995.14	1,555,004.86	24	8/31/2046	
27	200,900.00	48,593.90	2,581,448.76	152,306.10	2,697,301.24	1,402,698.76	25	8/31/2047	
28	200,900.00	43,834.34	2,625,283.10	157,065.66	2,854,366.90	1,245,633.10	26	8/31/2048	
29	200,900.00	38,926.03	2,664,209.13	161,973.97	3,016,340.87	1,083,659.13	27	8/31/2049	
30	200,900.00	33,864.35	2,698,073.48	167,035.65	3,183,376.52	916,623.48	28	8/31/2050	
31	200,900.00	28,644.48	2,726,717.96	172,255.52	3,355,632.04	744,367.96	29	8/31/2051	
32	200,900.00	23,261.50	2,749,979.46	177,638.50	3,533,270.54	566,729.46	30	8/31/2052	
33	200,900.00	17,710.30	2,767,689.76	183,189.70	3,716,460.24	383,539.76	31	8/31/2053	
34	200,900.00	11,985.62	2,779,675.38	188,914.38	3,905,374.62	194,625.38	32	8/31/2054	
35	200,707.42	6,082.04	2,785,757.42	194,625.38	4,100,000.00	0.00	33	8/31/2055	
Totals	5,022,307.42	2,785,757.42		4,100,000.00					
Year 35 numbers have been adjusted due to rounding of payments.									
Assumptions:									
(1) USDA RD Funding package									
DHHL contribution - \$3,770,723									
USDA Grant (2016) - \$3,055,137									
USDA Grant (2018) - \$1,999,946									
USDA Loan (2018) - \$4,100,000									
TOTAL - \$12,925,806									
(2) USDA Loan Terms									
Re-payment over a period of 35 years.									
Payments due the first two years will consist of interest only.									
Payments for the remaining 33 years will be equal amortized annual installments, beginning two years after loan closing.									
For planning purposes, use a 3.1250% interest rate and an amortization factor of \$49/\$1000, which provides for an annual payment of \$200,900.									
The precise payment amount will be based on the interest rate at loan closing.									
(3) Assumes construction completed by August 2021. First payment due August 31, 2021.									

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

November 19 - 20, 2018

TO: Chairman and Members, Hawaiian Homes Commission

FROM: Rodney Lau, Administrative Services Officer
Norman Sakamoto, Administrator, Land Development
Division
Kaleo Manuel, Acting Planning Program Manager
Gigi Cairel, Grants Specialist

Subject: Approve to Accept the US Department of Agriculture
Rural Development Loan/Grant Financing for the
DHHL-owned Ho'olehua Water System on the Island of
Moloka'i

RECOMMENDED MOTION/ACTION

That the Hawaiian Homes Commission (HHC) approves to accept the subsequent \$7,455,000 loan and subsequent \$1,592,333 grant, as part of a financing package awarded in September 2018 to the Department of Hawaiian Home Lands (DHHL) by the US Department of Agriculture Rural Development (USDA RD) to fund major capital improvements to the DHHL-owned Ho'olehua Water System (Public Water System #230) on the Island of Moloka'i; and

That the HHC delegates authority to the Chairman to negotiate final terms and conditions of the USDA RD loan, including execution of related documents.

BACKGROUND

The DHHL-owned Ho'olehua water system serves over 500 lessees and their families in Kalama'ula and Ho'olehua homesteads. Total population served is approximately 2,400 people. All other homesteads on Moloka'i receive potable water from the County of Maui, including Kapaakea and Kamiloloa-One Ali'i. In addition, this system delivers drinking water to community facilities such as the Ho'olehua airport, US Post Office, schools, churches and to commercial businesses. This is the only DHHL-owned water system that serves community facilities and businesses. This is an advantage to DHHL because these other water system users pay a higher water rate to help offset costs to operate the system that otherwise would be 100% borne by lessees.

The system is supplied by groundwater sources from the Kauluwai Well No. 1 and No. 2, both owned by DHHL. Water system facilities include a DHHL maintenance baseyard building, five storage tanks, one pressure breaker tank, two booster pumps, two altitude valves, and approximately 50 miles of pipeline. The water is treated at the source with sodium hypochlorite. The system is classified by the Department of Health (DOH) as a Public Water System Grade 2 distribution system and requires a DOH certified operator with a Grade 2 operator license. The system is operated by DHHL Moloka'i District Office personnel, who are all beneficiaries.

Water quality delivered by the Ho'olehua water system meets all federal and state drinking water quality standards. Every three to five years, DOH conducts a sanitary survey to check site and facility conditions and compliance with Technical, Managerial and Financial capacity standards. In prior DOH sanitary surveys, the Ho'olehua water system had significant deficiencies and DHHL water staff have fully addressed them to date. In the 2018 sanitary survey, the Ho'olehua system had no significant deficiencies.

Need for project

The needs for this capital improvement project are many and include:

- (1) Aging infrastructure, where some components have been operating since the 1930s such as the 3.5 million gallon (MG) concrete storage tanks located in Ho'olehua.
- (2) Water system components have reached the end of their useful life and are in need for major repairs or complete replacement.
- (3) Low water pressure in the Kalama'ula homestead, which is a priority project in the Moloka'i Regional Plan.
- (4) High level of unaccounted for water due to leaks.
- (5) High energy costs to operate the well pumps. The annual energy cost is \$310,000, which is 40% of the water system operating budget.

Improvements are needed to improve overall reliability and functionality of the water system. The proposed improvements are not intended to add new users to the system nor expand the service area beyond the existing homesteads in Ho'olehua and Kalama'ula.

Project description/scope

Overall objectives of the improvements are as follows:

- Increase operational efficiency
- Reduce energy costs
- Increase fire protection

- Achieve 24/7 access to system components by improving roadways
- Increase storage capacity
- Address water pressure issues
- Repair or replace components that have reached their useful life cycle
- Improve water system safety and security

The scope of the project is to implement much needed improvements to the Ho'olehua Water System to improve transmission and provide reliable water service to the existing population over a 35-year planning period. In addition to upgrading the reliability of the existing water system, improvements will seek to create a more sustainable system to minimize unexpected losses of service and reduce annual energy costs. The design and construction of the proposed Ho'olehua Water System improvements project is divided into four bid packages as follows.

Package 1 - Ho'olehua portion of the Ho'olehua Water System
Site numbers 1, 3, 4, 5, 6, 7. Refer to Exhibit B.

- Improve Kauluwai 1.0MG Storage Tank.
- Install a 1,000 gallon above-ground fuel storage tank for the generator.
- Repair the two Ho'olehua 3.5MG storage tanks.
- Replace aging asbestos water piping, pressure relief valves, gate valves, flow controls, well booster pumps and motors, which have reached the end of their useful life.
- Install new water lines and hydrants to provide fire protection to areas not protected now.
- Install new 0.2 MG storage water tank to lower the risk of low pressure and vacuum conditions in the waterline that could result in contamination of the drinking water system through an increase risk of backflow conditions. It will also provide adequate water pressure.
- Provide over 3 miles of all-weather roadways for 24/7 access to most of the water system, storage water tanks and well sites in order to properly maintain and service them.
- Demolish existing DHHL Molokai Maintenance warehouse and construct a new facility to house all of the new construction equipment and properly store water treatment supplies which will allow the Molokai District Office Maintenance crew to provide adequate maintenance and repairs to the Ho'olehua Water System.

Package 2 - Kalama'ula portion of the Ho'olehua Water System
Site number 2. Refer to Exhibit B.

- Improve roadway for 24/7 access to the 0.2MG Kalama'ula storage tank.
- Replace 12-inch transmission main water line.

Package 3 - Photovoltaic (PV) system and solar field

- Implementation of a large 1 mega-watt PV solar field. This should generate over \$300,000 (estimate) in annual electrical savings.

Package 4 - Equipment and supply needs for the entire Ho'olehua Water System.

Project costs

In 2016, the project cost estimate was \$25M. DHHL sought federal funds from the USDA RD Water Environment Program (WEP) (1) to access USDA RD set-aside grant funds available only to DHHL water and waste projects; and (2) to leverage DHHL resources for major capital improvements. USDA awarded \$10M in grant funds and DHHL committed \$12M of its own funds. Total project cost was then reduced to \$22M.

In 2018, USDA RD approached and encouraged DHHL to consider applying for additional funds for anticipated project cost overruns. USDA RD had a national "call out" for projects due to the sudden availability of federal dollars that needed to be obligated by the end of the federal fiscal year, September 2018. DHHL submitted an application to seek an additional \$9M, thus bringing the total project cost to \$31M. USDA RD subsequently awarded the additional \$9M in the form of a loan/grant combination - \$7.4M Loan and \$1.5M Grant.

TABLE 1
Project Budget

Project Budget Category	2016	2018	Difference
Engineering	\$2,035,444	\$2,518,663	\$483,219
Construction	\$18,481,503	\$24,013,781	\$5,532,278
Contingency	\$1,768,053	\$4,799,889	\$3,031,836
TOTAL	\$22,285,000	\$31,332,333	\$9,047,333

TABLE 2
Summary of USDA Funds

YEAR	USDA awards	DHHL contribution	TOTAL
June 2016	Grant \$10,011,750	\$12,273,250	\$22,285,000
September 2018	Loan \$7,455,000 Grant \$1,592,333	-0-	\$9,047,333
TOTAL	\$19,059,083	\$12,273,250	\$31,332,333
DHHL	Loan re-payment	\$7,455,000+	
TOTAL	DHHL Contribution	\$19,728,250+	

Loan terms (for planning purposes):
Period 35 years
Note: payments in first two years is interest only
Interest rate 3.1250%*
Amortization \$49/\$1000
Estimated annual payments \$365,295*

*Note: The precise payment amount will be based on the interest rate at which time the loan is closed and may be different than as stated above. See Exhibit A for the amortization schedule.

The following factors contributed to the differences in cost estimates from 2016 to 2018.

- Project costs generally have gone up in the 2-year period - 2016 and 2018.
- The lengthy DHHL procurement and contracting process
- USDA RD staff changes resulted in time delays of the USDA review of bid and contracting documents
- Guidance from USDA to increase Contingency to 20%
- Guidance from USDA that they were flush with funds that must be obligated by September 2018
- Guidance from USDA that there is no guarantee that USDA will fund future DHHL cost overruns for this Ho'olehua project

During this period, the project scope remained the same. The only change was that DHHL removed \$5M that was originally budgeted with USDA funds in 2016 for the PV project. Instead, DHHL anticipates the PV project to be self-financed through a Purchase Power Agreement (PPA). The \$5M in USDA funds was re-allocated to the other sub-projects - Bid Package 1 (Ho'olehua), Bid Package 2 (Kalama'ula) and Bid Package 4 (Equipment/Supplies).

Based on the factors above, DHHL was conservative in making the request to USDA RD for the additional \$9M. Since the \$9M award from USDA RD, DHHL again evaluated the project costs based on the actual final low bid numbers from Packages 1 and 2 - \$19,554,000 (USDA RD portion \$16,228,000) and \$3,048,540, respectively. Package 4 is estimated at \$1,411,242. With engineering design costs and 10% contingency, this brings up the project cost estimate from \$22M (2016) to \$25M (2018). At this time, it appears the shortfall is \$3M, not \$9M. Thus, DHHL may have remaining funds amounting to \$6M.

Per USDA RD regulations, "remaining funds may be used for eligible loan and grant purposes, provided the use will not result in major changes to the original scope of work and the purpose of the loan and grant remains the same." DHHL has developed a list of work items should there be such remaining

funds when construction is complete for the original scope. Additional items include the following (in order of priority):

- Any cost overruns experienced during construction, including funds needed for the PV project should the PPA fall through.
- Emergency repairs to the two 3.5MG concrete tanks.
- Replace and re-condition 278 fire hydrants, in addition to the 30 in the original scope.
- Construct protective structures over well pumps & booster pumps to protect moisture damage to pump motors.
- Stock equipment/supplies on island such as gate valves, water laterals, etc.
- Purchase equipment including tapping machine, bits & adapters, etc.

DHHL will seek preliminary approval from USDA RD to add these items in the event there are remaining funds.

TABLE 3
Updated Project Costs

	USDA Award Amounts	DHHL Revised Costs	Difference
Engineering	\$2,518,663	\$2,552,225	\$33,562
Construction	\$24,013,781	\$20,687,781	\$3,326,000
Contingency	\$4,799,889	\$2,068,778	\$2,731,111
TOTAL	\$31,332,333	\$25,308,784	\$6,090,673

Project Status

At this time, the following is the status of this project.

- Packages 1 and 2 - Bids received and ready to award contracts.
- Package 3 - PV project pending State (and possibly USDA RD) approval of bid documents.
- Package 4 - Equipment pending USDA RD approval of Request for Proposal documents.

DISCUSSION

DHHL is seeking approval to accept the 2018 USDA RD subsequent loan/grant package to finance the proposed improvements to the Ho'olehua water system. Should DHHL not proceed with the 2018 subsequent USDA RD loan/grant funds and, instead, proceed with the earlier 2016 USDA RD grant funds, the following are the impacts.

- There would be no need for DHHL to address USDA RD loan conditions - loan security, interim financing, change to use the federal bid and contract documents.
- DHHL may proceed with the Ho'olehua water system improvements project with minimal disruption and time delays to the project.
- DHHL will continue to use the State bid and contract documents.
- DHHL will need to identify a new source of funds for the estimated project cost shortfall of \$3M and any future unforeseen cost overruns during the construction period.
- Should the PV PPA fall through, DHHL will need to identify a new source of funds. The PV was part of the original scope for 2016 USDA RD funds. If the PV will be removed the original scope, it will result in a \$5M reduction in the original 2016 USDA RD grant of \$10,011,000.
- DHHL will need to identify a new source of funds for the additional needs, not in the original 2016 scope - includes emergency repairs to the two 3.5 MG concrete tanks, replace fire hydrants, construct new protective covering for the well pumps and booster pumps, etc.

Should DHHL accept the 2018 USDA RD loan/grant package, there are major issues that need to be negotiated and resolved with USDA RD. The USDA RD loan is a new component to the overall financing package and with it comes new funding conditions. The major issues of concern to DHHL are as follows.

- Loan security, collateral, and general obligation bond financing
- Interim financing
- USDA priority order to disburse and de-obligate funds
- Use of State of Hawaii procurement and contracting documents versus federal standard documents

DHHL is optimistic that USDA RD will concur with our proposed alternatives.

Loan Security, Collateral, General Obligation Bond Financing

When a borrower is a public body such as DHHL, USDA's first preference for security are general obligation bonds, which is evidence of the full faith and credit of the borrower. DHHL is unable to provide such security. Instead, DHHL proposes to pledge all revenues from its "available lands" as security in lieu of general obligation bonds, subordinate to the DHHL Revenue Bonds, series 2017 and DHHL Certificates of Participation Series 2017 A (COPS). This proposal would place USDA RD in third position to all revenues from DHHL "available lands."

Status: DHHL will send this proposed alternative to USDA RD for its review and concurrence.

Interim Financing

USDA RD loans are long term (35 years) permanent take-out loans. USDA RD requires its borrowers to seek Interim Financing for the construction period. However, should a borrower be unable to obtain such interim financing with reasonable terms, borrower may request an exception whereby USDA RD would disburse the loans funds directly on a monthly or quarterly basis.

Status: DHHL is pursuing an exception to this USDA RD requirement to obtain Interim Financing.

USDA priority order to disburse funds and de-obligate funds

This federal requirement is in regards to USDA's priority order on how project funds are to be spent and how USDA RD disburses the federal funds.

First priority	Applicant contribution
Second priority	USDA RD loan (awarded in 2018)
Third priority	USDA RD grant (awarded in 2016)
Fourth priority	USDA RD grant (awarded in 2018)

Further, there's a stipulation that should there be remaining funds upon construction completion, USDA may de-obligate such funds. Any reduction in funds will be applied to the USDA RD grant funds first. The amount of un-used funds will be taken out from the 2016 grant (\$10M) first, then the 2018 grant (\$1.6M). If there are more un-used funds, then loan funds will be applied as an extra payment towards the USDA RD loan.

Status: The next opportunity to re-assess costs is when final bid tabulations for all project components are received by DHHL. Secondly, as project construction nears completion, another assessment of project costs may be made to determine if there will be any remaining funds. Should this project come under budget, DHHL has planned for additional items to re-direct any remaining USDA funds.

Use of federal docs (EJCDC) versus State of Hawaii docs

At the time this project started in 2016, USDA RD obligated only grant funds to DHHL. USDA RD regulations required DHHL, as a state agency, to use its own State of Hawaii documents as opposed to the federal standard documents, called the Engineers Joint Contract Documents Committee or "EJCDC". Now in 2018, with the award of federal loan funds, DHHL is no longer exempted from using the EJCDC documents. The challenge is that DHHL has already executed bid and contract documents using the State templates. Changing existing State documents in mid-stream to the federal EJCDC documents will result in time delays and, possibly, loss of the vendors.

For Bid Packages 1 and 2, DHHL is at the point of contract award. Should this matter on EJCDC not be resolved in a timely manner and the current vendor declines the DHHL contract, DHHL would start a new procurement process. The second lowest bid in the first procurement was \$25,439,306, which is, coincidentally, about a \$6.0M difference from the lowest bidder (\$19,554,000). So, if there are remaining funds, first priority would apply to this situation.

EJCDC documents include, but are not limited to, the following: (a) contract documents between DHHL and engineer, construction contractor, inspector/construction management services; (b) Bid forms; (c) Notice of Award; (d) Standard General Conditions; (e) Change Orders; etc.

Status: The department is proposing to USDA that we continue using the State documents throughout the project period and, as needed, include any federal EJCDC requirements by amendment.

CONCLUSION

The department is in continuous communication with USDA RD to address these matters above and is working diligently and collaboratively to find mutually-agreeable alternatives. The primary benefit to accessing the USDA RD federal funds today for the existing Ho'olehua Water System is to leverage DHHL resources that would otherwise be used for new homestead lots to address the applicant wait list. Secondly, by utilizing the USDA RD funds, DHHL is creating templates for future use of the USDA RD WEP program to finance more DHHL water projects to develop new homestead lots.

RECOMMENDATION

Staff respectfully requests approval of the recommended motion as stated above.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Hoolehua				Base Interest	3.125%							
2					Adj Interest	37.500%							
3	Installment				N	33,000 PV		7,455,000.00					
4	calculated	\$365,288.79			Monthly Interest	19,414.06							
5	rounded	365,295.00			Annual Interest	232,968.75							
6													
7													
8	Year	P/I	Interest		Cumulative Interest Pd	Principal	Cumulative Principal Pd	Principal Balance	Pi pmts	Due Date			
9	1	232,968.75	232,968.75		232,968.75		-	7,455,000.00		8/31/2021			
10	2	232,968.75	232,968.75		465,937.50		-	7,455,000.00		8/31/2022			
11	3	365,295.00	232,968.75		698,906.25	132,326.25	132,326.25	7,322,673.75	1	8/31/2023			
12	4	365,295.00	228,833.55		927,739.80	136,461.45	268,787.70	7,186,212.30	2	8/31/2024			
13	5	365,295.00	224,569.13		1,152,308.93	140,725.87	409,513.57	7,045,486.43	3	8/31/2025			
14	6	365,295.00	220,171.45		1,372,480.38	145,123.55	554,637.12	6,900,362.88	4	8/31/2026			
15	7	365,295.00	215,636.34		1,588,116.72	149,658.66	704,295.78	6,750,704.22	5	8/31/2027			
16	8	365,295.00	210,959.51		1,799,076.23	154,335.49	858,631.27	6,596,368.73	6	8/31/2028			
17	9	365,295.00	206,136.52		2,005,212.75	159,158.48	1,017,789.75	6,437,210.25	7	8/31/2029			
18	10	365,295.00	201,162.82		2,206,375.57	164,132.18	1,181,921.93	6,273,078.07	8	8/31/2030			
19	11	365,295.00	196,033.69		2,402,409.26	169,261.31	1,351,183.24	6,103,816.76	9	8/31/2031			
20	12	365,295.00	190,744.27		2,593,153.53	174,550.73	1,525,733.97	5,929,266.03	10	8/31/2032			
21	13	365,295.00	185,289.56		2,778,443.09	180,005.44	1,705,739.41	5,749,260.59	11	8/31/2033			
22	14	365,295.00	179,664.39		2,958,107.48	185,630.61	1,891,370.02	5,563,629.98	12	8/31/2034			
23	15	365,295.00	173,863.44		3,131,970.92	191,431.56	2,082,801.58	5,372,198.42	13	8/31/2035			
24	16	365,295.00	167,881.20		3,299,852.12	197,413.80	2,280,215.38	5,174,784.62	14	8/31/2036			
25	17	365,295.00	161,712.02		3,461,564.14	203,582.98	2,483,798.36	4,971,201.64	15	8/31/2037			
26	18	365,295.00	155,350.05		3,616,914.19	209,944.95	2,693,743.31	4,761,256.69	16	8/31/2038			
27	19	365,295.00	148,789.27		3,765,703.46	216,505.73	2,910,249.04	4,544,750.96	17	8/31/2039			
28	20	365,295.00	142,023.47		3,907,726.93	223,271.53	3,133,520.57	4,321,479.43	18	8/31/2040			
29	21	365,295.00	135,046.23		4,042,773.16	230,248.77	3,363,769.34	4,091,230.66	19	8/31/2041			
30	22	365,295.00	127,850.96		4,170,624.12	237,444.04	3,601,213.38	3,853,786.62	20	8/31/2042			
31	23	365,295.00	120,430.83		4,291,054.95	244,864.17	3,846,077.55	3,608,922.45	21	8/31/2043			
32	24	365,295.00	112,778.83		4,403,833.78	252,516.17	4,098,593.72	3,356,406.28	22	8/31/2044			
33	25	365,295.00	104,887.70		4,508,721.48	260,407.30	4,359,001.02	3,095,998.98	23	8/31/2045			
34	26	365,295.00	96,749.97		4,605,471.45	268,545.03	4,627,546.05	2,827,453.95	24	8/31/2046			
35	27	365,295.00	88,357.94		4,693,829.39	276,937.06	4,904,483.11	2,550,516.89	25	8/31/2047			
36	28	365,295.00	79,703.65		4,773,533.04	285,591.35	5,190,074.46	2,264,925.54	26	8/31/2048			
37	29	365,295.00	70,778.92		4,844,311.96	294,516.08	5,484,590.54	1,970,409.46	27	8/31/2049			
38	30	365,295.00	61,575.30		4,905,887.26	303,719.70	5,788,310.24	1,666,689.76	28	8/31/2050			
39	31	365,295.00	52,084.05		4,957,971.31	313,210.95	6,101,521.19	1,353,478.81	29	8/31/2051			
40	32	365,295.00	42,296.21		5,000,267.52	322,998.79	6,424,519.98	1,030,480.02	30	8/31/2052			
41	33	365,295.00	32,202.50		5,032,470.02	333,092.50	6,757,612.48	697,387.52	31	8/31/2053			
42	34	365,295.00	21,793.36		5,054,263.38	343,501.64	7,101,114.12	353,885.88	32	8/31/2054			
43	35	364,944.81	11,058.93		5,065,322.31	353,885.88	7,455,000.00	(0.00)	33	8/31/2055			
44	Totals	12,520,322.31	5,065,322.31			7,455,000.00							
45	Year 35 numbers have been adjusted due to rounding of payments.												
46													
47													
48	Assumptions:												
49	(1) USDA RD Funding package												
50	DHHL contribution - \$12,273,250												
51	USDA Grant (2016) - 10,011,750												
52	USDA Grant (2018) - \$1,592,333												
53	USDA Loan (2018) - \$7,455,000												
54													
55	TOTAL - \$31,332,333												
56													
57	(2) USDA Loan Terms												
58	Re-payment over a period of 35 years.												
59	Payments due the first two years will consist of interest only.												
60	Payments for the remaining 33 years will be equal amortized annual installments, beginning two years after loan closing.												
61	For planning purposes, use a 3.1250% interest rate and an amortization factor of \$49/\$1000, which provides for an annual payment of \$365,295.												
62	The precise payment amount will be based on the interest rate at loan closing.												
63													
64	(3) Assumes construction completed by August 2021. First payment due August 31, 2021.												
65													
66	ITEM NO. E-1 Exhibit C												

Proposed Potable Water Improvements



Multiple Improvement Projects
Proposed In Seven Areas

HAWAIIAN HOMES COMMISSION
NOVEMBER 19 & 20, 2018
KAPOLEI, OAHU

J – ITEMS

REQUESTS TO ADDRESS THE COMMISSION

Burrows-Nuuanu, Leatrice W

From: Albert Rowland Jr. <rowlandjr.albert@yahoo.com>
Sent: Wednesday, August 08, 2018 11:07 AM
To: Burrows-Nuuanu, Leatrice W
Cc: rowlga41@yahoo.com
Subject: Re: Rowland, Albert; Lessee: Gwendolyn Rowland, Lease no. 648, Lot 50, Papakolea

Yes, we would like to have a power point presentation, and the time to do this would be 15 Minutes per our discussion, I wish we could just get this solved without going to the commission, but, We are put in a position that we need to contest.

We will seek outside legal advice on who's responsibility it is for the failing hillside next to our home.

Sent from my iPhone

On Aug 8, 2018, at 9:58 AM, Burrows-Nuuanu, Leatrice W <leatrice.w.burrows-nuuanu@hawaii.gov> wrote:

Sorry, I forgot the "jr."

From: Burrows-Nuuanu, Leatrice W
Sent: Wednesday, August 08, 2018 9:57 AM
To: 'rowland.albert@yahoo.com' <rowland.albert@yahoo.com>
Cc: Pagaduan, Lloyd D <lloyd.d.pagaduan@hawaii.gov>; Corpuz, Casey L <casey.l.corpuz@hawaii.gov>
Subject: RE: Rowland, Albert; Lessee: Gwendolyn Rowland, Lease no. 648, Lot 50, Papakolea

Aloha Mr. Rowland,

Per our telephone conversation this morning, you would like to be listed on the Commission's November 19, 2018, J Agenda. Since it is many months away, I'll email you for confirmation as the date draws nearer. If you don't receive an email from me by November 1st, please send me an email to confirm your participation.

Mahalo,

<image002.png>
 Leah Burrows-Nuuanu
 Hawaiian Homes Commission
 Department of Hawaiian Home Lands
 91-5420 Kapolei Parkway
 Kapolei, HI 96707
 Phone: 808 620 9504/ Fax: 808 620 9529
 Email: Leatrice.W.Burrows-Nuuanu@hawaii.gov

From: Corpuz, Casey L
Sent: Wednesday, August 08, 2018 8:46 AM
To: Burrows-Nuuanu, Leatrice W <leatrice.w.burrows-nuuanu@hawaii.gov>
Cc: Pagaduan, Lloyd D <lloyd.d.pagaduan@hawaii.gov>
Subject: Rowland, Albert; Lessee: Gwendolyn Rowland, Lease no. 648, Lot 50, Papakolea

Hi Leah,

Please call Albert Rowland at 497-7234. He would like to be placed on the Commission meeting agenda regarding homestead property located at 444 Kauhane St. because the "land is slipping."

Burrows-Nuuanu, Leatrice W

From: Crystal Puaoi-Kawai <crystalkpk93@gmail.com>
Sent: Sunday, October 14, 2018 4:41 PM
To: Burrows-Nuuanu, Leatrice W
Subject: .Request: Add to November Agenda - Lillian Puaoi Request to Appeal - Lot 99 Hoolehua, HI 96729

Follow Up Flag: Follow up
Flag Status: Flagged

Aloha Liatrice,

ATTN: HHL Commissioners and/or Chairperson Jobic Masagatani

I am emailing you on behalf of my great-grandmother, Lillian Puaoi. She would like to request to be added to the next agenda occurring some time in Mid-November.

Lillian would like to meet with the Hawaiian Homes Commissioner to discuss the reasons to appeal the recent decision that was made on October 3, 2018 to name Yolanda (Gomes) Puaoi the leasee of the Hawaiian Homestead land located at Lot #99 Farrington Avenue, Ho'olehua, HI 96729. Lillian and our family is aware there is a deed document which states Lillian Puaoi is the rightful leasee of that land which was given to her in 1949 from Mrs. Mary Ann Na'ehu Bigelow, who is her grand-aunt and was the Hawaiian Homes Commissioner's wife at that time.

When my great-grandfather, Ernest Puaoi Sr., passed away on December 18, 2008, instead of the land remaining under Lillian as the rightful leasee, the land was illegally succeeded by her son, Herman Puaoi Sr. After Herman passed away on December 25, 2012, the land was again, illegally succeeded by her other son, Gregory Puaoi Sr. who passed away on June 2, 2015. The land is now currently illegally succeeded by Yolanda (Gomes) Puaoi. Lillian would like corrections to be made from the multiple errors made through these years as Lillian is the rightful leasee of that land.

My great-grandmother and great-grandfather, Lillian and Ernest Puaoi Sr., worked extremely hard for many, many years to pay for their house and to keep their homestead. They raised 13 children on that land while working for Libby, McNeil and Libby Company and the Dole pineapple companies to provide for their family and to upkeep their homestead. Their blood, sweat and tears went into that land to keep it alive and within the family all those years. With my great-grandfather already passed away, me along with my family, whole-heartedly and strongly believe that for these reasons given in this email, my great-grandmother, Lillian Puaoi, should be the original and current leasee of this land. She is alive and well and deserves to have her land turned back to her where she bore and raised her many children, grandchildren and great-grandchildren to live out her beautiful life and to make more memories with all of her family.

Please contact me at 808-232-6725 or my mother, Malia Puaoi Kumata at 808-232-4692 or reply to this email to update my great-grandmother and I on the status of this request.

Mahalo,

Crystal Puaoi-Kawai on behalf of Lillian Puaoi
Phone: (808) 232-6725 | Email: crystalkpk93@gmail.com

Burrows-Nuuanu, Leatrice W

From: Bo Kahui <bokahui@laiopua.org>
Sent: Wednesday, October 24, 2018 4:00 PM
To: Burrows-Nuuanu, Leatrice W
Cc: Bo Kahui; Dora Aio; Iwalani tsai; Kapua Baker; Karleen Cox; Leah Debina; Maring Gacusana
Subject: Request to Address the Commission

Aloha Lea,
Dora Aio and I would like to request to placed on the J agenda.
We would like to discuss the following matters;

- VOLA Initiatives
 - SIC, Direct TV and Spectrum
 - Regional Plan Update
 - DCCRs & Delinquencies
 - ADU/ SDU Ohana Units
 - Village 4 Status
 - Rentals/ Empty Units
- L2020 Initiatives
 - GIA Grant Status & L2020 Grants program
 - \$200K GIA Operation grant
 - \$400K GIA CIP Grant
 - NHEA 3 yr/ \$2.4M
 - OHA Kulia & Community Initiative Grants
 - EDA \$5M CIP & Program Grants
 -
 - Community Center Build Update
 - Holualoa Water Resource Development Project- Status
 - O'oma Homestead Alliance

Please contact me if you have any questions or concerns.

Mahalo Nui

Craig "Bo" Kahui

Executive Director

Laiopua 2020


808-327-1221

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STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

July 19-20, 2021

TO: Chairman and Members, Hawaiian Homes Commission

FROM: Stewart Matsunaga, Acting Administrator 
Land Development Division

SUBJECT: For Information Only
Status Report on the US Department of Agriculture Rural Development
Loan/Grant Financing for the DHHL-owned Hoolehua Water System on the
Island of Moloka'i

RECOMMENDED MOTION/ACTION

For information only

DISCUSSION

1. On November 19-20, 2018, a multi-divisional submittal HHC Item H-2 was approved by the Hawaiian Homes Commission to accept a US Department of Agriculture Rural Development grant and loan financing package totaling \$31,332,333 for the partial reconstruction of the Hoolehua Water System. HHC Item H-2 is attached as Exhibit "A" which provides the background details of the 1) initial grant award, then 2) loan and grant financing package due to increased cost of construction. The Hoolehua Water System improvements are divided into four (4) packages.
2. Package 1 addresses water system improvements in Hoolehua, Molokai. Goodfellow Bros. LLC (GBL) is contracted for \$19,554,000 to provide improvements at 6 different sites in Hoolehua and construction started in March 2021. As of May 2021, approximately \$4,500,000 has been expended. Escalation costs attributed to the protracted time taken to modify construction contracts to include USDA RD Special Conditions, after the original GBL was encumbered, is under negotiation. Archaeological monitoring is being implemented in all excavation areas, with no findings to report, to date. Project expenses for archaeological monitoring and reporting and construction management have exceeded original estimated costs. DHHL is in process of assessing the total expenses needed to close out the construction of Package 1 and 2.
3. Package 2 addresses water system improvements in Kalamaula, Molokai. Goodfellow Bros. LLC (GBL) is contracted for \$3,048,540 to provide improvements in Kalamaula and construction started in January 2021. As of May 2021, approximately \$2,500,000

ITEM NO. E-1
Exhibit D

has been expended. Escalation costs attributed to the protracted time taken to modify construction contracts to include USDA RD Special Conditions, after the original GBL was encumbered, is under negotiation. Archaeological monitoring was implemented in all excavation areas, with no findings to report. Project expenses for archaeological monitoring and reporting and construction management have exceeded original estimated costs. DHHL is in process of assessing the total expenses needed to close out the construction of Packages 1 and 2.

4. Package 3 addresses energy efficiency and potential installation of Photovoltaic system. DHHL continues to engage in discussions with Hawaiian Electric Co. to determine optimal course of action to reduce energy costs for pumping, while ensuring that the grid supplying DHHL lessees are not deleteriously impacted. For budgeting purposes, a set aside between \$4,000,000 to \$5,000,000 was established for Package 3.
5. Package 4 addresses equipment and supply needs to efficiently operate, maintain and repair the water system. Pursuant to the Preliminary Engineering Report and in coordination with the Molokai District Office, an equipment list containing 21 line items of vehicles, equipment and supplies was advertised to bid in February 2021. While not all items received bids, DHHL has prepared purchase orders valued at over \$740,000 (rounded) for the purchase of various equipment and supplies, including over 587 “smart” meters. Remaining items on the equipment and supply list will be put out to bid in Fall 2021, and consider other equipment needs, subject to USDA RD authorization. \$1,600,000 was set aside as a budget limit.
6. Other project expenses include planning, engineering and project management costs, which are estimated at \$4,000,000 to \$5,000,000. It is clear that DHHL shall request from USDA RD adjustments to the project funding.
7. Under the USDA Loan/Grant program, DHHL is obligated to first expend \$12,273,250, prior to loan fund and grant fund reimbursements. DHHL reports that expenditures for engineering, construction and construction management are approximately \$6,000,000 or nearly 50% of DHHL’s obligation.

After expending \$7,455,000 in loan funding, then DHHL can start receiving reimbursement from USDA RD grants up to \$11,604,083. Please see Exhibit “A” for the USDA RD funding award.



E-2
For Information Only
WAIMANALO
Project Updates

March 21, 2022



The range of possible agricultural activities may be limited
Engineering consultant estimates a high per lot cost (\$600,000)

4-1-008: 072 (16 acres)
Fee Owner: State of Va



Alalhi St

Hoopulapula St

Kulaiwi St

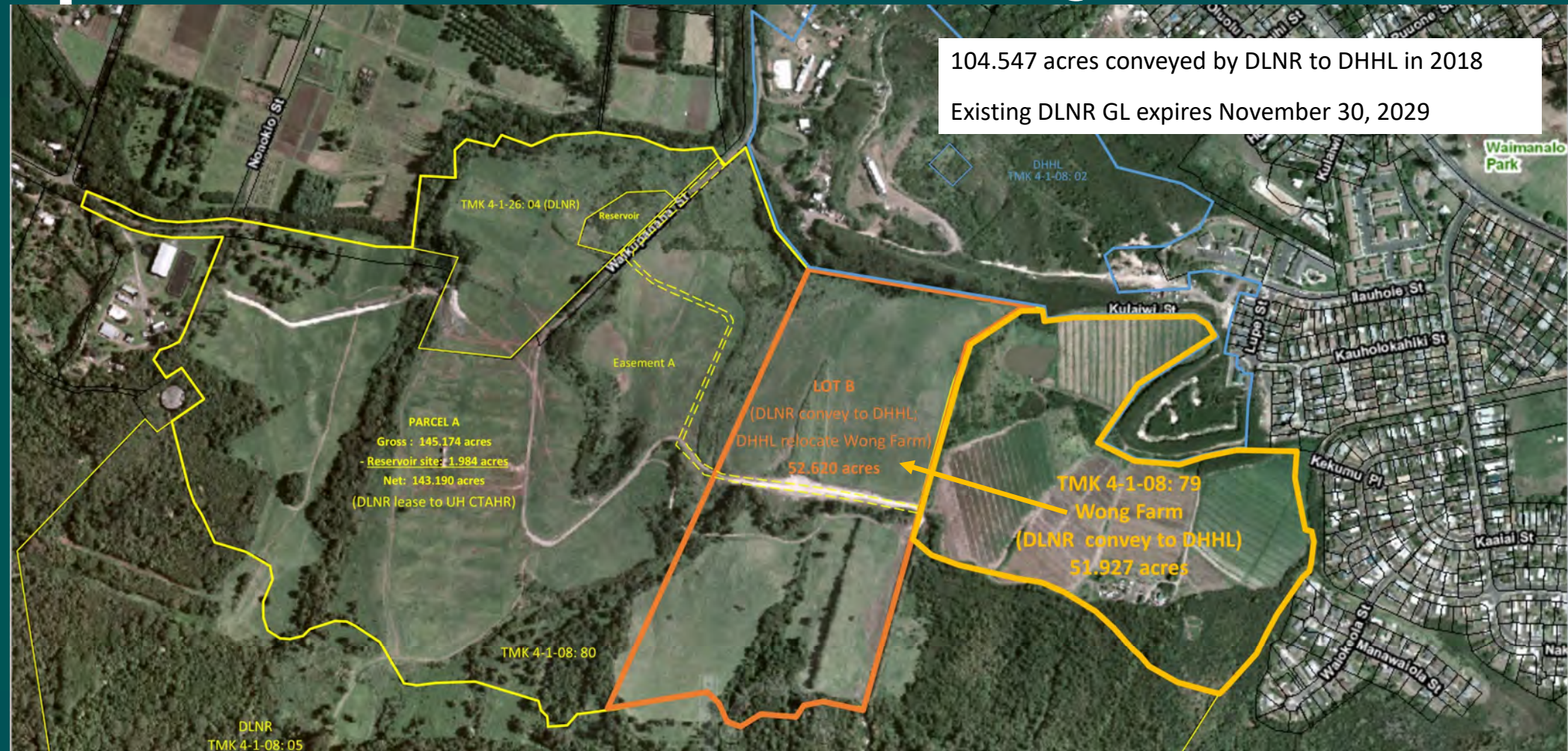
Supanaha St



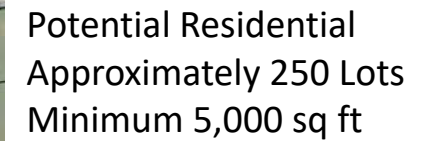
Residential and Subsistence Agriculture Lots

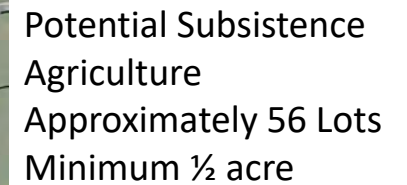
104.547 acres conveyed by DLNR to DHHL in 2018

Existing DLNR GL expires November 30, 2029



DEPARTMENT OF HAWAIIAN HOME LANDS - LAND DEVELOPMENT DIVISION







Nakini and Huli Streets Traffic Calming

Kulana Kauhale
Maluhia O Na
Kupuna

Blanche Pope
Elementary School

Kalanianaʻole Highway

Nakini Street

Huli Street

Six speed bumps
3 on Nakini Street
3 on Huli Street

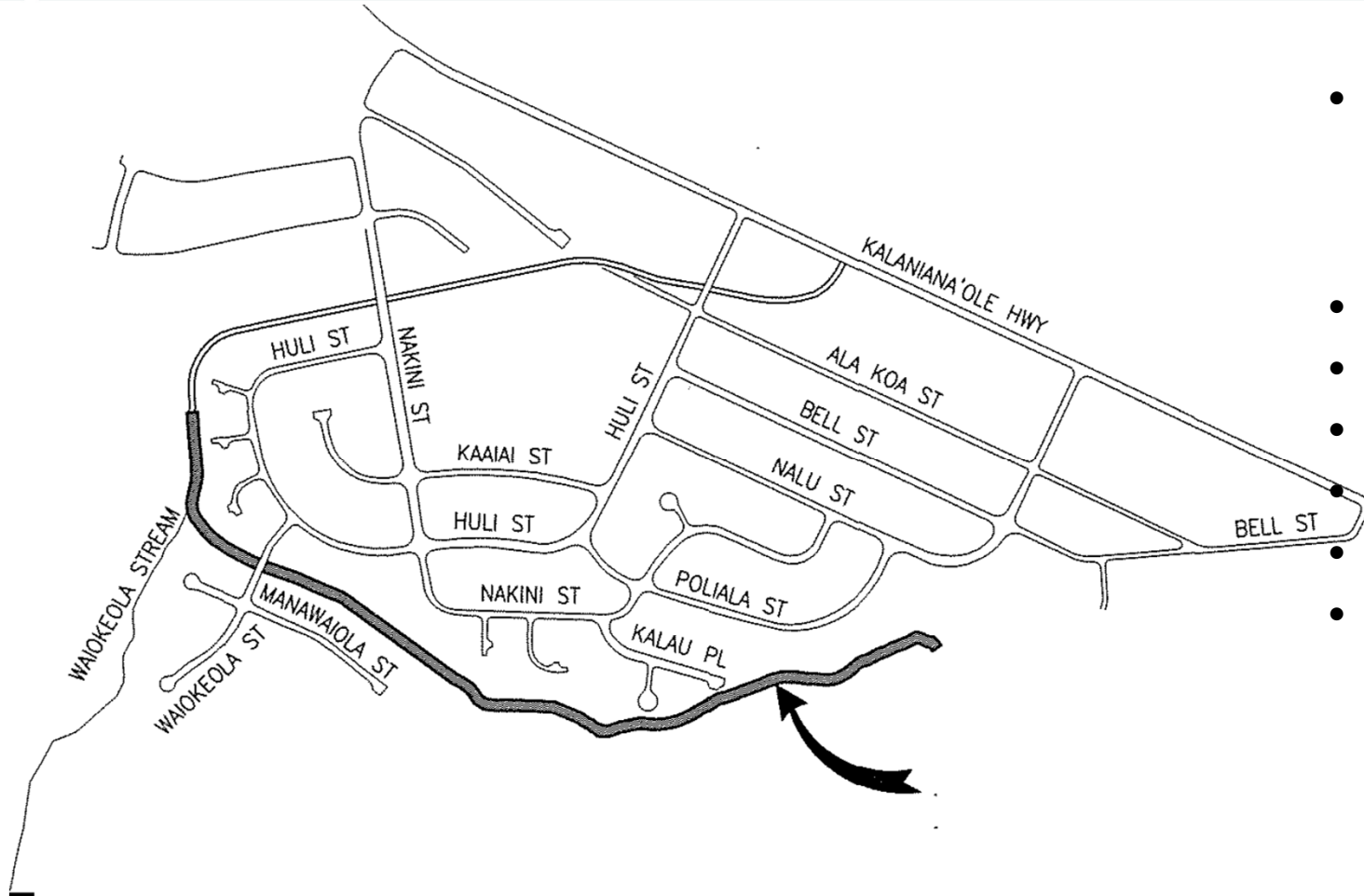
Other Traffic Calming measures investigated

Construction: Summer 2022

Legislative Appropriation (Act 6 SLH 2020) \$800,000

NAIIAN HOME LANDS - LAND DEVELOPMENT DIVISION

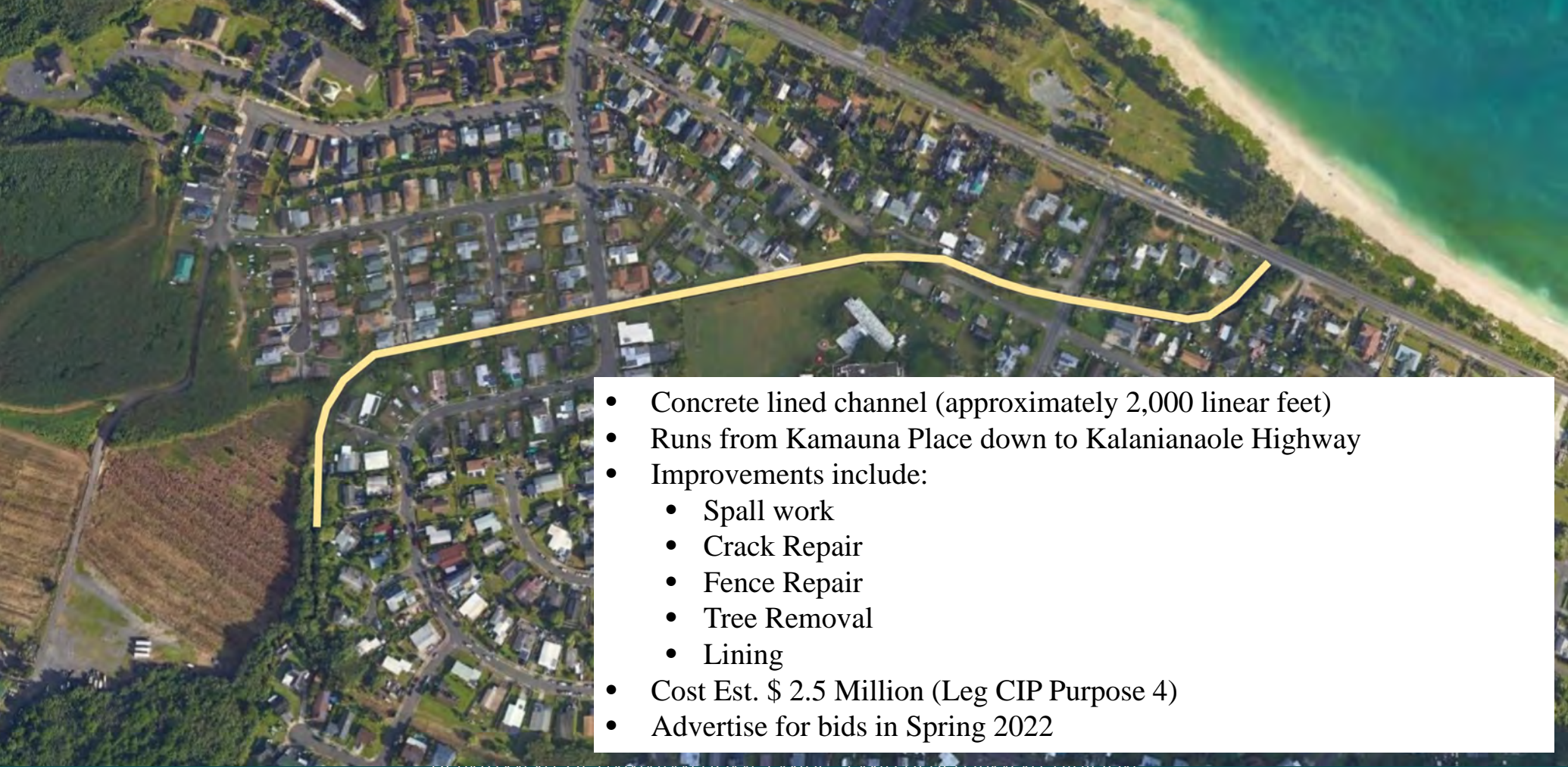
Waiokeola Stream & Drainage Channel Improvements



- Improvements to dirt drainage channel to mitigate flooding complaints from homesteaders
- Install rip rap in various areas
- Install Fencing
- Bid in Summer 2021
- Construction start: Fall 2021
- Construction: \$1.3 million
- Construction requires new maintenance road adjacent to homestead properties.




Waimanalo Flood Control Channel Improvements

- 
- Concrete lined channel (approximately 2,000 linear feet)
 - Runs from Kamauna Place down to Kalanianaʻole Highway
 - Improvements include:
 - Spall work
 - Crack Repair
 - Fence Repair
 - Tree Removal
 - Lining
 - Cost Est. \$ 2.5 Million (Leg CIP Purpose 4)
 - Advertise for bids in Spring 2022



Bell Street Drainage Improvements

- 
- An aerial photograph of a residential neighborhood in Hawaii. A yellow line is drawn across the map, highlighting a section of Bell Street that runs from the bottom left towards the top right. The street is flanked by houses with various roof colors and green lawns. In the background, a beach and the ocean are visible. The yellow line starts near the intersection of Bell St and Alaka St, runs east along Bell St, and then turns south at the intersection with Palanakaia Hwy.
- Hydraulic Study completed for conversion to pipe drainage and new outlet (approximately 1,000 linear feet)
 - FY23 budget request for \$500,000 proposed for engineering design
 - Estimated construction funding required: \$3 million (Leg CIP Purpose 4)

WAIMANALO WASTEWATER SYSTEM IMPROVEMENTS

Project Objectives

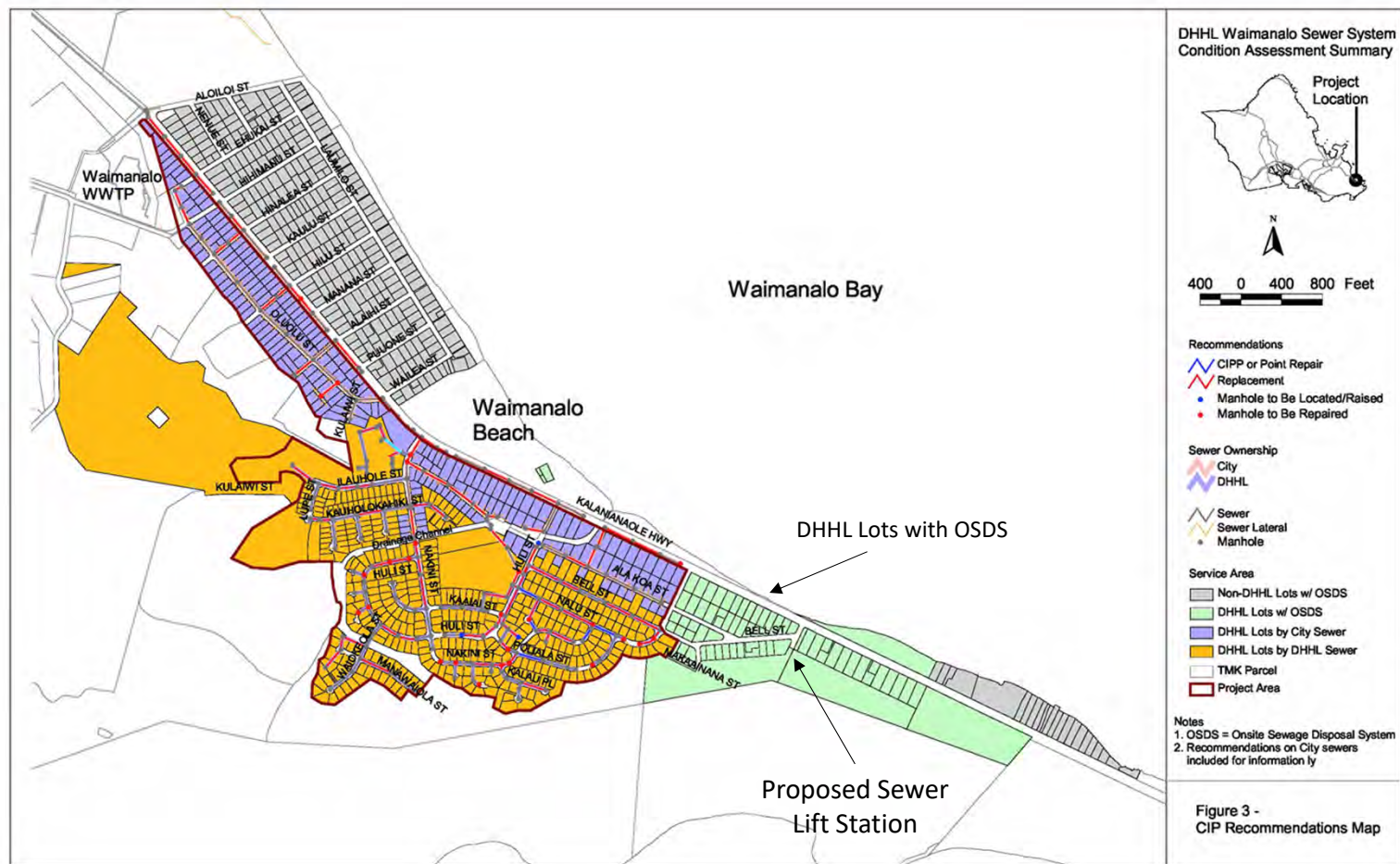
1. Repair sewer deficiencies identified through various field inspections
2. Upgrade existing DHHL sewers to the current City standards for ownership transfer to the City
3. Convert cesspools as required by Act 125 (SLH 2017) by 2050.

Summary

650 lots connected to City sewer system
 80 individual onsite sewage disposal systems (OSDS). Conduct survey and assessment Summer 2022.

Remedial Actions

Repair/replace existing DHHL sewers (\$18 million)
 Conversion of OSDS with pump station and new collector (\$12+ million)
 Construct sewer lift station and other sewer improvements at Bell Street (\$10M)





Mahalo



DEPARTMENT OF HAWAIIAN HOME LANDS

www.dhhl.hawaii.gov

STATE OF HAWAI'I
DEPARTMENT OF HAWAIIAN HOME LANDS

March 21, 2022

TO: Chairman and Members, Hawaiian Homes Commission

FROM: Stewart Matsunaga, Acting Administrator
Land Development Division



SUBJECT: For Information Only - Draft Environmental Assessment (DEA) for Ma'ili Residential Development, Waianae, Oahu, and Anticipated Finding of No Significant Impact (AFONSI), TMK Nos. (1) 8-7-010: 030 and 031

RECOMMENDED ACTION

None - for information only

DISCUSSION

PURPOSE

The purpose of this informational briefing is to update the HHC on the status of the Ma'ili Residential Development; to present summary highlights of the Draft Environmental Assessment (DEA); and to notify Commissioners of the DEA prior to publication in the Office of Planning and Sustainable Development's *The Environmental Notice* (OSPD TEN) periodical.

The DEA will be posted on DHHL's website.

BACKGROUND

The project site is a portion of two parcels designated as tax map key (TMK) (1) 8-7-010: 30 & 31. The parcels were transferred to DHHL from the United States of America through the Administrator of General Services via separate quitclaim deeds. The larger parcel (parcel 30; 84.417 acres) was transferred in December 2010. The smaller parcel (parcel 31; 4.857 acres) was conveyed to DHHL in July 2021 after remediation of hazardous materials from previous activities.

Approximately six acres were leased to the Department of Human Services and developed as the Ulu Ke Kukui transitional housing project. Before the lease expired in November 2019, Hawaiian Community Development Board (HCDB) was contracted to renovate the apartment units and rent them to DHHL beneficiaries. They are currently working on financing and plans approval and permitting. Rentals are expected to be available in late 2023.

Approximately 0.6 acres are leased to the Department of Human Services to operate Ho'omalulu O Nā Kamali'i, an emergency receiving home for children. The general lease expires in 2028.

Approximately 40 acres of land is designated for the Kamehameha Schools Community Learning Center at Mā'ili (CLC-M). The CLC-M, which was created to provide spaces for students and families to learn and grow, opened in August 2014. The CLC-M's Early Learning Complex is an education hub featuring community organizations that are co-located with each other to better serve Wai'anae Coast keiki and 'ohana. Approximately 10 acres of land have been developed to date.

The remaining approximately 40-acre project site is currently unoccupied.



PROJECT DESCRIPTION

Project Location:	Mā'ili, Wai'anae, Oahu
Tax Map Key:	(1) 8-7-010: 030 and 031
Ownership:	Department of Hawaiian Home Lands
Lot Area:	84.417 acres for 8-7-010: 030 4.857 acres for 8-7-010: 031 Total: 89.274 acres
Zoning:	The project area is AG-2, General Agriculture. The Department is not subject to County Zoning Ordinances. DHHL has determined that the project will be designed and constructed in accordance with Residential and Apartment zoning standards.
Special District:	The project is not located in a Special District.
State Land Use:	Agriculture
Existing Land Use:	<p>The project parcel is bordered by Mā'ili Channel to the north, Sea Country residential development to the east, and additional residential developments to the south and west. North and northeast of the project parcel is a quarry site operated by Pacific Aggregate.</p> <p>Within the tax map parcels, on northwestern corner are Ulu Ke Kukui (transitional housing facility) and Ho'omalū O Nā Kamali'i (receiving home), both of which will remain. The southern portion of TMK 8-7-010: 030 has been leased to Kamehameha Schools which constructed and is operating the Kamehameha Schools Community Learning Center.</p> <p>The two tax map parcels will be consolidated and subdivided as part of the project. That subdivision action will also create separate parcels for Ulu Ke Kukui, Ho'omalū O Nā Kamali'i, and the Kamehameha Schools lease.</p>
Nature of Development:	The project would develop approximately 40 acres of vacant land in Mā'ili, Wai'anae, O'ahu into a homestead community for DHHL beneficiaries. The development will take place in two separate phases. The first phase would construct the backbone road and utility infrastructure. The second phase, would develop the residential units, which would primarily be on single-family lots leased in accordance with the Hawaiian Homes Commission Act of 1921, but may include multi-family units for medium-term rentals.

Total Project Cost:	Estimated infrastructure construction cost: \$55.3 million
Project Schedule:	Planning Phase (Environmental Review Process): 2022 to 2023 Infrastructure Design: 2023 to 2024 Infrastructure Construction (backbone roads and utilities): 2025 to 2026 Residential Unit Design and Construction: 2026 to 2027 Occupancy of Residential Units: 2028

DEA SUMMARY

Following is a summary of the evaluations conducted as part of the environmental assessment process on the natural and human-made resources within the project area:

Climate

The climate of Mā‘ili, located on the northwest coastline of O‘ahu, is generally characterized as warm and dry along the coastal and lower valley areas. According to the National Oceanic and Atmospheric Administration (NOAA) (September 2021), the average yearly rainfall is approximately 20 inches along the coast with an average daily temperature ranging from 70 to 90 degrees Fahrenheit.

Potential Impacts and Mitigation

The proposed project is not anticipated to have a significant impact on regional climatic conditions. No mitigation measures are planned.

Geology and Topography

Geology: The project site is located on the southwestern flank of the Waianae Volcano. Physical and chemical weathering followed by erosion of Schofield Plateau generated sediments, which were transported to the coast. In the project vicinity and to the south, these sediments have accumulated and are interbedded with marine sediments and coral/algal reef formations, forming a sedimentary wedge. This wedge forms the Ewa Plain and serves as the confining formation, or "caprock," over the artesian basal aquifers of Southern O‘ahu. Deposition of sediments has continued from earlier geologic time through the present.

Topography: The majority of the site is relatively flat with slopes ranging between 0% to 5%. Existing ground elevations range from approximately 3 feet to 20 feet mean sea level (MSL). The higher elevations located on the eastern boundary of the site gradually slope in the southwesterly direction toward the coast.

Ground Water Resources: Mā‘ili Channel borders the northern boundary of the project site and flows west towards the Pacific Ocean. According to the U.S. Fish and Wildlife Service (USFWS), Mā‘ili Channel is classified as an E1UBLx estuary (an excavated, subtidal estuarine channel with an unconsolidated bottom) and a R4SBCx wetland (an excavated, seasonally flooded, intermittent stream).

Hydrology: Groundwater was encountered at about 4 to 12.5 feet below the existing ground surface, equivalent to elevations ranging from +3 and -3.3 feet MSL at the time of the field exploration. It should be noted that groundwater levels are subject to change due to rainfall, time of year, seasonal precipitation, surface water runoff, and other factors.

Potential Impacts and Mitigation

Grading activities of the proposed development will alter the existing ground slope and topography. Import of fill material will be required to fill the site to accommodate the proposed infiltration basin and various utilities. The impact of grading operations will be mitigated through compliance with dust and erosion control requirements of the City and County of Honolulu Grading, Soil Erosion and Sediment Control Ordinance and the provision of Chapter 11-60.1, Hawai'i Administrative Rules, Section 11-60.1-33 Fugitive Dust.

An overall reduction of water infiltration may result due to the proposed increase in impervious area. Reduction in infiltration will result in an increase of stormwater runoff generated. The use of post-construction storm water best management practices (BMPs), such as an infiltration basin, biofiltration systems, and landscaping will help to mitigate generated runoff as a result of reduced infiltration.

Soils and Agriculture

USDA Natural Resources Conservation Service: the site is comprised of three soil types which include Keaau stony clay, 2-6% slopes (KmaB), Mamala cobbly silty clay loam, 0-12% slopes (MnC), and Mokuleia clay (Mtb).

Land Study Bureau (LSB) Detailed Land Classification: The LSB classified the project site as very poor, "E".

Agricultural Lands of Importance to the State of Hawai'i: The majority of the project site is rated as "Other" important agricultural land with a small western portion of the project site as "unclassified".

Potential Impacts and Mitigation

The soils within the project site area are inadequate for agricultural cultivation or production. Therefore, the proposed development is not expected to adversely affect the availability of agricultural land.

Flora and Fauna

Botanical Survey: Vegetation varies from open grassland to shrubland. The vast majority (86%) of flowering plants are naturalized or ornamental, non-native species. No plants of conservation interest were found during the survey of the project area.

Wetland Survey: Mā'ili Channel is classified as an E1UBLx estuary (excavated, subtidal estuarine channel with an unconsolidated bottom) and a R4SBCx wetland (excavated, seasonally flooded, intermittent stream).

Wildlife Survey: The project site is absent of federally designated Critical Habitat for any species. However, the project site does contain a buffleggrass grassland, which is a typical habitat for the Short-eared Owl. The project's impact to any Essential Fish Habitat (EFH) would be limited to the transport of sediment and/or pollutants in runoff to Mā'ili Stream.

Potential Impacts and Mitigation

No significant adverse impacts to the botanical or wildlife resources should occur within the project site as a result of the proposed project.

Natural Hazards

Flooding: The project site is situated in either Flood Zone X or Flood Zone XS and does not fall within a special flood hazard area.

Tsunami: The project site is located in both the Tsunami Evacuation Zone and Extreme Tsunami Evacuation Zone designated by the Hawai'i State Civil Defense.

Hurricane: It is difficult to predict these natural occurrences and the degree of potential destruction they may bring. However, it is reasonable to assume that a hurricane will occur again. The closest emergency evacuation centers located near the project site are Leihōkū Elementary School and Wai'anae Elementary School which are approximately 2.6 and 2.7 miles away, respectively.

Earthquake & Volcanic Hazards: Most earthquakes occur around the Island of Hawai'i and are directly related to volcanic activity. Although it is difficult to predict these natural occurrences and the degree of potential destruction they may bring, it is reasonable to assume that similar future incidences are likely to occur again.

Rockfall Hazards: The anticipated risk of potential rockfalls would be low, since the project site is not immediately adjacent to steep sloping areas.

Wildfire: The Wai'anae Coast is known to have frequent fires, particularly along the mountains and hillsides, as well as unoccupied properties.

Potential Impacts and Mitigation

The project site is located in an area outside of the special flood hazard areas. Construction of the proposed project is not expected to be adversely affected by seismic activity. The likelihood of wildfires occurring on the project site would be reduced with the development of the proposed project as the site would be occupied and maintained.

Historic, Archaeological and Cultural Resources

Historic and Archaeological Resources: The project site was home to the Voice of America radio transmitter station during the latter years of World War II. Those facilities were demolished in the 1980's. Another historic feature, described as a plantation era raised railroad bed or cart path is proposed to be preserved in place – buried during site grading

operations.

Cultural Resources: While there are numerous legends associated with the Lualualei Ahupua'a, there are apparently none associated specifically with the project site.

Potential Impacts and Mitigation

The remaining archaeological resource at the proposed project site is the historic railroad bed / cart path. It is proposed to be preserved in place (burial), and utilities within the area will be installed in a manner that will attempt to minimize disturbance of the resource.

If significant sites, including human burials, are uncovered during construction, the contractor will be required to stop work and contact State Historic Preservation Division (SHPD). A mitigation plan will be developed, if required, and approved by SHPD prior to continuing with construction activities.

Hazardous Materials

The 4.9-acre portion of the site (TMK: 8-7-010:031) is managed under an Environmental Hazard Management Plan for management of residual levels of PCB-contaminated soil remaining in place beneath the southeastern end of the historic railroad bed / cart path.

Potential Impacts and Mitigation

Considering that the current development plan includes placing a significant amount of clean, structural backfill site-wide, residual soil contamination is unlikely to negatively impact future residential use of the site.

Roadways and Traffic

The project site is located approximately one-quarter mile northeast of Farrington Highway. It is anticipated that the project's primary access will be provided through an extension of Kulaaupuni Street which is owned by the City and County of Honolulu. Kulaaupuni Street is accessed from Farrington Highway via St. John's Road. The intersection of Farrington Highway and St. John's Road is signalized.

Potential Impacts and Mitigation

To improve operations at the Kulaaupuni Street/St. John's Road intersection, particularly during the morning peak hours, the Mobility Analysis Report suggested the implementation of a multi-way stop. The all-way stop control is not expected to substantially affect operations at adjacent intersections and would enhance safety for pedestrians. Additionally, in the future, signal timing modifications at the Farrington Highway/St. John's Road intersection will need to be coordinated with the State's Department of Transportation, Highways Division.

Noise

Current sources of noise in the vicinity of the project site include vehicular traffic, typical

residential noise, occasional aircraft, and natural sounds associated with weather and birds.

Potential Impacts and Mitigation

The proposed project is expected to produce an increase in noise levels both during and after construction is completed. The general contractor shall be responsible for obtaining necessary permits and complying with all permit conditions as well as ensuring proper maintenance of equipment. Upon completion of the proposed project, the noise levels at the project site are expected to mimic those typical of a residential neighborhood.

Air Quality

Air quality throughout the State is generally good due to the effects of the predominant tradewinds blowing from the northeast direction.

Potential Impacts and Mitigation

Exhaust transmission during construction would be generated from vehicles and construction equipment. Fugitive dust will be generated during construction activities and by vehicular traffic. Impacts due to exhaust emissions will be minimized by keeping all equipment properly tuned and maintained, as well as by minimizing unnecessary idle time. The contractor will be required to comply with all rules and regulations regarding air pollution control. No long-term impacts to air quality are anticipated.

Visual Resources

Per the Wai‘anae Sustainable Community Plan, visual resources in the Wai‘anae district include costal lands, forest lands including steep ridges and pu‘u near the coast, and peaks of the Wai‘anae Mountain range.

Potential Impacts and Mitigation

The visual appearance of the project site is expected to change from overgrown vacant land to a residential community. Since the proposed site will be filled to accommodate the proposed utilities, ocean views from the residences of Sea Country located mauka of the project site may be obstructed. Consultation and coordination with the Sea Country Homeowner’s Association will be included as part of the proposed project.

Social and Economic Characteristics

Population and Demographics: According to the 2020 census, the Mā‘ili Census Designated Place (CDP) has a total population of 11,535 persons. The median age of the population is 32.6 years compared to 39.6 for the State of Hawai‘i. The largest ethnic population in the Mā‘ili CDP was “Native Hawaiian/ Pacific Islander” at 24.7% of the population; the second largest ethnic population “Asian” at 18.5% of the population, and the third largest was “Two or more Races” at 41.5%.

Housing: The median gross rent in Mā‘ili was \$2,119 which is higher than in Honolulu

County and in the State (\$1,774 and \$1,651, respectively). The median mortgage in Mā'ili was \$2,396 which is lower than both Honolulu County and the State of Hawai'i (\$2,670 and \$2,472, respectively). Of the 3,096 housing units in the Mā'ili CDP, 64.0% of the units are owner-occupied.

Schools: Public schools serving the property include Mā'ili Elementary School, Wai'anae Intermediate School, and Wai'anae High School. Charter schools along the Wai'anae Coast include the Ka Wai'hona o ka Na'auao School in Nānākuli and the Kamaile Academy School in Wai'anae.

Potential Impacts and Mitigation

The proposed project is anticipated to have a positive impact on this population by providing a residential homestead community for DHHL's native Hawaiian beneficiaries under the Hawai'i Homes Commission Act.

Infrastructure and Utilities

Existing Water System: The Board of Water Supply (BWS) provides domestic potable water service to the Wai'anae District. Approximately half of the water comes from wells within Wai'anae while the other half is conveyed to Wai'anae from the Pearl Harbor aquifer. The water system is currently running near maximum capacity.

Existing Wastewater System: There is no wastewater system currently serving the project site. Existing sewer infrastructure can be found in adjacent roadways and developments.

Existing Drainage System: Mā'ili Channel begins east of the project site bordering the Sea Country residential development. The channel runs north parallel with the project site and then turns west along the project's north border. After crossing the Kulaaupuni Street Bridge, the channel runs south, then southwest towards the coast. The channel discharges into the Pacific Ocean downstream of the crossing at Farrington Highway. There is no internal drainage system within the project site.

Energy and Communications Systems: The proposed project site is not currently served by electrical, telephone, and cable services. Hawaiian Electric Company (HECO) has a mix of existing overhead and underground distribution systems servicing the adjacent developments. The existing Sandwich Isles Communication (SIC), Hawaiian Telcom (HTCO) and Charter Communications (Charter) distribution is through underground infrastructure along Kulaaupuni Street and via the overhead lines along St Johns Road.

Existing Solid Waste Collection: The City and County of Honolulu Department of Environmental Services, Refuse Division is responsible for the collection and disposal of solid waste island wide. The project site is currently vacant and does not generate waste.

Potential Impacts and Mitigation

The onsite water system for the development will be designed in accordance with the BWS Water System Standards. A proposed connection off the 242' Service Zone via an existing 8-inch water line within Kulaaupuni Street is anticipated.

The project's wastewater collection system will be designed in accordance with the City and County of Honolulu's, Department of Environmental Services (ENV) Wastewater System Design Standards and Wastewater System Standard Details. Approximately 300 feet of offsite sewer line will be required to convey the project's wastewater to the closest available existing sewer manhole.

Due to the proposed elevation of the site, the existing flow pattern would be altered. Instead of sheet flowing west towards the existing drain intake, the onsite drainage system will consist of swales and catch basins (and/or drain inlets) which will intercept a majority of the runoff produced onsite. The site runoff will be conveyed through an underground piped system which will lead to a box culvert. The box culvert will then discharge to an infiltration basin where runoff will be treated. The basin will be designed with an overflow to convey the peak flow rate, which will discharge into the Mā'ili Channel. Additional offsite drainage improvements will be required in order to address changes in the drainage flow pattern resulting from the development.

Existing electrical infrastructure is available to serve the site via the existing overhead lines along Kulaaupuni Street. The existing Hawaiian Telcom and Charter underground infrastructure (4-inch conduit) on Kulaaupuni Street is capable of accommodating the new infrastructure but a new fiber hub and power supply will be needed onsite to distribute the communication services.

Solid waste will be generated during and post-construction due to the proposed project. Waste generation reduction practices, such as recycling, will be encouraged. Coordination with the Department of Environmental Services, Refuse Division will be required to arrange trash pickup service for the new residential development.

Public Services and Facilities

Police Protection: The site is located within Honolulu Police Department (HPD) District 8. The Wai'anae Police Substation is located approximately two miles away.

Fire Protection: The Wai'anae Fire Station is approximately three miles away.

Health Care Services: The Wai'anae Coast Comprehensive Health Center is approximately two miles away. Additionally, several privately-operated medical/dental clinics and offices are located in the vicinity of the project area.

Recreation and Cultural Facilities: Recreational facilities within the vicinity of the proposed project include Mā'ili Kai Community Park, Mā'ili Community Park, Pu'u o Hulu Community Park, Mā'ili Beach Park, and the Mā'ili Pillbox hiking trail.

Educational Facilities: There are several educational facilities and programs located near the property.

Potential Impacts and Mitigation

It is anticipated that occasional and unavoidable demand for police service will occur

due to the increase in the onsite population.

It is anticipated that occasional and unavoidable demand for fire protection will occur. Access for fire apparatus as well as water service for the proposed project capable of supplying the required fire flow for fire protection will be provided.

It is anticipated that occasional and unavoidable demand for emergency health care services will occur due to the increase in onsite population.

The project is not anticipated to hinder or obstruct access to nearby recreational facilities. A mini park is included in the conceptual plan of the proposed project and will provide residents with an area for outdoor recreation.

The proposed project is anticipated to increase enrollment at public schools serving the property due to the increase in population.

ALTERNATIVES

No Action

The No Action alternative will result in no change to the project site: the proposed residential development would not be built and the property would remain undeveloped. Under the No Action alternative the short- and long-term adverse and beneficial impacts would not occur. However, No Action alternative would not accomplish DHHL's mission to provide homestead leases and awards to native Hawaiian beneficiaries.

Alternative Site Plans

The alternative site plan is comprised entirely of single-family residences. That alternative would provide approximately 200 lots (minimum of 5,000 square feet). The preferred site plan would provide approximately 145 single-family lots and 136 multi-family units. The preferred site plan would provide more units and the ability to meet differing housing needs of the beneficiaries.

Anticipation of a Finding of No Significant Impact

Based upon the analysis completed in the DEA, staff anticipates a finding of no significant impact for the Project. This determination is based upon the 13 criteria of significance that approving agencies must consider as specified in Hawai'i Administrative Rules 11-200.1-13. An analysis of the 13 criteria of significance is presented below:

1. Irrevocably commit a natural, cultural, or historic resource.

It is anticipated that the proposed project will not irrevocably commit to the loss of natural, cultural or historic resources. The Mā'ili Stream's concrete channel is not considered a wetland. The historic railroad bed / cart path located in the east and central portion of the site is expected to be preserved in place (burial). The remaining foundations of the Voice of America radio transmitting station site was previously considered significant for its association with the Office of War Information and the

Voice of America radio network. However, the facility is no longer eligible because it has since been demolished.

2. Curtail the range of beneficial uses of the environment.

The proposed project extends urbanization of the surrounding area. Although the project site is situated in the State Agricultural district and the City Agricultural-2 zone, the soil on the site is classified as very poor, therefore, agricultural use of the site would not be beneficial. Although other possible uses of the property will be dismissed, construction of the project's residential units will mimic and complement neighboring residential developments while providing needed housing.

3. Conflict with the State's environmental policies or long-term environmental goals established by law

The proposed project is consistent with the State's environmental policies, goals, and guidelines.

4. Have a substantial adverse effect on the economic welfare, social welfare, or cultural practices of the community and State.

The proposed development will benefit the economic and social welfare of the community by providing housing for native Hawaiian beneficiaries. Establishing a permanent homestead community will allow for cultural preservation and the cultivation of the values and traditions of Native Hawaiians.

5. Have a substantial adverse effect on public health.

The proposed project will be constructed in accordance with applicable City, State and Federal rules and regulations governing public health and safety.

6. Involve adverse secondary impacts, such as population changes or effects on public facilities.

It is anticipated that the proposed project will not involve adverse secondary impacts in the surrounding area. The slight increase in population in the Mā'ili area will be due to the development of approximately 280 new residential units, which will alleviate the current housing crisis.

7. Involve a substantial degradation of environmental quality.

The project is surrounded by established residential neighborhoods similar to the proposed development. While emulating adjacent developments the proposed project will not involve the substantial degradation of the environment.

8. Be individually limited but cumulatively have substantial adverse effect upon the environment, or involves a commitment for larger actions.

The proposed project is not related to any additional actions or activity in the region that will have a cumulative adverse effect on the environment or involve a commitment for larger actions.

9. Have a substantial adverse effect on a rare, threatened or endangered species or its habitat.

There were no federally designated Critical Habitat for any species nor plants of conservation interest observed at the site during the field investigation by the project biologist. However, a buffleggrass grassland was noted which is typically a habitat for the Short-eared Owl, the O'ahu population of which is a state-listed endangered species. Thus, to avoid disturbing nesting owls, a nesting survey will be conducted by a qualified biologist immediately prior to the start of construction.

10. Have a substantial adverse effect on air or water quality or ambient noise levels.

The proposed action will not impact air or water quality. Noise levels will change from those associated with vacant land use to a mixed-use development. The change in noise level is expected to be negligible and will not significantly affect surrounding properties. The project will reuse grey water.

Minimal impacts on air quality and noise are anticipated during construction, but will be limited by normal construction practices and Department of Health construction mitigation standards.

11. Have a substantial adverse effect on or be likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, sea level rise exposure area, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.

The project is not on or near an environmentally sensitive area.

12. Have a substantial adverse effect on scenic vistas and view planes, during day or night, identified in county or state plans or studies.

The proposed project is not anticipated to have a significant adverse impact on scenic view planes or scenic resources.

13. Require substantial energy consumption or emit substantial greenhouse gases.

It is anticipated that there will be no long-term requirement for substantial energy consumption or emittance of substantial greenhouse gases. Project construction will require additional energy consumption and emittance of greenhouse gasses. Once construction is completed the residential development is expected to increase electrical demand in the area; the loads are expected to be comparable to a similar residential development in size and density.

NEXT STEPS FOR EA COMPLETION

The following is a list of anticipated next steps and milestones in the completion of the EA.

- DEA anticipated to be published in the April 8, 2022, OPSD *TEN*
- 30-day public comment period on the DEA ends May 9, 2022.

- Revise DEA per public comments and complete Final Environmental Assessment (FEA) by July 29, 2022.
- Present FEA to HHC; HHC issues Finding of No Significant Impact (FONSI) declaration for the project August 15-16, 2022.
- HHC FONSI declaration for the project and FEA submitted to OPSD by August 31, 2022 for publication in OPSD *TEN* on September 8, 2022.

NEXT STEPS FOR OVERALL PROJECT IMPLEMENTATION

In addition to the completion of the FEA and HHC declaration of FONSI for the project in accordance with Hawaii Revised Statutes Chapter 343 and HAR 11-200.1, the following actions permits, approvals, and coordination are needed.

Permit or Approval	Approving Agency
Department of the Army (DA) Permit for Section 404 Activities of the Clean Water Act	U.S. Army Corps of Engineers
Clean Water Act, Section 401 Certification	State Department of Health – Clean Water Branch
National Pollutant Discharge Elimination System (NPDES) Permits	State Department of Health – Clean Water Branch
Disability and Communication Access Board review for compliance with Hawai‘i Revised Statutes §103-50	State Department of Health – Disability and Communication Access Board
Community Noise Permit	State Department of Health – Indoor and Radiological Health Branch
Stream Channel Alteration Permit (SCAP)	Department of Land and Natural Resources
Federal Consistency for Coastal Zone Management	Office of Planning and Sustainable Development
Building Permit	Dept. of Planning and Permitting
Grading Permit	Dept. of Planning and Permitting
Trenching Permit	Dept. of Planning and Permitting
Sewer Connection Permit	Dept. of Planning and Permitting
Subdivision Application	Dept. of Planning and Permitting
Surface Runoff from Construction Activities Entering into City’s Storm Sewer System	Dept. of Planning and Permitting
Street Usage Permit	Dept. of Transportation Services

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

March 21, 2022

TO: Chairman and Members, Hawaiian Homes Commission

FROM: Stewart Matsunaga, Acting Administrator
Land Development Division

SUBJECT: For Information Only - Draft Environmental Assessment (DEA) for Ma'ili Residential Development, Waianae, Oahu, and Anticipated Finding of No Significant Impact (AFONSI), TMK Nos. (1) 8-7-010: 030 and 031

RECOMMENDED ACTION

None - for information only

DISCUSSION

PURPOSE

The purpose of this informational briefing is to update the HHC on the status of the **Ma'ili Residential Development**; to present summary highlights of the Draft Environmental Assessment (DEA); and to notify Commissioners of the DEA prior to publication in the Office of Planning and Sustainable Development's *The Environmental Notice* (OSPD TEN) periodical.

The DEA will be posted on DHHL's website.

BACKGROUND

The project site is a portion of two parcels designated as tax map key (TMK) (1) 8-7-010: 30 & 31. The parcels were transferred to DHHL from the United States of America through the Administrator of General Services via separate quitclaim deeds. The larger parcel (parcel 30; 84.417 acres) was transferred in December 2010. The smaller parcel (parcel 31; 4.857 acres) was conveyed to DHHL in July 2021 after remediation of hazardous materials from previous activities.


Approximately six acres were leased to the Department of Human Services and developed as the Ulu Ke Kukui transitional housing project. Before the lease expired in November 2019, Hawaiian Community Development Board (HCDB) was contracted to renovate the apartment units and rent them to DHHL beneficiaries. They are currently working on financing and plans approval and permitting. Rentals are expected to be available in late 2023.


Approximately 0.6 acres are leased to the Department of Human Services to operate Ho'omalulu O Nā Kamali'i, an emergency receiving home for children. The general lease expires in 2028.

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

March 21-22, 2022

To: Chairman and Members, Hawaiian Homes Commission

Through: Peter "Kahana" Albinio, Jr., Acting Administrator
Land Management Division 

From: Shelly Carreira, Land Agent 
Land Management Division

Subject: Approval to Issue First Amendment to Right of Entry No. 701, Hawaiian Telcom, Makuu, Island of Hawaii, TMKS: (3) 1-5-119:051, (3) 1-5-118:048, (3) 1-5-120:036, (3) 1-5-121:046

RECOMMENDED MOTION/ACTION

That the Hawaiian Homes Commission (HHC) grant its approval to the first amendment to Right of Entry No. 701 (ROE701), issued for the purpose of non-exclusive roadway access for utility purposes and to upgrade its existing infrastructure located on Hawaiian home lands parcels under TMKS: (3) 1-5-119:051, (3) 1-5-118:048, (3) 1-5-120:036, (3) 1-5-121:046.

Approval of this first amendment is subject to the following conditions:

1. The term of ROE701 shall be extended for an additional twelve (12) month period, commencing on February 4, 2022; and
2. With the exception of the current requested action, all of the terms, conditions, covenants, and provisions of ROE701 shall continue and remain in full force and effect.

BACKGROUND/DISCUSSION:

At it's meeting of November 17, 2020, the Hawaiian Homes Commission approved the issuance of ROE701 to Hawaiian Telcom for the non-exclusive roadway easement for utility purposes and to upgrade its existing infrastructure for a 12-month period commencing on February 4, 2021 (Exhibit "A").

The DHHL is still in the process of updating the terms of its license with Hawaiian Telcom and discussions are ongoing but not complete. Approval of the extension of the interim right of entry will allow Hawaiian Telcom to continue upgrade and maintenance of its existing infrastructure within the Makuu subdivision and provide additional time needed for DHHL to finalize the license instrument that will cover the Makuu region and replace this right of entry permit.

Land Management Division is recommending the amendment based on Hawaii Revised Statutes, Section 171-55 Permits.

RECOMMENDATION

Land Management Division recommends approval of the requested motion/action as stated.

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

RIGHT-OF-ENTRY NO. 701

This RIGHT-OF-ENTRY NO. 701 (*ROE*), dated February 4, 2021, (*Effective Date*) is made by and between the State of Hawaii, **DEPARTMENT OF HAWAIIAN HOME LANDS**, whose place of business is 91-5420 Kapolei Parkway, Kapolei, Hawaii, 96707 (*PERMITTOR*) and **HAWAIIAN TELCOM, INC.**, a Hawaii ~~non-profit~~ corporation, whose address is 1177 Bishop Street, Suite 32, Honolulu, Hawaii 96813, (*PERMITTEE*). at/np.
lg/u.p.

1. **GRANT.** PERMITTOR grants to PERMITTEE, its employees, consultants, contractors, invitees, agents, and representatives (collectively, *Permittee's Representatives*), a non-exclusive, revocable right to enter that certain parcel of Hawaiian home lands located at Makuu, Island of Hawaii, identified as Tax Map Key Nos. (3) 1-5-119:051, (3) 1-5-118:048, (3) 1-5-120:036 and (3) 1-5-121:046, and being approximately 46.011 acres (more or less) of land and any improvements thereon, depicted in the map attached hereto as **Exhibit "A,"** together with those improvements existing thereon as of the Effective Date and any improvements or alterations permitted thereon (*Premises*).

2. **TERM.** This ROE commences on the Effective Date and will continue thereafter on a month-to-month basis until terminated as provided in this instrument; further provided, however, that the total term of this ROE shall not to exceed one (1) year. PERMITTOR may in its sole discretion, for any reason or no reason whatsoever, terminate this ROE on thirty (30) days written notice to PERMITTEE.

3. **PERMITTED USE.** PERMITTEE may use the Premises only for the following purpose(s): for non-exclusive roadway easement access for utility purposes and to upgrade its existing infrastructure. PERMITTEE shall not use the Premises for any other purpose(s), except with PERMITTOR'S prior written consent.

4. **FEES.** PERMITTEE is not required to pay any fees for its use of the Premises, but Permittee will bear its own costs, expenses, and liabilities arising from its use of the Premises. Processing and documentation fee of \$175.00 shall be waived.

5. **MAINTENANCE; SECURITY.** PERMITTEE shall keep the Premises in a strictly clean and sanitary and orderly condition, and shall not cause, make, permit, or suffer any waste, spoil, nuisance, nor any unlawful, improper, illegal, or offensive use of or on the Premises. PERMITTEE shall be solely responsible for the security of the Premises and all of PERMITTEE'S property kept in or on the Premises.

Item No. F-2

EXHIBIT "A"

DHHL
-
LMD

6. **CONSTRUCTION AND IMPROVEMENTS.** PERMITTEE may not construct, alter, amend, place, or install any improvements or fixtures on the Premises or any improvements thereon except with PERMITTOR'S prior written approval.

7. **COMPLIANCE WITH LAWS.** PERMITTEE shall comply with all rules, regulations, ordinances and/or laws of the State of Hawaii and any other municipal and/or Federal Government authority applicable to the Premises and improvements thereon.

8. **RIGHT TO ENTER.** PERMITTOR, its employees, agents, consultants, contractors and representatives, may at all reasonable times freely access and enter the Premises for the purpose of, but not limited to, examining the same or for the performance of any public or official duties; provided that PERMITTOR shall not interfere unreasonably with PERMITTEE'S permitted use(s) of the Premises.

9. **NO ASSIGNMENT OR SUBLEASE.** PERMITTEE may not in any manner transfer, assign, mortgage, pledge, sublease, or sublet any rights in or to the Premises, in whole or part, or otherwise hold or agree so to do for the benefit of any other person or persons or organization of any kind.

10. **NO LIENS OR ENCUMBRANCES.** PERMITTEE shall not by any act or omission, directly or indirectly, create, incur, assume, cause, or suffer to exist any liens or encumbrances on or with respect to its interests and rights of use in the Premises. PERMITTEE shall promptly notify PERMITTOR of any such liens and encumbrances and, at its own expense, take such action as may be necessary to immediately and fully discharge or release any such lien or encumbrance.

11. **SURRENDER.** Upon termination of this ROE, PERMITTEE shall peaceably and quietly surrender and deliver to PERMITTOR possession of the Premises and within thirty (30) days thereof, restore, at its own cost and risk, the Premises to a condition similar to that which existed prior to the Effective Date (or at PERMITTOR'S election, prior to PERMITTEE'S first occupancy of the Premises), reasonable and ordinary wear and tear and damage by acts of God excepted,. PERMITTEE shall remove all fixtures and personal property belonging to PERMITTEE; provided that in any such fixture can be safely removed without damage to the Premises or any improvements thereon. If PERMITTEE fails to effectuate such restoration of the Premises, PERMITTOR reserves the right to accomplish the same on PERMITTEE'S behalf and shall assess PERMITTEE the total costs thereof. Any improvements, fixtures, or personal property remaining on or in the Premises shall revert to and be deemed PERMITTOR's property, with which PERMITTOR may dispose in its sole discretion.

12. **INSURANCE.** PERMITTEE shall provide proof of a comprehensive public liability insurance policy of no less than \$2,000,000.00 for each occurrence, naming the Department of Hawaiian Home Lands (DHHL) as an additional insured prior to commencement of work and throughout the term of this ROE. The specification of these limits as contained



herein shall not be construed in any way to be a limitation on the amount of liability of PERMITTEE for fees, interest or other charges under this ROE.

PERMITTEE shall provide certificate(s) of insurance necessary to evidence compliance with the insurance provisions of this ROE. PERMITTEE shall keep such insurance in effect and the certificate(s) on deposit with PERMITTOR during the entire term of this ROE.

In addition:

- a. Failure of PERMITTEE to provide and keep in force such insurance shall be regarded as material default under this ROE. PERMITTOR shall be entitled to exercise any or all of the remedies provided in this ROE for default of PERMITTEE.
- b. The procuring of such required insurance policies shall not be construed to limit PERMITTEE'S indemnification obligations under this ROE.
- c. PERMITTOR is a self insured State agency. PERMITTEE'S insurance shall be primary. Any insurance maintained by PERMITTOR and/or the State of Hawaii shall apply in excess of, and shall not contribute with, insurance provided by PERMITTEE.

Such insurance policy shall (a) be issued by an insurance company or surety company authorized to do business in the State of Hawaii or approved in writing by the Chairman, Hawaiian Homes Commission; (b) name the State of Hawaii and its DEPARTMENT OF HAWAIIAN HOME LANDS as an insured; (c) provide that the DEPARTMENT OF HAWAIIAN HOME LANDS shall be notified at least thirty (30) days prior to any termination, cancellation or material change in the insurance coverage; and (d) cover all injuries, losses or damages arising from, growing out of or caused by any acts or omissions of PERMITTEE, its officers, agents, employees, invitees or licensees in connection with PERMITTEE'S use or occupancy of the Premises.

PERMITTEE shall insure during the term of this ROE the entire Premises, including all buildings now existing and hereafter built or located on the Premises, improvements and grounds, and all roadways and sidewalks on or adjacent to the Premises in the control or use of the PERMITTEE. The insurance shall cover loss or damage by fire and other hazards, casualties and contingencies, including vandalism and malicious mischief. The insurance shall be for the full insurable value of such improvements.

PERMITTEE shall furnish to PERMITTOR upon the execution of this ROE, certificates showing such insurance policy or policies to be in favor of PERMITTOR and to be in force, and shall furnish like certificates upon each renewal thereof. In the event of loss, damage or destruction, PERMITTOR shall retain from the proceeds of the policies such amounts deemed by



it to be necessary to cover the loss, damage or destruction of or to the improvements and the balance of such proceeds, if any, shall be delivered to PERMITTEE.

The procuring of this policy shall not release or relieve PERMITTEE of its responsibility under this ROE as set forth herein or limit the amount of its liability under this ROE.

PERMITTEE shall provide proof of liability insurance satisfactory to PERMITTOR within a reasonable time before the Effective Date.

13. **DEFENSE AND INDEMNITY.** PERMITTEE agrees to save, defend, and hold harmless the State of Hawaii, its Department of Hawaiian Home Lands, its officers, employees, and agents from and against all liability, loss, damage, cost, and expenses, including all attorneys' fees and costs, and all claims, suits, demands therefore arising out of or resulting from the acts or omissions of PERMITTEE or PERMITTEE's employees, officers, agents, or subcontractors under this Limited Right of Entry Permit, provided that PERMITTEE's obligations under this paragraph do not apply to any claims, suits, demands, liability, loss, damage, cost and expenses, including attorneys' fees and costs, asserted by Sandwich Isles Communications (SIC), or its related companies or subsidiaries, or any person or entity claiming by or through any of them, for trespass, tortious interference with a business advantage, breach of contract, or similar allegation or any claim arising from or based on any putative exclusive agreement between DHHL and SIC.

14. **HAZARDOUS MATERIAL.** PERMITTEE shall not cause or permit the escape, disposal, or release of any hazardous materials. PERMITTEE shall not allow the storage or use of such materials in any manner not sanctioned by law or by the highest standards prevailing in the industry for the storage and use of such materials, nor allow to be brought onto the premises any such materials except to use in the ordinary course of PERMITTEE'S business, and then only after written notice is given to the PERMITTOR of the identity of such materials and upon PERMITTOR'S consent, which consent may be withheld at the PERMITTOR'S sole and absolute discretion. If any lender or governmental agency shall ever require testing to ascertain whether or not there has been any release of hazardous materials by PERMITTEE, then PERMITTEE shall be responsible for the costs thereof. In addition, PERMITTEE shall execute affidavits, representations and the like from time to time at PERMITTOR'S request concerning PERMITTEE'S best knowledge and belief regarding the presence of hazardous materials on the Premises placed or released by PERMITTEE.

PERMITTEE agrees to indemnify, defend, and hold harmless PERMITTOR, its officers, employees, and agents from and against all liability, loss, damage, cost, and expense, including all attorney's fees, and all claims, suits, and demands therefore, arising out of or resulting from any use or release of hazardous materials on the premises occurring while PERMITTEE is in possession, or elsewhere if caused by PERMITTEE or persons acting under PERMITTEE. These covenants shall survive the expiration or earlier termination of the ROE.

For the purpose of this ROE, the term "hazardous material" as used herein shall include any substance, waste or material designated as hazardous or toxic or radioactive or other similar term by any present or future federal, state or local statutes, regulation or ordinance, such as the Resource Conservation and Recovery Act, as amended, the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, and the Federal Clean Water Act, as amended from time to time, and also including but not limited to petroleum, petroleum based substances, asbestos, polychlorinated-biphenyls ("PCB"), formaldehyde, and also including any substance designated by federal, state or local regulations, now or in the future, as presenting a risk to human health or the environment.

Prior to the termination of the ROE, PERMITTEE may be required to conduct a Level One (1) Hazardous Waste Evaluation and conduct a complete abatement and disposal, if necessary, satisfactory to the standards required by the Federal Environmental Protection Agency, the Department of Health and PERMITTOR.

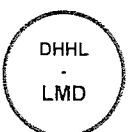
15. **ENTIRE AGREEMENT.** This ROE contains all of the terms and agreements between the parties relating to the subject matter hereof and supersedes and cancels any and all other conflicting prior agreements, promises, and negotiations between them. Nothing contained herein shall limit any claims by PERMITTOR against PERMITTEE arising under prior agreements, nor limit PERMITTEE'S continuing obligations under prior agreements, including insurance, indemnity, and hazardous waste obligations.

16. **PERMITTEE REPRESENTATIONS.** PERMITTEE currently uses and occupies the Premises and is familiar with the quality and condition of the Premises, has had an opportunity to inspect the Premises, and to evaluate and determine for itself the suitability of the Premises for its intended purposes; and PERMITTEE accepts the Premises as-is, where-is, with all faults, defects, and conditions, whether known or unknown.

17. **SPECIAL CONDITIONS.**

- A. The ROE document shall be subject to other standard terms and conditions of similar documents issued by DHHL and will be subject to the review and approval by the Office of the Attorney General, State of Hawaii; and
- B. This ROE is subject to other terms and conditions that may be deemed prudent by the Chairman of the Hawaiian Homes Commission.

[REMAINDER OF PAGE BLANK -- SIGNATURE PAGE FOLLOWS]

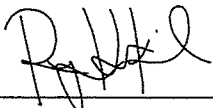


IN WITNESS WHEREOF, PERMITTOR and PERMITTEE have caused this ROE to be executed by the duly authorized officers/individuals as of the day and year first above written.

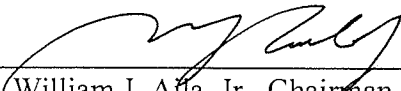
APPROVED BY THE HHC
AT ITS MEETING HELD ON
November 17, 2020

State of Hawaii
DEPARTMENT OF HAWAIIAN HOME LANDS

APPROVED AS TO FORM:



Deputy Attorney General
State of Hawaii

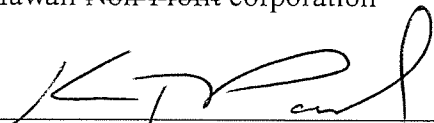
By 

William J. Alfa, Jr., Chairman
Hawaiian Homes Commission

PERMITTOR

HAWAIIAN TELCOM, INC.
a Hawaii ~~Non-Profit~~ corporation

at/n.p. rg/n.p.

By: 

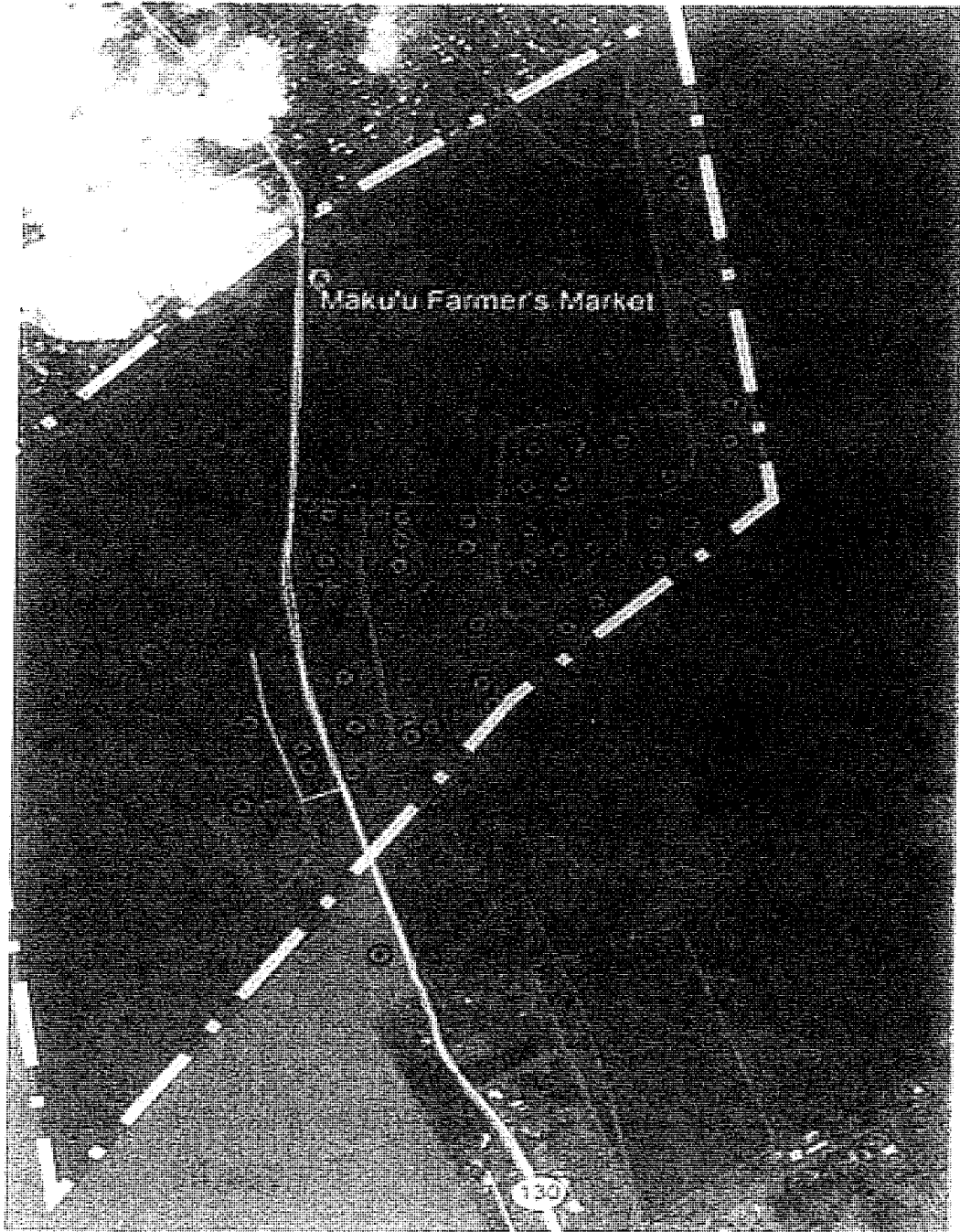
KEVIN T. PAUL
Its: SVP - ADVANCED SERVICES

PERMITTEE

Exhibit "A"

(Premises)

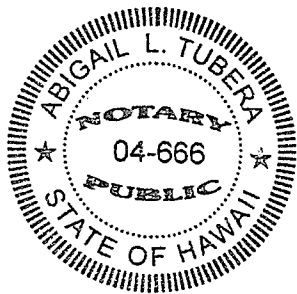
Tax Map Key Nos. (3) 1-5-119:051, (3) 1-5-118:048, (3) 1-5-120:036 and (3) 1-5-121:046



STATE OF HAWAII)
) ss:
CITY & COUNTY OF HONOLULU)

On February 11, 2021, in the First Circuit, State of Hawaii, before me appeared WILLIAM J. AILA, JR., to me personally known, who, being by me duly sworn or affirmed, did say that such person is the CHAIRMAN of the HAWAIIAN HOMES COMMISSION, and the person executed the foregoing instrument identified or described as RIGHT-OF-ENTRY NO. 701, as the free act and deed of such person, and if applicable, in the capacity shown, having been duly authorized to execute such instrument in such capacity.

The foregoing instrument is undated and contained nine (9) pages at the time of this acknowledgment/certification.



Neil L Tubera

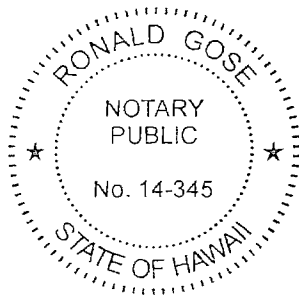
Print Name: Abigail L. Tubera

Notary Public, State of Hawaii

My commission expires: November 21, 2024

STATE OF HAWAII)
) SS.
CITY and COUNTY OF HONOLULU)

On this 4th day of February, 2021, before me appeared KEVIN T. PAUL, and _____, to me personally known, who, being by me duly sworn, did say that he/~~she~~ is the person who executed the foregoing instrument and acknowledged to me that he/she executed the same freely and voluntarily for the use and purposes therein set forth.




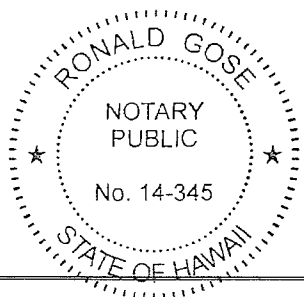
A handwritten signature of Ronald Gose in black ink.

Notary Public, State of Hawaii

Printed Name: RONALD GOSE

My commission expires: 10/12/2022


Document Date:	<u>Undated at time of notarization</u>	# of Pages:	<u>9</u>
Notary Name:	<u>RONALD GOSE</u>		<u>First</u> Circuit
Doc. Description:	<u>State of Hawaii, Department of</u>		
	<u>Hawaiian Home Lands, RIGHT-OF-ENTRY NO. 701</u>		
 Notary Signature		<u>2/4/2021</u> Date	
NOTARY CERTIFICATION			



STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

March 21-22, 2022

To: Chairman and Members, Hawaiian Homes Commission

From: Peter "Kahana" Albinio, Jr., Acting Administrator
Land Management Division 

Subject: Approval to Issuance of Non-Exclusive License as Easement for Access (Ingress & Egress) purposes from a portion of Hawaiian home lands identified by TMK No: (3) 6-4-008:024 (more commonly known as Kahili Road) to Jason K. & Melita A. Deluz (Fee owners by Entirety of TMK No. (3) 6-4-001:004), Puukapu, Island of Hawaii

APPLICANT:

JASON K. & MELITA A. DELUZ "DELUZ"

RECOMMENDED MOTION/ACTION:

That the Hawaiian Homes Commission (HHC) approve the issuance of a non-exclusive license as easement for access (Ingress & Egress) purposes from a portion of Hawaiian home lands identified by TMK No: (3) 6-4-008:024 (more commonly known as Kahili Road) to Jason K. & Melita A. Deluz (Fee owners by Entirety of TMK No. (3) 6-4-001:004), situated in Puukapu, Island of Hawaii. The license as easement shall be for vehicular and pedestrian access purposes only and for no other purpose whatsoever. Approval and issuance of this license easement for access (Ingress & Egress) as requested shall be subject to the following conditions:

1. The term of the license easement for access shall commence upon full execution of the license document and terminate immediately upon licensee's sale, assignment, and/or foreclosure of the fee-simple property that the easement for access directly services;
2. The easement access area shall comprise a land area containing a total of approximately 30 linear feet or two separate 15 linear foot sections, more or less, of Hawaiian home lands as delineated in the subdivision map see Exhibit "A" attached hereto, as submitted by DELUZ;
3. The Licensee shall remit a non-refundable processing and documentation fee in the amount of \$275.00;
4. Use of the easement access area shall be used STRICTLY for vehicular/pedestrian ingress and egress as proposed and for no other purpose whatsoever;

5. The Licensee shall remit a one-time lump sum payment of fair market value to be determined by an independent, disinterested third party as procured by the Licensor. The one (1)-time consideration fee as determined by the fair market summary appraisal report shall become due and payable in full within thirty (30) days from the report as dated. In addition to the lump sum payment, Licensee shall reimburse Licensor for the contracted appraisal to determine the one-time payment of fair market value for the access as requested.
6. Licensee's intended ingress and egress plans shall conform to federal, state and county (government agencies) standards. Licensee shall obtain applicable permits and approvals from government agencies prior to the commencement of any work on the property that requires such permits and approvals;
7. Licensee shall act as a good neighbor to the adjoining DHHL subdivision and community at large who shares and traverses over Kahilu Road area and be responsible for general maintenance of the license access area;
8. Any construction or alteration of the access area shall require DHHL written consent and approval;
9. The Chairman of the Hawaiian Homes Commission and/or the Hawaiian Homes Commission is authorized to impose such other conditions deemed prudent and necessary to serve the best interests of the trust and its beneficiaries; and
10. The license document will contain the standard terms and conditions of similar licenses issued by DHHL and shall be subject to review and approval by the Department of the Attorney General.

LOCATION:

Portion of Kahilu Road, Puukapu, Island of Hawaii, identified as Tax Map Key: (3) 6-4-008:024 (por.) See Exhibit "B-1 & B-2"

AREA:

Approximately thirty (30) linear feet or two (2) separate fifteen (15) linear foot sections

DISCUSSION:

William Byrns, Esq., from the law offices of Rush Moore LLP, submitted a request for a grant of easement to provide vehicular and pedestrian access for its client "DELUZ." The access as requested would come directly from Kahilu road which is a publicly used paved road owned by DHHL. However, Kahilu Road maintenance is shared between DHHL and the County of Hawaii, Department of Public Works. The southern boundary of DELUZ's fee simple property directly abuts Kahilu Road. Therefore, given its purpose as a road, the easement for access as requested

shall cover Kahilu Road in its entirety comprising an area of approximately 13.274 acres (578,215 sq. ft.) more or less.

Appraisal Review

Since Kahilu Road is owned by DHHL but is actively used as a public road LMD does not have any information for comparable land values for easement access purposes to reference and justify a fair one-time lump sum consideration fee. Therefore, LMD will seek to procure an independent, disinterested third-party appraisal firm to determine a fair consideration fee value for the purpose as proposed.

PLANNING AREA:

Puukapu, Hawaii Island

LAND USE DESIGNATION:

Supplemental Agriculture

CURRENT STATUS:

Although identified as a private road it is actively used as a public road (Kahilu Road)

CHARACTER OF USE:

Road Utility Use Purposes

CHAPTER 343 – ENVIRONMENTAL ASSESSMENT:

Triggers:

Use of State Lands

Exemption Class No. & Description:

In accordance with the "Comprehensive Exemption List for the State of Hawaii, Department of Hawaiian Home Lands, as Reviewed and Concurred Upon by the Environmental Council on June 30, 2015, the subject request is exempt from the preparation of an environmental assessment pursuant to Exemption List Type 1 Operations, repairs or maintenance of existing structures, facilities, equipment or topographical features, involving negligible or no expansion or change of use beyond that previously existing: Item #3 Patching, resurfacing, striping and cleaning of pavement surfaces including, but not limited to, streets, roads, highways, pedestrian ways and walkways, bike paths, driveways, parking lots and appurtenances.

The direct, cumulative, and potential impacts of the action described have been considered pursuant to Chapter 343, Hawaii Revised Statutes and Chapter 11-200, Hawaii Administrative

Rules. Since the action as proposed is determined to have minimal or no significant impact on the environment it would therefore be exempt from the preparation of an environmental assessment. The Planning Office processed the documentation that reflects the action as being eligible for exemption from the preparation of an Environmental Assessment under the Exemption Class as referenced above. The documentation is attached as Exhibit “C”.

AUTHORITY / LEGAL REFERENCE:

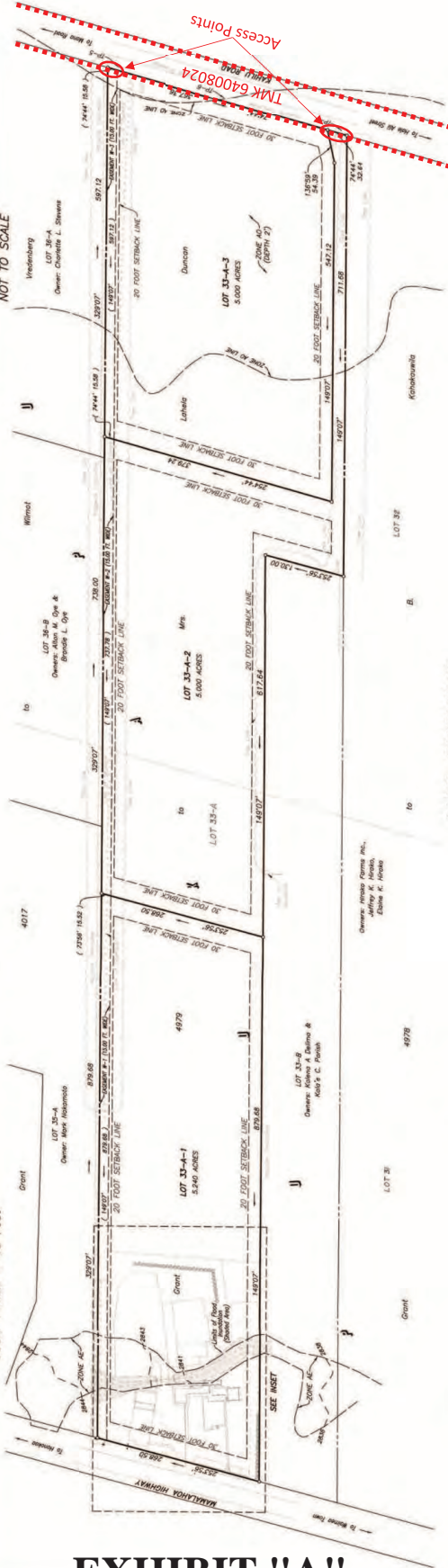
§ 207(c)(1)(A) of the Hawaiian Homes Commission Act, 1920, as amended, authorizes the department to grant licenses for the use of Hawaiian Home Lands for public purposes.

§ 10-4-21 of the DHHL Administrative Rules requires the applicant to pay for all costs incurred by the department for the processing of a license application, including a non-refundable processing fee of \$200.00. It also allows for a rental to be charged should the use benefit other than the department or native Hawaiians.

§ 10-4-22 of the DHHL Administrative Rules authorizes the issuance of licenses for public purposes, as easements in perpetuity or shorter term, subject to the easement being reverted to the department upon termination or abandonment.

RECOMMENDATION:

Land Management Division respectfully requests approval of the motion as stated

VICINITY MAP

MAP SHOWING

SUBDIVISION OF LOT 33-A
OF THE PULUKAPU HOMESTEADS, FIRST SERIES
BEING PORTION OF GRANT 4979 TO MRS. LAHELA DUNCAN
INTO LOTS 33-A-1, 33-A-2 AND 33-A-3 AND
DESIGNATION OF EASEMENTS W-1, W-2 AND W-3
FOR WATERLINE PURPOSES

Site Address:
64-791 Mamalahoa Highway

Prepared for:
Jason K. Deluz and Melitta A. Deluz
Tenants by the Entirety (Owners)

[illegible]

New Estimates:

Estimated W-1 for domestic and specialized selective programs affecting Lat 33-4-1-1
Area = 3,139 sq. ft.
In form of proposed Leds 33-4-2 & 33-4-3

Estimated W-2 for domestic and specialized selective programs affecting Lat 33-4-2
Area = 1,072 sq. ft.
In form of proposed Leds 33-4-1 & 33-4-3

Estimated W-3 for domestic and specialized selective programs affecting Lat 33-4-3
Area = 800 sq. ft.
In form of proposed Leds 33-4-1 & 33-4-2

Carson R. Elzarez
CARSON R. ELZAREZ
Licensed Professional Land Surveyor
Certificate No. 14282/Expires 4/30/22
94 Makani Circle
Hilo, Hawaii
July 8, 2021

 $17^{\circ} \pm 1^{\circ} \text{ at } 5.5 \text{ GPa}$

EXHIBIT "A"
ITEM NO. F-1

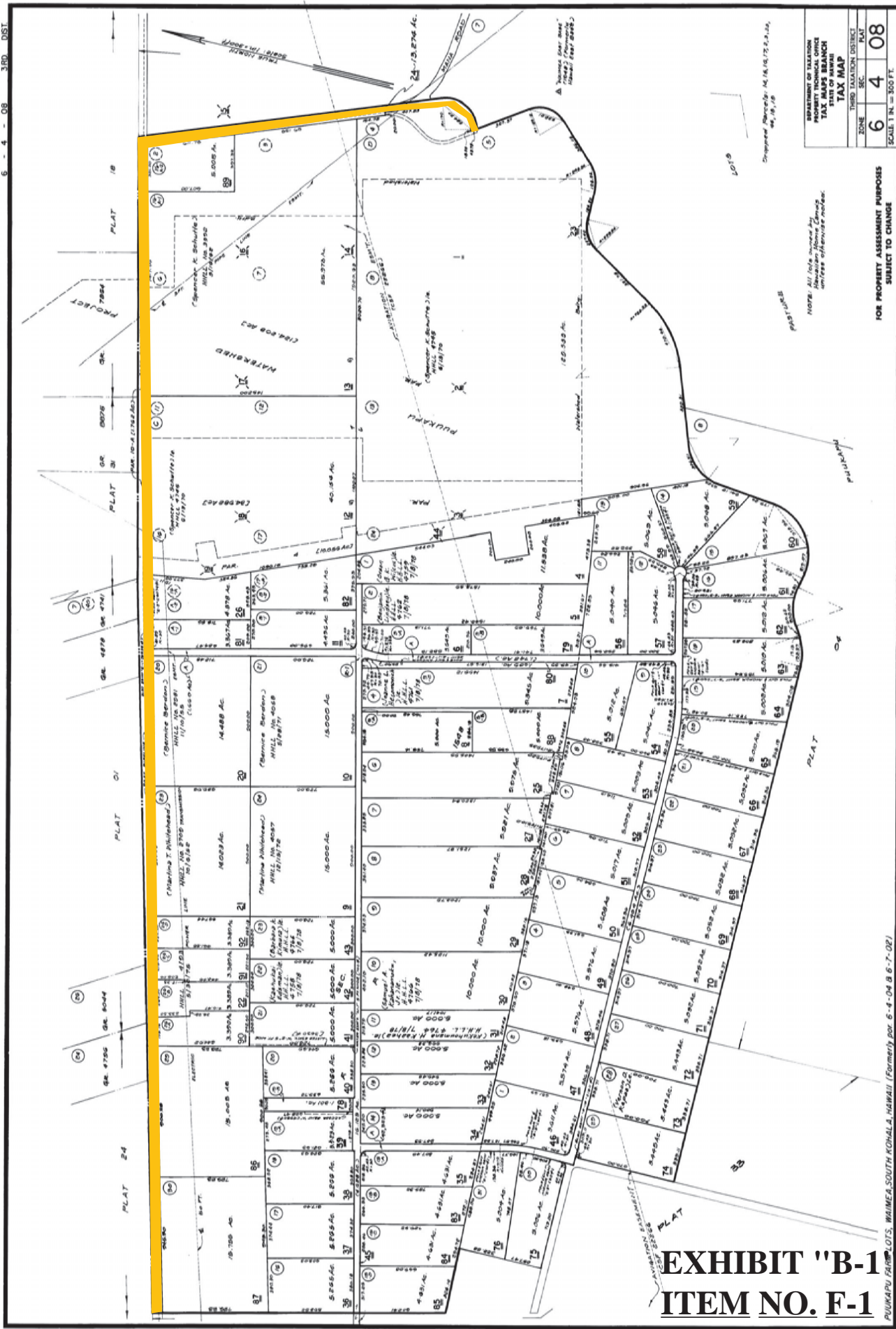


EXHIBIT "B-1" ITEM NO. F-1

Puukapu Farm Lots, Waimea, South Kohala, Hawaii (Formerly par. 6-4-04 B 6-7-02)

FOR PROPERTY ASSESSMENT PURPOSES
SUBJECT TO CHANGE

DEPARTMENT OF TAXATION HAWAIIAN TERRITORY TAX MAPS BRANCH STATE OF HAWAII TAX MAP			
ZONE	SEC	PLAT	
6	4	08	

NOTE: All lots owned by the State of Hawaii are shown in green unless otherwise noted.

Copyright 1998 by the State of Hawaii, Department of Taxation



Parcel Information

Parcel Number 640080240000
 Location Address
 Project Name
 Property Class AGRICULTURAL For zoning information, refer to [Zone Maps](#)
 Neighborhood Code 1100
 Legal Information
 Land Area (acres) 13.2740
 Land Area (approximate sq ft) 578,215

[View Map](#)
[Plat \(TMK\) Maps](#)

Owner Information

Owner Names
 HAWAIIAN HOME LANDS Fee Owner

Mailing Address
[HAWAIIAN HOME LANDS](#)

Assessment Information

Show Historical Assessments					
Year	Property Class	Market Land Value	Assessed Land Value	Assessed Building Value	Total Taxable Value
2021	AGRICULTURAL	\$100	\$100	\$0	\$0

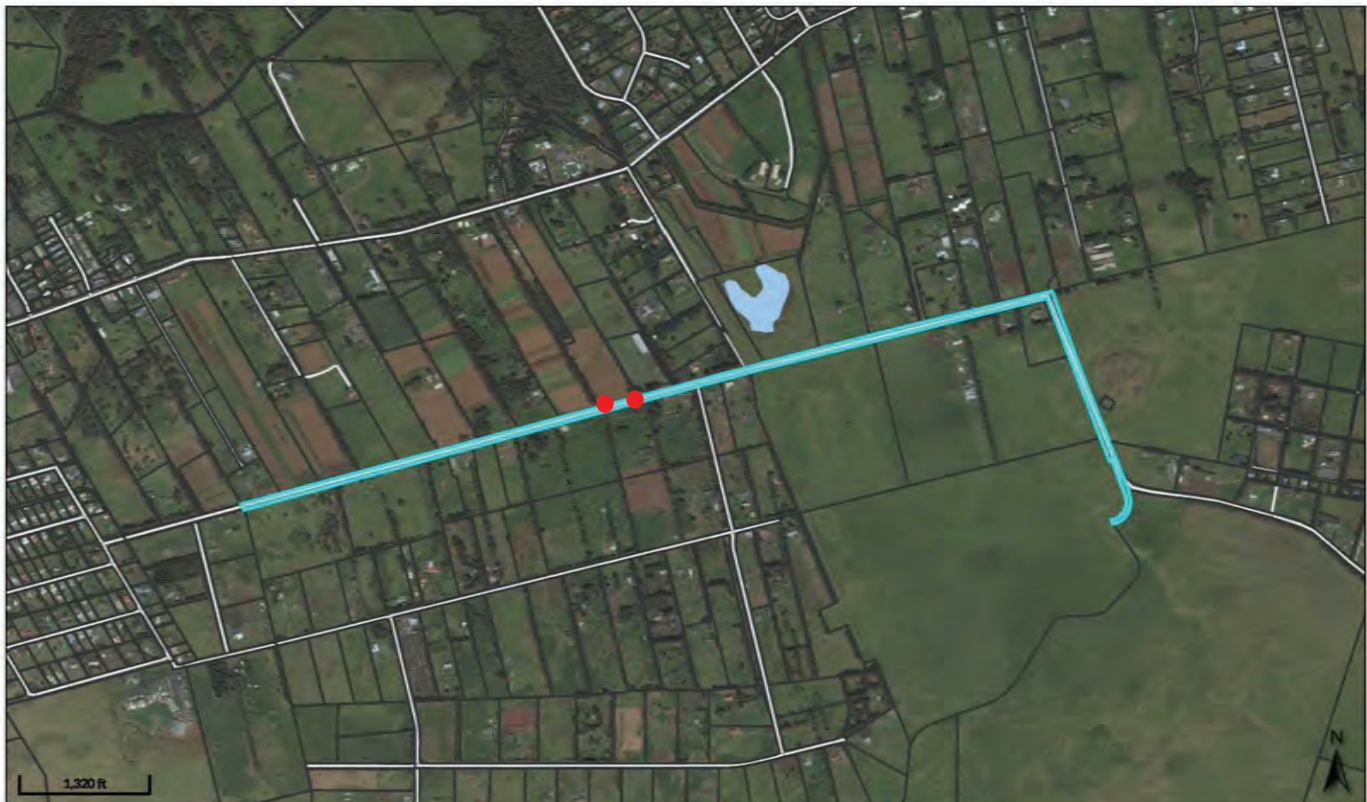
Land Information

Property Class	Square Footage	Acreage	Agricultural Use Indicator
AGRICULTURAL	578,215	13.274	

No data available for the following modules: Condominium/Apartment Unit Information, Agricultural Assessment Information, Residential Improvement Information, Commercial Improvement Information, Sketches, Other Building and Yard Improvements, Permit Information, Sales Information, Current Tax Bill Information, Historical Tax Information.

[Map History Query](#)
[GUPRI Privacy Notice](#)

Print to Desktop: 2/14/2022 10:14:56 AM



Parcel ID 640080240000
 Acreage 13.274
 Class AGRICULTURAL

Situs/Physical Address
 Mailing Address HAWAIIAN HOME LANDS

Market Land Value \$100
 Dedicated Use Value \$0
 Land Exemption \$100
 Net Taxable Land Value \$0
 Assessed Building Value \$0
 Building Exemption \$0
 Net Taxable Building Value \$0
 Total Taxable Value \$100

Last 2 Sales

Date	Price	Reason	Qual
n/a	0	n/a	n/a
n/a	0	n/a	n/a

Brief Tax Description n/a

EXHIBIT "B-2"
ITEM NO. F-1

DEPARTMENT OF HAWAIIAN HOME LANDS
Planning Office
February 14, 2022

TO: William J. Ailā, Jr., Chairman
Hawaiian Homes Commission PO-22-046

FROM: Andrew H. Choy, Acting Planning Program Manager

SUBJECT: LMD Grant of Non-Exclusive License for Access (Ingress & Egress) to Jason K. & Melita A. Deluz on TMK (3) 6-4-008:024 & (3)-6-4-001:004 for Vehicle and Pedestrian Access Exemption from HRS Chapter 343 Environmental Assessment Preparation for De Minimis Action

Recommended Action

That the Chairman exempt LMD Grant of License Easement to Jason K. & Melita A. Deluz on TMK (3) 6-4-008:024 for Vehicle and Pedestrian Access, a de minimis action from preparation of an environmental assessment per HRS Chapter 343.

Discussion

To ensure that all activities on DHHL lands are in compliance with Federal, State and County regulations, Planning Office offers the following recommendation to the Chairman on whether or not to exempt the proposed projects on DHHL lands from HRS Chapter 343. Per the statute, certain projects are exemptible from the environmental review process if the projects meet certain requirements as stated in Hawaii Administrative Rules (HAR) Section 11-200.1-8 subchapter 8 "Exempt Actions, List and Notice Requirements." HAR Section 11-200.1 also states that State and County agencies can prepare their own Chapter 343 exemption list. Activities on agency exemption lists must be consistent with Section 11-200.1 HAR exemption requirements and be approved by the state Environmental Council. In addition, Pursuant to HAR §11-200.1-16, DHHL considers activities listed in Part I of the approved exemption list to be de minimis, that by their nature do not have the potential to individually or cumulatively adversely affect the environment more than negligibly.

The proposed action meets the criteria for the following de minimis activity:

Type 1 Operations, repairs or maintenance of existing structures, facilities, equipment or topographical features, involving negligible or no expansion or change of use beyond that previously existing

Item #3 Patching, resurfacing, striping and cleaning of pavement surfaces including, but not limited to, streets, roads, highways, pedestrian ways and walkways, bike paths, driveways, parking lots and appurtenances

Based upon HAR Section 11-200.1 exemption criteria and DHHL's approved exemption list, the Planning Office concluded that the LMD Grant of Non-Exclusive License for Access (Ingress & Egress) to Jason K. & Melita A. Deluz on TMK (3) 6-4-008:024 & (3)-6-4-001:004 for Vehicle and Pedestrian Access is a de minimis action eligible for exemption from the environmental assessment process and an exemption declaration is not required.

☒ Concur

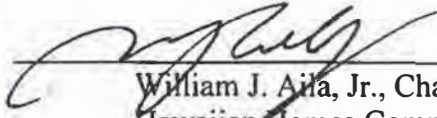

William J. Ailā, Jr., Chairman
Hawaiian Homes Commission

EXHIBIT "C"
ITEM NO. F-1

STATE OF HAWAI'I
DEPARTMENT OF HAWAIIAN HOME LANDS

March 21, 2022

To: Chairman and Members, Hawaiian Homes Commission
Thru: Andrew Choy, Planning Program Manager
From: Pearlyn Fukuba, Planner *plf*
Subject: Approval of the Kapolei Regional Plan Update (2022)

RECOMMENDED ACTION

That the Hawaiian Homes Commission:

- 1) Approve the Kapolei Regional Plan Update (2022) (Exhibit A); and
- 2) Authorize dissemination of the Kapolei Regional Plan Update (2022).

Discussion

Regional plans build a sense of community and capacity, stimulate partnerships for development and improvements, facilitate beneficiary participation in issues and areas of concern, and identify priority projects within existing and planned homestead areas. The plan may focus on a particular homestead community or several homestead communities in the region. At a minimum, the regional plans document current conditions and trends and identify a prioritized list of projects important to the community and the DHHL.

The DHHL Kapolei Regional Plan was adopted by the HHC in 2010. The outlook of a regional plan is typically 3-5 years. Because it has been more than five years since the adoption of the plan and because several priority projects have been implemented or are in-progress, there is a need to re-evaluate and update the regional plan for the Kapolei region in West O'ahu.

Due to the COVID-19 pandemic, the planning process

has been mostly conducted through virtual means to ensure compliance with health and safety rules and guidelines. The process began in October 14, 2020. Subsequent beneficiary consultation meetings were conducted. The Kapolei Regional Plan Update is attached as Exhibit A.

OUTREACH, PROCESS & METHODOLOGY

The planning process began in October of 2020. Using the virtual platform Zoom, DHHL's staff and consultants met with representatives from all of the Kapolei homestead associations and organization leaders to introduce the regional plan update project and to ask for their insight and guidance on the planning process with respect to the pandemic health and safety rules. Subsequent to that meeting, a site visit and three beneficiary consultation meetings were conducted.

A draft of the Kapolei Regional Plan Update was presented to the Hawaiian Homes Commission for information in November 2021. (Exhibit B) The third and final beneficiary consultation meeting on the draft plan was held on December 9, 2021. Beneficiary comments were collected at that meeting and subsequent changes were made to the draft plan as a result. Below is a summary of final plan recommendations.

Results of Beneficiary Consultation to Date

Through the beneficiary consultation planning process, participants identified the following values and guiding principles:

Guiding Principles:

- Natural, Cultural and Agricultural Resources
- Wahi Pana
- Kūpuna
- Keiki
- Self-sufficiency

The vision statement was based on the values and guiding principles and provides a unified direction for homestead, Departmental and Commission action in the Kapolei region:

"From the Pu'u in the uplands to the shores of Kualaka'i, Kapolei is a growing region that looks to its history, mo'olelo, 'āina and kūpuna to build a strong foundation for our Hawaiian homestead communities. Kānaka embrace the area's rugged climate and terrain, which motivates them to be resilient and self-sufficient. The wahi pana and kīpuka of this place are celebrated and stewarded for future generations."

PRIORITY PROJECT RECOMMENDATIONS

Based on the vision statement as shaped by the values and guiding principles and in continued discussion with beneficiaries, priority projects were identified for the region as follows:

1. Provide More Options for Quality Telecommunication Service to Homesteads

PROJECT DESCRIPTION

Homesteaders in Kapolei have expressed that they are dissatisfied with the quality of their telecommunications service from Sandwich Isles Communication. They would like to solicit service from other telecommunications providers on-island such as Hawaiian Telcom, Spectrum, etc. Kapolei homesteaders would like the option to seek telecommunications services elsewhere to better fit their needs.

OBJECTIVE

This project helps to fulfill the community value of self-sufficiency, "Kapolei is a place where people can live, work and play. All the things that homesteaders need to have a healthy, thriving community can be found within the region." The ability to obtain quality telecommunications services in Kapolei would further the objective of having what is needed to have a healthy, thriving community. Access to good quality telecommunications services is a critical need for Kapolei homesteaders.

2. Create more open spaces, park spaces, and recreation spaces to support the Homestead Community

PROJECT DESCRIPTION

The Kapolei homesteaders desire more open space for parks and recreation throughout the region. These spaces would

provide safe environments to support programs and activities for youth and leisure spaces for 'ohana to gather and enjoy the outdoors. Open spaces for parks and recreation are key to a thriving and healthy homestead community.

OBJECTIVE

Development of open spaces, parks and recreation spaces within the Kapolei Region helps to fulfill the Community Values of preserving "Natural, Cultural and Agricultural Resources", and prioritizing "Keiki" and "Kūpuna." This project idea also helps the region to reach its vision of establishing "*wahi pana and kīpuka...[that can be] celebrated and stewarded for future generations.*"

3. Create a Kūpuna Living Community

PROJECT DESCRIPTION

Kapolei homesteaders would like to see an alternative living option for kūpuna within the region so that they may have access to all the facilities and services needed for them to comfortably age in place. As kūpuna age, they may wish to leave their larger home and downsize to a living space that is more suited for their needs. The development of a vibrant kūpuna living community that provides not just residential spaces, but also support facilities and services for kūpuna would allow beneficiaries to live out their lives in Kapolei, surrounded by their families and community.

OBJECTIVE

This project helps to fulfill the community value of Kūpuna: "Kūpuna hold an important role and place in native Hawaiian society. Spaces and resources in Kapolei will be used to support kūpuna so they can pursue full and healthy lives as they age in place." Creation of a Kūpuna Living Community would help to create full and healthy lives for Kapolei kūpuna to age in place. This project also helps to achieve part of the vision for the region: "Kapolei is a growing region that looks to its history, mo'olelo, 'āina and kūpuna to build a strong foundation for the homestead communities." This vision prioritizes kūpuna within the Kapolei community and identifies how important kūpuna are to building strong foundations for homestead communities.

4. Support Heritage Center and Community Commercial Development (Previous Priority Project)

PROJECT DESCRIPTION

The Kapolei Heritage Center is operated and managed by the KCDC. This project was developed to fulfill the community's need for space for programming, gathering, cultural practices and more. Support for the Heritage Center and a community commercial development was selected by Kapolei beneficiaries as a priority project in the 2010 Kapolei Regional Plan and remains a priority in the region today.

OBJECTIVE

This project helps to fulfill the community values of wahi pana and self-sufficiency. "Wahi pana, of old and new, throughout the region are used by the community to gather and practice their culture." The Kapolei Heritage Center is a wahi pana in the region and completion of the Center's planned phases helps the region to reach its goal of having wahi pana available to the homesteads. "All the things that homesteaders need to have a healthy, thriving community can be found within the region" is a part of the value of self-sufficiency. Completion of the Ho'omaka Marketplace and the Kapolei Heritage Center helps to further the community's goal for self-sufficiency.

Ho'omaka Marketplace offers commercial and retail spaces and services for the community, and revenue generated from this commercial development will be used to help develop the Kapolei Heritage Center fully and to fund necessary programming to support the homestead communities.

5. Support the development of a Hawaiian-Focused School/Hawaiian Immersion School

PROJECT DESCRIPTION

Kapolei homesteaders would like to see the creation of a Hawaiian-Focus/Immersion School for children and youth in the region. This school would be both Hawaiian 'ike (knowledge) and 'ōlelo (language) focused. This school could be a part of the Department of Education (DOE) current or planned schools in the Kapolei region and would include a partnership with the DOE for development and operation. Currently, phase 1 of the new middle school located in East Kapolei is operational, and phase 2 is in designs. There are parcels designated for a new elementary school in the Kauluokaha'i Master Plan. The Hawaiian-Focus School/Hawaiian Immersion School could also be a public charter school which focuses on 'ike and 'ōlelo as pillars of the curriculum. This may include a partnership with or

creation of an educational entity capable of establishing and operating such a school.

OBJECTIVE

This project will fulfill the community value of Keiki. "Resources for 'ōpio and keiki are a priority. There are... programs for them to learn...near their homes." This project would help to create a place for homestead children to be educated in their native language and culture. This project also helps to fulfill the vision for Kapolei: "Kapolei is a growing region that looks to its history, mo'olelo, 'āina and kūpuna to build a strong foundation for the homestead communities." A school of this type would be a part of the strong foundation needed for homestead communities in the region.

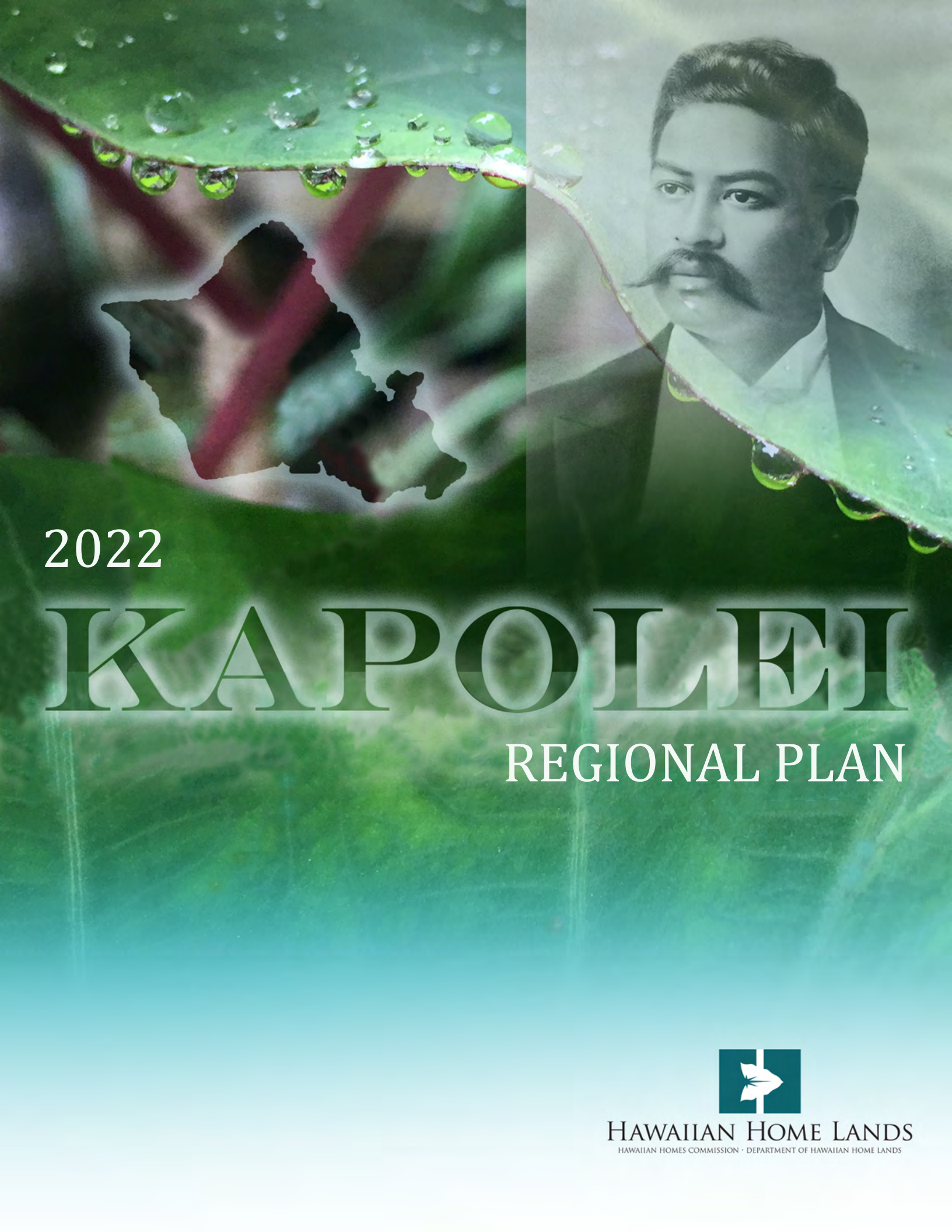
RECOMMENDED ACTION

Staff respectfully requests the Hawaiian Homes Commission to approve the

Exhibit A

KAPOLEI REGIONAL PLAN UPDATE

March 2022



2022

KAPOLEI

REGIONAL PLAN



HAWAIIAN HOME LANDS
HAWAIIAN HOMES COMMISSION • DEPARTMENT OF HAWAIIAN HOME LANDS

Executive Summary

Regional plans build a sense of community and capacity, they stimulate partnerships for development and improvements, and give beneficiaries within the region an opportunity to have a voice in planning for their future. The Hawaiian Homes Commission's approval of 23 Regional Plans across the state means that all homestead communities have the same opportunity. The 23 Regional Plans provide a platform for beneficiaries to talk to each other about their common issues and concerns. The Regional Plans empower beneficiaries with a recurring opportunity to convene as a community in order to identify and solve their own problems. Regional Plans ensure that beneficiaries are an integral part of the solutions to the issues that they have identified. Working with the Department of Hawaiian Home Lands (DHHL) Planning Office staff and consultants, the community identifies priority projects to respond to issues and areas of concern within existing and planned homestead areas. At a minimum, the Regional Plan documents current conditions and trends and identifies a prioritized list of projects important to the community and the department.

Vision. The vision provides a unified direction for homestead, Departmental and Commission actions in Kapolei. The vision statement is as follows:

"From the Pu'u in the uplands to the shores of Kualaka'i, Kapolei is a growing region that looks to its history, mo'olelo, 'āina and kūpuna to build a strong foundation for our Hawaiian homestead communities. Kānaka embrace the area's rugged climate and terrain, which motivates them to be resilient and self-sufficient. The wahi pana and kīpuka of this place are celebrated and stewarded for future generations."

Planning Area. All the lands in the Kapolei region are located within the ahupua'a of Honouliuli in the moku of 'Ewa on the southwest side of the mokupuni of O'ahu. There are four existing DHHL homesteads in the region, Malu'ōhai, Kaupe'a, Kānehili and Ka'uluokaha'i. The DHHL O'ahu Island Plan (2014) land use designations include:

Land Use	Total Lots/Parcels	Total Acreage
Residential	880 lots	345 acres
Community Use	7 parcels	35 acres
Commercial	4 parcels	80 acres
Industrial	10 parcels	550 acres
Total:	2,017	1,010 acres

Planning Process. This plan updates the 2010 Kapolei Regional Plan. The planning process took place during the COVID-19 pandemic with serious concerns for public health. Due to ongoing restrictions from COVID-19, the planning process was conducted virtually wherever possible, and any in-person activity followed State and County guidance such as, social distancing, masking, and limitations of the number of persons present.

The process began with a virtual meeting with Kapolei homestead association and organization leaders on October 14, 2020. This meeting introduced the Regional Plan Update project and gathered guidance from the leadership on how the process could be tailored to best fit the Kapolei community. Leadership was able to advise on the format and schedule for beneficiary consultations and offered assistance with publicity for the meetings. Beneficiary Consultation #1 was a virtual meeting hosted via Zoom on December 9, 2020. This meeting introduced the Regional Plan Update project to the community and facilitated participants in developing a list of community values as well as a vision statement for the Kapolei region.

Beneficiary Consultation #2 was a virtual meeting hosted via Zoom on May 4, 2021. In this meeting, participants reviewed and revised the draft community values and a draft vision statement developed from

Beneficiary Consultation #1. Participants also reviewed and revised a draft list of project ideas into a final project ideas list with a total of 14 project ideas. The top five priority projects for the Kapolei region were selected from this final list.

Selection of the priority projects was conducted via an online polling process. A link to the online poll was posted on the project website following Beneficiary Consultation #2, and Kapolei beneficiaries were asked to participate in the poll to select the top five priority projects to be included in the update to the Kapolei Regional Plan. The online poll was open for Kapolei beneficiary participation from May 5, 2021 to May 19, 2021. A total of 60 beneficiaries participated in the poll. The results of the poll included two sets of project ideas which received the same number of votes. The top five projects received 32 votes, 32 votes, 31 votes, 30 votes and 30 votes. The order of the priority projects was determined by the poll results and by guidance provided by Kapolei beneficiaries who attended Beneficiary Consultation #3.

An information submittal and draft of the update to the Kapolei Regional Plan was presented to the Hawaiian Homes Commission (HHC) for feedback on November 15, 2021. Beneficiary Consultation #3 was held virtually via Zoom on December 9, 2021 to gather feedback from the community on the draft of the plan as well. Feedback was incorporated into the final document, and a final draft of the Regional Plan Update was presented to the HHC in March 2022 for acceptance and adoption.

Priority Projects. The priority projects summarized in the table to follow reflect the projects that the community identified as priorities for the Kapolei region. The action steps and required resources for these projects to be implemented are listed below.

Priority Project	Action Steps	Required Resources
Provide More Options for Quality Telecommunications Service to Homesteads	<ul style="list-style-type: none"> • Document service issues • Participate in meetings and consultations 	<ul style="list-style-type: none"> • Assistance and coordination as needed
Create More Open Spaces, Park Spaces, and Recreation Spaces to support the Homestead Community	<ul style="list-style-type: none"> • Community partnership with DHHL for open space/park development • Request for Right of Entry permit for due diligence studies • Master/Special Area Plan & HRS Chapter 343 Compliance • Issuance of Finding of No Significant Impact (FONSI) • Long-term disposition • Planning & Permitting • Design & Construction • Operation & Maintenance 	<ul style="list-style-type: none"> • Technical Assistance • Funding (Planning, Design & Construction) • HHC Approval

Priority Project	Action Steps	Required Resources
Create a Kūpuna Living Community	<ul style="list-style-type: none"> • Identify potential locations • Due diligence studies • Master/Special Area Plan & HRS Chapter 343 Compliance • Issuance of Finding of No Significant Impact (FONSI) • Planning & Permitting • Design & Construction • Operation & Maintenance 	<ul style="list-style-type: none"> • Technical Assistance • Funding (Planning, Design & Construction) • HHC Approval
Support the Heritage Center and Community Commercial Development	<ul style="list-style-type: none"> • Completion of Ho'omaka Marketplace for revenue generation • Permitting • Design & Construction • Monitoring & Reporting 	<ul style="list-style-type: none"> • Technical Assistance • Funding (Planning, Design & Construction)
Support the Development of a Hawaiian-Focus School/Hawaiian Immersion School	<ul style="list-style-type: none"> • Partner with DHHL, City & State agencies, other organizations • Identify potential locations • Secure site control • Planning & Permitting • Design & Construction • Program implementation • Operation & Maintenance • Monitoring & Reporting 	<ul style="list-style-type: none"> • Technical Assistance • Funding (Planning, Design & Construction)

Table of Contents

Executive Summary.....	i
Glossary of Hawaiian language terms	1
Introduction.....	2
Purpose of a Regional Plan	2
Planning System	2
Regional Planning Process.....	3
Stakeholders and Partners	4
DHHL Master Planning Process and Community Development Goals.....	4
Methods and Approach.....	12
Vision and Values	15
Guiding Principles.....	15
Planning Area.....	17
Location.....	17
Regional History	20
Ahupua‘a.....	20
Wahi Pana and Additional Places of Importance	21
Existing Land Uses.....	23
Total Lots and Acreage	23
Homestead Uses	23
Community Uses.....	24
Commercial Uses.....	27
Industrial Uses	27
State and County Land Use Designations.....	27
State Land Use Districts.....	27
Kalaehoa Community Development District	27
City and County Zoning.....	28
Surrounding Land Ownership and Uses.....	28
Regional Revenue Generation	28
Infrastructure.....	35
Water Source and System	35
Potable Water	35
Non-Potable Water	36
Wastewater Systems	36
Other Wastewater Infrastructure.....	36
Electrical Infrastructure.....	37
Road System – Existing and Planned	37
Kalaehoa Airport	38
Project List	42
Previous Priority Projects.....	42
Final Project Ideas List	43
Priority Projects.....	44
1. Provide More Options for Quality Telecommunication Service to Homesteads.....	44
PROJECT DESCRIPTION	44
COMMUNITY INPUT.....	45
OBJECTIVE.....	45
IMPLEMENTATION ACTION STEPS.....	45

2. Create more open spaces, park spaces, and recreation spaces to support the Homestead Community	46
PROJECT DESCRIPTION	46
PAST ACTIONS.....	49
COMMUNITY INPUT.....	49
OBJECTIVE.....	49
IMPLEMENTATION ACTION STEPS.....	49
3. Create a Kūpuna Living Community.....	51
PROJECT DESCRIPTION	51
PAST ACTIONS.....	52
COMMUNITY INPUT.....	53
OBJECTIVE.....	53
IMPLEMENTATION ACTIONS STEPS.....	53
4. Support Heritage Center and Community Commercial Development (Previous Priority Project).....	54
PROJECT DESCRIPTION	54
PAST ACTIONS.....	55
COMMUNITY INPUT.....	55
OBJECTIVE.....	56
IMPLEMENTATION ACTIONS STEPS.....	56
5. Support the development of a Hawaiian-Focused School/Hawaiian Immersion School	57
PROJECT DESCRIPTION	57
PAST ACTIONS.....	57
COMMUNITY INPUT.....	57
OBJECTIVE.....	58
IMPLEMENTATION ACTIONS STEPS.....	58

Appendices

Appendix A	Beneficiary Consultation #1 – Meeting Recap
Appendix B	Beneficiary Consultation #2 – Meeting Recap
Appendix C	Beneficiary Consultation #3 – Meeting Recap
Appendix D	Leadership Meeting & Site Visit Recap

Figures

Figure 1: DHHL's Planning System.....	2
Figure 2: The Regional Plan Development and Update Process	3
Figure 3: Community Organization & Development	8
Figure 4: Master Planning and Land Development Process on Hawaiian Home Lands.....	10
Figure 5 Project Area Map.....	18
Figure 6 Ahupua'a Map.....	19
Figure 7- DHHL Land Use Designation Map.....	26
Figure 8 - State land Use Districts Map.....	30
Figure 9 - Kalaeloa Community Development District Zoning Map	31
Figure 10 - County Zoning map.....	32
Figure 11 - Large Landowners Map	33
Figure 12 - O'ahu Island Aquifer Map	35
Figure 13 - Roadways Map.....	39
Figure 14 - Wastewater Infrastructure Map.....	40
Figure 15 - Parks/Open Space Map.....	48

Glossary of Hawaiian language terms

‘āina	land, earth
ahupua‘a	traditional Hawaiian land section that typically ran from the mountains to the sea and included coastal and nearshore resources
‘ike	knowledge, referring to knowledge and traditions of the indigenous people of Hawai‘i
keiki	child
kānaka	people (references in this document to kānaka are shortened references to the term kānaka maoli meaning the native or indigenous people of Hawai‘i)
kīpuka	a space that is a variation or change of form from surrounding spaces, like a clearing in the forest, an oasis in an arid place (references in this document to kīpuka are identifying spaces or pockets of natural or cultural resources that can be found in the built environment of Kapolei)
Kualaka‘i	place name of the shoreline seaward of the former Barbers Point Naval Air Station, the beach that stretches from Hilo One in front of Campbell Industrial to One ‘Ula in ‘Ewa Beach
kūpuna	grandparents, ancestors or elders of the grandparent generation
mākua	plural of makua, parent
mo‘olelo	traditional stories, tales, myths, histories and legends
‘ohana	family
‘ōlelo	language, referring to the indigenous language of Hawai‘i
‘ōpio	youth or young person
pu‘u	hills or mountain peaks (refers to the many hills and mountain peaks found in the uplands of the ahupua‘a or traditional land division of Honouliuli)
Pu‘uokapolei	place name of a heiau located in Honouliuli ahupua‘a in the moku of ‘Ewa, near the present day Kapolei Regional Park
wahi pana	celebrated places, places of importance

Introduction

Purpose of a Regional Plan

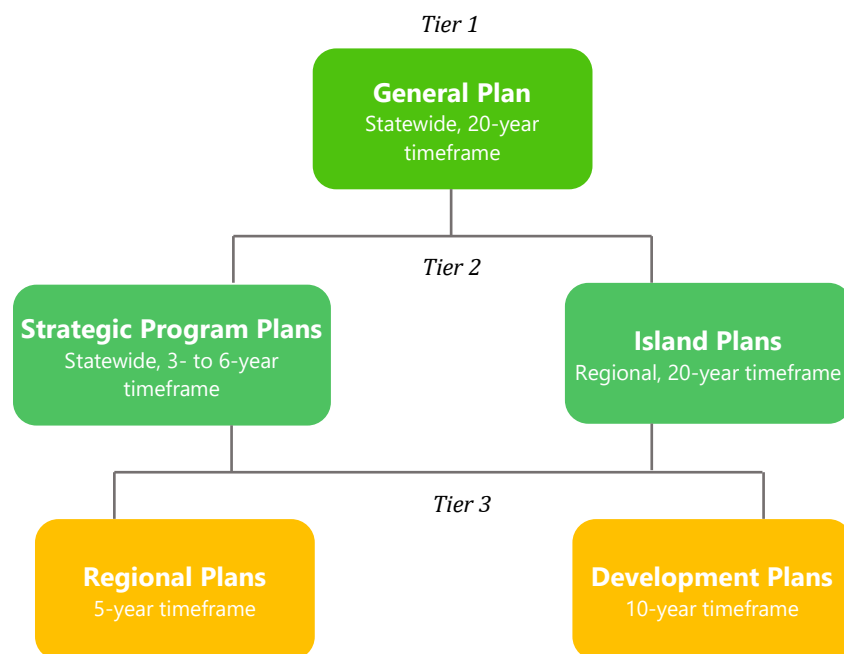
The mission of the Department of Hawaiian Home Lands (DHHL) is to build vibrant homestead communities. Regional Plans provide an opportunity for DHHL to work closely with existing lessees and native Hawaiian beneficiaries to clarify a vision for their community and to build partnerships with government agencies, private landowners, non-profit organizations, homestead associations, and other community groups to achieve that vision.

This Regional Plan is one of 23 Regional Plans that DHHL has helped Hawaiian homesteads to formulate statewide. These Regional Plans assess land use development factors, document issues and opportunities, and identify the region's top priority projects slated for implementation within the next five years.

Planning System

Regional Plans are part of DHHL's three-tiered Planning System (see Figure 1). At Tier 1 is the General Plan which articulates long-range goals and objectives for the Department. At the second tier, there are Program Plans that are statewide in focus, covering specific topic areas such as the Native Hawaiian Housing Plan and a Native Hawaiian Development Program Plan. Also, at this second tier are the Department's Island Plans that identify the Department's land use designations for each island and which have a function similar to the counties' land use designations. The Regional Plans are located at the third tier in the Department's Planning System which focuses on communities and regions. Development plans carry out second-tier planning recommendations and contain the information necessary to implement area-wide development, such as off-site infrastructure systems and improvements, utilities, estimated costs, and phased implementation.

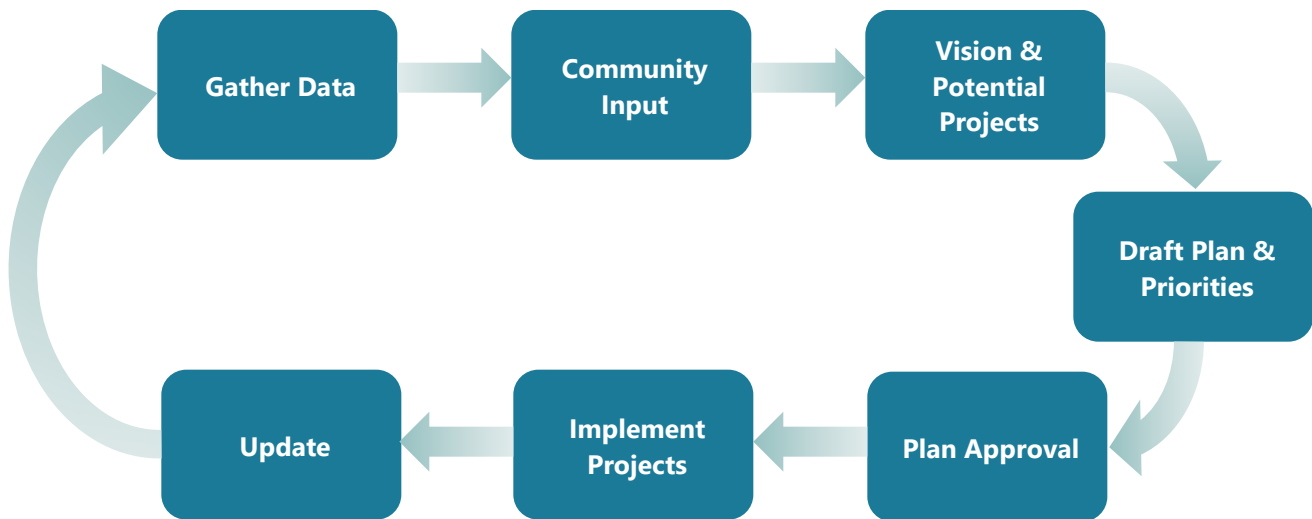
FIGURE 1: DHHL'S PLANNING SYSTEM



The roles of the Regional Plans within the Planning System are to:

- Apply the goals, policies, and land use designations of the General Plan, Program Plans, and applicable Island Plan to specific geographic regions;
- Directly involve the community in planning for their region;
- Compile comprehensive information about the region to provide a factual basis on which to identify needs and opportunities;
- Evaluate changes needed, if any, to the Island Plan as it applies to the region;
- Identify potential resources (e.g., partners, funding sources) to facilitate implementation; and
- Identify priority projects that are important to the community and implementation steps to move these projects forward.

FIGURE 2: THE REGIONAL PLAN DEVELOPMENT AND UPDATE PROCESS



Regional Planning Process

The development of Regional Plans involves seven steps (see Figure 2, The Regional Plan Development and Update Process):

1. **Gather Data.** Pertinent data describe existing conditions and trends, including history of the homestead, land use, infrastructure, natural features, historic/cultural features, surrounding uses, and development trends.
2. **Gather Community Input to Identify Issues and Opportunities.** Existing homesteaders, native Hawaiian beneficiaries, and other stakeholders are invited to a facilitated meeting to discuss issues and opportunities for the region.
3. **Create a Long-Term Vision and Identify Potential Projects.** The input from the community on issues and opportunities provides the basis to craft a draft vision statement that is reviewed and modified, as necessary, to the satisfaction of the community. Potential projects consistent with this vision are identified and prioritized by community consensus.
4. **Review a Draft Plan and Priorities.** Project details, budget estimates, and other pertinent project planning information are written up as part of a draft plan for review by the community.

5. **Approve the Plan.** Draft Regional Plans are then subject to the approval of the Hawaiian Homes Commission, which means that the Commission and Department officially support the priorities identified in the regional plan.
6. **Implement Priority Projects.** Upon approval, the homestead community, the Department, and other development partners can seek necessary funding and pursue the implementation of Priority Projects.
7. **Update.** Finally, since DHHL knows that regional development is a dynamic process with constantly changing opportunities and emerging issues, regular Regional Plan updates are built into the planning process.

Stakeholders and Partners

DHHL is working in partnership with other government agencies, the private sector, and community organizations to develop its lands and improve community life. DHHL believes that partnerships are an effective way to leverage resources and capital investments, mitigate undesirable impacts of development, coordinate area growth, reduce risks associated with large scale community projects, and create broad community benefits.

These partnerships allow for better prioritization and coordination of infrastructure improvements and the development of regional and public residential facilities. This coordination helps individual organizations achieve their goals while bringing long-term benefits to the community and region.

DHHL Master Planning Process and Community Development Goals

Homestead associations are frequently interested in developing capital improvement projects within their communities in order to provide needed social services and enrichment opportunities. The need for these desired projects is often captured in DHHL Regional Plans. While the characteristics of projects proposed are as diverse and unique as the DHHL communities in each region across the state, the overall planning and development process for these projects is the same in most instances.

Successfully implementing any type of land development project requires several basic foundational elements prior to project initiation. A strong organization that has a membership that works well together and has high levels of participation in regular association business ensures that (1) projects are selected based upon agreed upon criteria rather than individual preferences, (2) project plans are created, and (3) large amounts of social capital are built within and outside of the community. Figure 3, Community Organization & Development, briefly describes these elements of organizational capacity and project planning in more detail. The top level represents the steps that the homestead association (project proponent) should complete.

Most organizations go through five main stages of an organization's developmental lifecycle:

1. **Stage One: Imagine and Inspire.** The organization is not yet formalized, but individuals are inspired and united by a common vision or idea.
2. **Stage Two: Found and Frame.** The organization becomes formalized. Governing documents have been drafted and adopted by its members. The organization receives its non-profit status.
3. **Stage Three: Ground and Grow.** Organizations in this stage focus on establishing systems of accountability to its members as well as growing its internal capacity to provide more services or a higher quality of service to its members.
4. **Stage Four: Produce and Sustain.** This is the stage in which the organization is at its peak and is primarily concerned with how it can sustain its level of service over time.

5. **Stage Five: Review and Renew.** The organization re-invents itself in order to adapt to evolving conditions. The primary question the organization is concerned with at this stage is: "How can we do it better?" The organization revisits its mission, vision, services, and management structure.

Social capital can be defined as the networks of relationships among people who live and work in a particular society, enabling that society to function effectively. From time to time, a homestead association should assess its social capital both internally among its members as well as among external stakeholders and potential partners in order to determine the level of potential support for and/or opposition to a proposed land development project. Figure 3 Community Organization and Development illustrates the various social circles that should be engaged to support a land development project. Often, a development idea starts with a core group of individuals on an association board. Gradually that idea is shared with, and incorporates the ideas of, others in larger social circles in order to grow social capital and build support for a development project.

Lastly, Figure 3 illustrates that the association's assessment of its life cycle and existing social capital should be incorporated into a program plan. A program plan clearly articulates a community vision or need, identifies criteria for selecting programs or projects to fulfill that vision or need, and selects appropriate projects and programs based on those criteria. Programs/projects should be selected based on strong community support for the initiatives and the association's organizational capacity.

Once an association has done outreach with its community to identify its vision and goals, established criteria for selecting projects that help them accomplish their vision and goals, and selected project(s) that have strong community support, then the association can begin with the actual physical master planning and development of the project(s). Figure 4, Master Planning and Land Development Process on Hawaiian Home Lands, illustrates the process of master planning and land development on Hawaiian Home Lands.

Project Proponent Tasks:

- The project proponent should focus their time and attention to ensure that the community's vision and needs are integrated into the project.
- The project proponent should conduct a site and infrastructure assessment of the location in which they would like to implement the project in order to ensure that the location is appropriate for what they would like to do.
- A master plan should integrate and synthesize the community's vision and needs with the site and infrastructure assessment. A master plan should also include a financial plan that forecasts initial development costs, long-term operational costs, and how those costs will be financed over time.
- An Environmental Assessment (EA) or Environmental Impact Statement (EIS) needs to be prepared for the Master Plan in accordance with Hawaii Revised Statutes (HRS) Chapter 343. If federal funds are used for the project, then a federal EA or EIS may need to be completed in accordance with the rules and standards of the federal funding agency.
- Once Chapter 343 and federal environmental regulations are complied with, then the project proponent can proceed with obtaining the necessary permits and approvals and proceed with construction.

The next steps after the Project Proponent Tasks in Figure 4 include various DHHL staff reviews and HHC approvals that the Project Proponent will need to obtain.

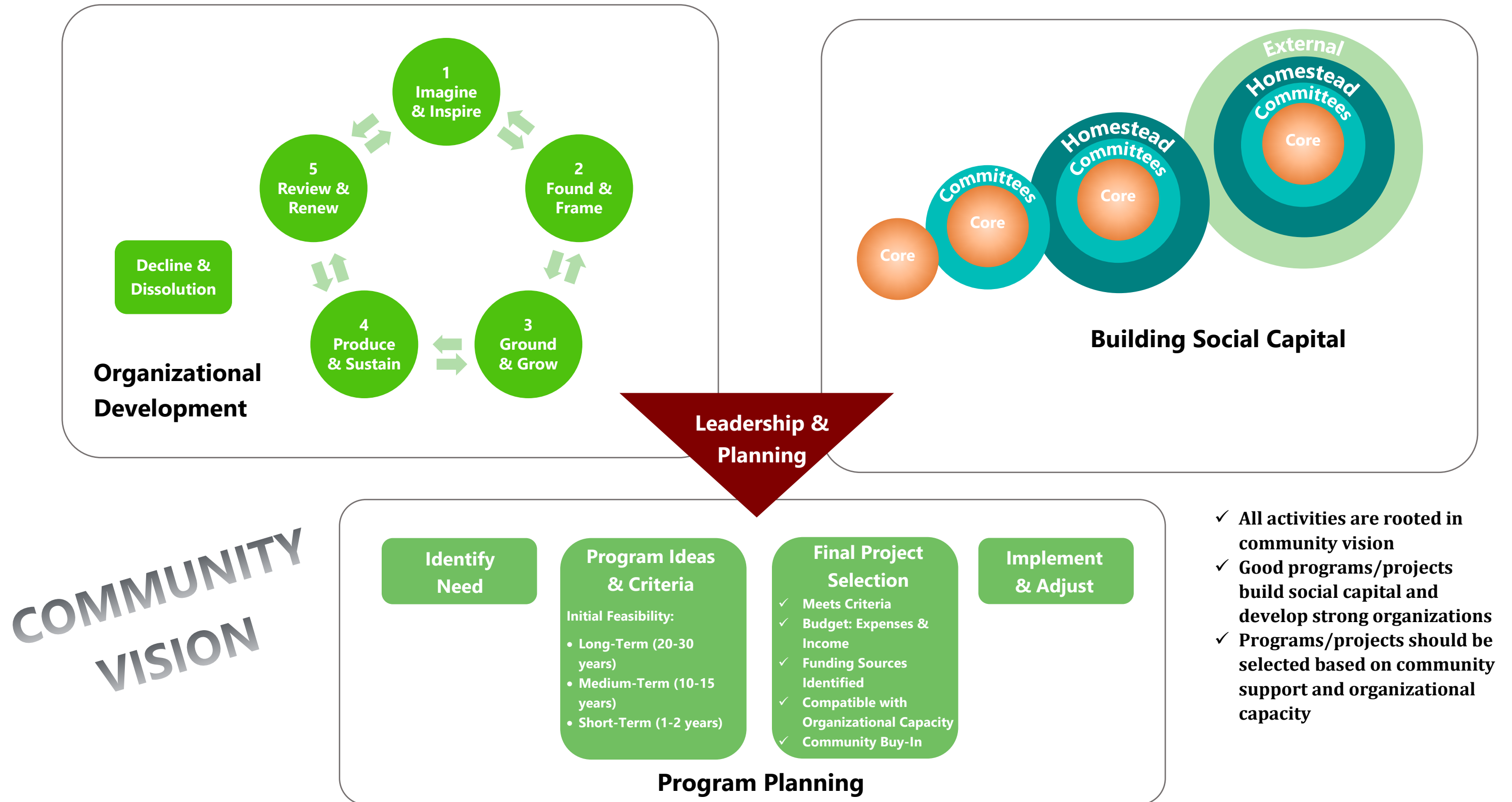
Requests by Non-Profit Organizations for Long-Term Use of DHHL Lands

DHHL has begun implementing a process for Internal Revenue Code (IRC) § 501(c)(1) or IRC § (501)(c)(3) non-profit organizations that are interested in long-term utilization of DHHL land for the purposes of providing programs and services to DHHL beneficiaries to further their rehabilitation and well-being. This process implements the Hawaiian Homes Commission Act (HHCA), Sections 204(2) and 207(c), which

authorize DHHL to lease or license lands for non-homesteading purposes on the same terms, conditions, restrictions, and uses applicable to the disposition of public lands as provided in HRS Chapter 171. HRS 171-43.1 authorizes DHHL to dispose of lands to eleemosynary organizations by direct negotiation without requiring a competitive solicitation process. The application process is designed to provide an opportunity for non-profit organizations to conduct due diligence on the project site and vet their conceptual plans in consultation with DHHL prior to requesting HHC approval of a long-term disposition. See “Implementation Action Steps” under “Priority Projects” for a more detailed list of steps and requirements for these types of land use requests.

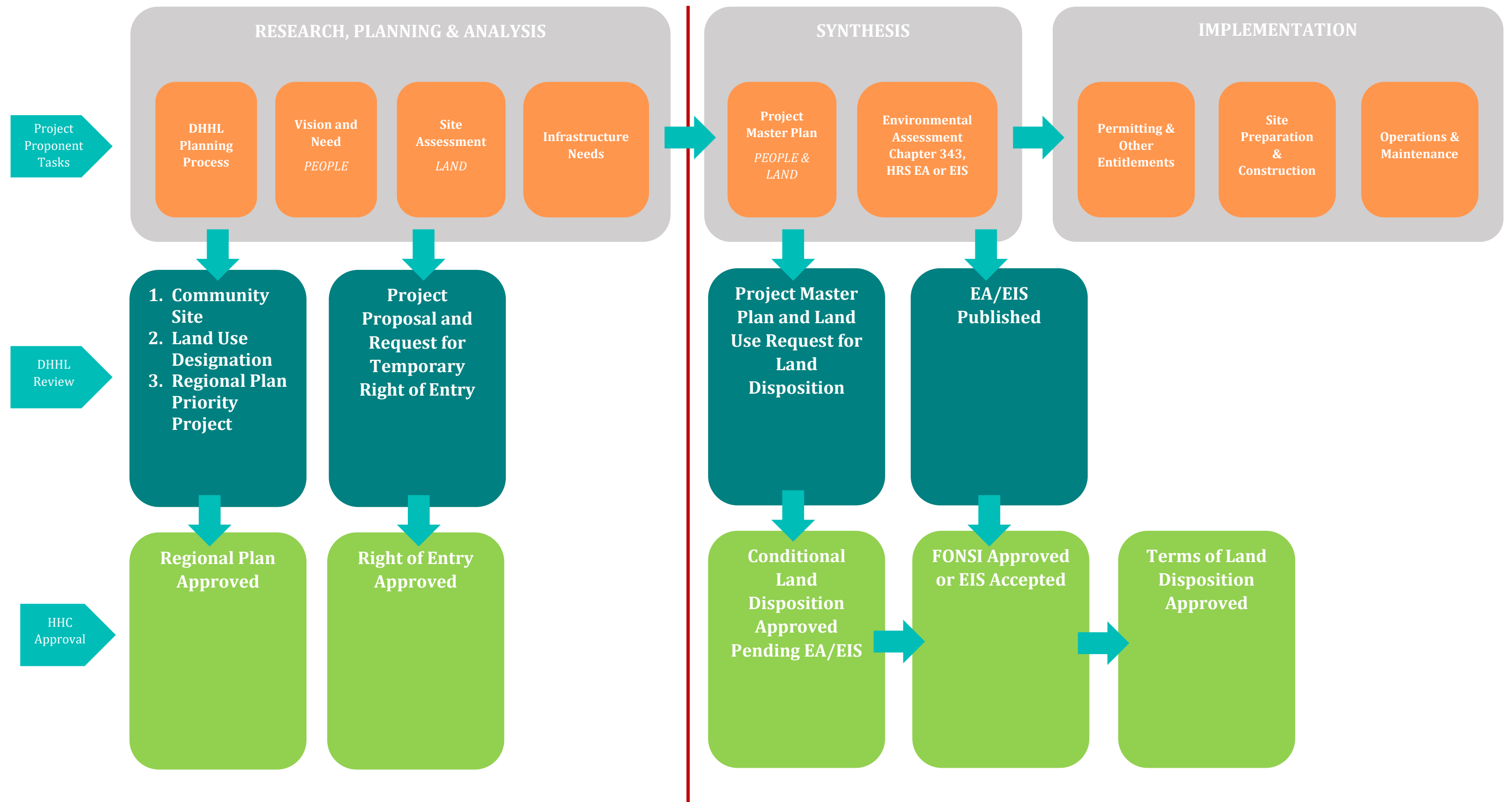
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FIGURE 3: COMMUNITY ORGANIZATION & DEVELOPMENT



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FIGURE 4: MASTER PLANNING AND LAND DEVELOPMENT PROCESS ON HAWAIIAN HOME LANDS



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Methods and Approach

The Kapolei Regional Plan Update began with a meeting with local leadership for insight and guidance on a planning process that would best fit the Kapolei beneficiary community. In light of the public health risks and various mandates from the State and City & County governments from the COVID-19 pandemic, in-person gatherings were not possible during this planning process. Instead, meetings were hosted virtually via Zoom. The selection of the days and times for each of the beneficiary consultations was guided by input from the homestead leadership.

Broad publicity of the community meetings was accomplished through mail-outs of meeting notices via postal mail and distribution of digital meeting invitations and reminders with assistance from the various homestead associations.

The approach for the community meetings included large group discussion and break-out rooms for small groups to facilitate more in-depth sharing on topics related to community values and a long-term vision. Detailed notes were captured at all meetings and were posted online on the project website which is hosted by DHHL. A meeting recap for each Beneficiary Consultation can be found in the appendices of this document.

The timeline for the Regional Plan update was as follows:

October 14, 2020: Leadership Meeting. The purpose of this meeting was to introduce the Regional Plan Update project to the leadership of the various homestead associations and organizations and to ask for their insight and guidance on the planning process. The meeting took place virtually via Zoom. Leaders from the following community/homestead organizations were asked to attend:

- Malu'ohai Homestead Association
- Kaupe'a Homestead Association
- Kānehili Homestead Association
- Ka'uluokaha'i Homestead Association
- Kapolei Community Development Corporation

Leaders from each organization were asked to assist with guiding the planning process for the regional plan update. Leaders assisted with selecting a tentative schedule for the beneficiary consultations. Representatives of each organization helped in guiding the site visit for the project consultants. And leaders also provided support in the distribution and publicity of meeting announcements and invitations for the various beneficiary consultations throughout the planning process.

October 27, 2020: Site Visit. The site visit included representatives of the various homestead and community organizations in the Kapolei region and project consultants. The site visit began at the Kapolei Heritage Center and proceeded throughout the region visiting most of the DHHL land holdings in the region. Some of the locations visited include: Kapolei Heritage Center, Kānehili Homestead, Kānehili Community Association Park, Ho'omaka Marketplace site, Ka'uluokaha'i Homestead, East Kapolei lots, Ka Makana Ali'i Shopping Center, Kaupe'a Homestead, Malu'ohai Homestead and Kalaeloa lots.

December 9, 2020: Beneficiary Consultation #1. The objective of this meeting was to explain the purpose and objective of regional plans in the DHHL planning system and the reason for the update to the Kapolei Regional Plan and to discuss the planning process and schedule with Kapolei beneficiaries. Additionally, this

meeting was meant to gather input from beneficiaries regarding their long-term vision for Kapolei, a list of important community values, and information about issues and opportunities in the region.

The beneficiary consultation was conducted online via Zoom. After some introductory presentations, beneficiaries engaged in small group discussions in virtual break-out rooms. They participated in a visioning exercise and were asked to answer questions such as:

1. What special things about this place do you want to preserve about Kapolei for the future generations?
2. What things do you want to create in this community, in this place?
3. What things do you want to change in this community, in this place?

Responses from break-out room discussions were recorded and shared with the larger group after reconvening. The major ideas and themes that came out of this meeting were used to develop a list of community values and to craft a vision statement for the region. See Appendix A for more information about this meeting.

May 4, 2021: Beneficiary Consultation #2. The purpose of this meeting was to present the draft vision statement and values to the community for feedback. This meeting also reviewed the issues and opportunities in the region and identified fourteen potential project ideas that might address those issues. Meeting participants helped refine the project descriptions and combine projects that complimented each other. A final list of proposed projects was posted to an online poll for prioritization. See Appendix B for a more detailed record of the meeting.

May 5, 2021 to May 19, 2021: Online Polling. Kapolei beneficiaries were asked to participate in an online poll to select the top five priority projects for the region. This poll was linked to the project website, and was open for participation from Wednesday, May 5, 2021 to Wednesday, May 19, 2021. A total of 60 responses was collected, and the top five priority projects were chosen from the responses in this polling process. See Appendix B for more details.

November 15, 2021: HHC Meeting. An informational submittal on the Regional Plan Update was presented to the Hawaiian Homes Commission for feedback at their regular meeting. Input from the Commission was incorporated into the draft of the Regional Plan Update.

December 9, 2021: Beneficiary Consultation #3. A draft of the Regional Plan Update was presented to beneficiaries for feedback. Input from participants was incorporated into the final draft that was prepared for adoption by the Commission.

March 21 & 22, 2022: HHC Meeting. Planning Office staff recommended HHC approval and adoption of the final draft of the update to the Kapolei Regional Plan at the March HHC Meeting.

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Vision and Values

“From the Pu’u in the uplands to the shores of Kualaka’i, Kapolei is a growing region that looks to its history, mo’olelo, ‘āina and kūpuna to build a strong foundation for our Hawaiian homestead communities. Kānaka embrace the area’s rugged climate and terrain, which motivates them to be resilient and self-sufficient. The wahi pana and kīpuka of this place are celebrated and stewarded for future generations.”

This vision statement was written based on the ideas and discussion of homesteaders that attended Beneficiary Consultations #1 and #2. At Beneficiary Consultation #2, drafts of the vision statement and community values were shared with attendees. Participants refined each of the community values and the vision statement to ensure that they best reflect beneficiaries of the Kapolei region.

Guiding Principles

The vision statement was based on the following values and guiding principles:

- Natural, Cultural and Agricultural Resources
- Wahi Pana
- Kūpuna
- Keiki
- Self-sufficiency

Natural, Cultural and Agricultural Resources

Preserve Kapolei’s rich natural, cultural, and agricultural history within new land uses and programs. Kapolei is a Town that has grown in what was once Country. That Country-feel should be incorporated wherever appropriate.

Wahi Pana

Traditional place names and wahi pana are of great value. Mo’olelo and histories are shared with homesteaders and the extended community of Kapolei to ensure that these celebrated places are respected, protected, and remembered into the future. Wahi pana, of old and new, throughout the region will be used by the community to gather and practice the native culture.

Kūpuna

Kūpuna hold an important role and place in native Hawaiian society. Spaces and resources in Kapolei will be used to support kūpuna so they can pursue full and healthy lives as they age in place.

Keiki

Resources for 'ōpio and keiki in Kapolei are a priority. There will be safe places for youth to spend their time and programs for them to learn and play near their homes.

Self-Sufficiency

Kapolei is a place where people can live, work and play. All the things that homesteaders need to have a healthy, thriving community can be found within the region. We strive for a Kapolei that offers an affordable lifestyle where people have time to enjoy their homes and their 'ohana.

Planning Area

Location

The Kapolei Region is located in the ahupua'a of Honouliuli, in the moku of 'Ewa on the mokupuni of O'ahu. This region includes four existing homestead communities: Malu'ohai, Kaupe'a, Kānehili and Ka'uluokaha'i. Also included in the Kapolei Region Plan are lands located in East Kapolei and Kalaeloa. There are currently 1,043 residential homestead lots constructed, 130 residential homestead lots have been awarded as undivided interest lots within the region. Of the 1,046 homestead residential lots constructed in the region, Malu'ohai has 226, Kaupe'a has 326, Kānehili has 404, and Ka'uluokaha'i has 160. Approximately 155 acres within the region are in long-term contracts, approximately 235 acres in short-term contracts, and approximately 200 acres unconstrained for future development. At full build-out of the proposed residential homesteads, the Kapolei Region aims to be the largest concentration of native Hawaiians in the world with nearly 2,000 homestead lots planned.

The moku of 'Ewa includes total DHHL landholdings of approximately 1,095 acres with 1,019 acres in the ahupua'a of Honouliuli and 76 acres in the ahupua'a of Waiawa. The DHHL Waiawa lands are located near the West Loch of Pearl Harbor and are all designated for Industrial Use. As there are no homesteading opportunities within the Waiawa lands, these lands are not included in the Kapolei Region and are subsequently not a part of the Kapolei Regional Plan. The planning area for this regional planning effort focuses on all the DHHL land holdings within the ahupua'a of Honouliuli.

The DHHL O'ahu Island Plan (2014) designated the following land uses within this Planning Area:

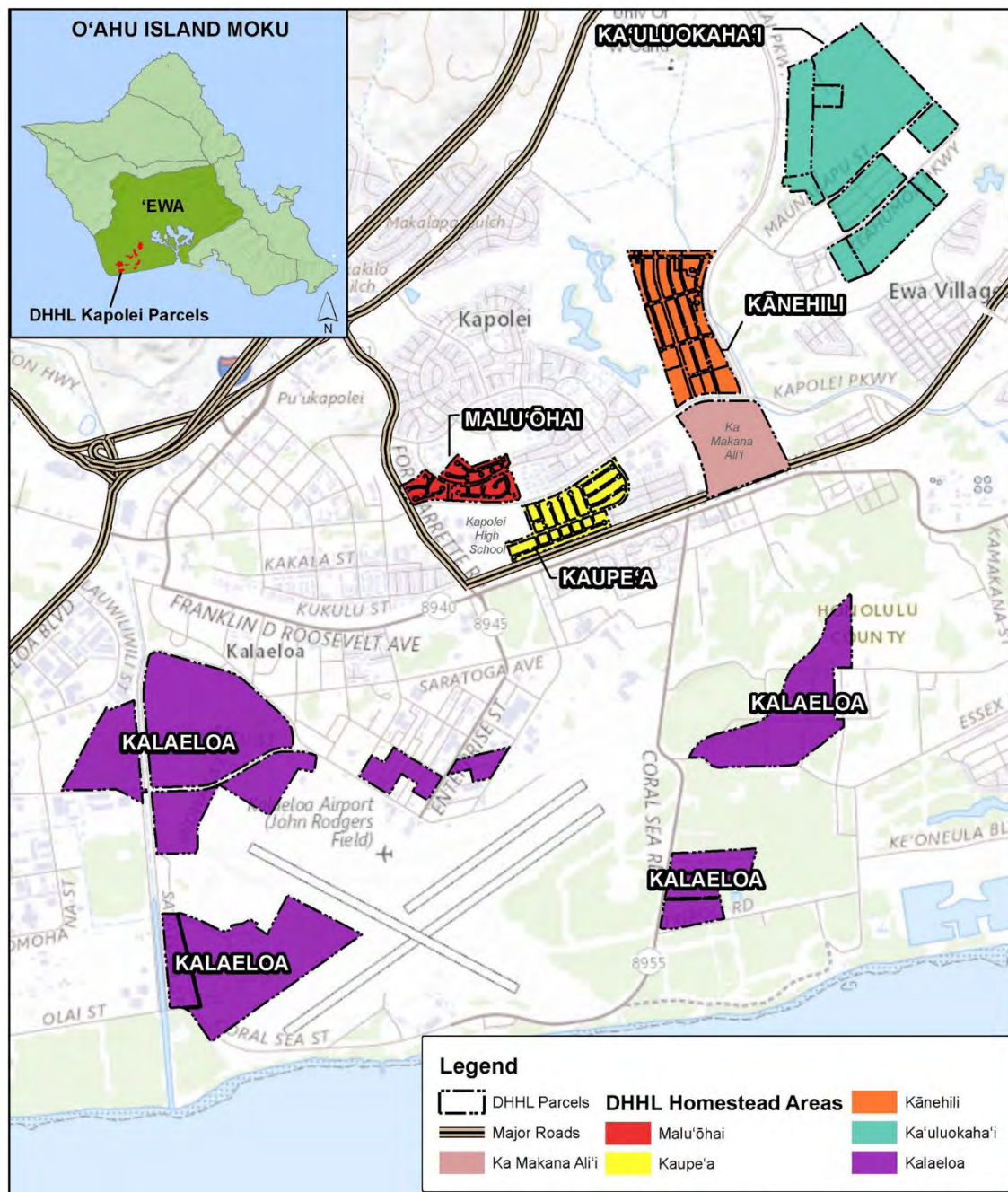
- Residential,
- Community Use
- Commercial, and
- Industrial.

It is important to note that all of the existing DHHL landholdings in the Kapolei Region are the result of an administrative initiative by the State of Hawai'i in 1994 and the Hawaiian Home Lands Recovery Act (HHLRA) enacted by the US Congress in 1995 to settle claims against the State and Federal governments regarding the loss of use of lands initially designated under the Hawaiian Homes Commission Act of 1920. Prior to this administrative initiative and the HHLRA, the Hawaiian Home Lands (HHL) Trust did not include lands located in the Kapolei Region. The State, in settling past land claims, found that thousands of acres of Hawaiian home lands were allegedly used, disposed of, or withdrawn from the HHL Trust by territorial or State executive actions since the Hawaiian Homes Commission Act (HHCA) was passed in 1920 by the US Congress. The lands in Kapolei located north of Roosevelt Avenue and East of Fort Barrette Road, which includes the four existing homesteads, were a part of the 16,518 acre settlement with the State of Hawai'i in 1994.

The HHLRA is a land settlement to account for the US's continued retention of lands that were initially available under the HHCA. The DHHL Kalaeloa lands were transferred to the HHL Trust as a result of the HHLRA following the closure of the Barbers Point Naval Air Station.

Since 2000, DHHL has focused on planning and development of the Kapolei region to meet the growing demand for residential homesteading opportunities on the island of O'ahu. The homesteads in the Kapolei region are some of the most recent and fastest growing homesteads within the State.

FIGURE 5 PROJECT AREA MAP

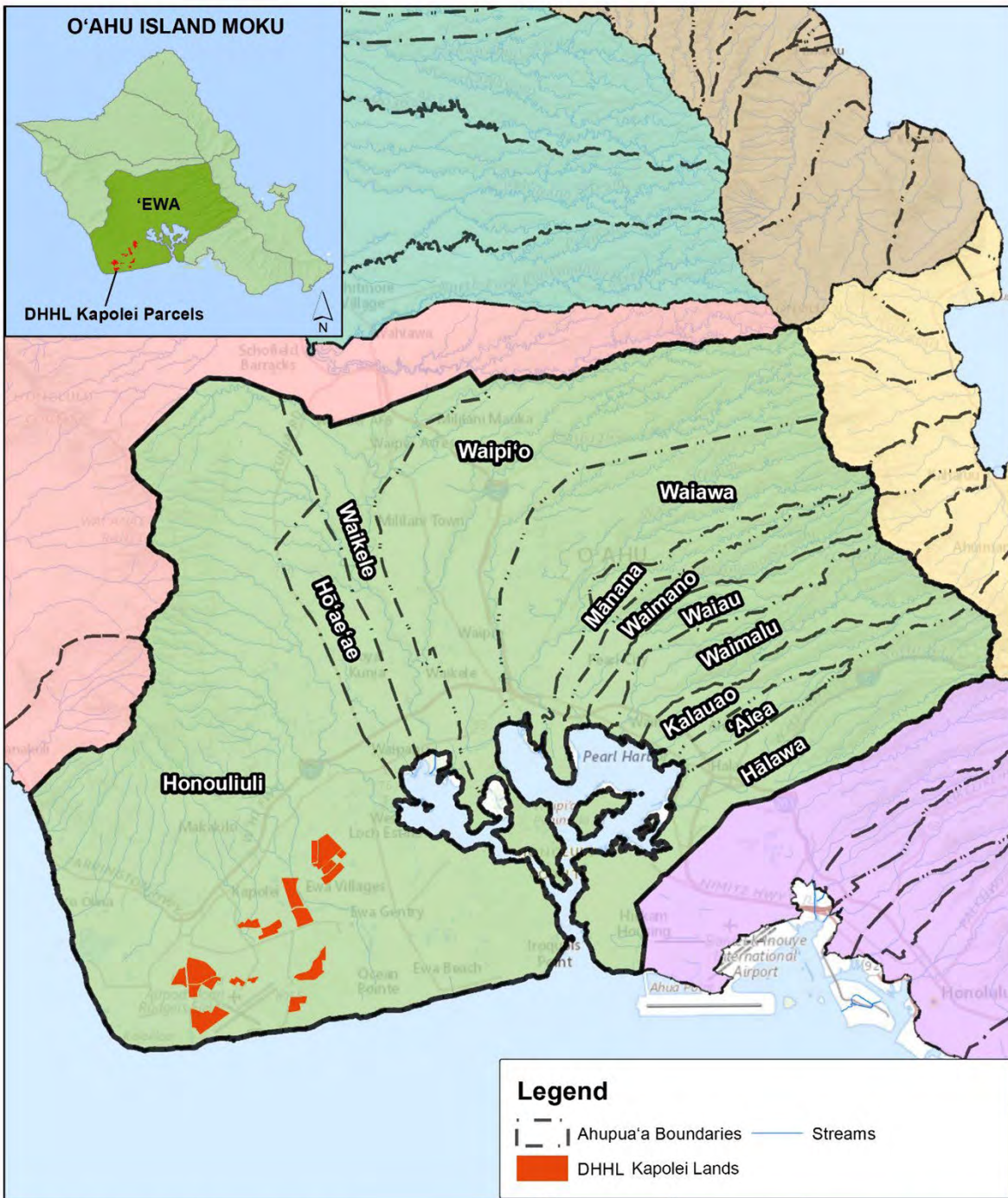


Kapolei Regional Plan Update
PLANNING AREA MAP
 November 2021

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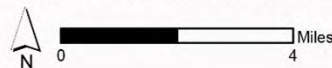


FIGURE 6 AHUPUA'A MAP



Kapolei Regional Plan Update
AHUPUA'A
 June 2021

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Regional History

The Kapolei Region is located on the southwest side of the mokupuni of O‘ahu. The moku of ‘Ewa covers the southcentral portion of the island. This moku borders the moku of Wai‘anae to the west and to the north, Ko‘olaupoko to the east and Kona to the southeast.

‘Ewa translates to mean crooked, out of shape or ill fitting. It is said that the akua Kāne and Kanaloa threw stones to determine the boundaries of the moku. The boundary stone for the moku of ‘Ewa was lost but later was found at Pili o Kahe, two hills north of the area that is now called Kahe Point, and the westernmost boundary of the moku. The moku of ‘Ewa stretches north to include part of the Central O‘ahu plains near what is now called Schofield and Wahiawā and extends to the top of the Ko‘olau mountains where it borders the moku of Ko‘olaupoko to the east. The southeast border of the moku runs along the boundary of the ahupua‘a of Hālawa and Moanalua. The entirety of Pu‘uloa or Pearl Harbor, is located within the moku of ‘Ewa.

Ahupua‘a

There are a total of 15 ahupua‘a found within the moku of ‘Ewa. The easternmost ahupua‘a is Hālawa, which translates to mean curve, as in a road or along a beach. North of Hālawa is the ahupua‘a of ‘Aiea. ‘Aiea literally means the *Nothocestrum latifolia* tree which is an endemic tree belonging to the Solanaceae or the Nightshade family, which once grew in the area. Next to ‘Aiea is the ahupua‘a of Kalauao, which means the multitude of clouds and is also the name of a stream in the same ahupua‘a. There is a famous waterfall found in this stream that is named Kahuawai, and was a favored resting place used by ali‘i. The ahupua‘a of Waimalu bounds Kalauao to the north and this name means sheltered water. Next to Waimalu is the ahupua‘a of Waiau, which means swirling water. Waimano is the name of the ahupua‘a to the north of Waiau. Waimano means many waters and is also the name of a stream in the ahupua‘a that was the bathing place of the shark demigoddess Ka‘ahupāhau. Next to Waimano are the ahupua‘a of Mānana, Mānana iki, Mānana Uka and Mānana Nui. Mānana means buoyant, iki means small, uka means upland and nui means large or plenty. Today these four ahupua‘a are often group together as one ahupua‘a simply called Mānana, however in the Index of Land Commission Awards, all four were listed as separate ahupua‘a. Next to Mānana is Waiawa which is named for the milkfish. North of Waiawa is the ahupua‘a of Waipi‘o which stretches from Pu‘uloa to the south to the ahupua‘a of Wai‘anae Uka located in Central O‘ahu. This ahupua‘a continues along the ridges to the top of the Ko‘olau mountains and borders the moku of Ko‘olaupoko to the east. Waipi‘o is the second largest ahupua‘a in the moku of ‘Ewa. West of Waipi‘o is the ahupua‘a of Waikele, which means muddy water. Next to Waikele is the small ahupua‘a of Hō‘ae‘ae which literally means to make soft or fine. There is a famous stone called Pōhakupili that is on the edge of the cliff on the boundary of Hō‘ae‘ae and Waikele which belonged to the akua Kāne and Kanaloa.

The last and largest of the ahupua‘a in the moku of ‘Ewa is Honouliuli which means dark bay. This ahupua‘a reaches from just north of Kahe Point power plant and the Waimānalo Gulch and follows the mauka ridgeline to the mountains above Camp Pālehua. It continues along the ridgeline passed the many pu‘u of the southern Wai‘anae Mountains to just passed Pu‘u Hāpapa near the border of the moku of Wai‘anae. The ahupua‘a of Honouliuli continues towards Central O‘ahu to the Schofield Barracks area and then follows a path near Kunia Road south to the West Loch area of Pu‘uloa. Makakilo and the Kunia Camp residential developments are all located within Honouliuli. Honouliuli also includes all the lands west of Pu‘uloa, from Iroquois Point to Kalaeloa. All the residential developments in Kapolei, ‘Ewa and ‘Ewa Beach are a part of the ahupua‘a of Honouliuli.

Wahi Pana and Additional Places of Importance

There are many wahi pana or places of importance that are found within the Kapolei Region. One of the most significant places is Pu'uokapolei, the name of a hill and heiau located in the center of the Kapolei area near the current Kapolei Regional Park. Pu'uokapolei means Hill of (the) beloved Kapo, Kapo being the sister of Pele. This heiau was the largest and most sacred of all the heiau in Honouliuli. It was used for solar observation, was a place of governance during ancient times, and was also the residence of Kamaunuanoho, the konohiki of this area. Today, this Pu'uokapolei is protected and maintained by The Ulu A'e Learning Center.

Another famous landmark in this area is the famed bay Pu'uloa, which means long hill. It is the site of the current military harbor called Pearl Harbor. This area was referred to as Ke awa lau o Pu'uloa, meaning the many channels or lochs of Pu'uloa. Pu'uloa is also the name of the salt ponds that were located to the east of the harbor. These salt ponds were used to establish Pu'uloa Salt Works, a commercial salt operation located near Keahi Point. These salt ponds were used for commercial salt production from the mid 1800's to the early 1900's. Other salt ponds were located along the shoreline in the West Loch area. Also, in the West Loch area were well-known kalo lands. Today the salt ponds and much of the traditional kalo lands have been covered with residential development.

There are many pu'u located in the uplands of Honouliuli. The tallest is Pu'u Hāpapa at approximately 2,800 feet above sea level. Other well-known pu'u in this area are: Pu'u Kānehōa, Pu'u Kaua, Mauna Kapu, Pālehua, Pu'u Kapua'i, Pu'u Makakilo, and Pu'u Pālailai.

Kahe is a land section found within Honouliuli nearest the boundary line of the moku of Wai'anae. Kahe means to flow, as of water. South of Kahe is an area called Ko'olina. Ko'olina means delightful or lovely and refers to the beaches and lagoons in the area now known as Ko 'Olina Resort. Kalaeloa is the name of the southwestern-most point of the island of O'ahu, the moku of 'Ewa and the ahupua'a of Honouliuli. This point has also been called Barbers Point. Kalaeloa is also the name used to refer to the lands that were conveyed to the State and County from the decommissioning of the old Barbers Point Naval Air Station. One'ula means red sand and is the name of a well-known beach park located makai of Ocean Pointe development between White Plains Beach or Kualaka'i to the west and the 'Ewa Beach area to the east. Kualaka'i is the traditional name of the famous White Plains Beach. Kualaka'i means sea cucumber and is also the name of the large mauka to makai access road in Kapolei, Kualaka'i Parkway.

Also located within the ahupua'a of Honouliuli is the Honouliuli National Historic Site. This site is the location of a former Japanese Internment Camp that was established during World War II following the attack on Pearl Harbor. It was in operation from 1943 to 1946 and was the largest and longest-used confinement site in the Hawaiian Islands. This internment camp housed Japanese-Americans, German Americans, Americans of other European ancestry and non-combatant labor conscripts from Japan, Korea, Okinawa, Taiwan and Italy. Though it is not currently open to the public, it is a recognized National Historic Site and is managed by the US National Park Service.

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Existing Land Uses

DHHL has established land use designations for their lands across all islands. These land use designations are established in the Island Plans. The following are descriptions of the land use designations that are found within the Kapolei region according to the DHHL O'ahu Island Plan (2014).

- **Residential:**
 - Residential lot subdivisions built to County standards in areas close to existing infrastructure.
 - Lots awarded to applicants on the residential waiting list.
 - Higher densities allowed on O'ahu. Minimum lot size of 5,000 square feet Infrastructure is built to County standards and includes potable water, all utilities, and paved roads.
 - Recently enacted administrative rules permit the development of multi-family units.
- **Community Use.**
 - Common areas for community uses and public facilities; includes space for parks and recreation, cultural activities, community based economic development, utilities and other public facilities and amenities.
 - No lot size restrictions at present. Infrastructure must meet County standards.
- **Commercial:**
 - Lands suitable for retail, business, and commercial activities.
- **Industrial:**
 - Lands suitable for processing, construction, manufacturing, transportation, wholesale, warehousing, and other industrial activities.

Total Lots and Acreage

Land Use	Total Lots/Units/Parcels	Total Acreage
Residential	1,116 homestead lots	205.5 acres
Proposed Residential	705 homestead lots 550 multi-family units	177.4 acres
Community Use	7 parcels	35 acres
Commercial	4 parcels	80 acres
Industrial	10 parcels	550 acres
Total:	1,821 homestead lots 550 multi-family units 21 parcels	1,047.9 acres

Homestead Uses

Malu'ohai is the first homestead to be built in the Kapolei Region and consists of 226 lots developed on approximately 37 acres of land. This homestead is located mauka of Kapolei Parkway across from Kapolei High School in Village 6 of the Villages of Kapolei. Malu'ohai is a part of the Villages of Kapolei Master Association. Of the 226 homesteads in Malu'ohai, 70 were built as a part of the Kapolei Ho'olimalima rent-to-own project that was developed by Mark Development, Inc. Ho'olimalima was an affordable rental project that targeted beneficiaries on the waitlist who made less than 50% and 60% of the Honolulu median income. Initial rent-up and income certifications began in 2001 and full occupancy was achieved by January 2002. This project allowed beneficiaries to rent at affordable rental prices and offered the option to purchase the

home after 15 years. Renters were given financial counseling support and assistance during their time as renters in preparation for the end of the 15-year rental term. As of January 2018, all the homes in Ho'olimalima were converted to homeownership. The remaining 156 homestead lots in Malu'ohai are a mix of 111 turnkey and 45 self-help homes.

Kaupe'a is the second homestead in the Kapolei region and is also located in the Villages of Kapolei and is a part of the Villages of Kapolei Master Association. This homestead includes 326 turnkey homes constructed in three phases on 52 acres located between Kapolei High School and Kapolei Middle School makai of Kapolei Parkway.

Kānehili is the third homestead developed in Kapolei and is located on 92 acres mauka of the intersection of Kualaka'i Parkway and Kapolei Parkway. This homestead includes 404 homestead residential total lots. Gentry Kapolei Development, LLC completed all 375 turn-key lots which are now occupied. There are 8 owner-builder lots with 6 that are occupied and 2 that are pending award. The Council for Native Hawaiian Advancement assisted with 10 self-help lots which are all occupied. Habitat for Humanity is assisting with 11 self-help lots, 8 are occupied and 3 are in progress.

Ka'uluokaha'i is the fourth homestead to be developed in the Kapolei Region. Ka'uluokaha'i homesteads are the first to be built in this region that are located east of Kualaka'i Parkway, between Keahumoa Parkway and Maunakapu Street. Ka'uluokaha'i homestead includes 160 single-family lots. These homestead lots are located near the planned Rail Transit Station along Kualaka'i Parkway. A total of 139 turnkey homes were developed by Gentry. 135 of these turnkey homes are occupied. The construction on the remaining 4 lots is complete, and these homes will be occupied pending the buyer's loan processing. There are a total of 21 owner-builder lots in this homestead that are in various stages of completion. A planned elementary school will be built to the east of Increment IIB. The new middle school has completed construction on Phase I and opened for classes in August 2020. This middle school is located to the west of the homestead. Additional homestead development is planned for the surrounding DHHL lands.

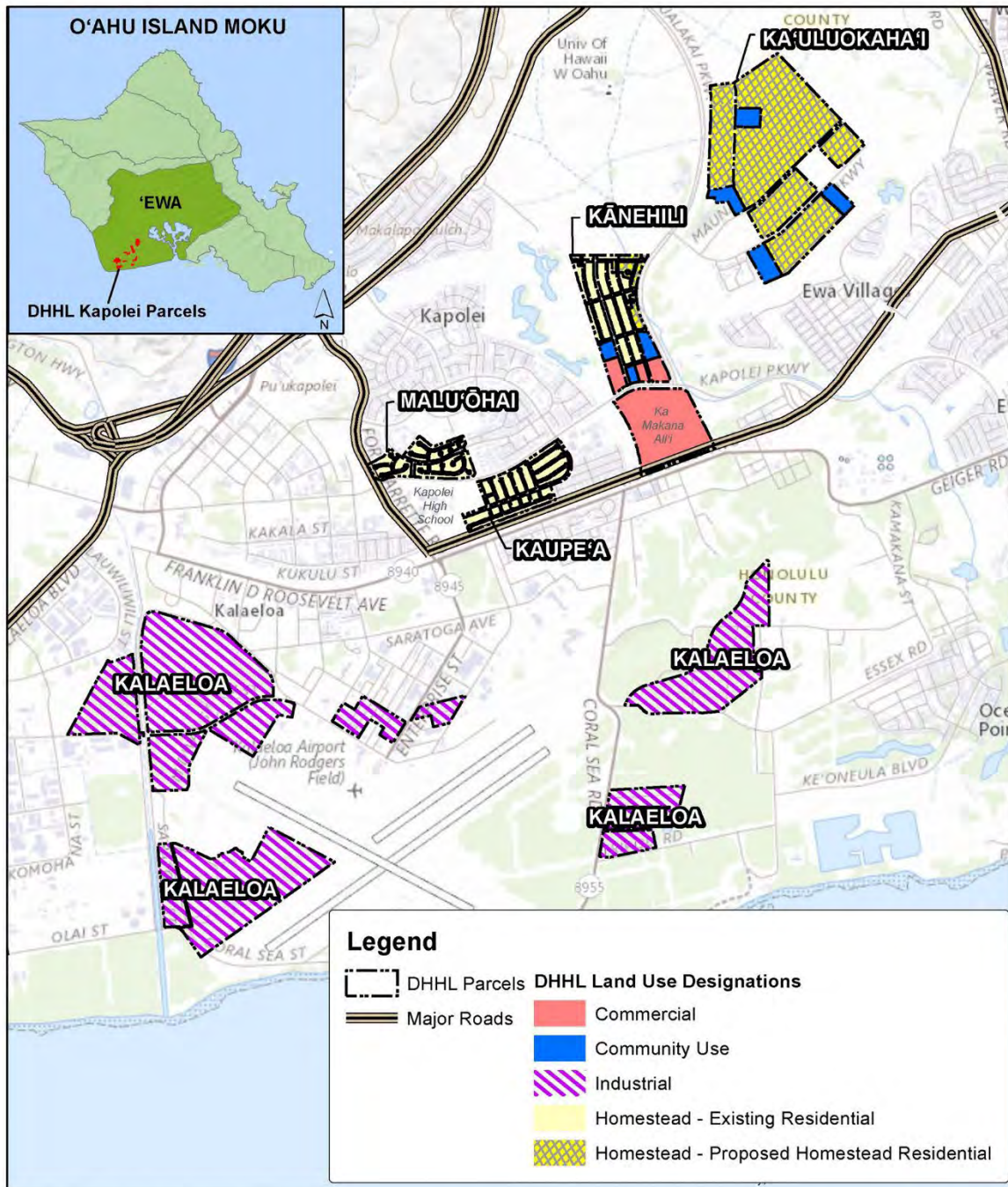
Construction plans for Increment IIC, 130 single-family lots, are pending approval by City & County of Honolulu agencies and construction is scheduled for summer 2022 to late 2023. Increment IIA is a Transit Oriented Development that will consist of multi-family rental units. DHHL anticipates the release of request for development proposals in late 2023. This development will likely be for 250 units, though the exact number is dependent upon the proposals received. Increment IIA is a development of 182 single-family lots, and design work for this development will start mid-2022. Increment IID is planned for 167 single-family lots. Increment IIF is planned for 226 single-family lots. And Low Density Apartments (LDA) 3 is planned for multi-family and/or retail use. LDA3 is estimated to have 250 multi-family rental units, though the exact number of units is dependent on the proposals received.

Community Uses

Kānehili Community Association Park is a 4.59-acre parcel that has been developed as a community park. This park features a playground and open green space and is intended to serve the surrounding beneficiary community. Some of the funding for the construction of the park came from a community benefit package agreement with DeBartolo Development, LLC who built Ka Makana Ali'i Shopping Center. The Kānehili Community Association is currently working on planning and design of future phases of the park construction as well as securing additional funding to complete full build out of the remaining acreage of the parcel.

Kapolei Heritage Center is a community building that is located mauka of the DHHL Offices on Kinoiki Street on a parcel of land that is called Kīpuka, meant to offer space for use by community organizations. The Council for Native Hawaiian Advancement is also located on a portion of the Kīpuka parcel. The Heritage Center is managed by the Kapolei Community Development Corporation (KCDC), whose board consists of community leaders from the various DHHL Kapolei homesteads. KCDC began a capital campaign in 2013 and received over \$2 million in state and private funds to begin construction on the Heritage Center. Phase I of the construction was completed in July 2016 and includes a certified community kitchen, two classrooms, and restrooms. Phase II of the Heritage Center will include a hālau or large gathering space. Phase III will include offices and a gallery to honor Prince Jonah Kūhiō Kalanianaʻole and the Hawaiian Homes Commission Act of 1921.

FIGURE 7- DHHL LAND USE DESIGNATION MAP



Kapolei Regional Plan Update
DHHL LAND USE DESIGNATIONS
 June 2021

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Commercial Uses

Ka Makana Ali'i Shopping Center is a 1.4 million square foot commercial development located on the makai corner of the intersection of Kualaka'i Parkway and Kapolei Parkway. This parcel is 67.7 acres and is designated in the DHHL O'ahu Island Plan (2014) for commercial use. At the end of 2014, a General Lease agreement was signed by DHHL with DeBartolo Development, LLC for a lease period of 65-years. The lease agreement is expected to generate more than \$200 million in rent revenue. According to the 2019 DHHL Annual Report, this lease generated approximately \$4.7 million in annual lease rent for DHHL.

Ho'omaka Marketplace is a community commercial development that is located on a 1.05-acre parcel at the corner of Kualaka'i Parkway and Kapolei Parkway, directly across from Ka Makana Ali'i Shopping Center. This Marketplace will be anchored by Longs Drugs, Hele Gas Station, 7-Eleven and Chick-fil-A, and will be developed by KCDC in partnership with KZ Development. Groundbreaking is currently anticipated for 3rd quarter of 2022.

Industrial Uses

All of the DHHL lands located in Kalaeloa are designated for Industrial use according to the O'ahu Island Plan (DHHL 2014). There are approximately 224 acres are in short- and long-term dispositions. Land uses in Kalaeloa include alternative energy, industrial base yards, commercial operations, stabling, office space, public service uses, and recreation.

State and County Land Use Designations

In general, the DHHL Island Plan land use designations are consistent with State Land Use Districts, and County Zoning. Where they may be inconsistent, DHHL may exempt itself from the State Land Use Law and County land use regulations pursuant to the HHCA, Section 204.

State Land Use Districts

The State Land Use Agricultural District includes lands for the crop cultivation; aquaculture; raising livestock; wind energy facilities; timber cultivation; agriculture-support activities, such as mills, employee quarters, etc.; and land with significant potential for agricultural uses. Only one parcel out of the DHHL land holdings in the Kapolei Region is located in the State Land Use Agricultural District. This parcel is located mauka of Malakole Street near the intersection of Saratoga Avenue and is currently undeveloped. There is a portion of Agriculture District land located east of Ka Makana Ali'i Shopping Center that includes the makai parcel of "Varona Village," part of the 'Ewa Villages development. They are not currently a part of the DHHL land holdings, but could potentially be transferred to the land inventory in the future.

The State Land Use Urban District is generally for lands characterized by "city-like" concentrations of people, structures, or services and includes vacant lands for future development. All DHHL land holdings, other than the one parcel within the Agricultural District, are located in the State Land Use Urban District. Please refer to Figure 8, State Land Use Districts Map, below.

Kalaeloa Community Development District

The Kalaeloa lands were formerly zoned F-1 Federal and Military Preservation District while under Federal ownership and used as Barbers Point Naval Air Station. However, the County zoning was amended following the decommissioning and official closure of Barbers Point Naval Air Station in 1999. Approximately 550 acres of land formerly a part of the Naval Air Station were transferred to the DHHL land inventory as a result of the

HHLRA land settlement. These lands are currently a part of what is called the Kalaeloa Community Development District (CDD). Effective 2012, the Kalaeloa CDD Rules and Reserved Housing Rules supersede the Kalaeloa Community Redevelopment Plan (2001) and other County Zoning designations. Most of the DHHL land holdings in the Kalaeloa CDD are zoned T-3 General Urban Zone with one portion of a parcel zoned T-2 Rural/Open Space Zone. The T-3 General Urban zone is characterized by mixed use projects with a commercial emphasis. T-2 Rural/Open Space zones shall consist primarily of open space, parks and limited agricultural use. Cultural, archaeological and environmental uses and sites shall also be located within the T-2 zone. It should be noted that HCDA is currently updating its Kalaeloa Master Plan and Rules. Please refer to Figure 9, Kalaeloa Community Development District Zoning Map, below for current zoning in Kalaeloa.

City and County Zoning

Malu'ohai is zoned R-5 Residential use. Kaupe'a is zoned R-3.5 Residential use, A-1 Low-Density Apartment, and P-2 General Preservation. Both of these homesteads are used primarily for single-family residential housing. Kānehili is zoned AG-1 Agricultural Cluster by the County, but is used as a mixture of Residential, Commercial and Community Uses. Ka'uluokaha'i homestead and the remaining East Kapolei II lands are designated AG-1 Agricultural Cluster by the County but are currently used for mixed use Residential, Proposed Residential, and Community Use. Please refer to Figure 10, County Zoning Map.

Surrounding Land Ownership and Uses

There are a mix of public and private large landowners in the Kapolei Region. Makaiwa Hills, LLC and D.R. Horton Schuler Homes are two large private landowners who own lands in the Makakilo area. Hunt Development is a large private landowner and master developer who owns over 500 acres of land in the Kalaeloa area. The State of Hawai'i owns large parcels of land surrounding the DHHL homesteads of Malu'ohai, Kaupe'a and Kānehili. These State-owned lands are used for Kapolei High School, Kapolei Middle School, and Kapolei Elementary School as well as 500 acres for the University of Hawai'i West O'ahu campus. The East Kapolei II lands are bordered to the north and east by the Ho'opili Development. Ka'uluokaha'i also includes State of Hawai'i land that is under development for use for a new Middle School and another parcel that will be used to develop a new Elementary School. In addition to the State of Hawai'i lands that will be used for schools, the Hawai'i Housing and Finance Development Corporation (HHFDC), an agency of the State of Hawai'i, owns two parcels in Ka'uluokaha'i. One is the Ko'oloa'ula Apartments and Keahumoa Place. There is also a large parcel in Ka'uluokaha'i that is the KROC Community Center, owned and operated by the Salvation Army. Please refer to Figure 11, Large Landowners Map.

Regional Revenue Generation

The DHHL land inventory in the Kapolei region is the largest source of DHHL's revenue from leases, licenses and permits in the State. There are a variety of land uses that generate revenue through annual lease rent payments to the Department. The following table lists the types of land uses, respective acreages and annual lease rents included in the 2019 DHHL Annual Report. This table excludes revenue and acreage from homestead residential uses, as well non-revenue generating acreage for lands used for community use, easements, and public service. This table only includes lands that generated revenue for the Department according to the DHHL Annual Report for 2019. Approximately 296 acres of the DHHL land inventory in the Kapolei region generated a total of \$7,568,231. The total land inventory for General Leases and Licenses on O'ahu is 6,059.88 acres, with Kapolei's 296 acres making up approximately 5% of the lands generating revenue on the island. Total revenue from all DHHL General Leases and Licenses Statewide is \$9,756,889.32,

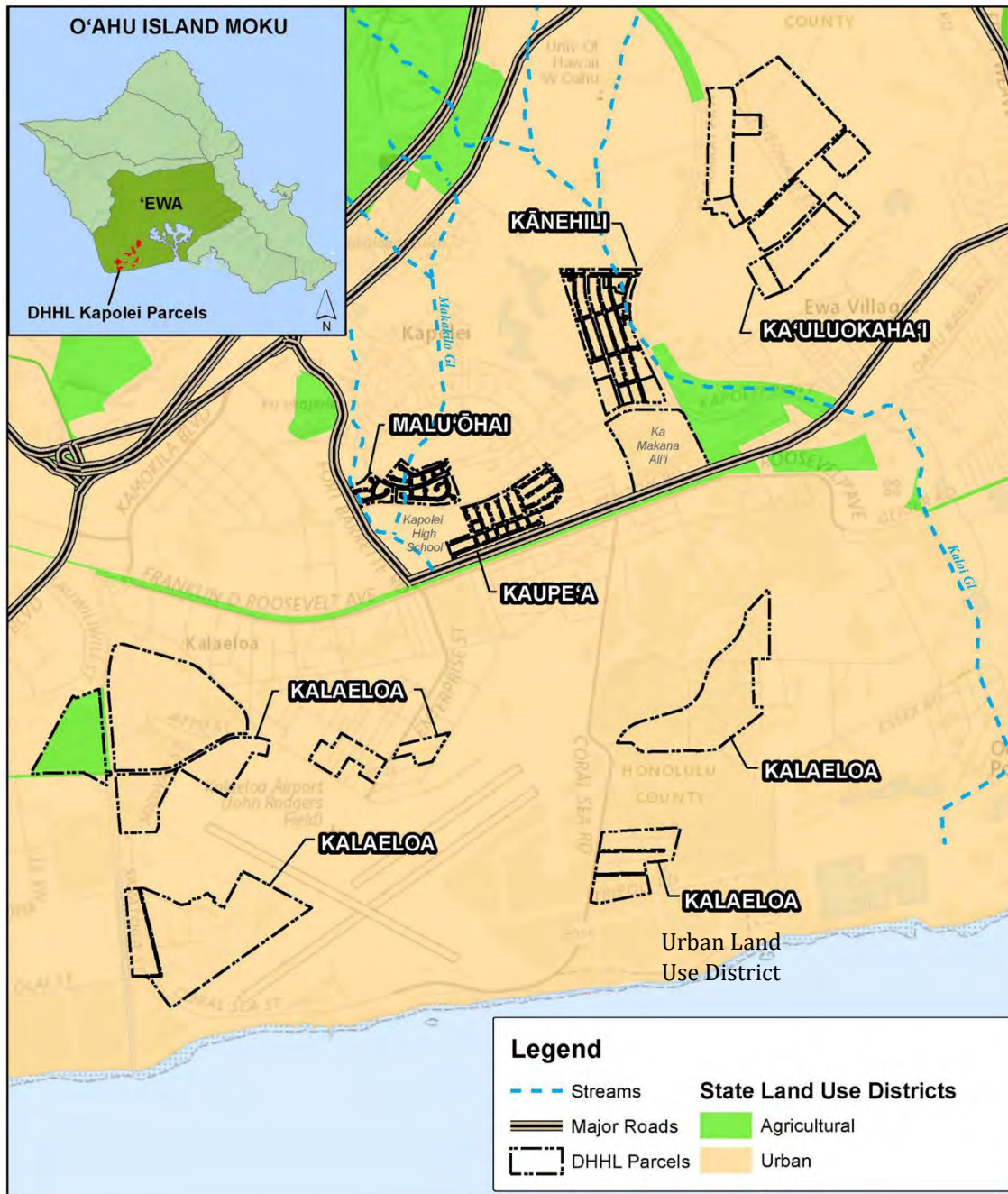
with Kapolei generating approximately 77.5% of this revenue.

TABLE 1 - KAPOLEI REGIONAL REVENUE IN 2019

Land Use	Acres	Annual Lease Rent
Agricultural	78.64	\$18,540
Alternative Energy	69.85	\$376,480
Commercial	72.96	\$4,853,806
Industrial	58.64	\$2,135,564
Office	0.31	\$12,578
Public Service	10.11	\$168,383
Recreation	0.51	\$480
Stabling	5	\$2,400
TOTAL	296.02	\$7,568,231

Source: 2019 DHHL Annual Report

FIGURE 8 - STATE LAND USE DISTRICTS MAP



Kapolei Regional Plan Update
STATE LAND USE DISTRICTS
 June 2021

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FIGURE 9 - KALAELOA COMMUNITY DEVELOPMENT DISTRICT ZONING MAP

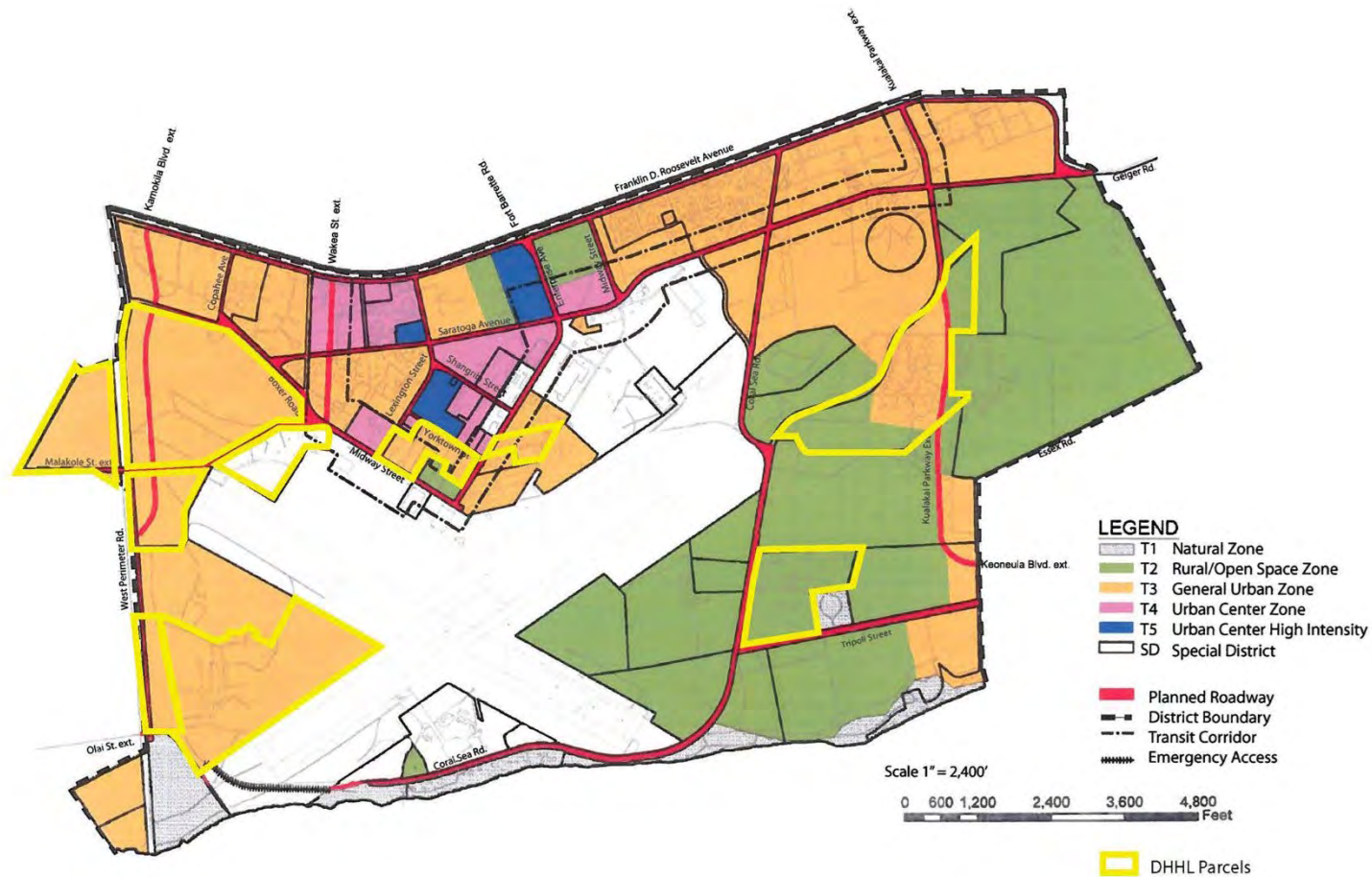
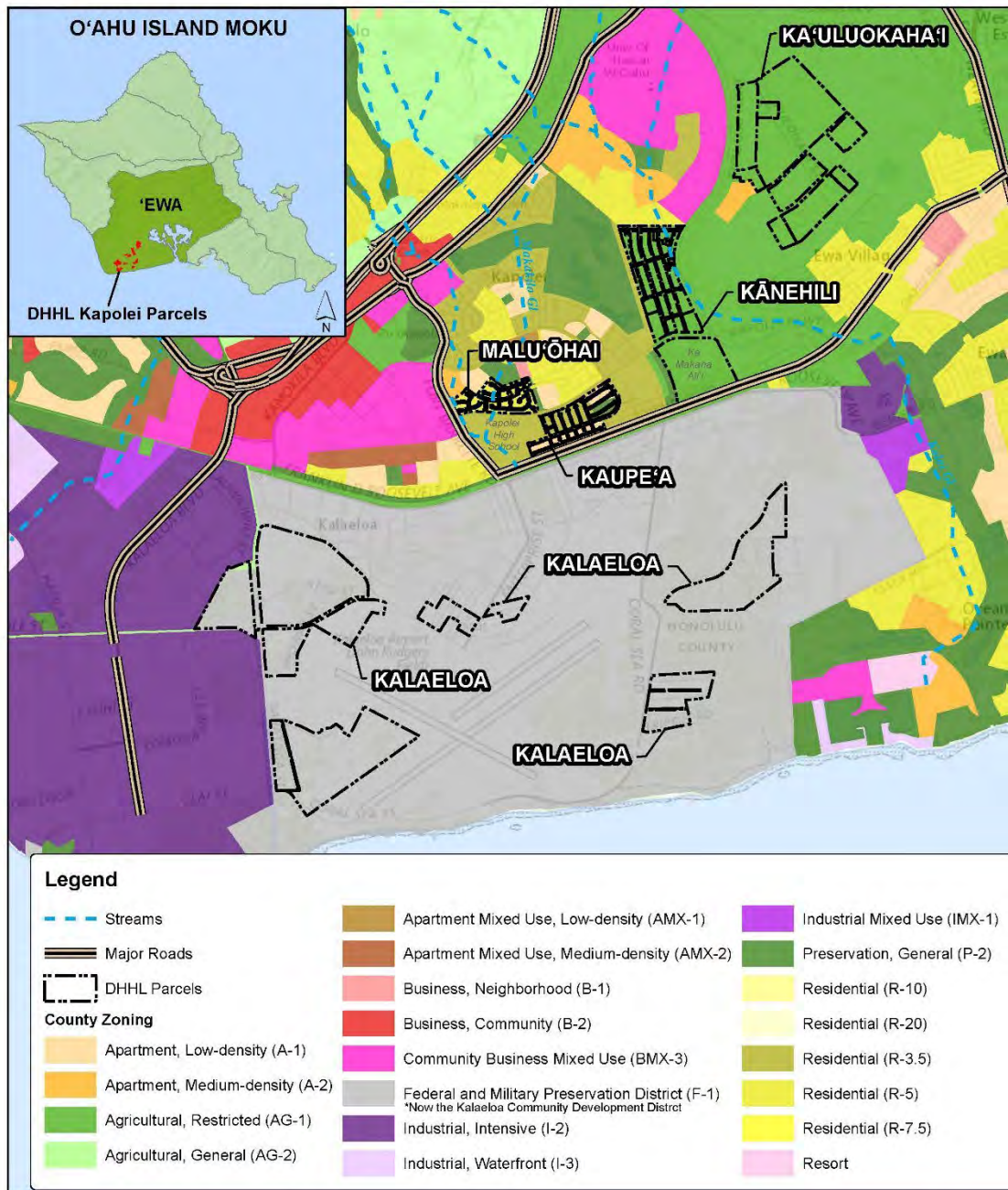


FIGURE 10 - COUNTY ZONING MAP

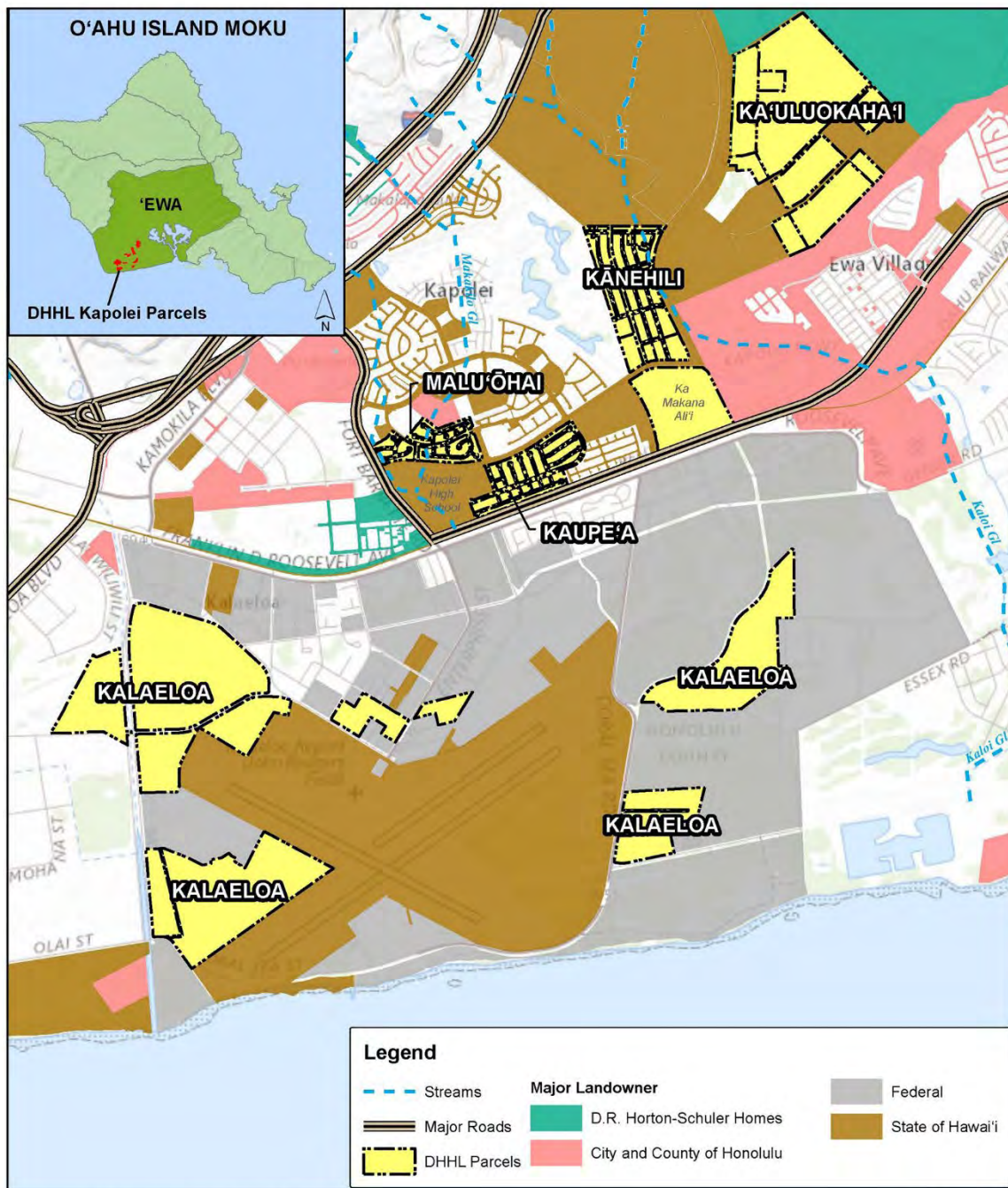


Kapolei Regional Plan Update
COUNTY ZONING
 August 2021

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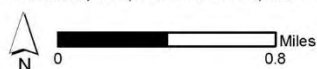


FIGURE 11 - LARGE LANDOWNERS MAP



Kapolei Regional Plan Update
LARGE LANDOWNERS
 June 2021

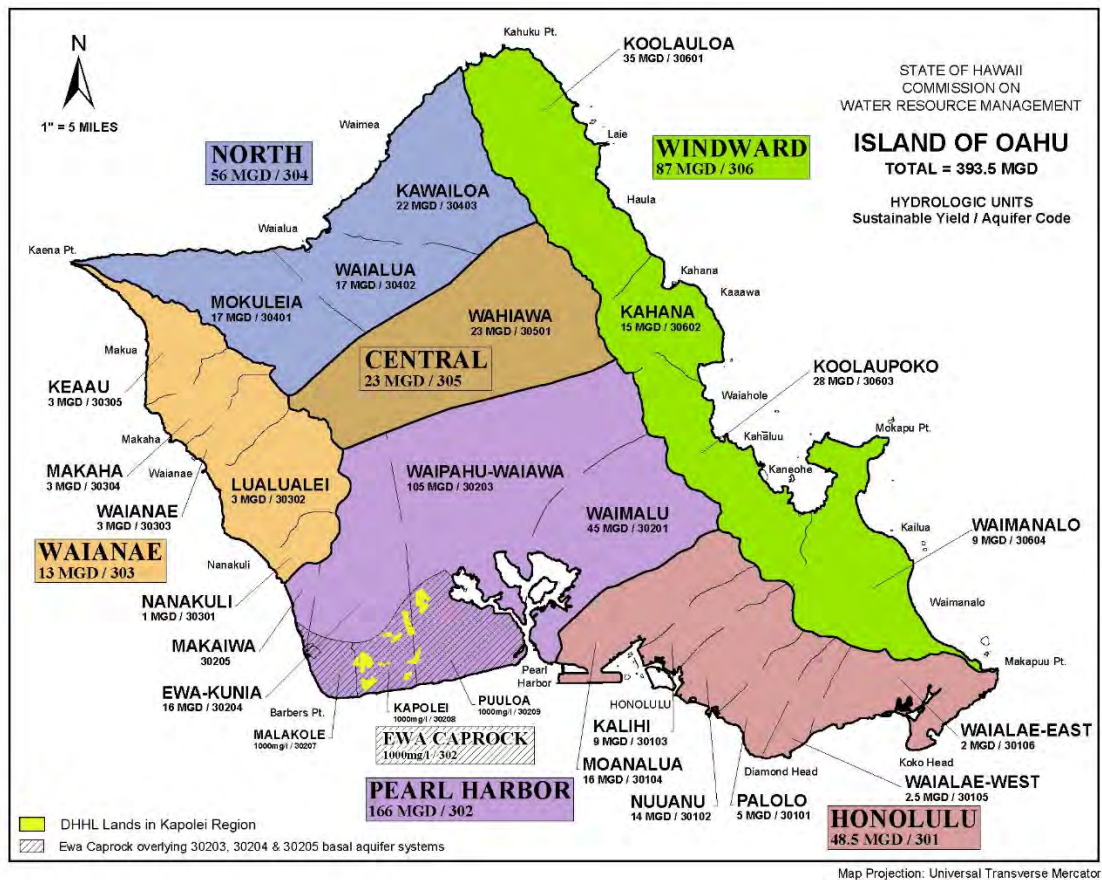
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Infrastructure

FIGURE 12 - O'AHU ISLAND AQUIFER MAP



Water Source and System

Potable Water

Potable water needs for DHHL's Kapolei homesteads and the Ka Makana Ali'i Shopping Center are serviced by the City and County of Honolulu Board of Water Supply (BWS). DHHL's East Kapolei water needs were identified in the East Kapolei Development Master Plan Water System Study (revised, 2007) and improvements to the existing BWS water system were cost shared with other owners/developers to be serviced by the same system. The main water infrastructure is already in place and servicing DHHL homesteads.

The potable water system for Kapolei falls within two BWS water service areas: 215-foot and 440-foot, with most of DHHL's development lying within the 215-foot service area. Water for these systems is drawn from

BWS ground water wells in the 'Ewa and Waipahu-Waiawa Aquifer System Areas, which roughly extend from Makaīwa to Waipi'o.

Kalaeloa water needs are provided by Hawai'i Water, formerly the Kalaeloa Water Company, which gets its water from the Barber's Point Shaft. Hawai'i Water is a subsidiary of California Water Service Group, and they acquired the Kalaeloa Water Company from Hunt Development in November 2020. Hunt Development had acquired the Kalaeloa Water Company from the Navy in 2017.

Non-Potable Water

Non-potable R-1 recycled water is planned for irrigation of large, landscaped areas, parks, and street landscaping from the Board of Water Supply Honouliuli Water Recycling Facility. This facility treats effluent from the City's Honouliuli Wastewater Treatment Plant, which services 'Ewa and Central O'ahu. A storage reservoir is planned at a spillway elevation of 215-feet and irrigation mains are planned within the Kapolei Parkway and Kualaka'i Parkway corridors.

Wastewater Systems

Malu'ohai, Kaupe'a, Kānehili, Ka'uluokaha'i, and Ka Makana Ali'i Shopping Center are serviced by the City wastewater system, though the City has yet to accept them for operation and maintenance. DHHL is responsible for the maintenance of the pipes and intakes until the City accepts these duties. Much of Ka'uluokaha'i's infrastructure has been constructed, with the infrastructure for utilities for each increment that will be installed during construction of the roads and grading of the lots.

Hawai'i Water provides wastewater services to Kalaeloa, the former Barber's Point Naval Air Station. Much of the undeveloped DHHL lands in Kalaeloa do not have wastewater infrastructure and will need to have it developed to support future uses.

There are three Wastewater Pump Stations located in the Kapolei Region: Makakilo City Pump Station, Kapolei Business Park Pump Station, and an additional Pump Station located in the Kapolei Region makai of the Kalaeloa Airfield that is currently owned by Hawai'i Water Company, LLC. Honouliuli Wastewater Treatment Plant, the regional wastewater treatment plant, and Honouliuli Water Recycling Facility, the City's largest water recycling facility, are also located in the 'Ewa plain near the Kapolei region.

Other Wastewater Infrastructure

There are a number of cesspools located on DHHL lands in Kalaeloa. Cesspools formerly on DHHL lands near the Kaupe'a and Malu'ohai homesteads were removed during the construction phases of the homesteads and replaced with connections to the City sewerlines. See Figure 13, Wastewater Infrastructure Map, below. No cesspools are located in the Kānehili homestead, community use lots or commercial lots. No cesspools are located in E. Kapolei parcels or Ka'uluokaha'i homestead. There are approximately 88,000 cesspools statewide, most of which are small capacity cesspools. The Hawai'i State Department of Health Wastewater Branch oversees and permits all wastewater systems in the islands, including cesspools. Current regulations require that all cesspools be upgraded, converted or closed by January 1, 2050 due to the environmental impacts associated with cesspools. Property owners, operators and lessees will need to comply with all federal and state requirements for cesspools.

Water and wastewater systems located in the Kalaeloa area have been privatized into the Kalaeloa Water Company (KWC) which is owned by Hawaii Water Company, LLC and operated by Pural.

Electrical Infrastructure

All of the DHHL land inventory located in Kapolei and East Kapolei is connected to the Hawaiian Electric Company (HECO) power grid, which supplies electrical power to most of O‘ahu island. In Kalaeloa, the majority of the electrical system is still owned by the United States Navy. There are several sectors that are connected to the HECO grid. The Coral Sea Road is energized and connected to HECO. DHHL land holdings along Coral Sea Road can request electrical service directly from HECO.

The Enterprise Energy Corridor Project is a project in partnership with the Hawaii Community Development Authority (HCDA) and the Department of Transportation (DOT). The HCDA portion of the project was completed in January 2020 and included installation of underground duct work between Kapolei Parkway and Midway Road fronting the Kalaeloa Airport. The DOT portion of the project to energize the duct lines is still in the design phase and HECO has a contract to complete this portion of the project by Summer 2021.

Hunt Development is pursuing the development of a Department of Veteran’s Affairs Multi-Specialty Outpatient Clinic located their lands on the west side of Kalaeloa near Kamokila Boulevard by the developer VA Aloha, LLC. In order to complete this project, new electrical power from the HECO grid will need to be routed to the west side of Kalaeloa.

Road System – Existing and Planned

The Kapolei Region has extensive roadway networks developed in the central area. Vehicular access to this side of the island is primarily from the H1 freeway system which travels from the moku of ‘Ewa to the moku of Kona, where the primary urban center is located. Another major roadway in the Kapolei Region is Farrington Highway, which stretches from the moku of ‘Ewa to the moku of Waialua on the North Shore of the island.

Kapolei Parkway and Franklin D. Roosevelt Avenue are major east-west access roadways in the region. Makakilo Drive/Ft. Barrette Road, Kualaka‘i Parkway and Fort Weaver Road are major mauka-makai access roadways. Much of the Kalaeloa roadway network is underdeveloped and underused. Current major roadways in Kalaeloa include Coral Sea Road, Roosevelt Avenue, and Enterprise Street. Future increased use and development in the Kalaeloa area will require additional roadway infrastructure.

Hunt Development is pursuing development of a Veteran’s Affairs Multi-Specialty Clinic located on its lands in the west side of Kalaeloa. This development will require construction of an extension to Kamokila Boulevard. Plans for this project show the extension of Kamokila Boulevard into the west side of the Kalaeloa Community Development District. VA Aloha, LLC is the developer for this project.

In consultation with the State of Hawai‘i Department of Transportation, there are several planned projects within the Kapolei region which will have impacts on DHHL land holdings and Kapolei beneficiaries. These projects are listed below.

Short-range Planned Projects:

- **Interstate Route H-1, Kapolei Interchange Complex, Phase 3.** The project would widen Farrington Highway, enlarge the H-1 Freeway loop offramp to Kalaeloa Boulevard, construct the Mauka Frontage Road from Makakilo Drive to Kapolei Interchange, and construct Pālailai Interchange.
- **Fort Barrette Road Railroad Crossing Improvements.** The project includes upgrading the existing railroad crossing from asphalt to concrete, replacing existing wooden tracks and ties, and installing new automated crossing gates and signals which will be synced to the new traffic signal at Franklin D. Roosevelt Avenue.

- **Harbor Access Road.** The scope of this project could include, but is not limited to, the design and construction of a new four-lane divided concrete roadway, auxiliary lanes, sidewalks, bike lanes, traffic signals, intersections, associated utilities, grading, landscaping, and connections to future Department of Transportation roadways and drainage canal bridge crossing.

Mid-range Planned Projects:

- **Interstate Route H-1, New Interchange, Kapolei Interchange.** This project is for the construction of a new interstate route H-1 Kapolei Interchange between Pālailai Interchange and Makakilo Interchange. This project is proposed to be constructed in multiple phases.

Long-range Planned Projects:

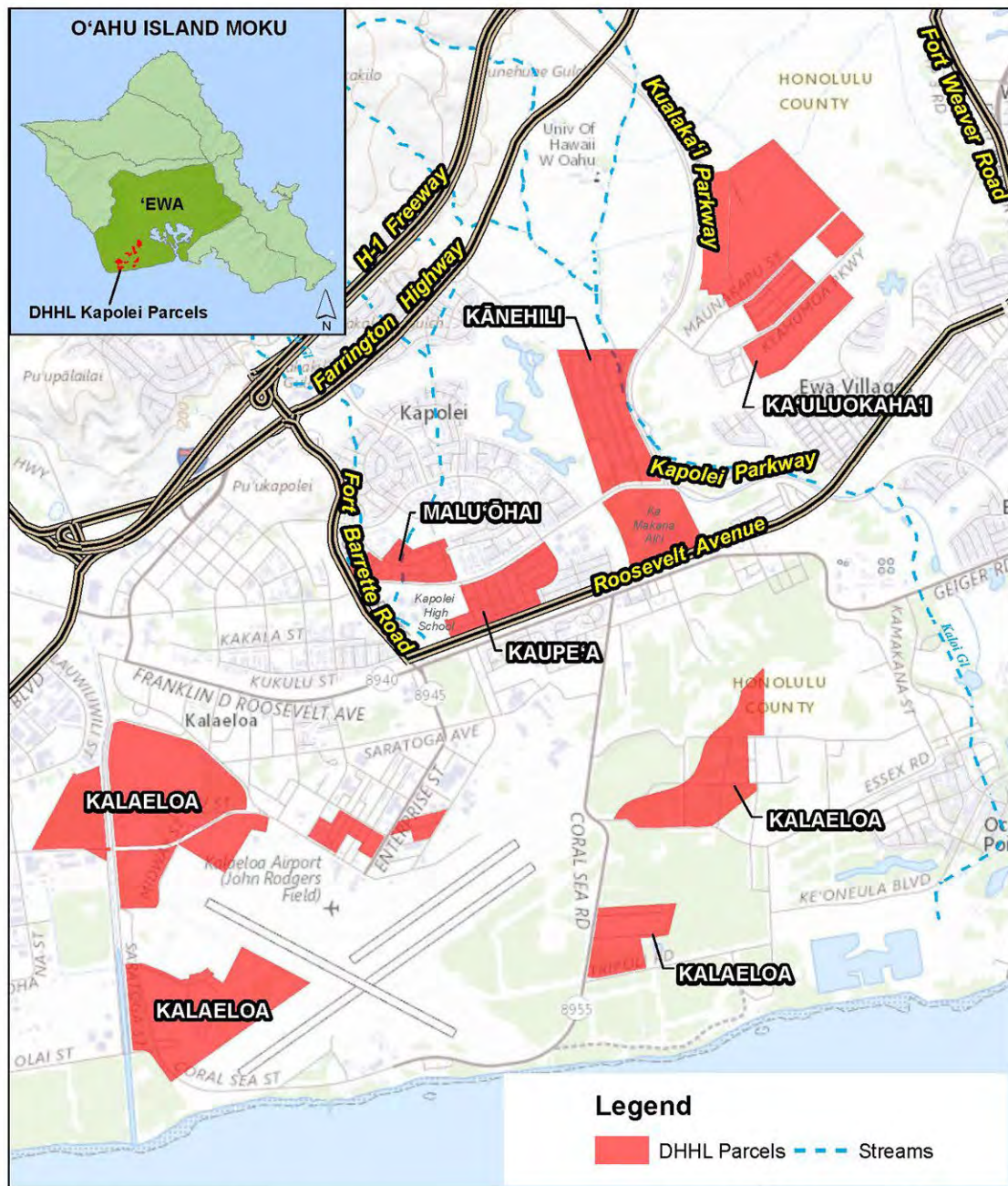
- **Fort Barrette Road (Route 901).** This project is for the widening of Fort Barrette Road from two- to four-lanes between Farrington Highway and Barbers Point Gate.
- **Kualaka'i Parkway (Route 8930) Extension, Interstate Route H-1 to Franklin D. Roosevelt Avenue.** This phase of this project is for the extension of Kualaka'i Parkway between Franklin D. Roosevelt Avenue and Saratoga Road.
- **Kualaka'i Parkway (Route 8930) Extension, Interstate Route H-1 to Franklin D. Roosevelt Avenue.** This phase of this project would widen and extend Kualaka'i Parkway as follows: 1) Expand from three- to six-lanes between Kapolei Parkway and Interstate Route H-1, and 2) Extend Kapolei Parkway to Franklin D. Roosevelt Avenue (six-lanes).

Kalaeloa Airport

The Kalaeloa Airport is approximately 750 acres which was originally a part of the Barbers Point Naval Air Station and has been owned and operated by the O'ahu District of State Airports System since 1999. The airports functions as a general aviation reliever airport for the Daniel K. Inouye International Airport. It has air traffic control functions from 6:00am to 10:00pm daily. Major users of Kalaeloa Airport include the US Coast Guard, Hawaii National Guard and the general aviation community. This airport acts as a launch site for Coast Guard Search and Rescue operations, aviation training, emergency response, and as an alternate landing site for airlines and the military.

In consultation with the State of Hawai'i Department of Transportation, the Airports Division advised that any planned projects located within 5 miles of Kalaeloa Airport may have restrictions on development and use and may require further review and permits. This could have impacts on future use and development for DHHL land holdings in the surrounding area.

FIGURE 13 - ROADWAYS MAP

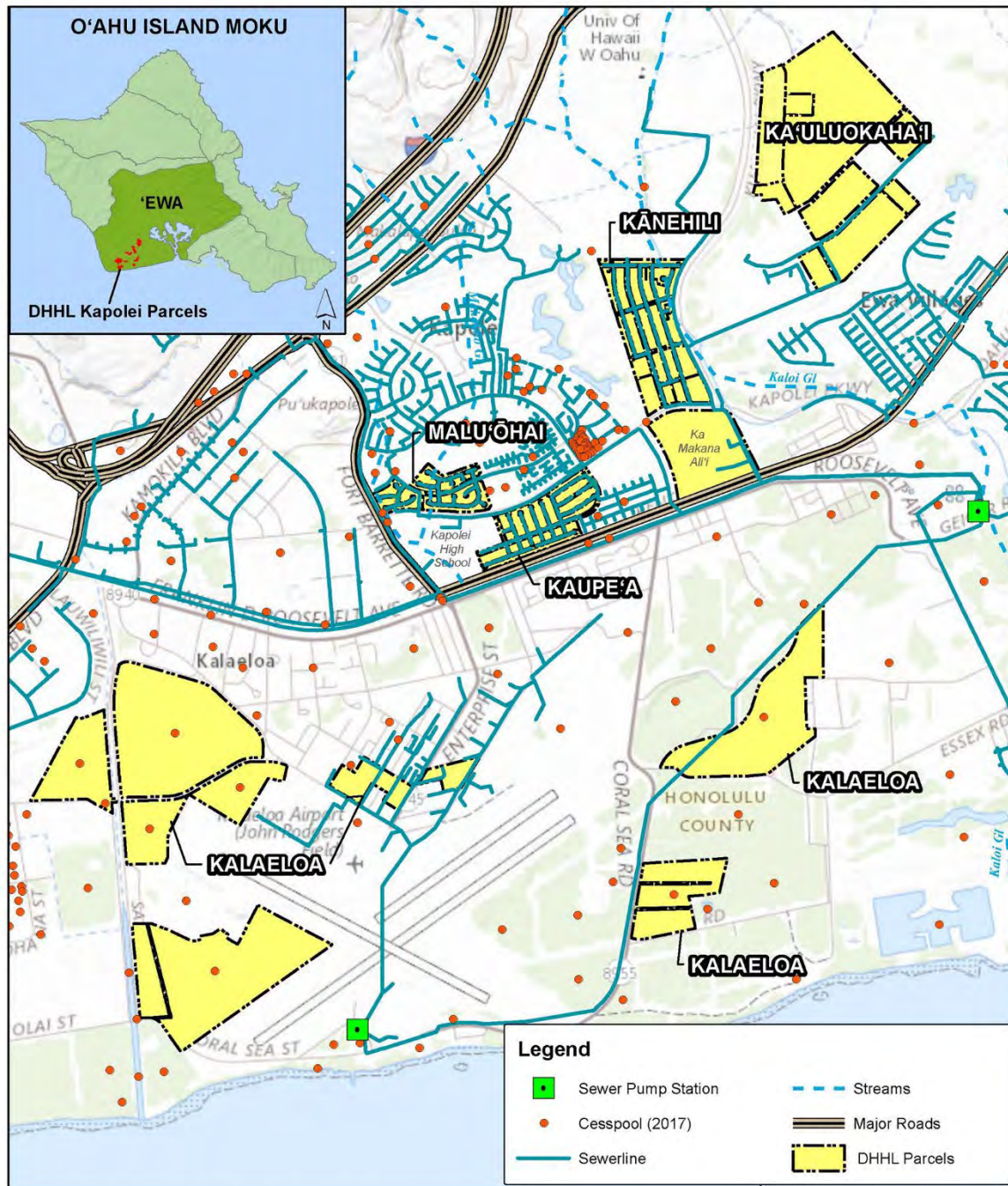


Kapolei Regional Plan Update
ROADWAYS
 August 2021

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FIGURE 14 - WASTEWATER INFRASTRUCTURE MAP



Kapolei Regional Plan Update
WASTEWATER INFRASTRUCTURE
 June 2021

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Project List

Projects identified by the community are meant to address the issues and concerns that were expressed by the participants in Beneficiary Consultation #1. Priority projects identified in the 2010 Kapolei Regional Plan were discussed by participants in Beneficiary Consultation #2 in order to determine the relevance those priority projects to the community today. In addition to the previously identified priority projects, the community discussed issues that were not addressed by the existing list of projects and suggested additional projects that might address those issues. All project ideas considered by the community are described in the following two sections.

Previous Priority Projects

The first Regional Plan for Kapolei was completed in 2010. The five priority projects identified in that plan and their status updates are described below.

Kapolei Regional Plan Priority Project	Project Champion	Status
Support Heritage Center and Community Commercial Development	KCDC	<p>This item remains a priority. Phase I of the Kapolei Heritage Center was completed in 2016 and is open for community use. This space includes two classrooms, restrooms, and a certified kitchen. Phase II and III of the Heritage Center are yet to be completed.</p> <p>Planning and design for the Community Commercial Development, called Ho'omaka Marketplace, is complete. The project is in the permitting phase and is expected to break ground in 4th quarter 2021, barring further delays from the COVID-19 pandemic. Ho'omaka Marketplace includes commitments from the following vendors: Long's, Hele gas Station, 7-Eleven, and Chick-Fil-A. The construction phase is anticipated to take approximately 12 months.</p> <p>The completion of the Kapolei Heritage Center including full build-out of Phase II and III are contingent on revenue generation from Ho'omaka Marketplace. This commercial development is meant to provide an on-going funding source to the community for community-based development, and the operation and maintenance of community spaces.</p>
Support New School Development	DOE	<p>This item remains a priority. Plans for a new elementary located near Ka'uluokaha'i will help to accommodate the growing population in Kapolei. Phase I of a new middle school has been completed and is operational.</p>

Kapolei Regional Plan Priority Project	Project Champion	Status
Engage Beneficiaries in a Planning Charette Process	DHHL	This project was completed in 2012. A design charette with the homestead community discussed development in E. Kapolei.
Develop Pedestrian/Bike Path Network to Community Resources	City & County of Honolulu	The O'ahu Bike Plan update was completed in December 2019. This plan is meant to guide future planning to better integrate bicycling into the islands transportation system.
Preserve and Develop Parks to Service the Homestead Community	DHHL/Community organizations	This item remains a priority. A 4.59 acre parcel located near Kānehili homestead is licensed to Kānehili Community Association for use as a park. Phase I of this park was completed in 2019. Future phases are in the planning process. A total of 13 acres is designated for open space/parks within the Ka'uluokaha'i master planned community.

Final Project Ideas List

The following project ideas list came from the discussions in Beneficiary Consultation #1 and #2. These project ideas are meant to address the needs and concerns of the community. A draft project list was refined by participants at Beneficiary Consultation #2. This project list was shared in an online survey on the project website, and beneficiaries were asked to select their top five priority projects for the Kapolei Regional Plan Update from this list of 14 items.

- **Support Heritage Center and Community Commercial Development**
- **Support the Development of a Hawaiian Focus/Immersion School**
- **Create More Open Spaces, Park Spaces, and Recreation Spaces to Support the Homestead Community**
- **Create a Kūpuna Living Community**
- **Establish a Place of Worship and a Place of Rest/Cemetery for the Homestead Community**
- **Create a Community Garden/Agricultural Space/Farmer's Market for Homesteaders**
- **Create Multi-Family and Rental Housing Developments for Homesteaders in Kapolei**
- **Hawaiian Culture Center**
- **Create Entrepreneurial and Business Opportunities**
- **Support Music**
- **Nurture Kapolei-Based Community Health Workers and Build Partnerships and Community Capacity to Help Address the Findings of Recently Completed Kapolei Homestead Health Survey**
- **DHHL to Address Post-build Issues in the Homesteads**
- **DHHL to Provide More Options for Communication in the Homesteads instead of only Sandwich Isles Communication**
- **Establish and Grow Inclusive Housing Programming for native Hawaiians with disabilities**

Priority Projects

The community was asked to select five priority projects from the above list of project ideas. The selection process consisted of an online survey link that was available on the project website where beneficiaries could choose the five projects that they felt should be priorities for the region. The survey was open for beneficiary participation between Wednesday, May 5, 2021 and Wednesday May 19, 2021 following Beneficiary Consultation #2 on Tuesday, May 4, 2021. A total of 60 responses to the survey were collected. Based on the responses received, the projects were ordered 1-5 and identified in the Draft Plan that was shared with the HHC and Kapolei beneficiaries in November and December 2021.

At Beneficiary Consultation #3 on December 9, 2021, attendees described the priority project pertaining to Telecommunications as an issue of great importance for the community and therefore requested that this project be placed as the highest priority project. This request has been accommodated in the Final Draft of this document.

The following projects were selected by participants as the top five priority projects for the region.

1. Provide More Options for Quality Telecommunication Service to Homesteads

PROJECT DESCRIPTION

Homesteaders in Kapolei have expressed that they are dissatisfied with the quality of their telecommunications service from Sandwich Isles Communication. They would like to solicit service from other telecommunications providers on-island such as Hawaiian Telcom, Spectrum, etc. Kapolei homesteaders would like the option to seek telecommunications services elsewhere to better fit their needs.

Sandwich Isle Communications, Inc. (SIC) was the sole provider of broadband telecommunications services under DHHL License No. 372, which was issued on May 9, 1995 to SIC's parent company Waimana Enterprises, Inc. On June 30, 2017, the Federal Communications Commission (FCC) adopted a Memorandum Opinion and Order which determined that all exclusivity claims related to the aforementioned license are preempted by Federal law and are therefore unenforceable. Since that time DHHL has been working through the complex issues associated with transitioning from broadband telecommunications services for lessees (both homestead lessees and general lessees) provided exclusively through a single entity to broadband services provided competitively through multiple vendors that will give lessees choice. This transition has been complicated and delayed by several overlapping issues including lawsuits in both Bankruptcy Court and the U.S. District Court; sale of a portion of the telecommunications infrastructure installed in and on Hawaiian home lands and takeover of this infrastructure by a new owner; competing interpretations of license 372 and its applicability post-sale of the telecommunication infrastructure; license negotiations with the new carriers; etc.

Although lessees were informed in January 2022 that they could seek service with any provider, increasing the number of providers (and therefore telecommunications options) available to lessees on the home lands has been slow due to the complexity, noted above, and infrastructure challenges.

COMMUNITY INPUT

At Beneficiary Consultation #2, participants identified service issues with SIC. Homesteaders stated that the quality of their service from SIC is poor, and they would prefer to seek service from other telecommunications providers who are better able to meet their needs.

During Beneficiary Consultation #3, attendees expressed some of the issues that they have been experiencing with the ability to access quality telecommunications services. In Malu'ōhai homestead, fiber optic infrastructure was never brought into the homestead and homesteaders do not have the option for connection to fiber optic broadband service at this time. According to homesteaders in Kaupe'a, fiber optic cables were installed in the homestead, but homesteaders have not yet been able to access this infrastructure for use. Homesteaders in Kānehili and Ka'uluokaha'i mentioned that they have challenges with the quality of their broadband services.

Kapolei beneficiaries in each of the homesteads shared that the challenges that came as a result of the pandemic further aggravated homesteaders already limited access to quality broadband telecommunications services. State and City & County stay at home orders and restriction of in-person work and school forced many homesteaders to change to attending work and school virtually. Slow and inconsistent broadband connections made this a huge challenge for homesteaders and highlighted the critical need for access to quality telecommunications for the homesteads.

OBJECTIVE

This project helps to fulfill the community value of self-sufficiency, “Kapolei is a place where people can live, work and play. All the things that homesteaders need to have a healthy, thriving community can be found within the region.” The ability to obtain quality telecommunications services in Kapolei would further the objective of having what is needed to have a healthy, thriving community. Access to good quality telecommunications services is a critical need for Kapolei homesteaders.

IMPLEMENTATION ACTION STEPS

- 1) **Document service issues.** This may be service issues experienced with SIC or any related company and communicate concerns in writing to DHHL and to the regulatory entities that have jurisdiction over telecommunication services including the Public Utilities Commission and the Department of Commerce and Consumer Affairs Division of Consumer Advocacy. If any action is to be taken by these regulatory entities, documentation regarding the service concerns experienced by lessees will be necessary. DHHL's license 372 Item #5 indicates: “Licensee shall provide at a minimum the same level of telecommunication service being provided in adjacent areas not subject to this license...” Documentation regarding the level of service received by lessees is critical if DHHL is to take any action under this section of the license.
- 2) **Participate in meetings and consultations.** This includes participating in Hawaiian Homes Commission meetings and any beneficiary consultations that may be conducted for proposed licenses being offered to other telecommunication providers to express their desire for other telecommunication options on Hawaiian home lands.

2. Create more open spaces, park spaces, and recreation spaces to support the Homestead Community

PROJECT DESCRIPTION

The Kapolei homesteaders desire more open space for parks and recreation throughout the region. These spaces would provide safe environments to support programs and activities for youth and leisure spaces for 'ohana to gather and enjoy the outdoors. Open spaces for parks and recreation are key to a thriving and healthy homestead community.

Currently, the park and recreation space available to the homesteaders in the region are as follows:

- Kānehili Community Association Park
- Kapolei Heritage Center
- Villages of Kapolei Association (VOKA) common spaces (available to homesteaders in Malu'ōhai and Kaupe'a who pay dues to VOKA)
- The Salvation Army Kroc Community Center (available to the general public through memberships)

According to the O'ahu Island Plan (DHHL 2014), a total of 35 acres of the DHHL land inventory has been identified for Community Use in the Kapolei region. This includes parcels located on DHHL lands in Kānehili and East Kapolei. Some of these parcels have been licensed to community organizations for use and are in varying stages of development. Approximately 15 acres on three separate parcels in East Kapolei are currently vacant and additional planning and design will be needed for future development of these lands.

Kānehili Community Association Park is located on a 4.59-acre parcel in the Kānehili Homestead at the corner of Kekāhili Street and Kamakahahele Street. It is maintained by the Kānehili Community Association (KCA). This parcel is a part of the DHHL land inventory and is licensed to and managed by the KCA. Phase I of Kānehili Community Association Park includes a basketball/volleyball court, keiki play area, picnic tables, benches, bicycle rack, trash receptacles, landscaped areas, irrigation system and native trees for the community to enjoy. Phase I of the park opened for use in July 2020.

The Association has partnered with SHADE institute and their collaborators at G70 and Ki Concepts to design Phase II of the park. A community design workshop was hosted virtually in May 2021 to discuss a working concept site plan for Phase II of the park and to form small working groups for the ongoing design of park programs and amenities. A survey was conducted in June 2021 to gather feedback from Kānehili Community residents to better understand the needs and wants of the community for the park space. A second design workshop took place in August 2021. The third and final workshop took place on February 19, 2022. Some features of the proposed Phase II design concept include: a community center facility, splash pad, imu, imu shed, playfield, hula mound, lei garden, crafts pavilion, and parking lot. Once the design and planning for Phase II are complete, KCA will then need to focus on fundraising for the permitting and construction to complete Phase II.

Another gathering and recreation space available to Kapolei homesteaders is the Kapolei Heritage Center. This space is leased to Kapolei Community Development Corporation (KCDC) and has completed Phase I of

three planned phases for development and construction. Phase I was completed in 2016 and includes a commercial kitchen, two classrooms, restrooms, and some parking. Phase II is the hālau space or gathering space. Phase III is office space and a gallery dedicated to Prince Jonah Kūhiō Kalanianaʻole. The Kapolei Heritage Center is located adjacent to the DHHL administrative building. Upon completion, the Heritage Center will provide space for gathering and recreation. Utilizing the spaces available with Phase I, the Heritage Center currently hosts programming such as Alu Like and Keiki o ka ʻĀina. With further construction, the Heritage Center will be able to increase their capacity for programming space and services provided to the homestead community.

The Villages of Kapolei Recreation Center 1 and Recreation Center 2 are private recreation centers that are on parcels owned by the Villages of Kapolei and are approximately 4 acres and 2 acres in size respectively. These recreation centers are located in the heart of the Villages of Kapolei and are open to use by members of the association. Each center has a recreation hall that includes indoor and outdoor gathering/event space and a kitchen area. These spaces are a part of the amenities available to VOKA members, which includes Maluʻōhai and Kaupeʻa homesteaders who pay monthly dues to VOKA.

Kapolei Community Park is a public park that is located on 12 acres of City and County of Honolulu lands that is adjacent to the Villages of Kapolei Recreation Centers. This park features a large open grass space, athletic courts, restrooms and playground area.

Aʻelo Park is a private park owned by the VOKA and located on a 1.89 acre parcel in Village 2/Aʻelo. This park features open space and has a small restroom facility.

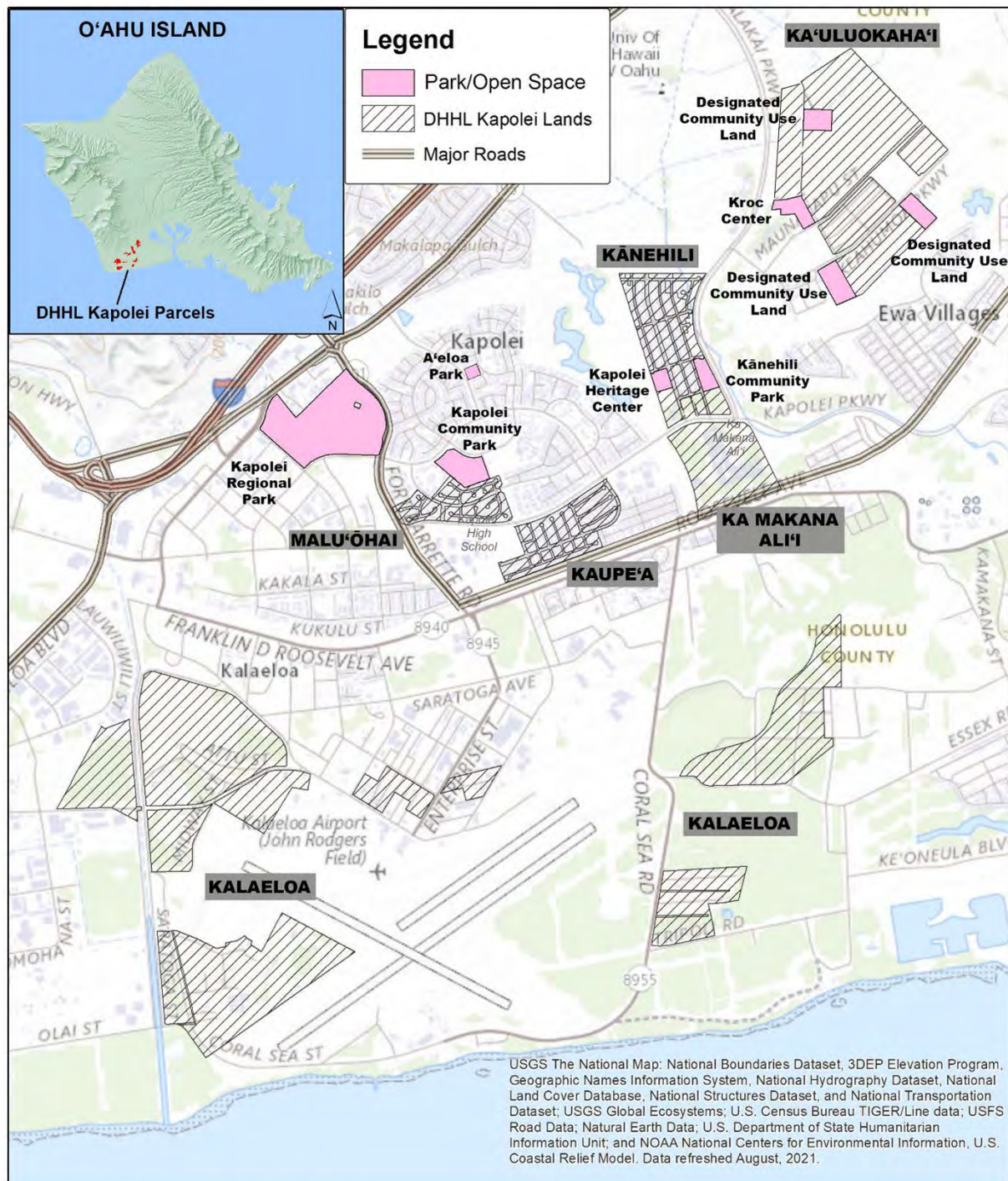
Kapolei Regional Park is a 73 acre park that was donated to the City and County of Honolulu from the James Campbell Estate. This park features large open spaces, restroom facilities, and an archery facility, and is also the location of Puʻuokapolei, a heiau and important historical space in native history.

The Kauluokahaʻi master-planned community is an ongoing development on DHHL lands, located east of Kualakaʻi Parkway surrounding Keahumoa Parkway to the north and south. This development includes three planned park spaces. Two of the planned park spaces are located on Keahumoa Parkway to the south and are 4.3 acres and 2.8 acres in size, respectively. A third park space is located north of Maunakapu Street and is 5.9 acres in size. Combined, these planned park spaces will provide 13 acres of open space and park space on DHHL lands to serve the East Kapolei homestead communities.

The Salvation Army Kroc Community Center is located on a 12-acre parcel within Kauluokahaʻi. Recreational facilities include an athletic center with an NCAA-regulation gymnasium; a state-of-the-art health and wellness center with workout equipment and facilities for individual and group fitness; an aquatics center featuring a competition pool and a recreation pool with giant water slides; and a 3-acre multipurpose field for outdoor programs. Membership is open to the general public and scholarships for reduced rates are available.

Potential sites for these types of spaces, as discussed by participants in beneficiary consultations, could include: an open lot adjacent to Kapolei High School and Kaupeʻa Homestead that is currently owned by the HHFDC, the “Varona parcels” adjacent to Ka Makana Aliʻi Shopping Center which may potentially be transferred to the DHHL land inventory (a transfer that is currently under review by the Department of the Interior), and East Kapolei undeveloped parcels owned by DHHL.

FIGURE 15 - PARKS/OPEN SPACE MAP



Kapolei Regional Plan Update
KAPOLEI PARKS MAP
 November 2021

This graphic has been prepared for general planning purposes only and should not be used for boundary interpretation or other spatial analysis.



PAST ACTIONS

Kānehili Community Association Park

- 2018 – Licensing to KCA for the Kānehili Community Association Park for planning, design and construction.
- 2020 – Kānehili Community Association Park Phase I completed and opened for use by Kānehili homesteaders in “good standing” with the Association.
- 2021 – KCA partnered with SHADE Institute for the design of Phase II of the park.

Kapolei Heritage Center

- 2008 – Lease to KCDC for the Kapolei Heritage Center for planning, design and construction.
- 2013 – KCDC launched a funding campaign to support the completion of Phase I of the Heritage Center.
- 2014 – Fundraising completed for Phase I of the Heritage Center, permitting and construction began.
- 2016 – Phase I of the Heritage Center completed and the facility opened for community use.

East Kapolei/Kauluokaha'i Planned Parks

- 2021 – The Kauluokaha'i master-planned community includes three planned park spaces for community use totaling 13 acres. Development of these parks will require partnerships.

COMMUNITY INPUT

Beneficiaries that participated in the Kapolei RPU Beneficiary Consultations #1 and #2 indicated that spaces are needed for keiki and youth to recreate, participate in programming and organized sports and enjoy safe areas to play. Parks and open spaces are important for 'ohana to safely access and enjoy. There is a need for spaces for the community and 'ohana to gather outdoors. Having safe spaces for walking and exercising that are nearby to the homesteads is a priority. According to the Trust for Public Land, their park program looks to provide park spaces located within a 10-minute walk for all residents. This metric of a 10-minute walk or a half a mile distance may be a good reference for homesteaders access to park or open spaces.

OBJECTIVE

Development of open spaces, parks and recreation spaces within the Kapolei Region helps to fulfill the Community Values of preserving “Natural, Cultural and Agricultural Resources”, and prioritizing “Keiki” and “Kūpuna.” This project idea also helps the region to reach its vision of establishing “*wahi pana and kīpuka...[that can be] celebrated and stewarded for future generations.*”

IMPLEMENTATION ACTION STEPS

- 1) **Establish a parks committee.** A committee of members of the various community associations/organizations is needed to explore development of park spaces in Kapolei to serve the homesteads. An new organization will need to be established or an existing organization or partnership of organizations will need to champion this project in order to move it forward. An established nonprofit organization is needed in order to engage in discussions with DHHL regarding licensing, operation and

management of designated park space within the homestead. Also, having a recognized community organization/entity allows access to legislative funding to support planning and construction, as opposed to only relying on DHHL trust funds. DHHL trust funds are primarily meant to fund the development of homestead lots for beneficiaries in accordance with its mission. Use of funds for projects other than this primary need are limited. It may take DHHL an extended period of time to be able to respond to funding needs outside of homestead development uses. Other funding sources are available such as: OHA, State and County GIA funds, etc.

- 2) **Survey the community.** Confirm the types of programs and uses that community members would like to see as a part of this project by reaching out to community members.
- 3) **Develop planned park space.** If park space is already planned for a parcel on DHHL lands, then these are the steps for the development of the planned park space:
 - a) **Funding.** Funding is needed for planning and design for the space. Potential funding sources include: the Legislature, DHHL grants, and/or private funding sources.
 - b) **Pre-application process.** A project proposal and an application for a Right of Entry Permit for the parcel will be submitted to DHHL for review. This project proposal will include a description of the applicant organization, the project, benefits to beneficiaries and DHHL, project implementation and potential timeline for implementation.
 - c) **DHHL HHC approves Right of Entry permit.** This approval is for a one-year limited right of entry for due diligence, including: preliminary site assessment research such as a biological review, archaeological review, etc. This information is needed for the preparation of a Master Plan and an Environmental Assessment. Prior studies may be updated if needed.
 - d) **Master Plan/Special District Plan & Environmental Assessment prepared.** The Applicant will prepare due diligence studies of the site, including a master plan and an environmental assessment. The environmental assessment will be published based on HRS Chapter 343 requirements.
 - e) **HHC approves FONSI; and then long-term disposition.** The Hawaiian Homes Commission will review the Final EA, issue a Finding of No Significant Impact, and approve the license or lease.
 - f) **Permitting and other entitlements.** The Applicant will secure all necessary permits and approvals as determined by DHHL in consultation with the appropriate agencies.
 - g) **Site Preparation and Construction.** All Best Management Practices (BMP's) and mitigation measures as outlined in the Final EA are to be followed during site preparation and construction.
 - h) **Operations and Maintenance.** The project is to be operated and maintained as described in the Master Plan and Final EA.
 - i) **Monitoring & Reporting.** This includes site visits and periodic reporting of site use.
- 4) **Identify potential locations outside of planned parks.** Locations within the homestead community located on lands not currently designated for community use or on available adjacent lands that are not a part of the DHHL land inventory should be identified as potential sites for a park.
- 5) **Land Use Designation Amendment.** Depending on the location identified and the needs of the program(s), a land use designation amendment may be necessary. The steps to achieve this change are as follows:
 - a) **Select a lot.**
 - b) **Propose a change to the land use designation from homestead residential use to community use or commercial use (depending on services and programs identified).**

- c) Approach Commissioner(s) to garner support for the proposed change.
 - d) Submit a proposal to the Planning Office and the Chairman to amend the O‘ahu Island Plan.
 - e) Departmental review of the proposal.
 - f) Beneficiary Consultation. This is required for any change to existing land use designation. Previous beneficiary consultation through the Regional Plan Update process may meet the beneficiary consultation requirement for the project. This beneficiary consultation is required specifically for a change to the land use designation in the O‘ahu Island Plan.
 - g) Departmental recommendation to HHC.
 - h) HHC Approval needed to change Land Use Designation and amend the O‘ahu Island Plan.
- 6) **Develop park space on non-DHHL lands.** For locations that are outside of the DHHL land inventory, these are the steps to develop park space for homesteaders in these locations.
- a) The Community and the Landowner will need to reach an access agreement.
 - b) Is this land on State/County lands? Private lands? Identify the specific permitting and other entitlements needed to use non-DHHL lands.
 - c) Project Planning and Design.
 - i) Establish long-term administration and community management of the site.
 - ii) Develop budgets for acquisition, development and maintenance of the site.
 - d) Funding: Potential funding sources:
 - i) Legislature
 - ii) DHHL grants
 - iii) Private funding
 - e) Develop the amenities of the space.
 - f) Conduct on-going operation, maintenance, and security.

3. Create a Kūpuna Living Community

PROJECT DESCRIPTION

Kapolei homesteaders would like to see an alternative living option for kūpuna within the region so that they may have access to all the facilities and services needed for them to comfortably age in place. As kūpuna age, they may wish to leave their larger home and downsize to a living space that is more suited for their needs. The development of a vibrant kūpuna living community that provides not just residential spaces, but also support facilities and services for kūpuna would allow beneficiaries to live out their lives in Kapolei, surrounded by their families and community.

One model for the envisioned Kūpuna Living Community in Kapolei is the Waimānalo Kūpuna Project, Kūlanakauhale Maluhia o Nā Kūpuna. This project is an 8-acre development that consists of 85 apartments, a resident manager’s apartment, and common areas. This housing development is located on DHHL lands off of ‘Ilaupole Street in Waimānalo. Rental apartments are available to elderly or senior (55 years of age or older) DHHL beneficiaries at rates affordable to low or moderate income families. The project cost approximately \$11.5 million and was financed by a combination of funds from the Office of Hawaiian Affairs (OHA), Federal Home Loan Bank of Seattle grants, Low Income Housing Tax Credits, the State Rental Housing Trust Fund, private lenders and loans from DHHL. Pacific Housing Assistance Corporation was selected to both develop

and manage the rental project. Construction began in September 2000 and was completed in March 2002, with the first tenants able to move-in the following month in April 2002.

Another potential model for the Kapolei Kūpuna Living Community is the planned DHHL development in Mō'ili'ili on the site of the Old Stadium Bowl-o-Drome. This project is for a 23-story high-rise building and accompanying low-rise townhomes that will offer a total of 270 units. This project will include: an apartment tower with studios, one-bedroom, two-bedroom and three-bedroom units; seven three-bedroom townhouse units; and a parking structure. The project will also include 4,680 square feet of commercial space at ground level with at-grade parking stalls. This commercial/retail component will help to subsidize the costs of operating and maintaining of the development. Part of this development includes units available to kūpuna beneficiaries. Stanford Carr Development was selected by DHHL as the developer for this project in early 2020. Construction is likely to be completed in mid-2024. This project is estimated to cost \$137 million in total.

A 2014 report completed for DHHL by PlanPacific, Inc. looks at alternative housing development models, including Kūpuna Housing. This report mentions that there is a strong preference for living in extended family/multi-generational households. Staff at Lunalilo Home shared that the care home model is an unsustainable model due to the difficulty in raising money to develop, operate and maintain the facility, and also because smaller-scale facilities or in-home care are more desirable, especially for those of modest means. There is a preference to integrate care into families and communities rather than separating elders from their families and communities. Lunalilo Home staff mentioned establishing a physical hub in Kapolei or the leeward region to provide support services such as meal preparation and delivery, eldercare training, nursing assistance, licensing assistance, housekeeping, and substitutes when primary home-based caretakers are on vacation or leave.

This report also looked at options for kūpuna who may wish to live independently but would like to be in a community with age-peers and nearby family and friends. A housing community designed to accommodate kūpuna aged 55 years of age and above could help to reach beneficiaries who do not have the financial means to purchase a single-family dwelling in a DHHL homestead.

The Kūpuna Living Community in Kapolei is envisioned to have small residential units designed for single or double occupancy. These may potentially be affordable rental units, similar to the Kūpuna Rental Units that are located in Waimānalo or the units that are planned for Mō'ili'ili. Support facilities may include a commissary to shop, a cafeteria to eat, outdoor spaces to garden, and on-site laundry facilities. Spaces for indoor and outdoor recreation would be found throughout the Kūpuna Living Community. This place ideally would be located within the Kapolei region and would provide long-term living opportunities for kūpuna beneficiaries. Additional facilities may include a place of worship and a place of rest or cemetery.

PAST ACTIONS

- 2002 – Kūlanakauhale Maluhia o Nā Kūpuna (Waimānalo Kūpuna Project) completed & first tenants occupy units.
- December 2014 – PlanPacific, Inc. completed a report on Alternative Housing Development Models for DHHL, including Kūpuna Housing options.

- 2020 – Stanford Carr Development selected for Mō‘ili‘ili Affordable Rental project to include kūpuna housing options.
- January 2020 – Beneficiary Consultation for Kauluokaha‘i TOD station with Kapolei beneficiaries. Participants discussed a need for kūpuna housing options in Kapolei.

COMMUNITY INPUT

At Beneficiary Consultations #1 and #2, participants discussed the importance of kūpuna in the region and in the community and identified a need for a community and housing development to serve kūpuna needs. The vision for this Kūpuna Living Community includes a vibrant community with housing and support facilities that allows kūpuna to age in place within their community in Kapolei. This development would serve kūpuna such as, (1) those who wish to downsize from a larger single-family dwelling into something smaller and more manageable and convenient and (2) kūpuna beneficiaries on the waitlist who do not have the financial resources to secure financing for a single-family dwelling.

OBJECTIVE

This project helps to fulfill the community value of Kūpuna: “Kūpuna hold an important role and place in native Hawaiian society. Spaces and resources in Kapolei will be used to support kūpuna so they can pursue full and healthy lives as they age in place.” Creation of a Kūpuna Living Community would help to create full and healthy lives for Kapolei kūpuna to age in place. This project also helps to achieve part of the vision for the region: “Kapolei is a growing region that looks to its history, mo‘olelo, ‘āina and kūpuna to build a strong foundation for the homestead communities.” This vision prioritizes kūpuna within the Kapolei community and identifies how important kūpuna are to building strong foundations for homestead communities.

IMPLEMENTATION ACTIONS STEPS

- 1) **A project champion is identified.** The Waimānalo Kūpuna Housing project was initiated by the Waimānalo Community and OHA, and was developed by DHHL. The Bowl-o-Drome redevelopment project is not explicitly a kūpuna housing project. This project was initiated by DHHL. A developer was hired by DHHL to design, build, finance and manage the facilities. The Ho‘omaka Marketplace is licensed to KCDC, and KCDC secured a developer to partner with its organization for the design, development and funding of the project. A community organization or DHHL may be the project champion for this project.
- 2) **Outreach with kūpuna.** It is important to outreach to kūpuna beneficiaries in order to confirm the physical and programmatic components of this project. A commercial component may be included in order to off-set the rental income needed for on-going maintenance of the facilities.
- 3) **Develop criteria.** Criteria is needed to identify the types of spaces that would best fit the proposed physical and programmatic needs for the kūpuna living community as identified by kūpuna beneficiaries.
- 4) **Identify potential locations.** Locations within the homestead community or on available adjacent lands should be identified as potential sites for a kūpuna living community.

- 5) **Land Use Designation Amendment.** Depending on the location identified and the needs of the program(s), a land use designation amendment may be necessary. The steps to achieve this change are as follows:
 - a) Select a lot.
 - b) Propose a change to the land use designation from homestead residential use to community use or commercial use (depending on services and programs identified).
 - c) Approach Commissioner(s) to garner support for the proposed change.
 - d) Submit a proposal to the Planning Office and the Chairman to amend the O'ahu Island Plan.
 - e) Departmental review of the proposal.
 - f) Beneficiary Consultation. This is required for any change to existing land use designation. Previous beneficiary consultation through the Regional Plan Update process may meet the beneficiary consultation requirement for the project. This beneficiary consultation is required specifically for a change to the land use designation in the O'ahu Island Plan.
 - g) Departmental recommendation to HHC.
 - h) HHC Approval needed to change Land Use Designation and amend the O'ahu Island Plan.
- 6) **Acquire Lands.** If no location within the homestead can be identified, an adjacent location could be acquired and added to the Hawaiian Home Lands inventory. The process for land acquisition is as follows:
 - a) Select a lot.
 - b) Beneficiary consultation is required to discuss the acquisition of lands and designation of land use in the O'ahu Island Plan.
 - c) Approach Commissioner(s) to garner support for the land acquisition.
 - d) Consultation with the U.S. Department of Interior.
 - e) HHC Approval needed to acquire lands.

4. Support Heritage Center and Community Commercial Development (Previous Priority Project).

PROJECT DESCRIPTION

The Kapolei Heritage Center is operated and managed by the KCDC. This project was developed to fulfill the community's need for space for programming, gathering, cultural practices and more. Support for the Heritage Center and a community commercial development was selected by Kapolei beneficiaries as a priority project in the 2010 Kapolei Regional Plan and remains a priority in the region today.

A funding campaign began in 2013 to secure funds for the development of the first phase of the Kapolei Heritage Center. Phase I of the Heritage Center includes two classrooms, restrooms, a small parking area, and a commercial kitchen space. Phase I was completed in 2016 and the Heritage Center opened for community use in July of that same year. Phase II and Phase III of the Heritage Center are planned to include a hālau, or large covered gathering space, and an administrative building which will provide more classrooms and a gallery dedicated to celebrating Prince Jonah Kūhiō Kalaniana'ole.

Funding for Phases II and III are planned to come from revenue generated from a community commercial development that will also be located in Kapolei. KCDC has a license agreement for a five-acre parcel at the corner of Kualaka'i Parkway and Kapolei Parkway. This site is adjacent to the Kānehili Community Association Park and located mauka of Ka Makana Ali'i Shopping Center. This commercial development is called Ho'omaka Marketplace, and is expected to feature the following anchor businesses: Longs Drugs, Chic-fil-A, 7-Eleven, and Hele gas station. There will be other retail spaces available in the marketplace, as well as an eleemosynary space for community use. Revenue generated from the tenants of Ho'omaka Marketplace will be used to fund the build out of Phases II and III of the Heritage Center. It is important to understand that these two spaces go hand in hand; revenue generated from the community commercial development is critical for the on-going development of the Kapolei Heritage Center.

The projected cost for design and construction of Phase II and Phase III of the Kapolei Heritage Center will be \$3-\$5 million for each phase. The projected timeline for the build out of these phases is linked to the completion and successful operation of Ho'omaka Marketplace. The Ho'omaka Marketplace is expected to break ground in 3rd quarter of 2021. Construction is estimated to take approximately 12 months to complete. Ho'omaka Marketplace could be open for operation as early as late 2023.

The Kapolei beneficiaries would like the Heritage Center to continue its ongoing and planned programming and would also like to see additional programming such as: youth and young adult education programs, cultural and historical education programs, a program to make the built environment more reflective of Kapolei's unique native roots (ex: murals, art, native landscaping, etc.), support for cultural celebrations in common spaces, and programs to support economic development for homesteaders.

PAST ACTIONS

- 2008 – KCDC established. KCDC acts as champion for the development of the Kapolei Heritage Center and Community Commercial Development (Ho'omaka Marketplace). Lease agreement for Kapolei Heritage Center and Ho'omaka Marketplace.
- 2010 – “Support Heritage Center and Community Commercial Development” selected as a priority project in the 2010 Kapolei Regional Plan.
- 2013 – Funding campaign to support Phase I planning, design, development and construction.
- 2015 – Construction of Phase I of the Heritage Center.
- 2016 – Kapolei Heritage Center Phase I completed featuring classrooms, restrooms, parking and a commercial kitchen.

COMMUNITY INPUT

- Supporting the Heritage Center supports programming in the region. The Heritage Center should provide these types of programs in addition to the resources and programming that is already available:
 - Create youth and young adult education programs
 - Support programs that provide cultural and historical education
 - Create a program to make the built environment more reflective of Kapolei's unique native roots (ex: murals, art, native landscaping, etc.)
 - Support cultural celebrations in common spaces
 - Support economic development for homesteaders

OBJECTIVE

This project helps to fulfill the community values of wahi pana and self-sufficiency. “Wahi pana, of old and new, throughout the region are used by the community to gather and practice their culture.” The Kapolei Heritage Center is a wahi pana in the region and completion of the Center’s planned phases helps the region to reach its goal of having wahi pana available to the homesteads. “All the things that homesteaders need to have a healthy, thriving community can be found within the region” is a part of the value of self-sufficiency. Completion of the Ho’omaka Marketplace and the Kapolei Heritage Center helps to further the community’s goal for self-sufficiency. Ho’omaka Marketplace offers commercial and retail spaces and services for the community, and revenue generated from this commercial development will be used to help develop the Kapolei Heritage Center fully and to fund necessary programming to support the homestead communities.

IMPLEMENTATION ACTIONS STEPS

- 1) **Permitting and construction.** KCDC to complete the permitting and construction of Ho’omaka Marketplace, Kapolei homesteads’ community commercial development.
- 2) **Open Ho’omaka Marketplace.** KCDC to open Ho’omaka Marketplace to the public including retail spaces, restaurants/food vendors, gas stations, etc.
- 3) **Funding.** Development of Phase II and Phase III of the Heritage Center is contingent on collecting revenue generated from the Ho’omaka Marketplace. Potential other funding sources include:
 - a) Legislative Grant-in-Aids
 - b) DHHL grants
 - c) OHA grants
 - d) Federal grants
 - e) Private funding (grants and/or financial products)
- 4) **Permitting and other entitlements.** The Applicant will secure all necessary permits and approvals as determined by DHHL in consultation with the appropriate agencies.
- 5) **Site Preparation and Construction.** All Best Management Practices (BMP’s) and mitigation measures as outlined in the Final EA, EIS or EA Exemption are to be followed during site preparation and construction.
- 6) **Operations and Maintenance.** The project is to be operated and maintained as described in the Master Plan and Final EA, EIS or EA Exemption.
- 7) **Monitoring & Reporting.** This includes site visits and periodic reporting of site use.

5. Support the development of a Hawaiian-Focused School/Hawaiian Immersion School

PROJECT DESCRIPTION

Kapolei homesteaders would like to see the creation of a Hawaiian-Focus/Immersion School for children and youth in the region. This school would be both Hawaiian 'ike (knowledge) and 'ōlelo (language) focused. This school could be a part of the Department of Education (DOE) current or planned schools in the Kapolei region and would include a partnership with the DOE for development and operation. Currently phase 1 of the new middle school located in East Kapolei is operational, and phase 2 is in designs. There are parcels designated for a new elementary school in the Kauluokaha'i Master Plan. The Hawaiian-Focus School/Hawaiian Immersion School could also be a public charter school which focuses on 'ike and 'ōlelo as pillars of the curriculum. This may include a partnership with or creation of an educational entity capable of establishing and operating such a school.

There are currently no educational opportunities for Hawaiian language immersion or Hawaiian culture-focused schools within the Kapolei region. The nearest Hawaiian Language immersion schools are for grades K-6 at Nānākuli Elementary in Nānākuli/Wai'anae and Waiau Elementary in Pearl City. Pū'ōhala Elementary in Kāne'ohe offers immersion from grade K-8. There are two immersion schools that offer high school education on O'ahu: Kahuku High & Intermediate in Kahuku on the North Shore and 'Ānuenue located in Honolulu. The nearest Hawaiian-focused charter schools are Ka Waihona o ka Na'auao and Kamaile Academy, both located on the Wai'anae Coast.

As a growing community with native Hawaiian families, Kapolei should provide more educational opportunities to support native Hawaiian youth in education. Kapolei is projected to be the largest concentration of native Hawaiians in the world at full build-out with 2,000 homesteads currently planned in the region. A school to provide curriculum to educate native students in the region is critical in building a thriving native community.

PAST ACTIONS

- n/a

COMMUNITY INPUT

There is a critical need for a school in Kapolei that can offer focused curriculum on 'ike and 'ōlelo Hawai'i, or Hawaiian culture and language. This would offer benefits to the community in Kapolei and offer more support for native keiki and youth. This would be an option for students in the region who would rather seek this type education rather than the traditional public schools that offer a standard curriculum within the Kapolei region.

Education is one of the tenets of KCDC's mission. KCDC is interested and supportive of the development of a Hawaiian-Focused School/Immersion School to serve the homestead communities in the Kapolei region. The design of the Heritage Center does not include adequate space and infrastructure to support the development of a K-12 school. Though the Heritage Center is designed to accommodate programming, a pre-K or Pūnana Leo program would likely be the extent of KCDC's capacity to provide a Hawaiian-Focused/Immersion school

program to homestead keiki. At present, Phase I of the Heritage Center is at capacity for its programming, and could only provide a potential space for a Pūnana Leo program after the completion of Phase II.

The Kapolei beneficiaries have clearly expressed a desire for access to Hawaiian-Focused/Immersion for K-12 education, not just for pre-K, to serve the Kapolei region. Ideally, this school would be located within a 4-mile radius of the four homesteads in Kapolei to provide an enriching experience for haumāna into the future. Beneficiaries envision a school to serve Kapolei keiki, 'ōpio, mākua and kūpuna that will teach the language and knowledge of their Hawaiian ancestors.

OBJECTIVE

This project will fulfill the community value of Keiki. "Resources for 'ōpio and keiki are a priority. There are... programs for them to learn...near their homes." This project would help to create a place for homestead children to be educated in their native language and culture. This project also helps to fulfill the vision for Kapolei: "Kapolei is a growing region that looks to its history, mo'olelo, 'āina and kūpuna to build a strong foundation for the homestead communities." A school of this type would be a part of the strong foundation needed for homestead communities in the region.

IMPLEMENTATION ACTIONS STEPS

- 1) **Form a committee.**
- 2) **Identify potential partnerships.** Organization/committee to identify potential partnerships to support the development of this project in Kapolei.
- 3) **Develop criteria.** Criteria is needed to identify the types of spaces that would best fit the proposed physical and programmatic needs for the kūpuna living community as identified by kūpuna beneficiaries.
- 4) **Identify potential locations.** Locations within the homestead community or on available adjacent lands should be identified as potential sites for a kūpuna living community.
- 5) **Select a site.** If a different site is selected, these are the steps to be followed:
 - a) The Community and the Landowner will need to reach an access agreement.
 - b) Review specific permitting and entitlements needed for compliance with use of selected lands.
 - c) Funding. Potential funding sources include:
 - i) DOE funding
 - ii) Legislature
 - iii) DHHL grants
 - iv) OHA grants
 - v) Kamehameha Schools
 - vi) Private funding
 - d) Planning and construction.
 - e) Operation and maintenance.

Appendix A

Beneficiary Consultation #1 – Meeting Recap



**Kapolei Regional Plan Update
Beneficiary Consultation #1
VIRTUAL Meeting via Zoom
WEDNESDAY, DECEMBER 9, 2020
7:00 P.M. – 8:30 P.M.**

MEETING RECAP

Attendance: 21 (digital sign-in via Google Forms)

DHHL: Pearlyn Fukuba (Planning Office and Project Manager), Andrew Choy (Planning Office), Sherri Hiraoka (Townscape, Inc., Consultant Project Manager), Lillie Makaila (Townscape, Inc., Consultant), Nolan Hong (Pop Creative Media, Technical Assistance).

Digital Handouts:

1. Beneficiary Consultation #1 Agenda
2. Slideshow Presentation

Presentation:

Lillie Makaila opened the meeting with welina, Auntie Homelani Shaedel offered opening pule and Pearlyn Fukuba shared introductions of the staff and consultants. Lillie Makaila gave a slideshow presentation to share the purpose of Beneficiary Consultation #1, the background on DHHL Regional Plans, and the Regional Plan Update project for the Kapolei Regional Plan (2010). Lillie Makaila introduced the Visioning Exercise and the attendees were split up into three virtual breakout rooms using the Zoom platform to participate in the Visioning Exercise. Lillie Makaila facilitated discussion for Breakout Room #1. Sherri Hiraoka facilitated discussion for Breakout Room #2. Andrew Choy facilitated discussion for Breakout Room #3, and Pearlyn Fukuba assisted with notetaking for Breakout Room #3 as well.

Breakout Room #1

Facilitator: Lillie Makaila

Vision Exercise Part I

Attendees were asked to share with the group their answers to the following questions:

1. *What special things about this place do you want to preserve for the future generations?*
2. *What do you want to create in this community? In this place?*
3. *What do you want to change in this community? In this place?*

Discussion:

- Pu'u o Kapolei & other wahi pana should be preserved for the future generations.
 - o These are important places for everyone: homesteaders and others who live in the region.
 - o Many of the homesteaders living in the Kapolei area are not from this place but have moved here from elsewhere. It is important that we all learn about the important places in the region.
 - o Even though Pu'u o Kapolei does not sit on DHHL lands, it is still an important resource for the DHHL beneficiaries in the region. We need to give folks a sense of place and give young folks reasons to stay here and not move away.
- The Heritage Center is important to community folks.
 - o It is a place to gather, to have celebrations and is the direct result of a survey done in the Malu'ohai homestead and part of the Kaupe'a homestead that asked lessees what the needs of the community are.
 - o The Heritage Center will be the wahi pana for all the homesteads in the Kapolei Region.
- Pueo are an important resource to be preserved and protected. They used to be more frequently seen but are very rarely seen today.
- Agricultural Lands are a resource in the area. Kapolei is a unique community with residential areas that are surrounded by agricultural and commercial lands. There is a sense of Town, but it is still Country. It is important to preserve open spaces and to work towards being more self-sustaining by prioritizing the agricultural industry in the region.
- More community engagement is needed in the region.
 - o We are concerned about the young folks in the community and ensuring that there are positive things for them to be engaged in, such as team sports, canoe clubs, etc.
 - o If there were opportunities for the old and the young to participate in engagement together it would allow them to spend time with each other, and the older folks could help to guide the youth into their future.
- We would like the homesteads to be cleaner and neater.
 - o Abandoned vehicles clutter up the roadways and make the community look bad. There are folks who live in the community who have cars parked on the road that haven't run in 5 years. These vehicles need to be removed. Homesteaders should make more of an effort to keep the homestead looking neat.
 - o Enforcement for these types of things can be complicated. Assistance from DHHL would be appreciated.
 - o Malu'ohai & Kaupe'a Associations and their lessees are under the master association of the Villages of Kapolei (VOKA). VOKA assists in sending notices to homeowners that are in violation of the association rules and policies. It is a very complex issue, but it is helpful to have assistance from a master association in regulating the neatness of the homesteads.
 - o One challenge is that it is not always clear if it is a homesteader who is responsible for the vehicle or if it was brought in by someone outside of the community.
- We envision a place of worship that is completed in the next 10 years and serves as a sanctuary for the region. Example: Moloka'i has many churches in the older homesteads, and there are ample places of worship for the community.

- We envision a place of rest, like a cemetery, in a serene and peaceful setting near the place of worship.
- We also envision a kūpuna living facility for kūpuna in Kapolei that is similar to the senior living apartments located in Waimānalo.
 - o There are many challenges for kūpuna, and sometimes maintaining a large homestead lot is not the most ideal situation for them. They may not be able to keep up with a larger home or yard.
 - o They may even be put into a back room of the house as their family takes over the space and they may not get the support or services that they need.
 - o We need a great kūpuna living facility so that they have a more suitable place to go as they age.

Visioning Exercise Part II

Attendees were asked, "If a documentary film crew comes to your community in 2050, what will they capture on film?" What does Kapolei look like?

1. *What does Kapolei feel like?*
2. *What should they highlight about your community?*

Discussion:

- There are more open spaces for the keiki.
 - o Kānehili Homestead is in the process of planning phase II of the Kānehili Area Park, but funding is an issue and is the Association's main priority right now.
 - o There should be soccer parks, baseball parks, and other places for keiki to go. There aren't many open spaces here for the community, but the Department (DHHL) has a lot of land in the region, and they need to put some grass down on those open lands and let the keiki go and use the spaces.
- There are spaces for the Homestead Community to have gardens or farming beyond just their homestead lot.
 - o The lots are small and don't offer much space for agriculture. There should be additional areas for each family to have a plot to grow vegetables and food to sustain themselves and to feed their 'ohana. We should also create more awareness about being sustainable.
- There is ample parking for the homesteads.
 - o Parking is needed for each family and their vehicles. Parking is also needed for other types of vehicles including boats, work trucks and other vehicles.
 - o Having safe and secure storage places to park would help keep the homesteads from being overwhelmed with parked vehicles.
- There is a thriving, sustainable Kūpuna Village filled with a community of native Hawaiian kūpuna.
 - o The design of these homes would be small, 1 bedroom/1 bath single family homes. There would be enough room for kūpuna to live comfortably, but not have such a large home and yard to care for. Everything would be close and easily accessible for the kūpuna. There would be spaces to garden, a commissary to shop, a cafeteria to eat, and even laundry services available.

- Kūpuna beneficiaries should be able to lease until they pass, and their spouse should be able to stay until they pass too regardless of whether they are a beneficiary or not. Their rent would be based on their income to ensure that it is truly affordable for them. Visitors are welcome, but there is no long-term family that is allowed to live in the kūpuna housing.
- There are health clinics, social and supportive services, volunteers to care for the kūpuna, and security to keep them safe and monitored.
- There are golf carts available for them to get around, sustainable energy like solar panels used, a recreation center, gym, places for them to shop, and more.
- People in the community run the community so it is cost effective. Native Hawaiian organizations are able to get involved and provide support to the kūpuna.
- Having a kūpuna village would free up the other types of homestead lots so they can be passed on to other beneficiaries when the kūpuna move into the village.
- Our kūpuna used to be better cared for in our history, and we need to include this as a priority in the planning for the future of our community.
- The people are self-governed.
 - This can mean a lot of different things but think about what this means to you and what you would want to see in a self-governed future.
- There is a neighborhood watch organization to spot things happening in the area and keep an eye on the community.

Breakout Room #2

Facilitator: Sherri Hiraoka

Vision Exercise Part I

Attendees were asked to share with the group their answers to the following questions:

1. *What special things about this place do you want to preserve for the future generations?*
2. *What do you want to create in this community? In this place?*
3. *What do you want to change in this community? In this place?*

Discussion:

- Intentional naming – preserve the names of this place.
 - Call out the ancestral names, be mindful of how we select names for buildings, places. Research!
- How do we have the visual landscape depict the native spaces; where might we look to create community gardens and invest in Hawaiian landscaping, native plants. The visual landscape should help us to reacclimate ourselves with this place. This should not be “Anyplace, USA.” We should know that we are in Kapolei, Honouliuli, etc. There are certain elements and native animals and plants that are specific to this place. We used to see owls flying, but don’t see them anymore. Ensure that trees that are in our communities are native to Kapolei, even those that serve a function.
- How do we ensure that our footprint and the stories that we tell our keiki are still relevant?

- Have space for gathering, activities, youth, for example the Pā hula at Pu‘u o Kapolei for cultural events, for music, for gathering. It is important that we have these places to activate and activating them is important for the community. Happy to have the attention at Pu‘u o Kapolei and that the young generation will always know it as a place for hula. Preserve names, traditional practices of this place.
- Happy that there are lots of non-profits and partnerships producing events for ‘ohana.
- Community use areas are important.
- Kapolei Heritage Center – a place for the homestead to call its own, managed by its homesteaders.
 - It would be good to have the Heritage center completed and fully built out and be the gathering place that was envisioned in 2008.
 - Lots to do to get Phase II (hālau) built. Need support.
- Kapolei at full buildout will be the largest concentration of native Hawaiians in the world – how do we plan for that growth? Is the Heritage Center enough? Do we need more? How do we service more homesteaders? How do we incorporate the cultural landscape into planning for community areas?
- The 35 acres of community area that DHHL put into the plans – what could they be? Our community will grow and will need places to gather and practice culture, celebrate, do things as a community. Those needs will exceed what we currently have planned.
- Historically, kalo and ‘ulu have their origins here. It reminds me of the nourishment that Kapolei has to make available to the homesteads. Nourishment as a concept or as physical food to survive for this and future generations. Nurture our people: food, health, well-being, spiritual.
- Great homestead leadership in Kapolei! We communicate and work together well as a region. Special for a region, especially as big as Kapolei. How do we encourage our youth to become engaged and be involved. What is the succession of stewardship and leadership to the next generation and beyond.
- We enjoy the neighborhood!
- Realize the “Live, Work, Play” Concept. A lot of our families commute to town for work, then get back into their cars and drive 1.5 hours back home. We have a lot of amenities but still find ourselves commuting to work and back. Expand from an economic development standpoint – how do we support that effort so our people can stay within this ahupua‘a to live, work, play? How to convert from a bedroom community to a thriving community with economic opportunities?
- Kānehili – teens and young adults need programs, e.g., Boys and Girls Club
 - This age group competes for space with the younger keiki in the parks. Need more places, programs for the teen/young adults. Something for them to do.
 - They tell us that there are not enough things for them to do.
 - Have neighborhood security watch program – watches out for drug or alcohol use and talks to young people so drugs and alcohol are not really a problem; just need productive activities for youth.
- Artists painting electrical boxes, murals – can we add art to buildings that is reflective of this space? Partner with others and engage youth to be a part of this.

- Perhaps even something that is dynamic, like in Kaka‘ako where the art changes every year.
- “The Great Wall of Kapolei” (on Kūalaka‘i) – gets tagged and cleaned, but could be used for art that the community will want to care for and police.
- Waipahu High School provides adult education programs. Perhaps Kapolei High School could also provide youth and young adult programs – what programs are needed?

Visioning Exercise Part II

Attendees were asked, “If a documentary film crew comes to your community in 2050, what will they capture on film?”

1. *What does Kapolei look like?*
2. *What does Kapolei feel like?*
3. *What should they highlight about your community?*

Discussion:

- Beautiful artwork that tells us that this is a place for the community, by the community.
- Community is engaged in these places of cultural learning. Puu o Kapolei, etc.
- We are not just hosting people, but teaching and nurturing and sustaining the knowledge of this place for future generations.
- Young homeowners, families moving into a home. See youth engaged in meaningful ways in a variety of settings.
- Multi-cultural celebrations in our common spaces.
 - Celebrating events that become signature events for Kapolei, like when we talk about Kapu‘uola Hula festival, people know that this is a Kapolei event.
 - Celebrations that span generations and are known in this place.
- “Neva have Kapolei when I was young!” Highlight the kūpuna who established the sense of place: their names, their contributions, and their trajectory. This is how Kapolei started, and this is where we are in 2050. Herald these stories!
- Story: the Hawaiian club in Okinawa held events where everyone learned and continued to practice culture: how to pound poi, imu pig, etc. Can we do something like that for the Heritage Center so we don’t forget how to do things, the traditions?
- Heritage Center will be important for the Hawaiian community and for transplants moving in. Do they have a connection to the Hawaiian culture? Are they learning about who we are and what we’re about? It’s important to integrate newcomers into our Hawaiian culture so they can learn. In 2050, they will know that their community was built on unity, culture.
- What can we bring to Kapolei for our children so they can remain here to live: jobs, Hawaiian culture. We’re losing too many children to the mainland.
- Availability of videos, etc. So newcomers can get a little bit of history and understanding and how to be active in the community?
- There are a lot of military families moving in and they are interested in the culture. We should take the opportunity to share our culture, our place and to ask for respect for our

culture and values so they learn about who we are so we are not dismissed 50 years from now.

- When anyone comes into our community, they should know that this is Hawai'i, our community. How does it look different from other communities? What is the story of this community?
- A place to come and learn.
- By 2050, Kapolei Heritage Center is built! A second site is built! Ho'omaka is built!
- Communities are thriving. Kapolei Community Development Corporation is servicing our communities with programs. A second site is emerging to expand services.

Breakout Room #3

Facilitator: Andrew Choy

Notetaker: Pearlyn Fukuba

Vision Exercise Part I

Attendees were asked to share with the group their answers to the following questions:

1. *What special things about this place do you want to preserve for the future generations?*
2. *What do you want to create in this community? In this place?*
3. *What do you want to change in this community? In this place?*

Discussion:

What special things about this place do you want to preserve for future generations?

- 'Ohana, relationship with neighbors.
- Heritage and culture.
- Community benefits, e.g., Ka Makana Ali'i.
- Land preserved for farming, cultural and self-sustaining purposes – preservation is needed, especially for the keiki.
- Preserving the community spaces like the parks and Kapolei Heritage Center (KHC), including expansion of those pieces.
- Preservation of the landscape, including food plants.

What do you want to create in this community, in this place?

What do you want to change in this community, in this place?

(NOTE: both questions were simultaneously answered)

- The current road design only allows parking on one side of the street, therefore it doesn't accommodate families with 4 or 5 cars. Can it be designed so that parking is allowed on both sides of the street?
- Streets are too narrow, homesteaders need to drive on their lawn to turn around vehicles.
- Can DHHL set aside land for a cemetery, including a place for urns (columbarium) in the Kapolei region (the closest cemetery is in Nānākuli).
- A park in their neighborhood that can be reached by walking or bicycling, green space, basketball park, etc.
- Current tree choices create too much rubbish, still waiting for a park to be built at the 9-acre vacant parcel near the high school.

- Traffic light and crosswalk at the intersection of Pū'ainakō and Kapolei Parkway
- Develop homestead youth leadership (gang prevention measures), charter schools, continue expansion of KHC and Kānehili park, install lights for night-time use.
- Roads are narrow, reduce 25 mph to 15 mph speed limit in the homestead areas
- Finish license agreement with VOKA to manage homesteads.
- Install green growth along Kūalaka'i Parkway to provide a barrier from fires that could jump the parkway to the homestead areas.

Visioning Exercise Part II

Attendees were asked, "If a documentary film crew comes to your community in 2050, what will they capture on film?"

1. *What does Kapolei look like?*
2. *What does Kapolei feel like?*
3. *What should they highlight about your community?*

Discussion:

What does it look like?

- Mature trees, children playing at the park, garden spaces.
- A place where people don't have to work 3 or 4 jobs and have time to enjoy their homes
- Kamehameha West O'ahu campus and Punahou campus.
- People live, work and play in the same region, and don't have to commute so far for work.
- Home gardens and a community farmer's market where they could buy products from one another.
- Healthy and resilient community where families have open spaces and opportunities to thrive.
- Drug and substance-free community.
- Community center for youth/kupuna, community center (a piko for the community),
- Live music, jam sessions, community imu.

The virtual Breakout Rooms were closed, and all attendees were brought back together into a large group discussion. Facilitators were asked to share highlights from each Breakout Room's discussion with the large group. Participants in each Breakout Room were asked to correct any errors in what was shared by Facilitators and/or to add in anything that was left out. Lillie Makaila began a large group discussion about the highlights that were shared.

Large Group Session:

Facilitator: Lillie Makaila

DISCUSSION:

What are some of the major themes from the Breakout Room Discussions?

- Kūpuna Village:
 - Comprehensive/full service
 - Affordable
 - Everything in one place
 - Cultural activities
 - Health maintenance

- Aging needs – health needs, activity needs, exercise needs
 - Safe place
 - Dementia friendly
 - Supportive services for people to age in place
- Agriculture/Community Garden space:
 - Space for each 'ohana to garden or farm
 - Space to share the produce – farmers market or co-op
 - Promote the idea of a circular economy
 - Grow produce
 - Retail produce
 - Work with others in the economy
 - Getting mulch
 - Working with kūpuna village, schools, restaurants
 - Workshops to help people build knowledge on how to garden
 - Lā'au Lapa'au – medicines, feed the circular economy
 - Look at the historical setting to better understand what to place these things
- Youth – places and spaces and programs to engage and groom to become active in the community
 - Already have resources – elementary schools, other schools, UHWO
 - Get youth active, higher education, trades. How do we connect the dots?
 - Types of activities: community sports, intramurals, cultural programs, paddling, clubs, baseball, volleyball, softball
 - Everyone get out there with a team – inter-homestead Olympics!
 - Biggest population of Hawaiians – we gotta do something!
- Community spaces within the homesteads – plan out all spaces.
 - Kaupe'a needs the 9 acres by the HS and Pū'ainakō. We need to get control of this. It's HHFDC land – how does DHHL get it? For a gathering Space?
 - Own up to promises.
 - What should a gathering space look like?
 - Assess the needs of the community. Build out the spaces we have and assess future needs.
- Traffic light! At Pū'ainakō and Kapolei Parkway

Presentation:

Lillie Makaila concluded the presentation covering next steps, the proposed timeline for completion of the update to the Kapolei Regional Plan, and shared contact information with the attendees. The meeting was adjourned at 8:45pm.

Comments submitted outside of Beneficiary Consultation #1:

- A lessee in Ka'uluokaha'i was unable to attend Beneficiary Consultation #1 and shared the following:

- Wider roads to accommodate parking. Many homesteaders have multiple families in one home. Thus, having several cars, and many turn their garages into a living space like a man cave or children's play zone. O have been told that narrower roads allow for more homes but if overcrowding of vehicles parked illegally are causing dangerous safety issues such as children in danger of not being seen if running from behind a car that is parked illegally, or blocking driveways which makes it difficult to back out of your driveway, and blocking sidewalks that wheelchairs have to go on the road to get by.
- A cemetery or columbarium like they have in Nanakuli. Not everyone has a plan for when we leave this earth.
- A park with space to allow children to play safely. The park could be multi use with an open covered building, certified kitchen, and an imu.
- All 3 requests require DHHL to change focus from single family Homes to multi family structures like condominiums.
- Rentals also are needed with long term leases for 99 years which would get people off the list.

Email sent to DHHL and Townscape, Inc.

- A lessee in Ka'uluokaha'i homestead requested a community bulletin board be placed near where the mailboxes are located. *Telephone request to DHHL.*
- A lessee in the Kaupe'a homestead discussed the various issues related to cluster mailboxes located closely to certain residences in the homestead. Some of these issues include:
 - Cluster mailboxes are for 100 individual mailboxes, and cause traffic and congestion where they are placed in front of the homes of the lessees.
 - This causes distress and frustration for the homes affected.
 - There was a recent car accident where someone checking their mail hit a parked car on the street.
 - The lessees were not notified that they would have a cluster mailbox in front of their home.
 - This is an added layer of difficulty that is shouldered by only a small percentage of those in the community.

Appendix B

Beneficiary Consultation #2 – Meeting Recap



**Kapolei Regional Plan Update
Beneficiary Consultation #2**

Virtual Meeting via Zoom

TUESDAY, MAY 4, 2021

6:30 P.M. – 8:30 P.M.

MEETING RECAP

Attendance: 10 (digital sign-in via Google Forms); 27 (count on Zoom)

DHHL: Pearlyn Fukuba (Planning Office and Project Manager), Andrew Choy (Planning Office), Sherri Hiraoka (Townscape, Inc., Consultant Project Manager), Lillie Makaila (Townscape, Inc., Consultant), Nolan Hong (Pop Creative Media, Technical Assistance).

Digital Handouts:

1. Beneficiary Consultation #2 Agenda
2. Slideshow Presentation
3. Draft Values
4. Draft Vision Statement
5. Draft List of Projects

Presentation:

Lillie Makaila opened the meeting with a welina, Aunty Homelani Schaedel offered opening pule and DHHL staff and the consultants introduced themselves. Lillie gave a slideshow presentation on the background of DHHL Regional Plans, the current update to the 2010 Kapolei Regional Plan, and what was discussed during Beneficiary Consultation #1 (BC#1) held on December 9, 2020. Notes from BC #1 may be found on the project website:

<https://dhhl.hawaii.gov/po/oahu/kapolei-regional-plan-update-2020-2021/>.

The purpose of Beneficiary Consultation #2 (BC#2) was to review and revise the draft values and vision statement that were developed after BC#1, review and amend the draft project list, and explain how the projects will be prioritized. Lillie facilitated a large group discussion on each of these topics. The following are summaries of the questions and comments that were raised.

DRAFT COMMUNITY VALUES

A list of draft community values was developed from the discussion in the visioning exercises conducted in BC#1. Each of the draft values is presented below with the **general topic in bold font** and a *description of the value in Italics*. Where appropriate, edits to the topic or descriptions are captured in Ramseyer format with additions underlined and ~~deletions struck through~~. Summaries of the discussion are presented as bullet points under each value. Some of the ideas are taken directly from the chat function in Zoom. These draft values will be further refined based on the discussion and presented in the Draft Kapolei Regional Plan Update (Kapolei RPU).

General Comments on Values

- Kāko'o for values so far. Need more participation on these calls. Gatherings are very important. Having spaces to gather are a priority. Important to instill values in the keiki.
- Hawaiian values are important and are important to be a part of our daily lives. We are forgetting about our values and replacing them with social media and influencers who are not rooted here. Younger generations are forgetting and not always practicing these values. A school that could teach etiquette and manners to our younger generations. Healing aspects of ho'oponopono, lomilomi.
- Would cover safety of community. We are community based, 'ohana. We gather and feel the most comfortable in places we gather. Could do practices.
- Take the values taught by our kūpuna and bring that forward and share.
- Do we have anywhere mentioning the pledge to the health and wealth of our community?
- Are there other community partners in Kapolei that have similar values?
- Serving all of our people in all of our homesteads. The values that each of us were taught. Open it up: what do we need vs. want. What is the priority?
- We no longer have a sense of being Hawaiian. Now we have to be Hawaiian in the white world. We've been told what we can and should be. We are teaching our children that we have a bigger loss and stake that the lands that have been taken away. It's our sense of self being.
- Hope that all the ideas are looked at. We know that it is not always possible to keep the agricultural history/lands, and that things are changing. This used to be swamp, not solid foundation. The roads are sinking. Makes you think about what will happen in the future, if the homes will start to sink.
- Health & wealth of the community.
- All the various communities have their own ideas about how they want to be. This is our little niche to be reflective of what we want to see

- City has ordinance that all new street names will be Hawaiian. Running out of words. A street in Kaupe‘a was named Kānehili before there was a Kānehili homestead.
- There may be more homesteads in the next 20 years.

Natural, Cultural and Agricultural Resources

~~Incorporate reminders of~~ Preserve Kapolei's rich natural, cultural, and agricultural history into new land uses and programs ~~whenever possible~~. Kapolei is a Town that has grown in what was once Country. That Country-feel should be incorporated wherever appropriate.

- The natural, cultural, ag resources is Kapolei's story.
- Everyone is from somewhere else. It's our keiki who are truly going to call Kapolei home.
- Kapolei is a new community with its people coming from somewhere else but now call Kapolei home. Our Keiki will be the first generation that can truly say they are from Kapolei. Together we are learning about this place we call now call home. We are learning new mo'olelo and mele. This is a tremendous opportunity to uncover Kapolei's rich history, learn its mo'olelo and share Kapolei's story...add to it...and build our community.
- We're still building and growing. We're still finding ourselves. Exciting times! We're building a community and a homestead.
- Natural, cultural & ag...."whenever possible" could we talk about rephrase wording? it feels like its optional.
- I think that the "whenever possible" is implied as with all of the other values. "whenever possible" doesn't belong in a value statement. 'O ku'u wahi mana'o kēia.
- Basic needs need to addressed. Give people hope. "when can" doesn't give you hope, it takes away.
- If can have enough space to grow food, it helps if there are no jobs. Basic needs need to be addressed. One of the basic needs is to give hope. To say "when possible," that takes away hope.
- However we choose to define our values, that is how we should articulate it.
- Don't think that it forces anything.
- Inside of "Incorporate reminders" of Kapolei's rich...replace with "Preserve"....

Wahi Pana

Traditional place names and wahi pana are of great value. Mo'olelo and histories are shared with homesteaders and the extended community of Kapolei to ensure that these celebrated places are respected, protected, and remembered into the future. Wahi pana, of old and new, throughout the region are used by the community to gather and practice the native culture.

Kūpuna

Traditionally, kūpuna held an important role and place in native Hawaiian society. Spaces and resources in Kapolei are used to create full and healthy lives for kūpuna as they age in place.

- Place for kūpuna that is serene in setting that provides them quality of life with assistance and care.

Keiki

Resources for ‘ōpio and keiki in Kapolei are a priority. There are safe places for youth to spend their time and programs for them to learn and play near their homes.

- Emotional safety. Safe spaces.
- We’ve lost students in neighborhood to suicide and we need to do more. Our rates are higher than national average.
- Lots of fights at the park after school and the school doesn’t do anything.
- Everyone is coming from somewhere else. The children who are transplanted are already at an age that they’re trying to figure out who they are, and the transplanting doesn’t help. They end up fighting for no reason.
- Need a better way to help kids and guide them in and out of school. Community cohesiveness and teach them how to be the next leaders in our homesteads. Build youth leadership. Physical leadership, emotional safety.

Self-Sufficiency

Kapolei is a place where people can live, work and play. All the things that homesteaders need to have a healthy, thriving community can be found within the region. Kapolei offers an affordable lifestyle where people have time to enjoy their homes and their ‘ohana.

- Include safety. Think about not just feeling safe to go home or go out at night, but safety in the infrastructure itself: safe roads, streets. Roadways are so small and parking is restricted. Need more open space & parks for children to play.
- Ka’uluokaha’i is growing now and in the next few years the children who are playing now, they will be driving. The roads are so small that it restricts parking. People are fighting over parking already. There will also be children playing with even more cars and parking. There’s no place for kids to play. Illegal parking.
- There’s new construction going on and workers are blocking the roads. Garbage trucks won’t go through if the road looks blocked.
- No parking on this side of road with arrows. Police will ticket and tow if the curb is painted red.

- DHHL enforcement branch needs more resources, and the teeth or ability to actually enforce these issues.
- People want more support in entrepreneurial and business opportunities – it's a part of independence.

DRAFT VISION STATEMENT

A draft community vision statement was developed from the discussions in BC#1 and is presented below *in Italics*. Where appropriate, edits to the vision statement are captured in Ramseyer format with additions underlined and ~~deletions struck through~~. A general comment on the vision statement is summarized in the bullet point. This draft vision statement will be further refined based on the discussion and presented in the Draft Kapolei RPU.

From the Pu'u in the uplands to the shores of Kualaka'i, Kapolei is a growing region that looks to its history, mo'olelo, 'āina and kūpuna to build a strong foundation for ~~the~~ our Hawaiian homestead communities. Kānaka embrace the area's rugged climate and terrain, which motivates them to be resilient and self-sufficient. The wahi pana and kīpuka of this place are celebrated and stewarded for future generations

- Should the reference be to "Pu'u" in general or to a specific pu'u? There are many pu'u. Pu'u Hāpapa is the highest point, but it is not as well known as Pālehua, Mauna Kapu, or Pu'u o Kapolei. General consensus was to keep the reference general.

DRAFT LIST OF PROJECTS

A draft list of projects was put together from the needs and desires raised in BC#1. The first five projects in the draft list (indicated by an asterisk*) were the top five priority projects from the 2010 Kapolei Regional Plan. Projects were not listed in any particular order and used the alphabet (A, B, C, etc.) to easily refer to projects during the discussion. Based on that discussion, some projects were deleted, some projects were added, and some projects were combined or revised.

General comments on the projects are listed below in bullet point format with some comments taken directly from the chat function in Zoom. The project list following the general comments uses Ramseyer format to show additions and ~~deletions~~. Where comments related directly to a specific project, they are listed in bullet point format below the project title.

General Comments

- When I think of our family home in Nānākuli, that home was established in the 1940s/50s. Growing up in Wai'anae, it is not that different from what we are experiencing here in Kapolei. They were new to the place and they built their communities. We have a wonderful opportunity to look at what kind of projects and programs are needed in order for us to support the needs of our community from keiki to 'ōpio to kūpuna. The Heritage Center was meant to provide this space. The voices that I have been hearing in my community have been to bring in a Hawaiian immersion school that focuses on 'ōlelo Hawai'i and 'ike Hawai'i. Place for kūpuna, serene in setting, provides a quality of life in a comfortable setting that provides assistive care if they need it.

A Support Heritage Center & Community Commercial Development*

- Supporting the Heritage Center supports programming. The Kapolei Heritage Center (Heritage Center) should provide these types of programs (former projects):
 - Create youth and young adult education programs
 - Support programs that provide cultural and historical education
 - Create a program to make the built environment more reflective of Kapolei's unique native roots (ex: murals, art, native landscaping, etc.)
 - Support cultural celebrations in common spaces
 - Support economic development for homesteaders
- Hawaiian cultural center to practice all of these things
- Hearing programs needed to support 'ōpio, keiki, kūpuna .
- In the last Regional Plan, the Heritage Center as the place to provide the wahi pana to provide these programs.
- Will Heritage Center accommodate the future of our homesteading growth?
- So the Heritage Center is run by the homesteaders?
Yes. The Heritage Center is run by homesteaders who volunteer on the Kapolei Community Development Corporation (KCDC) Board. The mission of KCDC is to serve the homesteaders in the Kapolei region.

B ~~Support New School~~ the Development of a Hawaiian Focus/Immersion School*

- Papa 'ōlelo school in Kapolei
- Absolutely! Culture/'ōlelo based charter school in Kapolei!
- Immersion School to focus on 'ike and 'ōlelo Hawaii.
- A papa 'ōlelo school in Kapolei would be a good improvement to the community.
- Please add Hawaiian Focus Charter School to Hawaiian language Immersion School.

- Hawaiian focus school can cover language, culture, music, and programs to support keiki and young adults.
- I think a Hawaiian-focused charter school is needed in for our keiki. 'Ōlelo is part of curriculum as well.
- I respectfully disagree with reducing 'ōlelo to a papa.

~~C Engage Beneficiaries in a Planning Charette Process*~~

- Completed

~~D Develop Pedestrian/Bike Path Network to Community Resources*~~

- Department of Transportation project

~~E Preserve & Develop Parks to Service Create More Open Spaces, Park Spaces, and Recreation Spaces to Support the Homestead Community*~~

F Create a Kūpuna Living Community

G Establish a Place of Worship and a Place of Rest/Cemetery for the Homestead Community

~~H Establish a place of rest/cemetery for the homestead community~~

- Combine with “Establish a place of worship”

I Create a Community Garden/Agricultural Space/Farmer's Market for Homesteaders

- Maybe a part of the region could be a coop part of land where people can grow food or have a swap meet. There is an example in Kekaha on Kaua'i. This helps with the entrepreneurship, pop-ups, etc,

~~J Create a farmer's market~~

- Combine with “Create a Community Garden/Agricultural Space”

~~K Create More Open Spaces, Park Spaces, and Recreation Spaces to Support the Youth in the Community~~

- Combine with “Create more open spaces, park spaces, and recreation spaces to support the youth in the community”

~~L Create youth and young adult education programs~~

- Move under “Support Heritage Center & Community Commercial Development”

~~M Support programs that provide cultural and historical education~~

- Move under “Support Heritage Center & Community Commercial Development”

~~N Create a program to make the built environment more reflective of Kapolei’s unique native roots (ex: murals, art, native landscaping, etc.)~~

- Move under “Support Heritage Center & Community Commercial Development”

~~O Support cultural celebrations in common spaces~~

- Move under “Support Heritage Center & Community Commercial Development”

~~P Support economic development for homesteaders~~

- Move under “Support Heritage Center & Community Commercial Development”

Q Create Multi-Family and Rental Housing Developments for Homesteaders in Kapolei

R Hawaiian Culture Center

- Hawaiian culture center. Place to practice values. It would cover safety of the community, it could be a space to gather and showcase our culture. We could have resources.

S Create Entrepreneurial and Business Opportunities

T Support Music

U Nurture Kapolei-Based Community Health Workers and Build Partnerships and Community Capacity to Help Address the Findings of the Recently Completed Kapolei Homestead Health Survey

V DHHL to Address Post-Build Issues in the Homesteads

- Actions should include:
 - Find opportunities for more parking in homesteads
 - Create a crosswalk and traffic light at the intersection of Pū'ainakō and Kapolei Parkway
 - Reduce the speed limit from 25MPH to 15MPH within the homesteads
 - Install green growth projects along Kualaka'i Parkway
 - Finish Villages of Kapolei Association (VOKA) license agreement to manage homesteads
 - Preserve trees
 - Place cluster mailboxes in better locations (not fronting homes or blocking driveways)
- Examples include plumbing in washed-out lots in Malu'ōhai, speed signs, the need for additional safe parking, cluster mailboxes in poor locations, and the need for retaining walls in Ka'uluokaha'i.
- The slope issue seems to be a specific issue to Ka'uluokaha'i and not a regional plan issue per se. However, it seems that each development has had post-build issues that have arisen. Maybe a better way to phrase as regional issue ...would be for DHHL to make it a priority to address post-build issues in area such as the plumbing in wash-out lots in Malu'ōhai, the sound wall in Kānehili, etc. Speed signs I think would fall under post-build issues as well.

W DHHL to Provide More Options for Communication in the Homesteads instead of only Sandwich Isles Communications

- Yes we need to get Sandwich Isles out lol, I work from home & have them coming out multi times, I'm sure we're all experiencing that.

X Establish and Grow Inclusive Housing and Programming for native Hawaiians with Disabilities

~~Y Establish a Neighborhood Watch organization~~

- There are already watch groups established

~~Z Find opportunities for more parking in homesteads~~

- Move under "DHHL to address post-build issues in the Homesteads"

~~AA Create a crosswalk and traffic light at the intersection of Pū‘ainakō and Kapolei Parkway~~

- Move under “DHHL to address post-build issues in the Homesteads”

~~BB Reduce the speed limit from 25MPH to 15MPH within the homesteads~~

- Move under “DHHL to address post-build issues in the Homesteads”

~~CC Install green growth projects along Kualaka‘i Parkway~~

- Move under “DHHL to address post-build issues in the Homesteads”

~~DD Finish Villages of Kapolei Association (VOKA) license agreement to manage homesteads~~

- Move under “DHHL to address post-build issues in the Homesteads”

~~EE Create multi-family housing developments for homesteaders in Kapolei~~

- Combine with “Create Multi-Family and Rental Housing Developments for Homesteaders in Kapolei”

~~FF Create more homestead rental projects in Kapolei~~

- Combine with “Create Multi-Family and Rental Housing Developments for Homesteaders in Kapolei”

~~GG Place cluster mailboxes in better locations (not fronting homes or blocking driveways)~~

- Move under “DHHL to address post-build issues in the Homesteads”

PROJECT PRIORITIZATION

The revised project list was posted to a Google form where Kapolei Beneficiaries can vote for their top five priority projects. Priority projects inform DHHL as to what is important to the Beneficiaries in a homestead region. The Department offers grants to communities to implement projects on a Regional Plan Priority Project list and since these projects have been vetted through the regional plan process, priority projects are considered to have gone through required beneficiary consultation. Projects that are not on the priority list may still be implemented, but additional steps may be necessary.

PRIORITY PROJECTS SELECTION POLL:

Voting instructions and eligibility were described during BC#2 and included in the Google Form instructions. Participation in priority project selection was limited to DHHL Kapolei beneficiaries, or DHHL lessees in Kapolei, DHHL undivided interest lessees in Kapolei, applicants on the DHHL waitlist who have a Kapolei mailing address, or a representative participating on behalf of one of the above persons. Only one submission was allowed per beneficiary. All participants were required to include a full name and valid form of contact for verification purposes. Additional household members were not eligible for participation unless they too could verify themselves as a Kapolei beneficiary. Submissions that could not be verified and duplicate submissions were excluded from the poll results. Prioritization was open until WEDNESDAY, MAY 19, 2021 (extended from May 18, 2021 at 8:30pm).

NEXT STEPS

Lillie concluded the presentation covering next steps, the proposed timeline for completion of the update to the Kapolei Regional Plan, and shared contact information with the attendees.

- Develop Draft Kapolei Regional Plan Update
- Hawaiian Homes Commission: present for review and comment (Aug 2021)
- Beneficiary Consultation #3 (Sep 2021)
- Hawaiian Homes Commission: present Regional Plan Update for adoption (Oct 2021)

The meeting adjourned at approximately 9:15 pm.

Contact Information

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Project Website

<https://dhhl.hawaii.gov/po/oahu/kapolei-regional-plan-update-2020-2021/>

Appendix C

Beneficiary Consultation #3 – Meeting Recap



**Kapolei Regional Plan Update
Beneficiary Consultation #3
Virtual Meeting via Zoom
THURSDAY, DECEMBER 9, 2021
6:30 P.M. – 8:00 P.M.**

MEETING RECAP

Attendance: 7 (count on Zoom)

DHHL: Pearlyn Fukuba (Planning Office and Project Manager), Andrew Choy (Planning Office), Sherri Hiraoka (Townscape, Inc., Consultant Project Manager), Lillie Makaila (Townscape, Inc., Consultant)

Digital Handouts:

1. Beneficiary Consultation #3 Agenda
2. Slideshow Presentation
3. Draft Kapolei Regional Plan Update (available online)
4. Online Comment Form

Presentation:

The purpose of Beneficiary Consultation #3 (BC#3) was to review the Draft Kapolei Regional Plan Update with Kapolei beneficiaries and to gather beneficiary comment on the Draft Plan. Lillie Makaila opened the meeting with a welina, Aunty Homelani Schaedel offered opening pule and DHHL staff and the consultants introduced themselves. Lillie gave a slideshow presentation with a review of the Draft Kapolei Regional Plan Update and a summary of the planning process. Lillie facilitated a large group discussion following the slideshow presentation. The following are summaries of the questions and comments that were discussed.

VISION STATEMENT:

The following Vision Statement was shared with BC#3 participants:

From the Pu'u in the uplands to the shores of Kualaka'i, Kapolei is a growing region that looks to its history, mo'olelo, 'āina and kūpuna to build a strong foundation for our Hawaiian homestead communities. Kānaka embrace the area's rugged climate and terrain, which motivates them to be resilient and self-sufficient. The wahi pana and kīpuka of this place are celebrated and stewarded for future generations.

Participants were asked for any suggested changes or corrections needed to the vision statement. One comment was shared via the chat and stated that the vision represents Kapolei. No other revisions were suggested during BC#3.

GUIDING PRINCIPLES/COMMUNITY VALUES:

Each of the five guiding principles were shared with BC#3 participants. Participants were asked to comment on each of the principles and share any suggested revisions that they may have. Participants in BC#3 only shared comments on two of the five guiding principles/values. These comments are summarized below. Changes to the language of these guiding principles/values based on beneficiary comments are included in this section. Added language is underlined and language that is removed is recorded with a ~~strike through~~.

Natural, Cultural and Agricultural Resources

Preserve Kapolei's rich natural, cultural, and agricultural history within new land uses and programs. Kapolei is a Town that has grown in what was once Country. That Country-feel should be incorporated wherever appropriate.

Wahi Pana

Traditional place names and wahi pana are of great value. Mo'olelo and histories are shared with homesteaders and the extended community of Kapolei to ensure that these celebrated places are respected, protected, and remembered into the future. Wahi pana, of old and new, throughout the region will be used by the community to gather and practice the native culture

Kūpuna

~~Traditionally,~~ Kūpuna hold ~~held~~ an important role and place in native Hawaiian society. Spaces and resources in Kapolei will be used to create full and healthy lives for kūpuna as they age in place.

Beneficiary comments:

- The word "held" makes it seem past tense. Suggest changing the language so that it shows the special place that kūpuna continue to hold for us as a people.

Keiki

Resources for 'ōpio and keiki in Kapolei are a priority. There will be safe places for youth to spend their time and programs for them to learn and play near their homes.

Self-Sufficiency

Kapolei is a place where people can live, work and play. All the things that homesteaders need to have a healthy, thriving community can be found within the region. We strive for a Kapolei which offers an affordable lifestyle where people have time to enjoy their homes and their 'ohana.

Beneficiary comments:

- The lifestyle is not so affordable now. Suggest adjusting the language so it is more aspirational about what folks want for Kapolei.

PRIORITY PROJECTS:

Each of the five priority projects selected by the Kapolei beneficiaries in the Priority Project Poll (see BC#2 Meeting Recap for more details about priority project selection) were shared with BC#3 attendees. Beneficiaries were given the opportunity to provide comments for each project. Participants in BC#3 only shared comments on Project #4 and Project #5. These comments are summarized below. Comments provided by DHHL staff are also found below the relevant priority project.

PRIORITY PROJECT #1: Create More Open Spaces, Park Spaces, and Recreation Spaces to support the Homestead Community.

PRIORITY PROJECT #2: Create a Kūpuna Living Community.

PRIORITY PROJECT #3: Support the Heritage Center and Community Commercial Development

PRIORITY PROJECT #4: Support the Development of a Hawaiian-Focus School/Hawaiian Immersion School

Beneficiary comments:

- Ensure that the school is both 'ike and 'ōlelo based and is not just a native charter school.

PRIORITY PROJECT #5: Provide More Options for Telecommunications Service to Homesteads

Beneficiary comments:

- Is it enough that this project is a priority project in the regional plan or does the community need to draft a resolution or take further action in order to emphasize the importance of this project to the Hawaiian Homes Commission?
- Maybe the community can do a survey of the homesteaders to better understand the scale of those that are affected.
- Has DHHL staff looked at the conditions of the contract that Sandwich Isles Communication (SIC) has failed to uphold as a way to terminate the license agreement? A solution for this issue in my homestead and other Kapolei homesteads was needed long ago.
- It is unfortunate that the Department is caught in this web of legality because they cannot communicate with us other than to say that they are working on this.
- 2020 was a huge wake up call for all of us, and it was horrible for many of our families. It has accelerated the need for SIC to do something for us to get quality services.
- Malu'ōhai does not have fiber optic cables, so there are limitations for the quality of service that the homesteaders will have access to.

- In Kānehili we have always had Oceanic/Spectrum for broadband services, and I don't understand why its all different. Getting everything more uniform would help.
- From a Kaupe'a standpoint, this is more than Priority Project #5. We are working with other agencies because there have been situations where our SIC lines have been compromised. There has been tampering and unauthorized use in Kaupe'a since 2018. This is something that should be looked at because we need our opportunities to be opened up for us. It scares me to see compromising of utilities, it is like having a prison without a guard.
- I hope that DHHL can look at this. In order for us to be self-sufficient we need this resolved.
- I am one of the first residents in Ka'uluokaha'i, and when we came in we started under this contract with DHHL for SIC. I feel like we should have had the option to choose and not be dictated what we should be getting. We do not have fiber optic and SIC is not putting out enough bandwidth for me to get our entire house covered with wifi, and it's a small house. They want us to get WiFi extenders and upgrade routers, but we are already paying for service.
- Before SIC only offered phone services and we went to Oceanic for internet. Around 2010 or 2012, SIC offered computer services and bundles. Some people switched over completely to SIC and those of us who stayed with Oceanic for internet did not experience the same problems as those who changed over to SIC. Those who did have issues wanted to go back to Oceanic. There was an agreement between Oceanic and SIC that services would not be transferred (back to Oceanic). Spectrum, formerly Oceanic, was not aware of the agreement but once they found out they stopped allowing homesteaders to switch to their services.
- I thought that Kaupe'a did not have fiber optic, but now I hear that they do have fiber optic but it is not being used to provide services to homesteaders. There are gaps in services in the homesteads.
- This is a priority project and it may need to be moved to a higher position. If we do this as a region, our voices are stronger than as individuals so we need to work together. This project has affected our families on a daily level and I don't appreciate our people being pawns on the checkerboard. Regardless of what number priority it is, our homestead leadership should still come together and not just as individuals.

DHHL staff comment:

- We are very aware of this issue, not just in Kapolei, and especially during the pandemic. The Department is currently pursuing legal remedies to try to address these options. It would help the Department if it could have more examples of beneficiary problems to bolster their case.
- By legal remedies, we mean how we can get out of our contract with the existing service provider. Because it is a legal matter, we have to be cautious.
- It always helps to remind the HHC about issues, so periodic testimony on the conditions helps.
- We can reflect the urgency of this issue in the writeup of the plan.

- We can reorder the projects and put it in a higher priority in the plan.

NEXT STEPS

Lillie concluded the presentation covering next steps, the beneficiary comment period and relevant information and deadlines, and shared contact information with the attendees.

- The beneficiary comment period is open from **Thursday, December 9, 2021 to Monday, January 10, 2022 at 8pm.**
- Beneficiaries may access the Draft Kapolei Regional Plan Update online or in-person at the DHHL Kapolei Offices.
- Comments may be submitted online via Google Form (link shared via chat and posted on the project website), via email to [dhhl.planning@hawaii.gov](mailto:dhdl.planning@hawaii.gov) or lillie@townscapeinc.com, or via telephone at (808) 550-3893.
- The Final Kapolei Regional Plan Update is expected to be up for adoption by the Hawaiian Homes Commission in March 2022.

The meeting adjourned at approximately 8:15 pm.

Contact Information

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Project Website

<https://dhhl.hawaii.gov/po/oahu/kapolei-regional-plan-update-2020-2021/>

Appendix D

Leadership Meeting & Site Visit Recap



Kapolei Regional Plan Update

Leadership Meeting

Via ZOOM

October 14, 2020, 6:30 P.M. – 7:30 P.M.

Attendance: Kānehili

Randy Akau
Antonio Bale

Kaupe‘a

Michelle Kauhane
Colleen Aiwohi
Iwalani McBrayer (connection issues)
Uncle Lono (connection issues)

Ka‘uluokaha‘i

Kimo Palakiko (joined at 8:00 pm)

Malu‘ōhai

Homelani Schaedel

KCDC

Scott Abrigo

DHHL:

Pearlyn Fukuba (Planner, Project Manager)

Townscape, Inc:

Lillie Makaila (Project Manager)
Sherri Hiraoka

Meeting Purpose: To introduce the Kapolei Regional Plan Update and planning team to the leadership of the Kapolei homestead associations and Community Development Corporation (CDC) and to ask for their assistance and guidance in preparing and planning for the update process.

Background on Regional Plans and Process

Please see handout “What is a Regional Plan.”

- What is the timeframe to update each Regional and Island Plans?
 - Regional Plans are generally updated every 10-20 years. The current Kapolei Regional Plan was completed in 2010.
 - Island plans are updated every 20 years
- Homestead Associations will prepare our communities ahead of time by sharing information and meeting agendas ahead of meetings.

**DHHL KAPOLEI REGIONAL PLAN UPDATE
LEADERSHIP MEETING
VIA ZOOM
October 14, 2020, 6:30 P.M. – 7:30 P.M.**

- Priority Projects from 2010 Kapolei Regional Plan Update
Please see handout “2010 Kapolei Regional Plan Review and Update.”
 - Heritage Center and Community Commercial Development
 - New School Development
 - This seems to be a State-led project, as opposed to a community project.
We should focus our priorities on projects that are led by the community.
 - Planning Charrette
 - A charrette was held in 2012 for the non-residential parcels, but the process was postponed after that.
 - Pedestrian/Bike Path
 - There has been no coordination with the O’ahu Bike Plan to date.
 - Traffic calming for all homesteads in the region might be preferable over a bike or pedestrian path.
 - There is too much traffic on Kapolei Parkway; a crosswalk is needed near Kapolei High School. A stoplight is needed near the proposed park parcel at the intersection of Kapolei Parkway and Pū’āinakō Street. DHHL is responsible for installing it. May not be needed until more houses are built in the vacant lot, but it will be needed eventually for children to get to the high school. A crosswalk is needed now at a minimum. Parks
 - Our community and children need parks and playgrounds to play. The discussion went from a regional park to a park managed by the Kānehili Homestead Association.
 - Today, the Kānehili Homestead Association has a license to manage the park and has obtained a Homestead Community Benefits agreement assistance with DeBartolo for \$500,000 to start a park for residents.
 - Came about from a survey of residents in 2014 to identify the need and priorities.
 - So far, have developed 30,000 square foot (sf) of a 4.5-acre parcel.
 - A basketball court, volleyball court, and keiki playground have been completed. A land area about 2,500 sf has been secured and the community has a plan for future improvements.
 - Kaupe’a also wanted a park in their homestead.
 - There was supposed to be a park at Kaupe’a, not just for Kānehili. Supposed to be a regional park but because of the DCCRs it ended up being in the Kānehili area.
 - At the Kaupe’a lot selection, a 9-acre lot on Hawai’i Housing Finance and Development Corporation (HHFDC) land was identified as a potential location for community use. A portion of this area was identified for use as a park. It is land-locked by DHHL. Outside of DHHL lands, it is only accessible by Kapolei Parkway.

**DHHL KAPOLEI REGIONAL PLAN UPDATE
LEADERSHIP MEETING
VIA ZOOM
October 14, 2020, 6:30 P.M. – 7:30 P.M.**

- DHHL previously tried to acquire the parcel but were unsuccessful.
 - HHFDC put out an RFP to develop the parcel for affordable housing but the lot has no sewer capacity or access. DHHL provided a right-of-entry to HHFDC, allowing them to put forth the RFP, but there is still no sewer capacity, so it is still undeveloped. Kaupe'a would still like to acquire the parcel as a park.
 - HHFDC did try to sell the parcel for \$1 million. OHA was offered the right of first refusal to acquire the parcel, but they declined.
- Priority projects from the 2010 DHHL Kapolei Regional Plan will be considered for prioritization, along with any new projects identified during this update.

Beneficiary Consultations

- The leadership agreed that the regional plan update process should continue and find a way to plan while accommodating COVID-19 protocols. Some organizations have reported increased participation in on-line meetings.
- The best days to hold meetings: middle of the week, Wednesday or Thursday
- Best time for meetings: 7:00 pm or 7:30 pm start
- Recommended outreach:
 - DHHL postcard mailouts. Timing of the notifications is important. Lessees need to get the notifications at least two weeks prior to the meeting.
 - Homestead Association email lists
 - Homestead Facebook pages
 - Road signs
 - Some kūpuna do not have computers, so we will need to think about how to reach out to them.
 - Homestead Associations can help with meeting reminders and encouraging lessees to participate.
 - The Kapolei Community Development Corporation (KCDC) will host a Kapolei Regional Plan Update website that has the same information as the DHHL project website: meeting announcements, meeting notes, draft materials, etc. This website will also allow for comments to be tracked.
 - DHHL will try to set up the Kapolei Regional Plan Update website the week of October 19 and will send out a notice when it is live. KCDC will coordinate with the DHHL Information and Community Relations Office. Links to both websites (DHHL and KCDC) will be on Regional Plan Update materials.
 - Each Homestead Association President and the KCDC President will serve as the contact for Regional Plan Update materials and announcements.

**DHHL KAPOLEI REGIONAL PLAN UPDATE
LEADERSHIP MEETING
VIA ZOOM
October 14, 2020, 6:30 P.M. – 7:30 P.M.**

- Format
 - All homesteads in the Kapolei Region will be included.
 - Three meetings to complete the plan update feels rushed.
 - Meeting #2 is supposed to cover issues, opportunities, projects, and prioritization. Is it possible to hold four meetings? Sample outline of a four-meeting format:
 - Meeting #1: Introduce Regional Plan update, discuss community vision and values and develop draft statement, discuss and summarize issues and opportunities.
 - Meeting #2: Review draft community values and vision statement, summarize issues and opportunities, discuss projects to address issues and opportunities.
 - Meeting #3: summarize project ideas, develop project writeups, prioritize projects.
 - Meeting #4: Present draft Regional Plan Update and collect comments.
 - Four meetings may cause participation fatigue. What other options can we think of?
 - Homestead can take the projects back to their Associations and identify priorities.
 - Get input online for some things, rather than at a meeting.
 - Surveys to supplement feedback solicited during meetings.
- Beneficiary Consultation #1
 - December 9, 2020
 - 7:00 pm
- Schedule: We will aim to take this update to the Hawaiian Homes Commission (HHC) at their meeting in the June/July 2021 time frame, which are typically in Kapolei. The community meeting in Kapolei is usually in February, so that will be too soon.

Additional Discussion and Information Needed

- It's hard to plan when we don't know where we're starting. Information that we need to get us all at the same starting point:
 - What is the acreage of land held by the Trust in Kapolei?
 - How much revenue do those lands generate for the Trust?
 - What are the community benefits derived from those lands?
 - Which parcels are under consideration for a change in disposition?
 - What lands are in the DHHL inventory and what is planned for those lands?

**DHHL KAPOLEI REGIONAL PLAN UPDATE
LEADERSHIP MEETING
VIA ZOOM
October 14, 2020, 6:30 P.M. – 7:30 P.M.**

- 2018 DHHL Annual Report – Kapolei region stats
 - Seven leases, 160.8 acres, brought in \$5,435,325 revenue
 - 16 licenses, 18 acres, \$361,000
 - 35 rights-of-entry (ROE), 147.7 acres, \$2.2 million
 - TOTAL leases, licenses, ROE: 326 acres, brought in ~\$8 million in 2018
- Rail, parking, Kroc Center: there is angst among the community regarding what has happened and what will happen with DHHL lands. What land was traded? For what? Was the Kroc center DHHL land that was swapped?
- Kalaeloa should be discussed in the Kapolei Regional Plan Update.
 - What is the history of the Kalaeloa lands? How did they get into the Trust? How did all of the Kapolei lands get into the Trust? Which lands were original Trust lands?
 - We need a better understanding of what is going on, relative to Kapolei. What is the disposition of those lands? What is being planned?
***As a note:
 - None of the Kapolei or Kalaeloa lands were original Trust lands, both were part of Federal and State settlements/exchanges.
- Ka'uluaokaha'i: what is the status of this homestead? How many units have been built? What is the total number to be built? Is there a master plan? What is the timing for the buildout?
- Has a committee been selected for the DHHL General Plan update?
 - As a note: The DHHL General Plan Committee consists of Commissioners: Randy Awo - Maui, Zachary Helm - Moloka'i, Russell Kaupu - O'ahu and Chair William Aila.
- Planning should be bottom up! Our input should inform the Island Plan and General Plan.
- The Regional Plan should be simple and easy to understand, stripped down to the essential information on DHHL lands.
- The Regional Plan doesn't have to be about specific places or things like individual schools; it can be about issues, like getting the City to take over the infrastructure.
- The City should take over maintenance of infrastructure. How can we get the City to take over maintenance of the streets? Both Mayoral candidates were asked about this and they both said that they are committed to accepting conveyance.
- Everything should be open for discussion. If it's important to a beneficiary, then it should be heard.
- The meeting concluded at 8:15 P.M.



Kapolei Regional Plan Update

Site Visit Discussion Recap

via Caravan

October 27, 2020, 10:00 A.M. – 1:00 P.M.

Attendance: Kaupe‘a	Colleen Aiwohi Uncle Lono
Ka‘uluokaha‘i	Kimo Palakiko Matt Palakiko
Malu‘ōhai	Homelani Schaedel
KCDC	Scott Abrigo
Townscape, Inc:	Lillie Makaila (Project Manager) Sherri Hiraoka

Site Visit Purpose: To orient the planning team with the Kapolei homestead lands and to learn about community concerns regarding specific parcels.

Sites Visited or Driven Through/By

- Kapolei Heritage Center
- Kānehili Homestead
- Ho‘omaka – Commercial parcel
- Ka‘uluokaha‘i Homestead
- Varona Village Makai site
- Ka Makana Ali‘i
- Kaupe‘a Homestead
- Malu‘ōhai Homestead
- Kalaeloa Solar I & II
- Arion Energy
- Pasha Hawai‘i

The following is a discussion recap from the participants that attended the site visit.

Kapolei Heritage Center

Managed by the Kapolei Community Development Corporation (KCDC)

- Heritage Center: 20,000 sf Community Parcel
 - Timeline of Kapolei Heritage Center
 - 2008 KCDC created
 - 2014/2015 KCDC received State Grants-in-Aid to design and construct the Heritage Center.
 - 2016 Kapolei Heritage Center opens
 - Envisioned as a kauhale to be built in phases
 - Phase I: Classrooms and certified kitchen
 - Phase II: Great Hall (300-person capacity)
 - Phase III: Offices for KCDC and Homestead Associations, Gallery
 - Classrooms
 - Averages about 350 users per month, 16,000 users per year.
 - KCDC subsidizes use of the facilities for Homestead-affiliated groups. Types of users include: Keiki o ka 'Āina, Alu Like, 'ukulele and driving classes, community workshops and meetings, etc.
 - Certified kitchen was designed to service functions at the Great Hall and to be a business incubator.
 - It is the only commercial kitchen in Kapolei run by a community organization.
 - Pre-COVID-19, it served both long-term and short-term users.
 - It shut down due to COVID-19 and is evaluating when it will re-open.
 - The Council for Native Hawaiian Advancement (CNHA) has offices in the adjacent Hawai'i Maoli building. They and KCDC partner together on projects.
- Ho'omaka: 4.9 acre commercial parcel
 - Purpose: to generate revenue to sustain the Kapolei Heritage Center
 - KZ has a general lease to develop the property
 - Tentative tenant list: Longs Drugs, Chick-Fil-A, Hele gas station, 7-Eleven
 - KCDC to have 1,200 sf of eleemosynary space for community programming, community incubator, to lease out, or other purposes.
 - Expected to be completed in 2021-2022.
 - Did community consultation when developing the concept. Another consultation is planned for November 2020.

Kānehili Homestead

- Used a community benefits grant from Ka Makana Ali'i to build phase I of the park, adjacent to Ho'omaka.

DHHL KAPOLEI REGIONAL PLAN UPDATE
SITE VISIT DISCUSSION RECAP
October 27, 2020, 10:00 A.M. – 1:00 P.M.

- Two-acre vacant lot between the Fire Station and Ho'omaka designated for commercial use.
- The Fire Station is on DHHL land.

Ka'uluokaha'i Homestead

- Located near the East Kapolei Rail Transit Station and Kroc Community Center.
- A new middle school is under construction between the Kroc Community Center and Ka'uluokaha'i Homestead.
- The current homes on site are mostly turn-key homes. Awardees were able to select one of five options for home design that were built by Gentry Homes.
- The eastern section of the homestead includes developer-built homes, while the western-most section is mainly self-help homes.
- A new elementary school is sited on the vacant land east of the homestead.
- Keahumoa Parkway includes portions of the road that have sunken and have large bumps in the road that have yet to be repaired.
- There are cluster mailboxes located mauka of the homestead.
- Another issue is the unauthorized use of the "dead-end" roadways leading into the vacant land where the next phase of homestead development will take place. People are gathering and partying in these areas because there is space to park vehicles and hang out. Ka'uluokaha'i Homesteaders have requested that DHHL block off access to these spaces to deter unauthorized use.
- A vacant lot along Maunakapu Street adjacent to the Kroc Center and across from the Middle School development is sited to be a Special Olympics Facility.

The land where the Kroc Center sits currently was previously a part of the DHHL land trust inventory. DHHL approached the Kroc Center about partnership in the Kapolei region. Because they were not interested in opening a Kroc Community Center on site unless they owned the land fee simple, DHHL transferred the parcel to the State of Hawai'i, who then sold the land to the Kroc Center. There are no direct community benefits from the sale of this land for the DHHL trust outside of the community services provided by the Kroc Center itself. This transfer and sale of DHHL Trust lands to another entity was a cause for concern from beneficiaries and some other interested stakeholders.

Varona Village Makai site

- The Varona parcels, which include a mauka and a makai parcel, is being proposed to DHHL for exchange with the 'Ewa Drum site, near Leeward Community College.
 - The Department of the Interior is reviewing the land swap to ensure that DHHL is getting a fair deal.

DHHL KAPOLEI REGIONAL PLAN UPDATE

SITE VISIT DISCUSSION RECAP

October 27, 2020, 10:00 A.M. – 1:00 P.M.

- The City has already built their maintenance yard on the 'Ewa Drum site, even though the deal is not final.
- Varona could be the fifth homestead in Kapolei.
 - Note: the Kealakehe-La'i'ōpua Regional Plan discussed what type of homestead development the homesteaders want the new villages to be, so there is precedent for a regional plan to address new homesteads as a priority project in the plan.
- Could Varona be used for kūpuna housing?
 - It is close to facilities and amenities.
 - Possible features: smaller space, no or a small yard, single story.
 - Waimānalo has a good kūpuna housing example. Easy access, small but big enough for a beneficiary and a caregiver.
 - There should be more options for kūpuna beneficiaries, especially those who cannot afford to purchase a larger, turnkey home.

Ka Makana Ali'i

- This shopping center is approximately 67 acres and it was leased to DeBartolo Development in 2014. DeBartolo has a general lease for 65 years and pays an annual lease rent of over \$4M to the DHHL Trust.
- There is a large open "hole" on the property where soil was harvested for fill in some of the other homestead developments. DeBartolo took on the property including this large open "hole" on the site and has chosen not to fill it.

Kaupe'a Homestead

- Kaupe'a is the second residential homestead village in Kapolei after Malu'ōhai. It is a turnkey development that borders Kapolei Parkway.
- There is a large open parcel of land that sits between Kapolei High School and Kaupe'a Homestead that is currently owned by HHFDC. The Kaupe'a Homestead Association has asked for DHHL to work on adding this parcel to the DHHL land inventory so that Kaupe'a can use it for a community park and potentially other community facilities.

Malu'ōhai Homestead

- It is the only homestead that has three housing products: turnkey, self-help, and rent-to-own.
- Ho'olimalima is what the rent-to-own housing development is called. This includes 70 homes that were built and managed by the developer. Homesteaders were given a fixed rent for a period of 15 years and during that time there were

DHHL KAPOLEI REGIONAL PLAN UPDATE

SITE VISIT DISCUSSION RECAP

October 27, 2020, 10:00 A.M. – 1:00 P.M.

services made available to them to help build credit and prepare them to be able to purchase the home. At the end of the 15-year period, only two families were not able to purchase their home.

- According to DHHL records, the purchase price for each of these homes after the 15-year rental period was approximately \$75,000.

Kalaeloa Parcels

- Kalaeloa Solar I and II have solar panels installed.
- Arion Energy proposed an additional solar farm makai of Kalaeloa Solar II but pulled out before securing a lease.
- Pasha Hawai'i leases a large parcel for warehousing.
- How/why did DHHL get the Kalaeloa parcels that it did? They do not have infrastructure (electricity, water, sewer) and they are spread out and not connected. It would seem that it would have been better to select parcels that are closer to Roosevelt Avenue since they are further from the airport and industrial uses and closer to existing infrastructure.
- It will be difficult to develop any of the Kalaeloa lands for housing due to the airport noise and development restrictions around the airport. It is also not desirable to live next to heavy industrial uses and large vehicle traffic. Infrastructure development would be expensive because we'd have to pay to bring in lines over lands that do not belong to DHHL. Perhaps some of the parcels could be developed in the future after Hunt develops their residences, bringing infrastructure closer and creating adjacent residential land uses.

General Discussion

- One of the challenges that our community faces is the aircraft noise. There are aircraft going overhead all the time, disrupting our lives.
- I seek a place of worship and a place of rest in my community, and we currently do not have these spaces here.
- What is "affordable"?
 - Can we build homes that are attainable? Homes for our families, kūpuna?
 - Can DHHL look at package homes and solicit volunteer labor from the community? These homes are much cheaper than some of the housing products DHHL has offered and in some cases, is more functional and
- The homestead community is willing to help their neighbors with self-help products and have offered that help to DHHL.
- Kūalaka'i Parkway extends makai of Kapolei Parkway along the east side of Ka Makana Ali'i and is supposed to eventually connect with Renton Road/Roosevelt Avenue.

DHHL KAPOLEI REGIONAL PLAN UPDATE

SITE VISIT DISCUSSION RECAP

October 27, 2020, 10:00 A.M. – 1:00 P.M.

- All Kapolei lands were not part of the original Trust but when fully developed, will be largest homestead region on O'ahu.
- How can we use the Regional Plan to drive the Island Plan and the General Plan from the bottom up?
- Internet is a problem in Kapolei. Most homesteads have to use Sandwich Islands Communications (SIC) and their service is terrible. Would it be possible to request grants to build mobile internet vans to provide reliable service for homesteads?
 - Estimated cost: \$3,000 + a vehicle
 - Scott will check with Kamehameha Schools to see how they operate their mobile internet service.

Exhibit B

DRAFT
KAPOLEI REGIONAL
PLAN UPDATE

November 2021



2022

KAPOLEI

REGIONAL PLAN

DRAFT: November 9, 2021



HAWAIIAN HOME LANDS

HAWAIIAN HOMES COMMISSION · DEPARTMENT OF HAWAIIAN HOME LANDS

Executive Summary

Regional plans build a sense of community and capacity, they stimulate partnerships for development and improvements, and give beneficiaries within the region an opportunity to have a voice in planning for their future. The Hawaiian Homes Commission's approval of 23 Regional Plans across the state means that all homestead communities have the same opportunity. The 23 Regional Plans provide a platform for beneficiaries to talk to each other about their common issues and concerns. The Regional Plans empower beneficiaries with a recurring opportunity to convene as a community in order to identify and solve their own problems. Regional Plans ensure that beneficiaries are an integral part of the solutions to the issues that they have identified. Working with the Department of Hawaiian Home Lands (DHHL) Planning Office staff and consultants, the community identifies priority projects to respond to issues and areas of concern within existing and planned homestead areas. At a minimum, the Regional Plan documents current conditions and trends and identifies a prioritized list of projects important to the community and the department.

Vision. The vision provides a unified direction for homestead, Departmental and Commission actions in Kapolei. The vision statement is as follows:

"From the Pu'u in the uplands to the shores of Kualaka'i, Kapolei is a growing region that looks to its history, mo'olelo, 'āina and kūpuna to build a strong foundation for our Hawaiian homestead communities. Kānaka embrace the area's rugged climate and terrain, which motivates them to be resilient and self-sufficient. The wahi pana and kīpuka of this place are celebrated and stewarded for future generations."

Planning Area. All the lands in the Kapolei region are located within the ahupua'a of Honouliuli in the moku of 'Ewa on the southwest side of the moku of O'ahu. There are four existing DHHL homesteads in the region, Malu'ohai, Kaupe'a, Kānehili and Ka'uluokaha'i. The DHHL O'ahu Island Plan (2014) land use designations include:

Land Use	Total Lots/Parcels	Total Acreage
Residential	880 lots	150 acres
Proposed Residential	1,190 lots	200 acres
Community Use	7 parcels	35 acres
Commercial	4 parcels	80 acres
Industrial	10 parcels	555 acres
Total:	2,017	1,015 acres

Planning Process. This plan updates the 2010 Kapolei Regional Plan. The planning process took place during the COVID-19 pandemic with serious concerns for public health. Due to ongoing restrictions from COVID-19, the planning process was conducted virtually wherever possible, and any in-person activity followed State and County guidance such as, social distancing, masking, and limitations of the number of persons present.

The process began with a virtual meeting with Kapolei homestead association and organization leaders on October 14, 2020. This meeting introduced the Regional Plan Update project and gathered guidance from the leadership on how the process could be tailored to best fit the Kapolei community. Leadership was able to advise on the format and schedule for beneficiary consultations and offered assistance with publicity for the meetings. Beneficiary Consultation #1 was a virtual meeting hosted via Zoom on December 9, 2020. This meeting introduced the Regional Plan Update project to the community and facilitated participants in developing a list of community values as well as a vision statement for the Kapolei region.

Beneficiary Consultation #2 was a virtual meeting hosted via Zoom on May 4, 2021. In this meeting, participants reviewed and revised the draft community values and a draft vision statement developed from Beneficiary Consultation #1. Participants also reviewed and revised a draft list of project ideas into a final project ideas list with a total of 14 project ideas. The top five priority projects for the Kapolei region were selected from this final list.

Selection of the priority projects was conducted via an online polling process. A link to the online poll was posted on the project website following Beneficiary Consultation #2, and Kapolei beneficiaries were asked to participate in the poll to select the top five priority projects to be included in the update to the Kapolei Regional Plan. The online poll was open for Kapolei beneficiary participation from May 5, 2021 to May 19, 2021. A total of 60 beneficiaries participated in the poll. The results of the poll included two sets of project ideas which received the same number of votes. The top two projects received 32 votes and are therefore numbered as projects #1./#2. The next project received 31 votes and is project #3. And last two projects in the top five both received 30 votes, making them projects #4./#5.

An information submittal and draft of the update to the Kapolei Regional Plan was presented to the Hawaiian Homes Commission (HHC) for feedback on November 15 & 16, 2021. Beneficiary Consultation #3 was held virtually via Zoom on December XX, 2021 to gather feedback from the community on the draft of the plan as well. Feedback was incorporated into the final document, and a final draft of the Regional Plan Update was presented to the HHC in March 2022 for acceptance and adoption.

Priority Projects. The priority projects summarized in the table to follow reflect the projects that the community identified as priorities for the Kapolei region. The action steps and required resources for these projects to be implemented are listed below.

Priority Project	Action Steps	Required Resources
#1/#2 Create More Open Spaces, Park Spaces, and Recreation Spaces to support the Homestead Community	<ul style="list-style-type: none"> • Community partnership with DHHL for open space/park development • Request for Right of Entry permit for due diligence studies • Master/Special Area Plan & HRS Chapter 343 Compliance • Issuance of Finding of No Significant Impact (FONSI) • Long-term disposition • Planning & Permitting • Design & Construction • Operation & Maintenance 	<ul style="list-style-type: none"> • Technical Assistance • Funding (Planning, Design & Construction) • HHC Approval
#1/#2 Create a Kūpuna Living Community	<ul style="list-style-type: none"> • Identify potential locations • Due diligence studies • Master/Special Area Plan & HRS Chapter 343 Compliance • Issuance of Finding of No Significant Impact (FONSI) • Planning & Permitting • Design & Construction • Operation & Maintenance 	<ul style="list-style-type: none"> • Technical Assistance • Funding (Planning, Design & Construction) • HHC Approval

Priority Project	Action Steps	Required Resources
#3 Support the Heritage Center and Community Commercial Development	<ul style="list-style-type: none"> • Completion of Ho‘omaka Marketplace for revenue generation • Permitting • Design & Construction • Monitoring & Reporting 	<ul style="list-style-type: none"> • Technical Assistance • Funding (Planning, Design & Construction)
#4/#5 Support the Development of a Hawaiian-Focus School/Hawaiian Immersion School	<ul style="list-style-type: none"> • Partner with DHHL, City & State agencies, other organizations • Identify potential locations • Secure site control • Planning & Permitting • Design & Construction • Program implementation • Operation & Maintenance • Monitoring & Reporting 	<ul style="list-style-type: none"> • Technical Assistance • Funding (Planning, Design & Construction)
#4/#5: Provide More Options for Telecommunications Service to Homesteads	<ul style="list-style-type: none"> • Beneficiaries can start to document service issues/requests/outcomes that can be provided to regulatory authorities 	<ul style="list-style-type: none"> • Assistance and Coordination as needed • HHC Approval

Table of Contents

Executive Summary	i
Glossary of Hawaiian language terms	1
Introduction.....	2
Purpose of a Regional Plan	2
Planning System	2
Regional Planning Process.....	3
Stakeholders and Partners.....	4
DHHL Master Planning Process and Community Development Goals.....	4
Methods and Approach.....	12
Vision and Values	15
Guiding Principles	15
Planning Area.....	17
Location	17
Regional History.....	20
Ahupua‘a	20
Wahi Pana and Additional Places of Importance.....	21
Existing Land Uses.....	23
Total Lots and Acreage.....	23
Homestead Uses	23
Community Uses.....	25
Commercial Uses	25
Industrial Uses.....	26
State and County Land Use Designations.....	26
State Land Use Districts	26
Kalaheo Community Development District.....	26
City and County Zoning	26
Surrounding Land Ownership and Uses.....	27
Regional Revenue Generation	27
Infrastructure.....	33
City and County Wastewater System.....	33
Other Wastewater Infrastructure.....	33
Electrical Infrastructure.....	33
Road System – Existing and Planned	34
Kalaheo Airport	35
Project List	39
Previous Priority Projects.....	39
Final Project Ideas List.....	40
Priority Projects.....	41
1./2. Create more open spaces, park spaces, and recreation spaces to support the Homestead Community.....	41
PROJECT DESCRIPTION	41
PAST ACTIONS.....	44
COMMUNITY INPUT.....	44
OBJECTIVE	44
IMPLEMENTATION ACTION STEPS	44
1./2. Create a Kūpuna Living Community.....	47

PROJECT DESCRIPTION	47
PAST ACTIONS.....	48
COMMUNITY INPUT	48
OBJECTIVE	48
IMPLEMENTATION ACTIONS STEPS	48
3. Support Heritage Center and Community Commercial Development (Previous Priority Project).....	50
PROJECT DESCRIPTION	50
PAST ACTIONS.....	50
COMMUNITY INPUT	51
OBJECTIVE	51
IMPLEMENTATION ACTIONS STEPS	51
4./5. Support the development of a Hawaiian-Focus School/Hawaiian Immersion School	52
PROJECT DESCRIPTION	52
PAST ACTIONS.....	52
COMMUNITY INPUT	52
OBJECTIVE	53
IMPLEMENTATION ACTIONS STEPS	53
4./5. DHHL should provide more options for communication in the homesteads other than Sandwich Isles	
Communications (SIC) contract.....	54
PROJECT DESCRIPTION	54
COMMUNITY INPUT	54
OBJECTIVE	54
IMPLEMENTATION ACTION STEPS	54

Appendices

Appendix A	Beneficiary Consultation #1 – Meeting Recap
Appendix B	Beneficiary Consultation #2 – Meeting Recap
Appendix C	Beneficiary Consultation #3 – Meeting Recap
Appendix D	Leadership Meeting & Site Visit Recap

Figures

Figure 1: DHHL's Planning System.....	2
Figure 2: The Regional Plan Development and Update Process.....	3
Figure 3: Community Organization & Development	8
Figure 4: Master Planning and Land Development Process on Hawaiian Home Lands.....	10
Figure 5 Project Area Map.....	18
Figure 6 Ahupua'a Map.....	19
Figure 7- DHHL Land Use Designation Map.....	24
Figure 8 - State land Use Districts Map	28
Figure 9 - Kalaeloa Community Development District Zoning Map.....	29
Figure 10 - County Zoning map	30
Figure 11 - Large Landowners Map.....	31
Figure 12 - Roadways Map	36
Figure 13 - Wastewater Infrastructure Map.....	37
Figure 14 - Parks/Open Space Map.....	42

Glossary of Hawaiian language terms

‘āina	land, earth
ahupua‘a	traditional Hawaiian land section that typically ran from the mountains to the sea and included coastal and nearshore resources
keiki	child
kānaka	people (references in this document to kānaka are shortened references to the term kānaka maoli meaning the native or indigenous people of Hawai‘i)
kīpuka	a space that is a variation or change of form from surrounding spaces, like a clearing in the forest, an oasis in an arid place (references in this document to kīpuka are identifying spaces or pockets of natural or cultural resources that can be found in the built environment of Kapolei)
Kualaka‘i	place name of the shoreline seaward of the former Barbers Point Naval Air Station, the beach that stretches from Hilo One in front of Campbell Industrial to One ‘Ula in ‘Ewa Beach
kūpuna	grandparents, ancestors or elders of the grandparent generation
mo‘olelo	traditional stories, tales, myths, histories and legends
‘ohana	family
‘ōpio	youth or young person
pu‘u	hills or mountain peaks (refers to the many hills and mountain peaks found in the uplands of the ahupua‘a or traditional land division of Honouliuli)
Pu‘uokapolei	place name of a heiau located in Honouliuli ahupua‘a in the moku of ‘Ewa, near the present day Kapolei Regional Park
wahi pana	celebrated places, places of importance

Introduction

Purpose of a Regional Plan

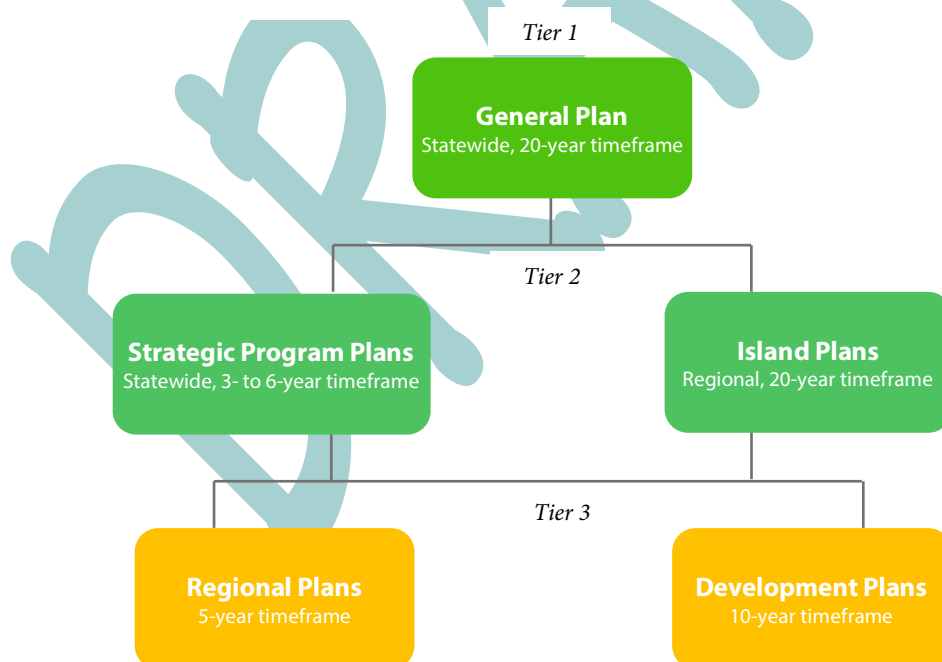
The mission of the Department of Hawaiian Home Lands (DHHL) is to build vibrant homestead communities. Regional Plans provide an opportunity for DHHL to work closely with existing lessees and native Hawaiian beneficiaries to clarify a vision for their community and to build partnerships with government agencies, private landowners, non-profit organizations, homestead associations, and other community groups to achieve that vision.

This Regional Plan is one of 23 Regional Plans that DHHL has helped Hawaiian homesteads to formulate statewide. These Regional Plans assess land use development factors, document issues and opportunities, and identify the region's top priority projects slated for implementation within the next five years.

Planning System

Regional Plans are part of DHHL's three-tiered Planning System (see Figure 1). At Tier 1 is the General Plan which articulates long-range goals and objectives for the Department. At the second tier, there are Program Plans that are statewide in focus, covering specific topic areas such as the Native Hawaiian Housing Plan and a Native Hawaiian Development Program Plan. Also, at this second tier are the Department's Island Plans that identify the Department's land use designations for each island and which have a function similar to the counties' land use designations. The Regional Plans are located at the third tier in the Department's Planning System which focuses on communities and regions. Development plans carry out second-tier planning recommendations and contain the information necessary to implement area-wide development, such as off-site infrastructure systems and improvements, utilities, estimated costs, and phased implementation.

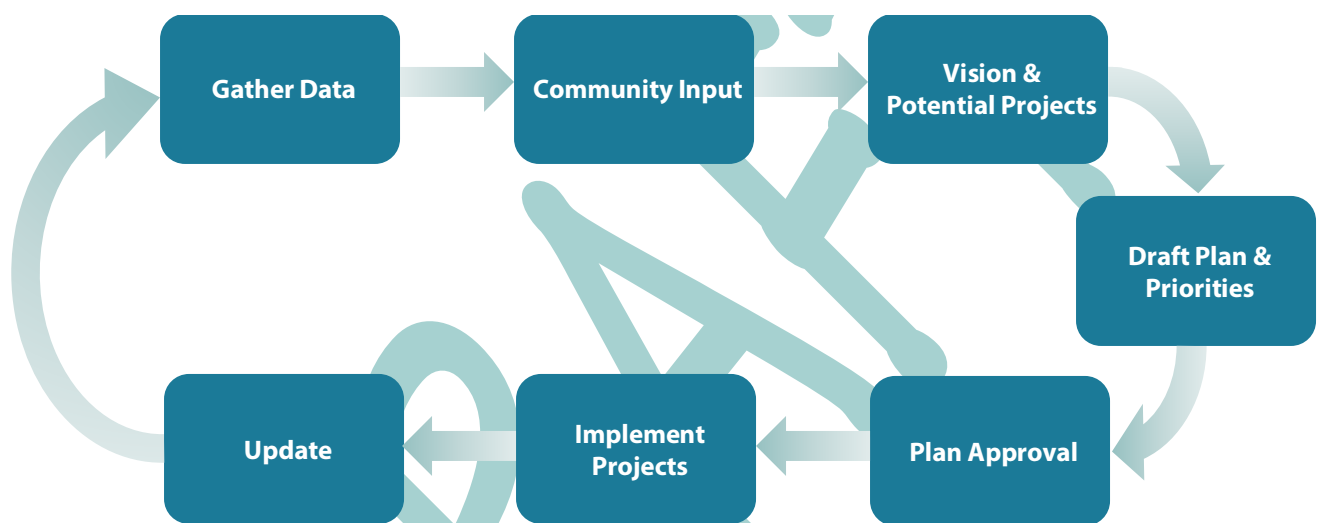
FIGURE 1: DHHL'S PLANNING SYSTEM



The roles of the Regional Plans within the Planning System are to:

- Apply the goals, policies, and land use designations of the General Plan, Program Plans, and applicable Island Plan to specific geographic regions;
- Directly involve the community in planning for their region;
- Compile comprehensive information about the region to provide a factual basis on which to identify needs and opportunities;
- Evaluate changes needed, if any, to the Island Plan as it applies to the region;
- Identify potential resources (e.g., partners, funding sources) to facilitate implementation; and
- Identify priority projects that are important to the community and implementation steps to move these projects forward.

FIGURE 2: THE REGIONAL PLAN DEVELOPMENT AND UPDATE PROCESS



Regional Planning Process

The development of Regional Plans involves seven steps (see Figure 2, The Regional Plan Development and Update Process):

1. **Gather Data.** Pertinent data describe existing conditions and trends, including history of the homestead, land use, infrastructure, natural features, historic/cultural features, surrounding uses, and development trends.
2. **Gather Community Input to Identify Issues and Opportunities.** Existing homesteaders, native Hawaiian beneficiaries, and other stakeholders are invited to a facilitated meeting to discuss issues and opportunities for the region.
3. **Create a Long-Term Vision and Identify Potential Projects.** The input from the community on issues and opportunities provides the basis to craft a draft vision statement that is reviewed and modified, as necessary, to the satisfaction of the community. Potential projects consistent with this vision are identified and prioritized by community consensus.
4. **Review a Draft Plan and Priorities.** Project details, budget estimates, and other pertinent project planning information are written up as part of a draft plan for review by the community.

5. **Approve the Plan.** Draft Regional Plans are then subject to the approval of the Hawaiian Homes Commission, which means that the Commission and Department officially support the priorities identified in the regional plan.
6. **Implement Priority Projects.** Upon approval, the homestead community, the Department, and other development partners can seek necessary funding and pursue the implementation of Priority Projects.
7. **Update.** Finally, since DHHL knows that regional development is a dynamic process with constantly changing opportunities and emerging issues, regular Regional Plan updates are built into the planning process.

Stakeholders and Partners

DHHL is working in partnership with other government agencies, the private sector, and community organizations to develop its lands and improve community life. DHHL believes that partnerships are an effective way to leverage resources and capital investments, mitigate undesirable impacts of development, coordinate area growth, reduce risks associated with large scale community projects, and create broad community benefits.

These partnerships allow for better prioritization and coordination of infrastructure improvements and the development of regional and public residential facilities. This coordination helps individual organizations achieve their goals while bringing long-term benefits to the community and region.

DHHL Master Planning Process and Community Development Goals

Homestead associations are frequently interested in developing capital improvement projects within their communities in order to provide needed social services and enrichment opportunities. The need for these desired projects is often captured in DHHL Regional Plans. While the characteristics of projects proposed are as diverse and unique as the DHHL communities in each region across the state, the overall planning and development process for these projects is the same in most instances.

Successfully implementing any type of land development project requires several basic foundational elements prior to project initiation. A strong organization that has a membership that works well together and has high levels of participation in regular association business ensures that (1) projects are selected based upon agreed upon criteria rather than individual preferences, (2) project plans are created, and (3) large amounts of social capital are built within and outside of the community. Figure 3, Community Organization & Development, briefly describes these elements of organizational capacity and project planning in more detail. The top level represents the steps that the homestead association (project proponent) should complete.

Most organizations go through five main stages of an organization's developmental lifecycle:

1. **Stage One: Imagine and Inspire.** The organization is not yet formalized, but individuals are inspired and united by a common vision or idea.
2. **Stage Two: Found and Frame.** The organization becomes formalized. Governing documents have been drafted and adopted by its members. The organization receives its non-profit status.
3. **Stage Three: Ground and Grow.** Organizations in this stage focus on establishing systems of accountability to its members as well as growing its internal capacity to provide more services or a higher quality of service to its members.
4. **Stage Four: Produce and Sustain.** This is the stage in which the organization is at its peak and is primarily concerned with how it can sustain its level of service over time.
5. **Stage Five: Review and Renew.** The organization re-invents itself in order to adapt to evolving conditions. The primary question the organization is concerned with at this stage is: "How can we do it better?" The organization revisits its mission, vision, services, and management structure.

Social capital can be defined as the networks of relationships among people who live and work in a particular society, enabling that society to function effectively. From time to time, a homestead association should assess its social capital both internally among its members as well as among external stakeholders and potential partners in order to determine the level of potential support for and/or opposition to a proposed land development project. Figure 3 illustrates the various social circles that should be engaged to support a land development project. Often, a development idea starts with a core group of individuals on an association board. Gradually that idea is shared with, and incorporates the ideas of, others in larger social circles in order to grow social capital and build support for a development project.

Lastly, Figure 3 illustrates that the association's assessment of its life cycle and existing social capital should be incorporated into a program plan. A program plan clearly articulates a community vision or need, identifies criteria for selecting programs or projects to fulfill that vision or need, and selects appropriate projects and programs based on those criteria. Programs/projects should be selected based on strong community support for the initiatives and the association's organizational capacity.

Once an association has done outreach with its community to identify its vision and goals, established criteria for selecting projects that help them accomplish their vision and goals, and selected project(s) that have strong community support, then the association can begin with the actual physical master planning and development of the project(s). Figure 4, Master Planning and Land Development Process on Hawaiian Home Lands, illustrates the process of master planning and land development on Hawaiian Home Lands.

Project Proponent Tasks:

- The project proponent should focus their time and attention to ensure that the community's vision and needs are integrated into the project.
- The project proponent should conduct a site and infrastructure assessment of the location in which they would like to implement the project in order to ensure that the location is appropriate for what they would like to do.
- A master plan should integrate and synthesize the community's vision and needs with the site and infrastructure assessment. A master plan should also include a financial plan that forecasts initial development costs, long-term operational costs, and how those costs will be financed over time.
- An Environmental Assessment (EA) or Environmental Impact Statement (EIS) needs to be prepared for the Master Plan in accordance with Hawaii Revised Statutes (HRS) Chapter 343. If federal funds are used for the project, then a federal EA or EIS may need to be completed in accordance with the rules and standards of the federal funding agency.
- Once Chapter 343 and federal environmental regulations are complied with, then the project proponent can proceed with obtaining the necessary permits and approvals and proceed with construction.

The next steps after the Project Proponent Tasks in Figure 4 include various DHHL staff reviews and HHC approvals that the Project Proponent will need to obtain.

Requests by Non-Profit Organizations for Long-Term Use of DHHL Lands

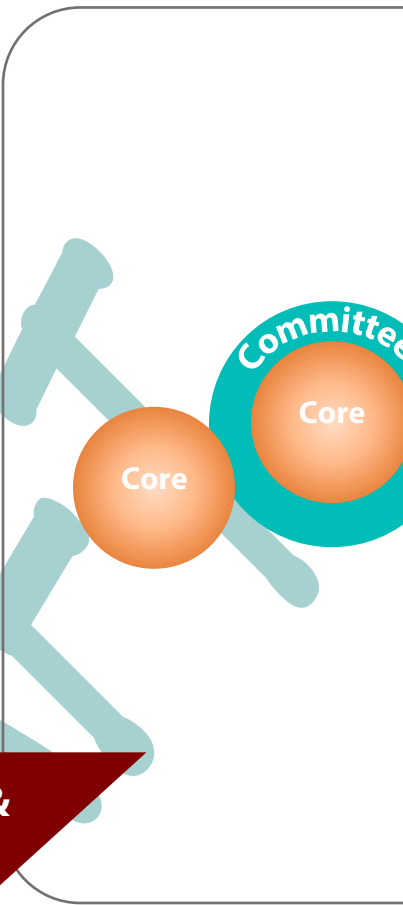
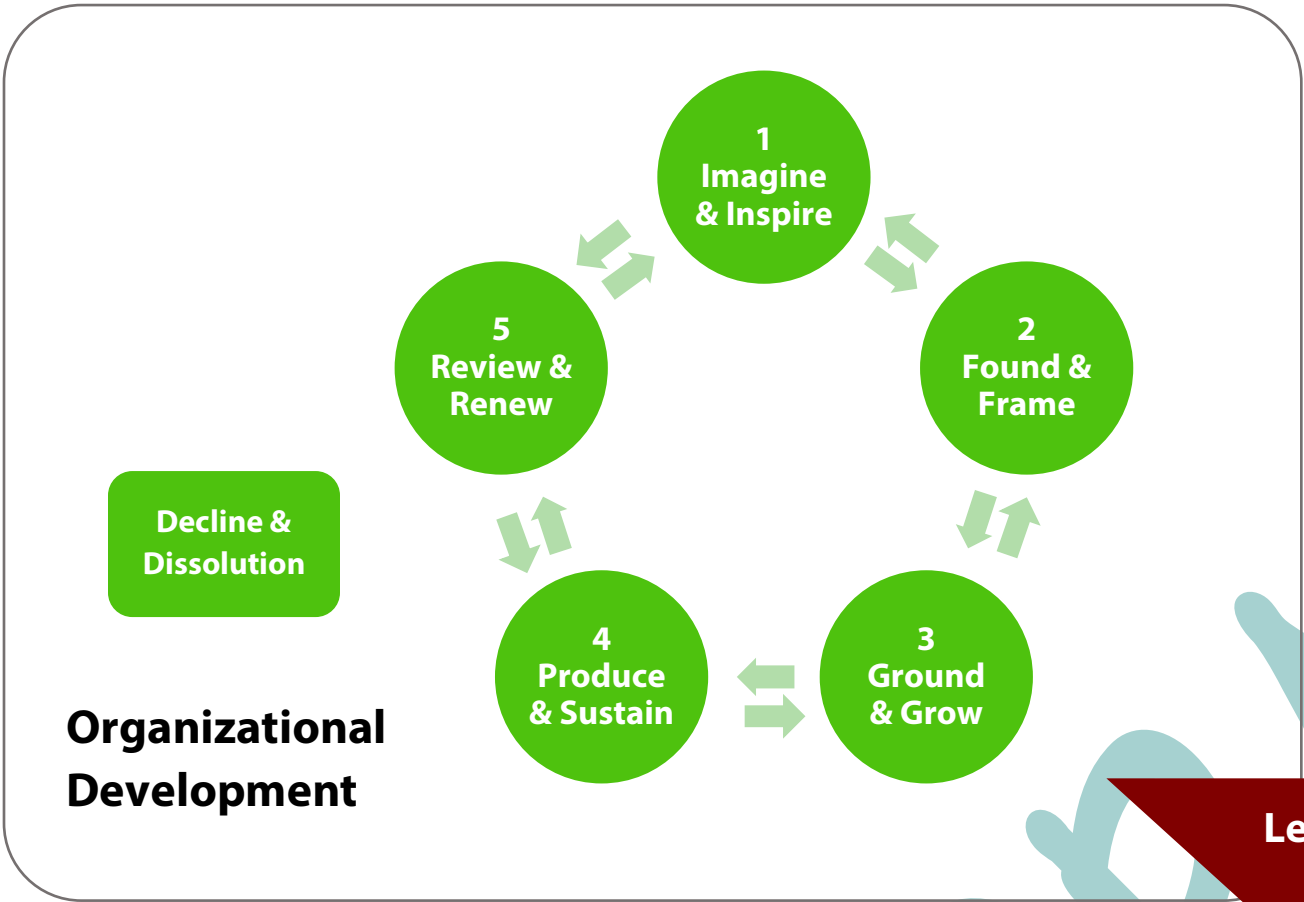
DHHL has begun implementing a process for Internal Revenue Code (IRC) § 501(c)(1) or IRC § 501(c)(3) non-profit organizations that are interested in long-term utilization of DHHL land for the purposes of providing programs and services to DHHL beneficiaries to further their rehabilitation and well-being. This process implements the Hawaiian Homes Commission Act (HHCA), Sections 204(2) and 207(c), which authorize DHHL to lease or license lands for non-homesteading purposes on the same terms, conditions, restrictions, and uses applicable to the disposition of public lands as provided in HRS Chapter 171. HRS 171-43.1 authorizes DHHL to dispose of lands to eleemosynary organizations by direct negotiation without requiring a competitive solicitation process. The application process is designed to provide an opportunity for non-profit organizations to conduct due diligence on

the project site and vet their conceptual plans in consultation with DHHL prior to requesting HHC approval of a long-term disposition. See “Implementation Action Steps” under “Priority Projects” for a more detailed list of steps and requirements for these types of land use requests.

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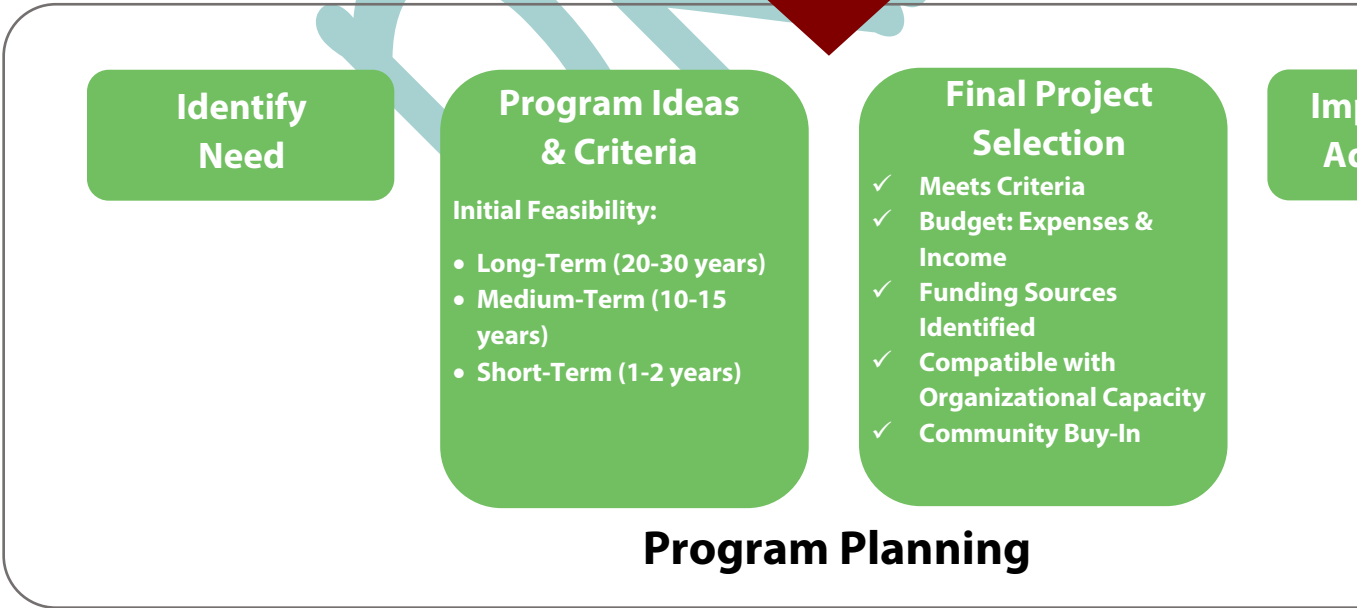
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Leadership & Planning

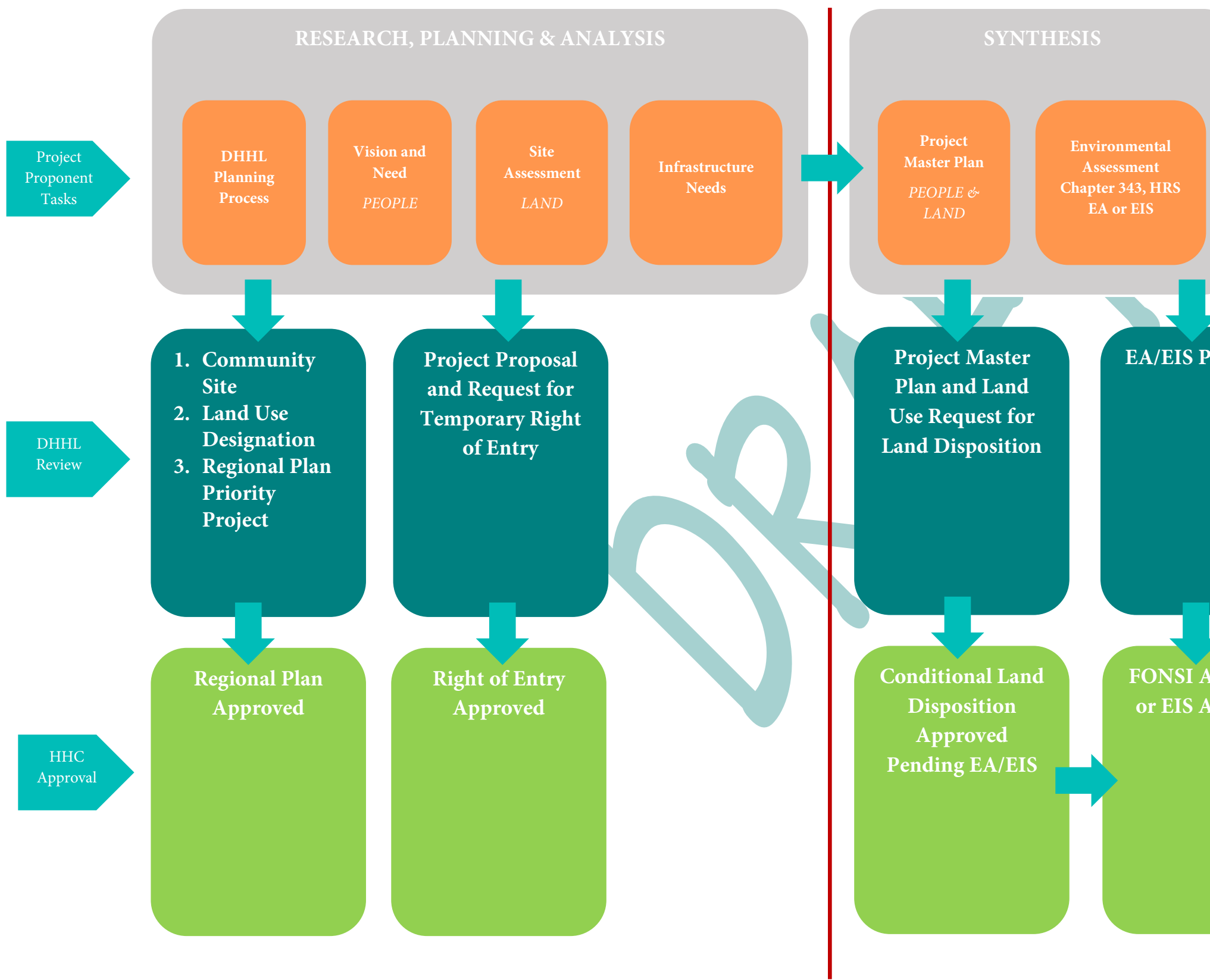
COMMUNITY
VISION





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Methods and Approach

The Kapolei Regional Plan Update began with a meeting with local leadership for insight and guidance on a planning process that would best fit the Kapolei beneficiary community. In light of the public health risks and various mandates from the State and City & County governments from the COVID-19 pandemic, in-person gatherings were not possible during this planning process. Instead, meetings were hosted virtually via Zoom. The selection of the days and times for each of the beneficiary consultations was guided by input from the homestead leadership.

Broad publicity of the community meetings was accomplished through mail-outs of meeting notices via postal mail and distribution of digital meeting invitations and reminders with assistance from the various homestead associations.

The approach for the community meetings included large group discussion and break-out rooms for small groups to facilitate more in-depth sharing on topics related to community values and a long-term vision. Detailed notes were captured at all meetings and were posted online on the project website which is hosted by DHHL. A meeting recap for each Beneficiary Consultation can be found in the appendices of this document.

The timeline for the Regional Plan update was as follows:

October 14, 2020: Leadership Meeting. The purpose of this meeting was to introduce the Regional Plan Update project to the leadership of the various homestead associations and organizations and to ask for their insight and guidance on the planning process. The meeting took place virtually via Zoom. Leaders from the following community/homestead organizations were asked to attend:

- Malu‘ōhai Homestead Association
- Kaupe‘a Homestead Association
- Kānehili Homestead Association
- Ka‘uluokaha‘i Homestead Association
- Kapolei Community Development Corporation

Leaders from each organization were asked to assist with guiding the planning process for the regional plan update. Leaders assisted with selecting a tentative schedule for the beneficiary consultations. Representatives of each organization helped in guiding the site visit for the project consultants. And leaders also provided support in the distribution and publicity of meeting announcements and invitations for the various beneficiary consultations throughout the planning process.

October 27, 2020: Site Visit. The site visit included representatives of the various homestead and community organizations in the Kapolei region and project consultants. The site visit began at the Kapolei Heritage Center and proceeded throughout the region visiting most of the DHHL land holdings in the region. Some of the locations visited include: Kapolei Heritage Center, Kānehili Homestead, Kānehili Community Association Park, Ho‘omaka Marketplace site, Ka‘uluokaha‘i Homestead, East Kapolei lots, Ka Makana Ali‘i Shopping Center, Kaupe‘a Homestead, Malu‘ōhai Homestead and Kalaeloa lots.

December 9, 2020: Beneficiary Consultation #1. The objective of this meeting was to explain the purpose and objective of regional plans in the DHHL planning system and the reason for the update to the Kapolei Regional Plan and to discuss the planning process and schedule with Kapolei beneficiaries. Additionally, this meeting was meant to

gather input from beneficiaries regarding their long-term vision for Kapolei, a list of important community values, and information about issues and opportunities in the region.

The beneficiary consultation was conducted online via Zoom. After some introductory presentations, beneficiaries engaged in small group discussions in virtual break-out rooms. They participated in a visioning exercise and were asked to answer questions such as:

1. What special things about this place do you want to preserve about Kapolei for the future generations?
2. What things do you want to create in this community, in this place?
3. What things do you want to change in this community, in this place?

Responses from break-out room discussions were recorded and shared with the larger group after reconvening. The major ideas and themes that came out of this meeting were used to develop a list of community values and to craft a vision statement for the region. See Appendix A for more information about this meeting.

May 4, 2021: Beneficiary Consultation #2. The purpose of this meeting was to present the draft vision statement and values to the community for feedback. This meeting also reviewed the issues and opportunities in the region and identified fourteen potential project ideas that might address those issues. Meeting participants helped refine the project descriptions and combine projects that complimented each other. A final list of proposed projects was posted to an online poll for prioritization. See Appendix B for a more detailed record of the meeting.

May 5, 2021 to May 19, 2021: Online Polling. Kapolei beneficiaries were asked to participate in an online poll to select the top five priority projects for the region. This poll was linked to the project website, and was open for participation from Wednesday, May 5, 2021 to Wednesday, May 19, 2021. A total of 60 responses was collected, and the top five priority projects were chosen from the responses in this polling process. See Appendix B for more details.

*FUTURE STEPS

November 15 & 16, 2021: HHC Meeting. An informational submittal on the Regional Plan Update was presented to the Hawaiian Homes Commission for feedback at their regular meeting. Input from the Commission was incorporated into the draft of the Regional Plan Update.

December XX, 2021: Beneficiary Consultation #3. A draft of the Regional Plan Update was presented to beneficiaries for feedback. Input from participants was incorporated into the final draft that was prepared for adoption by the Commission.

March 21 & 22, 2022: HHC Meeting. Planning Office staff recommended HHC approval and adoption of the final draft of the update to the Kapolei Regional Plan at the February HHC Meeting.

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Vision and Values

“From the Pu‘u in the uplands to the shores of Kualaka‘i, Kapolei is a growing region that looks to its history, mo‘olelo, ‘āina and kūpuna to build a strong foundation for our Hawaiian homestead communities. Kānaka embrace the area’s rugged climate and terrain, which motivates them to be resilient and self-sufficient. The wahi pana and kīpuka of this place are celebrated and stewarded for future generations.”

This vision statement was written based on the ideas and discussion of homesteaders that attended Beneficiary Consultations #1 and #2. At Beneficiary Consultation #2, drafts of the vision statement and community values were shared with attendees. Participants refined each of the community values and the vision statement to ensure that they best reflect beneficiaries of the Kapolei region.

Guiding Principles

The vision statement was based on the following values and guiding principles:

- Natural, Cultural and Agricultural Resources
- Wahi Pana
- Kūpuna
- Keiki
- Self-sufficiency

Natural, Cultural and Agricultural Resources

Preserve Kapolei’s rich natural, cultural, and agricultural history within new land uses and programs. Kapolei is a Town that has grown in what was once Country. That Country-feel should be incorporated wherever appropriate.

Wahi Pana

Traditional place names and wahi pana are of great value. Mo‘olelo and histories are shared with homesteaders and the extended community of Kapolei to ensure that these celebrated places are respected, protected, and remembered into the future. Wahi pana, of old and new, throughout the region will be used by the community to gather and practice the native culture.

Kūpuna

Traditionally, kūpuna held an important role and place in native Hawaiian society. Spaces and resources in Kapolei will be used to create full and healthy lives for kūpuna as they age in place.

Keiki

Resources for 'ōpio and keiki in Kapolei are a priority. There will be safe places for youth to spend their time and programs for them to learn and play near their homes.

Self-Sufficiency

Kapolei is a place where people can live, work and play. All the things that homesteaders need to have a healthy, thriving community can be found within the region. Kapolei offers an affordable lifestyle where people have time to enjoy their homes and their 'ohana.

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Planning Area

Location

The Kapolei Region is located in the ahupua‘a of Honouliuli, in the moku of ‘Ewa on the mokupuni of O‘ahu. This region includes four existing homestead communities: Malu‘ōhai, Kaupe‘a, Kānehili and Ka‘uluokaha‘i. Also included in the Kapolei Region Plan are lands located in East Kapolei and Kalaeloa. There are currently 1,115 residential homestead lots constructed, 130 residential homestead lots have been awarded as undivided interest lots within the region. Of the 1,115 homestead residential lots constructed in the region, Malu‘ōhai has 226, Kaupe‘a has 326, Kānehili has 403, and Ka‘uluokaha‘i II-B has 160. Approximately 155 acres within the region are in long-term contracts, approximately 235 acres in short-term contracts, and approximately 200 acres unconstrained for future development. At full build-out of the proposed residential homesteads, the Kapolei Region aims to be the largest concentration of native Hawaiians in the world with nearly 2,000 homestead lots planned.

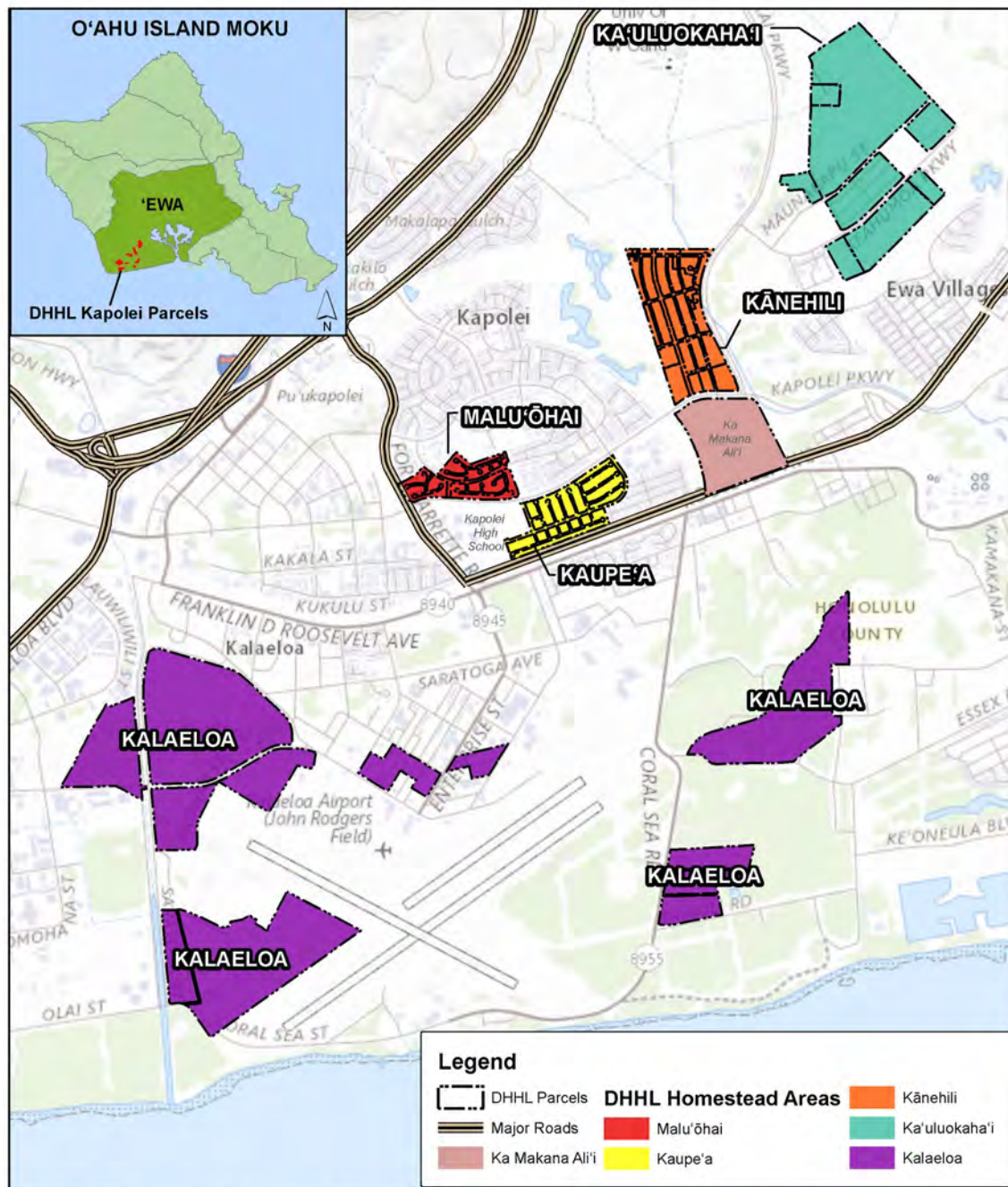
The moku of ‘Ewa includes total DHHL landholdings of approximately 1,095 acres with 1,019 acres in the ahupua‘a of Honouliuli and 76 acres in the ahupua‘a of Waiawa. The DHHL Waiawa lands are located near the West Loch of Pearl Harbor and are all designated for Industrial Use. As there are no homesteading opportunities within the Waiawa lands, these lands are not included in the Kapolei Region and are subsequently not a part of the Kapolei Regional Plan. The planning area for this regional planning effort focuses on all the DHHL land holdings within the ahupua‘a of Honouliuli.

The DHHL O‘ahu Island Plan (2014) designated the following land uses within this Planning Area:

- Residential,
- Community Use
- Commercial, and
- Industrial.

It is important to note that of the existing DHHL landholdings in the Kapolei Region are the result of Act 14, enacted by the Legislature of the State of Hawai‘i in 1995. Prior to Act 14, the Hawaiian Home Lands Trust did not include lands located in the Kapolei Region. Act 14 settled past land claims and provided \$600 million to DHHL in \$30 million annual installments, with the last payment received in June 2015. Act 14, in settling past land claims, found that thousands of acres of Hawaiian home lands were allegedly used, disposed of, or withdrawn from the Hawaiian Home Lands Trust by territorial or State executive actions since the Hawaiian Homes Commission Act was passed in 1920 by the US Congress. The landholdings in the Kapolei Region were transferred to DHHL as a part of the overall settlement with the State government to account for the lands removed from the Hawaiian Home Lands Trust. Since 2000, DHHL has focused on planning and development of these lands to meet the growing demand for residential homesteading opportunities on the island of O‘ahu. The homesteads in the Kapolei Region are some of the most recent and fastest growing homesteads within the State.

FIGURE 5 PROJECT AREA MAP



Kapolei Regional Plan Update
PLANNING AREA MAP
November 2021

This graphic has been prepared for general planning purposes only and should not be used for boundary interpretation or other spatial analysis.



O'AHU ISLAND MOKU

'EWA

DHHL Kapolei Parcels

Waipi'o

Waiawa

Waialeale

Ho'ole'ae

Honouliuli

Manana

Waimano

Waiau

Waimalu

Kalauao

'Aiea

Halawa

Legend

- Ahupua'a Boundaries
- Streams
- DHHL Kapolei Lands

Kapolei Regional Plan Update
AHUPUA'A
 June 2021

This graphic has been prepared for general planning purposes only and should not be used for boundary interpretation or other spatial analysis.

HAWAIIAN HOME LANDS
 DIVISION OF LAND CONSERVATION, DEVELOPMENT & ECONOMIC AFFAIRS

TOWNSCAPE

Regional History

The Kapolei Region is located on the southwest side of the moku of O‘ahu. The moku of ‘Ewa covers the southcentral portion of the island. This moku borders the moku of Wai‘anae to the west and to the north, Ko‘olaupoko to the east and Kona to the southeast.

‘Ewa translates to mean crooked, out of shape or ill fitting. It is said that the akua Kāne and Kanaloa threw stones to determine the boundaries of the moku. The boundary stone for the moku of ‘Ewa was lost but later was found at Pili o Kahe, two hills north of the area that is now called Kahe Point, and the westernmost boundary of the moku. The moku of ‘Ewa stretches north to include part of the Central O‘ahu plains near what is now called Schofield and Wahiawā and extends to the top of the Ko‘olau mountains where it borders the moku of Ko‘olaupoko to the east. The southeast border of the moku runs along the boundary of the ahupua‘a of Hālawā and Moanalua. The entirety of Pu‘uloa or Pearl Harbor, is located within the moku of ‘Ewa.

Ahupua‘a

There are a total of 15 ahupua‘a found within the moku of ‘Ewa. The easternmost ahupua‘a is Hālawā, which translates to mean curve, as in a road or along a beach. North of Hālawā is the ahupua‘a of ‘Aiea. ‘Aiea literally means the *Nothocestrum latifolia* tree which is an endemic tree belonging to the Solanaceae or the Nightshade family, which once grew in the area. Next to ‘Aiea is the ahupua‘a of Kalauao, which means the multitude of clouds and is also the name of a stream in the same ahupua‘a. There is a famous waterfall found in this stream that is named Kahuawai, and was a favored resting place used by ali‘i. The ahupua‘a of Waimalu bounds Kalauao to the north and this name means sheltered water. Next to Waimalu is the ahupua‘a of Waiau, which means swirling water. Waimano is the name of the ahupua‘a to the north of Waiau. Waimano means many waters and is also the name of a stream in the ahupua‘a that was the bathing place of the shark demigoddess Ka‘ahupāhau. Next to Waimano are the ahupua‘a of Mānana, Mānana iki, Mānana Uka and Mānana Nui. Mānana means buoyant, iki means small, uka means upland and nui means large or plenty. Today these four ahupua‘a are often group together as one ahupua‘a simply called Mānana, however in the Index of Land Commission Awards, all four were listed as separate ahupua‘a. Next to Mānana is Waiawa which is named for the milkfish. North of Waiawa is the ahupua‘a of Waipi‘o which stretches from Pu‘uloa to the south to the ahupua‘a of Wai‘anae Uka located in Central O‘ahu. This ahupua‘a continues along the ridges to the top of the Ko‘olau mountains and borders the moku of Ko‘olaupoko to the east. Waipi‘o is the second largest ahupua‘a in the moku of ‘Ewa. West of Waipi‘o is the ahupua‘a of Waikele, which means muddy water. Next to Waikele is the small ahupua‘a of Hō‘ae‘ae which literally means to make soft or fine. There is a famous stone called Pōhakupili that is on the edge of the cliff on the boundary of Hō‘ae‘ae and Waikele which belonged to the akua Kāne and Kanaloa.

The last and largest of the ahupua‘a in the moku of ‘Ewa is Honouliuli which means dark bay. This ahupua‘a reaches from just north of Kahe Point power plant and the Waimānalo Gulch and follows the mauka ridgeline to the mountains above Camp Pālehua. It continues along the ridgeline passed the many pu‘u of the southern Wai‘anae Mountains to just passed Pu‘u Hāpapa near the border of the moku of Wai‘anae. The ahupua‘a of Honouliuli continues towards Central O‘ahu to the Schofield Barracks area and then follows a path near Kunia Road south to the West Loch area of Pu‘uloa. Makakilo and the Kunia Camp residential developments are all located within Honouliuli. Honouliuli also includes all the lands west of Pu‘uloa, from Iroquois Point to Kalaeloa. All the residential developments in Kapolei, ‘Ewa and ‘Ewa Beach are a part of the ahupua‘a of Honouliuli.

Wahi Pana and Additional Places of Importance

There are many wahi pana or places of importance that are found within the Kapolei Region. One of the most significant places is Pu‘uokapolei, the name of a hill and heiau located in the center of the Kapolei area near the current Kapolei Regional Park. Pu‘uokapolei means Hill of (the) beloved Kapo, Kapo being the sister of Pele. This heiau was the largest and most sacred of all the heiau in Honouliuli. It was used for solar observation, was a place of governance during ancient times, and was also the residence of Kamaunuanoho, the konohiki of this area. Today, this Pu‘uokapolei is protected and maintained by The Ulu A‘e Learning Center.

Another famous landmark in this area is the famed bay Pu‘uloa, which means long hill. It is the site of the current military harbor called Pearl Harbor. This area was referred to as Ke awa lau o Pu‘uloa, meaning the many channels or lochs of Pu‘uloa. Pu‘uloa is also the name of the salt ponds that were located to the east of the harbor. These salt ponds were used to establish Pu‘uloa Salt Works, a commercial salt operation located near Keahi Point. These salt ponds were used for commercial salt production from the mid 1800’s to the early 1900’s. Other salt ponds were located along the shoreline in the West Loch area. Also, in the West Loch area were well-known kalo lands. Today the salt ponds and much of the traditional kalo lands have been covered with residential development.

There are many pu‘u located in the uplands of Honouliuli. The tallest is Pu‘u Hāpapa at approximately 2,800 feet above sea level. Other well-known pu‘u in this area are: Pu‘u Kānehōa, Pu‘u Kaua, Mauna Kapu, Pālehua, Pu‘u Kapua‘i, Pu‘u Makakilo, and Pu‘u Pālailai.

Kahe is a land section found within Honouliuli nearest the boundary line of the moku of Wai‘anae. Kahe means to flow, as of water. South of Kahe is an area called Ko‘olina. Ko‘olina means delightful or lovely and refers to the beaches and lagoons in the area now known as Ko‘olina Resort. Kalaeloa is the name of the southwestern-most point of the island of O‘ahu, the moku of ‘Ewa and the ahupua‘a of Honouliuli. This point has also been called Barbers Point. Kalaeloa is also the name used to refer to the lands that were conveyed to the State and County from the decommissioning of the old Barbers Point Naval Air Station. One‘ula means red sand and is the name of a well-known beach park located makai of Ocean Pointe development between White Plains Beach or Kualaka‘i to the west and the ‘Ewa Beach area to the east. Kualaka‘i is the traditional name of the famous White Plains Beach. Kualaka‘i means sea cucumber and is also the name of the large mauka to makai access road in Kapolei, Kualaka‘i Parkway.

Also located within the ahupua‘a of Honouliuli is the Honouliuli National Historic Site. This site is the location of a former Japanese Internment Camp that was established during World War II following the attack on Pearl Harbor. It was in operation from 1943 to 1946 and was the largest and longest-used confinement site in the Hawaiian Islands. This internment camp housed Japanese-Americans, German Americans, Americans of other European ancestry and non-combatant labor conscripts from Japan, Korea, Okinawa, Taiwan and Italy. Though it is not currently open to the public, it is a recognized National Historic Site and is managed by the US National Park Service.

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Existing Land Uses

DHHL has established land use designations for their lands across all islands. These land use designations are established in the Island Plans. The following are descriptions of the land use designations that are found within the Kapolei region according to the DHHL O‘ahu Island Plan (2014).

- **Residential:**
 - Residential lot subdivisions built to County standards in areas close to existing infrastructure.
 - Lots awarded to applicants on the residential waiting list.
 - Higher densities allowed on O‘ahu. Minimum lot size of 5,000 square feet. Infrastructure is built to County standards and includes potable water, all utilities, and paved roads.
 - Recently enacted administrative rules permit the development of multi-family units.
- **Community Use.**
 - Common areas for community uses and public facilities; includes space for parks and recreation, cultural activities, community based economic development, utilities and other public facilities and amenities.
 - No lot size restrictions at present. Infrastructure must meet County standards.
- **Commercial:**
 - Lands suitable for retail, business, and commercial activities.
- **Industrial:**
 - Lands suitable for processing, construction, manufacturing, transportation, wholesale, warehousing, and other industrial activities.

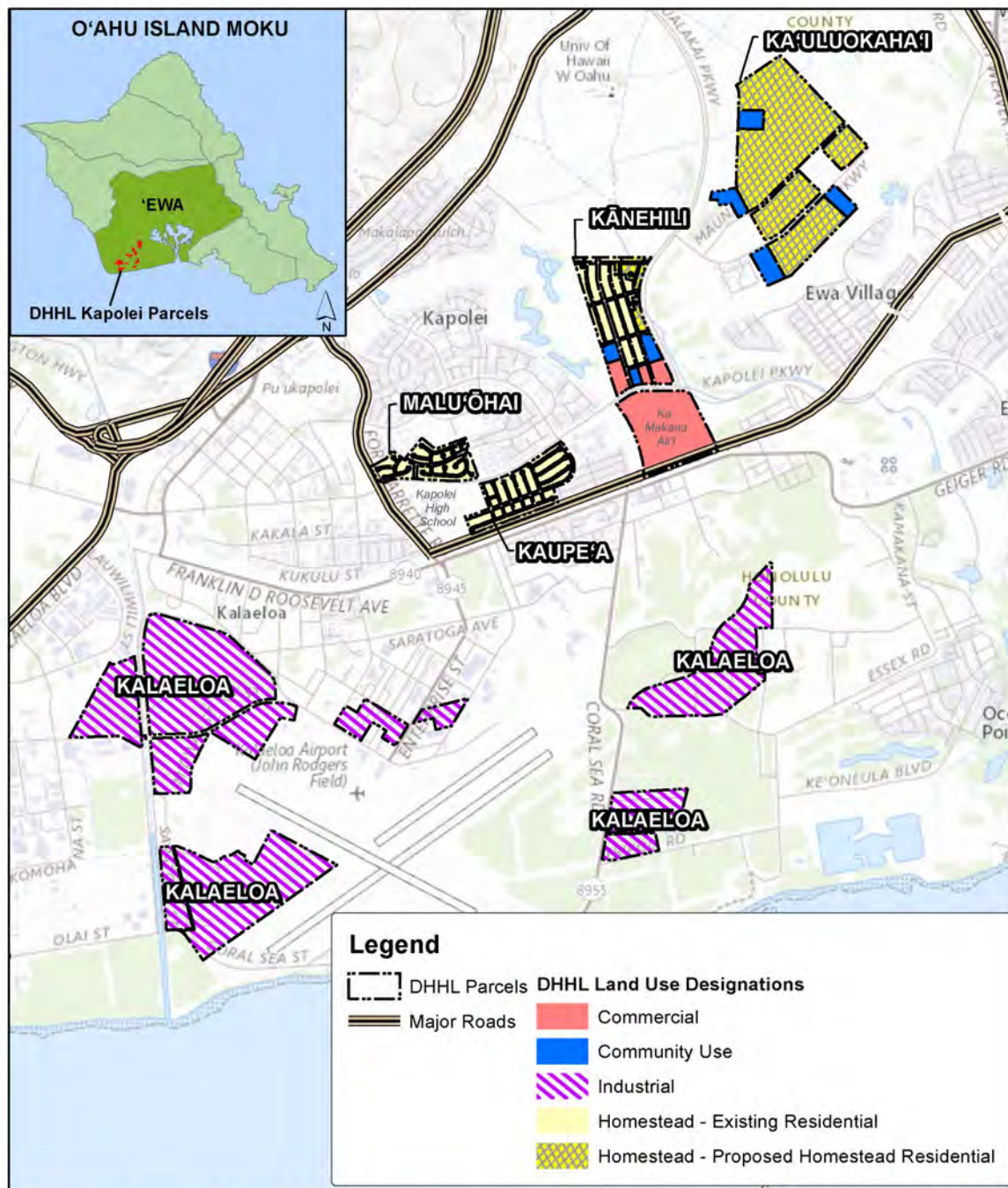
Total Lots and Acreage

Land Use	Total Lots/Parcels	Total Acreage
Residential	1,115 lots	164 acres
Proposed Residential	1,190 lots	200 acres
Community Use	7 parcels	35 acres
Commercial	4 parcels	80 acres
Industrial	10 parcels	555 acres
Total:	2,017	1,015 acres

Homestead Uses

Malu‘ōhai is the first homestead to be built in the Kapolei Region and consists of 226 lots developed on approximately 37 acres of land. This homestead is located mauka of Kapolei Parkway across from Kapolei High School in Village 6 of the Villages of Kapolei. Malu‘ōhai is a part of the Villages of Kapolei Master Association. Of the 226 homesteads in Malu‘ōhai, 70 were built as a part of the Kapolei Ho‘olimalima rent-to-own project that was developed by Mark Development, Inc. Ho‘olimalima was an affordable rental project that targeted beneficiaries on the waitlist who made less than 50% and 60% of the Honolulu median income. Initial rent-up and income certifications began in 2001 and full occupancy was achieved by January 2002. This project allowed beneficiaries to rent at affordable rental prices and offered the option to purchase the home after 15 years. Renters were given financial counseling support and assistance during their time as renters in preparation for the end of the 15-year rental term. As of January 2018, all the homes in Ho‘olimalima were converted to homeownership. The remaining 156 homestead lots in Malu‘ōhai are a mix of turnkey and self-help homes.

FIGURE 7- DHHL LAND USE DESIGNATION MAP



Kapolei Regional Plan Update
DHHL LAND USE DESIGNATIONS
 June 2021

This graphic has been prepared for general planning purposes only and should not be used for boundary interpretation or other spatial analysis.



Kaupe‘a is the second homestead in the Kapolei region and is also located in the Villages of Kapolei and is a part of the Villages of Kapolei Master Association. This homestead includes 326 turnkey homes constructed in three phases on 52 acres located between Kapolei High School and Kapolei Middle School makai of Kapolei Parkway.

Kānehili is the third homestead developed in Kapolei and is located on 92 acres mauka of the intersection of Kualaka‘i Parkway and Kapolei Parkway. This homestead includes 403 homestead residential lots. Gentry Kapolei Development, LLC completed 249 turn-key lots which are now occupied. A total of 18 self-help or owner-builder houses have been completed and are occupied, with five owner-builder lots in progress.

Ka‘uluokaha‘i is the fourth homestead to be developed in the Kapolei Region and the name of the East Kapolei master planned community. Increment IIB of Ka‘uluokaha‘i are the first homesteads built in this homestead and are located east of Kualaka‘i Parkway, between Keahumoa Parkway and Maunakapu Street. This development includes 102 turn-key homes that will be complete and occupied by early 2022 and 21 vacant lots selected by owner-builders in progress. These homestead lots are located near the planned Rail Transit Station along Kualaka‘i Parkway. A planned elementary school will be built to the east of Ka‘uluokaha‘i, and a planned middle school is currently under construction to the west of the homestead. Additional homestead development is planned for the surrounding DHHL lands, so far still referred to as East Kapolei II.

Community Uses

Kānehili Community Association Park is a 4.59-acre parcel that has been developed as a community park. This park features a playground and open green space and is intended to serve the surrounding beneficiary community. Some of the funding for the construction of the park came from a community benefit package agreement with DeBartolo Development, LLC who built Ka Makana Ali‘i Shopping Center. The Kānehili Community Association is currently working on planning and design of future phases of the park construction as well as securing additional funding to complete full build out of the remaining acreage of the parcel.

Kapolei Heritage Center is a community building that is located mauka of the DHHL Offices on Kinoiki Street on a parcel of land that is called Kipuka, meant to offer space for use by community organizations. The Council for Native Hawaiian Advancement is also located on a portion of the Kipuka parcel. The Heritage Center is managed by the Kapolei Community Development Corporation (KCDC), whose board consists of community leaders from the various DHHL Kapolei homesteads. KCDC began a capital campaign in 2013 and received over \$2 million in state and private funds to begin construction on the Heritage Center. Phase I of the construction was completed in July 2016 and includes a certified community kitchen, two classrooms, and restrooms. Phase II of the Heritage Center will include a hālau or large gathering space. Phase III will include offices and a gallery to honor Prince Jonah Kūhiō Kalaniana‘ole and the Hawaiian Homes Commission Act of 1921.

Commercial Uses

Ka Makana Ali‘i Shopping Center is a 1.4 million square foot commercial development located on the makai corner of the intersection of Kualaka‘i Parkway and Kapolei Parkway. This parcel is 67.7 acres and is designated in the DHHL O‘ahu Island Plan (2014) for commercial use. At the end of 2014, a General Lease agreement was signed by DHHL with DeBartolo Development, LLC for a lease period of 65-years. The lease agreement is expected to generate more than \$200 million in rent revenue. According to the 2019 DHHL Annual Report, this lease generated approximately \$4.7 million in annual lease rent for DHHL.

Ho‘omaka Marketplace is a community commercial development that is located on a 1.05-acre parcel at the corner of Kualaka‘i Parkway and Kapolei Parkway, directly across from Ka Makana Ali‘i Shopping Center. This

Marketplace will be anchored by Longs Drugs, Hele Gas Station, 7-Eleven and Chick-fil-A, and will be developed by KCDC in partnership with KZ Development. Groundbreaking is currently anticipated for early 2022.

Industrial Uses

All of the DHHL lands located in Kalaeloa are designated for Industrial use according to the O‘ahu Island Plan (DHHL 2014). There are approximately 224 acres in short- and long-term dispositions. Land uses in Kalaeloa include alternative energy, industrial base yards, commercial operations, stabling, office space, public service uses, and recreation.

State and County Land Use Designations

In general, the DHHL Island Plan land use designations are consistent with State Land Use Districts, and County Zoning. Where they may be inconsistent, DHHL may exempt itself from the State Land Use Law and County land use regulations pursuant to the HHCA, Section 204.

State Land Use Districts

The State Land Use Agricultural District includes lands for the crop cultivation; aquaculture; raising livestock; wind energy facilities; timber cultivation; agriculture-support activities, such as mills, employee quarters, etc.; and land with significant potential for agricultural uses. Only one parcel out of the DHHL land holdings in the Kapolei Region is located in the State Land Use Agricultural District. This parcel is located mauka of Malakole Street near the intersection of Saratoga Avenue and is currently undeveloped. There is a portion of Agriculture District land located east of Ka Makana Ali‘i Shopping Center that includes the makai parcel of “Varona Village,” part of the ‘Ewa Villages development. They are not currently a part of the DHHL land holdings, but could potentially be transferred to the land inventory in the future.

The State Land Use Urban District is generally for lands characterized by “city-like” concentrations of people, structures, or services and includes vacant lands for future development. All DHHL land holdings, other than the one parcel within the Agricultural District, are located in the State Land Use Urban District. Please refer to Figure 8, State Land Use Districts Map, below.

Kalaeloa Community Development District

The Kalaeloa lands were formerly zoned F-1 Federal and Military Preservation District while under Federal ownership and used as Barbers Point Naval Air Station. However, the County zoning was amended following the decommissioning and official closure of Barbers Point Naval Air Station in 1999. Approximately 550 acres of land formerly a part of the Naval Air Station were transferred to the DHHL land inventory. These lands are currently a part of what is called the Kalaeloa Community Development District (CDD). Effective 2012, the Kalaeloa CDD Rules and Reserved Housing Rules supercede the Kalaeloa Community Redevelopment Plan (2001) and other County Zoning designations. Most of the DHHL land holdings in the Kalaeloa CDD are zoned T-3 General Urban Zone with one portion of a parcel zoned T-2 Rural/Open Space Zone. The T-3 General Urban zone is characterized by mixed use projects with a commercial emphasis. T-2 Rural/Open Space zones shall consist primarily of open space, parks and limited agricultural use. Cultural, archaeological and environmental uses and sites shall also be located within the T-2 zone. It should be noted that HCDA is currently updating its Kalaeloa Master Plan and Rules, and this may affect the zoning of DHHL lands in Kalaeloa. Please refer to Figure 9, Kalaeloa Community Development District Zoning Map, below for current zoning in Kalaeloa.

City and County Zoning

Malu‘ohai is zoned R-5 Residential use. Kaupe‘a is zoned R-3.5 Residential use, A-1 Low-Density Apartment, and P-2 General Preservation. Both of these homesteads are used primarily for single-family residential housing. Kānehili is zoned AG-1 Agricultural Cluster by the County, but is used as a mixture of Residential, Commercial and Community Uses. Ka‘uluokaha‘i homestead and the remaining East Kapolei II lands are designated AG-1

Agricultural Cluster by the County but are currently used for mixed use Residential, Proposed Residential, and Community Use. Please refer to Figure 10, County Zoning Map.

Surrounding Land Ownership and Uses

There are a mix of public and private large landowners in the Kapolei Region. Makaiwa Hills, LLC and D.R. Horton Schuler Homes are two large private landowners who own lands in the Makakilo area. Hunt Development is a large private landowner and master developer who owns over 500 acres of land in the Kalaeloa area. The State of Hawai‘i owns large parcels of land surrounding the DHHL homesteads of Malu‘ōhai, Kaupe‘a and Kānehili. These State-owned lands are used for Kapolei High School, Kapolei Middle School, and Kapolei Elementary School as well as 500 acres for the University of Hawai‘i West O‘ahu campus. The East Kapolei II lands are bordered to the north and east by the Ho‘opili Development. Ka‘uluokaha‘i also includes State of Hawai‘i land that is under development for use for a new Middle School and another parcel that will be used to develop a new Elementary School. In addition to the State of Hawai‘i lands that will be used for schools, the Hawai‘i Housing and Finance Development Corporation (HHFDC), an agency of the State of Hawai‘i, owns two parcels in Ka‘uluokaha‘i. One is the Ko‘oloa‘ula Apartments and Keahumoa Place. There is also a large parcel in Ka‘uluokaha‘i that is the KROC Community Center, owned and operated by the Salvation Army. Please refer to Figure 11, Large Landowners Map.

Regional Revenue Generation

The DHHL land inventory in the Kapolei region is the largest source of DHHL’s revenue from leases, licenses and permits in the State. There are a variety of land uses that generate revenue through annual lease rent payments to the Department. The following table lists the types of land uses, respective acreages and annual lease rents included in the 2019 DHHL Annual Report. This table excludes revenue and acreage from homestead residential uses, as well non-revenue generating acreage for lands used for community use, easements, and public service. This table only includes lands that generated revenue for the Department according to the DHHL Annual Report for 2019.

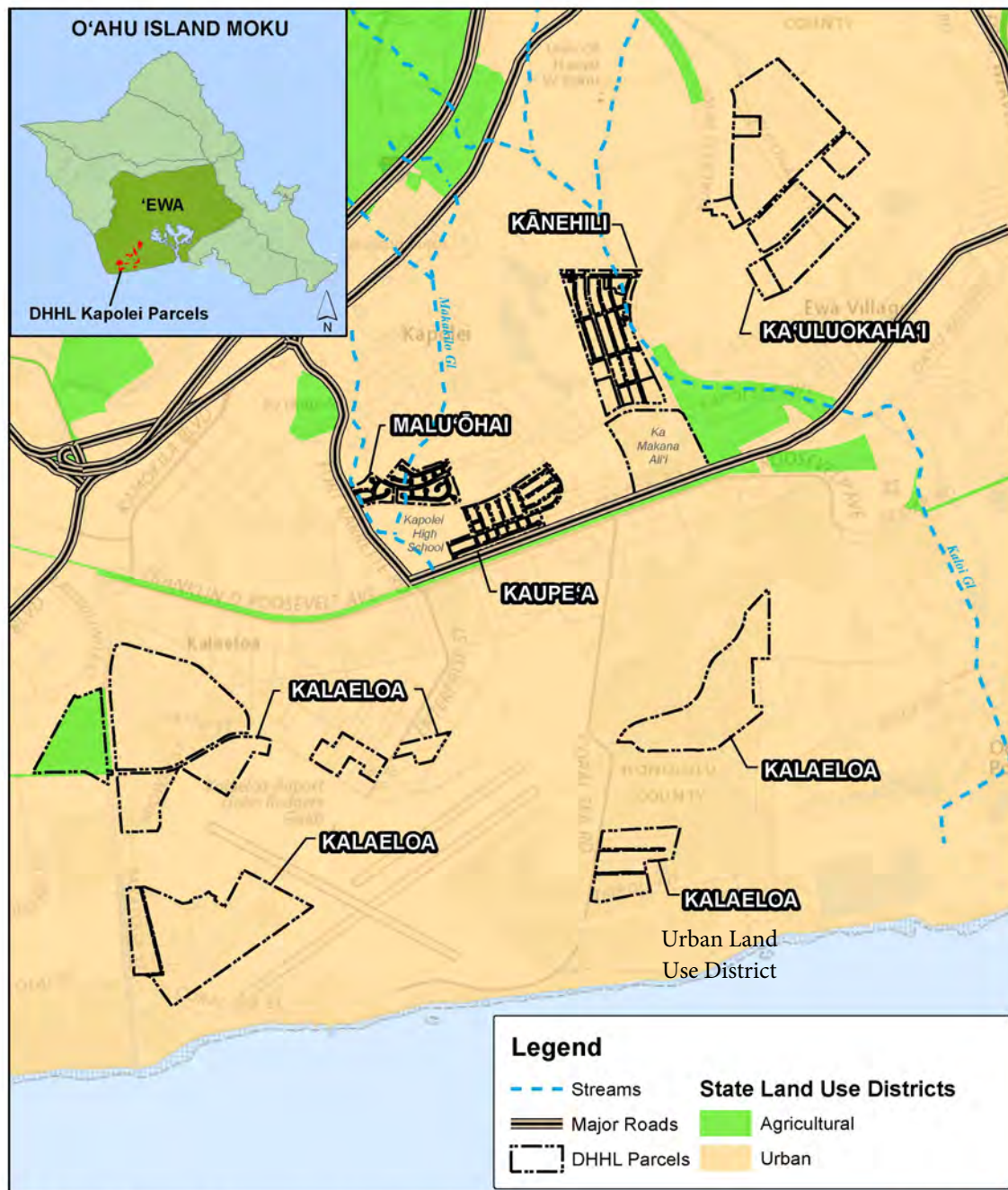
Approximately 296 acres of the DHHL land inventory in the Kapolei region generated a total of \$7,568,231. The total land inventory for General Leases and Licenses on O‘ahu is 6,059.88 acres, with Kapolei’s 296 acres making up approximately 5% of the lands generating revenue on the island. Total revenue from all DHHL General Leases and Licenses Statewide is \$9,756,889.32, with Kapolei generating approximately 77.5% of this revenue.

TABLE 1 - KAPOLEI REGIONAL REVENUE IN 2019

Land Use	Acres	Annual Lease Rent
Agricultural	78.64	\$18,540
Alternative Energy	69.85	\$376,480
Commercial	72.96	\$4,853,806
Industrial	58.64	\$2,135,564
Office	0.31	\$12,578
Public Service	10.11	\$168,383
Recreation	0.51	\$480
Stabling	5	\$2,400
TOTAL	296.02	\$7,568,231

Source: 2019 DHHL Annual Report

FIGURE 8 - STATE LAND USE DISTRICTS MAP



Kapolei Regional Plan Update
STATE LAND USE DISTRICTS
 June 2021

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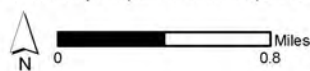


FIGURE 9 - KALAELOA COMMUNITY DEVELOPMENT DISTRICT ZONING MAP

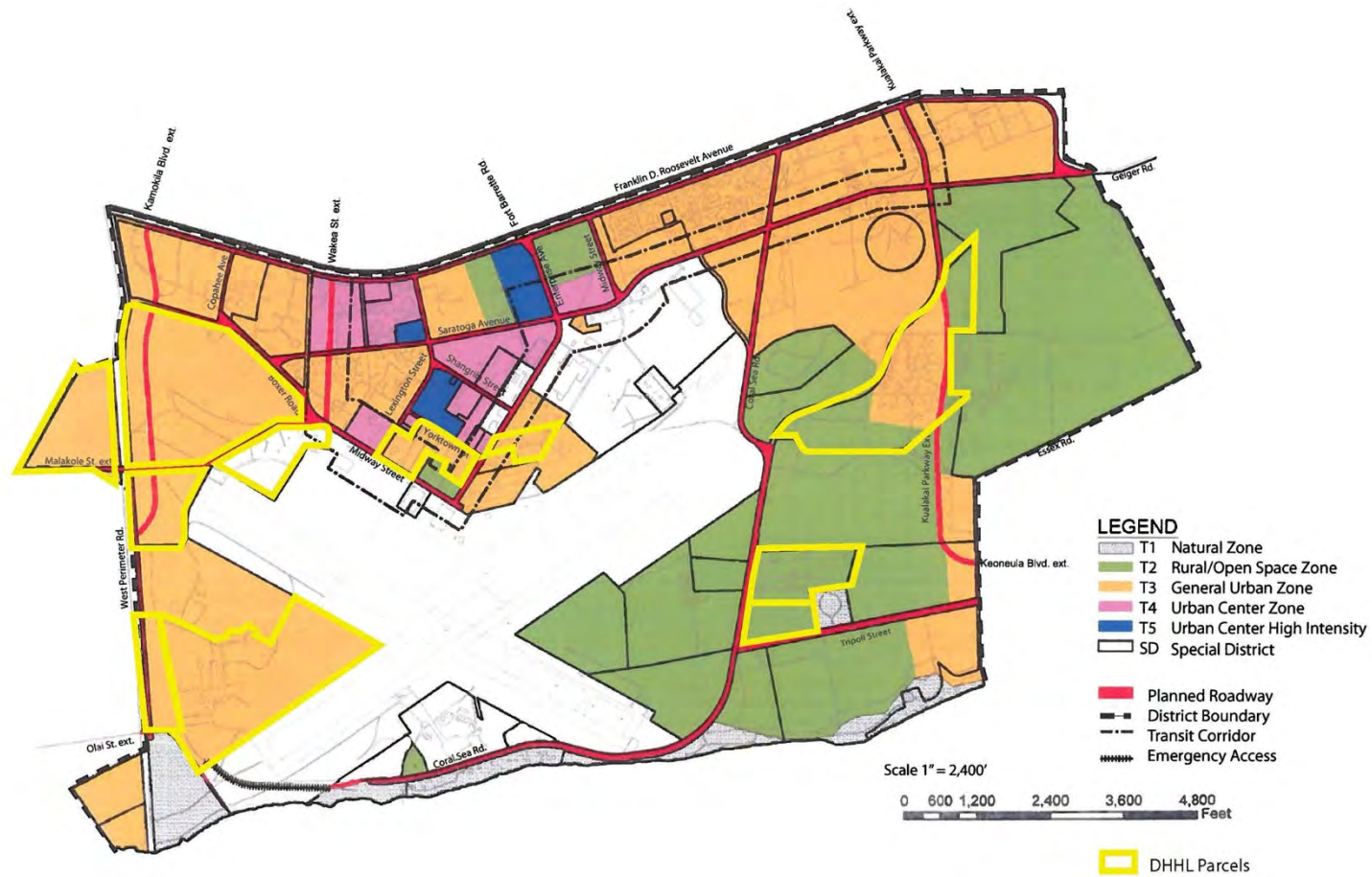
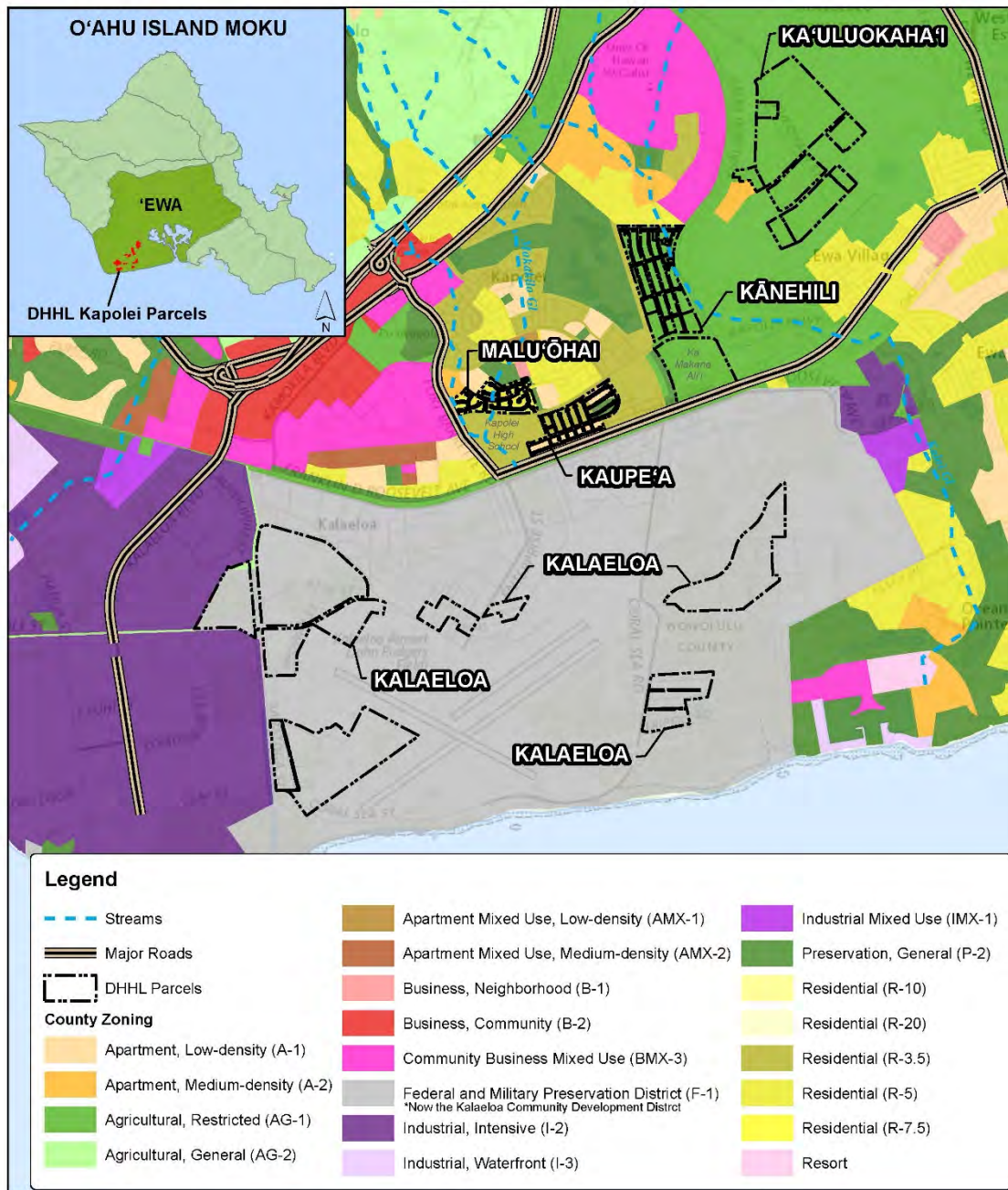


FIGURE 10 - COUNTY ZONING MAP



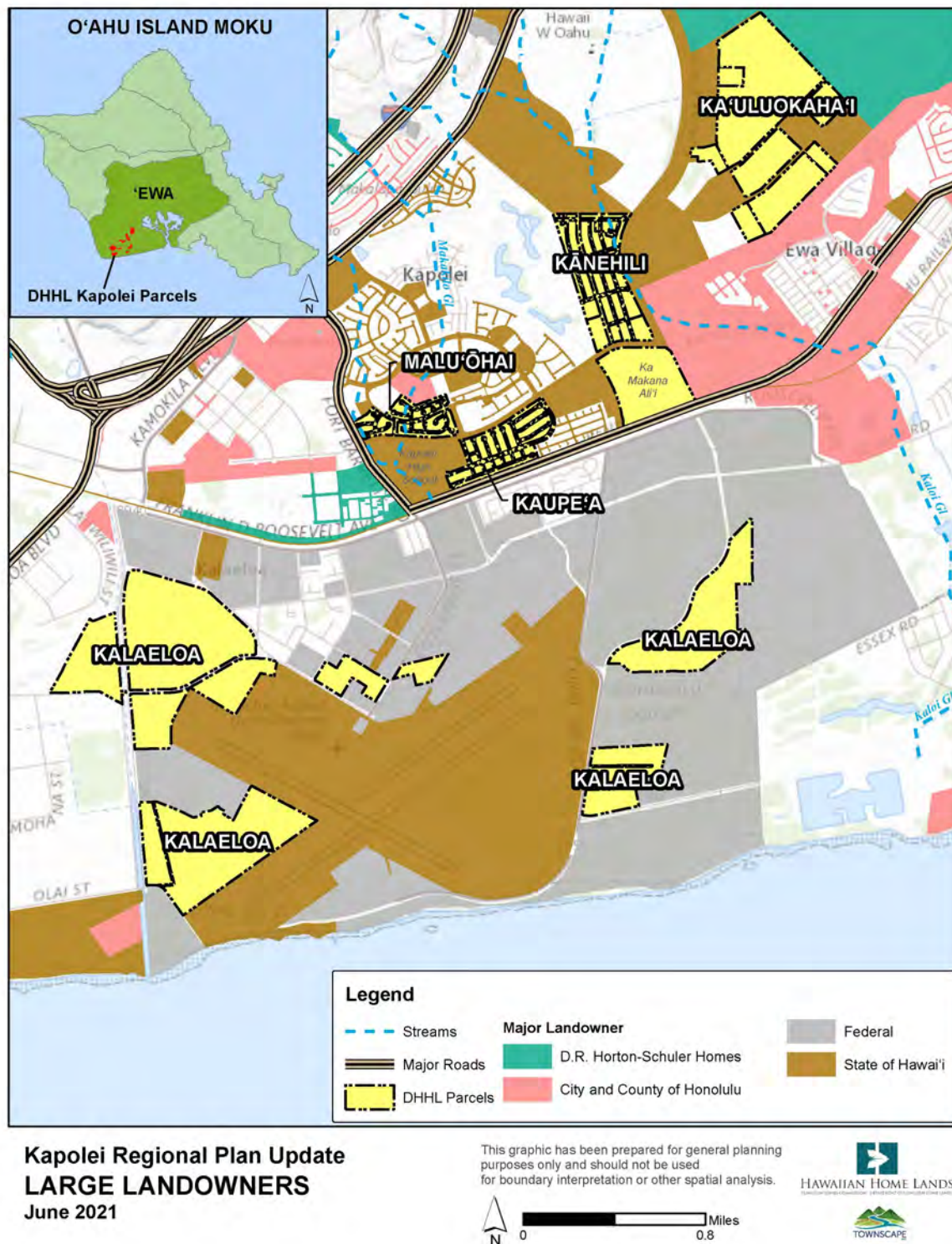
Kapolei Regional Plan Update
COUNTY ZONING
August 2021

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Gov't County of
Honolulu Lands

FIGURE 11 - LARGE LANDOWNERS MAP



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Infrastructure

City and County Wastewater System

Malu'ōhai, Kaupe'a, Kānehili, Ka'uluokaha'i, and Ka Makana Ali'i Shopping Center are serviced by the City wastewater system, though the City has yet to accept them for operation and maintenance. DHHL is responsible for the maintenance of the pipes and intakes until the City accepts these duties. Much of Ka'uluokaha'i's infrastructure has been constructed, with the infrastructure for utilities for each increment that will be installed during construction of the roads and grading of the lots. Much of the undeveloped DHHL lands in Kalaeloa do not have wastewater infrastructure and will need to have it developed to support future uses.

There are three Wastewater Pump Stations located in the Kapolei Region: Makakilo City Pump Station, Kapolei Business Park Pump Station, and an additional Pump Station located in the Kapolei Region makai of the Kalaeloa Airfield that is currently owned by Hawai'i Water Company, LLC. Honouliuli Wastewater Treatment Plant, the regional wastewater treatment plant, and Honouliuli Water Recycling Facility, the City's largest water recycling facility, are also located in the 'Ewa plain near the Kapolei region.

Other Wastewater Infrastructure

There are a number of cesspools located on DHHL lands in Kalaeloa, and near the Kaupe'a and Malu'ōhai homesteads. See Figure 13, Wastewater Infrastructure Map, below. No cesspools are located in the Kānehili homestead, community use lots or commercial lots. No cesspools are located in E. Kapolei parcels or Ka'uluokaha'i homestead. There are approximately 88,000 cesspools statewide, most of which are small capacity cesspools. The Hawai'i State Department of Health Wastewater Branch oversees and permits all wastewater systems in the islands, including cesspools. Current regulations require that all cesspools be upgraded, converted or closed by January 1, 2050 due to the environmental impacts associated with cesspools. Property owners, operators and lessees will need to comply with all federal and state requirements for cesspools.

Water and wastewater systems located in the Kalaeloa area have been privatized into the Kalaeloa Water Company (KWC) which is owned by Hawaii Water Company, LLC and operated by Pural.

Electrical Infrastructure

All of the DHHL land inventory located in Kapolei and East Kapolei is connected to the Hawaiian Electric Company (HECO) power grid, which supplies electrical power to most of O'ahu island. In Kalaeloa, the majority of the electrical system is still owned by the United States Navy. There are several sectors that are connected to the HECO grid. The Coral Sea Road is energized and connected to HECO. DHHL land holdings along Coral Sea Road can request electrical service directly from HECO.

The Enterprise Energy Corridor Project is a project in partnership with the Hawaii Community Development Authority (HCDA) and the Department of Transportation (DOT). The HCDA portion of the project was completed in January 2020 and included installation of underground duct work between Kapolei Parkway and Midway Road fronting the Kalaeloa Airport. The DOT portion of the project to energize the duct lines is still in the design phase and HECO has a contract to complete this portion of the project by Summer 2021.

Hunt Development is pursuing the development of a Department of Veteran's Affairs Multi-Specialty Outpatient Clinic located their lands on the west side of Kalaeloa near Kamokila Boulevard by the developer VA Aloha, LLC. In order to complete this project, new electrical power from the HECO grid will need to be routed to the west side of Kalaeloa.

Road System – Existing and Planned

The Kapolei Region has extensive roadway networks developed in the central area. Vehicular access to this side of the island is primarily from the H-1 freeway system which travels from the moku of 'Ewa to the moku of Kona, where the primary urban center is located. Another major roadway in the Kapolei Region is Farrington Highway, which stretches from the moku of 'Ewa to the moku of Waialua on the North Shore of the island.

Kapolei Parkway and Franklin D. Roosevelt Avenue are major east-west access roadways in the region. Makakilo Drive/Ft. Barrette Road, Kualaka'i Parkway and Fort Weaver Road are major mauka-makai access roadways. Much of the Kalaeloa roadway network is underdeveloped and underused. Current major roadways in Kalaeloa include Coral Sea Road, Roosevelt Avenue, and Enterprise Street. Future increased use and development in the Kalaeloa area will require additional roadway infrastructure.

Hunt Development is pursuing development of a Veteran's Affairs Multi-Specialty Clinic located on its lands in the west side of Kalaeloa. This development will require construction of an extension to Kamokila Boulevard. Plans for this project show the extension of Kamokila Boulevard into the west side of the Kalaeloa Community Development District. VA Aloha, LLC is the developer for this project.

In consultation with the State of Hawai'i Department of Transportation, there are several planned projects within the Kapolei region which will have impacts on DHHL land holdings and Kapolei beneficiaries. These projects are listed below.

Short-range Planned Projects:

- **Interstate Route H-1, Kapolei Interchange Complex, Phase 3.** The project would widen Farrington Highway, enlarge the H-1 Freeway loop offramp to Kalaeloa Boulevard, construct the Mauka Frontage Road from Makakilo Drive to Kapolei Interchange, and construct Pālailai Interchange.
- **Fort Barrette Road Railroad Crossing Improvements.** The project includes upgrading the existing railroad crossing from asphalt to concrete, replacing existing wooden tracks and ties, and installing new automated crossing gates and signals which will be synced to the new traffic signal at Franklin D. Roosevelt Avenue.
- **Harbor Access Road.** The scope of this project could include, but is not limited to, the design and construction of a new four-lane divided concrete roadway, auxiliary lanes, sidewalks, bike lanes, traffic signals, intersections, associated utilities, grading, landscaping, and connections to future Department of Transportation roadways and drainage canal bridge crossing.

Mid-range Planned Projects:

- **Interstate Route H-1, New Interchange, Kapolei Interchange.** This project is for the construction of a new interstate route H-1 Kapolei Interchange between Pālailai Interchange and Makakilo Interchange. This project is proposed to be constructed in multiple phases.

Long-range Planned Projects:

- **Fort Barrette Road (Route 901).** This project is for the widening of Fort Barrette Road from two- to four-lanes between Farrington Highway and Barbers Point Gate.
- **Kualaka'i Parkway (Route 8930) Extension, Interstate Route H-1 to Franklin D. Roosevelt Avenue.** This phase of this project is for the extension of Kualaka'i Parkway between Franklin D. Roosevelt Avenue and Saratoga Road.
- **Kualaka'i Parkway (Route 8930) Extension, Interstate Route H-1 to Franklin D. Roosevelt Avenue.** This phase of this project would widen and extend Kualaka'i Parkway as follows: 1) Expand from three- to six-

lanes between Kapolei Parkway and Interstate Route H-1, and 2) Extend Kapolei Parkway to Franklin D. Roosevelt Avenue (six-lanes).

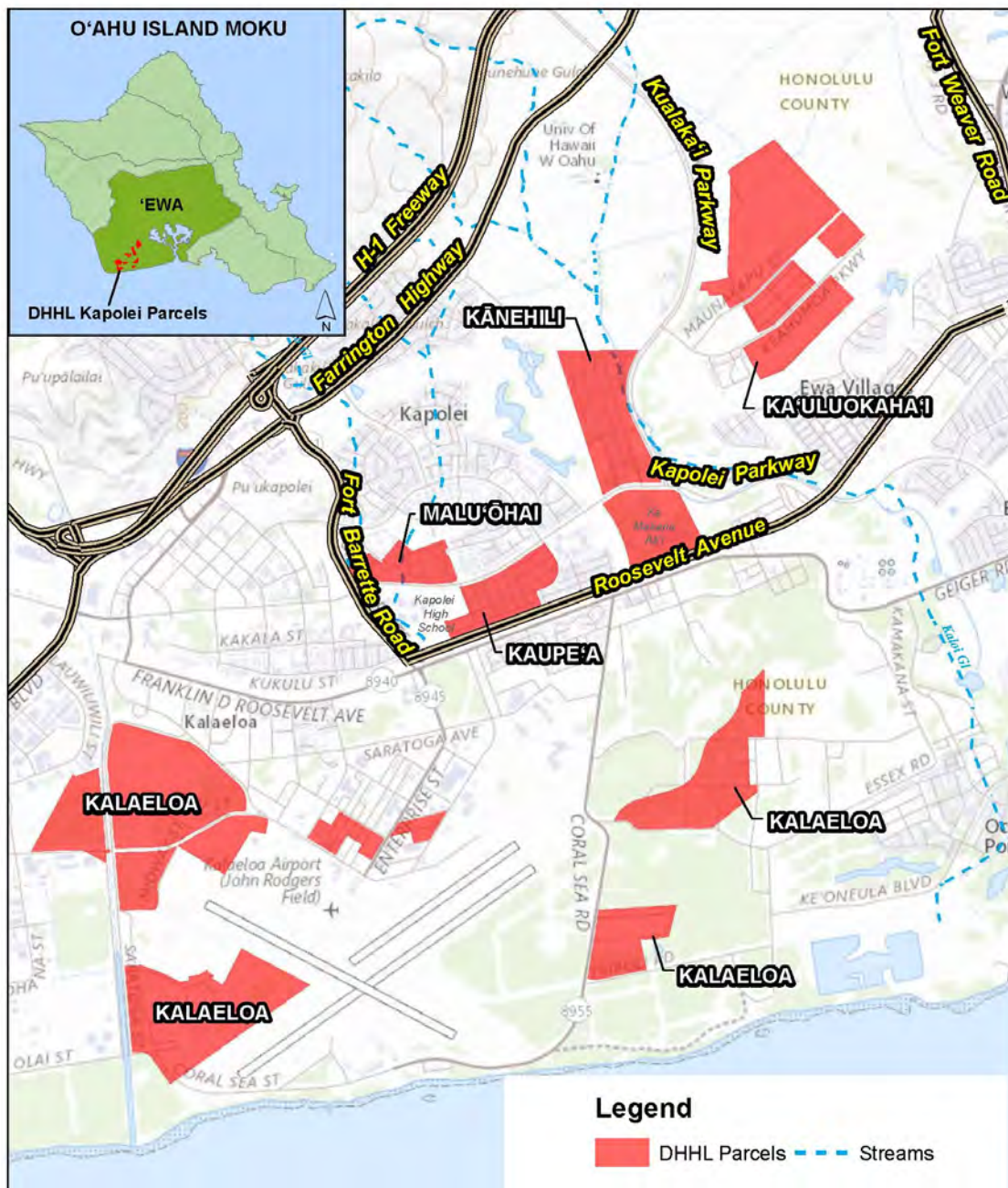
Kalaeloa Airport

The Kalaeloa Airport is approximately 750 acres which was originally a part of the Barbers Point Naval Air Station and has been owned and operated by the O'ahu District of State Airports System since 1999. The airports functions as a general aviation reliever airport for the Daniel K. Inouye International Airport. It has air traffic control functions from 6:00am to 10:00pm daily. Major users of Kalaeloa Airport include the US Coast Guard, Hawaii National Guard and the general aviation community. This airport acts as a launch site for Coast Guard Search and Rescue operations, aviation training, emergency response, and as an alternate landing site for airlines and the military.

In consultation with the State of Hawai'i Department of Transportation, the Airports Division advised that any planned projects located within 5 miles of Kalaeloa Airport may have restrictions on development and use and may require further review and permits. This could have impacts on future use and development for DHHL land holdings in the surrounding area.

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FIGURE 12 - ROADWAYS MAP

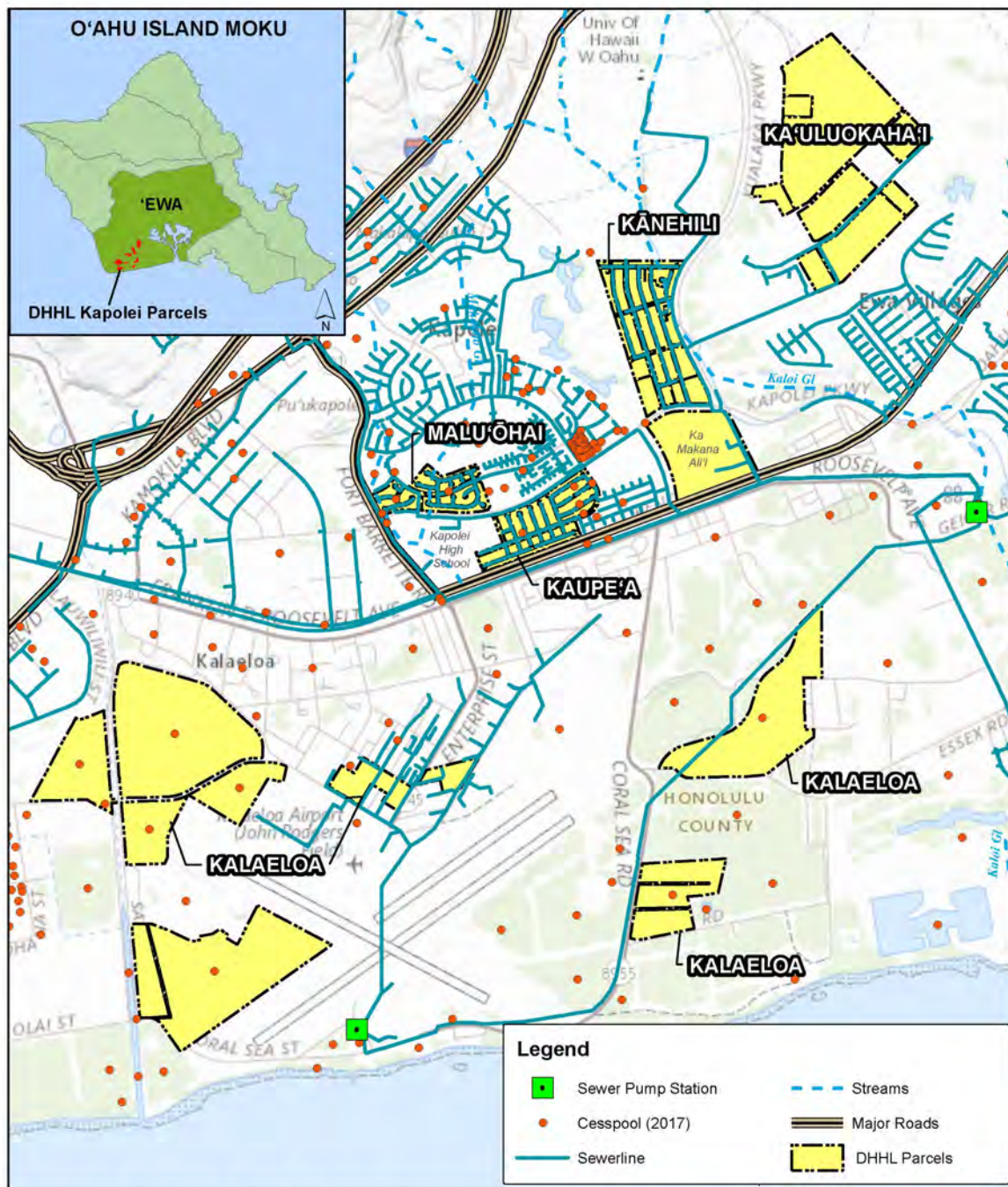


**Kapolei Regional Plan Update
ROADWAYS
August 2021**

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FIGURE 13 - WASTEWATER INFRASTRUCTURE MAP



Kapolei Regional Plan Update
WASTEWATER INFRASTRUCTURE
 June 2021

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Project List

Projects identified by the community are meant to address the issues and concerns that were expressed by the participants in Beneficiary Consultation #1. Priority projects identified in the 2010 Kapolei Regional Plan were discussed by participants in Beneficiary Consultation #2 in order to determine the relevance those priority projects to the community today. In addition to the previously identified priority projects, the community discussed issues that were not addressed by the existing list of projects and suggested additional projects that might address those issues. All project ideas considered by the community are described in the following two sections.

Previous Priority Projects

The first Regional Plan for Kapolei was completed in 2010. The five priority projects identified in that plan and their status updates are described below.

Kapolei Regional Plan Priority Project	Project Champion	Status
Support Heritage Center and Community Commercial Development	KCDC	<p>This item remains a priority. Phase I of the Kapolei Heritage Center was completed in 2016 and is open for community use. This space includes two classrooms, restrooms, and a certified kitchen. Phase II and III of the Heritage Center are yet to be completed.</p> <p>Planning and design for the Community Commercial Development, called Ho‘omaka Marketplace, is complete. The project is in the permitting phase and is expected to break ground in 4th quarter 2021, barring further delays from the COVID-19 pandemic. Ho‘omaka Marketplace includes commitments from the following vendors: Long’s, Hele gas Station, 7-Eleven, and Chick-Fil-A. The construction phase is anticipated to take approximately 12 months.</p> <p>The completion of the Kapolei Heritage Center including full build-out of Phase II and III are contingent on revenue generation from Ho‘omaka Marketplace. This commercial development is meant to provide an on-going funding source to the community for community-based development, and the operation and maintenance of community spaces.</p>
Support New School Development	DOE	<p>This item remains a priority. Plans for a new elementary located near Ka‘uluokaha‘i will help to accommodate the growing population in Kapolei. Phase I of a new middle school have been completed and is operational.</p>

Kapolei Regional Plan Priority Project	Project Champion	Status
Engage Beneficiaries in a Planning Charette Process	DHHL	This project was completed in 2012. A design charette with the homestead community discussed development in E. Kapolei.
Develop Pedestrian/Bike Path Network to Community Resources	City & County of Honolulu	The O‘ahu Bike Plan update was completed in December 2019. This plan is meant to guide future planning to better integrate bicycling into the islands transportation system.
Preserve and Develop Parks to Service the Homestead Community	DHHL/Community organizations	This item remains a priority. A 4.59 acre parcel located near Kānehili homestead is licensed to Kānehili Community Association for use as a park. Phase I of this park was completed in 2019. Future phases are in the planning process. A total of 13 acres is designated for open space/parks within the Ka‘uluokaha‘i master planned community.

Final Project Ideas List

The following project ideas list came from the discussions in Beneficiary Consultation #1 and #2. These project ideas are meant to address the needs and concerns of the community. A draft project list was refined by participants at Beneficiary Consultation #2. This project list was shared in an online survey on the project website, and beneficiaries were asked to select their top five priority projects for the Kapolei Regional Plan Update from this list of 14 items.

- **Support Heritage Center and Community Commercial Development**
- **Support the Development of a Hawaiian Focus/Immersion School**
- **Create More Open Spaces, Park Spaces, and Recreation Spaces to Support the Homestead Community**
- **Create a Kūpuna Living Community**
- **Establish a Place of Worship and a Place of Rest/Cemetery for the Homestead Community**
- **Create a Community Garden/Agricultural Space/Farmer’s Market for Homesteaders**
- **Create Multi-Family and Rental Housing Developments for Homesteaders in Kapolei**
- **Hawaiian Culture Center**
- **Create Entrepreneurial and Business Opportunities**
- **Support Music**
- **Nurture Kapolei-Based Community Health Workers and Build Partnerships and Community Capacity to Help Address the Findings of Recently Completed Kapolei Homestead Health Survey**
- **DHHL to Address Post-build Issues in the Homesteads**
- **DHHL to Provide More Options for Communication in the Homesteads instead of only Sandwich Isles Communication**
- **Establish and Grow Inclusive Housing Programming for native Hawaiians with disabilities**

Priority Projects

The community was asked to select five priority projects from the above list of project ideas. The selection process consisted of an online survey link that was available on the project website where beneficiaries could choose the five projects that they felt should be priorities for the region. The survey was open for beneficiary participation between Wednesday, May 5 and Wednesday May 19, 2021 following Beneficiary Consultation #2 on Tuesday, May 4, 2021. A total of 60 responses to the survey were collected.

The top two projects and last two projects out of the top five priority projects that were selected received the same number of votes from participants in the selection poll. These projects will appear as “1./2.” and “4./5.” as they are tied in votes. The top two projects each received 32 votes each, the third project received 31 votes, and the final two projects of the top five priority projects received 30 votes each.

The following projects were selected by participants as the top five priority projects for the region.

1./2. Create more open spaces, park spaces, and recreation spaces to support the Homestead Community

PROJECT DESCRIPTION

The Kapolei homesteaders desire more open space for parks and recreation throughout the region. These spaces would provide safe environments to support programs and activities for youth and leisure spaces for ‘ohana to gather and enjoy the outdoors. Open spaces for parks and recreation are key to a thriving and healthy homestead community.

Currently, the park and recreation space available to the homesteaders in the region are as follows:

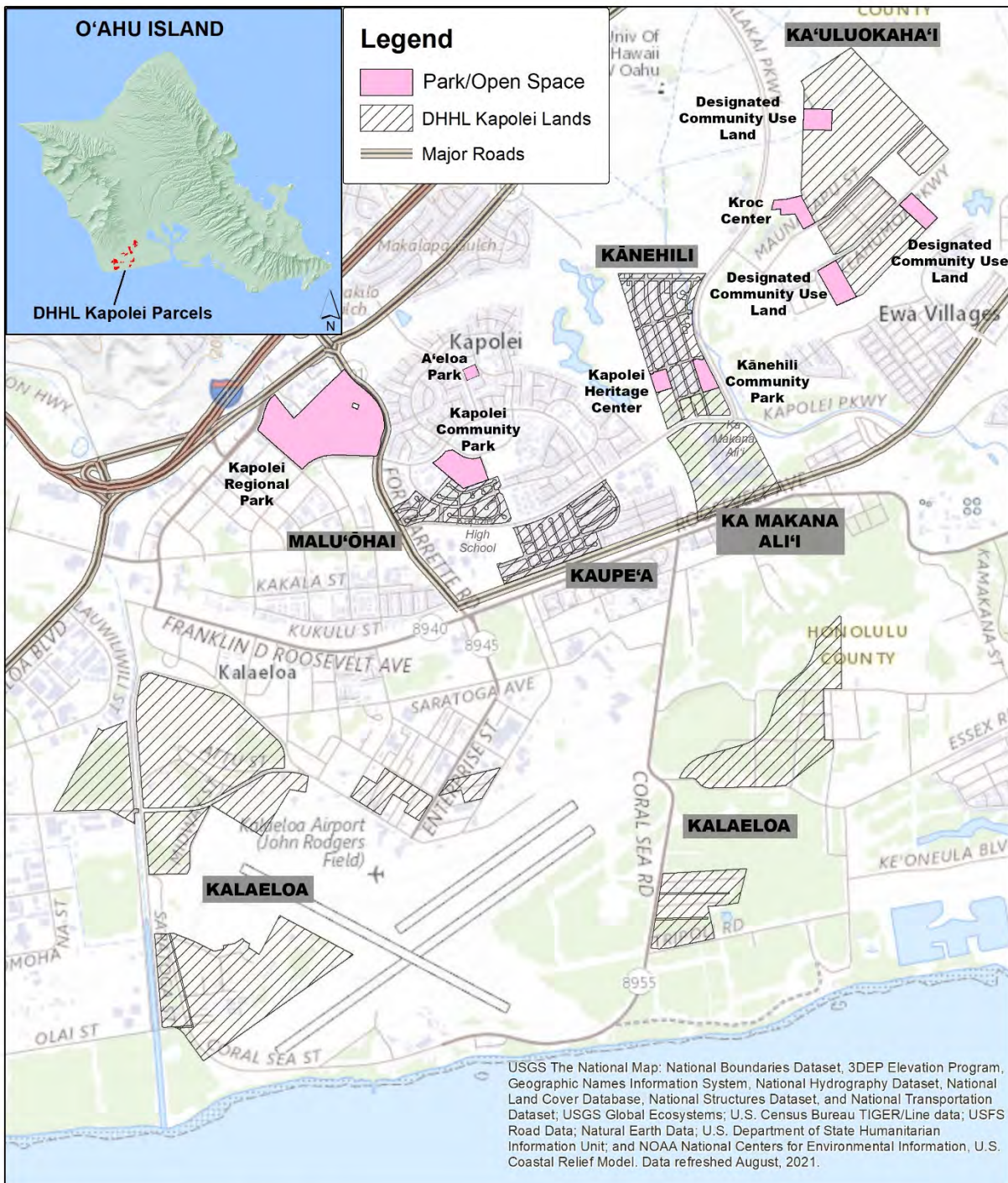
- Kānehili Community Association Park
- Kapolei Heritage Center
- Villages of Kapolei Association (VOKA) common spaces (available to homesteaders in Malu‘ōhai and Kaupe‘a who pay dues to VOKA)
- The Salvation Army Kroc Community Center (available to the general public through memberships)

According to the O‘ahu Island Plan (DHHL 2014), a total of 35 acres of the DHHL land inventory has been identified for Community Use in the Kapolei region. This includes parcels located on DHHL lands in Kānehili and East Kapolei. Some of these parcels have been licensed to community organizations for use and are in varying stages of development. Approximately 15 acres on three separate parcels in East Kapolei are currently vacant and additional planning and design will be needed for future development of these lands.

Kānehili Community Association Park is located on a 4.59-acre parcel in the Kānehili Homestead at the corner of Kekāhili Street and Kamakahelei Street. It is maintained by the Kānehili Community Association (KCA). This parcel is a part of the DHHL land inventory and is licensed to and managed by the KCA. Phase I of Kānehili Community Association Park includes a basketball/volleyball court, keiki play area, picnic tables, benches, bicycle rack, trash receptacles, landscaped areas, irrigation system and native trees for the community to enjoy. Phase I of the park opened for use in July 2020.

The Association has partnered with SHADE institute and their collaborators at G70 and Ki Concepts to design Phase II of the park. A community design workshop was hosted virtually in May 2021 to discuss a working concept site plan for Phase II of the park and to form small working groups for the ongoing design of park programs and amenities. A survey was conducted in June 2021 to gather feedback from Kānehili Community

FIGURE 14 - PARKS/OPEN SPACE MAP



Kapolei Regional Plan Update
KAPOLEI PARKS MAP
 November 2021

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residents to better understand the needs and wants of the community for the park space. A second design workshop took place in August 2021. Some features of the proposed Phase II design concept include: a community center facility, splash pad, imu, imu shed, playfield, hula mound, lei garden, crafts pavilion, and parking lot. Once the design and planning for Phase II are complete, KCA will then need to focus on fundraising for the permitting and construction to complete Phase II.

Another gathering and recreation space available to Kapolei homesteaders is the Kapolei Heritage Center. This space is licensed to Kapolei Community Development Corporation (KCDC) and has completed Phase I of three planned phases for development and construction. Phase I was completed in 2016 and includes a commercial kitchen, two classrooms, restrooms, and some parking. Phase II is the hālau space or gathering space. Phase III is office space and a gallery dedicated to Prince Jonah Kūhiō Kalanianaʻole. The Kapolei Heritage Center is located adjacent to the DHHL administrative building. Upon completion, the Heritage Center will provide space for gathering and recreation. Utilizing the spaces available with Phase I, the Heritage Center currently hosts programming such as Alu Like and Keiki o ka ʻĀina. With further construction, the Heritage Center will be able to increase their capacity for programming space and services provided to the homestead community.

The Villages of Kapolei Recreation Center 1 and Recreation Center 2 are private recreation centers that are on parcels owned by the Villages of Kapolei and are approximately 4 acres and 2 acres in size respectively. These recreation centers are located in the heart of the Villages of Kapolei and are open to use by members of the association. Each center has a recreation hall that includes indoor and outdoor gathering/event space and a kitchen area. These spaces are a part of the amenities available to VOKA members, which includes Maluʻōhai and Kaupēʻa homesteaders who pay monthly dues to VOKA.

Kapolei Community Park is a public park that is located on 12 acres of City and County of Honolulu lands that is adjacent to the Villages of Kapolei Recreation Centers. This park features a large open grass space, athletic courts, restrooms and playground area.

Aʻeloa Park is a private park owned by the VOKA and located on a 1.89 acre parcel in Village 2/Aʻeloa. This park features open space and has a small restroom facility.

Kapolei Regional Park is a 73 acre park that was donated to the City and County of Honolulu from the James Campbell Estate. This park features large open spaces, restroom facilities, and an archery facility, and is also the location of Puʻuokapolei, a heiau and important historical space in native history.

The Kauluokahaʻi master-planned community is an ongoing development on DHHL lands, located east of Kualakaʻi Parkway surrounding Keahumoa Parkway to the north and south. This development includes three planned park spaces. Two of the planned park spaces are located on Keahumoa Parkway to the south and are 4.3 acres and 2.8 acres in size, respectively. A third park space is located north of Maunakapu Street and is 5.9 acres in size. Combined, these planned park spaces will provide 13 acres of open space and park space on DHHL lands to serve the East Kapolei homestead communities.

The Salvation Army Kroc Community Center is located on a 12-acre parcel within Kauluokahaʻi. Recreational facilities include an athletic center with an NCAA-regulation gymnasium; a state-of-the-art health and wellness center with workout equipment and facilities for individual and group fitness; an aquatics center featuring a competition pool and a recreation pool with giant water slides; and a 3-acre multipurpose field for outdoor programs. Membership is open to the general public and scholarships for reduced rates are available.

Potential sites for these types of spaces, as discussed by participants in beneficiary consultations, could include: an open lot adjacent to Kapolei High School and Kaupēʻa Homestead that is currently owned by the HHFDC, the “Varona parcels” adjacent to Ka Makana Aliʻi Shopping Center which may potentially be transferred to the DHHL

land inventory (a transfer that is currently under review by the Department of the Interior), and East Kapolei undeveloped parcels owned by DHHL.

PAST ACTIONS

Kānehili Community Association Park

- 2018 – Licensing to KCA for the Kānehili Community Association Park for planning, design and construction.
- 2020 – Kānehili Community Association Park Phase I completed and opened for use by Kānehili homesteaders in “good standing” with the Association.
- 2021 – KCA partnered with SHADE Institute for the design of Phase II of the park.

Kapolei Heritage Center

- 2008 – Licensing to KCDC for the Kapolei Heritage Center for planning, design and construction.
- 2013 – KCDC launched a funding campaign to support the completion of Phase I of the Heritage Center.
- 2014 – Fundraising completed for Phase I of the Heritage Center, permitting and construction began.
- 2016 – Phase I of the Heritage Center completed and the facility opened for community use.

East Kapolei/Kauluokaha‘i Planned Parks

- 2021 – The Kauluokaha‘i master-planned community includes three planned park spaces for community use totaling 13 acres. Development of these parks will require partnerships.

COMMUNITY INPUT

Beneficiaries that participated in the Kapolei RPU Beneficiary Consultations #1 and #2 indicated that spaces are needed for keiki and youth to recreate, participate in programming and organized sports and enjoy safe areas to play. Parks and open spaces are important for ‘ohana to safely access and enjoy. There is a need for spaces for the community and ‘ohana to gather outdoors. Having safe spaces for walking and exercising that are nearby to the homesteads is a priority. According to the Trust for Public Land, their park program looks to provide park spaces located within a 10-minute walk for all residents. This metric of a 10-minute walk or a half a mile distance may be a good reference for homesteaders access to park or open spaces.

OBJECTIVE

Development of open spaces, parks and recreation spaces within the Kapolei Region helps to fulfill the Community Values of preserving “Natural, Cultural and Agricultural Resources”, and prioritizing “Keiki” and “Kūpuna.” This project idea also helps the region to reach its vision of establishing “*wahi pana and kīpuka...[that can be] celebrated and stewarded for future generations.*”

IMPLEMENTATION ACTION STEPS

- 1) **Establish a parks committee.** A committee of members of the various community associations/organizations is needed to explore development of park spaces in Kapolei to serve the homesteads. An new organization will need to be established or an existing organization or partnership of organizations will need to champion this project in order to move it forward. An established nonprofit organization is needed in order to engage in discussions with DHHL regarding licensing, operation and management of designated park space within the homestead. Also, having a recognized community organization/entity allows access to legislative funding to support planning and construction, as opposed to only relying on DHHL trust funds. DHHL trust funds are

primarily meant to fund the development of homestead lots for beneficiaries in accordance with its mission. Use of funds for projects other than this primary need are limited. It may take DHHL an extended period of time to be able to respond to funding needs outside of homestead development uses. Other funding sources are available such as: OHA, State and County GIA funds, etc.

- 2) **Survey the community.** Confirm the types of programs and uses that community members would like to see as a part of this project by reaching out to community members.
- 3) **Develop planned park space.** If park space is already planned for a parcel on DHHL lands, then these are the steps for the development of the planned park space:
 - a) **Funding.** Funding is needed for planning and design for the space. Potential funding sources include: the Legislature, DHHL grants, and/or private funding sources.
 - b) **Pre-application process.** A project proposal and an application for a Right of Entry Permit for the parcel will be submitted to DHHL for review. This project proposal will include a description of the applicant organization, the project, benefits to beneficiaries and DHHL, project implementation and potential timeline for implementation.
 - c) **DHHL HHC approves Right of Entry permit.** This approval is for a one-year limited right of entry for due diligence, including: preliminary site assessment research such as a biological review, archaeological review, etc. This information is needed for the preparation of a Master Plan and an Environmental Assessment. Prior studies may be updated if needed.
 - d) **Master Plan/Special District Plan & Environmental Assessment prepared.** The Applicant will prepare due diligence studies of the site, including a master plan and an environmental assessment. The environmental assessment will be published based on HRS Chapter 343 requirements.
 - e) **HHC approves FONSI; and then long-term disposition.** The Hawaiian Homes Commission will review the Final EA, issue a Finding of No Significant Impact, and approve the license or lease.
 - f) **Permitting and other entitlements.** The Applicant will secure all necessary permits and approvals as determined by DHHL in consultation with the appropriate agencies.
 - g) **Site Preparation and Construction.** All Best Management Practices (BMP's) and mitigation measures as outlined in the Final EA are to be followed during site preparation and construction.
 - h) **Operations and Maintenance.** The project is to be operated and maintained as described in the Master Plan and Final EA.
 - i) **Monitoring & Reporting.** This includes site visits and periodic reporting of site use.
- 4) **Identify potential locations outside of planned parks.** Locations within the homestead community located on lands not currently designated for community use or on available adjacent lands that are not a part of the DHHL land inventory should be identified as potential sites for a park.
- 5) **Land Use Designation Amendment.** Depending on the location identified and the needs of the program(s), a land use designation amendment may be necessary. The steps to achieve this change are as follows:
 - a) Select a lot.
 - b) Propose a change to the land use designation from homestead residential use to community use or commercial use (depending on services and programs identified).
 - c) Approach Commissioner(s) to garner support for the proposed change.
 - d) Submit a proposal to the Planning Office and the Chairman to amend the O'ahu Island Plan.
 - e) Departmental review of the proposal.
 - f) **Beneficiary Consultation.** This is required for any change to existing land use designation. Previous beneficiary consultation through the Regional Plan Update process may meet the beneficiary consultation

requirement for the project. This beneficiary consultation is required specifically for a change to the land use designation in the O‘ahu Island Plan.

- g) Departmental recommendation to HHC.
- h) HHC Approval needed to change Land Use Designation and amend the O‘ahu Island Plan.

6) **Develop park space on non-DHHL lands.** For locations that are outside of the DHHL land inventory, these are the steps to develop park space for homesteaders in these locations.

- a) The Community and the Landowner will need to reach an access agreement.
- b) Is this land on State/County lands? Private lands? Identify the specific permitting and other entitlements needed to use non-DHHL lands.
- c) Project Planning and Design.
 - i) Establish long-term administration and community management of the site.
 - ii) Develop budgets for acquisition, development and maintenance of the site.
- d) Funding: Potential funding sources:
 - i) Legislature
 - ii) DHHL grants
 - iii) Private funding
- e) Develop the amenities of the space.
- f) Conduct on-going operation, maintenance, and security.

DRAFT

1./2. Create a Kūpuna Living Community

PROJECT DESCRIPTION

Kapolei homesteaders would like to see an alternative living option for kūpuna within the region so that they may have access to all the facilities and services needed for them to comfortably age in place. As kūpuna age, they may wish to leave their larger home and downsize to a living space that is more suited for their needs. The development of a vibrant kūpuna living community that provides not just residential spaces, but also support facilities and services for kūpuna would allow beneficiaries to live out their lives in Kapolei, surrounded by their families and community.

One model for the envisioned Kūpuna Living Community in Kapolei is the Waimānalo Kūpuna Project, Kūlanakauhale Maluhia o Nā Kūpuna. This project is an 8-acre development that consists of 85 apartments, a resident manager's apartment, and common areas. This housing development is located on DHHL lands off of 'Ilaulohole Street in Waimānalo. Rental apartments are available to elderly or senior (55 years of age or older) DHHL beneficiaries at rates affordable to low or moderate income families. The project cost approximately \$11.5 million and was financed by a combination of funds from the Office of Hawaiian Affairs (OHA), Federal Home Loan Bank of Seattle grants, Low Income Housing Tax Credits, the State Rental Housing Trust Fund, private lenders and loans from DHHL. Pacific Housing Assistance Corporation was selected to both develop and manage the rental project. Construction began in September 2000 and was completed in March 2002, with the first tenants able to move-in the following month in April 2002.

Another potential model for the Kapolei Kūpuna Living Community is the planned DHHL development in Mō'ili'ili on the site of the Old Stadium Bowl-o-Drome. This project is for a 23-story high-rise building and accompanying low-rise townhomes that will offer a total of 270 units. This project will include: an apartment tower with studios, one-bedroom, two-bedroom and three-bedroom units; seven three-bedroom townhouse units; and a parking structure. The project will also include 4,680 square feet of commercial space at ground level with at-grade parking stalls. This commercial/retail component will help to subsidize the costs of operating and maintaining of the development. Part of this development includes units available to kūpuna beneficiaries. Stanford Carr Development was selected by DHHL as the developer for this project in early 2020. Construction is likely to be completed in mid-2024. This project is estimated to cost \$137 million in total.

A 2014 report completed for DHHL by PlanPacific, Inc. looks at alternative housing development models, including Kūpuna Housing. This report mentions that there is a strong preference for living in extended family/multi-generational households. Staff at Lunalilo Home shared that the care home model is an unsustainable model due to the difficulty in raising money to develop, operate and maintain the facility, and also because smaller-scale facilities or in-home care are more desirable, especially for those of modest means. There is a preference to integrate care into families and communities rather than separating elders from their families and communities. Lunalilo Home staff mentioned establishing a physical hub in Kapolei or the leeward region to provide support services such as meal preparation and delivery, eldercare training, nursing assistance, licensing assistance, housekeeping, and substitutes when primary home-based caretakers are on vacation or leave.

This report also looked at options for kūpuna who may wish to live independently but would like to be in a community with age-peers and nearby family and friends. A housing community designed to accommodate kūpuna aged 55 years of age and above could help to reach beneficiaries who do not have the financial means to purchase a single-family dwelling in a DHHL homestead.

The Kūpuna Living Community in Kapolei is envisioned to have small residential units designed for single or double occupancy. These may potentially be affordable rental units, similar to the Kūpuna Rental Units that are located in Waimānalo or the units that are planned for Mō'ili'ili. Support facilities may include a commissary to shop, a cafeteria to eat, outdoor spaces to garden, and on-site laundry facilities. Spaces for indoor and outdoor recreation

would be found throughout the Kūpuna Living Community. This place ideally would be located within the Kapolei region and would provide long-term living opportunities for kūpuna beneficiaries. Additional facilities may include a place of worship and a place of rest or cemetery.

PAST ACTIONS

- 2002 – Kūlanakauhale Maluhia o Nā Kūpuna (Waimānalo Kūpuna Project) completed & first tenants occupy units.
- December 2014 – PlanPacific, Inc. completed a report on Alternative Housing Development Models for DHHL, including Kūpuna Housing options.
- 2020 – Stanford Carr Development selected for Mō‘ili‘ili Affordable Rental project to include kūpuna housing options.
- January 2020 – Beneficiary Consultation for Kauluokaha‘i TOD station with Kapolei beneficiaries. Participants discussed a need for kūpuna housing options in Kapolei.

COMMUNITY INPUT

At Beneficiary Consultations #1 and #2, participants discussed the importance of kūpuna in the region and in the community and identified a need for a community and housing development to serve kūpuna needs. The vision for this Kūpuna Living Community includes a vibrant community with housing and support facilities that allows kūpuna to age in place within their community in Kapolei. This development would serve kūpuna such as, (1) those who wish to downsize from a larger single-family dwelling into something smaller and more manageable and convenient and (2) kūpuna beneficiaries on the waitlist who do not have the financial resources to secure financing for a single-family dwelling.

OBJECTIVE

This project helps to fulfill the community value of Kūpuna: *“Traditionally, kūpuna held an important role and place in native Hawaiian society. Spaces and resources in Kapolei are used to create full and healthy lives for kūpuna as they age in place.”* Creation of a Kūpuna Living Community would help to create full and healthy lives for Kapolei kūpuna to age in place. This project also helps to achieve part of the vision for the region: *“Kapolei is a growing region that looks to its history, mo‘olelo, ‘āina and kūpuna to build a strong foundation for the homestead communities.”* This vision prioritizes kūpuna within the Kapolei community and identifies how important kūpuna are to building strong foundations for homestead communities.

IMPLEMENTATION ACTIONS STEPS

- 1) **A project champion is identified.** The Waimānalo Kūpuna Housing project was initiated by the Waimānalo Community and OHA, and was developed by DHHL. The Bowl-o-Drome redevelopment project is not explicitly a kūpuna housing project. This project was initiated by DHHL. A developer was hired by DHHL to design, build, finance and manage the facilities. The Ho‘omaka Marketplace is licensed to KCDC, and KCDC secured a developer to partner with its organization for the design, development and funding of the project. A community organization or DHHL may be the project champion for this project.
- 2) **Outreach with kūpuna.** It is important to outreach to kūpuna beneficiaries in order to confirm the physical and programmatic components of this project. A commercial component may be included in order to off-set the rental income needed for on-going maintenance of the facilities.

- 3) **Develop criteria.** Criteria is needed to identify the types of spaces that would best fit the proposed physical and programmatic needs for the kūpuna living community as identified by kūpuna beneficiaries.
- 4) **Identify potential locations.** Locations within the homestead community or on available adjacent lands should be identified as potential sites for a kūpuna living community.
- 5) **Land Use Designation Amendment.** Depending on the location identified and the needs of the program(s), a land use designation amendment may be necessary. The steps to achieve this change are as follows:
 - a) Select a lot.
 - b) Propose a change to the land use designation from homestead residential use to community use or commercial use (depending on services and programs identified).
 - c) Approach Commissioner(s) to garner support for the proposed change.
 - d) Submit a proposal to the Planning Office and the Chairman to amend the O‘ahu Island Plan.
 - e) Departmental review of the proposal.
 - f) Beneficiary Consultation. This is required for any change to existing land use designation. Previous beneficiary consultation through the Regional Plan Update process may meet the beneficiary consultation requirement for the project. This beneficiary consultation is required specifically for a change to the land use designation in the O‘ahu Island Plan.
 - g) Departmental recommendation to HHC.
 - h) HHC Approval needed to change Land Use Designation and amend the O‘ahu Island Plan.
- 6) **Acquire Lands.** If no location within the homestead can be identified, an adjacent location could be acquired and added to the Hawaiian Home Lands inventory. The process for land acquisition is as follows:
 - a) Select a lot.
 - b) Beneficiary consultation is required to discuss the acquisition of lands and designation of land use in the O‘ahu Island Plan.
 - c) Approach Commissioner(s) to garner support for the land acquisition.
 - d) Consultation with the U.S. Department of Interior.
 - e) HHC Approval needed to acquire lands.

3. Support Heritage Center and Community Commercial Development (Previous Priority Project).

PROJECT DESCRIPTION

The Kapolei Heritage Center is operated and managed by the KCDC. This project was developed to fulfill the community's need for space for programming, gathering, cultural practices and more. Support for the Heritage Center and a community commercial development was selected by Kapolei beneficiaries as a priority project in the 2010 Kapolei Regional Plan and remains a priority in the region today.

A funding campaign began in 2013 to secure funds for the development of the first phase of the Kapolei Heritage Center. Phase I of the Heritage Center includes two classrooms, restrooms, a small parking area, and a commercial kitchen space. Phase I was completed in 2016 and the Heritage Center opened for community use in July of that same year. Phase II and Phase III of the Heritage Center are planned to include a hālau, or large covered gathering space, and an administrative building which will provide more classrooms and a gallery dedicated to celebrating Prince Jonah Kūhiō Kalanianaʻole.

Funding for Phases II and III are planned to come from revenue generated from a community commercial development that will also be located in Kapolei. KCDC has a license agreement for a five-acre parcel at the corner of Kualakaʻi Parkway and Kapolei Parkway. This site is adjacent to the Kānehili Community Association Park and located mauka of Ka Makana Aliʻi Shopping Center. This commercial development is called Hoʻomaka Marketplace, and is expected to feature the following anchor businesses: Longs Drugs, Chic-fil-A, 7-Eleven, and Hele gas station. There will be other retail spaces available in the marketplace, as well as an eleemosynary space for community use. Revenue generated from the tenants of Hoʻomaka Marketplace will be used to fund the build out of Phases II and III of the Heritage Center. It is important to understand that these two spaces go hand in hand; revenue generated from the community commercial development is critical for the on-going development of the Kapolei Heritage Center.

The projected cost for design and construction of Phase II and Phase III of the Kapolei Heritage Center will be \$3-\$5 million for each phase. The projected timeline for the build out of these phases is linked to the completion and successful operation of Hoʻomaka Marketplace. The Hoʻomaka Marketplace is expected to break ground in 4th quarter of 2021. Construction is estimated to take approximately 12 months to complete. Hoʻomaka Marketplace could be open for operation as early as late 2022.

The Kapolei beneficiaries would like the Heritage Center to continue its ongoing and planned programming and would also like to see additional programming such as: youth and young adult education programs, cultural and historical education programs, a program to make the built environment more reflective of Kapolei's unique native roots (ex: murals, art, native landscaping, etc.), support for cultural celebrations in common spaces, and programs to support economic development for homesteaders.

PAST ACTIONS

- 2008 – KCDC established. KCDC acts as champion for the development of the Kapolei Heritage Center and Community Commercial Development (Hoʻomaka Marketplace). Licensing agreement for Kapolei Heritage Center and Hoʻomaka Marketplace.
- 2010 – “Support Heritage Center and Community Commercial Development” selected as a priority project in the 2010 Kapolei Regional Plan.
- 2013 – Funding campaign to support Phase I planning, design, development and construction.
- 2015 – Construction of Phase I of the Heritage Center.

- 2016 – Kapolei Heritage Center Phase I completed featuring classrooms, restrooms, parking and a commercial kitchen.

COMMUNITY INPUT

- Supporting the Heritage Center supports programming in the region. The Heritage Center should provide these types of programs in addition to the resources and programming that is already available:
 - Create youth and young adult education programs
 - Support programs that provide cultural and historical education
 - Create a program to make the built environment more reflective of Kapolei’s unique native roots (ex: murals, art, native landscaping, etc.)
 - Support cultural celebrations in common spaces
 - Support economic development for homesteaders

OBJECTIVE

This project helps to fulfill the community values of wahi pana and self-sufficiency. “Wahi pana, of old and new, throughout the region are used by the community to gather and practice their culture.” The Kapolei Heritage Center is a wahi pana in the region and completion of the Center’s planned phases helps the region to reach its goal of having wahi pana available to the homesteads. “All the things that homesteaders need to have a healthy, thriving community can be found within the region” is a part of the value of self-sufficiency. Completion of the Ho‘omaka Marketplace and the Kapolei Heritage Center helps to further the community’s goal for self-sufficiency. Ho‘omaka Marketplace offers commercial and retail spaces and services for the community, and revenue generated from this commercial development will be used to help develop the Kapolei Heritage Center fully and to fund necessary programming to support the homestead communities.

IMPLEMENTATION ACTIONS STEPS

- 1) **Permitting and construction.** KCDC to complete the permitting and construction of Ho‘omaka Marketplace, Kapolei homesteads’ community commercial development.
- 2) **Open Ho‘omaka Marketplace.** KCDC to open Ho‘omaka Marketplace to the public including retail spaces, restaurants/food vendors, gas stations, etc.
- 3) **Funding.** Development of Phase II and Phase III of the Heritage Center is contingent on collecting revenue generated from the Ho‘omaka Marketplace. Potential other funding sources include:
 - a) Legislative Grant-in-Aids
 - b) DHHL grants
 - c) OHA grants
 - d) Federal grants
 - e) Private funding (grants and/or financial products)
- 4) **Permitting and other entitlements.** The Applicant will secure all necessary permits and approvals as determined by DHHL in consultation with the appropriate agencies.
- 5) **Site Preparation and Construction.** All Best Management Practices (BMP’s) and mitigation measures as outlined in the Final EA, EIS or EA Exemption are to be followed during site preparation and construction.
- 6) **Operations and Maintenance.** The project is to be operated and maintained as described in the Master Plan and Final EA, EIS or EA Exemption.

7) **Monitoring & Reporting.** This includes site visits and periodic reporting of site use.

4./5. Support the development of a Hawaiian-Focus School/Hawaiian Immersion School

PROJECT DESCRIPTION

Kapolei homesteaders would like to see the creation of a Hawaiian-Focus/Immersion School for children and youth in the region. This school could be a part of the Department of Education (DOE) current or planned schools in the Kapolei region and would include a partnership with the DOE for development and operation. Currently phase 1 of the new middle school located in East Kapolei is operational, and phase 2 is in designs. There are parcels designated for a new elementary school in the Kauluokaha'i Master Plan. The Hawaiian-Focus School/Hawaiian Immersion School could also be a public charter school which focuses on native language and culture as pillars of the curriculum. This may include a partnership with or creation of an educational entity capable of establishing and operating such a school.

There are currently no educational opportunities for Hawaiian language immersion or Hawaiian culture-focused schools within the Kapolei region. The nearest Hawaiian Language immersion schools are for grades K-6 at Nānākuli Elementary in Nānākuli/Wai'anae and Waiau Elementary in Pearl City. Pū'ōhala Elementary in Kāne'ohe offers immersion from grade K-8. There are two immersion schools that offer high school education on O'ahu: Kahuku High & Intermediate in Kahuku on the North Shore and 'Ānuenue located in Honolulu. The nearest Hawaiian-focused charter schools are Ka Wai'hona o ka Na'auao and Kamaile Academy, both located on the Wai'anae Coast.

The Kapolei Heritage Center is interested in supporting the development of a Hawaiian Immersion/focused school to serve the homestead communities. In recent conversations with Pūnana Leo, the Hawaiian immersion program for pre-k students, the Kapolei Heritage Center facilities were found to be unable to meet the needs of the program at this time. There is not enough space for added programming during weekday/daytime hours. Completion of Phase II of the planned development for the Heritage Center will double and triple the programming space available. Once Phase II is completed, the Kapolei Heritage Center may have enough space to support a Pūnana Leo program at its facilities.

As a growing community with native Hawaiian families, Kapolei should provide more educational opportunities to support native Hawaiian youth in education. Kapolei is projected to be the largest concentration of native Hawaiians in the world at full build-out with 2,000 homesteads currently planned in the region. A school to provide curriculum to educate native students in the region is critical in building a thriving native community.

PAST ACTIONS

- n/a

COMMUNITY INPUT

There is a critical need for a school in Kapolei that can offer focused curriculum on 'ike and 'ōlelo Hawai'i, or Hawaiian culture and language. This would offer benefits to the community in Kapolei and offer more support for native keiki and youth. This project is envisioned to be a full school with a Hawaiian immersion/focused curriculum, and not just a class or small program offered in the community. This would be an option for students in the region who would rather seek this type education rather than the traditional public schools that offer a standard curriculum.

OBJECTIVE

This project will fulfill the community value of Keiki. “Resources for ‘ōpio and keiki are a priority. There are... programs for them to learn...near their homes.” This project would help to create a place for homestead children to be educated in their native language and culture. This project also helps to fulfill the vision for Kapolei: “Kapolei is a growing region that looks to its history, mo‘olelo, ‘āina and kūpuna to build a strong foundation for the homestead communities.” A Hawaiian immersion/focused school would be a part of the strong foundation needed for homestead communities in the region.

IMPLEMENTATION ACTIONS STEPS

- 1) **Form a committee.**
- 2) **Identify potential partnerships.** Organization/committee to identify potential partnerships to support the development of this project in Kapolei.
- 3) **Develop criteria.** Criteria is needed to identify the types of spaces that would best fit the proposed physical and programmatic needs for the kūpuna living community as identified by kūpuna beneficiaries.
- 4) **Identify potential locations.** Locations within the homestead community or on available adjacent lands should be identified as potential sites for a kūpuna living community.
- 5) **Locate at the Kapolei Heritage Center.** If located at Kapolei Heritage Center, then the following steps should be followed:
 - a) KCDC to formalize partnership agreement with Pūnana Leo to provide educational opportunities at the Kapolei Heritage Center.
 - b) KCDC to complete Phase II of its Heritage Center Development.
- 6) **Select a site.** If a different site is selected, these are the steps to be followed:
 - a) The Community and the Landowner will need to reach an access agreement.
 - b) Review specific permitting and entitlements needed for compliance with use of selected lands.
 - c) Funding. Potential funding sources include:
 - i) DOE funding
 - ii) Legislature
 - iii) DHHL grants
 - iv) OHA grants
 - v) Kamehameha Schools
 - vi) Private funding
 - d) Planning and construction.
 - e) Operation and maintenance.

4./5. DHHL should provide more options for communication in the homesteads other than Sandwich Isles Communications (SIC) contract

PROJECT DESCRIPTION

Homesteaders in Kapolei have expressed that they are dissatisfied with the quality of their telecommunications service from Sandwich Isles Communication. They would like to solicit service from other telecommunications providers on-island such as Hawaiian Telcom, Spectrum, etc. Kapolei homesteaders would like the option to seek telecommunications services elsewhere to better fit their needs.

COMMUNITY INPUT

At Beneficiary Consultation #2, participants identified service issues with SIC. Homesteaders stated that the quality of their service from SIC is poor, and they would prefer to seek service from other telecommunications providers who are better able to meet their needs.

OBJECTIVE

This project helps to fulfill the community value of self-sufficiency, “Kapolei is a place where people can live, work and play. All the things that homesteaders need to have a healthy, thriving community can be found within the region.” The ability to obtain quality telecommunications services in Kapolei would further the objective of having what is needed to have a healthy, thriving community. Access to good quality telecommunications services is a critical need for Kapolei homesteaders.

IMPLEMENTATION ACTION STEPS

For Commercial Lessees:

- 1) Abide by the terms of the lease agreement, including limitations to telecommunications providers until a resolution to the constraints of the *perpetual license agreement with exclusivity jurisdiction* is implemented.

For Homestead Lessees:

- 1) Beneficiaries can start to keep a diary and/or documentation of service issues, requests and outcomes to illustrate their communication needs and challenges and share such information with regulatory authorities like the Public Utilities Commission or Federal Communications Commission that may have jurisdiction over telecommunication or broadband services and providers like Sandwich Isles Communications.

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

March 21-22, 2022

To: Chairman and Members, Hawaiian Homes Commission
Thru: Andrew H. Choy, Planning Program Manager *AC*
From: Nancy M. McPherson, Planner *Nancy McPherson*
Subject: For Information Only - Draft DHHL South Molokai
Shoreline Erosion Management Plan (SM-SEMP)

RECOMMENDED ACTION

None; for information only.

BACKGROUND

Context

The Planning Office (PO) last updated the Hawaiian Homes Commission (HHC) on the South Molokai Shoreline Erosion Management Plan (SM-SEMP) project two months ago at its January 2022 meeting. For more detailed background information on the status of the project at that point in time, please refer to Item No. G-4, "DHHL South Molokai Shoreline Erosion Management Plan (SM-SEMP)."

Progress on the project since the January 2022 update

The Community Engagement Program for the SM-SEMP has continued to be significantly impacted by the COVID-19 pandemic restrictions. A second focus group meeting has not yet been held, with over a year having elapsed since the first focus group meeting on February 10, 2021. The project team is in the process of scheduling the meeting for late March or early April.

A larger Community Meeting to review the Draft Plan had been tentatively scheduled for late summer 2021 as an in-person and virtual hybrid meeting, but this is now anticipated to be held in April or May of 2022.

The consultants have completed a "Working Draft" SM-SEMP for review by the HHC. See Exhibit A. Planning Office staff will continue work on the project until additional beneficiary outreach has been conducted and feedback incorporated into the SM-SEMP before requesting final approval by the Hawaiian Homes Commission, anticipated in April or May of 2022.

In spite of these challenges, the Working Draft has incorporated a significant amount of information from the community that has guided the recommendations for DHHL policies and actions included in the SM-SEMP. Molokai coastal homestead lessees shared their mana'o regarding preferred types of erosion responses and an appreciation for the opportunities that nature-based solutions could provide for shoreline restoration and stewardship grounded in cultural and subsistence practices.

DISCUSSION

Need for the Project

The HHC has been briefed regularly over the last several years on current and anticipated climate change impacts, both globally, nationally and here in our islands, as well as in the last three updates on the SM-SEMP to the HHC (April 2019, April 2021 and January 2022). Chronic and episodic shoreline erosion continues to affect Molokai's kona (leeward/southern) shoreline, including undermining Molokai's coastal highway, Kamehameha V Highway, in several locations, predominantly in Mana'e (East End). Figure 1 below, from the "Statewide Coastal Highway Program Report" prepared in 2019 for the State Department of Transportation Highways Division by the University of Hawaii's School of Engineering, illustrates erosion susceptibility for the sections of coastal highway bordering Hawaiian Home Lands. Signs of shoreline erosion affecting the roadbed of the highway begin in the ahupua'a of Kamiloloa, and worsen as the highway follows the coastline east toward Halawa Valley, due to the island's geographic alignment, location and extent of the fringing reef, and patterns of currents and ocean swells. The complete report, which includes data and recommendations for State highways on Kaua'i, O'ahu, Molokai, Maui and Hawai'i, can be downloaded here:

https://hidot.hawaii.gov/highways/files/2019/09/State-of-Hawaii-Statewide-Coastal-Highway-Program-Report_Final_2019.pdf

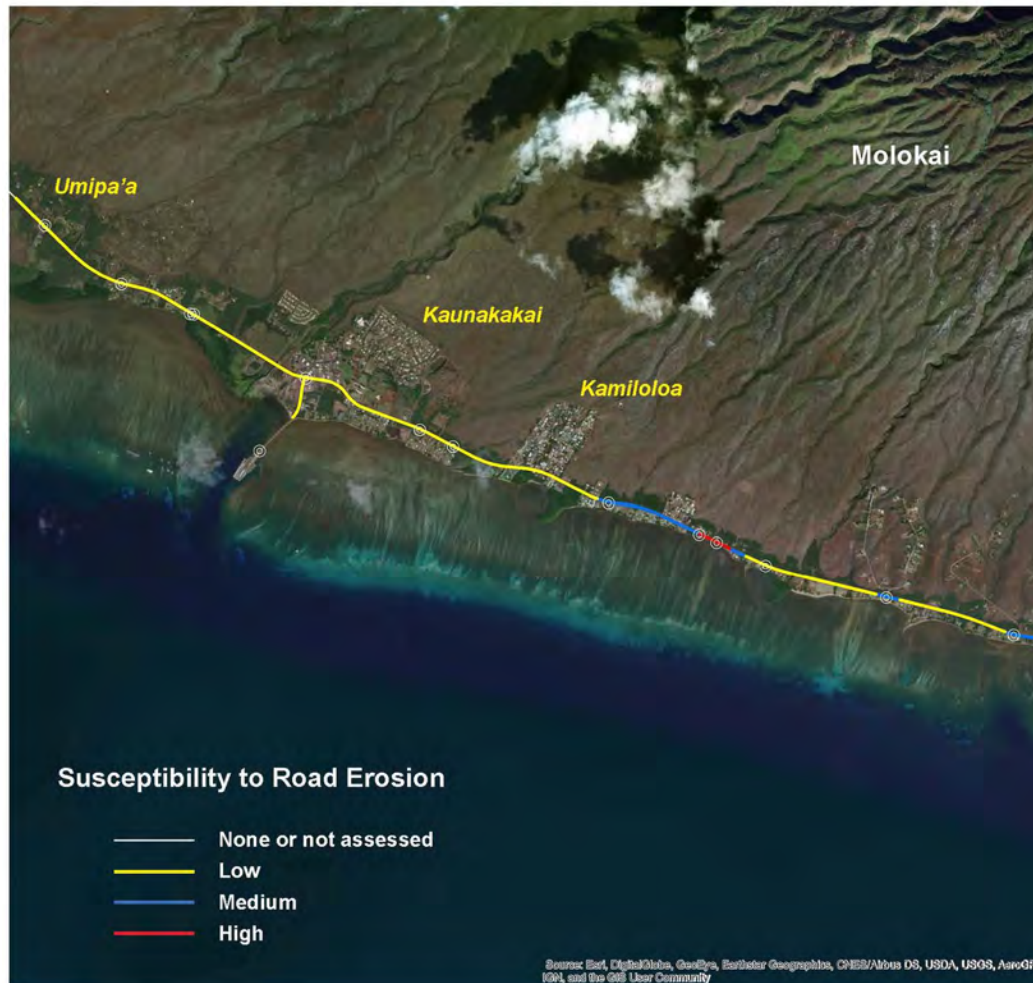


Figure 1.45. Segmentation Map: Kaunakakai area

Figure 1 Kamehameha V Highway Susceptibility to Erosion

One outcome of the SM-SEMP planning process has been identification of additional climate change-related impacts such as groundwater upwelling, cesspool failures, and flooding from stormwater runoff during heavy rain events. Beneficiaries were clear in their feedback that a more comprehensive, ahupua'a-based approach, in coordination with other landowners, other state agencies, and the County of Maui, would be needed to adequately address erosion and flooding impacts affecting low-lying coastal homestead areas. The DHHL Planning Office is in the initial phase of procuring consultant assistance to develop a Community Resilience Plan for Molokai Coastal Homesteads, to be funded with a National Coastal Resilience Fund (NCRF) grant from the National Fish and Wildlife Federation (NFWF).

Climate Change and Sea Level Rise (SLR) Projections

The Planning Office has started bringing in subject matter experts to provide timely updates to the HHC on climate change and sea level rise topics on a regular basis. In January 2022, Dr. Chip Fletcher of the UH School of Ocean and Earth Science and Technology (SOEST) presented to the HHC on the latest science and projections for greenhouse gas emissions, global temperature rise, increases in ocean temperatures, and revised projections for sea level rise in the Central Pacific. The news that the high projections have now become the moderate projections was pretty grim, which served to put DHHL on notice that sea level rise mitigation and adaptation measures must be put in place within the next 20 to 30 years.

Leah Laramee of DLNR also presented on nature-based solutions such as restoring forests and soil health, that will play an important role in the net negative decarbonization of the state's economy by 2045. The presentation that follows this information submittal, on climate change, will provide additional information and the latest science on climate change and will be presented by Thomas Giambelluca, Director of the Water Resources Research Center at the University of Hawai'i at Mānoa.

Adjustments to Project Methodology

A follow-up workshop with staff and beneficiaries will be held on Molokai as soon as possible, hopefully by early summer of 2022, so that a greater number of homesteaders living in the coastal communities of Kalama'ula, Kapa'akea and Kamiloloa-One Ali'i can learn more about the SM-SEMP's recommended mitigation and adaptation measures and the roles that DHHL, other state, federal and county agencies, and the lessees will need to play in successful implementation of the SM-SEMP recommendations.

Adjustments to Project Timeline

The time for completion of the SM-SEMP was extended by five months from the original completion date of September 30, 2021 to February 28, 2022, in order to allow more time to refine the recommendations and engage with beneficiaries. Due to the challenges with conducting a virtual focus group, additional beneficiary engagement will be conducted by staff over the next several months and will include scoping discussions on the next phase of engagement for the Community Resilience Plan.

Changes to Organization of the Draft SM-SEMP

The Draft SM-SEMP is now organized into six chapters, with an Executive Summary, References and four Appendices. Chapters Six and Seven were combined, so that the Implementation Strategy now includes policy recommendations in the overall discussion of recommended strategies and actions. In lieu of restating the discussion of plan organization that was presented in the January 2022 submittal, a synopsis of changes that were made between the las submittal and this is presented below. For an aerial map of the Project Area, see Figure 2, below.

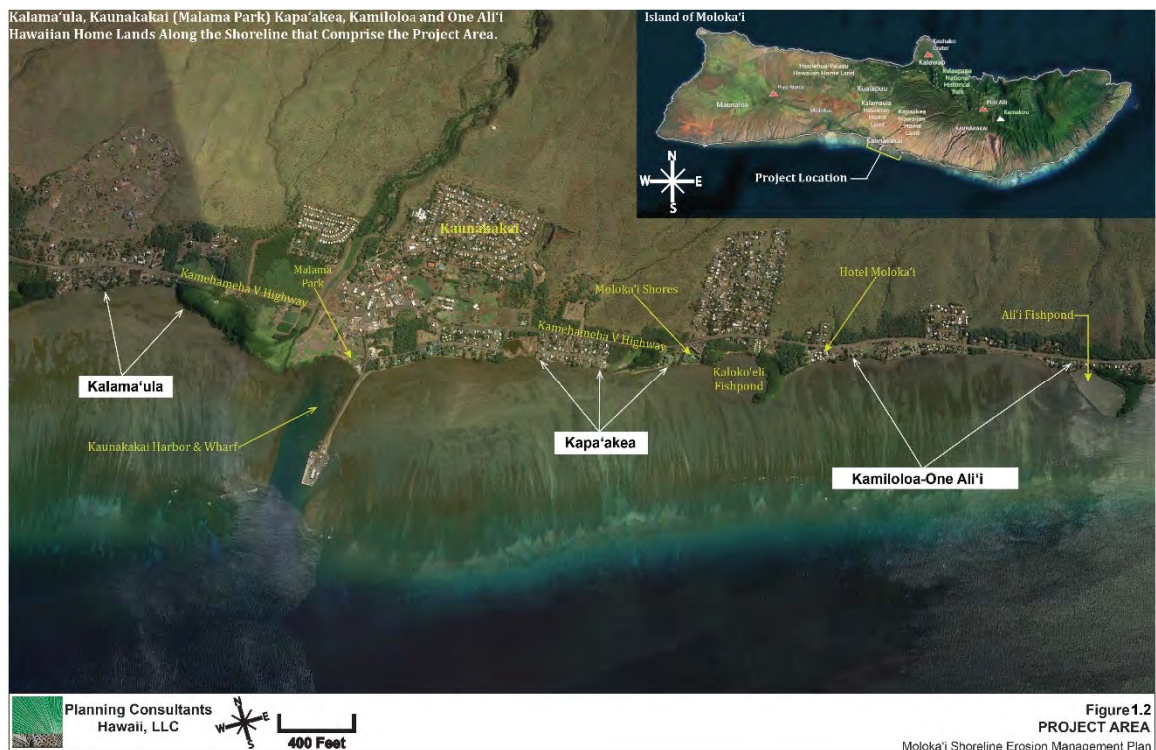


Figure 2, SM-SEMP Project Area

Synopsis of Revised Plan Organization

Executive Summary

Chapter 1 Introduction (unchanged)

- Provides overview of project area's relationship to island as a whole and to coastline of south central Moloka'i.

- Identifies SM-SEMP's purpose and objectives, discusses severity of the erosion problem, and identifies the cultural and ecological benefits of a healthy shoreline.

Chapter 2 SM-SEMP Planning Process (*Revised Outreach*)

- Documents five-phase planning process used to prepare Draft SM-SEMP
 - Phase 1 - Desktop Research
 - Phase 2 - Field Surveys
 - Phase 3 - Stakeholder Outreach
 - Phase 4 - Stakeholder Vetting of Draft Recommendations (*still underway*)
 - Phase 5 (Prepare Draft Final SM-SEMP -- modified)
 - Prepare HHC Review Draft, Draft for Community Review and Final SM-SEMP using information generated through Phases 1-4.

Chapter 3 Place and Context (*unchanged*)

- Analyzes project area spatially and temporally within context of Kona Moku and the five ahupua'a that have a direct influence on DHHL properties within SM-SEMP study area, with special emphasis on how human-induced change has affected coastal resources and shoreline processes.
- Describes socio-economic environment and planning and regulatory conditions that may influence appropriate responses to shoreline change.

Chapter 4 Coastal Hydrodynamics (*unchanged*)

- Identifies and describes factors that influence wave energy and physical form of coastline, e.g. wave conditions, currents, tidal changes, storm surge, bathymetry, sediment characteristics, and sources of sediment.
- Identifies four littoral (beach) cells fronting DHHL communities, defining hydrogeological and geographic areas needed to analyze forces affecting shoreline erosion, and prepare mitigation measures.

Chapter 5 Shoreline Erosion Management Options (*refined*)

- Discusses erosion management strategies and describes mitigation approaches ranging from soft, nature-based remedies to hard, man-made structures.
- Explores concept of adapting to shoreline change by realigning structures to reduce exposure to coastal hazards.

Chapter 6 Implementation Strategy (*Now combined with Chapter 7, Policy Recommendations - needs additional beneficiary input*)

- Offers strategies and actions designed to discourage building in harm's way and encourage long-term sustainability and shoreline resiliency
- Provides more specific remedies for areas threatened by erosion within Littoral Cells A through D.

Appendices (*Reordered and two Appendices added*)

- APPENDIX A: Stakeholder Outreach
- APPENDIX B: Five Molokai Land Divisions
- APPENDIX C: Flood Zones, Shoreline Setbacks, and State Certified Shoreline
- APPENDIX D: Shoreline Erosion Assessment (Severity and Risks)

Existing Conditions and Recommended Implementation Strategy

Table 1, below, lists the SM-SEMP's Core Strategies and some of the plan's highlighted actions.

CORE STRATEGIES	Action Highlights ¹
<u>Restore</u> natural shoreline function.	<ul style="list-style-type: none"> Remove and replace invasive plants and trees with climate adapted, drought tolerant native grasses, shrubs, and trees such as ‘aki‘aki grass, pōhuehue, naupaka, and milo. Develop a detailed vegetation management plan to guide shoreline and dune restoration within the SM-SEMP Area. Remove man-made debris between the high and low water line including tires, appliances, vehicle parts, concrete and asphalt rubble, CMU blocks, pallets, steel and plastic drums, and other non-indigenous materials and dispose of it properly.
<u>Educate</u> beneficiaries on sea level rise and coastal erosion, including appropriate mitigation measures.	<ul style="list-style-type: none"> Provide beneficiaries living in flood prone areas with the following information: <ul style="list-style-type: none"> “Answers to Questions about Substantially Improved / Substantially Damaged Buildings”, FEMA publication 213, August 2018. “Homeowners Handbook to Prepare for Natural Hazards” 4th Edition, by Dennis Hwang and Darren Okimoto, Sea Grant, University of Hawai‘i. Flood zone and sea level rise exposure maps.
<u>Strengthen the regulation and management of shoreline resources.</u>	<ul style="list-style-type: none"> Recommend consistency with identified State of Hawai‘i and Maui County regulations governing buildings and construction, the shoreline, and flood hazard areas. Recommend consistency with Federal and State DLNR regulations regarding shoreline surveys, armoring, and coastal construction on submerged lands.
<u>Adapt</u> structures and systems to better withstand coastal hazards.	<ul style="list-style-type: none"> Require new dwellings to be elevated above flood hazard zones (base flood elevation, SLR inundation) by more than one foot in elevation (freeboard). Encourage lessees to reconfigure dwellings by moving the kitchen mauka and elevating food preparation areas so that stove, refrigerator, and appliances are elevated or located at the highest, driest part of the property. Convert cesspools to septic systems wherever feasible to reduce the risk of contaminated water and protect beneficiary health.
<u>Prepare</u> for the relocation, or retirement, of structures out of areas threatened by sea level rise and coastal erosion.	<ul style="list-style-type: none"> Prepare a community-based plan for the relocation of vulnerable buildings, infrastructure, and public facilities away from area’s threatened by sea level rise and/or coastal erosion. Prepare and implement a planned obsolescence strategy for infrastructure at risk of damage from SLR, coastal erosion, and flooding including roads, drainages, wastewater treatment, and centralized utility systems and services.
¹ This table includes a sample of the SM-SEMP’s highlighted actions. A complete list of the Plan’s actions is in Chapter 6.	

Table 1 (Table ES-1) Highlighted Actions

Figures 3 through 11 that follow, excerpted from the Draft SM-SEMP’s Chapters 4 and 6, illustrate existing conditions for each of the four littoral (beach) cells fronting DHHL communities or community use areas, followed by recommendations for mitigation measures.

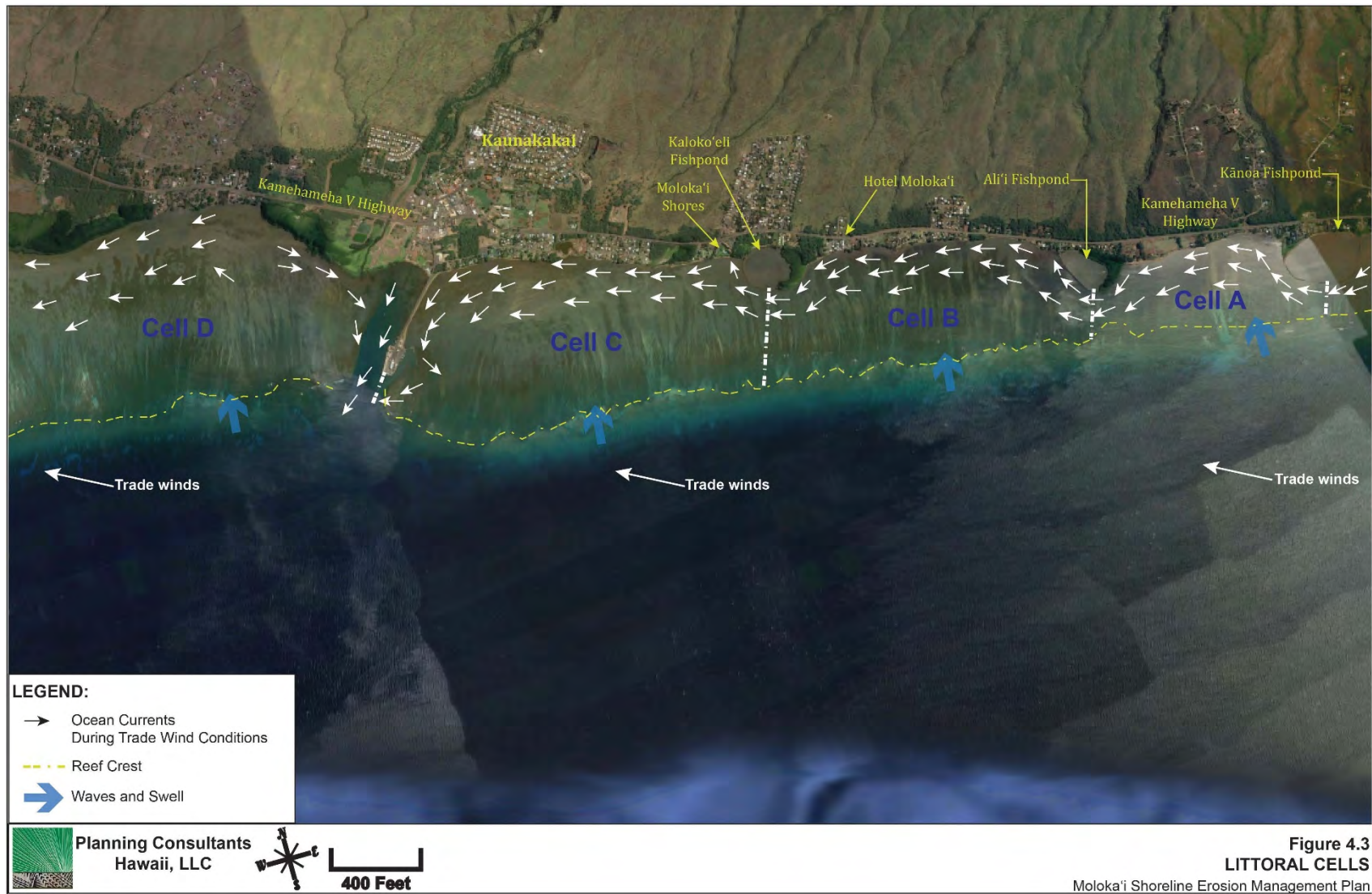


Figure 3 Littoral Cells

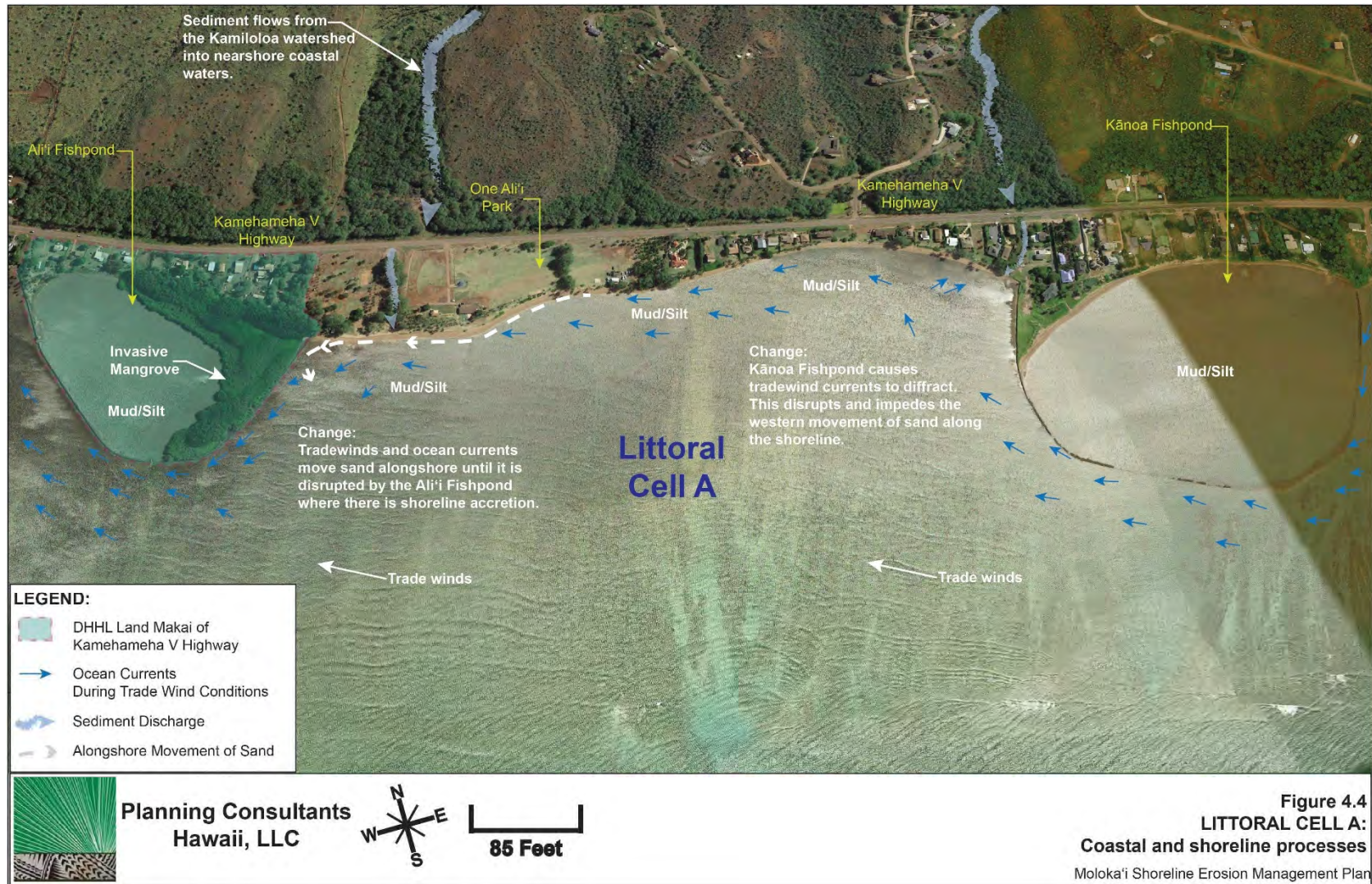


Figure 4 Littoral Cell A: Coastal and Shoreline Processes

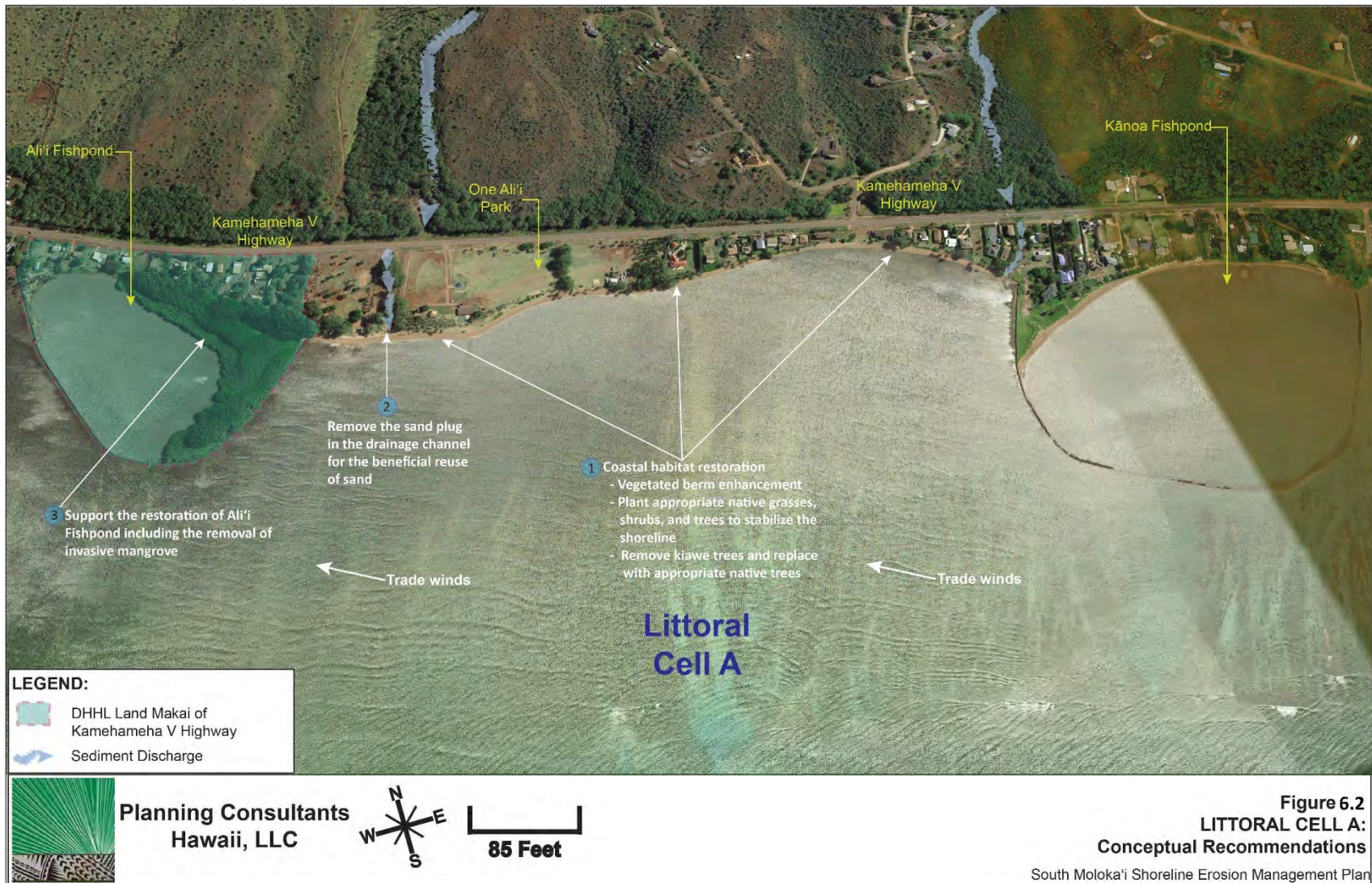


Figure 5 Littoral Cell A: Conceptual Recommendations

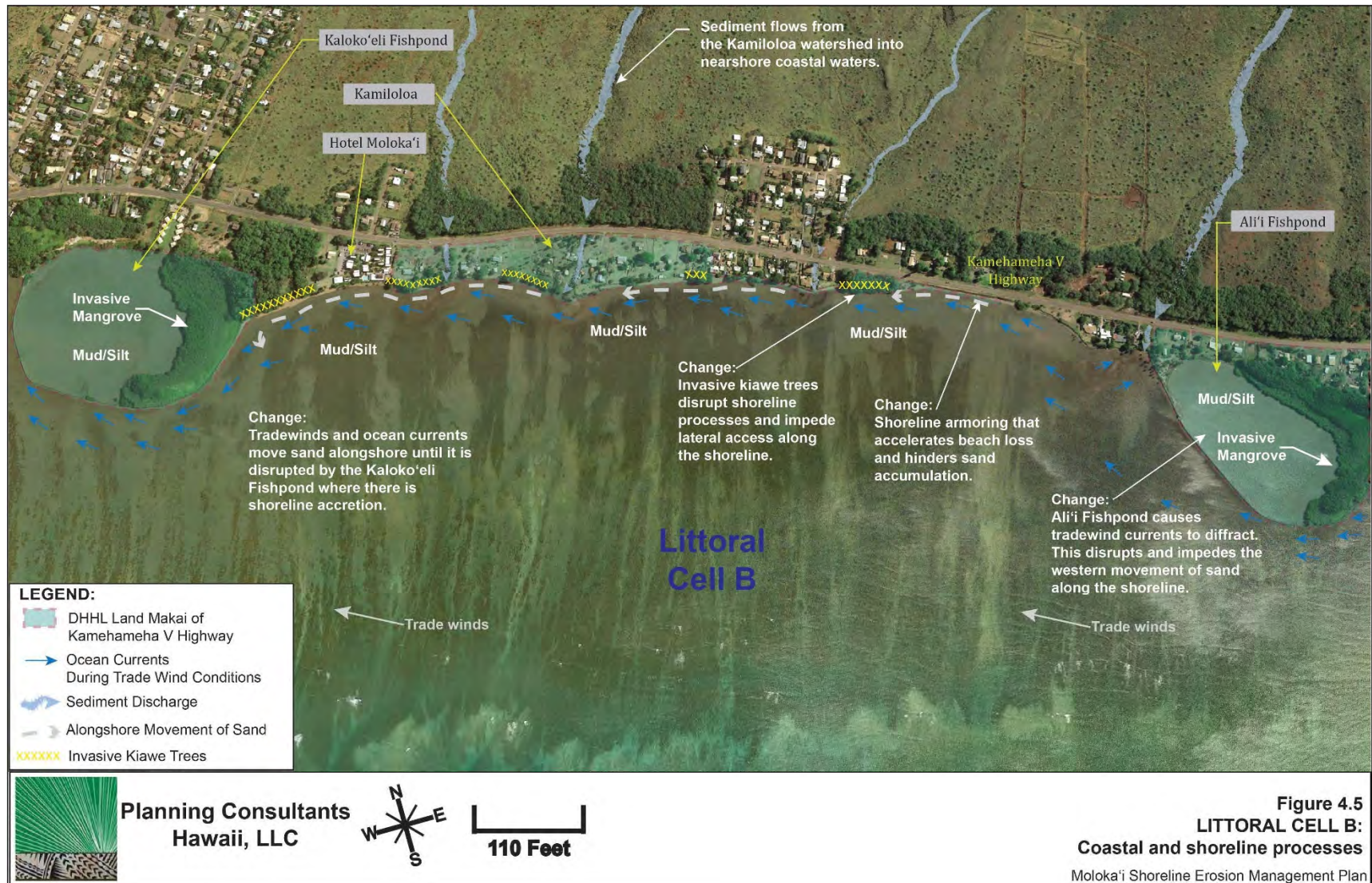


Figure 6 Littoral Cell B: Coastal and Shoreline Processes

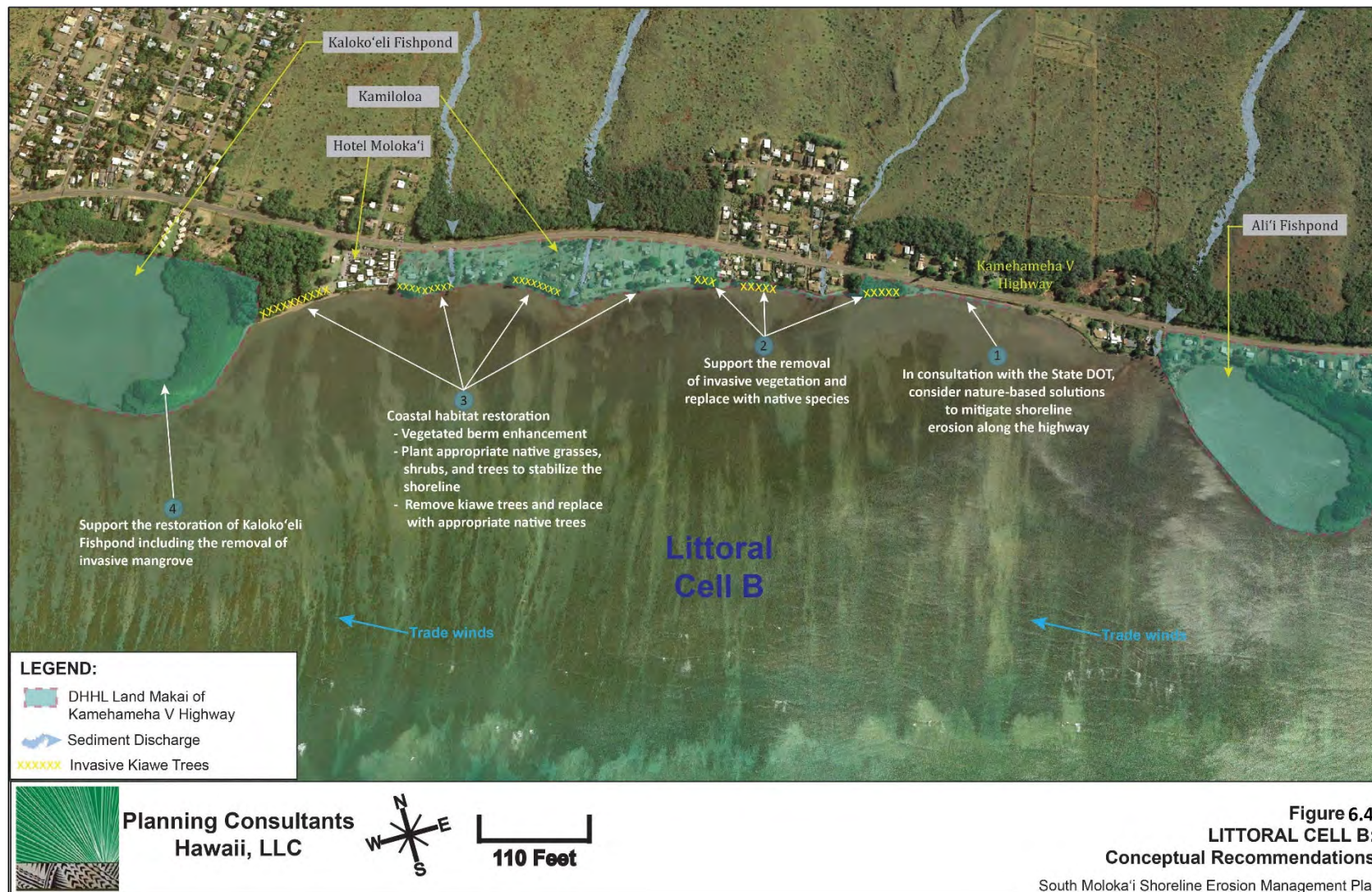


Figure 7 Littoral Cell B: Conceptual Recommendations

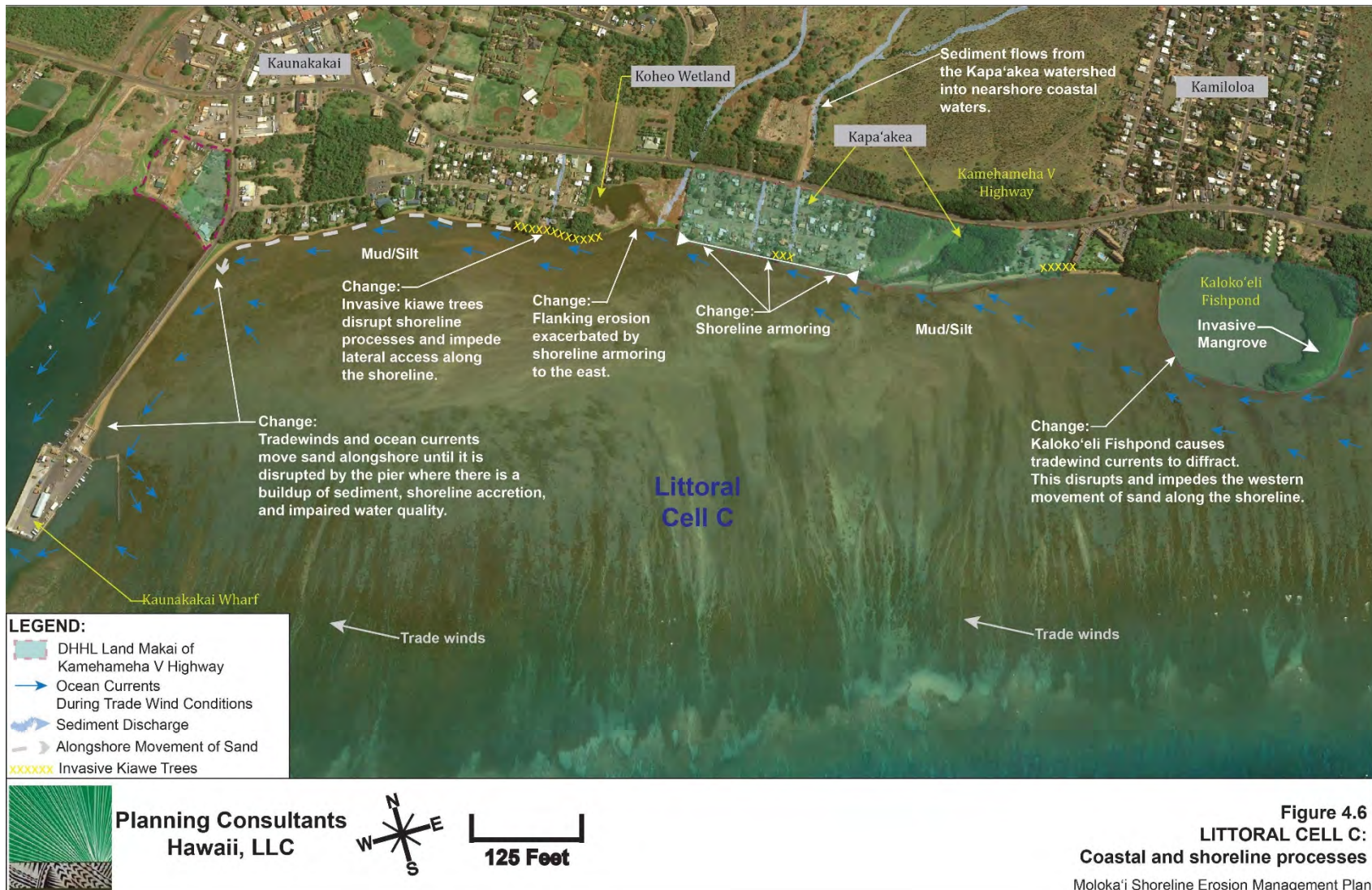


Figure 8 Littoral Cell C: Coastal and Shoreline Processes

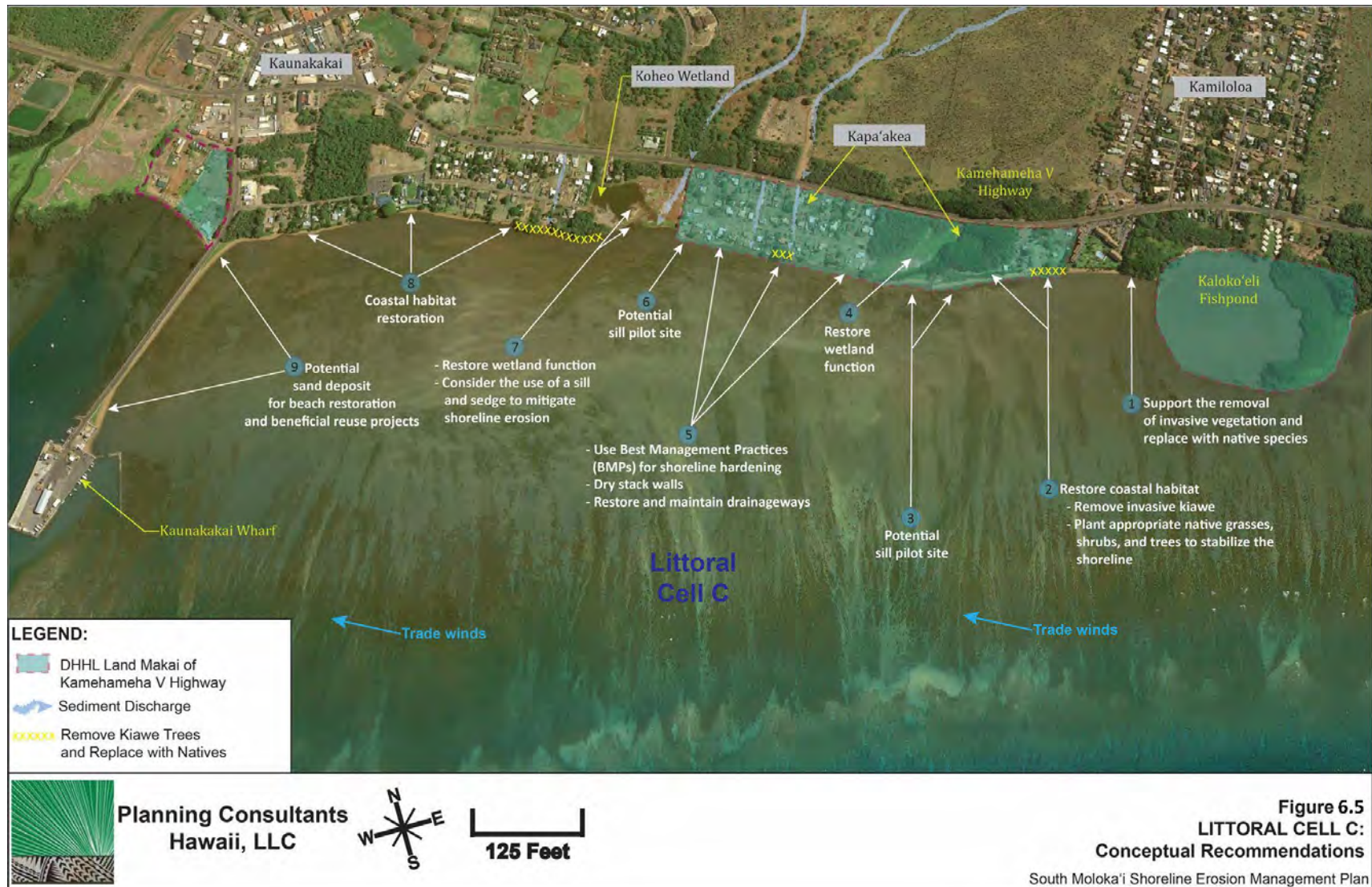


Figure 6.5
LITTORAL CELL C:
Conceptual Recommendations
 South Moloka'i Shoreline Erosion Management Plan

Figure 9 Littoral Cell C: Conceptual Recommendations

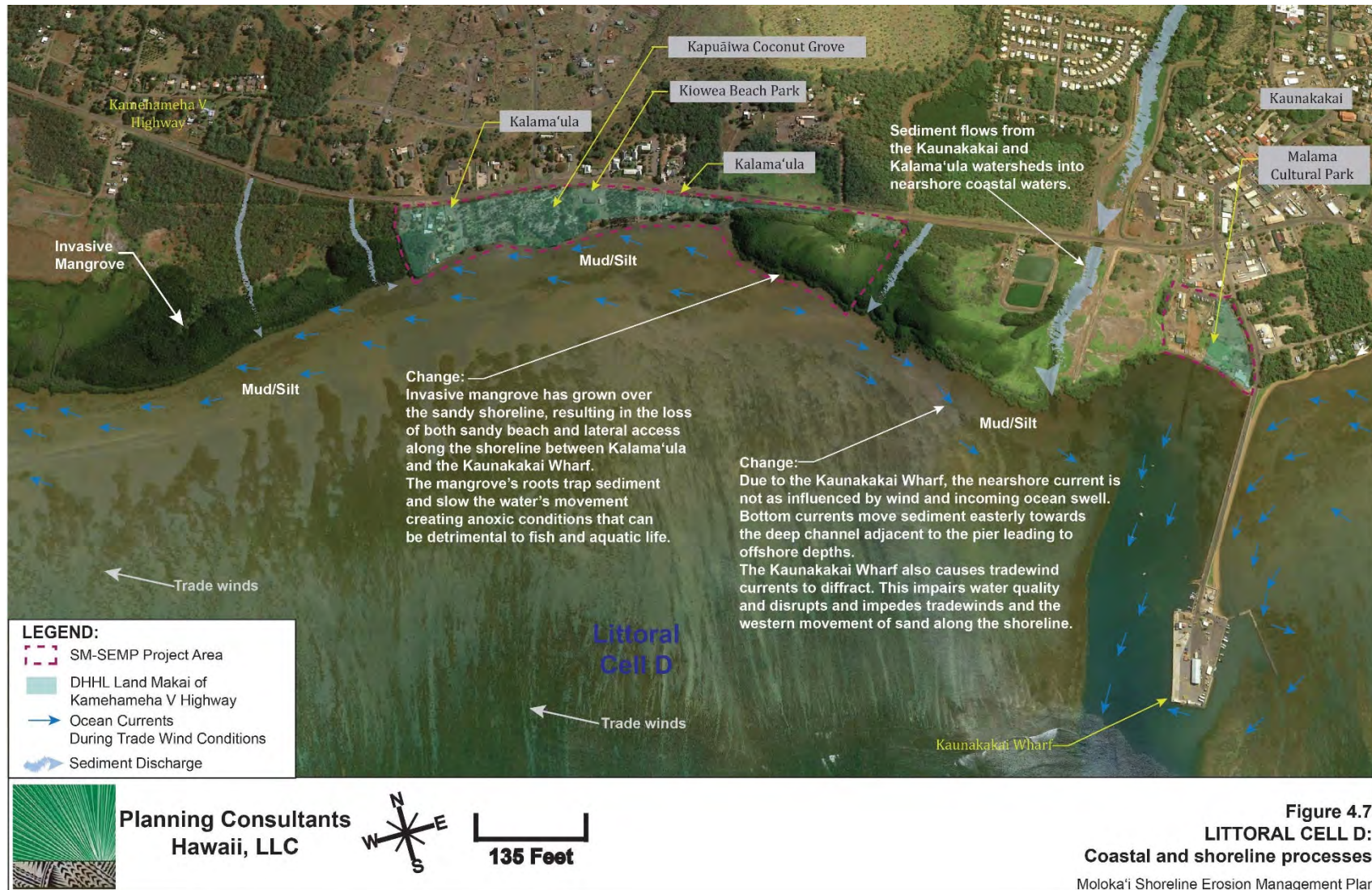


Figure 10 Littoral Cell D: Coastal and Shoreline Processes

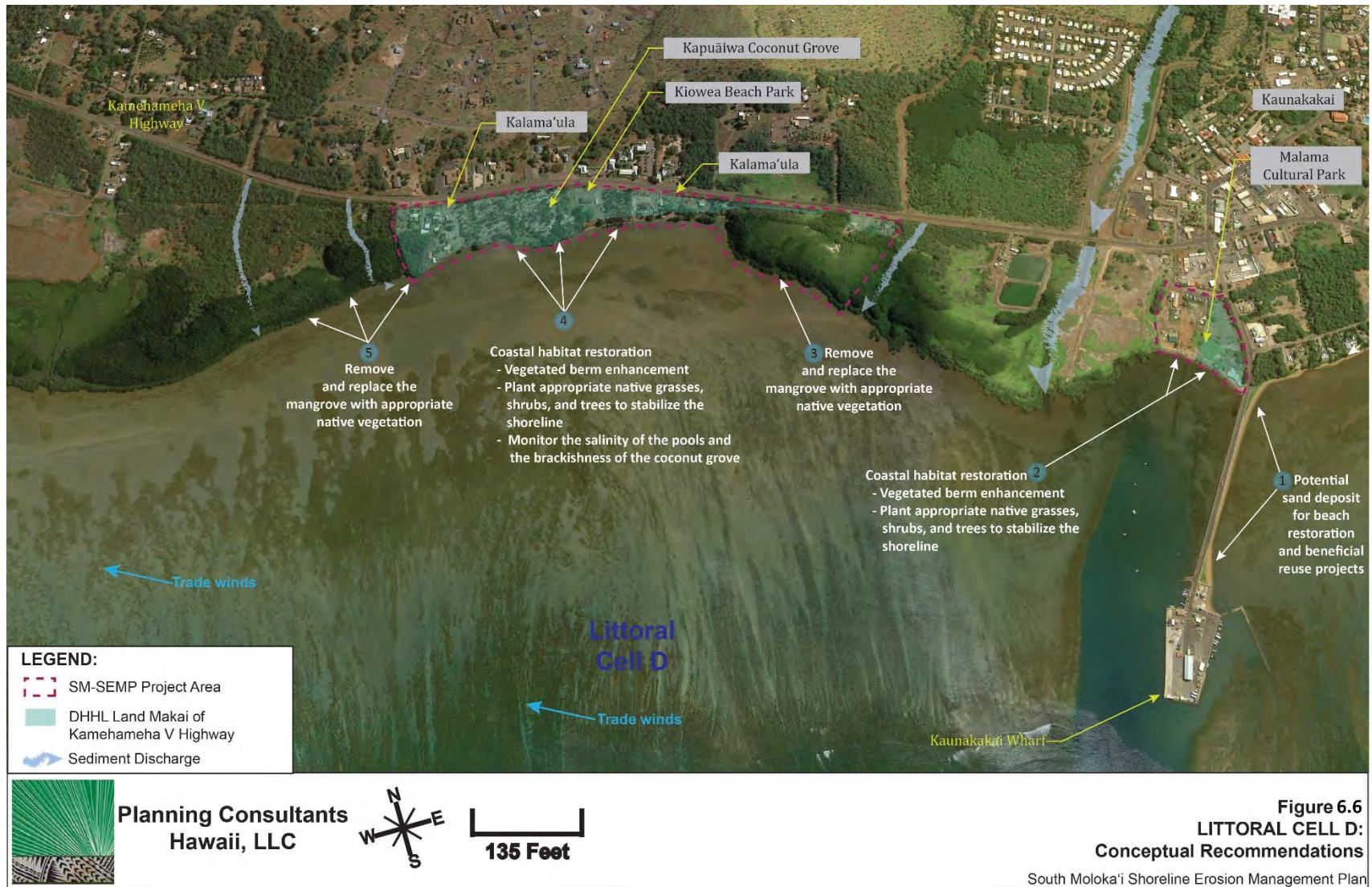


Figure 11 Littoral Cell D: Conceptual Recommendations

While the SM-SEMP meets the definition of a shoreline erosion management plan, the document will be utilized in the near term as a technical background study that will provide best practices, site-specific data and recommendations for action to support the next phase of work, which will be preparation of a Community Resilience Plan for the project area.

Implementation Phase

As discussed earlier, DHHL has been awarded a National Coastal Resilience Fund (NCRF) grant from the National Fish and Wildlife Federation (NFWF) for a project titled "Developing Community Resilience for Molokai Coastal Homesteads". Grant funds will be used to procure a consultant who will work with Molokai coastal homestead lessees, the larger beneficiary community, DHHL staff and other governmental agencies and non-governmental organizations to prepare a Community Resilience Plan for the project area, beginning in late summer/early fall of 2022.

This next planning project will incorporate cultural and traditional ecological knowledge and recommendations from the SM-SEMP and two Practicum Reports prepared by the University of Hawaii Dept. of Urban and Regional Planning, utilizing a moku- and ahupua'a-based adaptive management methodology. The planning effort will emphasize a comprehensive, community-centered approach to developing adaptation pathways and implementation measures that are responsive to community needs, culturally appropriate and feasible.

The approach will prioritize nature-based and climate-friendly solutions to address impacts to Molokai's coastal homesteads from sea level rise, coastal erosion, stormwater flooding, groundwater inundation, drought-denuded landscapes and other climate change-related impacts. The planning process will be interactive and will engage homesteaders, some of whom are already conducting shoreline stewardship activities, in development of short-, medium- and long-term recommendations and mitigation projects that can be implemented while the Community resilience Plan is still under development.

Summary and Next Steps

- The planning team has produced a Working Draft SM-SEMP for HHC review and comment and is preparing for a second focus group meeting in late March or early April 2022.
- PO staff will provide a newsletter update to the South Molokai beneficiary community in late March 2022.
- The Final Draft of the SM-SEMP will be brought to the HHC at its regular meeting on Molokai in April 2022.
- When safe to do so, hopefully by early summer, DHHL PO staff will hold an in-person workshop for the coastal homesteaders on Molokai to review the findings and recommendations of the SM-SEMP and explore opportunities for beneficiary participation in the implementation phase. Staff will also brief the community on the upcoming community resilience planning effort.
- DHHL PO staff is currently preparing to initiate the procurement for a consultant to assist with the planning process for the "Developing Community Resilience for Molokai Coastal Homesteads" project, to take place over the next two years.

RECOMMENDATION

None; for information only.

DRAFT

South Moloka'i Shoreline Erosion Management Plan



ITEM G-2

EXHIBIT A



Prepared by:

Planning Consultants Hawai‘i, LLC

and

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Prepared for:

State of Hawai‘i
Department of Hawaiian Homelands

February 2022

Suggested citation:

DHHL, 2022. *Draft South Moloka‘i Shoreline Erosion Management Plan*. State of Hawai‘i. Department of Hawaiian Home Lands. Prepared by Planning Consultants Hawai‘i, LLC and Coastal Planners, LLC. February 2022.

CONTENTS

EXECUTIVE SUMMARYii

CHAPTER 1 : INTRODUCTION 1

1.1 REGIONAL AND LOCAL SETTING.....1

1.2 THE EROSION PROBLEM3

1.3 PURPOSE AND OBJECTIVES OF THE SM-SEMP.....3

1.4 STRUCTURE OF THE SM-SEMP.....3

1.5 BENEFITS OF A HEALTHY SHORELINE.....3

1.5.1 Flood Reduction3

1.5.2 Shoreline Access.....3

1.5.3 The ‘Ice Box’4

1.5.4 Cultural and Recreational Practices4

CHAPTER 2 : SM-SEMP PLANNING PROCESS..... 5

2.1 BUILDING RESILIENCY5

2.2 THE SM-SEMP PLANNING PROCESS.....5

2.2.1 Phase 1 - Desktop Research5

2.2.2 Phase 2 - Field Surveys.....5

2.2.3 Phase 3 - Stakeholder Outreach5

2.2.4 Phase 4 - Stakeholder Vetting of Draft Recommendations6

2.2.5 Phase 5 - Prepare the Draft and Final SM-SEMP.....6

CHAPTER 3 : PLACE AND CONTEXT8

3.1 ANCIENT MOLOKA’I LAND DIVISIONS8

3.1.1 Kalama’ula Ahupua’a9

3.1.2 Kaunakakai Ahupua’a9

3.1.3 Kapa’akea Ahupua’a9

3.1.4 Kamiloloa Ahupua’a10

3.1.5 Makakupa’ia Ahupua’a10

3.2 HUMAN-INDUCED CHANGE, PRE-CONTACT TO THE PRESENT11

3.2.1 Pre-contact (600 A.D – 1777).....11

3.2.2 1778 – 1879.....11

3.2.3 1880 - 1920.....12

3.2.4 1921 – 1950.....13

3.2.5 1951 – Present.....15

3.3 THE SOCIOCULTURAL ENVIRONMENT.....17

3.4 THE TERRESTRIAL ENVIRONMENT18

3.4.1 Moloka’i Forest Reserve18

3.4.2 Dry Uplands and Lowlands Mauka of the Coastal Plain18

3.4.3 Lowlands within the Coastal Plain19

3.4.4 Coastline19

3.5 THE MARINE ENVIRONMENT.....19

3.5.1 Reef Zone Characteristics.....19

3.5.2 Marine Flora and Algae.....20

3.5.3 Fish Assemblage20

3.5.4 Coastal Fauna20

3.5.5 Terrestrial Erosion and the Marine Environment21

3.5.6 Sediment.....21

3.6 PLANNING AND REGULATORY CONDITIONS22

CHAPTER 4 : COASTAL HYDRODYNAMICS..... 23

4.1 COASTAL HYDRODYNAMICS23

4.1.1 Wind and Currents.....23

4.1.2 Waves23

4.1.3 Tides23

4.1.4 Coastal Erosion.....24

4.2 LITTORAL CELLS.....24

4.2.1 Kānoa Fishpond to Ali’i Fishpond (Cell A).....26

4.2.2 Ali’i Fishpond to Kaoko’eli Fishpond (Cell B)28

4.2.3 Kaloko’eli Fishpond to Kaunakakai Wharf (Cell C)30

4.2.4 Kaunakakai Wharf to Kahanu Avenue (Cell D).....32

4.3 SHORELINE EROSION ASSESSMENT (SEVERITY AND RISKS)34

4.3.1 Sediment & Sea Level Rise34

4.4 SEA LEVEL RISE AND ELEVATED WATER TABLES.....34

4.5 NATURAL HAZARD EXPOSURE35

CHAPTER 5 : SHORELINE EROSION MANAGEMENT OPTIONS 36

5.1 SEA LEVEL RISE ADAPTATION STRATEGIES36

5.2 ADAPTIVE REALIGNMENT.....36

5.3 HAZARD ACCOMMODATION36

5.4 PROTECTION FROM COASTAL HAZARDS36

5.5 SOFT OR NONSTRUCTURAL TECHNIQUES36

5.5.1 Vegetative Buffers37

5.6 PLANTS37

5.7 COIR41

5.7.1 Bank Stabilization41

5.7.2 Reinforced Sand Berm42

5.8 SAND DUNE RESTORATION43

5.9 BEACH RESTORATION43

5.10 SILLS & EDGE REINFORCEMENT.....44

5.11 GABIONS & MATTRESSES45

5.12 GEOTEXTILE BAGS, TUBES AND APRONS.....46

5.13 HARD STRUCTURAL TECHNIQUES.....49

5.13.1 Bulkheads49

5.13.2 Sheet Pile49

5.13.3 Seawalls49

5.13.4 Revetments50

5.13.5 Groins50

5.13.6 Breakwaters51

5.13.7 Breakwaters with Vegetated Backshore52

5.13.8 Dry Stacked Walls.....52

CHAPTER 6 : IMPLEMENTATION STRATEGY..... 54

6.1 CHOOSING APPROPRIATE RESPONSES TO SHORELINE CHANGE54

6.2 SPECIFIC IMPROVEMENTS FROM GREEN TO GRAY56

6.3 LITTORAL CELL A (KĀNOA FISHPOND TO ALI’I FISHPOND).....57

6.4 LITTORAL CELL B (ALI’I FISHPOND TO KAOKO’ELI FISHPOND).....59

6.5 LITTORAL CELL C (KALOKO’ELI FISHPOND TO KAUNAKAKAI WHARF)62

6.6 LITTORAL CELL D (KAUNAKAKAI WHARF TO KAHANU AVENUE)66

REFERENCES..... 69

APPENDICES.....72

APPENDIX A: Stakeholder Outreach

APPENDIX B: Five Molokai Land Divisions

APPENDIX C: Flood Zones, Shoreline Setbacks, and the State Certified Shoreline

APPENDIX D: Shoreline Erosion Assessment (Severity and Risks)

EXECUTIVE SUMMARY

Project Background and Purpose

The overwhelming consensus of climate scientists is that “our planet’s average temperature could be between 2 and 9.7°F (1.1 to 5.4°C) warmer in 2100 than it is today” (NOAA, 2012). As temperatures rise, Moloka’i will see stronger and more frequent storms which will result in severe and dangerous floods, greater stress on mauka watersheds, and increased sediment discharge into coastal waters.

For Department of Hawaiian Home Lands (DHHL) communities living along the south shore of Moloka’i this means preparing for the impacts of increasing sea levels and shoreline erosion. Climate change will make low lying areas between Kalama’ula and One Ali’i more vulnerable to flooding. According to recent studies, “with 3.2 feet of sea level rise, low-lying coastal areas around the island...may become chronically flooded within the mid- to latter- half of this century” (Tetra Tech 2017, 115). Furthermore, as sea levels rise, more wave energy will be telegraphed further inland, above and over the offshore reef fronting the South Moloka’i shoreline. As this happens, more and stronger waves will contact the area’s beaches causing more frequent and severe shoreline erosion events and loss of sandy beach.

In recognition of the deleterious impact of this erosion on the Hawaiian homestead communities of Kalama’ula, Kapa’akea, Kamiloloa, and One Ali’i, the DHHL commissioned this South Moloka’i Shoreline Erosion Management Plan (SM-SEMP). Its purpose is to provide a strategy to proactively manage shorelines that are vulnerable to erosion to make them more resilient to the effects of sea level rise.

This is to be achieved using: a. traditional ecological knowledge gathered from the project area’s Hawaiian homesteaders and lineal descendants; b. a scientific evaluation of coastal conditions; and c. published literature

on the causal factors contributing to shoreline erosion. Recommendations are further informed by community input as well as thoughtful consideration of South Moloka’i’s socioeconomic conditions and cultural, natural, and recreational resources.

The SM-SEMP team used the ahupua’a as a geographic construct to better understand the interconnected and interdependent relationship between south Moloka’i’s land and ocean ecosystems, and the reciprocal relationship between DHHL homesteaders and the environment. SM-SEMP recommendations were designed within the context of how those recommendations could affect mauka and makai lands, waters, and communities. Within the SM-SEMP Area, emphasis was also placed on the littoral cell¹, rather than the individual parcel, as a means to more effectively study the causes and consequences of shoreline erosion and to devise appropriate recommendations to mitigate the effects of shoreline erosion.

The Planning Process

Preparing the SM SEMP consisted of five phases as follows:

Phase 1 (Desktop Research)

Document the project area’s mo’olelo, history, terrestrial environment, physical coastal processes, and erosion hotspots within the context of the project area’s ahupua’a.

Phase 2 (Field Surveys)

Conduct field observations of shoreline conditions to gather valuable background data and photographs of past flooding, shore conditions, shore reference features, and shoreline change.

Phase 3 (Stakeholder Outreach)

Work with Hawaiian Homestead beneficiaries, lineal descendants, government, and community stakeholders to

identify shoreline erosion threats and appropriate management responses.

Phase 4 (Stakeholder Vetting of Draft Recommendations)

Prepare conceptual draft recommendations for vetting by a diverse group of Hawaiian Homesteaders and other stakeholders.

PHASE 5 (Prepare the Draft and Final SM-SEMP)

Prepare the Draft and Final SM-SEMP using information generated through the first four phases.

Issues and Challenges

The SM-SEMP Area faces an unusual number of climate change induced challenges in the future because of its location in a low-lying coastal area, environmental attributes, and the number of homesteaders residing in the area. Among the most important challenges caused by rising sea levels and coastal erosion are the following:

- Coastal flooding
- Damage to critical infrastructure such as Kamehameha V Highway and Kaunakakai Harbor and Wharf
- Loss of land and structures
- Damage to property
- Cesspool and septic system failure
- Impact on native flora and fauna
- Impact on cultural resources
- Access to and along the shoreline
- Diminished coastal water quality

“Over time, as sea level continues to rise, low-lying, populated coastal communities such as Kapa’akea would experience increased frequency and severity of flooding ultimately leading to permanent inundation, making some areas of the coast impassable or uninhabitable” (Tetra Tech 2017, 116).



Photo: A panorama of the informal shoreline armoring along a portion of Kapa’akea (Source: DHHL).

¹ A littoral cell is a coastal compartment that contains a complete cycle of sedimentation including sources, transport paths, and sinks (Inman, 2005).

Key Recommendations for the SM-SEMP

The following six core strategies describe the broad strategic action that will be taken to make the SM-SEMP’s shoreline more resilient to the effects of sea level rise and coastal erosion.

- Restore natural shoreline function.
- Educate beneficiaries on the causes and consequences of sea level rise and coastal erosion, including appropriate mitigation measures.
- Strengthen the regulation and management of shoreline resources.
- Adapt structures and systems to better withstand coastal hazards.
- Prepare for the relocation, or retirement, of structures out of areas threatened by sea level rise and coastal erosion.

Each strategy is further implemented through related actions. Table ES-1 highlights key SM-SEMP actions.

Next Steps

The 2020 – 2022 Covid 19 pandemic severely limited the ability of the planning team to carefully review the SM-SEMP’s recommendations with affected beneficiaries. As such, the DHHL should conduct further outreach with the project area’s beneficiaries in the Spring or Summer of 2022 and update the SM-SEMP’s recommendations accordingly.

The DHHL was awarded a National Fish and Wildlife Foundation (NFWF) grant to develop a resilience plan for homestead communities on the island of Moloka’i. Using the SM-SEMP as a foundation for this work, the resilience plan will further expand scientific analyses and modeling of projected sea-level rise, flooding, groundwater upwelling, and other increasing coastal hazards such as hurricane and tsunami. The resilience plan will identify priorities for projects that will stabilize and restore shorelines, mitigate coastal flooding and sedimentation, and emphasize culturally grounded, nature-based solutions.

Subject to available funding, the DHHL will also conduct the following SM-SEMP implementation activities:

1. Develop a detailed vegetation management and berm restoration plan with detailed topography and design renderings.
2. Prepare best management practices (BMP’s) for shoreline hardening in Kapa’akea to support dry stack walls, sills, and fishpond restoration.

3. Remove man-made debris along the shoreline, and where necessary, replace with native *pōhaku* using traditional native Hawaiian techniques for the construction of dry stack walls.
4. Prepare an environmental assessment and pursue other governmental permits required for SM-SEMP implementation.

Plan Organization

The SM-SEMP is organized into the following six chapters:

Chapter 1 (Introduction) provides an overview of the project area’s relationship to the island as a whole and more specifically to the coastline of south central Moloka’i.

Chapter 2 (SM-SEMP Planning Process) documents the process the planning team used to prepare the SM-SEMP.

Chapter 3 (Place and Context) analyzes the project area within the context of the Moku and the five ahupua’a that have a direct influence on the DHHL properties within the SM-SEMP study area including Kalama’ula, Kaunakakai, Kapa’akea, Kamiloloa, and Makakupa’ia.

Chapter 4 (Coastal Hydrodynamics) identifies and describes the factors that influence wave energy and the physical form of the coastline within the SM-SEMP study area including: wave conditions, currents, tidal changes, storm surge, bathymetry, sediment characteristics, and sources of sediment. Chapter 4 then identifies four littoral cells fronting the DHHL communities. The planning team used the littoral cell boundaries to define the geographic area in which to analyze the forces affecting shoreline erosion, and to prepare mitigation measures.

Chapter 5 (Shoreline Erosion Managment Options) explores erosion management strategies and describes mitigation approaches ranging from soft, nature-based remedies to hard, man-made structures. Chapter 5 also explores adapting to shoreline change by realigning structures to reduce their exposure to coastal hazards.

Chapter 6 (Implementation Strategy) offers strategies and actions for the overall SM-SEMP area to discourage building in harm’s way and to encourage long-term sustainability and shoreline resiliency. Chapter 6 then provides more specific remedies for areas threatened by erosion within defined littoral cells A through D.

CORE STRATEGIES	Action Highlights ¹
<u>Restore</u> natural shoreline function.	<ul style="list-style-type: none">• Remove and replace invasive plants and trees with climate adapted, drought tolerant native grasses, shrubs, and trees such as ‘aki’aki grass, pōhuehue, naupaka, and milo.• Develop a detailed vegetation management plan to guide shoreline and dune restoration within the SM-SEMP Area.• Remove man-made debris between the high and low water line including tires, appliances, vehicle parts, concrete and asphalt rubble, CMU blocks, pallets, steel and plastic drums, and other non-indigenous materials and dispose of it properly.
<u>Educate</u> beneficiaries on the causes and consequences of sea level rise and coastal erosion, including appropriate mitigation measures.	<ul style="list-style-type: none">• Provide beneficiaries living in flood prone areas with the following information:<ul style="list-style-type: none">▪ “Answers to Questions about Substantially Improved / Substantially Damaged Buildings”, FEMA publication 213, August 2018.▪ “Homeowners Handbook to Prepare for Natural Hazards” 4th Edition, by Dennis Hwang and Darren Okimoto, Sea Grant, University of Hawai’i.▪ Flood zone and sea level rise exposure maps.
<u>Strengthen</u> the <u>regulation and management</u> of shoreline resources.	<ul style="list-style-type: none">• Recommend consistency with identified State of Hawai’i and Maui County regulations governing buildings and construction, the shoreline, and flood hazard areas.• Recommend consistency with Federal and State DLNR regulations regarding shoreline surveys, armoring, and coastal construction on submerged lands.
<u>Adapt</u> structures and systems to better withstand coastal hazards.	<ul style="list-style-type: none">• Require new dwellings to be elevated above flood hazard zones (base flood elevation, SLR inundation) by more than one foot in elevation (freeboard).• Encourage lessees to reconfigure dwellings by moving the kitchen mauka and elevating food preparation areas so that stove, refrigerator, and appliances are elevated or located at the highest, driest part of the property.• Convert cesspools to septic systems wherever feasible to reduce the risk of contaminated water and protect beneficiary health.
<u>Prepare</u> for the relocation, or retirement, of structures out of areas threatened by sea level rise and coastal erosion.	<ul style="list-style-type: none">• Prepare a community-based plan for the relocation of vulnerable buildings, infrastructure, and public facilities away from area’s threatened by sea level rise and/or coastal erosion.• Prepare and implement a planned obsolescence strategy for infrastructure at risk of damage from SLR, coastal erosion, and flooding including roads, drainages, wastewater treatment, and centralized utility systems and services.

¹ This table includes a sample of the SM-SEMP’s highlighted actions. A complete list of the Plan’s actions is in Chapter 6.

Table ES-1: Highlighted Actions.

CHAPTER 1: INTRODUCTION

The complex interaction of coastal processes and generations of human-induced change to the natural environment have had a profound impact on the South Molokaʻi shoreline. The interaction of these forces, along with rising sea levels, has resulted in significant erosion of some sections of the South Molokaʻi shoreline which is threatening private property; critical infrastructure; and natural, cultural, and recreational resources.

In recognition of the deleterious impact of this erosion on the Hawaiian homestead communities of Kalamaʻula, Kapaʻakea, Kamiloloa, and One Aliʻi, the Department of Hawaiian Home Lands (DHHL) commissioned this South Molokaʻi Shoreline Erosion Management Plan (SM-SEMP). It’s purpose is to develop a strategy to proactively manage shorelines that are vulnerable to erosion to make them more resilient to the effects of climate change.

This is to be achieved through a scientific evaluation of coastal conditions, the use of traditional ecological knowledge gathered from the project area’s Hawaiian homesteaders and lineal descendants, and published literature on the causal factors contributing to shoreline erosion. Recommendations are further informed by community input as well as thoughtful consideration of South Molokaʻi’s socioeconomic conditions and cultural, natural, and recreational resources.

1.1 REGIONAL AND LOCAL SETTING
Molokaʻi is the fifth largest of the six developed southern Hawaiian Islands, being as much as ten miles wide and thirty-eight miles long. The island has approximately eighty-eight miles of shoreline that circumscribes the 260 square mile island. Molokaʻi has shorelines that are dynamic and can change rapidly in response to natural forces such as storms, high winds, and large surf.

On Molokaʻi’s west side, Papohaku Beach is the longest, most intact coastal dune system in the southern Hawaiian Island chain. The eastern side of Molokaʻi is considerably more humid and lush, owing to its exposure to the prevailing trade winds. The volcanic island rises some 4,961 feet above sea level and has some of the highest sea cliffs and waterfalls in Hawaiʻi along its north shore. In contrast, Molokaʻi’s south shore is not exposed to the prevailing northwest ocean swells and storms and forms a coastal plain. It is also somewhat protected from waves, storms, and swell from the south by the islands of Lānaʻi and Kahoʻolawe as illustrated by Figure 1.1. Given this protection, Molokaʻi’s south shore has the longest continuous fringing reef in the United States, and it has sites with the best coral coverage in the developed Hawaiian Islands (Ogston and Field, 2010).

There are many ahupuaʻa incorporating watersheds or sub-basins within the moku or division of land on the island of Molokaʻi. Of these, five have a direct influence on the DHHL properties within the SM-SEMP study area: Kalamaʻula, Kaunakakai, Kapaʻakea, Kamiloloa, and Makakupaʻia ahupuaʻa. The neighboring Kawela ahupuaʻa to the east also has considerable influence on sediment transport and stormwater influx to the coastline.

The DHHL subdivisions are adjacent to other residential developments along and within the coastal plains of Molokaʻi’s south shore and begin about one mile east of Kaunakakai Town and extend approximately 3.5 miles from town (Figure 1.2).

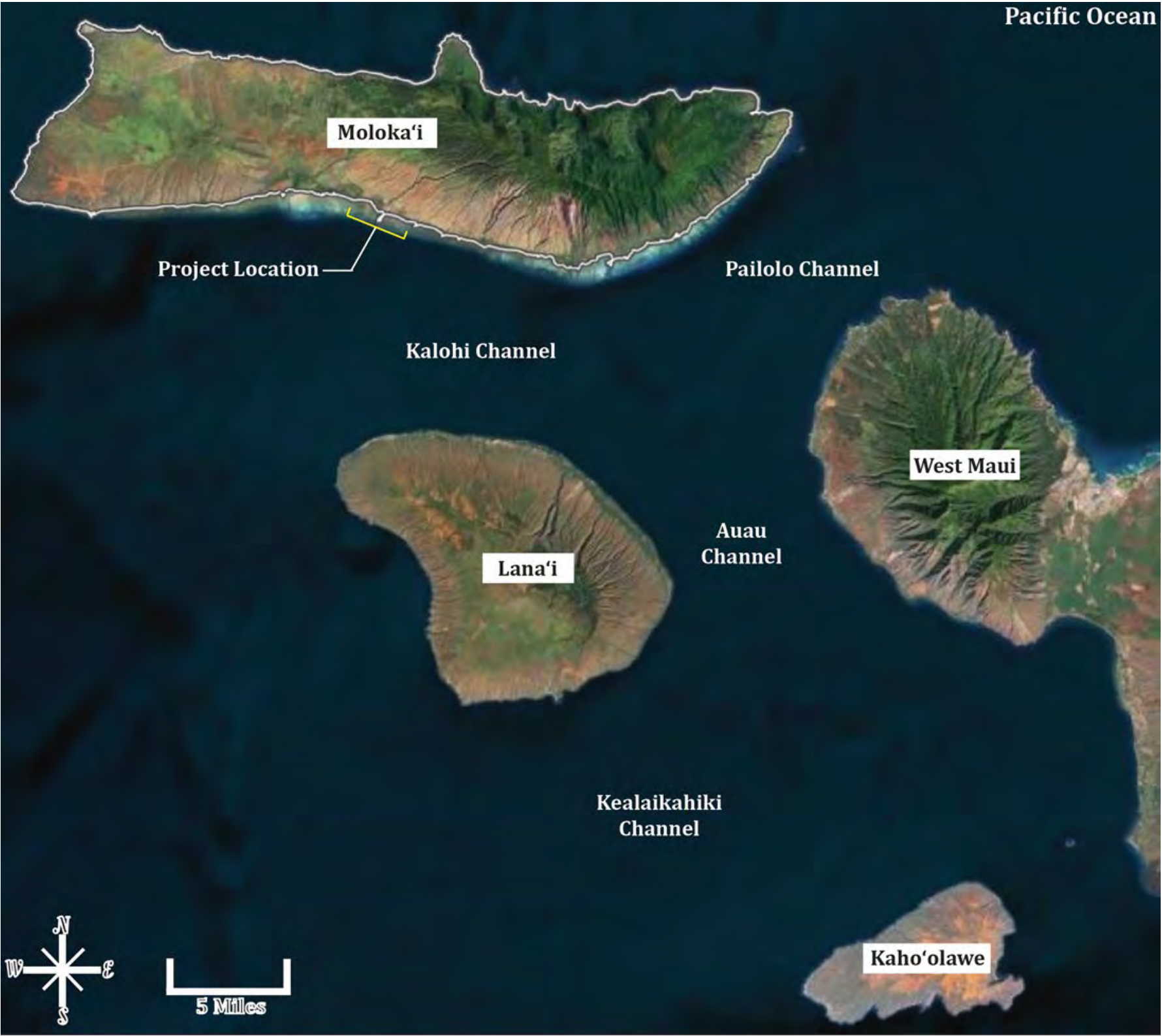


Figure 1.1: Location of the study area in the context of neighboring islands.

Kalama‘ula, Kaunakakai (Malama Park) Kapa‘akea, Kamiloloa and One Ali‘i
Hawaiian Home Lands Along the Shoreline that Comprise the Project Area.

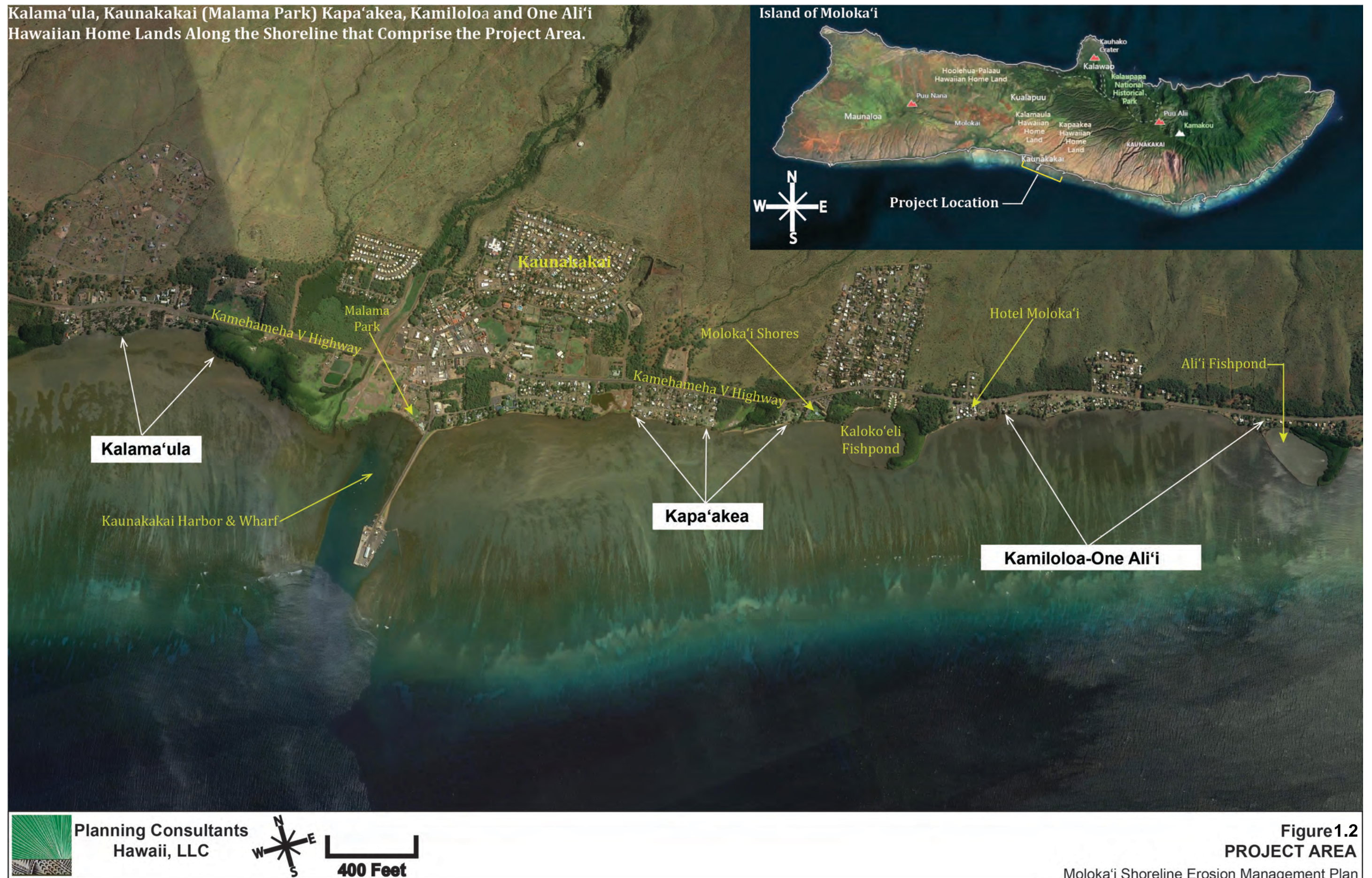


Figure 1.2
PROJECT AREA

Moloka‘i Shoreline Erosion Management Plan

All of these communities are served by Kamehameha V Highway. There are fifteen beneficiary lots in the Kalama‘ula community, five of which are along the shoreline. In Kapa‘akea there are forty-seven residential lots, seventeen of which are along the shoreline. The community is bordered by wetlands on either side and has concrete culvert drainages to divert heavy upland rainstorms to the ocean. Fourteen beneficiary lots within the Kamiloloa and One Ali‘i community are located along the shoreline to the east of Hotel Moloka‘i. In addition, thirteen residential lots within the community are located between the Kamehameha V Highway and the Ali‘i fishpond. In total, there are thirty-six oceanfront beneficiary lots within these DHHL communities (Table 1.1).

DHHL Beneficiary Lots Makai of Kamehameha V Highway			
DHHL Community	# of Oceanfront Beneficiary Lots	# of non-oceanfront Beneficiary Lots	Total Beneficiary Lots
Kalama‘ula	5	10	15
Kapa‘akea	17	30	47
Kamiloloa – One Ali‘i	14	13 ¹	27
¹ Thirteen residential lots within the subdivision are located between the Kamehameha V Highway and the Ali‘i fishpond.			

Table 1.1: DHHL Beneficiary Lots within SM-SEMP Area Communities.

1.2 THE EROSION PROBLEM

The three and one-half mile discontinuous stretch of coastline fronting the Hawaiian homestead communities of Kalama‘ula, Kapa‘akea, Kamiloloa, and One Ali‘i has experienced substantial change over the years. Shoreline erosion has resulted in the loss of homestead property, limited shoreline access, and harmed cultural and environmental resources.

DHHL homesteaders living along this portion of Moloka‘i’s southern shore have observed changes to the shoreline over their lifetime, and they have expressed concerns about how best to address these changes. Correspondingly, DHHL is studying what measures should be taken to respond to shoreline change and what actions would be prudent and appropriate to adapt to future states of the coastline, especially in light of sea level rise.

1.3 PURPOSE AND OBJECTIVES OF THE SM-SEMP

In the future the effects of climate change, sea level rise, and more frequent extreme weather and king tide events are expected to increase coastal erosion and expose DHHL homesteads to coastal hazards such as flooding, storm surge, beach and land loss. To address these risks, the DHHL contracted Planning Consultants Hawai‘i, LLC, and Coastal Planners, LLC, to assist with the preparation of a shoreline erosion management plan for the coastal homestead communities of Kalama‘ula, Kapa‘akea, Kamiloloa, and One Ali‘i along Moloka‘i’s southern coast.

The purpose of this SM-SEMP is to provide the DHHL with a strategy to manage shoreline erosion in the project area. Specific objectives are to:

1. Enable DHHL to proactively plan for and manage shoreline erosion;
2. Investigate underlying causes of shoreline erosion, and likely future progression;
3. Identify effective and sustainable shoreline erosion management strategies that maintain natural processes and consider community needs; and
4. Educate the community as to the causes of shoreline erosion and appropriate management responses.

The intent is to offer a workable management plan that can be readily implemented by DHHL, homeowners, and community members.

1.4 STRUCTURE OF THE SM-SEMP

The SM-SEMP describes the existing marine, terrestrial, and socioeconomic environment within the project area. Using available reports, peer reviewed studies, traditional ecological knowledge, and community input this SM-SEMP provides a description of the physical coastal processes and geomorphology that affect shoreline function and health.

The SM-SEMP recommends actions that can help restore the natural function of the coastline fronting the project area. Where manmade actions have altered the shoreline and it is no longer feasible to restore the shoreline’s natural function, the SM-SEMP provides construction and land use techniques to help prevent or mitigate the potential damage to land and coastal structures from shoreline erosion. While primarily focused on oceanfront properties, the suggestions and recommendations contained in the SM-SEMP could benefit mauka homes located in low-lying areas of Moloka‘i’s coastal plain.

The SM-SEMP also discusses ineffective shoreline management methods so that time, money, and energy are not spent on ideas that may appear to have merit, but usually are detrimental when compared to other methods of shoreline intervention. The SM-SEMP also provides recommendations that will build community resilience in the face of sea level rise.

1.5 BENEFITS OF A HEALTHY SHORELINE

A healthy Hawaiian shoreline is an extremely dynamic place. Natural forces sort out sediment into coarse and fine materials. Coarse materials such as rocks, cobbles, pebbles, and sand remain as waves, wind, and water affect the land-water interface. Finer materials such as silt and clay are washed away or diluted and dissolved into the water to be carried away by currents. The wind blows grains of sand, and waves push sand mauka where it can become entrained in the fine web of roots of native plants such as ‘aki‘aki grass, ‘ākulikuli, pōhuehue, naupaka, beach heliotrope, and naio.

1.5.1 Flood Reduction

The native plants mentioned above help to build vegetated berms and sand dunes to support a healthy shoreline. Berms and dunes store sand aggregate for use during large storm events where waves can overtop the edge of the shoreline

and spread out into rear yards resulting in flooding. During moderate storms, waves run up the beach but do not crest the berm thereby avoiding the flooding of inland area. However, large waves may overtop the berm and spread out over inland areas resulting in flooding, but with less force and depth of water than would occur without the berm.

Sand dunes and vegetated berms along the edge of the shoreline are nature’s way of blocking and buffering incoming wave energy. The sand and aggregate contained within these natural features are released by having waves chew into them, which spreads the sand into the nearshore area making it shallower. This causes the wave to break sooner and further offshore. Naturally vegetated berms or dunes rise slightly higher than the coastal plain (or rear yard in many cases) offering a modicum of protection from seawater inundation into the mauka areas along the coastal plain. Berms and dunes are nature’s way of buffering the dynamic forces along the shoreline.

1.5.2 Shoreline Access

A healthy, unobstructed shoreline can function as a pathway providing access to and along the coastline for community members to fish, glean, gather, and recreate. As shorelines erode and become narrow, the community’s ability to access the coastline can be hindered. Access can be further diminished by human-made structures such as seawalls, rubble mounds, boulder piles, or other types of armoring placed on the coastline.

Excessive vegetative growth can form impenetrable thickets that also hinder access along the shoreline. Thick stands of non-native kiawe trees are a common hinderance to shoreline access that impedes lateral access along the shoreline in the project area. Additionally, kiawe tree roots can inhibit the free flow of sand and sediment causing erosion scarps to form. The trees also dry out the soil, reducing moisture needed for native plants to grow.



Photo: Kiawe can impede access along the shoreline for subsistence gathering, particularly at high tide.

1.5.3 The ‘Ice Box’

A healthy shoreline can contribute to a healthier reef, which in turn provides food to the people. For generations DHHL beneficiaries living in the SM-SEMP area have relied on the ocean and the streams for their sustenance.

“Went crabbing, lay net before for the small fish – pua – small mullet. Her ‘ohana only took what they could eat. Mother gathered limu... She knew where the freshwater was coming out – all the way from Kimball’s place (now Penny’s) one... Our kupuna would tell us stories about all the sweet potato, vegetables being grown to feed the people of Kalama‘ula”.

Kanani Negrillo, Kalama‘ula Lessee

Fishing is more productive on a healthy coral reef with clean water than on a reef covered in sediment and having murky water. The pollution that harms coral reefs can also degrade nearshore and shoreline flora that is an important source of food and fiber for native Hawaiians. For instance, limu is a type of edible seaweed, of which at least eight species are popular in polynesian and hawaiian dishes (Preskitt, 2002). Some of these, like limu ogo (*Gracilaria parvisipora*) now occur in excess along Moloka‘i’s southern shores, whereas other more preferred species of limu like ‘ele‘ele (*Enteromorpha prolifera*) are scarce or have become absent. Factors contributing to these changes may include species introductions, overharvesting, increased turbidity in the water column (i.e., murky water), degraded water quality along the shoreline and inner reef, and shoreline erosion and subsequent shoreline armoring.

1.5.4 Cultural and Recreational Practices

Access to and along the shoreline for cultural and subsistence purposes is vitally important to the well-being of native Hawaiians. The native Hawaiian people “access and use the shoreline area for many purposes, including fishing; gathering limu, 'opihi, and other ocean resources; and for recreation” (MacKenzie, M.K., 1991). Native Hawaiian traditional and customary rights are impeded when access to and along the shoreline is lost due to erosion and subsequent shoreline armoring activities. A healthy shoreline, backed by native plants and grasses, is important for the perptuation of the Hawaiian culture.

Boating can be a subsistence, commercial, or recreational activity. Small fishing boats, kayaks, and outriggers can easily be anchored near the shore along Moloka‘i’s relatively calm, shallow, southern shoreline. However, access to mooring opportunities are diminishing along the project area’s eroding shoreline. On an eroding beach, boaters will frequently need to wade through shallow water along the shoreline to reach a mooring. If the nearshore is too silty, one may get stuck or lose footwear that becomes stuck in the silty muck. If the sand is scoured away, an outrigger or small boat’s hull can be damaged or leak as a result of being dashed against the rocks.

In addition, as coral reefs diminish in vitality, larger waves could penetrate further inland breaching the offshore fringing reef. Such large waves could overturn small boats and cause them to sink or cause them to break free of their moorings, resulting in lost or damaged watercraft.

Stand up paddling is one type of fitness and recreation that allows one to see through the water into the undersea menagerie. Kayaking is also a popular form of recreation with similar attributes. Both are more enjoyable in clean, rather than murky, ocean waters. Outrigger paddling, either solo or in group, is a favorite pastime and traditional activity in Hawai‘i. It can be a competitive or social sport that improves mental and physical fitness and instills traditional Hawaiian values of collaboration and community, especially in youth. But the enjoyment of the experience may be diminished if the water is murky from silt, the sandy launch is scoured away, or if there is high wave reflection from shore armoring.



“For recreation (stand-up paddle boarding), food, mālama, health and wellness, growing limu, restoring kupe‘e (cowries), and enjoying the beauty of our place. Stewardship - teaching our youth traditional practices, how to mālama the shoreline.”

Kenneth “Boom” & Doreen “Pinky” Gaspar, Kapa‘akea Lessees

Photo: Alluvial layers of red clay can pollute nearshore waters with fine silt and sediment that smothers coral reefs.

CHAPTER 2: SM-SEMP PLANNING PROCESS

To proactively manage erosion and strengthen community resilience, the DHHL has conducted various integrated coastal zone management activities in recent years. These efforts, aimed at building resiliency, informed the SM-SEMP planning process. Two of these efforts are highlighted below.

2.1 BUILDING RESILIENCY

In 2014, DHHL and select homestead residents were invited to a day-long workshop to develop post-disaster reconstruction guidelines and protocols sponsored by the Maui County Planning Department. The multiyear project resulted in nearly seventy recommendations, some of which were tailored from input received from DHHL homesteaders. For Molokaʻi, repair and reconstruction of homes are the community’s highest priority, even with houses that are damaged by more than 50% of their replacement value. If Molokaʻi’s residents have habitable accommodations it is less likely they would need to leave the island. Thus, a strong preference was expressed to focus limited resources and personnel on repairing and reconstructing habitable structures rather than constructing pools, carports, and other non-essential structures.

In 2015, DHHL sponsored a coastal resilience workshop for DHHL communities wherein the DHHL gathered input from the homestead communities of Kapaʻakea and Kamiloloa-One Aliʻi. In support of the project, the University of Hawaiʻi Department of Urban and Regional Planning prepared a coastal disaster resilience guidance manual. In coordination with community members, they identified areas and assigned levels of risk confronting the homestead communities from a wide range of coastal hazards. Among those hazards, the severity of the shoreline erosion was discussed and the need for further study and action identified.

2.2 THE SM-SEMP PLANNING PROCESS

The SM-SEMP team built upon recent planning efforts intended to build resiliency on Molokaʻi. Through desktop research the team gathered, reviewed, and documented existing relevant research and data. The team also gathered a wide variety of input from the community and stakeholders through multiple outreach techniques including agency meetings, community orientation meetings, stakeholder interviews, a focus group meeting, and a community workshop. The DHHL compared, analyzed, and synthesized the data from each outreach technique to capture a wide array of input and to assess the validity of the results.

In the plan preparation phase, the SM-SEMP team used the data collected through the desktop research, field survey, and outreach phases as a foundation to prepare the Preliminary and Final Draft SM-SEMP. The SM-SEMP planning process is depicted in Figure 2.1. The following subsections provide a more detailed description of the planning process.

2.2.1 Phase 1 - Desktop Research

The SM-SEMP Team started the project by conducting desktop research of publications, maps, and studies of Molokaʻi’s south shore. The team reviewed studies and articles about the project area’s offshore coral reefs, sediment transport patterns, drainage, wind and currents, flooding, terrestrial environment, land use, and socioeconomic conditions. The team gave attention to studies of the areas between Kalamaʻula and One Aliʻi Park. The team undertook an analysis of coastal hazards and risk exposure using digital maps and resources as part of the desktop research. Team members also conferred with academics and researchers at the University of Hawaiʻi who have studied Molokaʻi’s south shore to gain feedback, test ideas, frame remedies, and narrow discussion.

2.2.2 Phase 2 - Field Surveys

The SM-SEMP team obtained observations of shoreline conditions during site visits held in February 2019 and October and November 2019. The February site visit was three consecutive days and involved traversing the project area’s shoreline. The route was selected based on findings from the desktop assessment and by reviewing various sources of aerial imagery. Most areas were observed during low tide to maximize information capture about shore conditions. The site visits included a visual observation and assessment of the following shoreline features:

- Physical coastal processes;
- Shoreline access points;
- Drainage ditches and swales;
- Wetlands and stream mouths;
- Erosion hotspots;
- Flood prone areas;
- Proximity of buildings and accessory structures to the ocean both in terms of horizontal distance and elevation above the shoreline;
- Shoreline armoring;
- Parks and publicly used open space;
- Land, resources, physical infrastructure, and structures impacted by erosion; and
- Natural and man-made improvements to address erosion.

The February site visit began at the causeway to the Kaunakakai Wharf and extended to Aliʻi Park. It was separated into a number of discrete segments that could be covered by foot. A few locations were not accessible including the outer walls of fishponds and undeveloped wetland areas. Special site visits to the 22-acre Koheo Wetland adjacent to Kapaʻakea and the Kalokoʻeli and Aliʻi Fishponds were led by local experts familiar with these unique areas and their history.

Several oceanfront property owners hosted opportunities to see shoreline change firsthand and provided valuable background data and photographs of past flooding, shore conditions, shore reference features, and shoreline change. Site observations were supplemented with aerial and DHHL authorized drone images, archival maps, and photographs.

The SM-SEMP team used the October and November 2019 site visits to ground truth observations made in February, revisit and reaffirm empirical findings at specific locations, such as taking measurements at erosion hot spots, and to gather information and conduct interviews in the Kalamaʻula ahupuaʻa.



Photo: *Measuring shoreline change.*

2.2.3 Phase 3 - Stakeholder Outreach

The SM-SEMP team met with agency regulators and experts in the coastal management field to discuss DHHL land use and coastal issues. Discussions shed light on the difficulties of obtaining financing for home improvements for sites within flood hazard zones, emergency response and evacuation, fishpond creation and restoration, invasive species control, regulatory permitting and bifurcated jurisdictions, misconceptions about building permit processes, and a variety of other challenges that beneficiaries may face in creating more resilient communities and shorelines.

‘A‘ohe hana nui ke alu ‘ia.
No task is too big when done together by all.
-Mary Kawena Pukui

DHHL staff provided updates to the community during regular DHHL meetings. In January/February 2019 the SM-SEMP team interviewed key stakeholders, conducted a resident survey, and hosted an orientation meeting on Moloka‘i to gather insight and perspective from residents, leaders, and stakeholders in the DHHL community. During the orientation meeting the SM-SEMP team presented the initial findings of the desktop research through PowerPoint presentations, handouts, and large format maps. Participants infused their knowledge of place by identifying erosion and flood prone areas and describing problematic locations on maps of the south shore. Discussion ensued about the project during an interactive question and answer period and in small groups and one-to-one discussion.

The SM-SEMP team distributed a survey at the meeting to help quantify issues that residents face in each homestead subdivision. The surveys highlighted erosion-related concerns, themes, and problem areas and helped direct the SM-SEMP team to erosion hot spots and areas of concern.

Personal interviews were held with more than a dozen individual residents, families, and stakeholders that reside along the shoreline or had specific involvement in shoreline issues such as caretaking, stewardship, fishpond, or wetland restoration. The interviews followed the survey in format but were sufficiently open ended to allow for broad discussion and fluidity in conversation. The SM-SEMP team was privileged to meet a variety of knowledgeable people and kupuna who were willing to share their ideas, generate remedies, and share their mana‘o in keeping with sound stewardship of the ‘āina. Appendix A provides the transcriptions taken during the interviews.

2.2.4 Phase 4 - Stakeholder Vetting of Draft Recommendations

Using the data collected through the first three phases, the vetting phase included DHHL preparation of draft recommendations for review by a diverse group of stakeholders. The DHHL will host meetings with the stakeholders to gather input on the draft recommendations and to discuss and resolve outstanding issues through this and/or subsequent planning processes.

2.2.5 Phase 5 - Prepare the Draft and Final SM-SEMP

Using the input collected during the previous phases, the DHHL prepared the Draft SM-SEMP for review and approval by the Hawaiian Homes Commission.



Photos: Community stakeholders identify erosion-related problems, details, and concerns through facilitated group discussion.

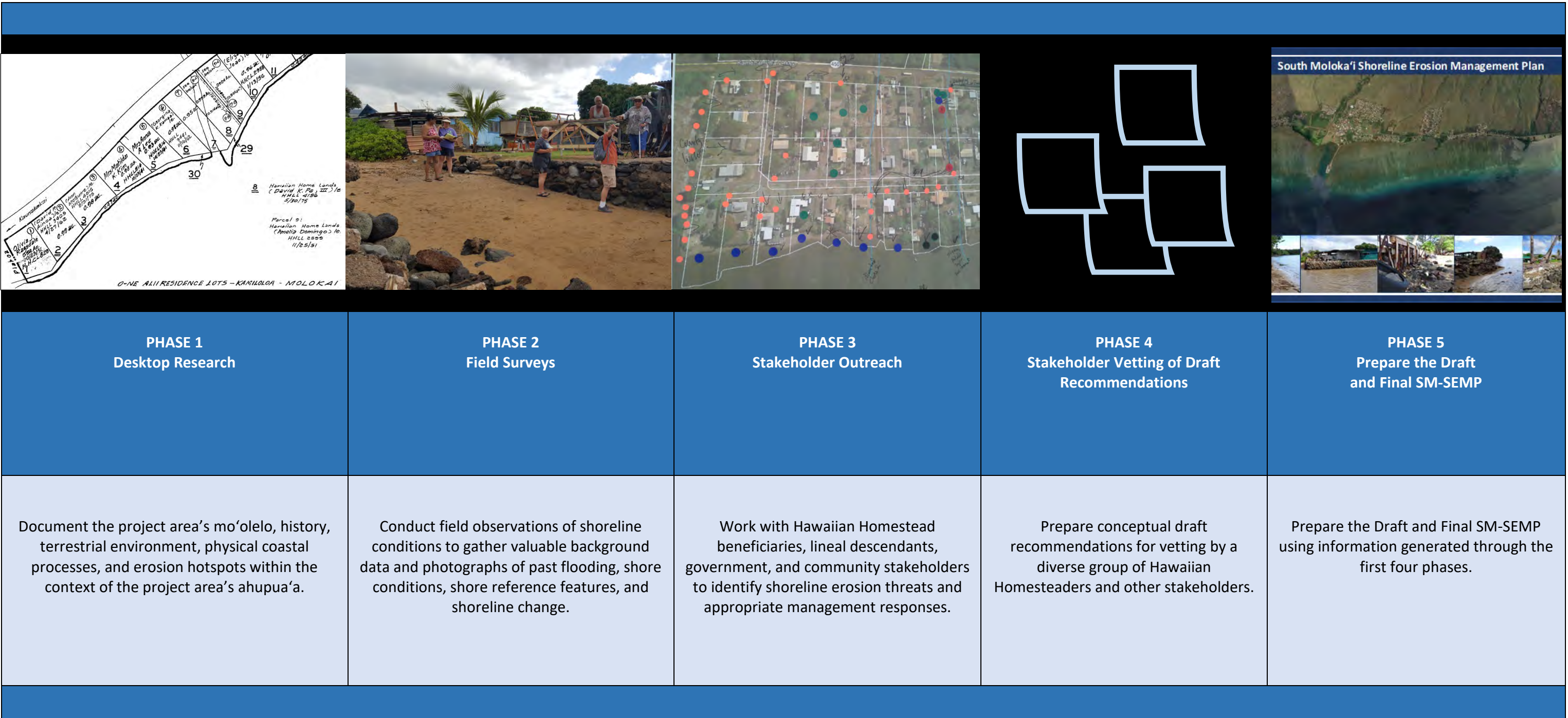


Figure 2.1: SM-SEMP Planning Process.

CHAPTER 3: PLACE AND CONTEXT

The island of Molokaʻi is elongated with its highest point being Kamakou, a high volcanic peak that rises 4,961 feet in the east. The island’s central and eastern terrain forms steep mountain slopes with deeply eroded gulches and valleys, especially on the wetter east side of the island. The western side of Molokaʻi has much lower tablelands and is barren owing to its arid state. Its people have long recognized the important connection between the land and the sea.

The poetic name Molokaʻi Nui a Hina and its legendary origin establishes kuleana (duty, responsibility, privilege) to care for the island’s resources (Halealoha Consulting, 2021, 5):

... the island of Molokaʻi, like a child, is small and fragile – unlike a large continent. The resources of an island are finite, and these finite resources need to be nurtured by the island’s “family” if the people are to grow strong, healthy and prosper. Many of the

families of Molokaʻi trace their roots on the island back to antiquity, making the island an integral part of their ancestral family. Molokaʻi’s modern-day stewards have a special responsibility to care for the island as they would care for a member of their own family – a responsibility bequeathed to them by Hina, birth mother of this island (Molokaʻi Community Service Council, 2020).

Traditional poetic names of the island include *Molokaʻi ʻāina momona* (fat, fertile lands of Molokaʻi), which refers to verdant lands that produce an abundance of food from loʻi kalo (taro patches), loko iʻa (fishponds), kai (near-shore) and moana (deep-sea) fishing grounds. Another name, *Molokaʻi nō ka heke* (Molokaʻi is greatest, foremost), refers to the celebrated athletes of the Makahiki competitions held at Naʻiwa and Kainalu. One of the most famous is *Molokaʻi pule oʻo* (Molokaʻi of powerful prayer), a reference to the powerful kahuna trained at Puʻu Anoano and ʻIliʻiliʻopae Heiau, in particular the ones who practiced ʻanāʻanā

(black magic, evil sorcery). The other well-known name is *Molokaʻi nui a Hina* (Great Molokai, Child of Hina) (Halealoha Consulting, 2021, 5).

3.1 ANCIENT MOLOKAʻI LAND DIVISIONS

Ancient Hawaiians subdivided the mokupuni (island) of Molokaʻi into subareas to enhance the stewardship of the island’s resources (Figure 3.2). The initial land divisions were the Koʻolau (windward) and the Kona (leeward) districts, or moku-o-loko (Summers, 1971). In 1859 the Kona and Koʻolau districts were dropped, and the island was made into just one district, called Molokaʻi district. In 1909, the present division into Molokaʻi district and Kalawao district was made (ibid.).

Each of Molokaʻi’s Moku is further divided into ahupuaʻa which incorporate watersheds or sub-basins (Figure 3.1). Of these, five have a direct influence on the DHHL properties within the SM-SEMP study area including Kalamaʻula, Kaunakakai, Kapaʻakea, Kamiloloa, and Makakupaʻia (Figure 3.3). Each of these ahupuaʻa is briefly described below. Please see Appendix B for more detailed insights into the origins of Molokaʻi, its place names, and its ancient land divisions.

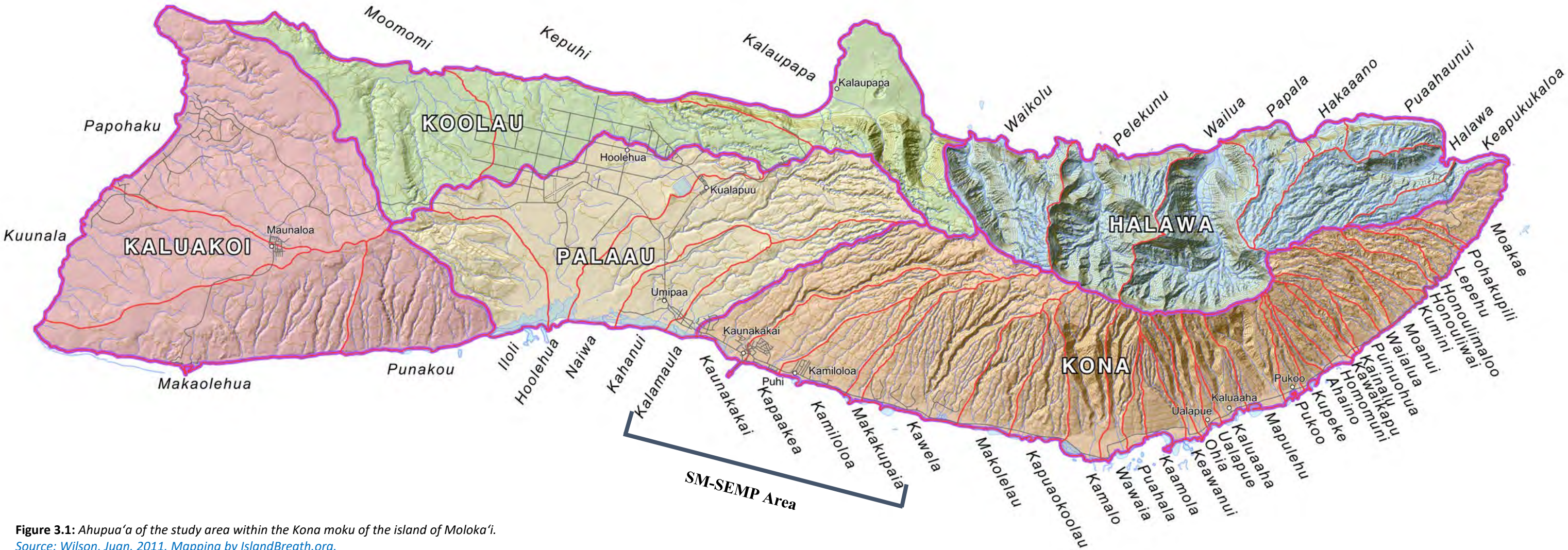


Figure 3.1: Ahupuaʻa of the study area within the Kona moku of the island of Molokaʻi. Source: Wilson, Juan. 2011. Mapping by IslandBreath.org.

3.1.1 Kalama’ula Ahupua’a

Kalama’ula translates to mean, “the red torch or red lama tree.” The Kalama’ula Ahupua’a is located west of Kaunakakai (Pukui, 1974, 74). The ahupua’a rises gradually from sea level upland to Pu’u Luahine before ascending to 1,800 feet above sea level (Manera 2013, 21). Kalama’ula is one of three watershed areas in the Pālā’au region comprising 5,838 acres with no perennial streams (CRAMP, 2008). Known water names include ‘Olo’olo (pool/spring), Waianui (spring) and Makehe Stream (Halealoha Consulting 2021, 10).

In 1925 Kalama’ula became the first Hawaiian homestead subdivision in the Hawaiian islands. Today, Kalama’ula has a “growing homestead residential community in the coastal lowlands and kula (upland) region, wetlands in the southwestern corridor, pastoral use, Kapuāiwa Grove, Church Row, and Kūlana ‘Ōiwi Multi-Service Center (Kūlana ‘Ōiwi), which houses the offices of DHHL, Office of Hawaiian Affairs, Queen Lili’uokalani Children’s Center, Kamehameha Schools, Alu Like and Na Puuwai. The area acts as a rural transition between industrial and agricultural uses to the northwest, and the more urban uses of Kaunakakai, Moloka’i’s country town, to the east” (Manera, L. 2013, 21).

Catherine Summers identifies the special places in Kalama’ula including ponds, a fishpond, heiau, a pool, kahua maika (stone rolling fields), petroglyphs, a spring, and house sites (Halealoha Consulting 2021, 6). Some of Kalama’ula’s special places include:

- 1. Kahua Maika near Pu’u Luahine. (The only one of old left in all the islands.)
- 2. Childhood home of Keōpūolani, sacred wife of Kamehameha the Great.
- 3. “Kapuāiwa,” coconut grove planted by Kamehameha V.
- 4. Kamaloko Fishpond, with all kinds of fish. (awa, āholehole, large ‘o’opu, and ‘alamihi crab)
- 5. Kahokai/Kakokahi Fishpond: “mess up the work.” (now filled)
- 6. ‘Ōhi’apilo Fishpond: “smelly ‘ōhi’a tree.” (now filled)
- 7. ‘Umipa’a Fishpond: “stifle firmly.” (now a dry land section)

The area was also known for its food cultivation on land and the abundance of fish and other ocean foods gathered in the nearshore area. The entire shoreline was called Hīlīa, “an off-shore area extending eastward from Pakanaka Pond through Kalama’ula, it is now covered with mud, but formerly the shores had sandy beaches. Fish were very numerous here especially small mullet which often came in great schools near the shore. At times they were so numerous that ‘This little fish darkened all of the beaches” (Tomonari-Tuggle, 1983 and Tomonari-Tuggle, 1990).

The ‘ōlelo no’eau for this shoreline area is:
Ka i’a kā wawae o Hīlīa
The fish of Hīlīa, kicked by the feet (Summers, 1971).

There was extensive cultivation of ‘uala (sweet potato) in the kula (upland) areas (Halealoha Consulting 2021, 7).

3.1.2 Kaunakakai Ahupua’a

The Kaunakakai ahupua’a gradually rises from sea level to approximately 1,300 feet where it enters the Moloka’i Forest Reserve before extending to the Waikolu Valley Lookout and Pu’u Ka’eo at roughly 3,702 feet above sea level. The ahupua’a is bound by the Kaunakakai gulch to the east and the western extent of the Kalaniana’ole Colony to the west. The makai portion of the ahupua’a is nearly 3,400 feet wide, but the ahupua’a gradually narrows before reaching its uppermost elevation. The Kaunakakai Stream lies along the ahupua’a’s eastern border and flows continuously. The upper portions of the ahupua’a are mostly forested while the dry uplands and lowlands mauka of the coastal plain are mostly comprised of shrubland or bare earth. The small country town of Kaunakakai lies at the foot of the ahupua’a and serves as Moloka’i’s commercial, educational, and government center.

“The old name for Kaunakakai was Kaunakahakai, “Resting-(on) -the beach.” It was the place for the canoes to come, for here there were plenty of fish (Pukui, personal communication).” (Summers, 1971)

West of the approach to the Kaunakakai wharf is a platform that was part of Kamehameha V’s home, “Malama”... The beach in front of this site was used exclusively by the ali’i for sun bathing (Halealoha Consulting 2021, 15). The coastal flats along Kaunakakai’s shoreline were rich in salt pans. It is said that the salt pans were made “something like a taro patch” and the salt was “not too sour...” (Summers, 1971).

3.1.3 Kapa’akea Ahupua’a

The literal meaning of Kapa’akea is “the coral or limestone surface” (Pukui, 1974, 86). The Kapa’akea Ahupua’a is pie shaped and ascends gradually from the seashore to the South Fork of the Kaunakakai Gulch where it becomes very steep. The ahupua’a is bound on the west and north by the Kaunakakai Gulch, and it is bound on the east by the Kamiloloa Gulch. Along its makai side the ahupua’a is roughly 3,800 feet wide and extends from Kamiloloa in the east to the Kaunakakai Harbor in the west. There are no perennial streams in the ahupua’a. Two intermittent streams run during heavy rains and were diverted around the west and east boundaries of the Kapa’akea Cemetery. The first stream is named Kamiloloa, and the name of the second stream is unknown (Halealoha Consulting 2021, 18). The upper portion of the ahupua’a is mostly forested while the dry uplands and lowlands mauka of the coastal plain are mostly comprised of shrubland or bare earth. The ahupua’a includes the eastern portions of Kaunakakai and the homestead community of Kapa’akea.

The Kapa’akea Ahupua’a is also home to the Kōheo Wetlands, Ka La’i o Ke Kioea Bird Sanctuary, which is a 10-acre coastal salt marsh (Halealoha Consulting 2021, 18). Ka la’i o kioea, “The tranquil spot of the kioea” was the name of a place where the homesteads are now located in Kapa’akea. “Here there were numerous plover and curlews. The curlews are said to have called to the canoes to go out to

sea to fish. Hence the saying, ‘Molokai i ke kioea ho’olale ka wa’a (Molokai where the kioea urge on the canoes)’” (Halealoha Consulting 2021, 18).

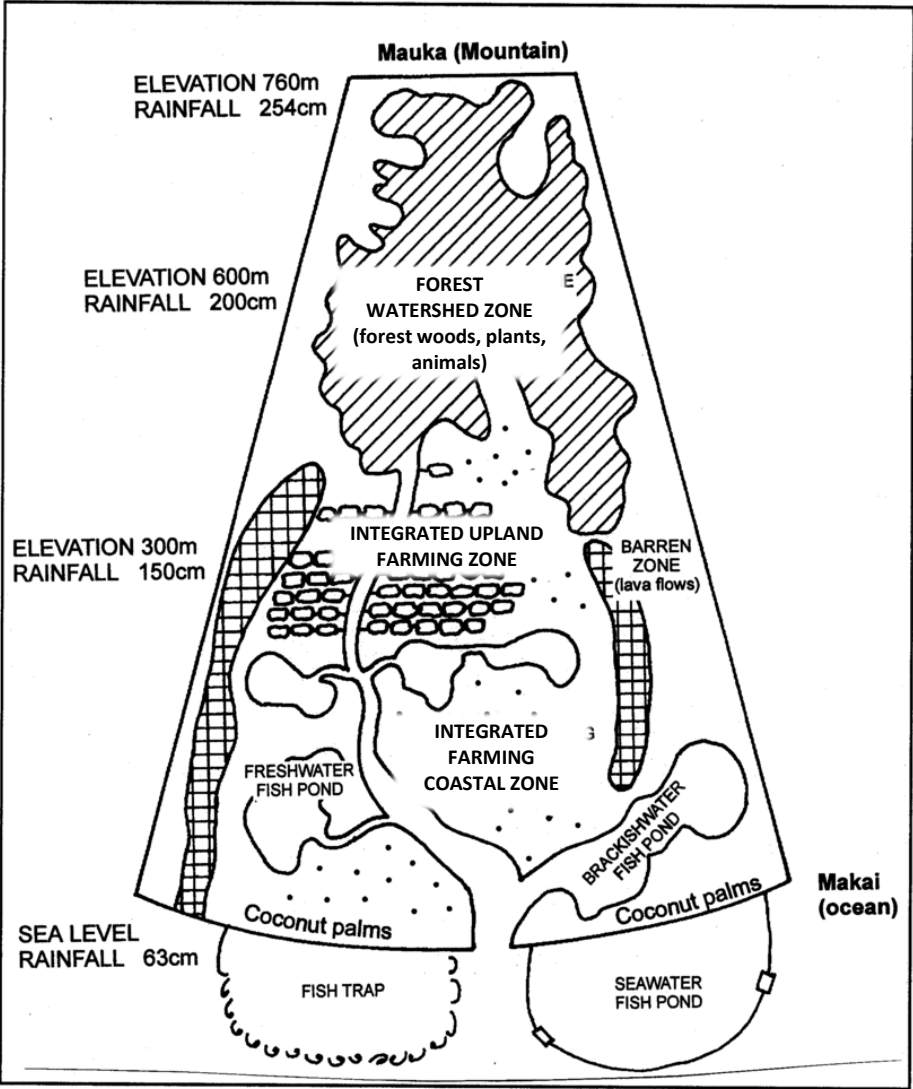


Figure 3.2: The Ahupuaa System of Ancient Hawai’i (Source: adapted from Costa-Pierce 1987, Pg. 324).
In ancient Hawai’i land was divided into units called ahupua’a. Ahupua’a boundaries typically spanned the valley between two ridgelines and extended from the uplands to the sea. Ahupua’a often included a variety of resources, available within different ecological zones, to sustain human life. As shown in Figure 3.2, the mauka forested areas provide a variety of plants and animals for food, clothing, medicinal, and cultural purposes. In the mid-to-lower elevations streamwater is diverted to support farming and aquaculture. Coconut trees and other coastal plants and animals provide an additional source of food for the community. Coastal fishponds and coral reefs provide important resources from the sea. In ancient days the Kanaka Maoli carefully managed their ahupua’a and gave special consideration to the relationship of mauka and makai resources when making resource management decisions.

3.1.4 Kamiloloa Ahupua’a

Two adjoining land sections comprise the Kamiloloa ahupua’a. The section to the west is referred to as “Government” while the section to the east is known as “Konohiki.” Kamiloloa literally means “the tall milo tree” (Pukui, 1974, 82)

The ahupua’a is pie shaped and rises gently from the seashore to about the 1,000 foot elevation before it gradually becomes steeper and is hemmed in by the Makakupa’ia ahupua’a to the east and the Kapa’akea ahupua’a to the west. The ahupua’a includes the community of Kamiloloa in the west and the community of One Ali’i and the Ali’i fishpond in the east. The intermittent Kamiloloa stream runs through the ahupua’a. The dry uplands and lowlands mauka of the coastal plain are mostly comprised of shrubland or bare earth.

The Kamiloloa Ahupua’a is also the home of Kaloko’eli Pond which is known as “The dug up pond,” it was a loko kuapa having an area of 27.6 acres in 1901 (Summers 1971, 88). Another well-known historic site is Ka Lua Na Moku ‘Iliahi, which is known as “The pit of the sandalwood ships.” Located in the Moloka’i Forest Reserve, it is a roughly 110-foot-long trench in the ground that is shaped like the hull of a ship. Following the development of the commercial sandalwood trade it was built at the direction of the chiefs to measure how much ‘iliahi would fit in the hull of a ship. Commoners would gather the ‘iliahi from the forests and carry it down to the pit where it would be stored until it could be sold to passing trading ships.

3.1.5 Makakupa’ia Ahupua’a

The roughly 2,000 foot wide by 14,000 foot long Makakupa’ia ahupua’a rises gradually from the Ali’i Fishpond to roughly 1,000 feet before it becomes much steeper as it meets, and is enveloped at its upper reaches by, the Kawela ahupua’a to the east and the Kaunakakai ahupua’a to the west. Two adjoining land sections comprise the Makakupa’ia Ahupua’a. The land section to the west was referred to as “Government” while the land section to the east was referred to as Konohiki.

Makakupa’ia is the home of the roughly 26-acre Ali’i Pond. The wall of this loko kuapa is 2,710 feet long, about 4 feet wide, and 4.5 feet high. There was one makaha. In 1957 the pond was filling with mud and about 4-acres along the eastern wall and inshore line were covered with mangrove. The makaha was broken... (Summers 1971, 90).

There is one intermittent stream that appears to be named Onini and a second stream that does not have a name. No spring names were found to be associated with Ali’i Pond or Kaoaini/Kaonini Pond (Halealoha Consulting 2021, 23).

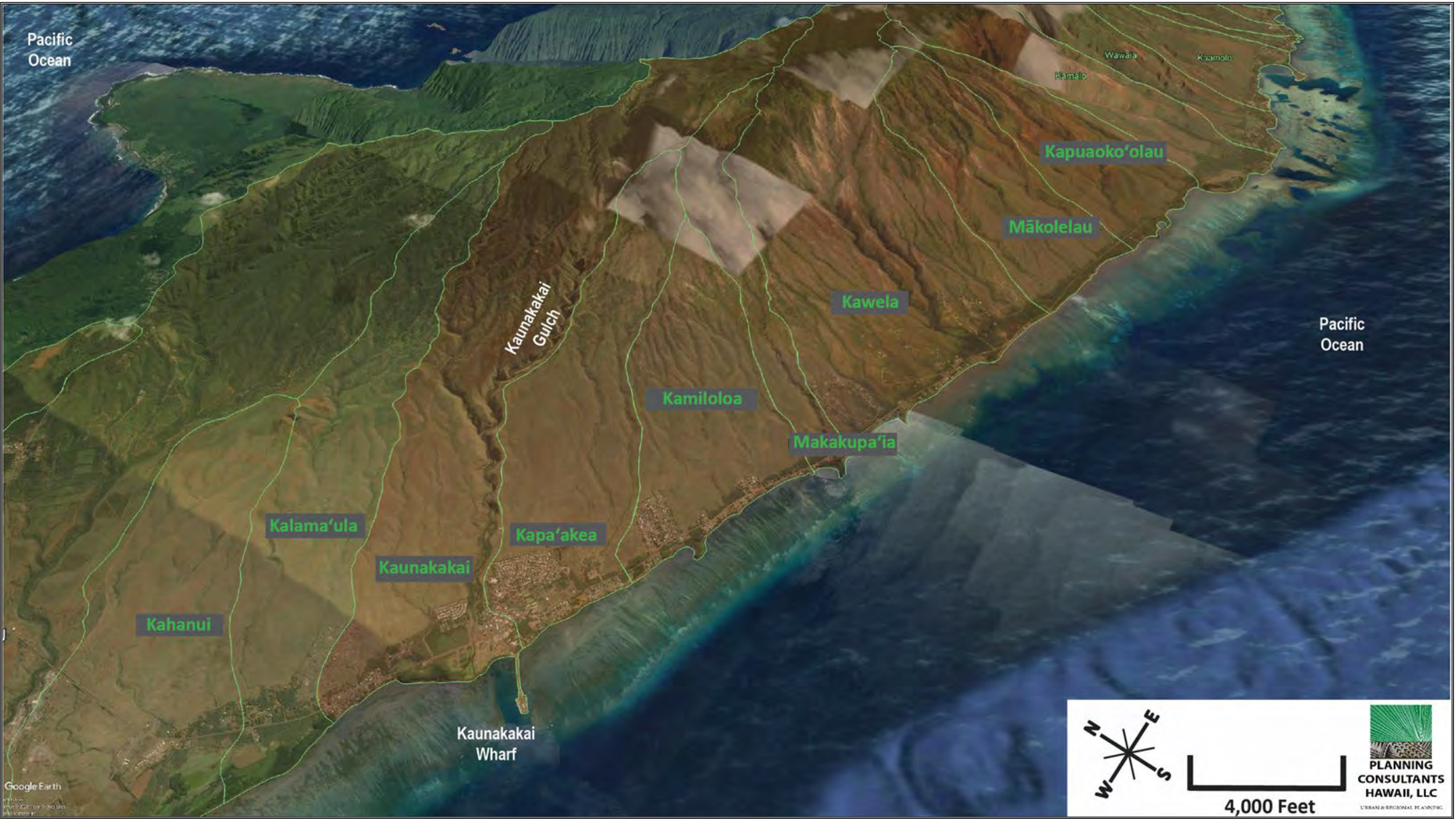


Figure 3.3: The South Moloka’i shoreline in the context of the area’s ahupua’a.

*In the water off Kamiloloa was a sea fishery known for the he’e (Monsarrat, n.d.e:183)
“Formerly the he’e found here were the i’a kapu of Bernice P. Bishop. The time for catching them was from November to March 1”...
(Summers 1971, 88).*

3.2 HUMAN-INDUCED CHANGE, PRE-CONTACT TO THE PRESENT

3.2.1 Pre-contact (600 A.D – 1777)

The first polynesian settlement on Molokaʻi occurred on the east coast of the island in the area of Halawa in roughly 600 A.D (Roberts, Lucile M and Field, Michael E. 2008, 123). In the ensuing years, settlement spread west along Molokaʻi’s southeastern coastline and into the adjacent valleys. Southeastern Molokaʻi offered settlers deep valleys with an abundance of fresh water, low-lying coastal plains with fertile, arable soil, and an expansive reef rich in marine life (ibid, 123).

Subsistence farming activity was the primary land use and it was characterized by the clearing and tilling of the land for sweet potatoes, taro, coconuts, bananas, and other “canoe crops” the early settlers brought to Hawaiʻi from Polynesia. Settlements were small (a single or a few hale) and generally spread out along the coast and in the valleys. Between 600 A.D and roughly 1,000 A.D. human settlement had minimal impact on terrestrial and coastal processes.

Commencing around 1,000 A.D., Molokaʻi’s early Hawaiian settlers began building fishponds on the reef flats to capture and raise fish for consumption. By the early 15th century, they had constructed over 50 stone-walled fishponds (ibid, 123-124) stretching along the south coast between Kumimi to Kaunakakai and beyond (Chris Hart & Partners 1993, F-2). Figure 3.4 illustrates a portion of Molokaʻi’s Southeastern coast with and without fishponds.

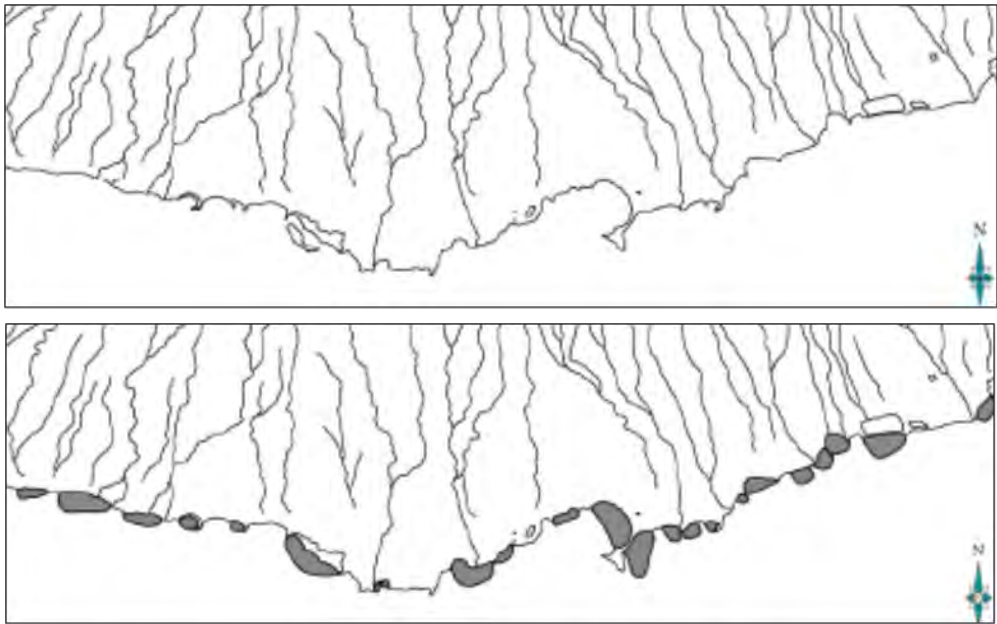


Figure 3.4: Portion of Southeastern coast of Molokaʻi with and without fishponds. (Roberts, Lucile M., 4)

The fishponds altered the natural flow of southeastern Molokaʻi’s ocean waves, currents, and nearshore sediment. The fishponds also disrupted the natural pathway for the movement of stormwater and sediment from mauka areas to the coast. Sediment washed downslope during heavy rains would be deposited in the fishponds

or settle in the nearshore waters between the fishponds (Roberts, Lucile M and Field, Michael E. 2008, 124). These alterations had a significant impact on coastal geomorphology, water quality, and the physical form of the coastline.

As the population continued to grow during this period, the terrestrial environment also saw significant change as settlers constructed extensive ‘auwai (irrigation ditches), taro loʻi (ponded terraces;) and habitat sites to sustain the growing population. Mauka of the fishponds along the lower kula slopes a more extensive system of stone terraces were constructed to support the cultivation of ‘uala (sweet potato), wauke (paper mulberry) plants, and other crops (Native Register 1848: vol.7). These human interventions began to alter the natural flow of stream water from the mauka reaches of southeastern Molokaʻi’s watersheds to the shoreline and marine environment.

3.2.2 1778 – 1879

Captain James Cook, the first westerner to view Molokaʻi, described the island as follows: “Morotoi is only two leagues and a half from Mowee to the West North West. The Southwestern coast, which was the only part near which we approached, is very low; but the land rises backward to considerable height; and, at the distance from which we saw it, appeared to be entirely without wood. Its produce, we were told, consists chiefly of yams. It may, probably, have fresh water, and, on the South and West sides, the coast forms several bays, that promise good shelter from the trade winds” (King 1784, 114).

The arrival of western explorers, merchants, whalers, and missionaries forever changed the natural, physical, and social landscape of the Hawaiian Islands.

One of the most devastating impacts to Molokaʻi’s natural environment brought by western contact was the introduction of sheep, deer, goats, and cattle. These grazing animals were welcomed by the native Hawaiian community as an excellent source of food. However, the newly introduced hooved animals, along with the pigs brought to Hawaiʻi by early Polynesian settlers, thrived in Molokaʻi’s temperate climate. They soon became feral and migrated deep into Molokaʻi’s valleys, and ascended its mountains, where they burrowed for edible roots and foraged on native grasses, shrubs, and small trees.



Photos (Left to Right): Fishpond of East Molokaʻi (Velvateen Waters, Flickr.com); Kapuāiwa Coconut Grove planted in the 1860s by Kamehameha V (Photo taken on May 24, 2016, Flickr.com).

By the middle of the 19th century, southcentral Molokaʻi’s hillsides were largely denuded of vegetation by the rapidly growing population of feral ungulates and the commercial harvesting of sandalwood. With the loss of vegetation to hold the soil, heavy rains began to transport increasing amounts of soil onto southeastern Molokaʻi’s coastal plain and reef flats.

Soil loss likely accelerated in the mid-1800s when cattle ranching intensified and plantation monoculture was introduced (Roberts, Lucile M and Field, Michael E. 2008, 125). The clearing necessary for sugar and pineapple cultivation heightened the susceptibility of the soils to erosion in the lower coastal areas resulting in the deposit of greater loads of sediment into the marine environment (ibid., 126).

Molokaʻi’s rainfall patterns also changed because of the extensive damage to its forests and the denuding of its hillsides of vegetation. The loss of much of Molokaʻi’s plant life reduced the amount of atmospheric moisture through evapotranspiration resulting in less rainfall. With less rainfall many perennial streams became intermittent.

3.2.3 1880 - 1920

In the 1880s the coastline between Kalamaʻula and the One Aliʻi fishpond was characterized by mudflats, sandy beach, wetlands, salt pans, and a limited number of structures and habitation sites (Figures 3.5 and 3.6). Jackson’s 1882 survey of Kaunakakai Harbor (Figure 3.5) was prepared prior to the construction of the Kaunakakai Wharf. The Jackson Survey documents a wide sandy beach and mud and sand flats that are partially dry at low water. Lands just west of the “village” of Kaunakakai are described as low level “sterile land” that is swampy in rainy weather. Lands just to the east are described as “grasslands”.

Makai of the small village of Kaunakakai there was a long, sandy beach fronting a natural break in the reef. It is here that Malama, the royal residence of King Kamehameha V, was situated. The house is described by a guest in 1870: "It is a grass hut, skillfully thatched, having a lanaʻi all around...On the north west side of the house is a large grass house, and it seems to be the largest one seen to this time...There are four other fine, big houses, mostly thatched...The King’s yard covers about three acres and is planted with trees, mostly coconuts, that are thriving nicely” (Holoholopinaau 1870:Ke Au ʻOkoʻa). By the time Jackson surveyed the Harbor in 1882 Malama had passed to Princess Ruth Keʻelikōlani, one of the last descendants of the Kamehameha dynasty (Fitzpatrick, Gary L and Moffat, Riley M 2004, 86).

The break in the reef fronting Malama served as a natural entry to the shoreline for the transport of goods to and from Molokaʻi. Prior to the construction of the wharf small boats would carry goods between the larger ships anchored offshore and the sandy beach. The 1882 Jackson Government Survey map illustrates a handful of structures along this beach to support the shipping activities (Figure 3.5).

By 1886, the Hawaiian Government Survey prepared by M.D. Monsarrat, shows a government road running east-to-west just mauka of the coastline (Figure 3.6). In 1889 a small stone-wharf was built fronting Malama, near the opening in the reef. Eight years later a more substantial wharf was constructed next to the old one (Figure 3.7) to serve the growth of plantation agriculture in Central Molokaʻi. The expansion of plantation agriculture is noted in the American Sugar Company’s year 1900 survey of Kaunakakai and Vicinity (Figure 3.7) that documents the planting of sugar cane to the east and west of Kaunakakai.

Like the fishponds, the construction of the wharf altered the natural flow of ocean waves, currents, and nearshore sediment between Kalokoʻeli Fishpond and Kalamaʻula which changed the coastal geomorphology, water quality, and the physical form of the coastline in this area.

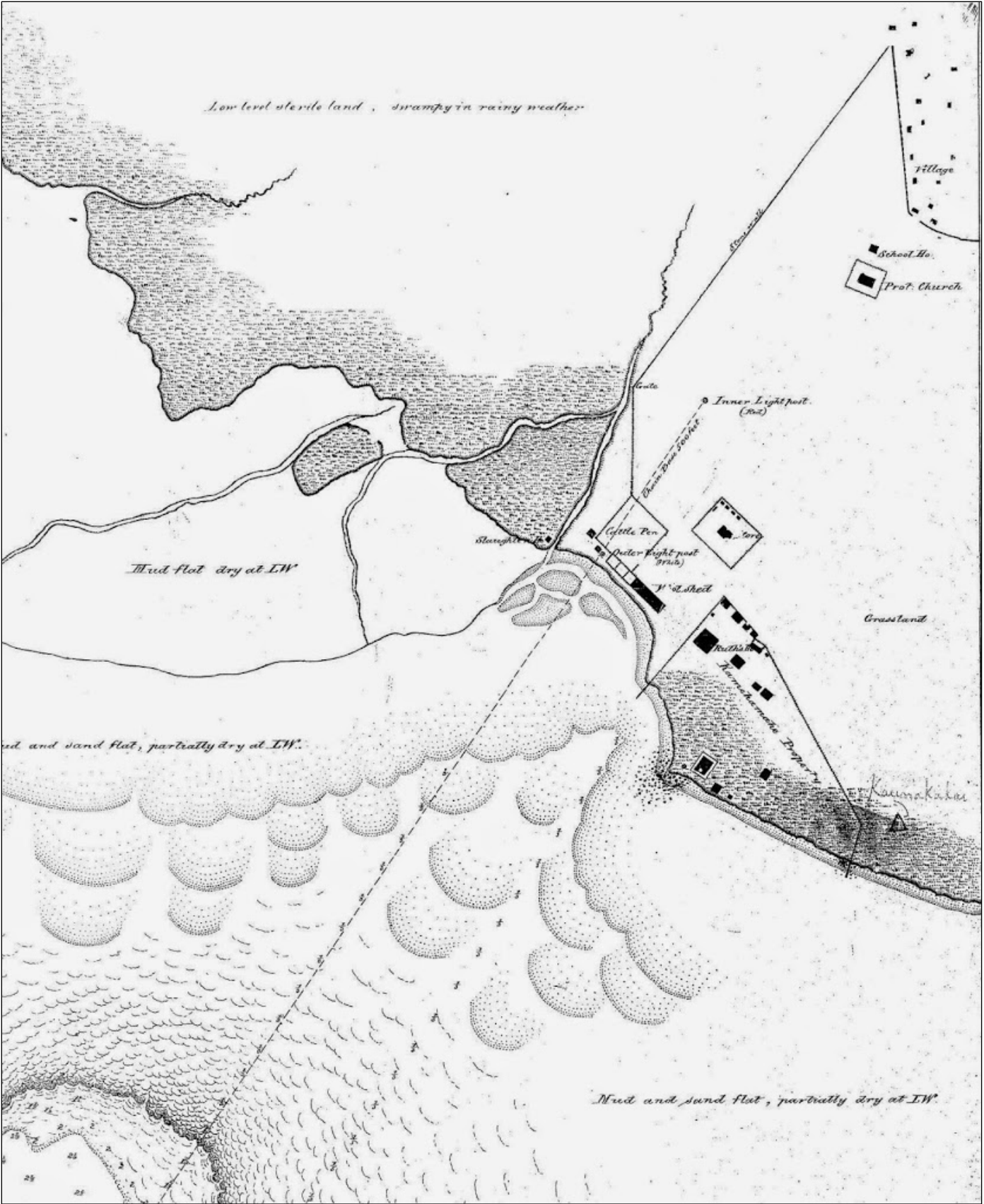


Figure 3.5: Kaunakakai Harbor, Molokaʻi, by G. E. G. Jackson, 1882.

A 1924 land court map identifies four large salt evaporation ponds on either side of Kaunakakai Stream that were developed by the residents of Kaunakakai in 1910 (Chris Hart & Partners 1993, F-11). In 1902 the American Sugar Company introduced mangroves to stabilize the coastal mudflats at Pālā’au in south-central Moloka’i and to hold back the soil washed down by heavy rains into the sea (Allen 1998, 62). Since its introduction the mangrove has migrated eastward taking over much of the coastline. In doing so, it has reduced the area of wetland habitat important for endemic waterbirds, and it has also encroached onto the reef flat, coastal beaches, and fishponds making many of these areas inaccessible. Despite these negative outcomes, mangrove has reduced the amount of sediment that is transported from the watershed to coastal waters and the reef. It has also reduced erosion caused by coastal wind and wave energy (Roberts, Lucile M and Field, Michael E. 2008, 134).

3.2.4 1921 – 1950

The development of the ranching, sugar, and pineapple industries brought new migrants to Moloka’i, and as the population grew there was a demand for new businesses, services, infrastructure, and homes to support the growing population.

With its central location and proximity to the wharf, Kaunakakai grew quickly during the 1920s and 1930s to become Moloka’i’s main business center. In 1935 Kaunakakai’s growth was further stimulated when “all County buildings were permanently moved intact from ‘Ualapu’e to Kaunakakai where they are situated today” (Chris Hart & Partners 1993, F-5).

During the 1920s Kalama’ula’s population also grew after the United States Congress passed the Hawaiian Homes Commission Act in 1921. By 1922 seventy-nine Hawaiian Homesteading families moved to Kalama'ula, which contributed to the demand for commercial services in Kaunakakai and its subsequent population growth

The physical growth of Kaunakakai is evident when comparing the 1900 survey that describes Kaunakakai as a “native village”, and documents just a handful of structures (Figure 3.7), with aerial imagery of Kaunakakai taken in 1950 (Figure 3.8) that captures a town with several defined roadways serving a node of residential and commercial structures.



Figure 3.6: Cropped survey of Moloka’i’s south-central coastline. Taken from: [Hawaiian Government Survey, Molokai Middle & West Section, M.D. Monsarrat 1886.](#)

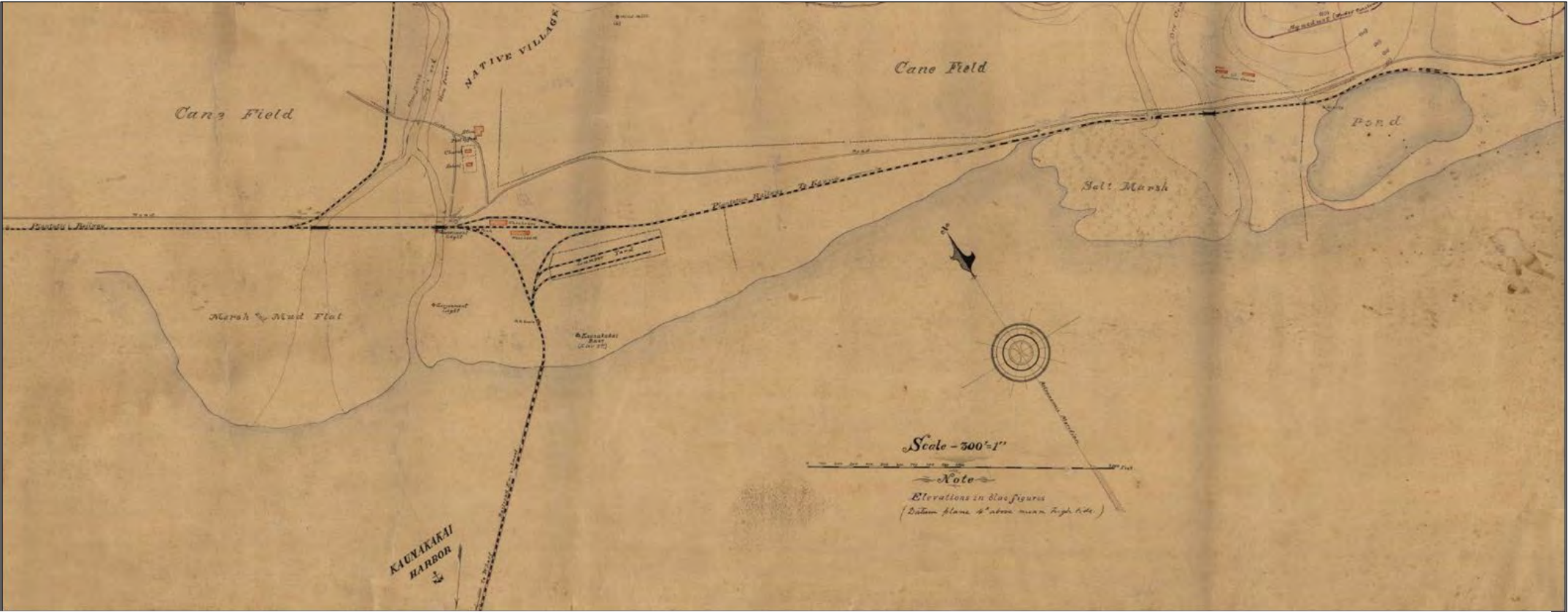


Figure 3.7: Cropped survey of Kaunakakai and abutting shoreline. Taken from: [Kaunakakai and Vicinity, American Sugar Co., Molokai Hawaiian Islands, May 1900.](#)

In 1934 the wharf at Kaunakakai was lengthened to nearly .5 mile and expanded and fortified so it could carry a two-lane road and handle additional shipping capacity. These improvements further disrupted the along-shore currents, waves, wind, and the transport of sediment between Kapa‘akea and Kalama‘ula.

By 1930, much of the island was devoted to plantation agriculture or to grazing. Both activities continued to alter the land of the Ho‘olehua Saddle and the coastal plain. As Handy (1931) noted, most fishponds by this time had been abandoned and were filled with mud (Roberts, Lucile M and Field, Michael E. 2008, 126).

In 1945, the Seaside Inn, precursor to the Pau Hana Inn, opened (Chris Hart & Partners 1993, F-13). Between 1945 and the 1980s additional visitor accomodation and commercial services would be developed along the coastline within the SM-SEMP area.

In response to episodic flooding, in 1950 the Army Corps of Engineers built a levy along both sides of Kaunakakai Stream to divert floodwater away from the town and towards the sea (ibid., F-14).

As illustrated in Figure 3.8, by 1950 the mudflats between Kalama‘ula and Kaunakakai Stream had largely been overtaken by invasive mangrove. This photo also depicts the coastal marsh and wetlands of Kapa‘akea prior to the development of residential lots in the mid-1950s. As of 1950, the shoreline between the Kaunakakai Wharf and the community of Kamiloloa-One Ali‘i was still largely sandy beach, interrupted only by the Kaloko‘eli Fishpond.

“My mother could walk from this lot [in Kalama‘ula} to the wharf [unimpeded]. All mangrove now”.

Penny Martin, Kalama‘ula Shoreline Lessee (Multi-Generational)



Figure 3.8: USGS, aerial imagery of Kaunakakai and adjacent coastline. February 27, 1950.

3.2.5 1951 – Present

In the late 1940s much of the coastal plain between the Seaside Inn (Pau Hana Inn) and the eastern side of the Kaloko‘eli fishpond was undeveloped. Historically, much of this area was wetland and salt marsh fed by two gulches and the ocean where the Kapa‘akea subdivision now exists. Ash from Kaunakakai’s trash incinerator was allegedly placed as fill in the marsh ([Nancy McPherson, personal communication January 31, 2019](#)). After World War II the marsh was filled to make the land for the development of the Kapa‘akea subdivision in the early 1950s ([ibid.](#)). By 1964 the Kapa‘akea Subdivision is largely developed as seen in Figure 3.9. Appendix D provides a more detailed history of these early subdivisions.

At one juncture, commercial interests attempted to fill portions of the 23-acre Koheo Wetland leading to citizen action that prevented development and resulted in the wetland’s undeveloped status ([Aleone Gibbons personal communication, January 31, 2019](#)).

The Hotel Moloka‘i was built in 1968 just east of the Kaloko‘eli Fishpond, and the Moloka‘i Shores was built in 1977 just west of the Kaloko‘eli Fishpond. These facilities were built to accomodate an increasing number of visitors to the Island.

The growth of the resident and visitor population between Kalama‘ula and the One Ali‘i fishpond led to an increase in sewage discharge. The Kaunakakai wastewater reclamation facility was developed in 1969 to meet the needs of Kaunakakai residents. The facility’s detention pond is visible in aerial imagery taken in 1977 (Figure 3.10). The facility pumps its treated wastewater into injection wells that are located just north of town. Many of the older houses in the area use cesspools to process their wastewater while newer residences use septic systems. Some of the larger commercial establishments and condominiums use private treatment systems to process their wastewater ([Roberts, Lucile M and Field, Michael E. 2008, 127](#)). “There is a potential—as yet undocumented—impact on the reef from the migration of sewage through ground-water seepage. Nutrients in the sewage may contribute to blooms of undesirable algae” ([ibid., 127](#)).

Figures 3.9 and 3.10 illustrate the increasing coastal development that occurred over the thirteen years from 1964 to 1977. As of 1977 sandy shoreline is still visible between the Kaunakakai Wharf and the beach fronting the Hotel Moloka‘i. However, the beach appears to have receded between the Hotel Moloka‘i and the Ali‘i Fishpond (Figure 3.10).

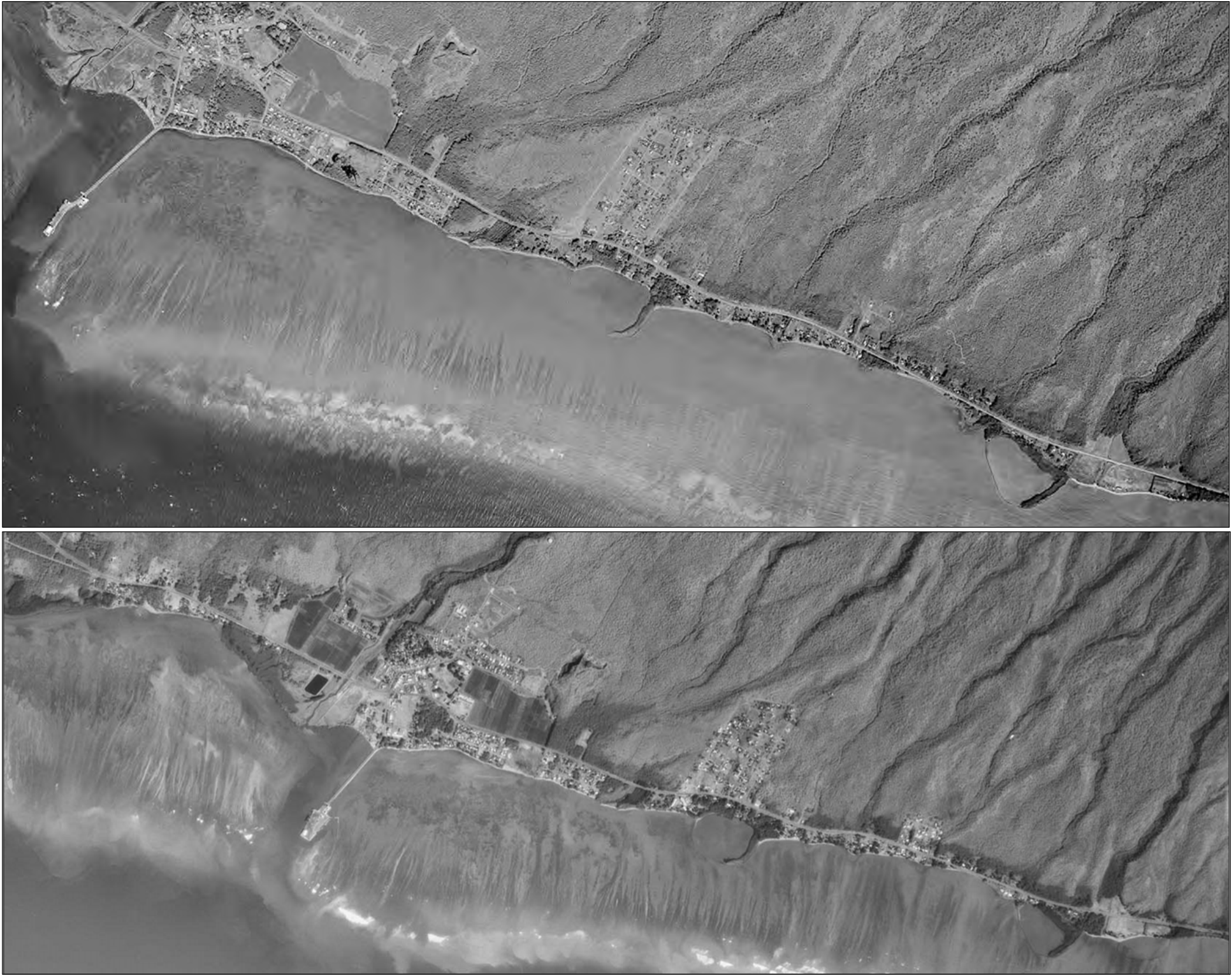


Figure 3.9 (Top): Southcentral Moloka‘i, EKO - 2CC - 43, December 28, 1964. Figure 3.10 (Bottom): Southcentral Moloka‘i, USGS, January 6, 1977.

Since 1977 there has been significant spread of invasive mangrove in both the Kaloko‘eli and Ali‘i Fishponds (Figures 3.11 and 3.12).

Aerial imagery taken in 2000 (Figure 3.11) and 2021 (Figure 3.12) also illustrate the significant loss of sandy shoreline that has occurred in the SM-SEMP area since the 1970s. In response, there has been a proliferation of shore armoring installed along oceanfront lots in Kapa‘akea but not much armoring has been erected in Kamiloloa-One Ali‘i. The armoring (seawalls, rocks, rubble mounds, etc.) has contributed to down drift erosion creating a domino effect which leads to more armoring of the coastline as down drift landowners try to protect their property from the erosion caused by seawalls updrift of their property.

The various walls are indicative of attempts to retain land behind the wall rather than allowing the land to migrate to its natural state and grade. Oceanfront properties in Kamiloloa have fallen trees and short embankments along the seaward edge of their property that are indicative of shoreline retreat and coastal erosion. Most oceanfront residents consistently noted that their lot used to extend further seaward, and those seaward portions of their lot are now regularly submerged, not just during high tide events.

A root cause of the erosion is rising sea levels. According to coastal scientists, “over the next 30 to 70 years, homes and businesses located near the shoreline will be impacted by sea level rise” ([Hawai‘i Climate Change Mitigation and Adaptation Commission 2017, 115](#)). According to the Hawaii Sea Level Rise Vulnerability and Adaptation Report, “Coastal portions of Hawaiian Home Lands, such as in Kalama‘ula...would be flooded with sea level rise displacing native Hawaiian families that live in this area. In addition, fishing and cultural practices taking place along the shore would be impacted as beaches erode. In a recent study of multiple coastal hazards, four of the six Hawaiian Home Lands on Moloka‘i, Kamiloloa-Makakupā‘ia (assessed together due to proximate geography), Ho‘olehua-Pālā‘au, Kalama‘ula, and Kapa‘akea, are estimated to have the greatest potential for people to be displaced by tsunamis, waves, and sea level rise” ([ibid. 129](#)).



Figure 3.11 (Top): Aerial Imagery, South Shore Moloka‘i, May 16, 2000. **Figure 3.12 (Bottom):** Aerial Imagery, South Shore Moloka‘i, 2021 ([Google Earth Image 2021 Maxar Technologies, Data SOEST/UHM](#))

3.3 THE SOCIOCULTURAL ENVIRONMENT

Despite its modest size and population, Molokaʻi is often referred to as the “last Hawaiian Island” due to its abundance of cultural resources and continuation of cultural traditions. Roughly 63% of Molokai’s population is either Native Hawaiian or part-Hawaiian or other pacific Islander, the largest proportion in the State of Hawaiʻi (DBEDT, 2011, Table 6). As Hawaiʻi’s population continues to grow, Molokaʻi has been able to retain its close-knit communities and laid-back lifestyle. Many residents cherish their subsistence lifestyle and view access to fishing, hunting, and gathering sites to be of great importance as highlighted in a personal interview with DHHL homesteader Aunty Leilani Wallace:

“Important to get food from ocean – our icebox is from One Aliʻi [beach park] down to Kalamaʻula. Not the beach. Crab, pua – ‘amaʻama [baby mullet], ‘ōʻio [bonefish], āholehole [menpachi], and pāpio [jack]. Outside the reef – kala [unicorn fish], kole [surgeon fish], manini [tang], uhu [parrotfish], palani [eyestripe surgeonfish]...”

For Molokaʻi as a whole, “a reported 40% of the population rely on subsistence farming, hunting, and fishing” (Molokai Health Center, 2021).

Molokaʻi’s population declined to 6,275 persons in 2019 (American Community Survey, 2019), from 7,404 persons in 2000 (2010 State of Hawaiʻi Data Book, Table 1.10) a 15% decline. In 2020 Molokaʻi had 2,229 households spread over 260.46 square miles (2020 State of Hawaiʻi Data Book, Tables 1.10 and 1.12). Of the total island population, there are approximately 1,821 people residing on DHHL lands (American Community Survey, 2019, Table DPO2). Kaunakakai is the most populous area of the island with a population of 3,038 (American Community Survey, 2019, Table S0101) and a median age of 44.1 (ibid.).

Over the past few decades, several of Molokaʻi’s large businesses such as the Kaluakoi Resort, Del Monte, Dole, Pau Hana Inn, and the Molokaʻi Ranch Hotel have closed, leaving many residents with few employment options. Many residents have taken multiple part time or seasonal jobs, often without benefits, to compensate. As of May 2021, Molokai’s not seasonally adjusted unemployment rate was 7.3% (DLIR 2021, 2). The median household income in East Molokai (census tract 317) was \$41,705 (U.S. Census Bureau's American Community Survey 2015-2019, Table 2).

In 2019, the Kalamaʻula Homestead had an estimated population of 322 people (American Community Survey 2019, Table DPO2). Median household income was \$61,875. There were more females (180) than males (142), and the median age was 35.6 (ibid.). Household size averaged 3.54 people, and roughly 88% of the neighborhood’s residents were native Hawaiian or part Hawaiian (ibid.).

The Kapaʻakea Homestead had an estimated population of 166 people in 2019 (ibid.), roughly half as many people as the Kalamaʻula Homestead. Median household income in the Kapaʻakea subdivision was \$32,813. Similar to Kalamaʻula, the Kapaʻakea homestead had more females (85) than males (81), but the median age was younger at 34.5 years old. Household size averaged 3.25 people, and nearly 98% of the Kapaʻakea’s residents were native Hawaiian or part Hawaiian (ibid.).

The Kamiloloa-Makakupaʻia Homestead was the least populated of the three homestead areas having roughly 75 residents in 2019 (ibid.). Median household income was \$32,500. Unlike Kalamaʻula and Kapaʻakea, the Kamiloloa-Makakupaʻia Homestead had more males (45) than females (30). The median age was 35.2 years old (ibid.). Household size averaged 2.68 people, and roughly 89% of the neighborhood’s residents were native Hawaiian or part Hawaiian (ibid.). Please see Table 3.1 for select demographic data.

Table 3.1	SELECTED DEMOGRAPHIC ESTIMATES HAWAIIAN HOME LAND COMMUNITIES		
	Kalamaʻula	Kapaʻakea	Kamiloloa-Makakupaʻia
Population	322	166	75
Males	142	81	45
Females	180	85	30
Median Age	35.6	34.5	35.2
Hawaiian/Part Hawaiian	88.2%	97.60	89.3%
Housing Units	108	61	39
Households	91	51	28
Avg Household Size	3.54	3.25	2.68
Median Household Income	\$61,875	\$32,813	\$32,500
Table 3.1. Source: American Community Survey, 2019, ACS 5-Year Estimates Data Profiles. Table DP02.			



Photo: Coastal structure Kamiloloa, Molokaʻi.

Western contact also brought de-forestation and the loss of sandalwood trees through direct harvest. Land clearing for sugarcane production also destroyed much of the native vegetation. As a result of these human activities, endemic plants quickly declined and large areas of the low and upland portions of the Kamiloloa and Kaunakakai watersheds became barren.

Along with water diversions, these vegetative changes caused perennial streams that flowed nearly continuously to become ephemeral, flowing only occasionally or intermittently (Jokiel, 2006). These terrestrial changes further accelerated erosion of upland soils and the deposition of sediment into nearshore ocean waters during heavy rainstorms which caused the inner reef to become inundated with layers of silt and mud that smothered corals. This excessive input of sediment into nearshore areas also filled fishponds and harmed their productivity.

3.4.3 Lowlands within the Coastal Plain

Much of the lowlands between Kamehameha V Highway and the shoreline have been developed with housing and graded for associated roadways, drainage, and wastewater infrastructure. The natural ecosystem in this area has been heavily modified by human activity.

Historically, there was a salt marsh fed by two gulches and the ocean where the Kapa’akea DHHL subdivision now exists. Based on an American Sugar Company map circa 1900’s, a railway line to Kawela was parallel and just makai of the Kamehameha V Highway, abutting the salt marsh that is now the Kapa’akea homestead lots.

In 1961, serious flooding caused substantial damage to the homes in Kapa’akea that were inundated with two to three feet of standing water. To address chronic flooding at Kapa’akea, drainage improvements were made between 2007 and 2011 including grading the edge of the roadway, installing fords at two locations on the loop road, and lining the drainage ditches with geotextile fabric mesh for erosion control. Additional flood mitigation improvements underwent an environmental assessment in 2016 but have yet to be permitted or constructed. These efforts address flooding, but not erosion or shifting of the shoreline’s location, or sea level rise.

3.4.4 Coastline

The project area’s coastline primarily consists of low-energy, shallow, nearshore waters along a sandy, silty, sediment-laden shoreline that is absent of cliffs, bluffs, or steep embankments. The coastline is interspersed with wetlands, mangrove forests, stream outlets, drainages, fishponds, and shoreline hardening structures that, along with the causeway to the Kaunakakai Wharf and Harbor, substantially

influence the dynamics of the shoreline and the movement of sediment along the shore and within the inner reef zone.

Sediment along the shore comes from both upland sources and the reef offshore. Sand excreted by grazing herbaceous fish, shells from invertebrates, and coral fragments that break free of a main colony during storms contribute to the sediment supply and the formation of sandy beaches.

On many of the oceanfront properties along the Kamiloloa-One Ali’i shoreline, the natural berm mauka of the shore, with its native vegetation and raised topography, has been lost or heavily altered. In many cases, the crest or slight rise between the shore and inland areas has been graded for property development. The alteration has resulted in lost capacity to absorb wave energy and runup and limit or prevent flooding. Dense thickets of keawe trees also occur along this shoreline altering sediment transport and reducing muliwai (brackish or groundwater influx).

The shoreline fronting the Kapa’akea community has largely been hardened with seawalls, boulders, and other anthropogenic material.

3.5 THE MARINE ENVIRONMENT

3.5.1 Reef Zone Characteristics

The coral reef that parallels Moloka’i’s south shore is the largest continuous fringing reef in the main Hawaiian Islands (Ogston and Field, 2010). The shallow reef flat has depths around 6.5 feet or less and extends nearly a mile offshore in the Kaunakakai area, rising to a reef crest that is partially exposed at low tide (Cochran-Marquez, 2005). Figure 3.15 illustrates the transition from the inner reef flat, which is covered in sediment, to the reef crest exposed at low tide, to the fore reef which harbors coral growth (Field, Cochran, Logan, and Storlazzi, 2008).

The inner portion of the reef flat is a wide, shallow depression extending offshore from fishponds and a shoreline that has a band of fine-grained sediment. Much of this inner reef flat is covered with a thick mixture of terrigenous (land-based) mud, silt, and carbonate sand. Sand patches and coral-covered pavement become more dominant along the seaward edge of the reef flat and coral coverage increases with distance from shore (Figure 3.15). The mid-to-outer reef flat has live corals and patches of fine-grained sediment and grooves of sand and gravel (Calhoun and Field, 2008 in Ogston and Field, 2010). The reef crest has a diverse array of coral species that are wave resistant.

Seaward of the reef crest, the fore reef alternates between abundant reef and barren hard pavement. The fore reef platform fronting One Ali’i, Kamiloloa, and extending west to Kaunakakai has barren areas

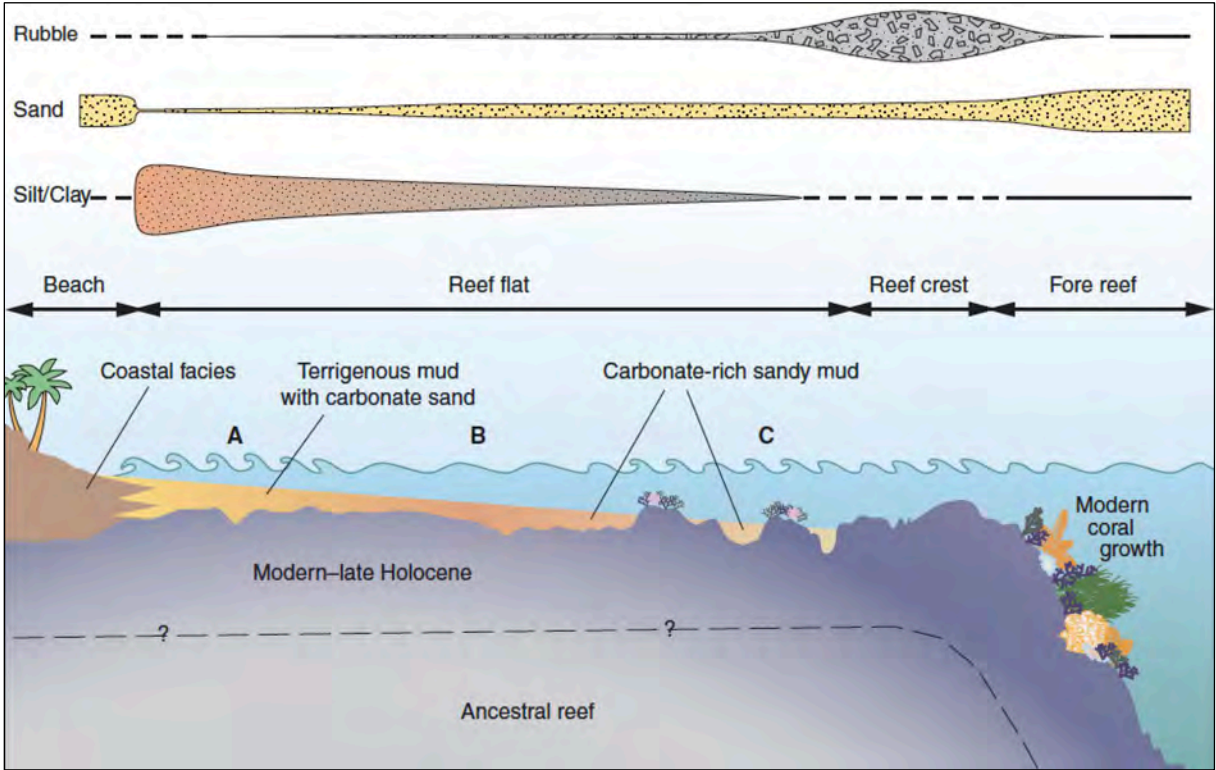


Figure 3.15: Major anthropogenic stressors the affects Moloka’i’s south shore reef habitat (Field, Ogston, and Storlazzi, 2011).

that form a “dead zone” relative to coral growth (Cochran-Marquez, 2005). The outer reef is mostly comprised of live coral, reef rubble, and sand-sized carbonate sediment. This area follows a pattern of spur and groove morphology that drops in depth to ninety feet, where it transitions into a sloping sand-covered plain of the shelf zone (Cochran-Marquez, 2005).

3.5.2 Marine Flora and Algae

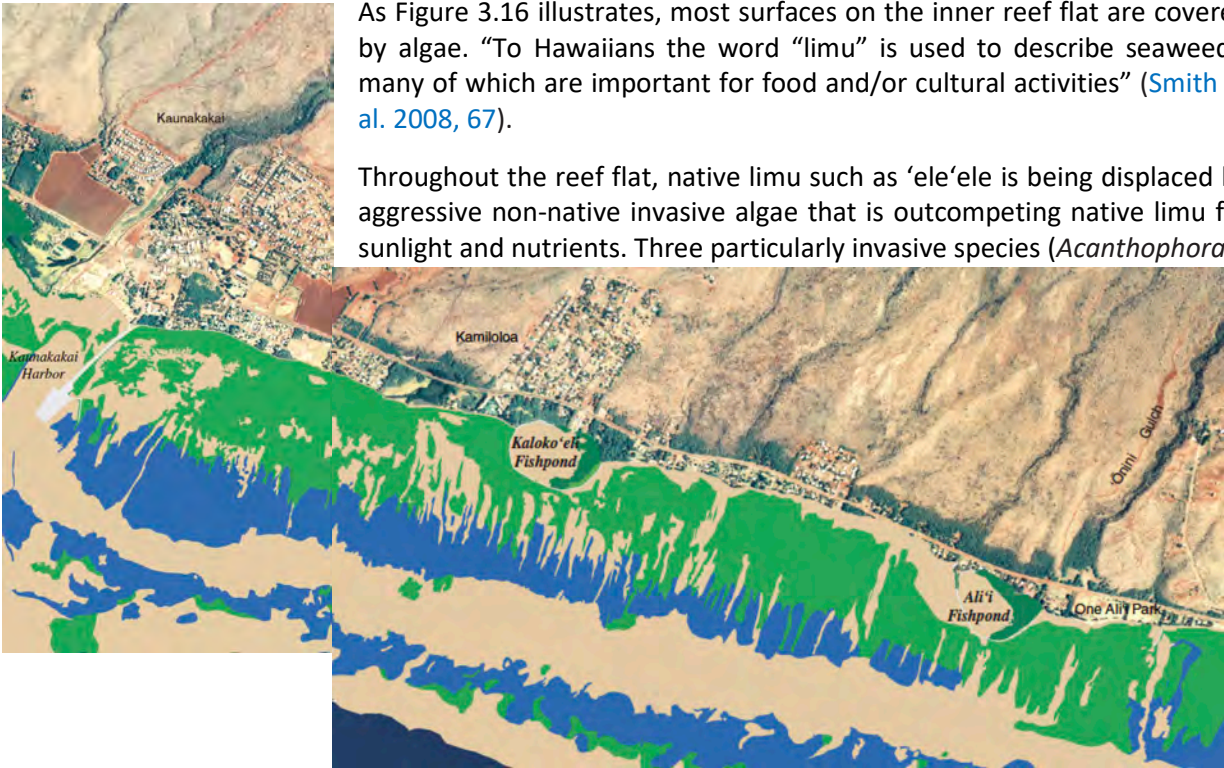


Figure 3.16: Biological coverage along Moloka’i’s south shore indicating algae (green), coral (blue) and uncolonized (tan) areas (Cochran-Marquez, 2005).

spicifera, *Hypnea musciformis*, and *Gracilaria salicornia*, commonly known as gorilla ogo) are outcompeting native limu for sunlight and nutrients (Smith et al. 2008, 70). *Hypnea musciformis* is also known to wash up onto the beaches throughout the project area creating an unsightly mess.

“In 2005, we used to have twenty-five different species of limu. Limu kala disappeared eight years ago.”

Noelani Lee Yamashita,
Former Executive Director, Ka Honua Momona

While under threat from invasive algae, several edible forms of native limu can still be found within the project area’s shallow reef flat including limu nanauea (*Gracilaria coronopifolia*), long ogo (*Gracilaria parvispora*), limu pālahalaha (*Ulva fasciata*), and limu ‘ele‘ele (*Enteromorpha prolifera*).

The inner and middle reef flat is also rich in native seagrasses (*Halophila hawaiiiana*). These seagrasses play an important role in the marine ecology by stabilizing sediment which would otherwise drift onto the reefs. Seagrasses are also a food source

for many marine organisms and provide habitat for several species of fishes and marine invertebrates (Smith et al. 2008, 70).

The green alga *Halimeda kanaloana* is abundant seaward of the project area’s fore reef in deep sandy areas. *Halimeda kanaloana* is an important part of the ecosystem and is known to be a source of sand (Smith et al. 2008, 74). Its skeleton is made of calcium carbonate which accumulates in quiescent conditions but can break down quickly from abrasive wave action. The plant forms productive meadows of habitat on the seafloor that is important for smaller fish, shrimp, urchins, invertebrates, and other marine life.

3.5.3 Fish Assemblage

South Moloka’i’s reef flats support an assemblage of fish, many of which are harvested for subsistence consumption. A range of fish families are represented, with the following six families comprising roughly ninety percent of the total fish biomass (Friedlander and Rodgers 2008, 61):

- 1. Surgeonfishes;
- 2. Parrotfish;
- 3. Triggerfishes;
- 4. Wrasses;
- 5. Snappers; and
- 6. Jacks.

Herbivores tend to dominate both shallow and deeper waters along the reef flat. Kamiloloa is a notable exception where benthic surveys found that invertebrate feeders comprised a majority of fish biomass. This was a function of the overall low biomass at Kamiloloa (Friedlander and Rodgers 2008, 62). Subsistence fishing, and the harvesting of other marine resources, is vitally important to both the Hawaiian culture and the economic security of many DHHL lessees within the project area. “A variety of fishing techniques ranging from trolling, bottom fishing, netting, and spearing are utilized. Gathering of limu (seaweed), shellfish and crustaceans is widely practiced” (Jokiel 2006, 11).



Photo: Subsistence fishing, South Shore Moloka’i.

“In the old days, was lots of crab – kūhonu crab, alamihi crab. They still get, but not like before”.

Henry Paleka, Kalama’ula Shoreline Lessee

3.5.4 Coastal Fauna

Hawai’i has three main edible crabs: Kona, kuahonu, and Samoan. Kūpuna noted a significant change in the abundance and predominance of the Samoan crab, an invasive species, along the sandy silty shorelines in the study area. Several observed a distinct change from smaller, native crabs to Samoan Crabs (aka mud crab) whom have larger, stronger, front claws. This invasive is tastier and more edible according to the kūpuna, and thus more preferred and harder to find (personal communication, February 2nd, 2020). The Samoan Crab was introduced in Kaneohe Bay, Oahu in 1926 by the State with the intent to establish a commercial fishery on Oahu, and the Big Island (Cazar, 2015)(Cascorbi, 2011, 5). The crab inhabits muddy bottoms in brackish water along the shoreline, mangrove areas, and river mouths; environments that are common in the study area. The crabs can grow to 20 cm, and weigh several pounds, and are omnivorous eating both plants and other mollusks including other crabs.

The Koheo Wetland, also referred to as the Ka La’i o Ke Kioea Bird Sanctuary, is a 10-acre coastal salt marsh that abuts the western end of the Kapa’akea Homestead subdivision. “It is now home to dozens of species of native shorebirds, including one of the rarest shorebirds in the world and Kaunakakai’s official bird, the kioea, also known as the bristle-thighed curlew” (Chao, E. 2012). Other protected species have been observed by local ornithologist Arleone Dibben-Young on the mudflats offshore during low tide in the vicinity. They include the federally endangered ae’o or Hawaiian Stilt and Whimbrel’s that are protected by the Migratory Bird Treaty Act (Manera, 2013, 33).

The coastline along the DHHL homesteads does not appear to have ideal habitat for endangered species, although in 2005 it was reported that a captively raised monk seal frequented the harbor area until it was removed. Separately, a downed ‘Ua’u kani, or Wedge-tailed shearwater was observed about a mile southeast of the harbor (Manera, 2013, 33).

A number of protected species can be found on Moloka’i and may occasionally be observed within the coastal areas of Moloka’i’s south shore. Protected birds include:

- Nēnē, Hawaiian goose (*Branta sandvicensis*),
- ‘Ua’u kani, Wedge-tailed shearwater (*Puffinus pacificas chlorhynchus*),
- ‘Ua’u, Hawaiian Petrel (*Pterodroma sandwichensis*),
- ‘A’o, Newell’s shearwater (*Puffinus auricularis newelii*),

- Ae’o, Hawaiian stilt (*Himantopus mexicanus knudseni*)
- ‘Alae ke’oke’o, Hawaiian coot (*Fulica alai*), and
- ‘Alae ‘ula, Hawaiian Gallinule (*Gallinula chloropus sandvicensis*)

Other protected species include:

- Honu, threatened green sea turtle (*Chelonia mydas*),
- ‘Ilio-holo-i-ka-uaua, Hawaiian monk seal (*Monachus schauinslandi*),
- ‘Ōpe‘ape‘a, Hawaiian hoary bat (*Lasiurus cinereus semotus*), and
- Blackburn’s sphinx moth (*Manduca blackburni*).

The relative isolation and small sizes of the populations of these protect species on Moloka’i make them extremely vulnerable to perturbations or disruptions of their lifestyle or the habitat they depend on, for example degradation or development of their feeding, resting, roosting, or breeding areas. Because the populations are small, unexpected disasters such as hurricanes or wildfires could have an outsized negative effect and lead to their extinction.

More traditional activities such as development of formerly undeveloped areas (especially along the southeastern coast) can lead to the loss or disturbance of habitat that is critical to the native species long-term survival. Improper grading techniques near stream corridors or gulches can result in sedimentation and degradation of terrestrial, freshwater, and marine habitat. Improperly situated development along the coastal plain can increase nutrients in the



Photo: An endangered Hawaiian Ae’o, South Shore Moloka’i.

ground water that contribute to non-native algal blooms which affect fish populations and coral habitats negatively.

3.5.5 Terrestrial Erosion and the Marine Environment

Upland sediment has a major influence on the project area’s coastal geomorphology. Rainstorms can dislodge terrigenous soils, rocks, and silt from upland sources and this sediment is then carried by streams, gulches, and drainageways to the shore. Ancient Hawaiians built at least fifty-two fishponds on the south shore of Moloka’i (Wyban, 1992 in Jokiel, 2006). But many of these fishponds have formed catchment basins for upland sediments that are released during heavy, but infrequent, rainstorms.

The dominant sediment input to the marine environment is from infrequent kona storms that occur several times per winter and place fine sediment in fan deposits near the mouth of drainage gulches (Field et al., 2008 in Ogston and Field, 2010). This fine sediment becomes trapped on the shallow inner reef flat where it is stored in thin deposits and trapped by macroalgae (Ogston and Field, 2010). The deposition of sediment has caused the inner reef to become inundated with layers of silt and mud that has smothered corals and altered both down-slope and along-shore sediment transport patterns. Sediment transport along shore is now dependent on wind strength and direction, nearshore currents, and fishpond size and shape (Jokiel, 2006).

The filling of the project area’s wetlands has amplified the impact of upland erosion on the marine environment. Wetlands capture and filter upland sediment before it reaches the ocean. As the wetlands were filled sediment laden storm runoff, with greater amounts of dirt and silt, flowed into nearshore waters clouding the water, choking fisheries, and polluting nearshore reefs.

3.5.6 Sediment

Sediment concentrations of 10 mg/l or more in the water column are detrimental to coral reefs. This level of suspended sediment results in fewer coral species, less live coral, lower coral growth rates, and decreased rates of production (Rogers, 1993 in Jokiel, 2014). Sediment in the water column can block sunlight needed by corals to photosynthesize and sediment accumulation can eliminate or cover recruitment sites. Sediment can stress individual corals and bury coral colonies. These detrimental conditions for coral (i.e., high sediment-driven turbidity) happen almost daily on Moloka’i’s south shore, especially during the afternoon when trade winds blow at moderate to high speeds (Ogston and Field, 2010) and tides are high (Ogston, Storlazzi and Field, 2004). The situation causes sediment to be resuspended, further impacting reef vitality and degrading reef health and function (Figure 3.17). The recirculated sediment

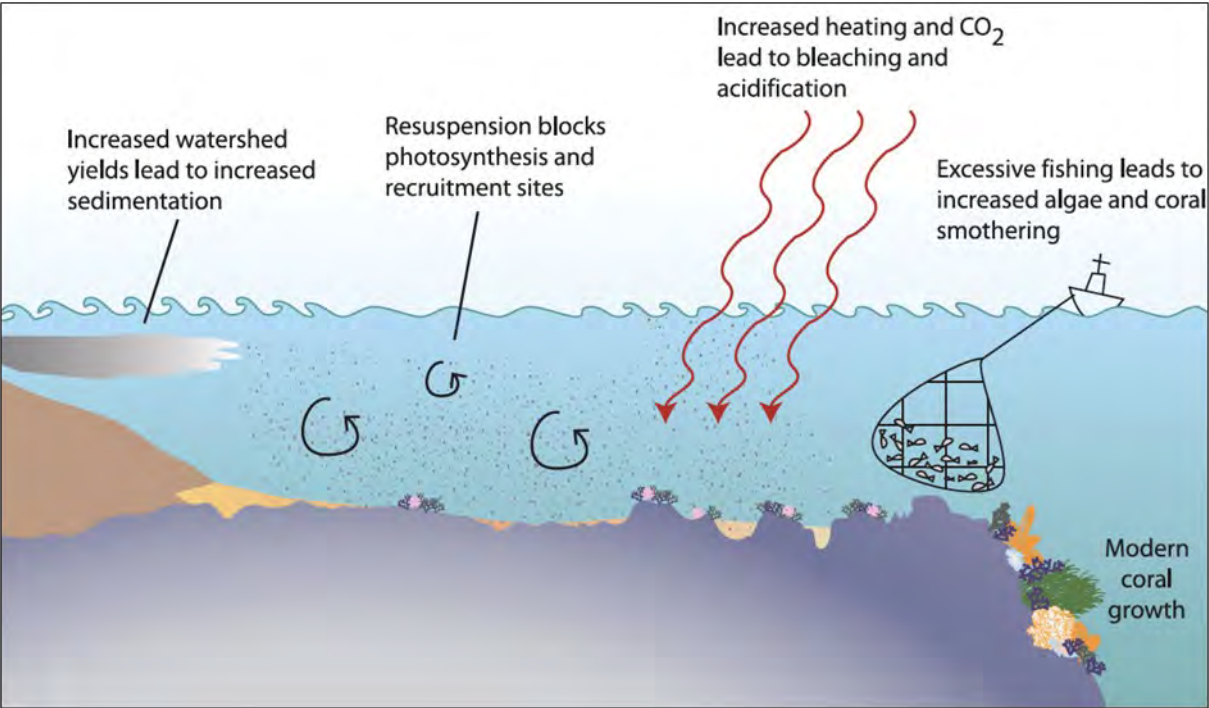


Figure 3.17: Major anthropogenic stressors the affects Moloka’i’s south shore reef habitat (Field, Ogston, and Storlazzi, 2011).

continues to have an adverse impact as it recirculates again and again in the water column until it is flushed out of the marine ecosystem through the reefs spur and groove morphology.

The frequency and duration of turbidity is critical for determining the stress induced on corals. In some cases, rather than causing actual coral mortality, the sediment inhibits coral settlement and recruitment. Coral growth offshore of Kamiloloa and Kawela showed a significant increase with distance from the shore and there was a reduction of macroalgae as one moved further from the shore (Jokiel, 2014). There was a strong inshore to offshore turbidity gradient due to extensive terrigenous sediment discharge from multiple drainage basins, of which Kawela was the most significant (ibid). Sediment moves from east to west due to the predominant wind direction, but it is eventually flushed out by traveling through the spur and groove reef system to be discharged offshore into deeper open ocean waters. The frequent resuspension of terrigenous sediment on the reef is related to wind speed and tide-controlled water depth (Ogston and Field, 2010). These sediment inputs predominantly originate from upland sources, erodible soils, and barren hillsides within the watershed.

In the three kilometer stretch east from Kaunakakai Harbor, coral abundance decreases drastically from the reef average of 90% to values as low as 10%. The cause of the decrease has not been determined, but the role of sediment suspended on the reef flat, and its seaward advection is one possible factor (Ogston, Storlazzi, Field, and Presto, 2004, 567). More recent findings by (Jokiel, et.al., 2014) suggest that the lack of suitable hard substrate, macroalgal competition, and blockage of [coral polyp] recruitment on available substrate account for low coral coverage in areas of high turbidity. Whereas the direct impact of high turbidity on coral growth and mortality is of lesser importance (ibid.).

3.6 PLANNING AND REGULATORY CONDITIONS

The entire State of Hawai‘i, from its mountain tops to the reefs offshore, are within the coastal zone. Federal waters begin at the mean high-water mark and extend 200 miles offshore. This overlaps State waters and submerged lands which extend three miles offshore.

In 1972, the federal Coastal Zone Management Act (CZMA) was enacted to better coordinate and regulate coastal activities between the federal, state and county / municipal levels of government. In 1978, Hawai‘i’s Legislature enacted the Hawai‘i CZMA, HRS 205A, to regulate actions and activities within the state’s coastal zone. Any federal activities that would affect the state’s coastal zone must be consistent with the CZMA’s policies and objectives. Similarly, any state or local projects funded by federal monies or requiring federal permits must be consistent with the state’s CZMA. For instance, dredging or fill for the construction of an offshore breakwater would require federal permits from the U. S. Army Corps of Engineers. The State Office of Planning issues Consistency Determinations that afford the state government the opportunity to review, influence, and modify federal agency decisions affecting the coastal zone.

The Hawai‘i CZMA also delegates the authority to regulate “development” along the coastline to each island’s Planning Commission. This delegation allows for decision making to be local influenced within each island’s Special Management Area (SMA) and Shoreline Setback Area (SSA). The SMA encircles Moloka‘i extending at least 300 feet inland of the shoreline and includes the DHHL homestead properties in this study. The SSA is based on individual lot size and ranges from 40 feet to 150 feet inland of the shoreline, including DHHL oceanfront properties.

The regulatory shoreline’s location is constantly changing because it is the highest wash of the waves during the highest tide of the year. The debris or vegetation line can also indicate its location. Areas mauka of the shoreline are within Maui County and/or the Moloka‘i Planning Commission’s jurisdiction, whereas areas makai of the shoreline are within the State Department of Land and Natural Resources (DLNR) jurisdiction. Areas below the mean tide line are within both state and federal jurisdiction. Thus, if you walked from the pavilion at Ali‘i Park down the dry beach, onto the wet sandy beach, and then stepped into the ocean waters, you would pass through three sets of government regulation: County/Planning Commission, State DLNR, and shared state/federal jurisdictions. On a seawall or revetment, these multiple jurisdictions are compressed together and can make permitting of the structure complex.

The CZMA law encourages home rule and community decision making. In Moloka‘i, the Planning Commission reviews development proposals and may add conditions of approval. They also concur the County Planning Department Director’s recommendations for more minor items or exempt activities that are not development. A private landowner proposing construction makai of Kamehameha V. Highway would submit an assessment to the Maui County Planning Department as it would be a project proposed in the SMA or SSA. The individual owner would have to obtain Commission approval or the Commission’s

concurrence with the Planning Director’s recommendation for an SMA minor permit or SMA exemption.

In contrast, since DHHL is a state government agency, it’s actions must be determined to be consistent with the Hawai‘i CZMA law’s ten objectives and thirty-five policies. This “Consistency Determination” would be made by the State Office of Planning, not the Moloka‘i Planning Commission. However, HRS 205A-22 defines an “Applicant” as “any individual, organization, partnership, or corporation including any utility or **ANY** agency of government” (emphasis added). So DHHL may also have to obtain the Moloka‘i Planning Commission’s or Maui County Planning Department’s approval of an SMA permit and a Shoreline Setback Variance for any seawall, revetment, or armoring fronting any of the homestead subdivisions. Relative to the SMA, actions proposed by DHHL may require approval from both the State Office of Planning and the Moloka‘i Planning Commission or Maui County Planning Department, whereas actions proposed by an individual landowner or lessee should only require approval of the latter ([Dack, 2015](#)).

The State CZMA, HRS 205A-43.6(c) clarifies that the Board of Land and Natural Resources has jurisdiction over shoreline armoring that is seaward of the shoreline, including unauthorized armoring. Any armoring proposed in, or on the edge of the water, as opposed to entirely on dry land, would require approvals by both the State DLNR and the U.S. Army Corps of Engineers because it involves shared federal/state waters in the coastal zone.

In addition, the SSA and/or State permits would trigger compliance with HRS 343, Hawaii’s Environmental Review law. This would require public input, notification, and consultation through the preparation of an Environmental Assessment or Environmental Impact Statement and the acceptance of the environmental document by the ‘authority’. If an individual landowner proposed the shore armoring, the Moloka‘i Planning Commission or DLNR would be the accepting authority. In contrast, DHHL could be the accepting authority if they were proposing the armoring.

In Hawai‘i, a property owner is **not** entitled to protect their oceanfront land at the public’s expense in terms of lost coastal resources or access. Thus, the likelihood of gaining approval for shoreline armoring is low and its effectiveness questionable because of rising sea levels, bigger waves reaching the shore, and the rise in ground water saturating the soils inland of a seawall due to sea level rise. There are also multiple opportunities for legal challenge by an affected party. Thus, protecting the coastline with a seawall, revetment, or rubble mound; or building an offshore structure such as a groin, breakwater, crib wall, or rubble mound requires considerable time (i.e., years), planning and expense, and has uncertain outcomes given their potential adverse cumulative effects. Instead, natural methods that mimic nature are often less costly, easier to permit, and more effective in the long-term.

Other public health and safety regulations apply equally to DHHL, individual landowners, and beneficiaries when constructing new buildings or structures. New buildings must comply with federal flood zone regulations and obtain a

Flood Development Permit (FDP) administered by the Zoning Administration and Enforcement Division of the Maui County Planning Department ([Dack, 2015](#)). This mitigates the risk that a structure will incur flood inundation and helps reduce the risk of flood damage. The FDP is usually processed by the County in conjunction with a building permit but may be applied for separately.

Building permits may be required by DHHL for new structures on homestead properties to ensure occupants health and safety. However, the Definitions section (MCC 16.26B.202) was amended in 2012 to read:

JURISDICTION. The County of Maui of the State of Hawaii, excluding lands placed in the state land use commission's conservation districts and lands set aside under the Hawaiian Homes Commission Act. (Ord. No. 3928, § 1, adopted March 12, 2012).

Grading permits are needed when walls or terraces retain more than four feet of material or soil between their front and back sides. This helps ensure that the wall does not fall over and the soils behind it do not slump forward or shift. Trenching for utilities, excavation for a septic tank, and moving less than 50 cubic yards of material may be exempt from a grading permit in the subject subdivisions, provided erosion control measures are implemented. Changes in the ground’s contour or elevation because of fill should not increase flooding on a neighboring or adjacent property and should not be used in a V or VE flood zone as it could be eroded away exposing a slab or foundation.

Primary coastal sand dunes cannot be graded because they buffer incoming waves, replenish the beach with sand, and filter silt out of ponded stormwater. Only clean sand, not dirt or unclean fill, can be placed in the SSA and shoreline area given that dirty fill could easily pollute the ocean. Grading and fill are regulated by Maui County’s Department of Public Works, Development Services Administration, pursuant to MCC 20.08. Placing sand or fill seaward of the shoreline is regulated by the State DLNR and could trigger additional federal and/or state regulatory reviews. Retaining a berm vegetated with native plants in the rear yard adjacent to the shoreline is a natural, effective means of controlling flooding and erosion.

Appendix C provides additional information on flood zone, shoreline setback, and state certified shoreline regulations.

4.1 COASTAL HYDRODYNAMICS

Molokaʻi’s relative exposure to winds, waves, and swell are depicted in Figure 4.1. Average wave height for the south shore is predominantly influenced by exposure to prevailing northeast trade winds throughout the year, and to a lesser extent southern swell. In summer months, south swells can bring large waves that overtop the fringing reef and reach the shore, particularly during extreme tide events such as full moon or king tides.

Molokai and Lanai
Damaging high waves* and high waves due to hurricanes

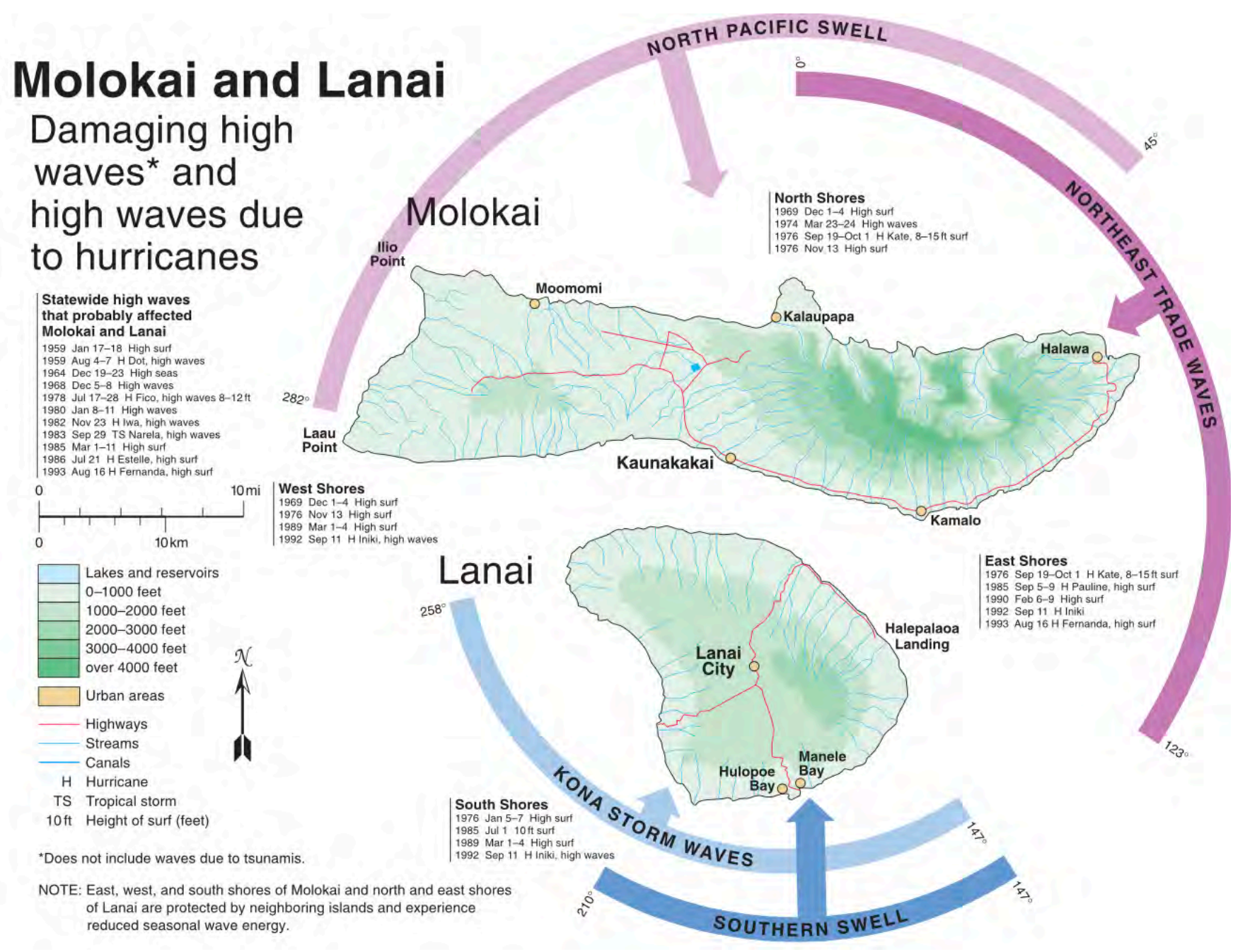


Figure 4.1: Prevailing wind and wave patterns for Molokaʻi and Lānaʻi (Fletcher, C., Grossman, E., Richmond, B., Gibbs, A. 2002).

Factors that influence wave energy and dynamics include: wave conditions (height, period or interval between them), currents (direction, speed), tidal changes, storm surge, bathymetry (depth variations, rugosity), sediment characteristics, and sources of sediment. These factors combine to create the force and energy that alters the physical form of the coastline.

4.1.1 Wind and Currents

Trade wind conditions occur 83% of the time between May and November and 37% of the time between November and May (Ogston and Field 2010, 1029). The wind has a heavy influence on Molokaʻi’s south shore currents because of the inner reef flat’s shallow nearshore area and the extensive offshore fringing reef. The prevailing wind is from the east and picks up in speed and intensity in the afternoon (Figure 4.1). This often creates small churning waves and hastens movement along the shore.

The trade winds are a dominant factor driving sediment flux, resuspension, and transport along the reef. The relative orientation of the south Molokaʻi shoreline to the prevailing winds contributes to the nearly 1,640 feet wide band of fine silt and sediment along the inner edge of the reef flat (Ogston and Field, 2010, 1029). Bands of fine sediment within the reef flat are particularly apparent between Kawela Gulch and the Kaunakakai Wharf causeway (Jokiel, et.al., 2014, 7).

Trade wind generated waves, currents, and tidal elevations on the reef flat control the frequency and duration of turbidity events which impact reef health. Findings from various studies suggest a high level of recirculation of sediments driven by afternoon wind, especially at high tide, with some findings suggesting sediment can be stirred up and recirculated as much as seven times before being flushed out of Molokaʻi’s south shore reef system (Ogston, Storlazzi, Field, and Presto, 2004).

4.1.2 Waves

Large waves generated in deep water usually break and expend their energy on the edge of south Molokaʻi’s offshore reef and have less influence on the nearshore environment (Ogston and Field, 2010). As shown in Figure 4.2, significantly more wave energy reaches the shore at high tide than low tide, regardless of the offshore wave height (Field, Cochran, Logan, and Storlazzi, 2008).

The amount of wave energy reaching the shoreline is relatively consistent and is constrained by the water-surface elevation, not the offshore wave height (Ogston and Field, 2010). Instead, the waves generated by trade winds are the prevailing influence along Molokaʻi’s south shore as they move sediment along the shore and resuspend sediment due to wave growth over the shallow reef (ibid.).

4.1.3 Tides

Tides have a significant influence on south Molokaʻi’s waves and currents because of the shallow, broad, and wide extent of the reef flat. The tide typically ranges from two to just over three feet in height. Although the tidal range is relatively small, it represents a doubling in water depth over much of the reef flat. This tidal variation over the reef flat is important for sediment resuspension and transport because wave heights are limited by the depth of water. During higher tides, the effects of offshore waves are greater on the reef flat because more wave energy is telegraphed into the nearshore and wave energy can be transferred through the deeper water over the reef crest. The greater water depth also allows for larger local wave formation on the reef flat (Field, Cochran, Logan, and Storlazzi, 2008).

4.1.4 Coastal Erosion

Coastal erosion is a natural process whereby the shoreline retreats inland over time due to wind, waves, prevailing currents, and storms. Shorelines are highly dynamic and shift frequently through time. In Hawai‘i, shoreline retreat may occur slowly over time, or rapidly because of acute or episodic erosion events, normally associated with large surf, storm events, and seasonal changes in wave regime. In contrast to episodic erosion, chronic coastal erosion occurs over long periods of time where the shoreline retreats inland because of sea level rise, wind scouring, soil dissolution, and wave action.

Chronic coastal erosion can be exacerbated when sand supplies are confined, sand transport hindered, or sand reservoirs are constrained behind groins, seawalls, revetments, and other similar structures. Slab-on-grade foundations can constrain sand underneath the foundation’s weight, preventing the sand from moving freely along the coastline. Hindering sand movement can deprive down drift properties of the sand or sediment necessary for buffering the erosive effects of waves, currents, and storms.

Armoring a sand or sediment starved area can lead to flanking erosion of areas down drift, and particularly at the end of the armoring. The armoring redirects wave energy to the end of the armored area where the wave’s energy can wrap around the end of the armoring and scour softer materials away. This can result in down drift property owners armoring their property which then stimulates additional down drift armoring until the entire coastal cell is armored. This domino effect is best prevented by evaluating coastal erosion on a regional or littoral (sediment) cell basis, instead of making decisions on a parcel-by-parcel basis.

On a healthy beach where sand and sediment transport are not hindered, the shoreline typically changes with the seasons, with one season being more erosional and the other season facilitating accretion. The width of the beach, which narrows during one season, normally recovers as seasonal wave and current patterns return the previously displaced sand. While sand may shift daily, weekly, monthly, or seasonally, over the long-term the width of the beach remains about the same and the ebb and flow of sand continues unhindered.

A sandy beach serves as a buffer to the incoming waves that cause erosion by absorbing and dispersing wave energy. A healthy reef system contributes to a healthy, functional shoreline and vice-versa.

4.2 LITTORAL CELLS

Within the project area shoreline erosion is caused by waves approaching the shore and removing sediment, and by structures interrupting the movement of sediment along the shoreline. Along Moloka‘i’s south shore currents naturally move sediment, sand, and silt along the coast from east-to-west. However, between One Ali‘i and Kalama‘ula the alongshore transport mechanism is interrupted by structures that extend seaward from the shoreline including the Ali‘i and Kaloko‘eli Fishponds and the Kaunakakai Harbor and Wharf.

Although the fishponds are now part of the coastal environment, they have altered the geomorphology of the coast. Aerial photographs depict an accumulation of sediment on the eastern side of both the Ali‘i and Kaloko‘eli Fishponds and a deficit or scalloped, concave area indicative of shoreline erosion on the western side of each fishpond. The eastern walls of both fishponds break the wind and slow and redirect both incoming wave energy and the current moving along the shoreline from east to west. As a result, the movement of water along the coastline slows and sediment suspended in the water column settles out of the slowed water by gravity. Areas that are upwind and up-current of both fishponds accumulate sediment. In contrast, the areas down drift of both fishponds are deprived of the sediment flowing along the coastline, and this loss of sediment contributes to shoreline erosion.

The Kaunakakai Wharf used to be accessible via an elevated roadway over the water. However, as larger trucks and containers became necessary for supplying Moloka‘i’s needs, a causeway was built. The addition of the causeway to the Kaunakakai Wharf in more recent years redirected and further slowed the prevailing along-shore current by blocking the water’s flow. This added to the deposition and accretion of silt and mud adjacent to the causeway. The causeway further exacerbated sediment accumulation by slowing the along-shore current, allowing more sediment to fall out of suspension, accumulate, and make the area shallower, which in turns slows the current.

Moreover, the addition of a rock breakwater to protect the small boat harbor on the eastern, updrift side of the Wharf, further restricted the natural flow of seawater. Sediment and current patterns may form an eddy and the flushing of sediments from nearshore waters into deeper ocean currents has been impaired. The U.S. Army Corps of Engineers has studied several options to restore the flow of currents through or underneath the causeway but determined that the negative impacts could outweigh the positive benefits of altering the existing situation (Bottin and Acuff, 2001).

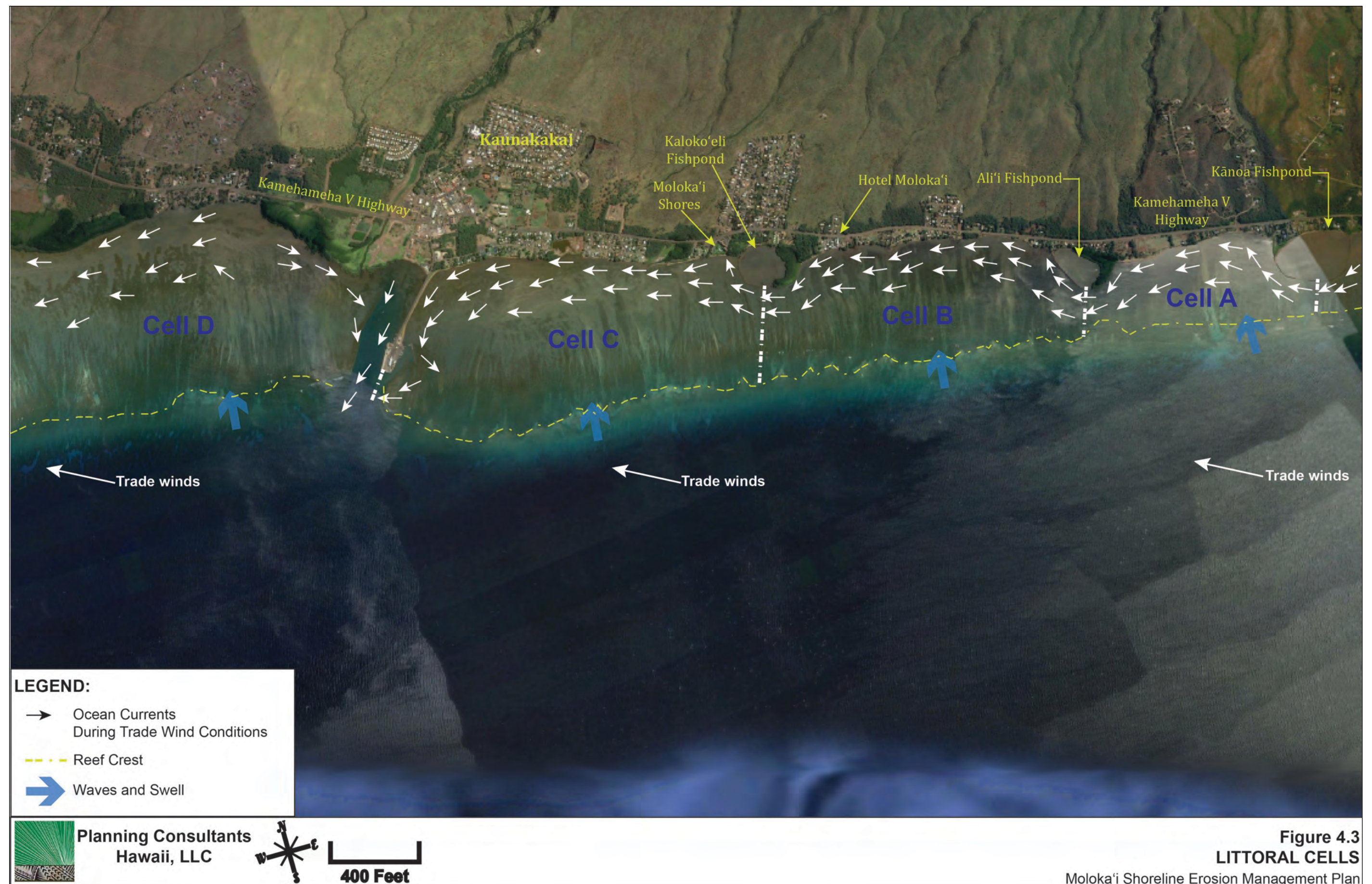
The deposition of upland sediment into the project area’s coastal waters is also changing the geomorphology of the project area’s shoreline. The Kaunakakai, Kapa‘akea, and Kamiloloa streams, as well as and several drainage outlets, carry sediment from the Kaunakakai and Kamiloloa Watersheds to the shoreline fronting the project area. The fishponds capture and stabilize some of this sediment that is released during heavy rains, much like stormwater detention ponds.

Soils and sediment including fine clay, silt, sand, pebbles, cobbles, rocks, stone (pohaku) and boulders move down to and along the shoreline. Lighter aggregate materials can be carried by wind, but most aggregate is moved by water, such as rushing streams, stormwater cutting through dry gulches, or strong waves approaching the shore. This results in sediment flowing in a foreseeable fashion.

Sediment flow can be divided into four littoral cells, “A, B, C, and D”, fronting the DHHL communities, as shown in Figure 4.3. A littoral cell is a coastal compartment that contains a complete cycle of sedimentation including sources, transport paths, and sinks (Inman, 2005). Setting a littoral cell’s boundaries helps to define a specific geographical area in which the sediment budget can be analyzed, and management strategies can be appropriately designed.



Figure 4.2: Reach of wave energy between low and high tide at Kamiloloa (Field, Cochran, Logan, and Storlazzi, 2008).



4.2.1 Kānoa Fishpond to Ali'i Fishpond (Cell A)

Cell “A” is bound by the Kānoa Fishpond to the east and the Ali'i Fishpond to the west as depicted in Figure 4.4. On the western side of the Kānoa fishpond, a series of private properties extend to the west, but they are not part of this study. They are located between the ocean and Kamehameha V Highway and the lots generally become wider to the west towards the wide, sandy beach fronting the One-Ali'i Beach Park (which is just east of the Ali'i Fishpond).

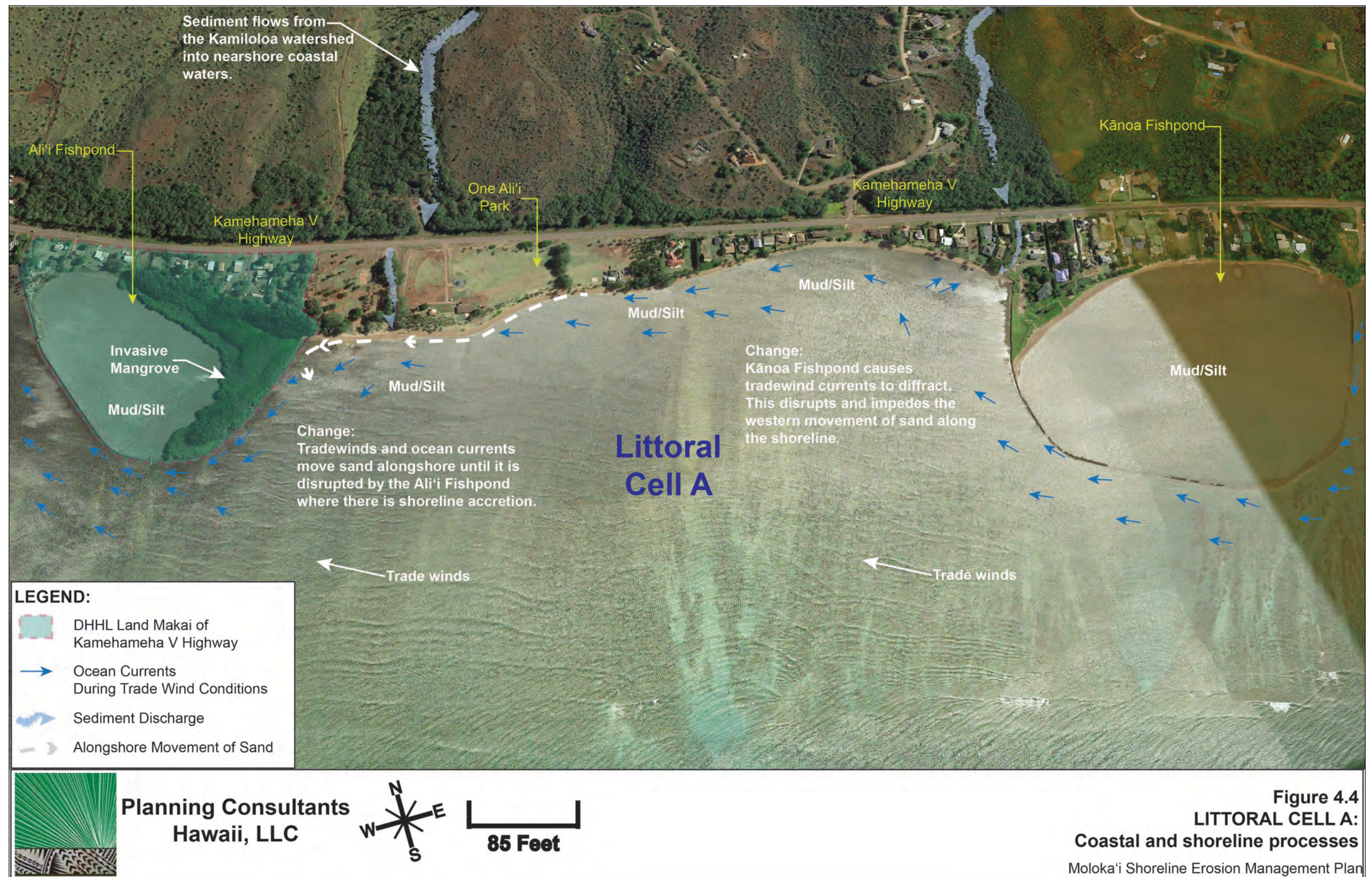
East of One-Ali'i Fishpond, sediment has built up against the fishpond's wall in Cell “A” resulting in shoreline accretion. Over the years, much of the Ali'i Fishpond has filled with sediment and mangrove trees. The wall interrupts the amount of sediment flowing along the coast, depriving sediment from the western side of the fishpond, resulting in shoreline erosion in Cell “B” down drift of the fishpond.



Photos (Left to Right): 1. A sample of beach sand, One Ali'i Park; 2. Looking east from the the backshore of One Ali'i Park.



Photos (Top to Bottom): 1. Looking east fronting Ali'i Beach Park; 2. Looking west along One Ali'i Beach Park.



4.2.2 Ali'i Fishpond to Kaoko'eli Fishpond (Cell B)

Cell “B” is bound by the Ali'i Fishpond to the east and the Kaloko'eli Fishpond to the west as depicted in Figure 4.5. Sandwiched between the ocean and Kamehameha V Highway lies the Kamiloloa subdivision, just to the west of the Ali'i fishpond. Most of the Kamiloloa oceanfront lots are located down wind and down drift of the Ali'i fishpond and to the east of the Hotel Moloka'i. Some of the lots exhibit small embankments due to erosion but most of the lots have more natural gradients to the ocean than the lots at the Kapa'akea subdivision further to the west. In some cases, the grade or embankment has been impacted by man-made impediments. On the western, downwind side of the Ali'i fishpond is a section of Kamehameha V Highway that has experienced coastal erosion and is exposed to wave and tidal action.

Like Cell “A”, there is considerable accretion at the western end of Cell “B” updrift of the Kaloko'eli fishpond, between the Hotel Moloka'i and the fishpond's eastern wall. This is evidenced by three adjoining lots east of the fishpond's wall that have experienced considerable accretion since the lots were platted approximately eighty-six years ago. The accretion, as opposed to erosion on the down drift side of the fishpond, illustrates the significant influence that sediment transport plays in the littoral system along Moloka'i's south shore.

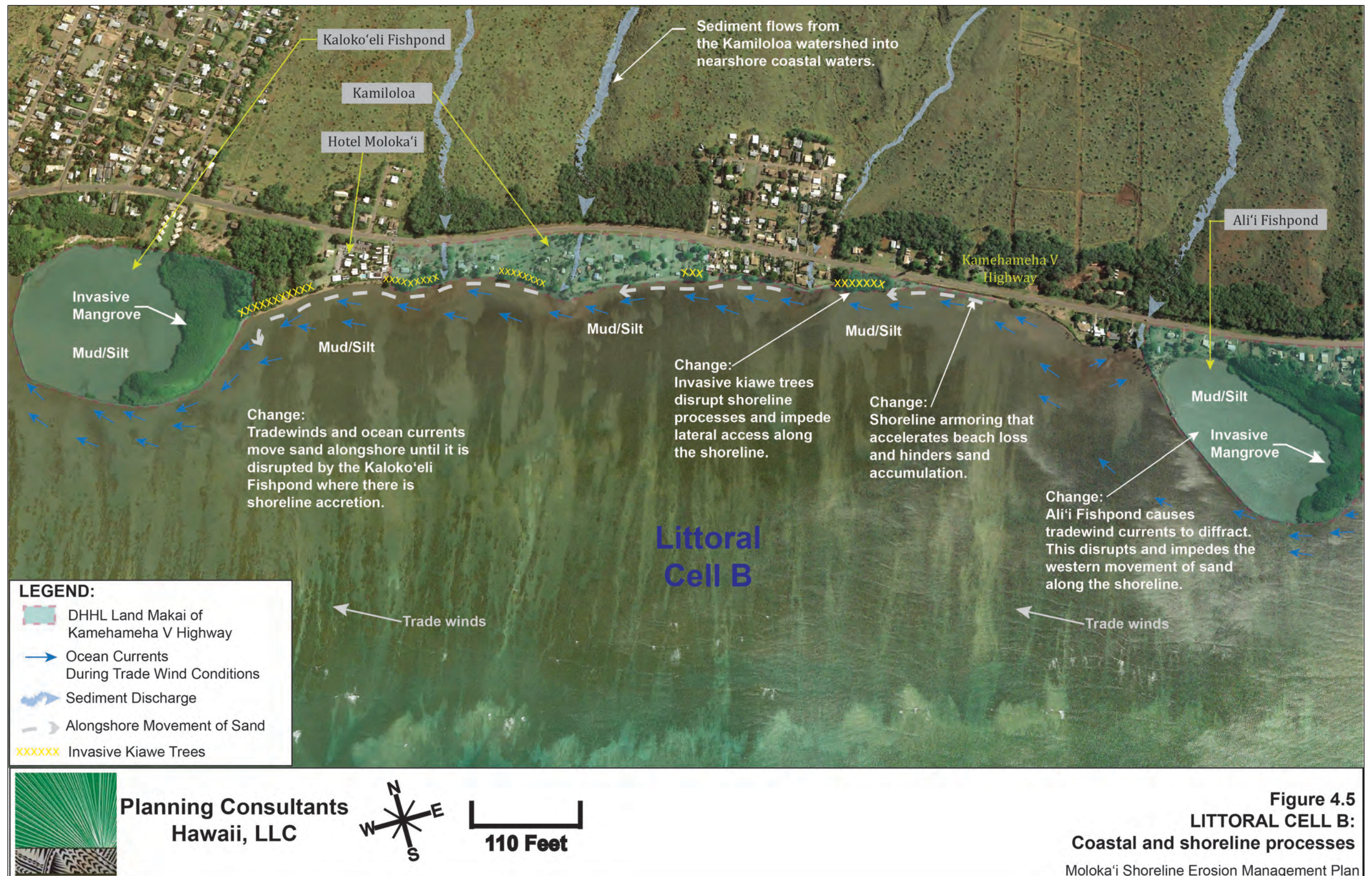
The Kaloko'eli fishpond separates and divides sediment transport along the shore between Cells “B” and “C”, as evidenced by a smooth, concave curve to the shoreline down drift of the fishpond.

Similar to the Ali'i Fishpond, much of the Kaloko'eli Fishpond has filled with sediment and mangrove trees. This changes the ecology of the fishpond and impedes muliwai flow (fresh and brackish water inputs) and ground water flows that may have helped transport sediment in the past.

Sediment transport within the littoral cells is often disrupted by shoreline armoring, as well as dense thickets of invasive Kiawe trees. This can be seen in Cell “B” fronting and just east of the Hotel Moloka'i. The Hotel Moloka'i has fixed the seaward edge of its property causing water to come right up to its wall. The Hotel Moloka'i is to the east of the Kaloko'eli fishpond and the hotel's restaurant, bar, and pool areas are built upon a foundation that serves as a seawall. The seawall provides protection during high tide and large surf, but the beach is submerged at those times. Seawater regularly reaches the face of the wall during high tide events. A dense thicket of vegetation, just east of the Hotel Moloka'i, also disrupts sediment transport along this stretch of shoreline and many Milo trees have taken root in the accumulated soils.



Photos (Clockwise from Top): 1. Looking east along an eroding shoreline fronting Kamiloloa; 2. Informal, shoreline armoring fronting Kamiloloa; 3. Panorama view of informal shoreline armoring and the use of naupaka along Kamiloloa ([Source: DHHL](#)).



4.2.3 Kaloko’eli Fishpond to Kaunakakai Wharf (Cell C)

Cell “C” is bound by the Kaloko’eli Fishpond to the east and the Kaunakakai Wharf to the west as depicted in Figure 4.6.

Just down drift of the Kaloko’eli Fishpond is the Moloka’i Shores in Cell “C” which has a sandy berm along its seaward edge that is stabilized by naupaka plants. This vegetative berm moves, and its contents are redistributed, in response to natural forces. This natural process is unlike shoreline armoring which redirects the force of waves and currents to neighboring down drift properties. Just down drift of the vegetated berm is a private residence with an approximate three feet high erosion scarp. This scarp has formed, in part, due to kiawe tree roots retaining the sandy soils along the coastline and preventing the formation of a beachfront that has a gentler slope and profile. While the kiawe has preserved the land, it has done so at the cost of a gradually sloping sandy beach. Fallen branches and slumping tree trunks have further hindered access along the shoreline to the west. The two properties illustrate the contrast between having native and non-native vegetation along the shore.

The Kapa’akea subdivision is situated between the swampy remnant of the Kapa’akea fishpond to the east and the Koheo Wetland to the west. Both wetlands help to capture, filter, slow, and stabilize sediment and stormwater that originates from the Kapa’akea and Kamiloloa streams and flows downhill into nearshore marine waters. Despite the high amount of upland sediment input, the Kapa’akea subdivision’s oceanfront properties continue to experience land loss as the coastline moves inland and the shoreline retreats. In response, virtually all of DHHL’s oceanfront residential lots have some form of coastal armoring in an attempt to halt or diminish shoreline retreat. The armoring, as well as shoreline reference features provided by knowledgeable long-time observers, suggests that the coastline has been gradually moving inland over time. The shoreline hardening at Kapa’akea has exacerbated shoreline erosion fronting both the Koheo Wetland and the down drift properties along the eastern third of Seaside Street.

The western end of Cell “C” is the causeway to the Kaunakakai Wharf. The flow of sediment through Cell “C” has been substantially altered by the modification of the roadway to the harbor’s Wharf. Originally, the roadway was elevated upon posts, but it was changed as fill was placed atop discharge pipes to form a causeway. The modification slowed the speed of the current and redirected its flow offshore. This increased the deposition of sediment along the coastline and along the eastern edge of the causeway, compounding the sediment discharge problem. Moreover, the addition of groins and a rock mound on the eastern side of the harbor’s Wharf to protect the small boat harbor further altered the natural flow within the littoral cell causing additional deposition of sediment within the terminus of Cell “C”.

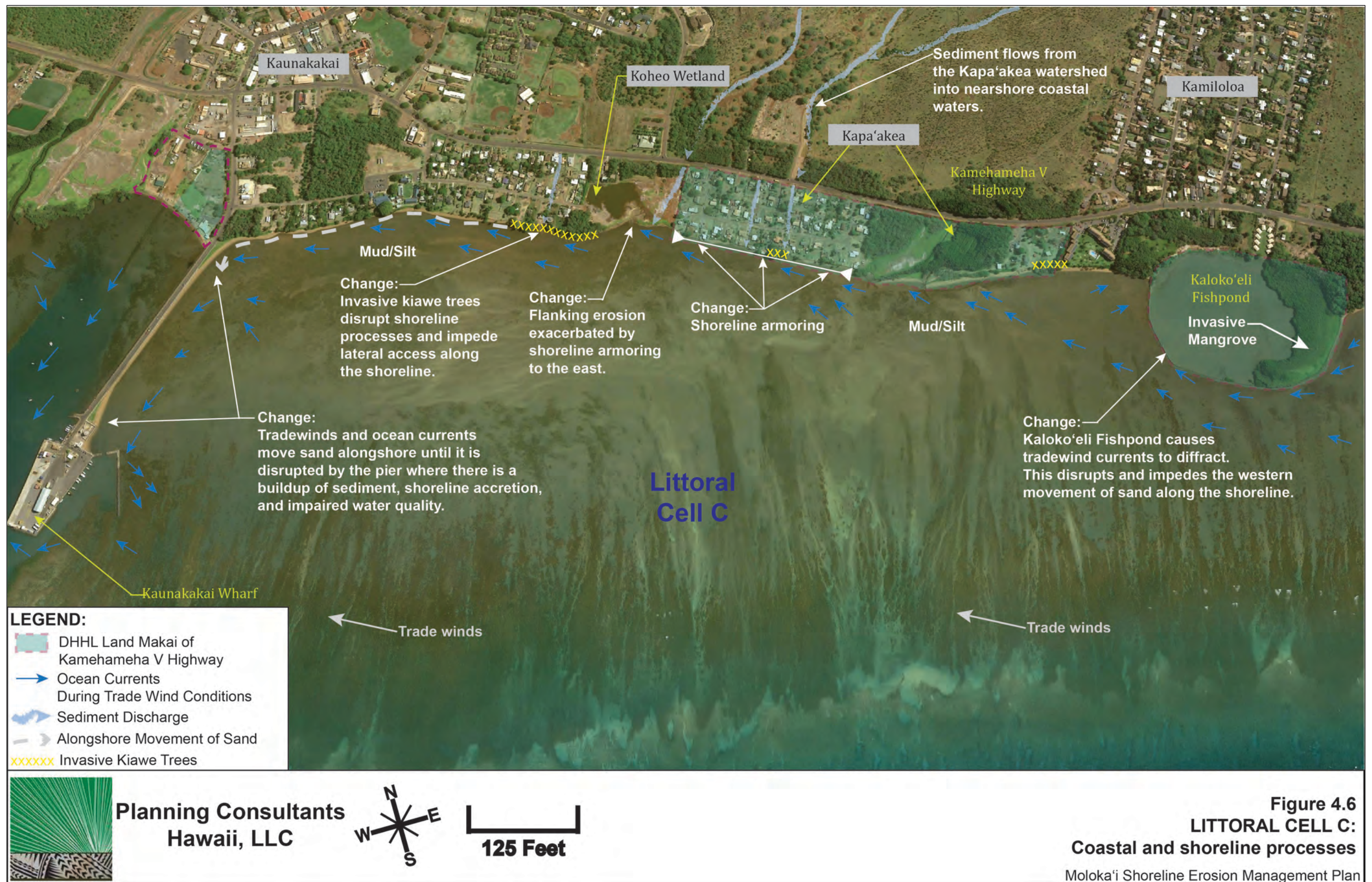
The U.S. Army Corps of Engineers conducted experiments to increase the amount of water that could flow down drift by adding culverts under the causeway ([Bottin and Acuff, 2001](#)). They reported that culverts could restore flow but would create eddies on the western side of the causeway and erode the fill used to create the causeway and the land on its down drift side. Removal of the existing fill, and the inner portion of the causeway, would eliminate these eddies and result in improved wave-induced current and sediment transport patterns. However, restoring along-shore flow would accelerate erosion and land loss and create stronger cross currents immediately west of the causeway where outrigger canoe paddling is popular.



Photos (Clockwise from Top): 1. Kaloko’eli Fishpond; 2. The remnants of an ancient fishpond just east of Kapa’akea shelters the sandy shoreline from waves and currents; 3. Looking east at the informal shoreline armoring fronting Kapa’akea; 4. A rock sill protects the beach fronting a home in Kapa’akea; 5. Looking west at the informal shoreline armoring fronting Kapa’akea.

Photo (Below): A panorama of the informal shoreline armoring along a portion of Kapa’akea ([Source: DHHL](#)).





4.2.4 Kaunakakai Wharf to Kahanu Avenue (Cell D)

Cell D (Figure 4.7) is considerably different than the other three littoral cells that are within the study area. Cell D is both down wind and down drift of the Kauanakakai Wharf so sediment transport within the study area of the cell is only marginally influenced by the prevailing east to west winds and currents. Due to the presence of the Kaunakakai Wharf, the nearshore current is not as influenced by wind and incoming ocean swell. Currents that are pushed by trade winds and swell tend to diffract and bend when they encounter the Wharf and its causeway. This impairs water quality and disrupts and impedes the east to western movement of sand, silt, and pebbles along the shoreline. The causeway itself forms a barrier that prevents sand from moving along the shoreline from Cell C into Cell D.

The Kaunakakai Stream mouth, just west of the Wharf creates an influx of sediment that spreads out like a fan. But much of this sediment is carried by bottom currents into the deeper channel adjacent to the Wharf that leads offshore. Unlike Cells A, B, and C where the sediment moves from east to west, some of the sediment in cell D moves in the opposite direction, from west to east, due to the influence of the deep channel along to the Wharf’s western side. This channel begins near the shore and extends out beyond the reef where it has been carved into the submerged terrain by the Kaunakakai Stream over thousands of years. Since the channel is considerably lower in elevation and deeper than the surrounding shallow flats, it acts like a drain that pulls nearshore waters, sediment, and silt into the channel where it is transported offshore and into the deeper ocean.

In comparison to the littoral cells to the east (Cell A-C), the nearshore area of Cell D receives much greater influxes of freshwater and upland sediment. High amounts of upland sediment and freshwater are discharged from the Kaunakakai Stream mouth just west of Malama Park and the Wharf. Freshwater seeps and groundwater flow through the Kapuāiwa Coconut Grove creating visible springs and brackish pools within the grove. This groundwater empties into the nearshore flats just offshore of Kalama’ula and since freshwater is lighter than saltwater, it has the potential to carry upland dissolved minerals, sediment, and silt further offshore.

Sediment transport along the coastline is largely inhibited by thick stands of Red Mangrove, an invasive species. In the early 19th century, upland mauka areas had become barren and denuded by free-ranging feral ungulates, such as Axis Deer which were introduced but kapu for hunting. After rainstorms, brown turbid stormwater full of silt and clay would wash downhill and out into the nearshore reef and marine waters. Ranch hands on horseback planted sprigs of the mangrove along the south shore in the 1900’s in an attempt to capture the upland soils before they smothered the offshore reef.

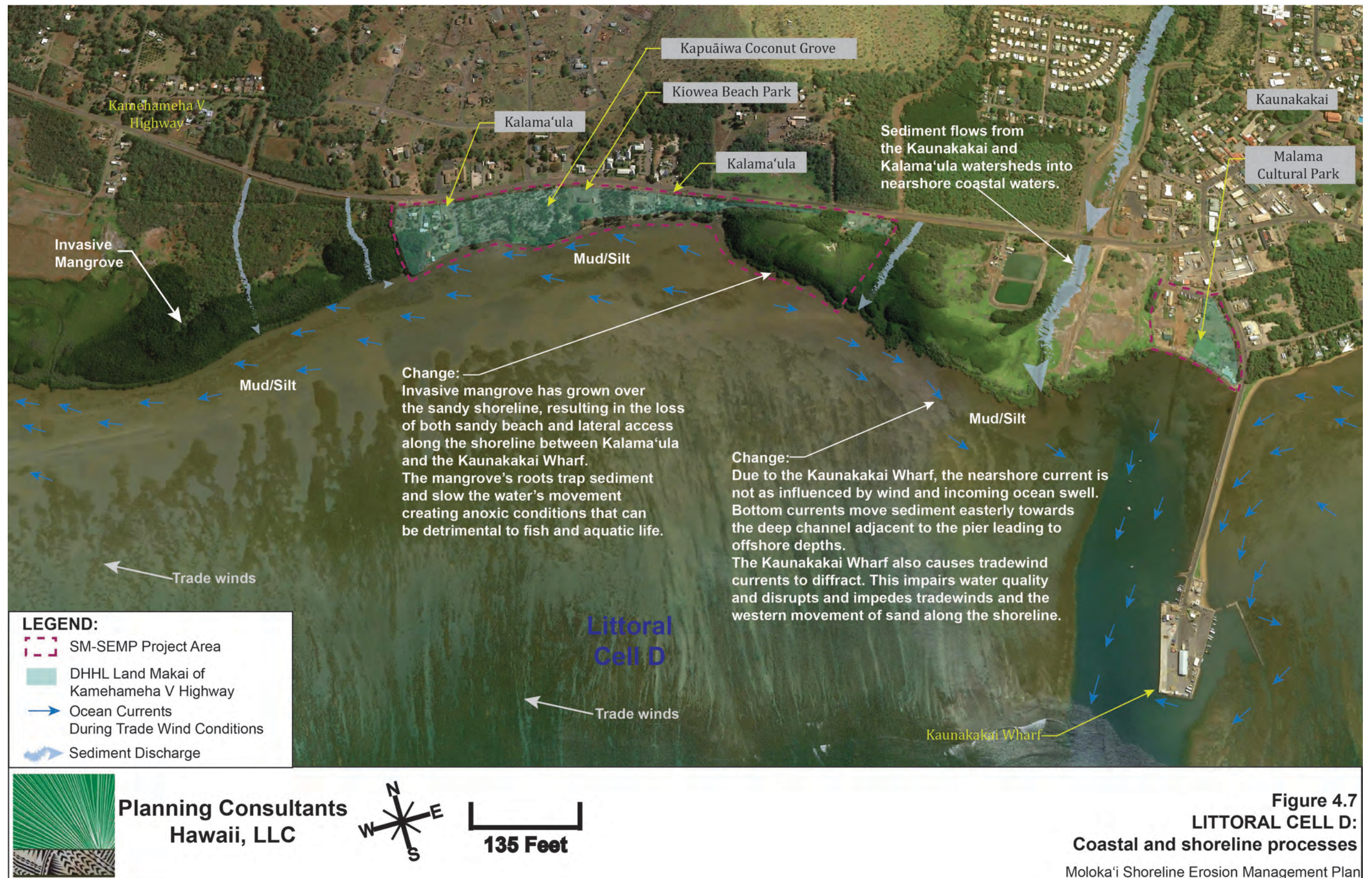
Mangroves have adapted to cope with saltwater immersion and wave action and their tangled root system breaks up and dissipates wave energy until its effects are nearly negligible. The mangroves have a complex intertwined root system that slows the movement of water to a near standstill. The quiet, shaded waters are good for juvenile fish to avoid predators but can become anoxic (lacking in oxygen) resulting in fish kills when the tide or current subsides.

The shoreline flanking both sides of the Kalama’ula subdivision has been overwhelmed with thick stands of invasive mangrove. This has fundamentally interrupted the natural sediment transport mechanisms along the shoreline. Over the past century, a considerable amount of swampy land has formed between the east side of Kalama’ula subdivision and the Kaunakakai Stream mouth. Similarly, from Pond Place and Kapuāiwa Place that borders the Kapuāiwa Coconut Grove, a large, long, thicket of invasive mangrove has slowed the movement of sediment to the west of the subdivision causing a muddy, silty flat to form in nearshore waters.

The areas flanking the Kalama’ula subdivision are accreting due to slowed currents, sediment deposition, and conversion to swamplands by mangroves. Meanwhile, the Kapuāiwa Coconut Grove and Kiowea Beach Park shorelines are eroding. Exposed root balls of coconut trees along the shore and the cracking and slippage of concrete slabs at the park’s oceanside pavilion illustrates the erosion trend. Kiowea Beach Park may be eroding due to an interruption in along-shore sediment transport that is exacerbated by rising seas and wave over wash during king tides and full moon events.



Photos (Clockwise from Top Left): 1. The shoreline fronting Malama Cultural Park; 2. The Kalama’ula shoreline while looking east towards Kaunakakai Wharf; 3. An eroding shoreline fronting Kiowea Beach Park; 4. Invasive mangrove between Kalama’ula and Kaunakakai Wharf. 5. A view of the Kalama’ula shoreline looking west. 6. The Kapuāiwa Coconut Grove.



4.3 SHORELINE EROSION ASSESSMENT (SEVERITY AND RISKS)

Coastal erosion can be measured over time to provide an estimate of historic shoreline change. The amount of change can be indicative of future states of the coastline and its likely location should erosion continue unabated. This subsection summarizes the findings of Appendix D which analyzes the rate of shoreline change within the project area by analyzing and comparing the project area’s historic plat maps against existing shoreline conditions. Please see Appendix D for a more complete discussion of this analysis.

The Kapa’akea plat maps were drawn in 1950 and identify the length of drainage easements and access paths from Kapa’akea Loop (the main internal roadway) to the ocean. The plat map also lists dimensions for individual homestead lots. A July 21, 1950, map also illustrates a DHHL-owned strip of land (parcel 1) located between the individual homestead lots and the ocean. However, parcel 1 is now entirely submerged suggesting the shoreline has moved inland approximately 66 feet on the western side and roughly 52 feet on the eastern side of the subdivision over the past 70 years. This equates to an average annual erosion rate of about 0.84 feet/year.

The One Ali’i and Kamiloloa subdivisions also have a separate, DHHL-owned, strip of land between the individual homestead lots and the ocean. While the plat maps do not provide specific dimensions for these lands, they do list the acreage of these buffer strips allowing their original width to be estimated from the parcel’s length. Erosion of these lands suggest similar, albeit lower, rates of shoreline change and retreat.

The calculations of shoreline change based on the plat maps are consistent with the personal observations made by long-time residents and historical reference features identified by kupuna. Accordingly, new buildings, infrastructure, and development in areas that are prone to erosion should be avoided since they may be underwater during the structure’s lifespan. This precautionary approach is a logical and culturally appropriate way to keep people and their investments out of harm’s way.

4.3.1 Sediment & Sea Level Rise

As the sea level rises (SLR), more wave energy is anticipated to be telegraphed further inland, above and over the coral reef system. Waves will skate over the top of the reef with progressively less interruption as the surface of the ocean rises. The reef’s friction effect that breaks and reduces wave energy will be negated and more waves will contact the nearshore environment and cause or contribute to shoreline erosion. Offshore waves will tend to extend further inland because the reef’s roughness will have less of a dampening effect on incoming wave energy, similar to the differences presently observed between high and low tide (Figure 4.2).

Some studies predict that significant erosion of the shoreline will occur when the tide is high and where the shoreline is characterized by low, flat, erodible terrain (Ogston and Field, 2010). But shoreline erosion only adds a small amount of

sediment to the reef flat budget compared to wind generated resuspension (ibid.). The authors predict more intense and longer periods of wave generated resuspension of sediment, coupled with increased turbidity due to shoreline erosion in the future. They predict a four-fold increase (9% to 37%) in turbidity events that exceed acceptable levels, and longer durations of those events (ibid.). The higher turbidity would occur during daylight hours when reefs are photosynthesizing. Silt in the water column would block the sunlight which corals need to survive and would inhibit their fitness. Reef growth will not keep up with the increase in sea level rise. As a result, more sediment will be released by wave energy that reaches the coastline only to be recirculated again within the coral reef ecosystem. However, these projections assume that the ground inland of the shoreline is comprised of erodible silt, alluvial soils, clay, or loam, and not sandy substrate. Coarse sand does not get resuspended as easily as silt and does not create as turbid conditions that are detrimental to corals.

The negative feedback loop created by SLR could cause significant change to the morphology and ecology of Moloka’i’s south shore. The result of this increased shoreline erosion could further degrade the reef’s ability to dissipate wave energy and to serve as a sustainable food resource.

With rising seas, more energy from offshore waves will propagate over the reef crest across the reef flat and attack the shoreline leading to erosion and shoreline retreat. With the SLR predicted this century, fringing reefs could be adversely impacted by an increased frequency and duration of the resuspension of fine sediment of reef flats and an increase in shoreline erosion that would release more sediment into nearshore waters (Field, Ogston and Storlazzi, 2011). As such, even small changes in water elevation could have broad implications on sediment management and reef health along Moloka’i’s south shore. These adverse effects can be minimized by management activities that decrease sediment input from upland sources in the watershed, increase the number and diversity of herbivorous fish that eat algae, and limit or reduce other stresses to reef habitat.

4.4 SEA LEVEL RISE AND ELEVATED WATER TABLES

Climate change would have three predominant effects on Moloka’i’s south shore: more rainfall, bigger and higher storm surge, and rising seas (i.e., sea level rise). The climate in arid locations is predicted to become dryer over time and wet areas would tend to have more intense and frequent rainfall events (IPCC, 2007). Severe rainfall events are likely to occur more frequently and with more intensity, generating more stormwater and rainwater sheet flow. Current drainage infrastructure has limited capacity to prevent flooding of DHHL properties and the surrounding coastal plain on Moloka’i’s south shore.

The Pacific Ocean is warming, resulting in higher tides, more frequent episodes of strong storms, big waves, and strong surge events where more wave energy and water are telegraphed to shore. This is likely to lead to more acute episodes of beach erosion, and a trend towards higher rates of chronic coastal erosion. Although the exact amount of SLR is still in question, most scientists estimate that SLR of one meter (3.3 feet) by year 2100 is probable (Norcross et al., 2008). Some experts anticipate a meter of SLR in the Hawaiian Islands as early as year 2060

(Hawai’i Climate Change Mitigation and Adaptation Commission. 2017) and believe adverse effects are already being realized. For instance, during the past decade, many beaches on the neighboring island of Maui have experienced higher rates of erosion, more frequent severe erosion events, and less seasonal recovery of sandy beaches after erosion events than in previous years. Importantly, SLR will occur in an exponential, non-linear fashion with small changes at first, but increasingly more significant events over time that occur more frequently.

Ascertaining the impacts from climate change and sea level rise is challenging, but the most prudent way of avoiding these impacts is to build out of harm’s way. There are multiple ways to avoid these impending risks to DHHL properties, either by adaption and realignment, accommodation, or protection.

In the future, the effects of climate change, sea level rise (SLR), and more frequent extreme weather scenarios could increase coastal erosion or change the morphology and shape of the project area’s coastline. These changes in the coastline’s features could, in turn, increase the exposure of the homestead areas to coastal hazards such as flooding, rising waters, storm surge, and/or loss of dry, firm land. SLR and shoreline erosion will also reduce access to, and along, the shoreline for fishing, gathering, subsistence, recreation, and cultural activities. As sea’s rise, salt water will intrude further inland and underground causing more groundwater to become contaminated with salt. Salt water is 32 times heavier than fresh water and can displace or contaminate a disproportionate amount of potable water. As a result, saltwater intrusion can turn potable wells brackish and contaminate shallow drinking wells on the coastal plain.

Separate from erosion or shoreline change, as SLR increases more groundwater will be contaminated with salt, disrupting the biological action in wastewater treatment systems leading to reduced performance or failure. Rising sea levels could also cause homestead infrastructure, such as cesspools and leach fields, to fail along the coastal plain. This would lead to backups in plumbing, raw waste overflows, and contamination of nearshore waters with sewage or pathogenic liquid effluent that can make people sick. SLR can result in a rising groundwater table that could infiltrate and inundate cesspools with brackish or saltwater. This can cause cesspools to fail as toilets, showers, and sinks have no down gradient place to flow resulting in back up or overflow. Furthermore, the salt in seawater tends to kill the microbes within a cesspool and those in adjacent soil layers such as a leach field that decompose human waste into benign organic materials. The loss of these microbes can be counteracted by adding yeast and other microbe-enhancing compounds to a cesspool or septic system to improve their effectiveness.

The presence of a higher or more brackish water table can cause wastewater effluent in the cesspool to mix with groundwater which can then be drawn into the ocean and nearshore waters as the tide drops. Wastewater effluent is high in nitrogen, a fertilizer that fuels algae growth. The added algae in nearshore waters are detrimental to reef health and can reduce game fish diversity and biomass. Wastewater effluent can also soak the soil leading to its saturation, which in turn

can lead to further dissolution of alluvial clay within the soil that can leach out of the substrate and create turbid nearshore waters. The dissolved clay and silt in the water column can settle on corals and be harmful to their health.

4.5 NATURAL HAZARD EXPOSURE

Flooding, severe storms, large waves, and other natural hazards contribute to shoreline change, often in dramatic fashion. Exposure to natural hazards can result in large waves overtopping the fringing reef and reaching the shore. This exposure is of particular concern to oceanfront residents during extreme high tide events, such as full moon or king tides. Interviews with residents in the DHHL subdivisions attest to waves overtopping seawalls and shore armoring, particularly in Kapa‘akea during the summer months when there is a full moon or king tide.

The Pacific Disaster Center provides an online atlas that ranks the vulnerability of the Kawela coast to natural hazards. The relative exposure of DHHL properties is similar given their proximity within the coastal plain. Figure 4.8 illustrates the intensity of coastal hazards for the Kawela to Kaunakakai coastline as published in the *Natural Hazards and Vulnerability Atlas* (Fletcher, C., Grossman, E., Richmond, B., Gibbs, A. 2002). Coastal hazard rankings for this section of Moloka‘i’s south shore range from 1 (low) to 4 (high).

The overall hazard assessment for the Kawela coast is moderately low, except at the Kawela Stream mouth in Nalulua due to its history of high stream flooding. Rankings for seismic activity, sea level rise, and storms are the greatest hazards (3), followed by big waves, erosion, and tsunami (2), and stream flooding (ranked 1 to 2). Historically, flooding of Kapa‘akea in the 1990’s inundated the DHHL properties with two to three feet of water and mud from mauka lands. This flooding covered the highway and inundated homes and buildings resulting in considerable damage and cleanup efforts. Overwhelmed streams, gulches, and drainage infrastructure did not have sufficient capacity for the events and excessive flooding ensued. While DHHL has improved drainage infrastructure since that time, SLR data was nascent, and the improvements probably did not envision the capacity necessary to accommodate climate change.

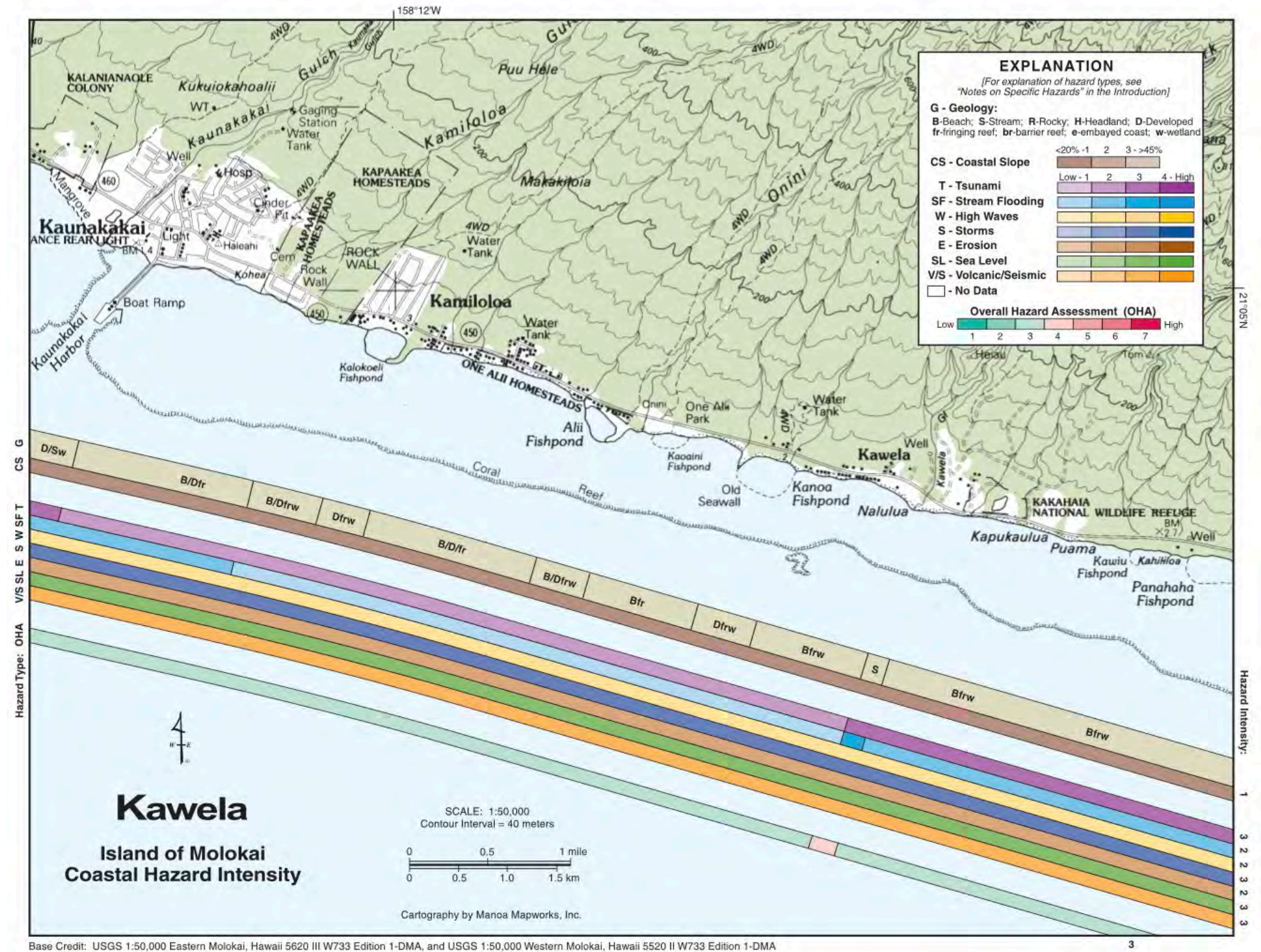


Figure 4.8: Map of Coastal Hazard Intensity for Kawela, Moloka‘i. Source: Fletcher, C., Grossman, E., Richmond, B., Gibbs, A. 2002.

CHAPTER 5: SHORELINE EROSION MANAGEMENT OPTIONS

5.1 SEA LEVEL RISE ADAPTATION STRATEGIES

Considering SLR and its potential adverse impacts, the Hawai’i State Office of Planning Coastal Zone Management Program (OP CZM) has identified three main adaptation strategies for addressing coastal hazards: Managed Retreat, Accommodation, and Protection (DBEDT, 2019).

It is important to consider these strategies in response to the variety and types of impacts that are likely to result from exposure to SLR and shoreline change. It is also important to understand the degree of coastal hazard exposure for those residing on the coastal plain. It is wise to consider the advantages, disadvantages, limitations, and potential natural and cultural impacts of each strategy before implementing an erosion or hazard exposure response. Among these strategies, managed retreat has the greatest certainty of reducing risk and damage from coastal hazards.

5.2 ADAPTIVE REALIGNMENT

Managed Retreat or *adaptive realignment* is a form of relocation that incrementally moves development inland and mauka from the coastline. The strategy involves the creation of a proactive plan to relocate vulnerable buildings, infrastructure, and public facilities out of harm’s way by avoiding erosion, flood, and hazard prone areas during a building’s lifespan. If the cost of protecting a vulnerable structure from SLR exceeds the cost of relocating the structure out of harm’s way, adaptive realignment can make economic and practical sense. If the cost to repair and maintain a building in harm’s way exceeds the cost of adapting to natural hazards, it may be prudent to fully implement a managed retreat strategy. These costs should also factor in the human costs of lost life, personal injury, and damage to property and possessions including repetitive losses. Adaptive realignment may occur within the confines of a parcel, between parcels, or within a community.

Adaptive realignment can be accomplished in several ways. First, through the physical relocation of structures that are situated in at-risk areas. Second, through the incremental improvement of buildings and infrastructure located outside of hazard prone areas. Third, through policy that restricts development, substantial improvements, or infrastructure upgrades in hazard prone areas. Such policy should prevent inappropriate building practices in at-risk areas, such as slab-on-grade home and building construction, the pushing of erodible soils into mounds for house pads, the filling of natural drainage ways, construction in gulches, and the use of cesspools. The policy should account for the cumulative costs of development including differences in property insurance costs, association maintenance fees, and special assessment or reserve fees. Fourth, the strategy should direct capital improvement and infrastructure enhancements to areas that are not at risk of damage by coastal and natural hazards. Finally, the strategy should incentivize development of new areas that are located outside of hazardous areas and the retirement of buildings in at-risk areas.

A planned obsolescence strategy can also be implemented where buildings and infrastructure located within hazardous areas are retired at the end of their useful lifespan rather than repetitively repaired, which may cumulatively cost more than replacement.

For DHHL, implementing an adaptive realignment strategy with both short- and long-term policy objectives and implementation strategies could offer substantial efficacy relative to achieving its mission to provide safe, affordable, and functional homesteads.

5.3 HAZARD ACCOMMODATION

A second strategy is *hazard accommodation*, which involves adapting existing structures and systems to allow them to better withstand the impact of a coastal hazard. Elevating a structure by a foot or two above the base flood elevation is one way to accommodate flooding while ensuring the building remains functional. For instance, plantation-style homes are built on posts, that if securely anchored, could allow flood waters to flow under the building unhindered. Reorienting a building to be perpendicular to the shoreline rather than parallel to it can reduce the area of the building that faces the ocean and the surface area that must withstand the forces of wind, rain, waves, and water.

Adding hurricane clips that connect the roof to the rafters, and the rafters to the walls with metal brackets, will help prevent the roof from lifting and being blown away in a hurricane or under strong wind conditions. Creating a continuous load path, where the roof, rafters, walls, posts, piers, and foundation are all connected using metal straps like Simpson Strong-Ties can anchor the whole house and prevent it from being carried away by flood waters or blown apart by high winds and the vacuum and low pressure created by spinning coastal storms and hurricane force winds.

Reconfiguring an existing home is also a means of accommodation such as moving the kitchen to the inland, mauka side of the home, along with elevating expensive electrical appliances that can easily be damaged by seawater. Elevating the kitchen using posts and piers can make it cooler and more comfortable as prevailing breezes can flow under the kitchen flooring. Likewise, flood waters could flow under the kitchen without damaging expensive appliances like the stove, refrigerator, and electrical appliances if they are located sufficiently above ground. Waterproofing electrical outlets, placing electric lines in waterproof conduit or PVC pipes, and using breakaway walls in low-lying structures accommodates floodwaters without causing the loss of the building, especially if its post and piers are reinforced to withstand the force of waves or arranged so that debris cannot form a dam that places more pressure or stress upon the building’s posts, piers, or upright beams.

5.4 PROTECTION FROM COASTAL HAZARDS

A third strategy is *protection from coastal hazards*. This strategy can involve “soft” or “hard” techniques to respond to coastal dynamics and shoreline change. It is an intervention between the building or infrastructure to be protected and the sea. Soft techniques are intended to create a buffer to absorb or reduce the ocean

energy reaching the shore, whereas hard techniques typically involve the placement of hard structures that are intended to refract or deflect incoming energy at a fixed location between the land and sea. In all cases human involvement, intervention, and maintenance of the protection is a necessary component of this strategy. Some forms of protection require more maintenance than others and each has its benefits and shortcomings. Shoreline protection should be tailored to the specific location and its risk or exposure profile, noting that combinations of protective strategies may be most effective.

5.5 SOFT OR NONSTRUCTURAL TECHNIQUES

There are several natural responses to shoreline erosion, flooding, and coastal hazards. Building in harmony with natural shoreline processes is one of the most effective and efficient means of protecting inland assets. This approach, known as “living shorelines,” is designed to achieve multiple, interrelated goals including:

- Stabilizing the shoreline to reduce shoreline erosion and storm damage;
- Providing ecosystem services by restoring habitat for fish, birds, crabs and shellfish, benthic organisms (infauna), limu, and aquatic marine life;
- Restoring native plants and propagating vegetation, typically by encouraging the use and maintenance of climate adapted, salt tolerant, drought resistant, and obligate submerged plant species;
- Increasing the capacity to store and stabilize flood waters until they recede; and
- Maintaining mauka to makai connections between terrestrial and marine ecosystems to enhance resilience and restore shoreline functions.

In designing a living shoreline, a first step is to identify what needs to be protected, its permanency, replacement cost, adaptability, and resiliency to perturbations, storms, and coastal hazards. To evaluate responses, it is important to assess the setting by understanding the shoreline energy conditions. A determination should be made if the shoreline is experiencing episodic, seasonal, or more long-term chronic erosion. For instance, is the erosion related to a singular storm or king tide event, or does the beach disappear intermittently only to recover the next season, or has the ocean consistently moved inland, year after year, submerging land and coming closer to buildings over time. These three forms of erosion (episodic, seasonal, chronic) can lead to a retreating shore, but their cause and response can differ. As such, it is important to capture long-term observations from people familiar with a particular stretch of shoreline, identify shoreline reference features, and review old, archived maps and photographs, to help identify changes in the shoreline’s location.

Homesteaders should observe the location and extent of wave-driven versus wind-driven inundation in the shoreline and rear yard areas. Marking heights of flood water inundation and points of reference for later measurement is useful, particularly for immobile items such as large rocks or natural features that will not move over time. Trees may serve as reference points, but since they can fall or change over time it is better to use nonliving items as shore reference features.

Homesteaders should also observe the extent of inundation from high tide and king tides. Mark these areas for later reference and photograph them with immobile reference features and items of scale in the background. Note any barren yard areas, areas entrained with sand or coral fragments (versus pebbles or black stone) as the coral fragments indicate the inland extent of ocean water and waves. Scorched brown and yellow grass, white salt crystals on the top of dried soils, and barren areas are also indicative of seawater inundation areas. Areas consisting of compacted clay (red, rust brown) or alluvial soils should also be delineated since they erode differently than sandy areas. In some cases, sand may be ‘perched’ atop a harder lava rock or firmer clay/alluvial soil layer that may erode at a different rate.

5.5.1 Vegetative Buffers

Leaving a green, vegetated buffer strip of native vegetation between the ocean and vulnerable structures will stabilize the shoreline and reduce the risk of damage, property loss, and loss of life from coastal hazards. Shorelines exposed to higher waves and intense storms require a larger setback for buildings and habitable structures, and thus a wider vegetated buffer. For instance, a 50 feet wide buffer of grasses and reeds can absorb nearly half of all incoming wave energy in a coastal wetland or marsh (TNC, 2017). When coastal storms or hurricanes flatten this vegetation, they resurrect themselves shortly afterwards because they are pliable and adapted to the environment. This pliability contrasts greatly to the rigidness of man-made structures that can crack, shift, slide or be compromised by the force of the ocean.

Building with nature is often more successful than working against nature. For Molokaʻi’s south shore, it is important to use native plants that are accustomed to the harshness of the shoreline. Some native plants thrive in the harsh coastal environment where other plants wither and die. Special plants, called obligate wetland plants, can tolerate being dried out or totally inundated with salt water, while exposed to strong sunlight without dying. Sedges are a family of plants that have pliable stems with edges that allows them to deflect and absorb wave energy. Sedges are obligate plants that can grow in direct sunlight, which is prevalent along the project area’s coastline. Two native species of sedge are ‘aka’akai and Kaluhā (UH, 2019). Both can grow in clay or sandy soils and in fresh or brackish water. Both are salt and sun tolerant with Kaluhā being more drought tolerant. When planted 1 to 3 feet apart, their roots and shoots will spread out to form new stalks and plants with ‘aka’akai forming one-foot-wide clumps and Kaluhā forming mats of vegetation. Kaluhā is excellent for reconstructing natural Hawaiian wetlands, and its roots form a thick interwoven mass that helps prevent soil erosion and filters stormwater runoff preventing pollution from entering the ocean.

These species of plants may be appropriate on sheltered shorelines with low wave energy and an influx of fresh water provided by drainages, seeps, springs, and other similar features. They should be tested in locations near or down gradient of cesspools to evaluate their tolerance of a consistent influx of nitrogen and fresh water into these nearshore environments. Bivalves and shellfish may

also grow well in nearshore areas that are brackish due to cesspool inputs, but they are not edible.

There are also unique plants that have adapted to Hawaiʻi’s hot, dry, sunny, salty, and windy coastal environment and can be used to restore sand dunes. Dune restoration plants have shallow roots that quickly spread horizontally (rhizomatic) rather than extending deep into the ground. The stems and leaves of the plant capture windblown sand grains which are then covered by the plant’s quickly spreading roots. The accumulated sand forms a mound or dune that serves as a reservoir that resupplies the beach with sand during storms and large wave events. These sand reservoirs are built up in the backshore area and remain covered in vegetation until large waves eat into the dune and pull stored sand down onto the wet beach and spread it along the shore. This makes the nearshore waters shallower, which in turn causes waves to break further offshore and reduces their erosive energy.

Sand dunes also prevent storm surge from flooding inland areas by forming a berm that is slightly higher in elevation than the surrounding area. Sand berms also block sediment laden stormwater coming from mauka areas from entering the ocean. The berm slows the water, so it ponds, and silt, dirt, debris, and rocks settle and are filtered before the water enters the ocean.

5.6 PLANTS

The native dune friendly plant species listed below could help to restore Molokaʻi’s south shore. Table 5.1 provides a summary of each plant.

The plants are viewable at <https://www.forestryimages.org/browse/> and [Bugwood.org](https://bugwood.org) from photographs taken by [Kim Starr or Starr Environmental](#), Maui, Hawaii.

‘Aki’aki grass has shallow roots that spread quickly on sandy shores and sand dunes. The grass captures windblown sand and spreads new roots over the captured sand to build up a reservoir in a birm. The sand remains in place until large waves expend their energy by pushing and/or pulling the sand into another shape and morphology. It is best to plant near the end of the rainy season so it can be well-established before the hot, dry, summer months. The grass can collect sand burs.



Source: [Forest and Kim Starr, Starr Environmental, Bugwood.org](#)

Pōhuehue or beach morning glories have extensive runners (rhizoids) for roots that hold sand, berms, and dunes in place. The runners retreat or creep seaward naturally in response to waves and tide action. The plants grow easily but need drip irrigation to start. Drip irrigation lines can be patterned for the landscape and there should be one keiki plant per drip hole. The plants can have purple or white flowers depending on the species selected and both do well for restoration.



Source: [Forest and Kim Starr, Starr Environmental, Bugwood.org](#)

Naupaka is better suited for the backshore area and can grow profusely once established. It is saltwater and salt spray tolerant. Naupaka also captures floatables such as driftwood and human induced pollution such as styro-foam and plastics which become entrained in their stocks and roots. Naupaka hedges have been artificially induced through irrigation to grow seaward and down the beach face, thereby limiting shore access, which is prohibited by the State.



Source: [Forest and Kim Starr, Starr Environmental, Bugwood.org](#)

‘Ākulikuli is a native plant that readily grows along the shoreline in salt laden environments. The plant needs salt spray to thrive and needs inundation by fresh or brine waters. It can also grow on hard packed clay and alluvial soils. This low ground cover has very succulent green leaves with bright red stems and purplish pink flowers that can be used for lei. It is one of the most salt-tolerant of all coastal plants, and is an excellent ground cover for beach areas, saline soils, xeric landscaping, and in and around water features. It should not be confused with pickleweed (‘Ākulikuli kai) an introduced competitor species.



Photos: Native ‘Ākulikuli (left) and Non-native pickleweed (right)
Sources: Forest and Kim Starr, Starr Environmental (left) and Bryan Harry, NPS (right). http://www.botany.hawaii.edu/basch/uhnpcesu/htms/kahoplnt/fish_pops/bataceae/plant01.htm

Pōhinahina leaves smell like sage or spice when crushed. They have bell-shaped flowers with blue violet corollas and the plant attracts butterflies and caterpillars. It is an indigenous plant that can grow into a shrub. It is naturally found on sandy beaches, rocky shores, and dunes on most of the islands to about 50 feet above sea level.



Source: Forest and Kim Starr, Starr Environmental
<http://www.starrenvironmental.com/images/>

Ilima forms an excellent groundcover and shrub for open, sunny and/or windy coastal areas. Its leaves range from one-half inch to over 5 inches long and can be glabrous (without hairs) to very fuzzy. The plant has small yellow flowers that are not fragrant but are attractive in the landscape.



Source: Forest and Kim Starr, Starr Environmental
<http://www.starrenvironmental.com/images/>

Naio is a fast to medium growing landscape shrub or tree. It can grow to 5 or 6 feet tall in a few years. It does not require much care after the plant is established. They form hardy shrubs that can tolerate both dry and moist conditions and have a near continuous flowering period followed by colored fruits. Flowers are small and white or white with light to dark pink or lavender centers.



Source: Forest and Kim Starr, Starr Environmental
<http://www.starrenvironmental.com/images/>

Bulrush are sedges that consist of round dark green stalks that range from 8 to 10 feet tall. The stalks are buoyant and grow directly in the water and in full sun. They can grow into clumps and form thick mats of pliable vegetation. The stalks

absorb wave energy and can buffer storm surge. They are excellent for reconstructing natural Hawaiian wetlands and provide habitat and food for waterfowl. The California bulrush, *Schoenoplectus californicus*, shown below is common in Hawai‘i.



Source: Forest and Kim Starr, Starr Environmental.
<http://www.starrenvironmental.com/images/>

Milo can be found growing naturally at the high tide line above mangrove and at the top edge of the sandy beach berms. They can readily tolerate seawater and occasional tidal inundation as well as wind and salt spray. Milo offers shade and can grow 30 to 40 feet in height. The trees produce leaf litter and dry seed capsules year-round. However, these seeds tend to be soft and not hard on bare feet.

Beach Heliotrope is a woody plant with a trunk. It has shallow roots that help hold sand in place, even during episodic erosion events. The tree does not grow very tall and often forms gnarled, intertwined branches that when combined with its broad leaf foliage, can offer shade along the shore. The leaves and stems contain a milky sap that attracts Monarch butterflies, and they can often be observed alighting on the Milo Tree’s leaves and stems. The trees are salt tolerant and grow well in arid, windy, sunny, coastal environments.



Source: Forest and Kim Starr, Starr Environmental. <http://www.starrenvironmental.com/images/>

Seashore paspalum grass or Paspalum vaginatum is a warm-season perennial (long-lasting) grass that spreads by stolons or runners to enhance its growth. It thrives in salty, sandy environments and is commonly observed in landscaped parks and lawns for oceanside lots. However, because of its thick root system it can cover, obscure, or hide erosion impacts such as sinkholes and under scour occurring under its surface. It is not recommended for areas immediately inland of shore armoring but is commonly used given its ease in maintenance and comfort underfoot.



Source: Forest and Kim Starr, Starr Environmental. <http://www.starrenvironmental.com/images/>

Kiawe trees are a non-native, invasive species. They displace native species and have an adverse impact on soils and hydrology. They can artificially hold soils along a coastline which contributes to the formation of escarpments or embankments. When the embankment becomes too steep or soft, the trees slump seaward and can become hindrances to access along the shoreline.

Kiawe accumulate nitrogen in their roots and trunk. When the tree is removed, this nitrogen store can serve as an available fertilizer for new young plants. As such, removing the tree and replanting with native drought tolerant plants can be successful. The dead dried wood makes for exceptional barbeque charcoal and has a pleasant scent for cooking. Removal of kiawe is advantageous for the coastal environment, its use, and its ecology.

There are both male and female trees. The tree has high rates of evapotranspiration, meaning that it pumps out more water from the ground than it uses only to discharge the groundwater withdrawn into the air. The tree’s action dries out the soil making it harder for native plants to grow. This competitive advantage created by damaging the natural hydrology of the soil creates long-term damage to our groundwater supply and native ecosystem. In addition, the males grow long thorns that can easily pierce the bottom of shoes, boots, and flipflops making for a painful experience when walking along the shoreline.



Photo: An invasive kiawe tree along Moloka’i’s southern shoreline.

Table 5.1: Dune & Coastal Friendly Plants

Names	Scientific Name	Specifics	Planting notes
‘Aki ‘aki grass Dropseed Indigenous	<i>Sporobolus virginicus</i>	Drought tolerant roots spread quickly, with leaves and stems that capture windblown, and wave pushed sand to form dunes and berms. Prevent foot traffic so fragile roots are not trampled.	Prefers moist conditions until established. Plant stolons or plugs 4 to 10inches apart to allow room for the grass to grow and the seeds to regenerate themselves.
Pōhuehue Blue beach morning glories Indigenous	<i>Ipomoea pes-caprae subsp. brasilinsis</i>	Good plant for beach front properties, and sandy, rocky, salt-spray or windy locations. Provides erosion control with vines that quickly adapt to tide variations. Vines spread 7 to 15 feet and have attractive pink to lavender flowers with purple centers.	Water for two weeks then only in times of prolonged drought. Allow room for the vines to spread. Will form a dense groundcover. Can be susceptible to pests including slugs, snails, sweet potato weevil, red spider mites, and leaf spot disease fungus.
Hunakai White beach morning glory Indigenous	<i>Ipomoea imperati</i>	Once plants are well established, water only in times of prolonged drought. The plant has bright white flowers with a yellow, occasionally purple, throat. Its vines spread 7 to 15 feet.	The vine requires plenty of room to spread, is easy to grow and maintain, and stays very low to the ground. Prefers full sun, brackish and salt water, sand, or coral. Very drought tolerant.
Naupaka Indigenous	<i>Scaevola taccada and gaudichaudiana</i>	The xeric plant requires minimal maintenance and watering. Plants can form a hedge and serve as a windbreak against prevailing sea breeze. The shrub tends to capture floatable trash in its thick leaves and stocks.	Coastal naupaka kahakai is often planted on the makai side of the house and naupaka kuahiwi on the mauka side. Plants prune well, growing back thickly at cut branches and twigs. Best to hand prune.
‘Ākulikuli Sea purslane Indigenous	<i>Sesuvium portulacastrum</i>	One of the most salt-tolerant of all coastal plants, it forms excellent ground cover for beach areas, saline soils, clay soils, and coastal wetlands. A short, ground cover plant that spreads from 1 to 4 feet or more in width. Full sun is optimal but tolerates some shading for part of the day. The plant can tolerate a limited amount of foot traffic.	Once established, water only in times of prolonged drought. This groundcover will grow in moist or wet conditions, such as coastal wetlands, and can tolerate periods of complete inundation or dry out. Space 6 to 12 inches apart and the plants will grow together forming a nice groundcover.
Pōhinahina Beach vitex Indigenous	<i>Vitex rotundifolia</i>	Forms low medium sized shrubs 6 to 8 feet wide with a height to width ratio of 1:2. Its leaves are aromatic with a sage-like spicy odor when crushed. It has bell-shaped flowers with blue violet corollas (petals). The flowers and pungent leaves are used today in lei work. The plant attracts butterflies.	Allow a lot of room to spread. Out plant with ‘a’ali’i and native trees like wiliwili or naio. The plant prunes well, forming thick hedges or ground covers. Under very wet conditions or prolonged rainy periods a leaf rot fungus or powdery mildew may appear but usually will clear up when water decreases. Plants should be spaced between 2 to 4 feet apart.
‘Ilima Indigenous	<i>Sida fallax</i>	A low shrub with a 4-to-8-foot spread. Excellent groundcover for open, sunny and/or windy coastal areas. Has bright yellow, orangish small flowers that bloom year-round and attract pollinators. Pruning encourages new growth but avoid pruning severely.	Do not locate near automated sprinklers since heavy watering can lead to fungal rot and/or black sooty mold that will affect its health and vigor. They should be planted 3 to 6 feet apart.
Naio Bastard Sandalwood Endemic	<i>Myoporum</i>	The plant prefers very sunny, dry locations. Reduce watering after established. Poor drainage and damp soil will eventually kill these plants, which favor arid conditions. Flowers are small and white or white with light to dark pink or lavender centers.	Plants are prone to ants, scale, mealy bugs, spider mites, and aphids. The shrubs should be spaced 3 to 6 feet apart.
Kaluhā Bulrush Indigenous	<i>Bolbchoenus maritimus</i>	Grass-like sedge that grows 2.5 feet tall, in soils with pH of 6.0-9.0 in fine clay, silty loam, or sand and is tolerant of alkaline and saline soils. The roots form a thick interwoven mass that helps with soil erosion in wetland sites and filters waste from the water. Excellent sedge for reconstructing natural Hawaiian wetlands.	After plants send up foliage, flowers and setting fruits, it then dies back partially or completely year-round. Use caution when harvesting seeds as they have small hairs that irritate the skin, inducing a rash-like sensation and appearance. Provides a food source and shelter for native waterfowl.
‘aka’akai Bulrush Indigenous	<i>Schoenoplectus tabernaemontani</i>	The stalks of this bulrush range from 8-10 feet tall and are buoyant. They are good for visual screening or as a hedge in water features. Best grown directly in the water and in full sun but can tolerate some shade during the day. Excellent for wetland restoration and can dissipate wave swell energy.	Plant in clumps of at least 1 foot wide to ensure there will be sufficient shoots (rhizomes) to spread out and form new stalks. Space clumps of plants at least 1-3 feet apart and they will grow together at a slow to moderate rate to form a dense mat.
Portia tree Milo	<i>Thespesia populnea</i>	Milo is easy to grow and care for, but it drops numerous leaves and dry seed capsules year-round. They can be found growing naturally at the high tide line above mangrove but can tolerate an occasional brackish water tidal inundation. Milo can tolerate wind and salt spray.	Milo has a nice spicy fragrance when freshly cut, disappearing when carved into finished wood products. The trees canopy creates shade along the beach and back shore. Milo means to twist, curl, or spin.

Source: www.nativeplants.hawaii.edu

5.7 COIR

Coir is often used to restore and build living shorelines. Because it is a natural material it is far better for the marine environment and does not pollute the ocean. It consists of coconut fiber woven material that is heavier and coarser than burlap but somewhat similar in texture and color. Coir itself has minimal structural strength, but it can be effective at retaining soils, sand, and sediment and helps planted vegetation become established to hold sand and sediment in place. Coir is useful for gentle slopes and mounds. It can be placed as a mat over an area to be planted, rolled down over the face of a slope or embankment, fashioned into logs or tight rolls to form toe protection at the bottom of a stabilized slope, or laid out flat with the ends wrapped around a sand center and woven together to form a sand-filled tube or so-called burrito. Coir comes in bags, tubes, mats or blankets, and rolls. Coir can be used in dry areas where plants will be installed, and it helps encourage the plants rhizomatic (horizontal) root growth that holds sandy soils and sediment in place. Drip irrigation lines and vegetation should be placed atop the sand covering the coir material. Individual drip tanks can be used where there is an absence of hose bibs or an irrigation water source.

Coir mat consists of a chemically treated woven coconut material which decomposes into organic materials. The material should be covered with sand and not directly exposed to sunlight or inundated with water as this will cause the coir to deteriorate much more quickly. The longevity of coir is typically greater in areas where its placement is protected by fringing reef, reef shelves, rocky headlands, sills, remnant fishpond walls, wetlands, marsh, dry sandy beach, or higher elevation beach flats. The life of coir can be extended by placing it where the coir material is not exposed to direct sunlight and not subject to erosion from tides and waves, and where it is seldom inundated or soaked by seawater. Similarly, the placement of coir and its orientation to the prevailing wind direction should be accounted for in design so that loose sand covering the coir material is not easily blown away, thereby exposing the coir to sunlight. Groundwater seepage can also cause coir to degrade more quickly than planned, but wave and seawater exposure, and exposure to direct sunlight, are typically the main things that degrade coir materials. To extend the life and function of coir, it should be kept dry and out of direct sunlight.



Photos: Examples of a sand-filled coir ‘burrito’ at King’s Park, Newport, RI
Photos courtesy of Janet Freedman (TNC, 2017).

5.7.1 Bank Stabilization

An embankment along the shoreline can be indicative of coastal erosion or it can be a natural berm that separates the coastal plain from the active beach, shore, and surf zone. Natural coastal bank protection can be restored for most tide ranges, topographic slope, or sand grain size, provided that the toe of the embankment is situated above the mean high-water mark where it will not be regularly inundated by seawater, currents, or wave action. Coir rolls can be used to help protect the toe of the slope from erosion and reinforce the embankment’s stability. However, they are most effective in areas with higher beach elevations, with some dry beach at high tide, and where the rolls are not constantly subject to erosion from tides and waves. Installing coir rolls at the toe of a bank stabilization project can provide increased stability while the vegetation becomes established. For larger areas, natural fiber blankets can be placed on the face of an embankment above the coir rolls, covered with sand, and planted with native, salt tolerant grasses and shrubs. However, the rolls, blankets, and vegetation require ongoing maintenance, such as resetting, anchoring, or replacement, to ensure their success. Coir rolls should be securely anchored, such as with wooden stakes, to prevent the roll’s dislodgement by waves and/or tidal action.

Care should be taken in designing embankment stabilization to consider upland stormwater runoff and groundwater flows when using coir along an embankment’s face or along its toe. Excess stormwater or subsurface ground water flows can create hydrostatic pressure that can push tightly woven coir away from an embankment’s surface if the coir is not properly anchored, fastened, or secured. Sediment or loose sand may be required as fill to cover coir material and to establish a stable slope and angle for an embankment. Coir rolls are typically 12-20 inches in diameter and 10-20 feet long. They are packed with coir fibers and held together by mesh, and they can be pre-vegetated to get a head start on the plant growing process. A high-density roll may be necessary at the toe, while lower-density rolls could be used on the face of the embankment or slope above. Wooden stakes for blankets, earth anchors for rolls, or a combination of the two may be necessary to anchor the system.

Salt-tolerant, climate adapted native vegetation with extensive root systems are best and should be used in conjunction with coir fiber rolls to help stabilize a site. Natural fiber coir mat blankets can be used to stabilize the ground surface while plants become established. It is recommended that coir blankets be run up and down the slope rather than horizontally across it. As the coir rolls disintegrate, the plants take over the job of bank stabilization as their roots grow into an interconnected network to capture and hold sediment, sand, and sandy soils. Native plants growing on the berm or embankment should respond naturally to the ebb and flow of the ocean through changes in tides and seasons. For example, beach morning glories will extend runners and stems seaward during dry periods and will quickly rescind their leaves and stems when regularly inundated with seawater.

If an embankment’s slope is too steep or is undercut it may fail, slide, or sluff due to wave and wind action, especially erosion of the toe of the embankment. For this reason, a slope should be dressed and groomed, so that it is not too steep before covering or reinforcing it with coir materials and planting it with native vegetation. To reduce the angle of the slope to a gentler grade, it is best to regrade it by removing sediment and material from the top of the embankment rather than adding sediment to its toe, since the upper slope rests upon the toe, which is more susceptible to erosion. The plants should not be exposed to stormwater runoff from adjacent yards that could erode away the plants, soils, and materials during heavy rainstorms.

The ends of the extent of coir rolls should be carefully designed to minimize any redirection of waves onto adjacent or down drift properties. Tapering the rolls down in number and height where they end so that they blend with the topography or mirror adjacent grades and stabilized banks can help address this problem. If pavement, driveways, lanais, or lawns extend all the way to the edge of the top of the embankment, they may have to be cut back or repositioned inland, otherwise the bank may become too steep and fail or slump. The weight of concrete or asphalt atop a sandy berm can artificially hold the sand in place causing scarping and bank erosion to occur more quickly than a naturally maintained slope and crest. Proper maintenance of a vegetated buffer using native plant species between the back yard and the edge of the embankment will help minimize and mitigate bank failure and loss. Creating and maintaining a vegetated buffer using rhizomatic plants with spreading root systems will help prevent the loss of sand and sediment resulting in more stable conditions that reduce the chance that the embankment may slump or collapse.

Planted vegetation and weed control is necessary at first. The vegetation should be monitored monthly throughout the growing season to ensure plant success. Temporary irrigation by hand, using jugs, or drip irrigation lines may be necessary until the native, drought tolerant species become firmly established along the face of the embankment and preferably along its toe. The coir material should be inspected seasonally, at least twice a year, and after any storms, high waves, heavy rain events, or king tides, especially during a full moon. Regular, ongoing maintenance is often needed, including replanting barren or denuded spots. It may also be necessary to retighten the fiber roll and the coir mat, coir blankets, or their anchoring system after severe weather events.

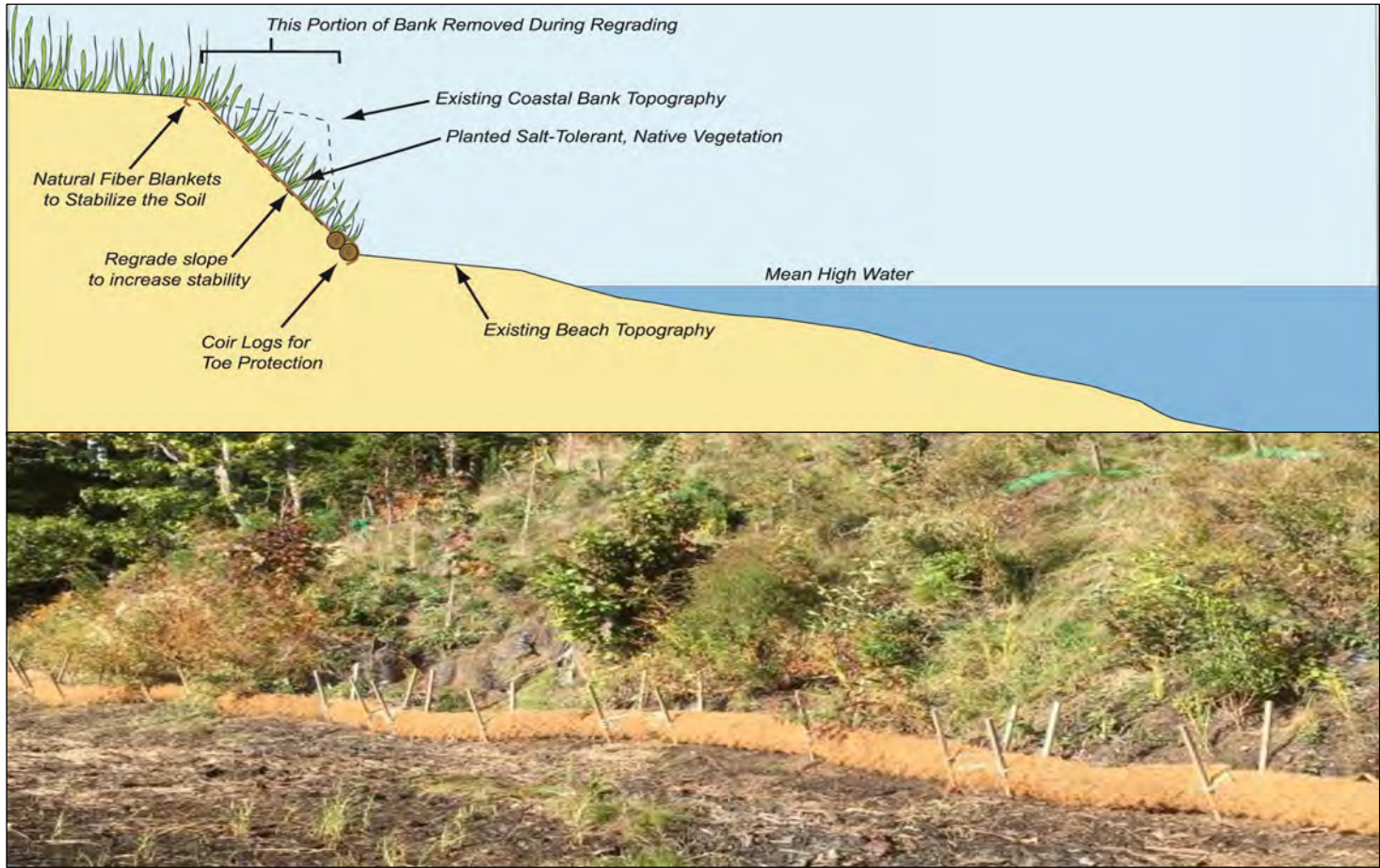


Figure 5.1: Conceptual and actual bank stabilization using coir rolls.
Source: *Bustins Island, Freeport, ME. Photo courtesy of Troy Barry (TNC, 2017).*

5.7.2 Reinforced Sand Berm

In conducting site investigations of the DHHL homestead subdivision there were no primary sand dunes observed. A primary coastal dune is protected under the County’s grading ordinance. Primary dunes are the first sand mound that extends along or parallel to the shoreline, such as those that are visible along Pāpōhaku Beach on the Island’s west end. Despite the absence of primary sand dunes at the DHHL homesteads, sandy berms are present that rise slightly above the coastal plain before descending to the beach and into nearshore waters. Berms were present along the back yard of some homestead lots and areas that had not been graded or altered from their natural state. For instance, sandy berms are evident along the makai edge of Ali’i Park.

Sandy berms play an important function in protecting the coastal plain and ecosystem. They allow for the capture, ponding, filtering, and percolation of upland storm water runoff in the back shore, which reduces water pollution and helps improve water quality in the ‘ice box’ nearshore. Sandy berms also protect the coastal plain from wave inundation and flooding.

Naturally, some king tides or large wave events over a year may overwhelm the crest of the berm, but then the wave loses its energy as it spreads over the coastal plain. Figure 5.2 below shows how coir can be used to reinforce and help build a sandy berm to emulate a sand dune’s natural morphology and beneficial properties.

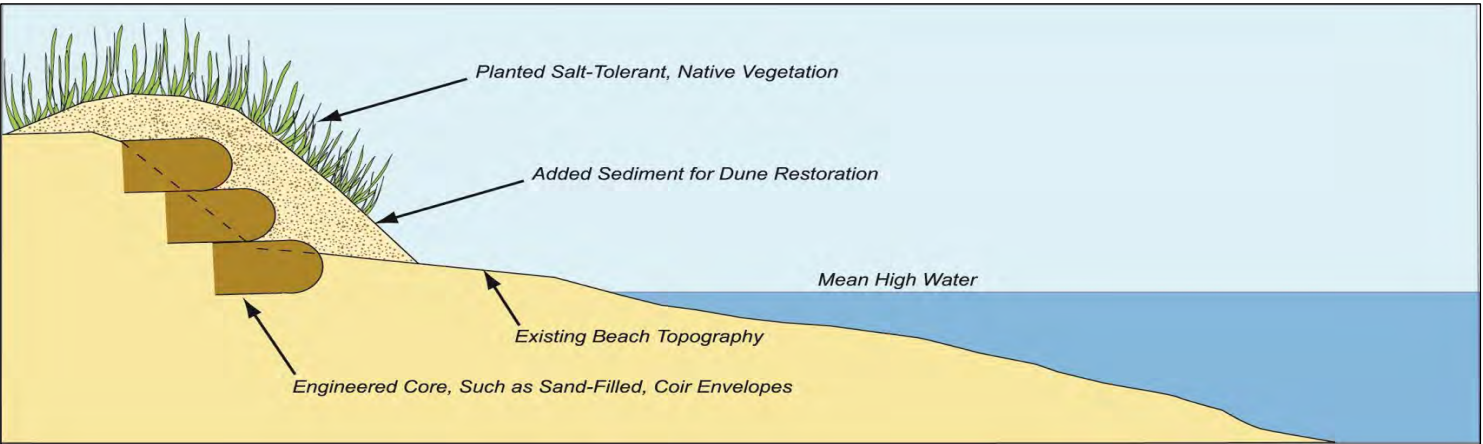


Figure 5.2: Diagram of a sand berm or embankment reinforced with a sand-filled coir burrito (TNC, 2017).

A number of lots in Kamiloloa had low spots in their yards that were lower than Kamehameha V Highway, and lower than the oceanfront edge of the property, suggestive of a berm. Berms are a physical feature usually located mid-beach and characterized by a break in the slope, separating the flatter backshore from the seaward-sloping foreshore (Norcross-Nu’u, Fletcher and Abbott, 2008). Berms can also be described as a terrace formed by wave action, or a mound or accumulation of sand and/or aggregate. The backshore is generally a dry portion of the beach between the berm crest and the vegetation line that is submerged only during very high sea levels and eroded only during moderate to strong wave events.

Constructed berms are a form of green, soft structure that can respond naturally to shoreline retreat, particularly where wave energy is low to moderate. They emulate a sand dune but are not as large, nor take as much space, as a primary sand dune.



Photo: Sandy berm with a sand-filled coir burrito before planting at Kahana Bay, Maui, HI.

For lots in Kamiloloa, coir mat, sandbags, or coir burritos could be placed on top of the embankment or along the seaward edge of the rear yard and covered with sand and then vegetated with native plants. They can be stacked atop one another (3-2-1 or 2-1) like a pyramid or as a wedge against an erosion scarp or embankment parallel to the shore to form a single, continuous berm.

Any opening in the berm would allow waves or seawater to inundate and spread out behind the berm, potentially eroding the mauka portion of the berm as wave surge and swash is pulled back towards the ocean. This type of flanking erosion can also occur at the ends of coir reinforced embankment if not properly designed or protected. If an opening is required, then it should be offset between two overlapping rows of the berm and face opposite of the prevailing wind direction, as wind can displace sand easily. Artificial berms should be constructed behind embankments and as far mauka as feasible, while close enough to the shore to serve as a sediment reservoir during an extreme storm event.

The ends the extent of coir rolls should be carefully designed to minimize any redirection of waves onto adjacent or down-drift properties to prevent end scour. Tapering the rolls down in number and height so the project blends into the adjacent landscape, will help address this problem. Ending coir at rocky outcrops or headlands is also recommended, especially if there is risk to the coir of being cut by rocky substrate or rocks tossed, turned, and moved by wave action.

5.8 SAND DUNE RESTORATION

Sand dune restoration relies on the importation and placement of beach quality sand to compensate for sediment lost from the littoral cell. The sand must be of similar grain size and color, as well as free of silt, clay and other of contaminates that could pollute nearshore waters if washed into the ocean.

A sand dune is a reservoir of sand to buffer, absorb, and reduce a coastal storm’s erosive energy. The dry dune holds sand for when it is needed during storms and large wave events. During these extreme events, incoming waves draw the sand out making the nearshore area shallower which causes the waves to break further offshore thereby reducing the wave’s energy when it reaches the shore. Over time the sand dune is rebuilt by currents, wind, and wave action pushing the sand up and into the backshore provided that native plants remain to help capture the grains of sand that build the dune. Planting the dune with native, salt-tolerant vegetation that can quickly grow an extensive root system will help hold the sediment in place until it is needed. The plant’s roots extend seaward to capture sand pushed up the slope by seawater and rescind back up the face of the dune when inundated with saltwater. Through this natural process of vegetative growth and die back, the dune grows higher, wider, and remains in equilibrium with the coastal environment. Pāpōhaku Beach on Molokaʻi’s west end has natural sand dune formations that reflect this natural phenomenon.

Sand dunes can be created by placing compatible sand or sediment on an existing dune, or by building up a mound of sediment at the back of the beach to create an artificial dune. The sand dune is intended to be sacrificial; its contents will erode away but will buffer and absorb wave energy that would otherwise not be dissipated. Sediment (i.e., sand) can be brought in from an offsite source, such as a sand pit, land being graded for development, offshore depression, stream mouth, drainage outlet, or a coastal project such as a harbor dredging or clearing of a stream mouth. However, the sand must be sufficiently clean and coarse enough for the location, and sieve analysis and grain size tests should be conducted. There are also important cultural considerations that need to be evaluated before moving, relocating, or reusing sand in this manner.

Because the roots of sand-tolerant plants are fragile, they can easily be crushed by foot traffic. Therefore, directing access paths and shore users with signage and low impact roped pathways is highly recommended. To prevent blow out of the dune sand, pathways should be oriented at an acute reverse angle to the prevailing wind direction, or the path should approach the shore from behind the dune and use a wooden cross over to bridge the dune. A beach or shoreline access path should never face directly into the wind, as this will cause a loss of the placed sand and deflation of the dune’s volume. Sand fencing can also be installed to trap windblown sand to help maintain and build the volume of a dune. The use of educational illustrative placards, signs, marked and delineated footpaths, fencing, and wind-fencing all help to protect the vegetation that naturally covers and holds the dune’s sand and sediments in place.

The seaward slope of the dune should be less steep than 3:1 (base to height). Dunes with vegetation perform more efficiently than dunes without vegetation, ensuring stability, greater energy dissipation, and resistance to erosion. Dunes planted with native plants can provide significant wildlife habitat, such as nesting sites for turtles and wedged-tail shearwaters, a seabird of cultural significance. The height, length, and width of a dune relative to the size of the predicted storm waves and storm surge determines the level of protection the dune can provide.

Dunes typically erode during storm events. Plants should be replaced if they are removed by a storm or die. In areas with no beach at high tide, dune projects will be short lived as sediment is rapidly eroded and redistributed to the nearshore. The added sediment from dune projects supports the protective capacity of the entire beach system (i.e., dune, beach, and nearshore area). Any sand eroded from the dune during a storm, supplies a reservoir of sand to the fronting beach and nearshore area. To maintain an effective dune, sediment may need to be added regularly to keep the dune’s height, width, and volume at appropriate levels.

Dunes dissipate wave energy rather than reflect it like a seawall does. A sand dune serves as a barrier to storm surge and prevents flooding of buildings and structures located inland by reducing over wash events. Sand dunes are one type of living shoreline and are important to preserve.

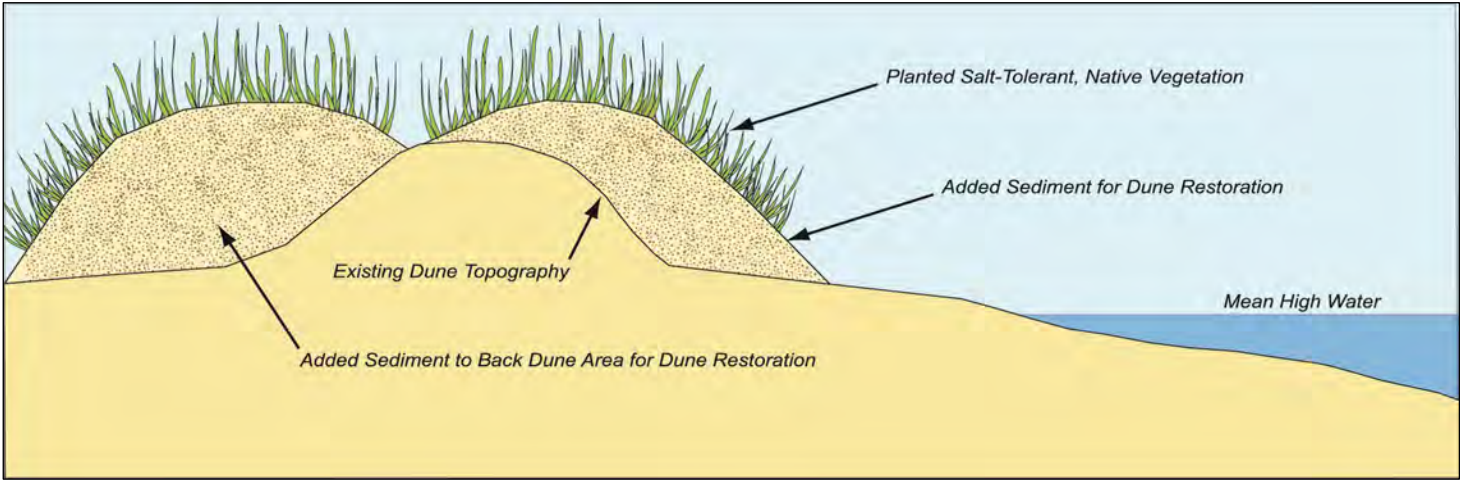


Figure 5.3: Conceptual diagram of a restored sand dune (TNC, 2017).

5.9 BEACH RESTORATION

Beach restoration and beach maintenance are the only management tools that serve the dual purpose of protecting coastal lands and preserving beach resources (Beach Management Plan, 2008). Beach restoration can provide erosion protection as well as enhance recreational resources. The sand helps to buffer erosive waves by absorbing and dissipating wave energy while enlarging the amount of dry beach area available for users of the shoreline. Beach restoration can address erosion on a regional littoral cell basis rather than a property-by-property basis. Regional littoral cell approaches to beach restoration tend to be more proactive and effective at protecting beach assets than property-by-property approaches. Beach restoration involves the placement of sand as fill, with or without supporting structures, along the shoreline to widen the beach.

In Hawaiʻi, these efforts amount to either beach restoration or beach maintenance (HSBPA, 2015), as listed below.

1. Beach Restoration

- Using land-based sand resources (e.g., offsite grading).
- Using sand dredged from offshore deposits.
- Beneficial reuse of sediment, such as from a harbor or stream mouth clearing project.

- Sand imported from outside Hawai‘i (although imported sand is no longer permitted to be used on State submerged lands or beaches).

2. Beach Maintenance

- Sand back-passing (recycling) from an area of seasonal beach accretion to an area of seasonal beach erosion.
- Sand pushing or beach scraping to rebuild back-beach volume or dunes using seasonally accreted sand from lower on the beach profile.
- Dune restoration using borrowed sediment (including sand) and other measures such as revegetation with native species and dune fencing to capture windblown sand.

While beach restoration is a favorable method of shore protection, it may not be appropriate at all locations. The chance of beach restoration success is much higher for embayed shorelines (coves, pocket beaches) than for straight or convex (curved outward) shorelines, unless structures such as groins are used to simulate the effect of headlands to retain the sand. Beach restoration may not be appropriate for areas with sensitive marine ecosystems such as coral reefs or locations where the sand may fill holes in the reef and damage habitat for tako (octopus) and other marine life. Additionally, water quality and marine life surveys are important before, during, and after sand placement to determine whether any negative impacts arise from the addition of sand.



Photo: *Vegetated dunes provide a reservoir of sand at Kama’ole Beach Park I in Kihei, Maui.*

Hawai‘i’s white sandy beaches are made of carbonate sand, which is derived from skeletal components of marine organisms such as coral, algae, crabs, shells, and mollusks. A considerable amount of sand is also produced by herbivorous fish as they graze upon algae within corals. A mature parrotfish or tang can contribute several pounds of sand a year and thus efforts to increase their abundance and longevity should be encouraged to help restore sandy shores and beaches.

Sand used for beach restoration should be compatible with the existing sand on the beach. Due to the sensitive nature of marine life, it is important that sand for beach restoration be as close as possible in size and composition to the existing sand on the beach, and that it be as clean, and free from silt and clay as possible.

Silt and clay can cause brown sediment plumes to form when they enter the water and can be harmful to corals and marine life. To prevent this, a sieve analysis of the existing native sand and the proposed sand fill is required, and the two must be comparable, before sand can be placed along the coastline. The State of Hawai‘i DLNR OCCL strictly regulates the size, color, quantity, and quality of sand used for restoration purposes and Maui County’s Department of Public Works regulates the coarseness and quality of sand placed as fill in the shoreline area.

The sand chosen to be placed on a shoreline must have sand grains that are equal or greater in size than the existing sand on the beach to prevent it from washing away. The sand must be clean and coarse because silt and fines within placed sand or fill can pollute nearshore waters and damage coral reefs. The volume of sand fill or the amount of sand placed along the shore should be calculated to represent an optimal beach width, noting that sand dunes are typically 20 to 30 degrees in angle. Care should be taken to emulate previous beach widths and profiles. Historic beach widths and profiles can sometimes be estimated by comparing the current vegetation line or wet/dry line to previous beach widths as determined through an analysis of data gathered through traditional ecological knowledge, empirical observations, archived maps, and old site or aerial photographs. The information gathered through these sources is compared to immovable shoreline reference features such as headlands, rock formations, and large mature trees to identify the location of the existing shoreline relative to historic shorelines. Adding plants can help retain placed sand and sediments. However, the use of soil may be restricted and any sediment used should be carefully monitored so that it does not wash off or pollute the ocean, nearshore waters, and nearby coral reefs.

5.10 SILLS & EDGE REINFORCEMENT

A sill is a mound of rocks, stones, or boulders placed in linear fashion along the edge, or in the shallows, of the shoreline. The rocky sill is backed by an expanse of reeds, tall grasses, or marsh vegetation that can thrive when regularly inundated or submerged by high or king tides. Structures and back yard areas that are actively used must be located inland or mauka of the vegetative buffer.

The rocky edge (i.e., sill) prevents erosion by interrupting swell energy and protects the vegetation from scour, whereas the vegetation absorbs wave energy. For instance, a 25-foot wide reed bed can diminish nearly half of the incoming wave energy in a salt marsh, due to the flexibility of the stocks of the plant, the proximity of the stocks to one another, and the diffusion of energy that occurs when waves flow around the stocks of the plant. Capitalizing on this feature, sills create a sort of energy sponge or shock absorber along the coastline. They can act like a curb stop or speed bump to incoming waves.

Sills are useful in low to moderate wave energy environments. Gaps or offsets in the rocky edge can increase tidal exchange, seawater inundation, and habitat connectivity much like a gate in a fishpond. The size and placement of the stones should be such that they form an immovable mound, or trapezoid, but not a wall as this would tend to reflect wave energy. The top of the mound should not be so high as to limit inundation of the vegetation during high tides. The location of the rock sill should be between low and high tide lines such that the toe of the sill is exposed during low tide, but the mound is not high enough to be exposed at high tide.

A rocky sill can also slow or displace stormwater drainage or interrupt the discharge of sediments that are carried from upland areas to be discharged offshore or through tongue and spur reef formations. Sills may not be appropriate in locations where upland storm water flow is excessive, heavy, or carries a high sediment load, as the sediment can quickly build up within the vegetation bed behind or mauka of the sill preventing its plants from being submerged.



Photo: An example of a vegetated sill. *Source:* North Carolina Coastal Federation. <https://www.publicradioeast.org/post/living-shorelines>.

Sediment can also accumulate just inland of the sill reducing its effectiveness, if not maintained or properly designed for the shore's morphology. A rocky sill should not be placed so low on the shoreline as to become buried in accumulated sediment as this would reduce its efficiency and effectiveness. Ideally, the plants behind the sill biodegrade and stabilize accumulated sediments to keep the system in balance. Stones, rocks, coral, and/or large coral fragments can be used as the base material for the sill.

Gaps within the line of rocks forming the sill may be necessary to allow for access between the dry land and the ocean. Any gaps for foot trails or small boat access should be offset from one another so that waves and water cannot enter the backshore area directly, as this would allow for scouring and contribute to flanking erosion behind the sill. Access points should be consolidated to reduce degradation of the vegetation behind the sill and the sill itself. Typically, the access point should be oriented at an obtuse angle to the prevailing wave and wind direction to reduce the risk of damage by strong wind or waves.

Installing a sill may require more land area than hardened approaches to shore armoring. Sills also may not provide protection during large storm events. However, they do provide a more naturalized response to shoreline erosion, and they are more resilient than seawalls and bulkheads. Establishing vegetation successfully can be a challenge, especially if invasive species

compete or are prevalent at the site. Ongoing monitoring and management of the sill is recommended. Coastal storms can displace the sill and knock over stands of plants. However, dislodged clumps of plants can resurrect themselves and turn upright after a few weeks with minimal help or intervention.

5.11 GABIONS & MATTRESSES

Gabions are metal baskets filled with cobble sized rocks or stones. Gabions are often shaped like a cube and can be stacked upon each other along the front edge of an embankment to help protect it from erosion. Stones, rocks, coral, and/or large coral fragments can be used as the fill material for the gabion basket. A typical stainless-steel gabion basket is three cubic feet (3 x 3 x 3 ft.). However, metal baskets degrade in salt spray coastal environments and can leave sharp rusted wire in its wake should the container deteriorate. Stainless wire can cause injury after the basket degrades and saltwater causes it to rust. As an alternative, plastic or synthetic mattresses offer a more flexible, durable container when filled with rocks or stones. However broken or loose plastic strips can be confused by seabirds, turtles, and wildlife as being edible. Both the stainless steel and plastic types of containers come in a range of sizes, and each has its advantages and disadvantages. The rocks used can be angular rather than rounded to facilitate the entrainment and capture of sand in the voids that form between the rocks. However, if the mattress breaks open and the sharp rocks are released into the beach or nearshore environment, they can have adverse impacts on foot traffic.

Mattresses can conform to an embankment and be quickly mobilized and filled. They should be underlain with geofabric to prevent dissolution of the soil on the embankment and to reduce hydrostatic pressure from subsurface or groundwater flow. They often have sufficient weight to maintain their position, however cable anchors are often used to ensure their stability. Foot traffic on top of mattresses should be avoided. Rear yard irrigation and/or storm water discharge pipes should be redirected away from the mattresses to reduce subsurface flow and hydrostatic pressure behind the mattress fill material.



Photo: Tensar brand rock filled mattress underlain by geotextile fabric.



Photo: *Tensar geotextile mattress filled with hard, angular rocks to capture sand particles.*

5.12 GEOTEXTILE BAGS, TUBES AND APRONS

A common, flexible, and potentially temporary option to combatting shoreline erosion is to use geotextile fabrics. The fabric is flexible, durable, easy to ship, and allows water to pass through the fabric but not sediment. The fabric is vastly stronger than coir and does not degrade when exposed to direct sunlight or seawater. This key feature makes the use of geotextiles along the coastline an attractive, low cost, impermanent alternative when compared to constructing more permanent shoreline hardening or less permanent soft measures that rely on coir mat.

Skirts or Aprons

Long sheets of geotextile fabric can be configured to overlay an embankment to stop it from being eroded by wave action. Often the embankment is ‘dressed’ to remove rocks, tree roots, or sharp items and to smooth the face of the embankment. The geotextile skirt or apron that is overlaid on the embankment’s face must be held tightly at its top and anchored at its bottom to prevent it from being dislodged by wave action. The top can be held with cables and platypus anchors embedded in the rear yard, but care must be taken that the cables do not become tripping hazards.

The bottom of the skirt can be held down by placing heavy sandbags in the hem of the skirt or a chain or heavy pipe can be sewn into the hem of the skirt and buried under the surface of the beach. However, if the hem or its anchoring is exposed to waves and surge action, the geotextile fabric or its seams can tear and fail. Subsurface groundwater can also build up behind the fabric and displace or dislodge it if it is not porous enough to accommodate the hydrostatic pressure emanating from the embankment that it is covering.



Photo: *A geotextile erosion skirt covering an eroded embankment at the Kā’anapali Beach Club, West Maui, 2018.*

Sand-filled Burrito’s

Some lightweight geotextiles, such as Mirafi 150 - a black felt-like fabric, can be laid out flat, have dry sand placed in its midst, and have the ends wrapped overtop of the placed sand and sewn together to form an elongated sand-filled bag - a ‘burrito’ of sorts. The burrito can be shaped to fit the contour desired, but it has no structural strength. This method is particularly useful in situations where sinkholes have formed within a yard, or behind a seawall, that need to be filled quickly to stabilize the situation and bring the yard up to the natural grade.

Burritos are a good temporary measure to stabilize cavities that often form inland of shore armoring. The fabric and fill don’t necessarily stop the surrounding soils from eroding but can move in response to wave surge and be pulled into cavities or gaps in shore armoring.

Geo-tubes

Long, flexible tubes can be purchased and filled with sand to form a barrier along the shoreline that prevents erosion of the backshore area. The tubes are usually placed parallel to the shoreline along the bottom of a scarp or an embankment. Over time they often become embedded into the landscape and its contour due to sloughing of the upper embankment. The tubes can also be placed perpendicular to the shoreline to form groins that trap sediment and sand moving along the shoreline. Sediment will accumulate on the up-gradient side of the geo-tube groin as the prevailing current will build material up against one side of the groin but deprive sediment accumulation on the down drift side leading to greater erosion depending on the seaward extent of the geo-tube.



Photo: A stack of sand-filled burritos made of black Mirafi filter fabric, West Maui, 2018.

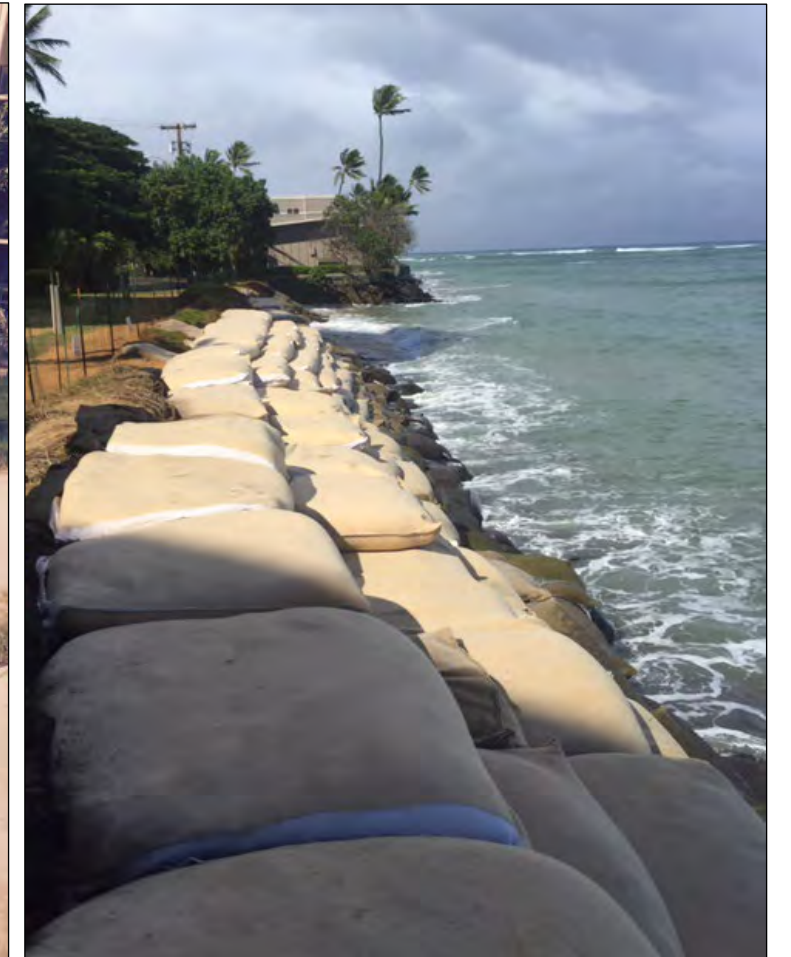
Geo-tubes are normally filled using a slurry of sand and water and the water drains out of the tube. This ‘de-watering’ can trigger additional permitting and mitigation measures to prevent pollution of the ocean.

Industrial Sandbags. Geotextile bags come in a range of sizes, shapes, and material durability. One of the most durable and commonly used in Hawai‘i is the Elco Rock brand of sand filled geotextile bag. They are made in Australia and shipped by plane to Hawai‘i. Typically, Elco bags are filled with dry sand, sewn together at their crest, and then moved and positioned in place by an excavator with a specialized claw designed to squeeze, but not rip or break, the bag’s fabric. The bags are filled upright, lifted, and turned sideways by the excavator to be stacked in horizontal rows. Typical sizes are 0.75 and 1.5 cubic yard in size and weigh 3,000 to 10,000 pounds each. The bags are designed to not be easily displaced by large surf, strong currents, or wave action. However, they do move and can shift over time, and algae can grow on the geotextile fabric where it is frequently submerged making it a slipping hazard.

The large industrial bags are usually placed along the edge of a scarp or embankment to prevent further erosion of oceanfront property. The bags are laid on their side and placed snugly against each other to form a long row along the shoreline. The first row of bags should be placed low enough to prevent under scour of the sand or media upon which the bags rest and which forms its base. Additional rows of bags are stacked upon the underlying row of bags and are usually offset to form an angled revetment. The geotextile bag revetment is designed to mimic the contour of the land it is protecting and may be back filled to closely conform with the inland area to be protected. The top row of bags and the crest of the bag revetment should be higher than the prevailing upper reach of the waves to prevent the area behind the bag revetment from becoming saturated with wave over wash or seawater.



Photo: A sand-filled Elco brand geotextile bag revetment atop Tensor mattresses, West Maui.



Photos: Geotextile bags may shift due to storm surge and typically require maintenance over time as these before and after photos illustrate, West Maui.

The leading deterrent to government authorization of the use of Elco Bags is that once they are in place, they are often not removed by the property owner and become *de-facto* permanent shore protection. Over time, the bags can become slippery with algae and hinder access to and along the shoreline. Moreover, individual bags can become dislodged from the revetment, or break open and become entrained on nearby reef or rocks. While very durable, the bags can tear if repeatedly bashed about on rocks or reef substrate by wave action, or impaled by wave tossed rocks, leading to their premature deterioration or failure.

Shifting of the bags from hydrostatic pressure behind the bags is also common, especially if seawater or groundwater builds up behind the embankment that the bags are protecting. Wave over wash and subsurface water can cause dissolution of the soils in the embankment behind the bags. Thus, the embankment should be covered in geotextile fabric and the bags underlain with the same fabric to prevent soil saturation and sediment transport into nearshore waters.

Other bag types

There are other types and brands of sandbags. For instance, top-filled polypropylene trap bags that can be 4-feet tall and 4-feet in diameter and can be stacked with an excavator. The 300 pound plus bags (when filled) have handles so they can be lifted and moved by heavy equipment. They can also be tied together to reflect incoming wave energy. However, polypropylene trap bags do not prevent water from reaching the backshore which can result soil dissolution due to soil saturation by incoming wave surge action.

Smaller plastic, hand-filled sacks weighing 35 to 60 pounds can also serve in an emergency. However, these are usually not large or heavy enough to remediate coastal erosion over the long term. The contents of the bags can become water-logged and behave like pods of jelly, rolling about due to wave surge, injuring people, and damaging nearby buildings or structures. They are easily displaced by Hawai‘i’s substantial wave energy and surge and are too small and light to prevent wave inundation.

These types of bags also have many drawbacks, for instance the plastic bags can tear, releasing their contents, and become floating trash in marine waters that turtles and marine life mistake as food. Unfortunately, the bags are often filled with sand from the nearby beach which reduces the shoreline’s ability to absorb and dissipate wave energy.



Photo: An example of polyurethane plastic sandbags.

Sand Fill

The DLNR OCCL has strict guidelines for the types of aggregate and fill that can be placed inside or used in conjunction with the above methods. Sand is the preferred fill or aggregate to underlay skirts or aprons and to fill burrito’s, geo-tubes, sandbags, and Elco bags. The fill must be consistent with the native materials found along the shoreline being protected. For instance, if gray gravel for a parking lot is used to fill the bags on a coralline beach, but the bagsbreak open during a storm, the bags could release the sharp-edged gravel into the much softer coral white sand beach degrading the beach’s color, texture, and potentially making it painful for foot traffic along the shore. The fill material must be of similar color, density, and coarseness to the original native beach material so that it sticks to the shore and is not easily washed away by normal tides, currents, and waves.

Consistent with State Department of Health regulations to protect near shore water quality, the fill used for sandbags and tubes must be clean and not have an excess of silty organic material. Clay, dirt, and fine sediment can dissolve into the water column or be easily washed into marine waters creating red or brown plumes. This water pollution makes the nearshore water murky, blocks life-giving sunlight from reaching corals and their symbiotic algae, increases water temperatures, and it can harbor pathogens and nutrients within colloids of the sediment grains matrix. For the reasons above, among others, only clean sand fill with less than 6% fines and no more than 10% cobble can be placed along the shoreline or used as fill in sandbags or sand containment devices. Both the Maui County Department of Public Works and the State DLNR OCCL regulate the quality of sand used as fill within the shoreline environment, with the State having more stringent requirements. A sieve analysis conducted by a geotechnical laboratory can determine if the sand proposed to be used as fill meets regulatory guidelines.

One of the main benefits of using geotextile containment is that once in place, the fill material can be removed by cutting the fabric to allow its contents to be released to the environment. If the fill is clean sand, then it can be released, and no harm would come to marine life or water quality. The geotextile fabric can be gathered, removed, and appropriately disposed of relatively quickly so it does not harm or pollute the marine environment.



Photo: Polypropylene “Trap Bags”. (Kaanapali, West Maui, 2018).

5.13 HARD STRUCTURAL TECHNIQUES

Armoring the shoreline with walls, bulkheads, and other impenetrable structures can help protect the land, but usually at the cost of losing the beach or sandy shore. Because walls merely reflect wave energy and do not absorb or dissipate the wave’s energy, they are generally a less favored response to shoreline change. Walls and armoring almost always require continued, ongoing maintenance. They often have unplanned, undesired consequences especially on neighboring properties and nearshore coastal resources. Furthermore, walls and armoring may fail to protect inland development during hurricanes or severe coastal storm events. When they fail during such episodes, it is often difficult if not impossible to stage and implement repairs. For this reason, most regulatory agencies prohibit the construction or expansion of shore armoring except in limited, unique circumstances, and then only with strict provisions relating to land use, maintenance, best management practices, and shoreline access. The best coastal hazard strategy is avoidance. However, there are steps that can be taken to make walls, revetments, bulkheads, and other forms of armoring more effective and less likely to fail as discussed below.

5.13.1 Bulkheads

A bulkhead is typically a vertical wall that extends parallel and along the shoreline. Bulkheads are primarily used in low wave energy environments. They are intended to hold soil in place, fixing the location of the rear yard or back yard and ensuring that it is preserved. Bulkheads are often made of corrugated steel or vinyl sheets that are linked together. The sheets can be cantilevered to hang upon pile driven poles, or they can be driven into the substrate. Stability can be gained if the sheets are also anchored by cables buried in the rear yard. Wood poles are driven into the substrate on the seaward side to provide added stability and are bolted to each sheet. Once in place, the bulkhead can be backfilled, and the grade brought to its top to have a level rear yard.

Access to the ocean is usually limited to stairways built over the bulkhead, as an interruption in the wall’s face would weaken the structure’s integrity. Walkways atop the bulkhead can be integrated into its cap for access along or above the shoreline. Bulkheads do not solve the cause of an erosion problem and are primarily used where there are small or no waves such as along a stream, inlet, harbor, or bay. Bulkheads require ongoing maintenance.



Photos: A typical vinyl and wood pile bulkhead.

5.13.2 Sheet Pile

Sheet pile is made from steel or vinyl. It is designed to be pounded through the substrate until it meets bedrock or hardpan. The sheets link together and can be held on either side by a singular steel pile which extends into the bedrock or hardpan. Sheet pile can be used in coastal environments exposed to wave energy. However, given their small footprint, they are best

used in combination with other methods such as a small rock revetment fronting the sheet pile. Exposed faces of sheet pile should be treated or covered in concrete, as should its cap to prevent saltwater intrusion and rusting of the sheet material. Sheet pile installations generally have much shorter lifespans than a poured concrete seawall or rock revetment. They also are highly reflective of wave energy despite their irregular face creating choppy water nearshore with turbulent cross currents. Sheet pile can contribute to down drift scour or erosion.



Photos: Sheet pile shore protection.

5.13.3 Seawalls

A seawall is a vertical wall that faces, or is parallel to, the ocean and its prevailing wave direction. Seawalls are intended to prevent the loss of soils, sediment, or property from being eroded by waves or consumed by the sea. They may be constructed of a variety of materials, but stronger seawalls are usually made of poured high-strength concrete, concrete masonry unit (CMU) blocks, or large cut lava stone that is stacked upon each other and held with mortar. Steel rebar is added to the seawall to give it strength. The metal rods create a more rigid grid or form within the poured concrete or are inserted into the hollow part of CMU blocs before they are filled with concrete. Metal rebar should be coated with epoxy to extend its life and prevent it from rusting. Within poured concrete, rusting rebar will spall and expand causing the concrete to chip or weaken from the inside out if not properly prepared. Spalling of concrete is a common problem in Hawai’i. Seawalls can be pile or gravity supported, with the latter most common in Hawai’i. Seawalls normally require ongoing maintenance and can be expensive to repair once damaged.

Seawalls retain soil on one side of the wall and thus need to have weep holes in the wall that allow rainwater and wave splash over to drain back into the ocean. Weep holes are normally placed just below the grade of the rear yard and just above the high tide line. The weep hole drains are wrapped with geotextile fabric so that they do not clog. Additional weep holes may be needed depending on the depth of the soil column, its drainage properties, and the area’s hydrology.

Seawalls should be high enough so that waves do not overtop the wall and should be higher than high tide combined with storm run up levels. A seawall should have an over-wash lip to prevent incoming waves and swells from splashing up in the air and having a portion of the water falling landward behind the wall. This area can become saturated with water and cause the soil behind it to behave as a slushy liquid (dissolution) that can be pulled underneath the wall or through cracks in the wall causing the wall to collapse. For this reason, a seawall must be properly designed with weep holes, geofabric filters for drainage, and have a foundation that cannot be scoured by waves.

The footing for a seawall is a critical component to its strength and longevity. Seawalls need to be anchored to unmovable substrate such as bedrock or thick reef hard pan. The footing for a seawall must be wide enough on each side of the wall to

allow it to rest securely without being toppled over by hydrostatic forces that can build up behind the wall. The toe, or bottom of the seaward face of a seawall, should have a sill or ledge that protects the wall's footing from being under scoured by wave action or that can succumb to the loss of the sandy substrate fronting and the seawall.

A seawall must have a properly designed tieback at either end of the wall to prevent flanking erosion, where wave energy wraps inland and scours out softer materials at the end of the wall. The impact of building a seawall can cause the erosion problem to move down drift to an adjacent property, causing new erosion and creating the need for further armoring. This domino effect is a common cumulative problem that results in a community's loss of its sandy beach and dry access for subsistence gathering, fishing, and recreational activities.

Access along the face of a seawall can be lost due to erosion and shoreline retreat. A seawall's toe can become slippery with algae if regularly submerged or exposed to tidal action. Access to the ocean is limited to breaks in the wall such as stairways, but these are weak points in the wall's integrity. Seawalls do not address the cause of an erosion problem, and they can mask it until sinkholes and fissure cracks form in the rear yard due to under scouring and unseen breaches in the wall.



Photo: A poured concrete seawall.

5.13.4 Revetments

Revetments form a slope that is made of stones that fit together and lay over the slope of the shoreline or embankment to protect it from erosion and wave impact. Waves run up the face of the revetment and cause them to lose energy. As the water is pulled back down the face of the revetment by gravity, the swash breaks the trough of the next incoming wave, reducing its energy.

Each stone should rest upon the stone below it with the bottom toe stone being the largest, most immovable portion of the structure. The revetment should be built no steeper than a 2 to 1 ratio, and ideally at a 33-degree angle.

Filter cloth should be used underneath the placed stones in a revetment since water may penetrate through cracks and crevices and the sediment upon which the stones rest upon. This sediment may become saturated or liquified but should be held behind the filter cloth to prevent its dissolution and loss which could cause the stones in the revetment to lift, shift, or



Photos: A properly designed revetment has interlocking stones underlain with geofabric.

move leading to the structure's failure. As such, stones on a revetment are frequently underlain with multiple layers of known-sized well-drained aggregate, rocks, and geotextile fabric.

A revetment needs to be tall enough to prevent overtopping by high tides plus storm run-up levels. It must have a foundation that cannot be scoured or eroded such that the base stones could shift. Rocks on a revetment rest at an angle atop lower lying stones, much like the scales of armor on an Armadillo. If a lower rock is displaced, the upper stones can slide, slip, or shift leaving gaps in the armament.

The toe stone must be sufficiently large, and heavy enough to not be dislodged by storm waves. It should be placed well below the low tide line and below submerged areas to prevent scouring of the sediment or base upon which it is resting. Revetments can cause negative impacts such as the loss of sand in front of the armoring, flanking erosion at the ends of the revetment, slippery faces that are susceptible to algal growth, and new erosion to neighboring or down drift properties. Since they are less reflective of waves, sand in the water column may fall out of suspension and buildup intermittently at the toe of a revetment.

Wave over wash or improper handling of drainage can cause hydrostatic pressure to build up behind the revetment. Without proper weep holes, filter fabrics, and aggregate design, water can accumulate behind the revetment and cause displacement of armor stones leading to the structure's collapse and failure.

5.13.5 Groins

Groins are jetties that extend out into the ocean, seaward and perpendicular to the coastline. They are typically comprised of large rock armaments set upon geotextile fabric with a length, width, height, and seaward end (head) tuned to the coastal forces and prevailing waves at the site. The landward end of a groin is usually buried to allow access along the shore and is not visible. Groins must rise high enough from the submerged land or seafloor to trap sand and sediment to form a protective buffer along the shore. Accumulated sand should eventually cover the landward portions of the groin so that the groin does not interrupt or hinder lateral access along the shoreline.

The spacing between groins should be 2 to 3 times the length of the groin. Sand and sediment will accumulate on the updrift side of a groin but deprive the down drift side of the groin of sand and sediment which results in erosion on the groin's down drift side. The length of the groin should be sufficient to capture sand and sediment that is moving alongshore, but not too long as to cause excessive or accelerated erosion on the down-drift side or ponding and lack of circulation on the up-drift side. Groins should also be oriented so they can deflect incoming wave and storm energy rather than channel it to the down-drift side where it would accelerate erosion and shoreline retreat.



Photo: A series of short rock groins have retained the beach at Stables Road, Maui.

Groins are typically constructed in a series comprising a groin field with multiple groins that extend perpendicular or at an angle to the shoreline, rather than just one or two groins. Groins can provide a platform for fishing and recreation making it easier to access areas further offshore. But like revetments, a groin’s surface can harbor algae that may be quite slippery to walk upon. Groins can channel or redirect the current to flow along the side of the groin to its offshore end. Consequently, they can introduce a danger for swimmers or recreationalists if they become entrained in this flow. Similarly, once in the water, individuals may find it difficult to exit because the groin’s slope and surface can be too slippery or steep to climb out of the water and the structures usually lack handholds, railings, cracks, crevices, or roughness to facilitate egress.

Visually, groins can interrupt natural view planes to the ocean and can have a negative impact on the perception of the environment. Similarly, views along the shoreline can be degraded by the interruption that a groin creates along the coastline. Depending on their size and configuration, a large groin can serve as a fishing platform or means to enjoy mauka views of the coastline and mountains.



Photo: A concrete block groin illustrates updrift accretion and down drift erosion at Kūhiō Beach, Waikiki, Oahu, Hawai‘i.

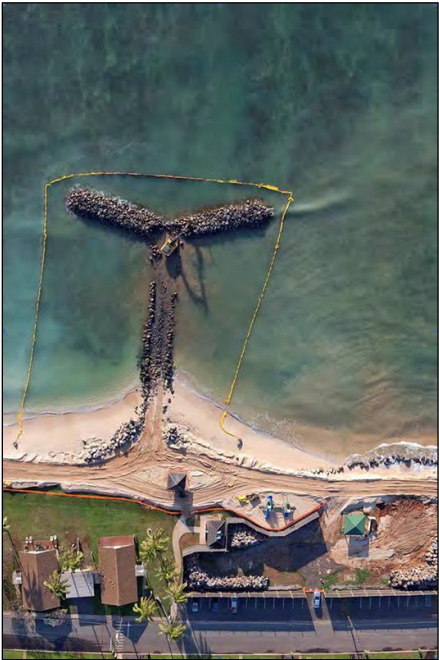
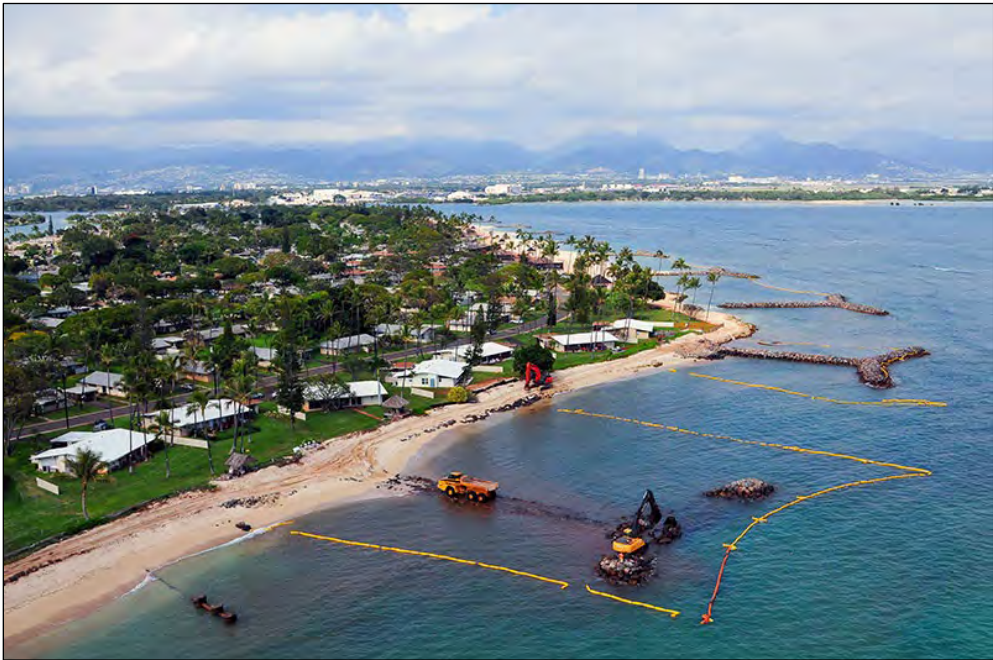
Engineered groins can form a navigational hazard to vessels especially for smaller watercraft, motorboats, and sail boats that come close to shore. Under certain high wave or high tide events, the crest of a groin may not be clearly visible and could cause damage to a propeller or keel. Installing large groins usually needs federal approval from the U.S. Army Corp of Engineers, adding another layer of permitting to the complicated coastal zone management process.

Groins are best suited to shorelines where an alongshore drift direction dominates. Like other forms of armoring, groins need to incorporate geotextile filter fabric to allow liquid and water to move without dissolution or loss of fine sediment, sand, or soils. Groins are typically made of rocks and armor stones. However, groins can be made of a variety of materials, such as wood, stones, concrete block, or sand held in bags, but they are susceptible to displacement and failure if not stout and strong

enough to withstand storm force waves and powerful along shore currents. Groins require maintenance due to the displacement of rocks and other materials by storms or wave action. Groins do not prevent inundation of property by waves or flooding of rear yards, but they can reduce this risk by capturing and building up a reservoir of sediment or sand that may help buffer or diminish coastal hazards.

Stub, T and L-shaped groins.

Stub groins extend seaward like a stem and do not diminish or hinder incoming waves. T-Head groins have rock platforms that extend from both sides of the head or end of a stub groin, whereas L-Head groins extend from only one side of the seaward end of the groin. The extensions are designed or angled to interrupt, diminish, or break up incoming wave energy. The “T” or “L” can reduce wave energy on either side of the groin and create an eddy to reduce erosion or transport of sand and sediment within the groin’s area of influence. The back shore and shoreline area down drift of the last groin should not be comprised of erodible material to prevent acceleration of shoreline erosion. An L-Head Groin may be used for the last, down-drift groin with the base of the L facing updrift and seaward to capture sediment and prevent it from being lost or transported around the seaward end of the groin and out of the littoral cell system by the prevailing current.



Photos: Iroquois Point Pearl Harbor, Honolulu, Oahu, Hawaii, 2013. **Source:** [Healy Tibbits Construction](https://www.healytibbits.com/projects/project-details/iroquois-point-beach-nourishment).
<https://www.healytibbits.com/projects/project-details/iroquois-point-beach-nourishment>

5.13.6 Breakwaters

Breakwaters are offshore structures that are intended to break waves before they reach the softer shoreline or the slope of the backshore area. The rocks break the waves, reducing their force, and help prevent wave action from cutting into the sediment and carrying it away. The rocks must be heavy and large enough to not be easily displaced by wave energy. A design with interlocking rocks can strengthen the structure, but it must be secure enough to withstand submergence and the force of waves and strong storm currents. Stone or rubble breakwaters should be underlain with geotextile filter fabric if placed on sandy bottom to prevent displacement or dislodgement of the breakwater.

The breakwater should not be continuous; but should generally run parallel to the coastline and have sufficient gaps to allow water to ebb and flow behind the structure and between it and the vegetated shore. It is important that the breakwater not block or hinder circulation so as to prevent stagnation along the shore, stop eddies from forming behind the breakwater, and allow sufficient flushing of seawater as to support marine life.

A breakwater should be located sufficiently offshore to allow a bulge to form inland of the breakwater. It should be high enough to break waves, but not so low or short that it creates a navigational hazard to boats or watercraft. Gaps between offshore breakwaters should be wide enough to cause minimal change in nearshore currents and to prevent stagnation or undesired sedimentation. Breakwaters and rubble mounds can change the configuration of the shoreline, alter alongshore transport of sediment, and have unintended consequences if not properly designed, located, and constructed. Breakwaters should also be located sufficiently offshore to have the effect intended. For instance, sand can accumulate immediately behind the structure because along shore transport mechanisms from the swash of the waves, has been interrupted. Breakwaters can also have a significant effect on the makai view, and surfing waves, particularly for leisure activities on the beach.



Photo: A rubble mound breakwater has accumulated sand in the eddy behind the structure.
Photo by K. Duhring. Source: [Center for Coastal Resources Management, Virginia Institute of Marine Science](#).

5.13.7 Breakwaters with Vegetated Backshore

Vegetation and slope stabilization can be used in conjunction with a breakwater to emulate a reef shelf. The design is similar to a sill backed by vegetation. The roots of grass and native, salt-tolerant plants can help hold soils, sediment, and sand in place in the backshore area, whereas the breakwater reduces the force of incoming waves. The types of plants used should have roots that spread horizontally rather than roots that grow vertically. The spreading roots hold more sand and sediment over a larger area, but their roots are shallow and fragile so walking on them must be avoided so the roots are not trampled and die. Designated paths with rope and post boundary fencing can be used to direct pedestrians away from fragile plantings. Commonly used plants include Naupaka, ‘Aki ‘Aki grass, bulrush, and Pōhuehue (beach morning glory).



Photo: Breakwater sill and marsh vegetation at Morris Landing, Holly Ridge, NC.
Photo: [Carter Smith](#).
Source: <https://ncseagrant.ncsu.edu/currents/2018/11/living-shorelines-can-enhance-saltmarsh-resilience-to-hurricanes/>

5.13.8 Dry Stacked Walls

The walls around a fishpond exemplify a well-constructed dry stacked stone wall. Dry stack walls can be used to retain earth on one side and prevent ocean inundation on the other side to help protect oceanfront property. Pōhaku “rocks” can be female, male, or even hermaphrodite depending on their physical qualities. Male or boy stones are called Kū stones. Female or girl stones are called Hina stones. Strong dry stack walls are made of Kū and Hina stones that fit together and become tighter and more solidified as time passes, and when the ground shakes, such as during tremors from earthquakes or volcanic activity.

Fishpond kuapā (seawalls) were constructed from many materials including lava rock; coralline blocks; and rubble of rocks, coral, and soil. Small rocks and coral fragments filled interior cracks and could help cement the wall together. A fishpond wall was designed to be permeable to water, allowing aeration and water circulation while deflecting incoming wave energy. Similarly, dry stack seawalls must allow groundwater to seep through the wall either by adding weep holes to drain subsurface water, or by using geotextile fabric liners behind the wall to prevent dirt, soil, sand, or fill from being lost and forming sinkholes behind the wall.

A fishpond seawall was made with two rows of rocks and a filled center. The outer ocean-facing and the inner retaining face of the walls differ. The outer wall had a greater angulation to allow some of the deflected current to “clean” or scour the outer rim of the fishpond. The outer wall was often 5 feet wide and 3–5 feet tall ([Keala, Hollyer and Castro, 2007](#)). The largest stones make up the bottom (bottom stones are foundation stones called niho stones), ocean-facing side of the wall. The rocks should be positioned with the flat side facing outward because that side will be exposed to wave impact and needs to deflect the energy of the waves. When placing one rock on top of another, they should be placed 1 to 2 inches inside of the front edge of

the lower rock (ibid.). Each rock should slant or lean toward the center of the wall. In this way, gravity pulls the rocks inward toward the middle of the wall rather than outward or to the side(ibid.).

As the outer facing seawall and the inner retaining face of the wall begin to rise above the ground, the space between them (i.e., the middle of the wall) should be filled with smaller rocks, which do not have to be placed in any particular way. As the wall is built up from the bottom layer of rocks, the “seams” between adjacent rocks should be staggered so that the next rock should be placed over the seam between the two lower rocks (Keala, Hollyer and Castro, 2007).

Long, narrow rocks should be placed pointing toward the center of the wall which will add strength to the wall. The rock’s surfaces need to be examined to choose the best surface to fit on the rocks already in the wall. Face stones are known to Hawaiians as “Alo” stones. These are the stones that make the Alo “face” of the wall. The “face” is the side that will face the outside of the wall, while the “sit” is the side of the rock that will sit on the lower two rocks on the wall. It is important to plan where the rocks are going to be stored, sorted, piled and where they will fall or sit when placed on the wall, because it is inefficient and inconvenient to move large rocks more than once (ibid.). The use of grout or concrete should be avoided in favor of a well-selected set of rocks for the wall. Concrete can hide erosion and under scouring by waves. It also prevents the rocks from naturally settling into one another to create a tighter, more durable seawall.

“A Kuapā has various types of stones. Niho stones are foundation stones. Alo Stones is the face of the wall. Unu stones are wedging stones to help support the Alo stones. Pani Hakahaka stones are the filler stones that help fill in gaps of the wall. Pāpale stones are at the top of the wall known as cap stones.

These stones are either male or female stones. When the wall is being built the stones are moved into categories. 1) Niho 2) Alo 3) Pani Hakahaka 4) Unu 5) Pāpale. These are the five basic categories for organizing rocks for a kuapā.”

*Kia’i Collier, Waihe’e Steward and Educator,
Hawai’i Island Land Trust*



Photo: The intricate structure of a wall constructed using uhaul humu pōhaku (Hawaiian dry-stacked masonry).
Source: National Park Service Photo. <https://www.nps.gov/puho/learn/historyculture/preservation.htm>



Photos (Top to Bottom): Restoration of Keawa Nui Fishpond of South Moloka’i (Honua Consulting, March 11, 2011, Flickr.com); Keawanui Fishpond in South Moloka’i (Honua Consulting, September 1, 2010, Flickr.com).

CHAPTER 6: IMPLEMENTATION STRATEGY

6.1 CHOOSING APPROPRIATE RESPONSES TO SHORELINE CHANGE

Chapters 1 through 4 capture and summarize the past and present conditions confronting DHHL homestead lots along Molokaʻi’s south shore. Chapter 5 explores erosion management strategies and describes approaches ranging from soft, nature-based remedies to hard, man-made structures to mitigate the impact of shoreline erosion. Chapter 5 also explores methods to better adapt structures to shoreline change and to avoid shoreline change by realigning or relocating structures to reduce their exposure to coastal hazards.

This chapter synthesizes the data collected through the first five chapters to create a set of five “core strategies” that are germane to the SM-SEMP planning area. The SM-SEMP’s “core strategies” succinctly describe the broad strategic action that DHHL and its beneficiaries, as well as the broader community, could take to make the SM-SEMP’s shoreline more resilient to the effects of sea level rise and coastal erosion. Actions provide more detailed procedures, programs, or physical improvements to carry out the SM-SEMP’s core strategies. For instance, DHHL has a variety of tools at its disposal to manage risks from coastal hazards and shoreline erosion. DHHL can manage the use of its land and the location of future infrastructure investment to encourage the relocation of existing development to areas less susceptible to the effects of sea level rise and coastal erosion. There are also established zoning codes and practices in Maui County to help address flooding, shoreline armoring, retaining walls, grading, and coastal erosion. DHHL could utilize some of these. For instance, in Maui County plans for shore armoring must be stamped by a licensed structural engineer to ensure the structural integrity of the proposed shoreline armoring.

Chapter six organizes the SM-SEMP’s recommendations geographically. Core strategies that address issues systemic to the entire SM-SEMP Area are presented in Table 6.1, followed by detailed recommendations for four identified littoral cells that encompass the shoreline between Kānoe Fishpond and Kalamaʻula.

CORE STRATEGIES	Actions
1.0 <u>Restore</u> natural shoreline function.	<div>1.1 Remove and replace invasive plants and trees with climate adapted, drought tolerant native grasses, shrubs, and trees such as ‘aki’aki grass, pōhuehue, naupaka, and milo.<div>1.1.1 Develop a detailed vegetation management plan to guide shoreline and dune restoration within the SM-SEMP Area.</div>1.1.2 Contract with a community-based non-profit or business, with expertise in habitat restoration, to implement the vegetation management plan and provide ongoing maintenance of the improvements.<div>1.1.3 Support non-profit efforts to provide homesteaders with native, drought-tolerant, climate adapted seedlings and saplings to encourage shoreline restoration.</div>1.1.4 Prune or remove vegetation and trees that hinder access along the shoreline during high tide. The area between low and high tide should be free of obstructions such as kiawe trunks and branches, ironwoods, milo thickets, and naupaka bushes.</div> <div>1.2 Remove man-made debris between the high and low water line including tires, appliances, vehicle parts, concrete and asphalt rubble, CMU blocks, pallets, steel and plastic drums, and other non-indigenous materials and dispose of it properly.<div>1.2.1 Contract with a community-based non-profit or business to remove and haul debris to a government-approved disposal site.</div>1.2.2 Support community-wide clean-ups where litter and rubbish are removed from the shoreline.</div> <div>1.3 Remove accumulated sediment and debris from stormwater drainageways to keep them clear and functional. If the drainage has clay, soil, silt, or other dark colored sediment, remove and dispose of it in the landfill because it pollutes the ocean and degrades coral reefs. If the drainage is primarily clean, uncontaminated sand, place it along the ocean frontage or atop sand dunes or naturally vegetated berms at the edge of rear yards in the neighborhood, noting that State law provides for this type of activity.<div>1.3.1 Contract with a community-based non-profit or business for regular drainageway maintenance.</div></div> <div>1.4 Initiate a groundwater inundation program by regularly testing and monitoring the following: a. the pH, salinity, and water level relative to the tide at the pocket wetland adjacent to the new pavilion at Kiowea Park; and b. the seeps and springs in the Kapuāiwa Coconut Grove to help characterize the area’s hydrology, particularly as it relates to Coconut tree health.</div> <div>1.5 Support actions that restore native upland habitat and reduce sediment laden stormwater from reaching the shoreline.</div> <div>1.6 Support feral ungulate control, including fencing to exclude axis deer from watersheds rich in native habitat, and fencing to enclose axis deer within designated hunting areas.</div>
2.0 <u>Educate</u> beneficiaries on the causes and consequences of sea level rise and coastal erosion, including appropriate mitigation measures.	<div>2.1 Provide beneficiaries living in flood prone areas with the following information:<div><div>• “Answers to Questions about Substantially Improved / Substantially Damaged Buildings”, FEMA publication 213, August 2018.</div><div>• “Homeowners Handbook to Prepare for Natural Hazards” 4th Edition, by Dennis Hwang and Darren Okimoto, Sea Grant, University of Hawai’i.</div><div>• Flood zone and sea level rise exposure maps.</div></div></div> <div>2.2 Ensure beneficiaries review coastal hazard information such as flood zone maps, SLR inundation areas, and coastal hazard exposure rankings when being granted a homestead lot. A disclosure notice should be signed by the beneficiary acknowledging review of the information.</div> <div>2.3 Invite Dennis Hwang, and other Sea Grant Extension Agents, to speak to beneficiaries.</div> <div>2.4 Ensure beneficiaries living along the shoreline understand and acknowledge that:</div>

CORE STRATEGIES	Actions
	<ul style="list-style-type: none"> • Their land benefit is subject to natural variability and coastal dynamics and its size may change over time. • A homestead lease does not include submerged land and that DHHL is not obligated to prevent submergence. • Armoring the shoreline can be detrimental to coastal processes, marine flora and fauna, and your neighbor’s property and should only be done after consultation with DHHL planning staff.
3.0 Strengthen the regulation and management of shoreline resources.	<p>3.1 Recommend consistency with the following State of Hawai’i and Maui County regulations governing buildings and construction, the shoreline, and flood hazard areas:</p> <ul style="list-style-type: none"> • Hawaii Revised Statutes (HRS) Chapter 205A, Coastal Zone Management. • Maui County Code (MCC) Title 16, Building and Construction Codes. • MCC Chapter 20.08.035, minimal best management practices when disturbing the ground (grading, excavating, fill). • MCC Chapter 19.62 Flood Hazards Areas. • Hawai’i Revised Statutes (HRS) Chapter 205A-43 (a), setbacks along shorelines are established of not less than forty feet inland from the shoreline. <p>3.2 Recommend consistency with Federal and State DLNR regulations regarding shoreline surveys, armoring, and coastal construction on submerged lands.</p>
4.0 Adapt structures and systems to better withstand coastal hazards.	<p>4.1 Require new dwellings to be elevated above flood hazard zones (base flood elevation, SLR inundation) by more than one foot in elevation (freeboard).</p> <p>4.2 Require new buildings to use anchored post and pier construction so as to be movable instead of slab on grade construction which is immobile.</p> <p>4.3 Require buildings, and especially existing dwellings, to install hurricane clips and have a continuous load path to reduce damages to the structure during a coastal storm.</p> <p>4.4 Encourage lessees to reconfigure dwellings by moving the kitchen mauka and elevating food preparation areas so that stove, refrigerator, freezer, and appliances are elevated or located at the highest, driest part of the property.</p> <p>4.5 Encourage lessees to relocate the water heater, air conditioner, chillers, and/or pumps to higher waterproofed areas within the property.</p> <p>4.6 DHHL should host and facilitate Community Work Days to install hurricane clips, add continuous load path straps, create flood resistant anchors, and take other house strengthening and storm resilient measures as described in Dennis Hwang’s <i>Homeowner’s Handbook to Prepare for Natural Hazards</i> found at: http://seagrant.soest.hawaii.edu/homeowners-handbook-to-prepare-for-natural-hazards/</p> <p>4.7 Convert cesspools to septic systems wherever feasible to reduce the risk of contaminated water and protect beneficiary health.</p> <p>4.8 Encourage cesspool conversions with financial incentives from DHHL but with conditions to reduce exposure to natural hazards by realignment or relocation to areas not exposed to sea level rise.</p> <p>4.9 Remove outhouses, or connect them to a septic system, to prevent contamination of the “ice box” and protect beneficiary health.</p> <p>4.10 Encourage building designs and layouts that are perpendicular to the shoreline to reduce the building’s surface area that is exposed to coastal storms, wind, waves, and hazards.</p> <p>4.11 DHHL should purchase Simpson Strong-Ties and other commonly used hurricane mitigation materials in bulk and provide them to beneficiaries along with training on their installation and use.</p>
5.0 Prepare for the relocation, or retirement, of structures out of areas threatened by sea level rise and coastal erosion.	<p>5.1 Prepare a community-based plan for the relocation of vulnerable buildings, infrastructure, and public facilities away from area’s threatened by sea level rise and/or coastal erosion. The plan should include specific strategies and actions for the:</p> <ol style="list-style-type: none"> a. relocation of entire communities, if necessary; b. relocation of structures on a lot that are situated in flood and erosion prone areas to areas on the same lot that are free of such hazards; and c. construction of new, more reliable infrastructure, and the provision of services to areas that are not at risk of SLR and coastal hazards to incentivize new development and neighborhoods in locations that are not in harm’s way. <p>5.2 Prepare and implement a planned obsolescence strategy for infrastructure at risk of damage from SLR, coastal erosion, and flooding including roads, drainages, wastewater treatment, and centralized utility systems and services.</p> <p>5.3 Develop incentives for the retirement, relocation, and reconfiguration of structures upland and mauka, particularly on oceanfront lots.</p> <p>5.4 Allow pavilions and accessory structures in the setback area, but not plumbing, and require structures to be portable and moveable.</p> <p>5.5 Require additions to existing dwellings on oceanfront lots to be located on the mauka side of existing structures and elevated above base flood elevations.</p> <p>5.6 Require a coastal hazard exposure assessment in any new leases or renewals and facilitate relocation if and when structures are damaged by 50% or more.</p> <p>5.7 Incentivize relocation away from flood and erosion prone areas by providing infrastructure and leasable lots upland.</p>

Table 6.1: SM-SEMP Core Strategies and Actions.

Chapter 4 describes how sediment flow within the SM-SEMP Area is divided into four littoral cells which are mapped to illustrate the main sources and sinks of sediment and the probable transport mechanisms within each littoral cell that are driving shoreline change. Shoreline managers can use the maps to analyze each cell’s sediment budget, and design appropriate management strategies to make the shoreline more resilient to sea level rise and coastal erosion.

The SM-SEMP planning team shared the maps and research with key stakeholders and DHHL management in an interactive workshop. Stakeholders had the opportunity to provide written comments, diagrams, and suggestions on the maps to improve the accuracy of the information reported, infuse place-based and traditional ecological knowledge, and to put the information gathered in historic context. Stakeholders also reviewed erosion issues and potential responses. The purpose of the workshop was to ground truth the team’s findings and to have a stakeholder driven evaluation of intervention techniques and remedies.

Stakeholders evaluated different approaches and remedies to shoreline change. These response options ranged from soft and green natural approaches to hard and gray constructed structures that are designed to remedy erosion, such as those illustrated in Figure 6.1. Included in the response options was realignment of the built environment to adapt to changes in the coastal environment, such as elevating, reconfiguring, retiring, or relocating structures.

A brief description of each of the ten response options along with photos exemplified how each approach functions. The relative cost of each approach, its longevity, permit requirements, footprint or size, and typical impacts were also listed.

Stakeholders discussed their likes and dislikes for each of ten different approaches to shoreline change. The stakeholders evaluated the approach and response option in overall terms and not in relation to any specific location, area, built asset, or erosion threat. For instance, there was general agreement that erosion responses that relied on plastic materials, such as Tensar mattresses or plastic gabions, were inappropriate for Moloka’i’s south shore given the sensitive nature of the marine and nearshore environment. In contrast, dry stack walls that emulated fishpond walls were more welcomed and viewed more favorably.

The stakeholders then reviewed eight types of assets or resources identified as being commonly at-risk or under threat from erosion along the project area’s coastline. These included: carports, pavilions, houses subject to episodic erosion (i.e., singular storms) or chronic (long-term) erosion, historic resources such as Kalaniana’ole Hall and Kapuāiwa Coconut Grove, and public resources such as roadways (Kamehameha V Highway) and park infrastructure (pavilions, restrooms). For each of the eight assets, the stakeholders evaluated the ten responses and indicated which ones they liked, thought were okay, or disliked and the rationale for their feeling. They also noted any specific costs, benefits, or concerns associated with a possible remedy for a particular resource or area.

6.2 SPECIFIC IMPROVEMENTS FROM GREEN TO GRAY

Using the information from the stakeholder workshop, the SM-SEMP team identified specific remedies for areas threatened by erosion within littoral cells A through D as depicted by Figure 6.2 and Figures 6.4 - 6.6.

Three of the four beach cells exhibit erosion while one cell exhibits accretion. For instance, Cell B is sediment deficient in front of the Kamiloloa subdivision lots just east of the Hotel Moloka’i leading to mild to moderate erosion. In contrast, Cell C is sediment starved in front of the Kapa’akea subdivision leading to significant land loss due to erosion.

The shoreline’s natural function to absorb wave energy has been mostly lost at Kapa’akea but is only compromised at Kamiloloa. Accordingly, a soft “living shoreline” approach is recommended for many of the oceanfront properties in cells A through D. This soft strategy is intended to restore the natural buffering capacity of the coastline over the short term by creating a sand reservoir comprised of a sand berm with an engineered coir mat center that is covered in native vegetation. While other soft approaches have merit and may be effective,

creating a vegetated sand berm is likely one of the most practical options that could readily be implemented at these locations.

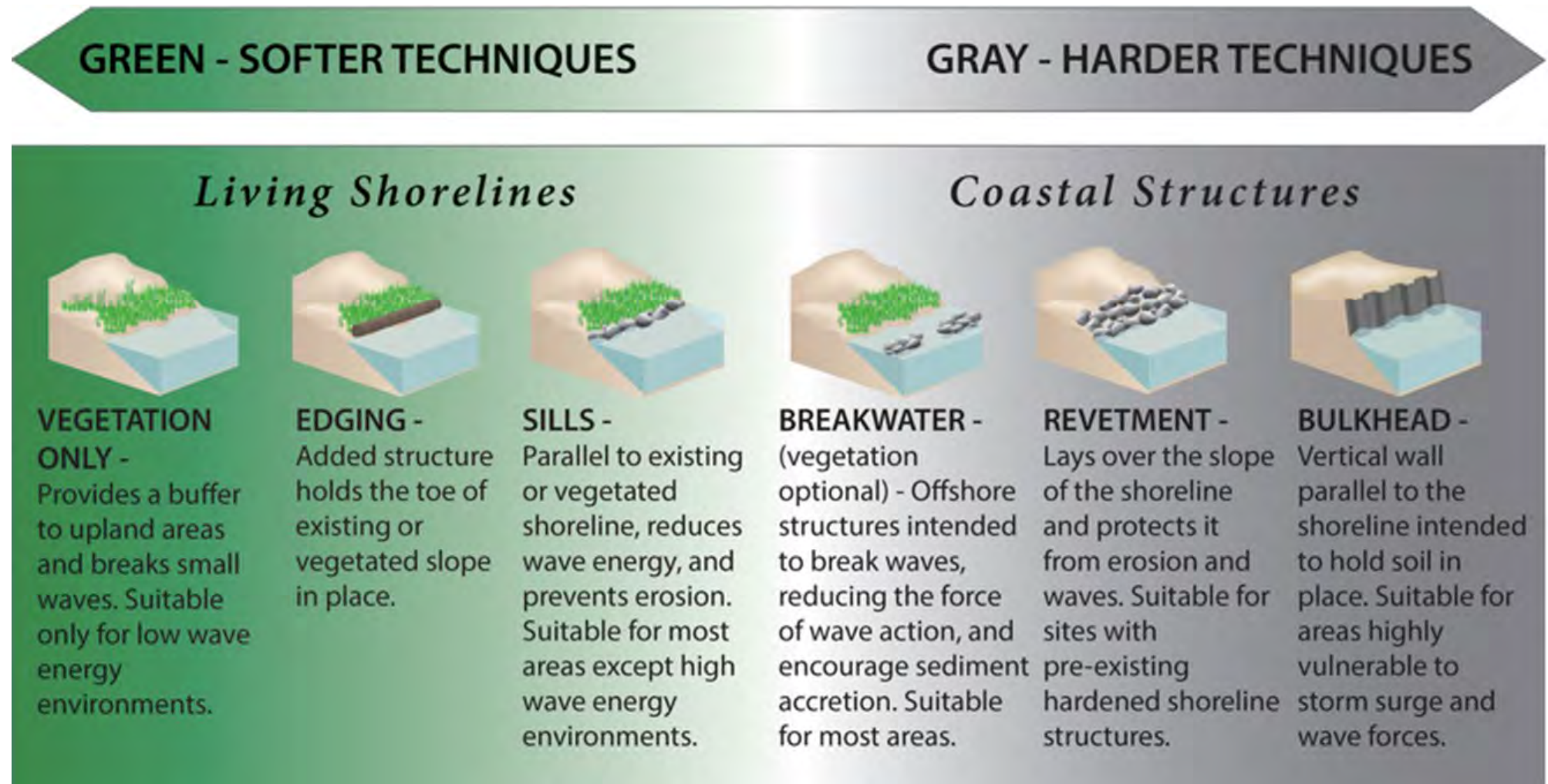


Figure 6.1: Shoreline change response options, from natural approaches to constructed structures. (Sage, NOAA, 2015).

6.3 LITTORAL CELL A (KĀNOA FISHPOND TO ALI’I FISHPOND)

Several sites within littoral Cell A (Figure 6.2) could benefit from a soft, green approach to mitigate coastal erosion. Three specific improvements are recommended, and Figure 6.2 identifies their locations within littoral Cell A. This subsection describes each of these recommendations in more detail.

1 Coastal habitat restoration could help rejuvenate natural shoreline processes to make the shoreline more resilient to shoreline erosion. This could be accomplished by creating a vegetated sand berm that rises 1½ - 3 feet above the grade to enhance the interface between the land and sea and create a buffer between them. Shoreline managers can augment the height and width of the berm fronting the One Ali’i Park pavilion and restroom with clean sand covered by native coastal plants. Managers can also direct foot traffic between the park and the shoreline with posts, ropes, and signage to prevent the native plants from being trampled.



Photo: A sand berm anchored by native vegetation make this beach more resilient to sea level rise and erosion.

Shoreline managers can plant climate adapted, drought tolerant native grasses, shrubs, and trees such as ‘aki’aki grass, pōhuehue, naupaka, and milo to improve soil retention along the edge of the shoreline and reduce the loss of soil and sand to waves, king tides, and erosion. By removing kiawe trees that absorb a disproportionate amount of fresh water and dry out the soil, managers can improve growing conditions for native plants, reduce the formation of embankments along the back shore, and eliminate the supply of sharp thorns and branches that hinder access along the coastline. Please see Recommendation 3, of Littoral Cell B, for a more thorough discussion of the use of coir mat enhanced sand berms to support habitat restoration and coastal resilience.

2 Remove the sand plug in the drainage channel for the beneficial use of sand. The swale running mauka to makai along the western edge of One Ali’i Park cannot adequately drain stormwater just inland of the shoreline. The mouth of the swale is plugged with sand that has accumulated over time. This prevents the water mauka of the plug from discharging into the ocean and instead causes it to pond, harbor mosquitos, and enable algal growth. The sand appears to be clean, low-silt, and coarse-grained which would make it suitable for beneficial reuse in Cell A or elsewhere along Moloka’i’s south shore. Shoreline managers could remove the sand plug and use it to enhance the height and width of the vegetated berm recommended in front of the One Ali’i Park’s pavilion and/or restroom. The beneficial reuse of the sand is also consistent with State law HRS 205A-

44(a)(3)/(4) provided that its placement does not create significant turbidity. Silt fences can be erected during clearing of the drainage swale to prevent polluting nearshore marine waters.

Shoreline managers could also use the sand as clean fill at other DHHL locations and projects. The sand that is plugging the drainage swale should be tested using a sieve analysis to determine if it meets DLNR OCCL criteria for ‘beach quality sand’. If suitably clean and free of silt, the sand could be placed in natural fiber coir mat



Photo: The sand that plugs this drainage channel could be repurposed for berm enhancement.

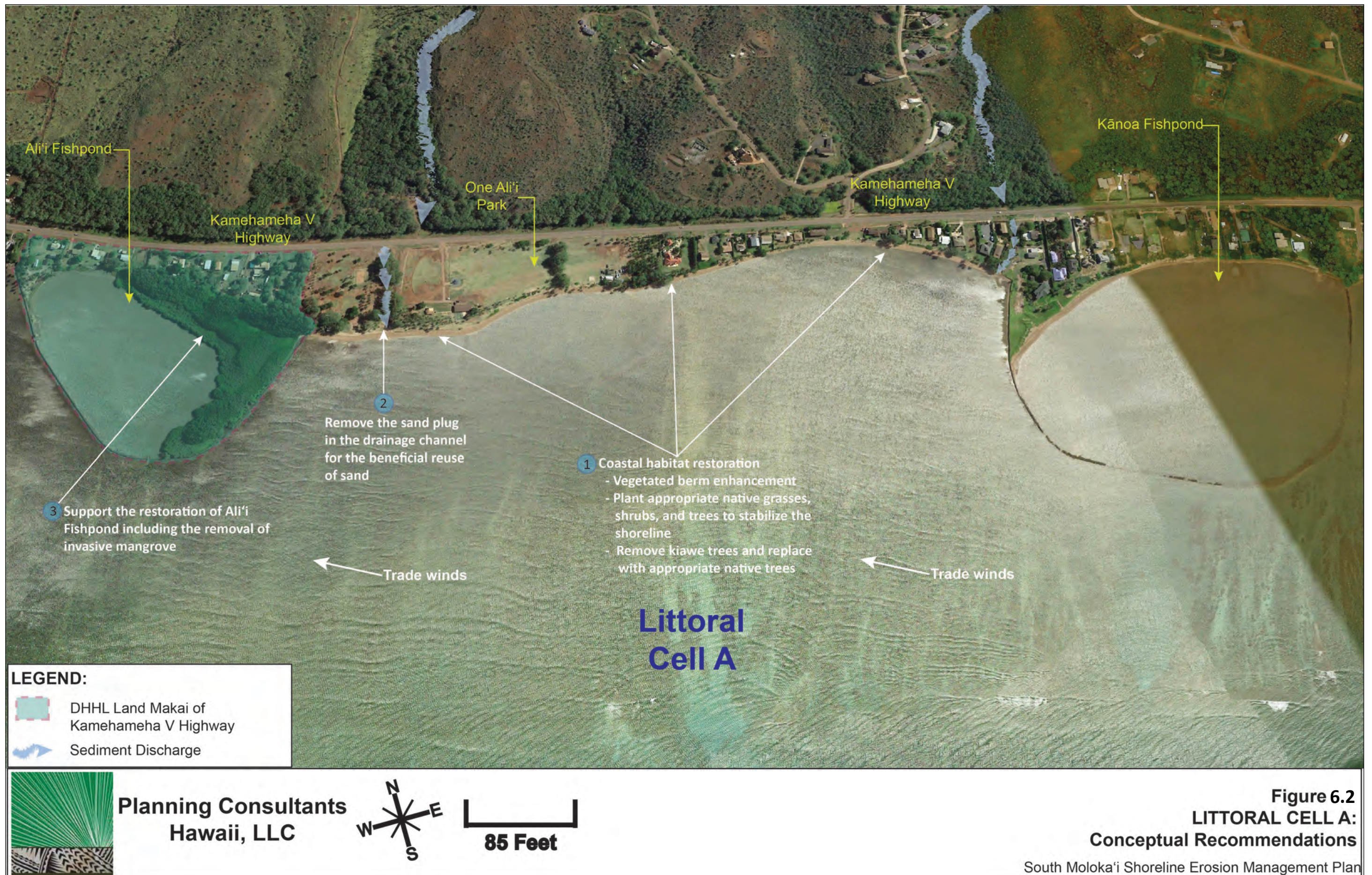
bags or burritos to create or enhance a vegetated sand berm or to protect an eroded embankment (See Figure 6.4 - Cell B recommendations). Alternatively, shoreline managers could use the clean fill for temporary groins made of geotextile sand-filled tubes or bags at other DHHL locations (See Figure 6.5 - Cell C recommendations).

3 Support the restoration of Ali’i Fishpond including the removal of invasive mangrove. The Ali’i Fishpond, like many other fishponds, has been invaded by non-native mangrove. Mangrove breaks the wind, slows the current, and can turn clear coastal waters into anoxic, murky swamp land and mudflats. Generally, mangroves are favored for fisheries and wading seabirds, but the introduction of mangrove into the nearshore marine environment over a century ago has greatly reduced nearshore productivity and the vitality of the shoreline environment because it is not native to this shore. Supporting community-based and non-profit efforts to remove invasive mangrove and restore fishponds and benthic habitat would be of great benefit to the ecosystem and to Moloka’i’s southern shoreline.

Other recommendations for Cell A include relocating the restroom at Delmonte Park further inland and upland as it is located very close to the water’s edge. Adaptive realignment of the building would avoid inundation by waves or flooding of the floor or fixtures. The realignment to predicted coastal hazards would avoid damage to the building or under scouring of its foundation from coastal erosion. A new elevated structure may necessitate a few steps up into the building but could avoid seawater inundation, even if only elevated a few feet above the grade. The restroom’s wastewater disposal system should also be converted to a septic system if it presently relies on a cesspool, as is suspected given its age.



Photo: Looking east fronting Delmonte Park



6.4 LITTORAL CELL B (ALI’I FISHPOND TO KAOKO’ELI FISHPOND)

Similar to Cell A, a number of sites within littoral Cell B (Figure 6.4) could benefit from soft measures that emulate nature’s ability to absorb or diffuse wave energy and reduce shoreline erosion. Figure 6.4 illustrates the geographic location of five of these measures. Each of these measures is described below.

1 In consultation with the State Department of Transportation (SDOT), consider nature-based solutions to mitigate shoreline erosion along the highway. DHHL owns a 1.56-acre long, thin parcel of land, TMK (2) 5-4-006:026 west of Ali’i Fishpond. The land extends makai of the Kamehameha V Highway for about 1,000 feet before it jogs seaward in front of a series of private lots with developed homes along its western end. DHHL should work in consultation with the HDOT Highways Division to address the highway’s exposure to coastal hazards such as flooding, wave over wash, and sea water inundation of the road’s substrate. DHHL is already an active member in the HDOT Road & Nature Based Solutions discussion group and the DHHL’s involvement should continue. DHHL should collaborate with HDOT in evaluating a sill and sedge approach to reducing saltwater intrusion and absorbing wave energy along this narrow, at-risk location.



Photo: A portion of DHHL property harbors kiawe trees makai of the highway.

2 Support the removal of invasive vegetation and replace with native species. Kiawe trees along the shoreline should be removed given they absorb a great deal of fresh water and dry out the soil. This would improve native plant growing conditions, reduce the formation of embankments along the back shore, and eliminate the supply of sharp thorns and branches that hinder access along the coastline. DHHL should lead by example by removing the kiawe trees on their parcel mentioned above. The site lends itself to an enjoyable, usable, open space next to the ocean with sufficient space for head-in public parking from the road. The area would need to be replanted with native grasses, shrubs, and trees such as milo and beach heliotrope, but once established the area could offer a pleasant, shaded respite with fine coastal views and sounds.

3 Coastal habitat restoration. Other portions of the shoreline in Cell B are impassible due to kiawe and invasive shrubbery that should be removed and replanted with a mixture of native species that would restore ecological function and improve the resilience of the coastline to high wave events. Planting climate adapted, drought tolerant native grasses, shrubs, and trees such as ‘aki’aki grass, pōhuehue, naupaka, and milo would improve soil retention along the edge of the shoreline and reduce the loss of soil and sand to waves, king tides, and erosion. The removal of invasive and replacement with native plant species is an effective means to restore the function of the coastline and improve nearshore water quality and marine, benthic, and wildlife habitat.

The Kamiloloa shore between Hotel Moloka’i and the drainage swales and stream outlets to its east could benefit from a coir mat enhanced sand berm along the makai edge of the rear yards. Constructed berms are a form of green infrastructure that can effectively and naturally respond to shoreline retreat, particularly where wave energy is moderate. Berms mimic sand dunes, but they are not as large, nor do they take as much space (See subsection 5.7.2).

As a first step, non-native plants, and invasive trees such as kiawe should be removed along a 20-40-foot-wide corridor along the coastline. This allows for the reestablishment of native species given appropriate care and management by the landowner and community. Appropriate drought tolerant coastal species (in order of mature height) include: ‘aki’aki grass, pōhuehue, naupaka, naio, beach heliotrope, and milo trees.

Once the corridor is cleared, a sandy berm should be created just inland of the crest of the existing shoreline. The berm should be located above the water line and inland of the wet beach, but near the makai edge of a property’s rear yard. This berm would create a rise or bump in the landscape that is higher in elevation than the shoreline. The intention is to provide a buffer that can absorb incoming wave energy, disperse waves, and reduce erosion by creating a reservoir of sacrificial sand that can be eroded by large waves. A vegetated sand berm is also effective at capturing and slowing upland stormwater runoff, allowing excess rainwater to pond and deposit sediment on the mauka side of the berm, instead of in the marine environment.

The enhanced sand berm should be located just mauka of the debris and vegetation line. When properly vegetated, the sand berm will be stable and unchanged at this location for most of the year, except during the few times when wind, waves, tides, and seawater combine to overtop the berm and inundate rear yards.

A good reference feature is the seaward edge of the vegetation line and the landward extent of the debris line. This shoreline reference feature is formed by small bits of wood, leaves, fragments of white coral, and plastic pollution that tend to collect along the shore at the highest inland extent that waves pushed it over the past year, thereby forming the debris line.

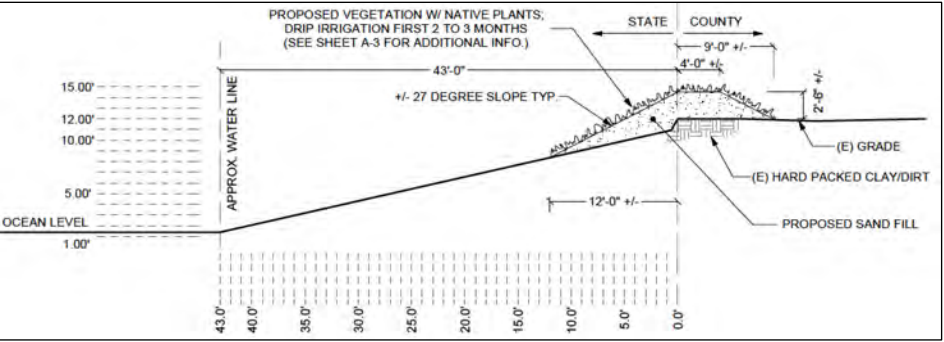


Figure 6.3: Conceptual diagram of a sand berm’s restoration.

The core of the berm should be comprised of sand-filled coir mat formed into envelopes or tubes. A long coir blanket can be laid out like a rug paralleling the shoreline. In some cases, it may be helpful to place the coir blanket within a shallow, hand dug depression that has wooden stakes to hold the sand-filled core tube. Sand is placed in a long row and piled 2 to 3 feet high in the middle of the coir blanket. The edges of the coir blanket are then brought together at the top, wrapping around, and containing the sand within it. The edges of the coir mat are then sown together to form a ‘burrito’ with coir material on the outside and sand on the inside of a long, linear, roll or tube. Sand should cover the burrito to protect the coir mat from deteriorating in the sun and water. Special attention should be taken to prevent the added sand from blowing away or being washed away by planting it with native, drought-tolerant plants. Sand placement should be done at low tide and during the calmest seasons of the year.

For access to the shoreline, the end of one linear burrito can extend inland and behind the beginning of the next linear burrito. This offset between the parallel berms would allow foot traffic to pass through the “Z” gap formed by the two engineered berms, but not allow water to directly pass between them. Openings or gaps in the berm that face the ocean may suffer ‘blow out’ by wave and wind action entering, eroding, and thereby expanding the gap in the berm.

To prevent blow out, access paths to the shore should always be at an acute opposite angle to the prevailing or predominant wind, water, wave, and current direction. Where feasible, wooden crossovers, stairs, or marked footpaths are recommended to prevent foot traffic from crushing the fragile roots of the native plants that hold the sand in place, including those on the sand berm. Additional sand should be added on either the seaward, landward, or on both sides of the berm to form one continuous, shore-parallel vegetated sand mound.

The top of the berm should be at least three feet above the high-water mark, or 2 ½ feet above the neighboring topography, whichever is higher. The seaward slope of the berm should be less steep than 3 to 1 width/height ratio. Do not use sand from the beach as this merely transfers, and does not expand, the sand reservoir available for storm events. The berm forms a reservoir of sand that can be eroded or sacrificed during a storm to replenish and augment the sand fronting the beach. This helps dissipate wave energy rather than reflect it into the nearshore and/or alongshore areas.

The height, length, and width of the berm determines the level of protection that it can provide. To maintain an effective barrier, sand may need to be added, particularly after big storms, to keep the berm’s dimensions consistent with its original intent. A sandy berm won’t necessarily stop wave over-topping, but it can reduce the force, depth, and frequency of inundation events into rear yards and buildings.

Placed sand should be covered with an additional coir blanket and planted with native vegetation. The plants are needed to retain the placed sand and although the plant’s roots are shallow and easily trampled, they will spread across the sand to hold it in place. Native, salt-tolerant, erosion-control vegetation with extensive spreading rhizomatic root systems are highly recommended and will help hold the sand in place.



Photo: Vegetated sand berm restoration using native plants.

Ongoing monitoring of the berm is necessary so plants can be replaced if they die or are removed by waves. Berms with vegetation, as opposed to without, will perform more effectively and offer greater energy dissipation, resistance to erosion, and stability. The restored sand berm is not likely to withstand a major storm or hurricane, but it would enhance the resiliency of the coastline, building its capacity to absorb shock and high water and wave events such as “King Tides”.

Drip irrigation is necessary at the time of planting for the plants to survive, but once established they adapt to the harsh, hot, dry, salty environment of the coastline. Drip irrigation can be provided by connecting portable jugs to small plastic tubes that are placed along or slightly beneath the surface of the sand. The water level in the jugs should be monitored on a regular basis and refilled as needed until the plants are firmly established. The drip lines can be left in place in case the plants need watering during a drought or dry season.

The sand source or borrow site must be identified and evaluated beforehand to ensure it does not contain cultural artifacts or sensitive resources such as *iwi kupuna*. Before its beneficial reuse is implemented, the source of the sand must be evaluated to be culturally appropriate. Sand that plugs drainages and lined drainage swales can often serve this purpose, since it should be periodically removed to allow the swales to drain properly to the ocean. Sand that has accumulated in front of man-made impediments to its lateral movement along the shoreline may also be less likely to harbor cultural resources given the sand’s unnatural accumulation. For instance, a substantial amount of sand and sediment has accumulated updrift of the Kaloko’eli Fishpond wall. The three parcels between the Hotel Moloka’i and the Kaloko’eli Fishpond accreted from 70 feet to 180 feet over a 33-year period according to County plat map (5-4-002), and they have likely gained more material since then.

A sieve analysis is recommended to ensure the sand used for restoration is of the right grain size, coarseness, density, color, and is free of fines and silt so it is compatible with the surrounding environment. It is important to use the right coarseness of sand, so the sand grains stick to the beach and are not easily washed away by normal currents and wind. The sand must be cleaned and lack fine silt or red/brown clay that could pollute nearshore waters and choke the coral reef. The color of the sand should also be compatible with the area in which the sand berm is being constructed. It is important to use sand that is comparable to the native sand in the vicinity of berm restoration, both from an ecological and aesthetic perspective, in case the berm breaks, and its contents are released. In addition to reducing risk, sand berms form habitat for marine life, wildlife, and birds like wedge-tailed shearwaters that help fishermen locate schools of fish. Sand berms are important culturally, ecologically, and aesthetically.

A coordinated community effort involving adjoining oceanfront property owners and lessees in the Kamiloloa subdivision could help rebuild the assimilative capacity of the coastline to buffer coastal hazards along this portion of the shoreline.



Photo: What one meter of sea level rise could look like in Moloka’i.

4 The Kaloko’eli Fishpond has been invaded by non-native mangrove on its upwind side. Mangrove breaks the wind, slows the current, and can turn clear coastal waters into anoxic, murky swamp land. Generally, such areas are favored for fisheries and wading seabirds, but the introduction of non-native mangrove into the nearshore marine environment over a century ago has greatly reduced nearshore productivity and the vitality of the shoreline environment.

Supporting community-based and non-profit efforts to remove invasive mangrove and restore fishpond and benthic habitat would benefit the ecosystem and could potentially reduce the impact of sea level rise on the Kamiloloa shoreline.

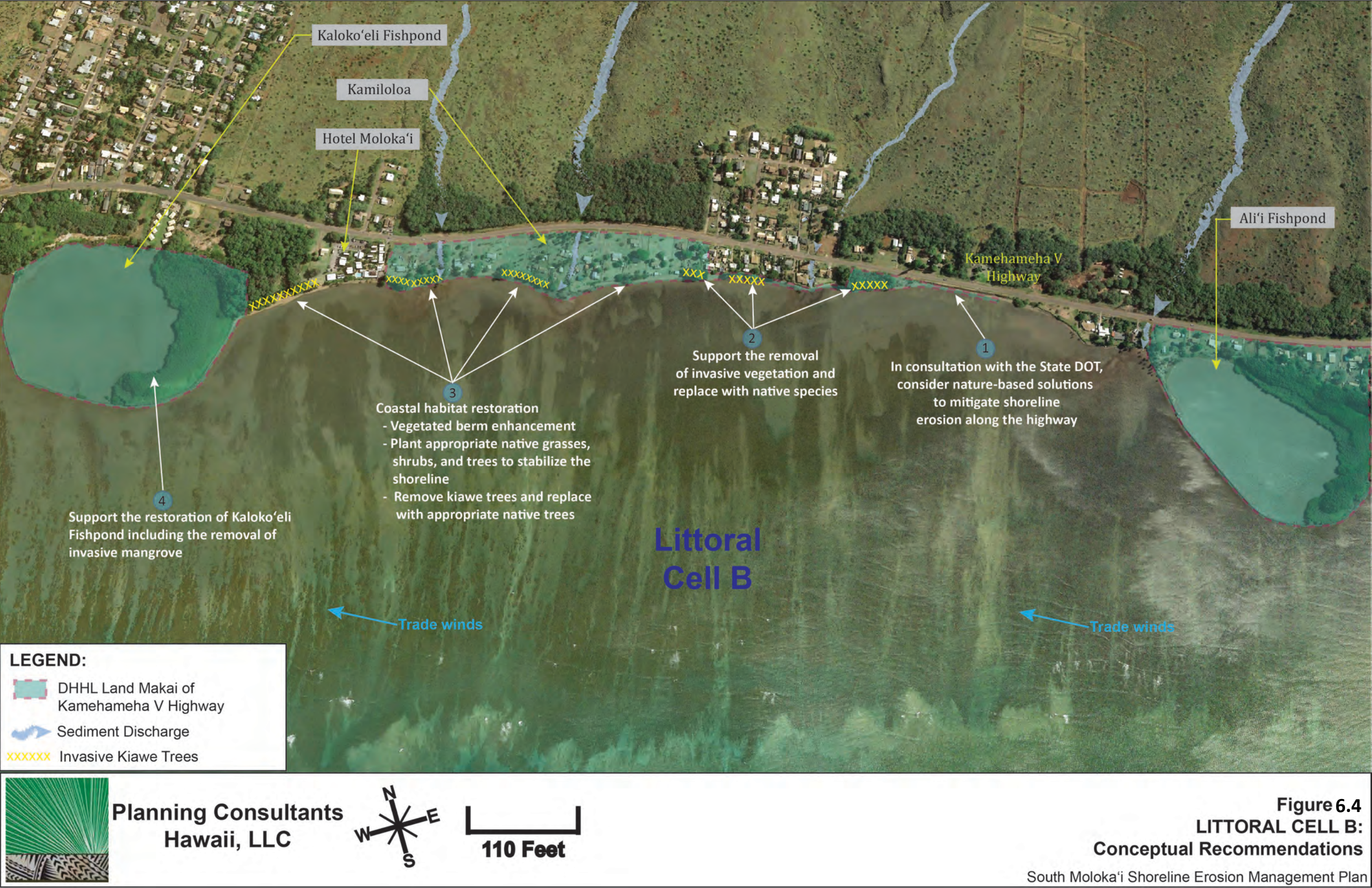


Figure 6.4
LITTORAL CELL B:
Conceptual Recommendations

South Moloka'i Shoreline Erosion Management Plan

6.5 LITTORAL CELL C (KALOKO’ELI FISHPOND TO KAUNAKAKAI WHARF)

The natural movement of sediment within and through Littoral Cell C has been drastically altered by human intervention. Littoral Cell C extends from the Kaloko’eli Fishpond to the Kaunakakai Wharf (Figure 6.5). The coastline fronting the Kapa’akea homestead subdivision is the most armored and unnatural of the DHHL properties within the project area. Nine recommendations are identified on Figure 6.5 and are discussed below.

- 1 Support the removal of invasive vegetation and replace with native species. Like other cells, DHHL should strive to remove invasive vegetation and incentivize its replacement with native species adapted for the shoreline environment.
- 2 Restore coastal habitat. Some segments of the shoreline in Cell C are impassible due to kiawe, invasive shrubbery, and man-made armoring. In contrast, the shoreline fronting the Moloka’i Shores condominiums exhibits a mixture of native species that are adapted to the coastal environment. They have restored the ecological function and resiliency of the shore area to prevent high waves and coastal erosion events from cutting steep embankments into the shoreline. By planting drought tolerant native grasses and shrubs such as ‘aki’aki grass, pōhuehue, and naupaka, and creating a reservoir of erodible sand, they have reduced the condominium’s exposure to waves, king tides, and flood inundation while maintaining an accessible and attractive shoreline. The removal of invasive plants and replacement with native species is a cost-effective means to restore the function of the coastline and improve the nearshore marine habitat and water quality.
- 3 6 Potential sill and fishpond restoration pilot site. The DHHL should explore increasing the assimilative capacity of the environment along the shore using fishpond restoration and a rock sill and sedge as a pilot study at a few specific locations. To exemplify, adjacent to the eastern side of the Kapa’akea subdivision is a submerged remnant fishpond wall (#3, Figure 6.5) that behaves as a sill that is similar to what was discussed in Chapter 5. A crescent-shaped beach has formed just mauka of the ancient fishpond wall because of sediment and sand accumulation.

It appears the submerged wall breaks wave energy that would otherwise erode the shoreline and cause an embankment to form, as has occurred in other portions of the littoral cell. The vegetation inland demarks the tidal inundation line. The naturally stable sandy shore that has formed at this location is wide enough for unconstrained lateral transit. This contrasts with the armored shoreline to the west in the Kapa’akea subdivision that has a narrow, steep interface between the land and the water hindering alongshore and mauka-to-makai access.

Shoreline managers should strive to restore the fishpond wall to emulate a sill formation at this and other shoreline locations within DHHL jurisdiction. This form of remediation could help reduce the amount of shoreline erosion, and it may counteract the loss of shoreline access due to impairment of natural sediment transport. While a nearshore sill does not usually prevent erosion, it can help

reduce the rate and severity of erosion and sediment loss. A sill can also contribute to the formation of a gentler grade between the ocean and a property’s rear yard on the coastal plain. A sill with native sedges immediately inland can absorb a considerable amount of wave energy and surge, up to 50% in 50 feet, but it may succumb to breaking waves and scour during a large storm event. Nonetheless, post storm clean-up is usually considerably easier than repairs to massive shoreline armoring.



Photo: A remnant fishpond wall east of Kapa’akea acts as a sill to break wave energy thereby facilitating a beach corridor to form.

A sill comprised of small hand-carried rocks and boulders has also been created at the western end of the Kapa’akea homestead subdivision (#6, Figure 6.5). The sill is not backed by vegetation, such as sedge, that could absorb and assimilate wave energy. However, the low-rise nature of the rock sill has probably contributed to the formation of a gentle grade and sandy backshore. Other candidate locations for sill and sedge could include the shore fronting Kamehameha V Highway in Cell B where the highway is threatened. In Cell C, the shoreline fronting developed DHHL properties west of Moloka’i Shores condominium could test this approach if it was associated with removal of invasive kiawe trees. Some oceanfront locations within the Kapa’akea subdivision may find this approach more suitable and palatable than using foreign debris such as tires and rubble to slow coastal change.

The sill at the western end of Kapa’akea contrasts with neighbors to the east who have taller, vertical armoring that may hold the line against erosion and prevent

retreat of the shoreline, but at a loss of the beach corridor between the yard and ocean and the attendant loss of direct access to the ocean and nearshore marine environment.



Photo: A low rocky mound at the western end of Kapa’akea forms a sill that breaks waves and captures sediment which helps to build a sandy shoreline.

- 4 7 Restore wetland function. Kapa’akea has wetlands on either side of the subdivision that should be fully restored. Functional wetlands can store substantial amounts of storm water runoff and can prevent flooding.
- Wetlands are an excellent sink to capture and stabilize silt and sediment that runs off barren hillsides and into the ocean where it harms marine life, smothers corals, and degrades the nearshore environment. DHHL should collaborate with partners and non-profits to maximize each wetland’s assimilative capacity by restoring their ecological function. Drainages and swales should be cleared and maintained. Upland grazing, especially by ungulates, should be managed. Hydrologic connections to the wetlands within the ahupua’a should be maintained, improved, and restored where feasible.
- 5 Use best management practices (BMP’s) for shoreline hardening; dry-stack walls; and restore drainageways. Oceanfront residents in Kapa’akea should incorporate BMP’s when responding to shoreline change. A considerable amount of armoring has already been placed along this portion of the south Moloka’i coastline (Figure 6.5). Informal rubble mounds and foreign materials such as tires, wooden pallets, plastic jugs, barrels, concrete curbs, asphalt slabs, carpet, motor engines, and auto parts should be removed. If replacement is necessary, only native lava or volcanic rock or pōhaku should be used. The following types of foreign material can be dangerous to human health and the natural environment:

1. Pallets rot and leave rusty nails that injure feet;
2. Plastic jugs and tires hold water where mosquitos breed;
3. Asphalt and engines have oils that pollute the ocean; and
4. plastics decay and make fish and birds sick when eaten.

Foreign materials and debris leach harmful chemicals into the water and sediment that can be toxic to marine life, corals, crabs, limu, and fish. Over time these toxins can bioaccumulate in edible marine species to the detriment of human health if ingested. Rubble and debris are not as effective as volcanic rock, *pōhaku*, and coarse sand grains at absorbing and dissipating wave energy, king tides, and storm surge.

Along the shoreline, it is imperative to have weep holes or a means for ground water to seep through a wall when a wall retains an embankment. If a wall is constructed along the shoreline where one side is exposed to the ocean, but the other side is covered by the rear yard, ground water will be pulled under the wall’s footing causing the wall’s base to erode and the wall to collapse. Without a means for water to seep out of the wall, hydrostatic pressure will build up behind the wall and push the stones or concrete blocks seaward which may topple the wall during a storm. Coarse, clean, well-drained sand and aggregate behind a wall allows ground water to seep through the wall and not build up pressure mauka of it. Smaller, less angular stones and *‘ili’ili* (pebbles) can be used as fill mauka of a retaining wall.

Before constructing either a retaining wall, or seawall, along the shoreline ensure that all required governmental permits have been obtained to ensure the wall will be safe and effective. Furthermore, inspect the nearshore benthic environment for freshwater seeps and springs. If bivalves, shells, or marine life that thrives on brackish water are plentiful, it could indicate that freshwater springs or upwellings are prevalent. A dry stack wall may not be suitable for such a location because of potential groundwater flows and the potential for hydrostatic pressure behind the wall. Speak with *kūpuna* who know the area to determine if the location was good for gleaning or gathering shellfish in the past, or if it has chilly spots in nearshore waters, or was a favored place for swimming. Traditional ecological knowledge like this can help inform the proper site-specific remedy or response to shoreline change.

Drainages, lined culverts, and swales should be cleared and maintained and their outlets to the ocean should not be covered or blocked by armoring or debris. Impediments to the flow of water can cause backups, ponding and/or flooding of adjacent property and will cause the drainageways to fail.

Natural access to ocean resources is preferable and can be lost or hindered when shoreline armoring is relied upon to protect land. A sandy beach provides a gradual slope to walk down or to move and stage kayaks, outrigger canoes, and small fishing boats, whereas a rock-strewn shoreline creates a vertical impediment to gaining easy access to marine waters and nearshore life.



Photo: *This wall’s effectiveness could be improved with more weep holes distributed behind the wall and more porous aggregate as fill.*

In places where building relocation, reconfiguration, retirement, or realignment cannot be implemented, a dry stack wall or boulder mound should be considered instead of using debris or rubble. Shoreline armoring that incorporates the best practices mentioned will help improve the nearshore environment, keep the ‘ice box’ clean and free of pollutants, and improve the effectiveness of shore protection efforts.

Traditional Indigenous designs for fishpond perimeter walls (*loko kuapā*) function like a seawall (please see “Dry Stack Walls”, Chapter 5, Subsection 5.13.8). They have some porosity so that water can flow into and seep through the wall, thereby helping to absorb some of the wave energy while also alleviating hydrostatic pressure. To achieve this, the wall’s face must be properly oriented to the prevailing wave pattern. Ideally, fringing reefs are offshore of the wall, and can break up the incoming waves.

The wall should be located just before the waves would reform and break a second time, thereby depriving the wave of its power before it can crest again. The wall should stand at least one foot higher than the highest tide of the year.

Since no mortar or cement is involved, the stones used must be carefully selected and placed in an interlocking fashion (*ho’o niho*). The base rocks or toe of the wall should comprise the largest and heaviest rocks and rest on immobile substrate. The toe rock must be below the scour depth of the waves to prevent it from moving, tilting, or its resting position from being compromised. The seaward face of the rocks should be greater than its inland facing portion of the wall and the face of the wall should slope upward rather than be vertical to reduce wave energy. A second interwall can be made of stones placed to interlock with the face stones. This configuration of ‘male’ stones interlocking with ‘female’ stones in crisscrossed layers starting at the bottom and rising upward helps to create a strong, durable wall, whether it be a freestanding fishpond perimeter, or retaining an embankment or rear yard.



Photo: *Without armoring, land is lost but beach and access are preserved.*

Coral “ko’a” is made of calcium carbonate (i.e., limestone) and can fill in gaps and voids between the outer and inner wall. Coral is preferred because it grips the stones better, which prevents the stones from sliding and shifting. Coral is also lighter than black or blue volcanic rock, but tends to hold stones together to help seal gaps and voids.

A dry stack wall tends to collapse inward upon itself thus becoming tighter and tighter with age thereby increasing its strength over time. Consult with a Hawaiian practitioner who is a fishpond wall builder or contact a fishpond restoration organization for input and guidance.

⑧ Coastal habitat restoration between the Koheo Wetland and the Kaunakakai Wharf would rejuvenate natural processes making the shoreline more resilient to changing shoreline conditions. Planting climate adapted, drought tolerant native grasses, shrubs, and trees such as ‘aki’aki grass, pōhuehue, naupaka, milo, and beach heliotrope would improve soil retention along the edge of the shoreline and reduce the loss of soil and sand from waves, king tides, and erosion. Removing kiawe trees would improve native plant growing conditions, reduce the formation of embankments along the shore, and eliminate the supply of sharp thorns that hinder access. DHHL should partner with its neighbors to help coordinate and incentivize restoration of habitat, and lateral access given its importance to the culture and lifestyle of Moloka‘i’s residents.

9 Beneficial reuse of sand. Sand has accumulated updrift of the Kaunakakai wharf. These areas may harbor good quality sand that is less likely to contain culturally significant resources given its unnatural accumulation. The shoreline area east of Malama Cultural Park and along the eastern side of the wharf could provide sand for restoring the shoreline and for beneficial reuse. DHHL should work with the HDOT Harbors Division and the DLNR DOBOR to explore the beneficial reuse of the accumulated sand. A sieve analysis is recommended to ensure the sand used is clean and not silty and is compatible with the environment where it would be placed. It is important to use sand that is comparable to the sand in the vicinity of the restoration area for ecological, marine life, water quality, and aesthetic reasons.

Stub groins. An additional option that warrants further examination for the area fronting the Kapaʻakea Subdivision is the strategic placement stub groins to capture and retain sand and sediment.

Prior to installing permanent rock groins, it would be prudent to test temporary sand groins to evaluate their utility in addressing shoreline change. Placing short (25-foot or less) stub groins updrift of a few of the drainage outlets on the western side of the Kapaʻakea subdivision may be a practical means of capturing sediment and rebuilding the coastline. Since upland sediment discharge usually travels in an east-to-west direction it would be more effective to have each groin located on the eastern side of the outlet for open drainage swales and lined culverts. These locations would also tend to not block the discharge of storm water runoff, which is needed to prevent inland flooding. Several suitable locations could be selected to test the effect of placing short stub groins along the shore temporarily. If the results were favorable, and there were not negative down drift effects, then permanent groins could be evaluated. However, permitting permanent structures may be challenging and could trigger a public decision-making process that can take a considerable amount of time, effort, and study.

This option can be tested by using geotextile tubes, or bags, arranged perpendicular to the coastline and filled with sand. Sand is mixed with water in a containment device and then pumped as a slurry into the geotextile tube or bag. The sand remains in the tube, or bag, but

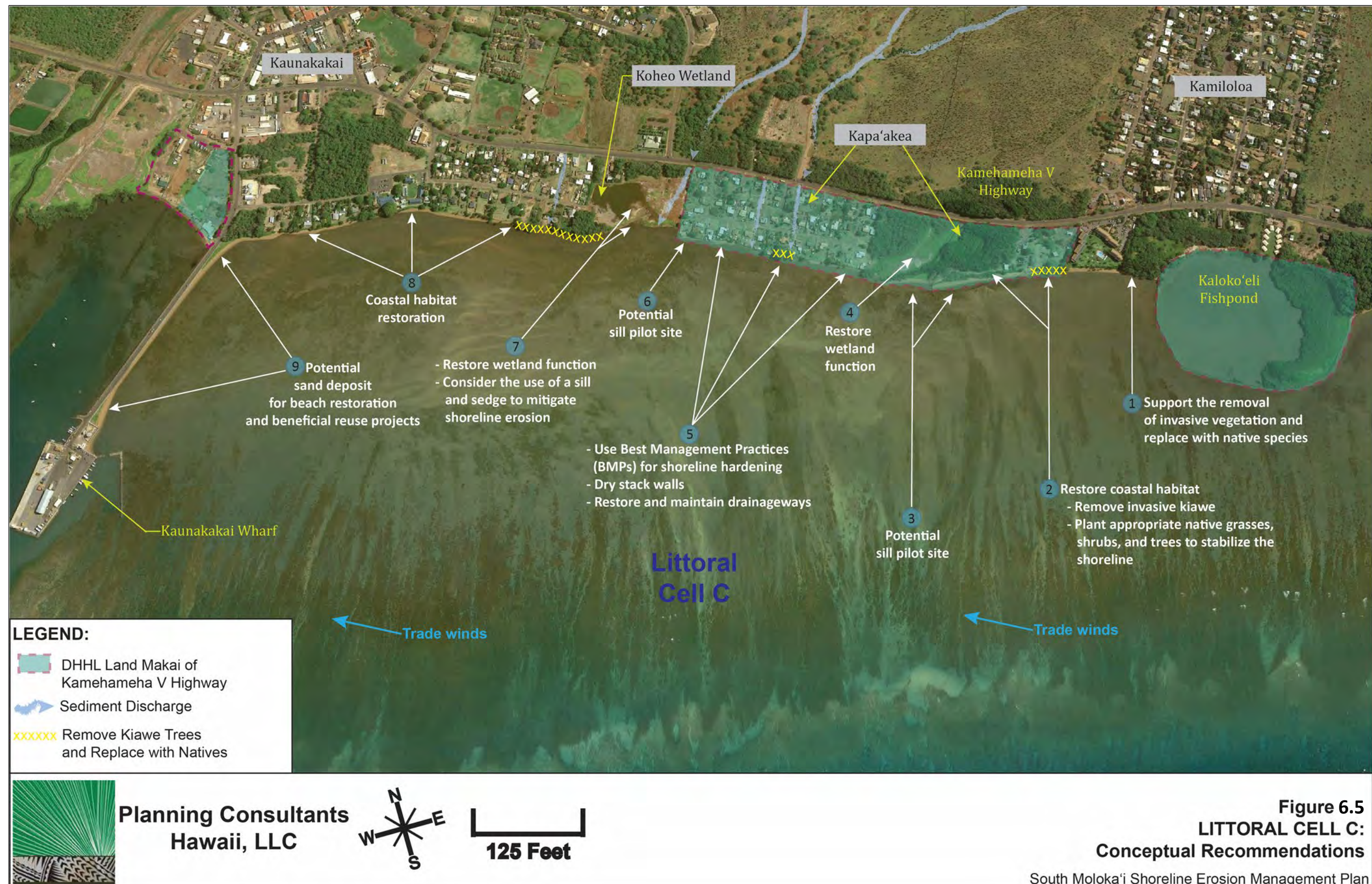
the water is squeezed out through the geotextile fabric. This is a fast and cost-effective way of building groins that prevent along shore loss of sediment.

The geotextile sand groins are temporary in nature and can be easily removed by cutting them open and releasing their sand contents. Precautions must be taken to protect water quality during pumping and depositing of the slurry. The tubes work best when resting on stable, non-abrasive substrate. For example, if the tubes are placed on sharp stones, or jagged reef, they can be torn open if large waves push the fabric across the substrate or if rocks scour the fabric during heavy wave action. Turbidity in nearshore waters can be controlled during bag filling by using booms and silt curtains, and only doing work during calm sea conditions. For Molokaʻi's south shore, the work may have to occur in the morning when the prevailing winds are usually light.

If the geotextile stub groins prove to be a suitable shoreline erosion management option, they can be replaced with permanent rock groins as illustrated in the photo below.



Photo: Aerial imagery of rock stub groins along Maui's north shore.



6.6 LITTORAL CELL D (KAUNAKAKAI WHARF TO KAHANU AVENUE)

Littoral Cell D cell extends from the Kaunakakai Wharf to just east of the Kalanianaʻole Colony (Figure 6.6). The natural movement of sediment within and through littoral Cell D has been drastically altered by the introduction of mangrove and the construction of the Kaunakakai Wharf. Cell D’s hydrology, water quality, and aquatic ecosystem has also been influenced by flood control efforts such as stream channelization and centralized wastewater treatment that discharges in the cell.

In the geologic past, currents flowed over the reef and sediment was carried offshore by the deep channel carved into the ocean floor by the Kaunakakai Stream. Nowadays, most of the littoral cell is accreting, primarily through mangrove infestation that slows nearshore currents. The mangrove slows the water as it reaches the shallows where it becomes still and converts the once coarse sandy shoreline to inaccessible swamp land with minimal utility. In contrast, Kiowea Park and Kalanianaʻole Hall in the center of the littoral cell are eroding and exhibiting shoreline retreat. Figure 6.6 includes five recommendations that are discussed below.

1 Beneficial reuse of sand. A considerable amount of sand has accumulated on the eastern side of the Kaunakakai Wharf. This man-made structure impedes lateral movement of sediment along the shoreline between littoral Cells C and D causing it to accumulate on the Wharf’s updrift side. A substantial amount of sand and sediment has accumulated updrift and across the wharf from the Canoe Hales at Malama Cultural Park. In addition, sand and sediment has been deposited by altered current patterns along the eastern side of the wharf where it meets the revetment that protects the small boat harbor. Both areas could provide sand for restoring the shoreline.

DHHL should work in collaboration with the HDOT Harbors Division and the DLNR DOBOR to explore the beneficial reuse of the accumulated sand. A sieve analysis is recommended to ensure the sand used for restoration is of the right grain size, coarseness, density, color, and is free of fines and silt so it is compatible with the environment where it would be placed. It is important to use the right coarseness of sand, so the sand grains stick to the beach and are not easily washed away by normal currents and wind. The sand must lack fine silt or clay that could cause turbidity and pollute marine waters. The color of the sand should also be compatible with the area in which the sand is being used or placed. It is important to use sand that is comparable to the native sand in the vicinity of the restoration, both from an ecological and aesthetic perspective. However, the sand that has accumulated in this area was originally from updrift and east of the wharf, implying that it is from a native source and is therefore appropriate for restoration activities.

2 Coastal habitat restoration (Malama Cultural Park). The lands of the Malama Cultural Park are steeped in Hawaiʻian history as it was the home of Malama, the royal residence of King Kamehameha V. Today, the shoreline area is a hub for recreational activity including Canoe Hales, outrigger canoes, storage to support water sports, organized contests, and sporting events. Wetlands mauka

of the shore, and adjacent to access roads in the park, should be maintained and improved through careful, well-planned restoration activities. Invasive mangrove is creeping into the shoreline area along the Park’s western extent. Given its invasive nature, the water sports community should actively remove and replace the mangrove with native vegetation such as bulrush or other climate-adapted native plants. If restoration activities became a regular part of sports club activities and team curriculum, shoreline maintenance and care could dramatically change and improve the Park’s coastal environment, near shore water quality, and aesthetic appeal.

Malama Cultural Park could benefit from an enhanced vegetated sand berm along the edge of the shoreline. However, pedestrian and recreational use would have to be directed to marked pathways so that fragile, shallow dune plants and their roots would not die from being trampled by foot traffic or crushed by canoes. The remnant carpet used to control erosion of the short clay embankment at the top of the shore should also be replaced with more environmentally benign materials, such as sand from the opposite side of the wharf. Carpet tends to leach chemicals into nearshore waters that fish, crabs, limu, and other aquatic life can bioaccumulate, and that people may unknowingly harvest and eat. Please see Subsection 6.4 (Littoral Cell B), Recommendation 3, for a more thorough discussion of the use of coir mat enhanced sand berms to support habitat restoration and coastal resilience.

3 5 Remove and replace the mangrove with appropriate native vegetation. Long-term residents of Kalamaʻula provide firsthand reports that invasive mangrove has spread so extensively seaward that former open coastal foot paths to Malama Cultural Park to the east are now impassible. This segment of shoreline is replete with thickets of mangrove-induced accretion.



Photo: Invasive mangrove between Kalamaʻula and Kaunakakai Wharf.

The mangrove thickets on both the eastern and western side of the Kalamaʻula subdivision have inhibited the use of the land and hindered access to the ocean and along the shoreline. Excessive mangrove infestation can cause anoxic conditions in the still water leading to fish kills at low tide. To counter this, a community-based effort to remove and replace mangrove with appropriate native vegetation is recommended. Such efforts will help residents and DHHL reclaim the use and utility of land lost to this invasive plant.

4 Coastal habitat restoration (Kapuāiwa Coconut Grove to Kalanianaʻole Hall).

The retreating coastline between the Kapuāiwa Coconut Grove and Kalanianaʻole Hall may benefit from a vegetated sand berm and native habitat restoration. Several coconut trees have succumbed to erosion along this portion of the coastline. The historic hall is not jeopardized by erosion but could be inundated by rising waters and flooding from wave overtopping of the embankment along the shore.

To reduce this risk, a maintained vegetated sand berm could help raise the height of the embankment to reduce the risk of flood damage to the building. Other south shore areas use vegetated berms to reduce a building’s exposure to moderately sized wave over wash and flooding. Please see Subsection 6.4 (Littoral Cell B), Recommendation 3, for a more thorough discussion of the use of coir mat enhanced sand berms to support habitat restoration and coastal resilience.



Photo: A vegetated sand berm protects a house from waves and flooding.

As part of a comprehensive strategy of adaptive realignment, a new pavilion and restroom were built substantially inland of the existing shore-fronting pavilion at Kiowea Park. As portions of the original pavilion deteriorate, they should be removed before they are threatened by inundation and/or become debris along the shore.

For example, the concrete slab that has slipped seaward should be removed before it breaks into smaller, sharper pieces that become tripping hazards entrained in the sand. The concrete sink and its drain to the ocean fronting the pavilion should be removed and not replaced. Electrical wiring, outlets, and fuse boxes should be water-proofed or removed to prevent accidental electrocution should they become inundated with seawater.

The concrete block restrooms adjacent to the pavilion and its wastewater system should be decommissioned and retired over time. With predicted sea level rise, these built assets will require more maintenance and repair costs, while safer replacements are available at the new pavilion.



Photos (above/below): Damaged components of the pavilion should be removed and retired.



While a vegetated sand berm could help prevent inundation, foot traffic would have to be controlled so the roots of the berm's native plants are not crushed or trampled. When the roots die, the plant dies, and the sand in the berm can easily be washed or blown away. Fortunately, the original pavilion is designed to allow water or waves to flow through the structure with minimal hindrance or harm.

These built assets should be decommissioned over time rather than continually repaired as the need and expense will rise with sea levels.

To the west and nearly adjacent to the new pavilion is an isolated spring or pocket wetland. The spring is located substantially inland but makai of the highway. The spring could serve as an indicator of ground water and hydrologic patterns in the vicinity of Kapuāiwa Coconut Grove. Many of the coconut trees in this area exhibit poor health and are dying.

As DHHL has offices across the highway, it should consider monitoring the salinity and water level of the spring and open springs within the grove to help determine the brackishness of the coconut grove's subsurface flows and the inland extent of tidal influence. A professional hydrologist in partnership with student interns could develop an educational opportunity for collecting data and testing the pond and springs characteristics.

Other (the boat ramp). The boat ramp at the end of Kapuāiwa Road next to Pond Place is frequently used to access nearshore waters and the reef west of the wharf. The safety and utility of the area could be enhanced with minor improvements that could indirectly reduce human-induced coastal erosion.

Down-shielded, seabird friendly, lighting could help deter illicit and unwelcome activity that occurs at night in the dark parking area. Such lighting could help drivers better align their trailers to the boat launch to avoid becoming stuck in soft sediment, impaling trees, crushing their roots, or driving into the embankment nearby.

An eroded concrete cap encases the end of a water line on the western side of the boat ramp. If the line breaks, valuable potable water would be lost, the embankment could erode, and emergency repairs may be required. As a remnant, the eroded cap could damage a boat, trailer, vehicle, or puncture a tire. The cap and water line should be removed and terminated within or adjacent to the paved roadbed serving the nearby residences. Terminating the water line at this inland location would make it accessible, but not create a driving or tripping hazard or risk damage, leakage, or breakage of the water line. It may also be prudent to relocate the electric line utility pole and its guide wires from the eastern side of the roadbed, where they represent a vehicle hazard when turning or backing, to the western side of the road where it would not impede vehicle and trailer turning movements.



Photo: Plants can absorb and dissipate wave energy and create wildlife habitat.



Photo: Access to clean productive nearshore waters is our kuleana and important to Moloka'i's lifestyle.

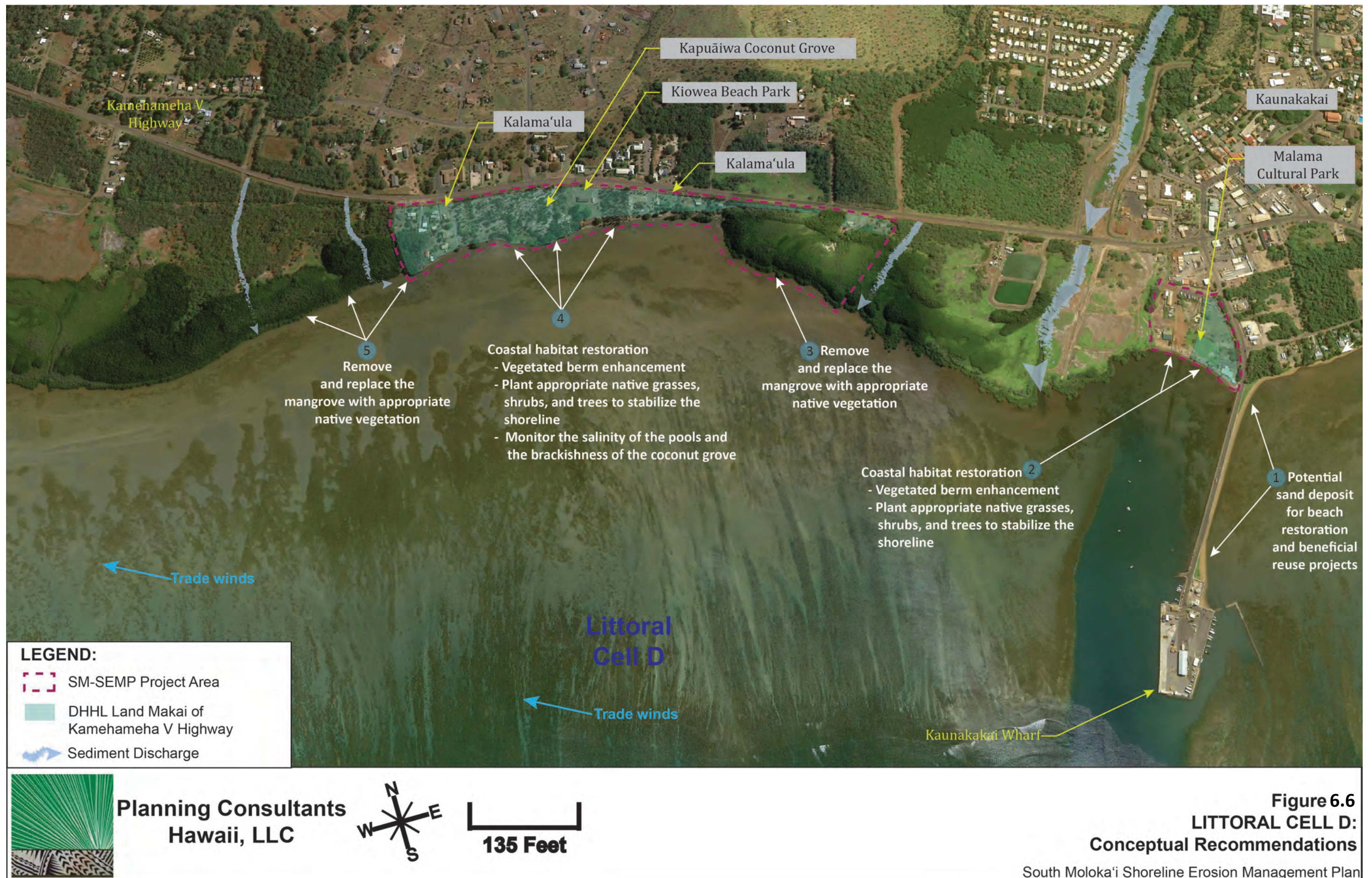


Figure 6.6
LITTORAL CELL D:
Conceptual Recommendations

South Moloka'i Shoreline Erosion Management Plan

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APPENDICES

APPENDIX A: STAKEHOLDER OUTREACH

SOUTH MOLOKA'I SHORELINE EROSION MANAGEMENT PLAN

List of Stakeholders Interviewed

Name	Affiliation	Date
Kenneth "Boom" Gaspar Doreen "Pinky" Gaspar Georgette "Jody" Kaneakua	Gaspars: Kapa'akea shoreline lessee, Lot 5 Georgette: Successor, Kapa'akea Lot 16	01/30/2019
Uncle Herbert Hoe	Ka Honua Momona Intl. third house at 3MM, Kamiloloa Moloka'i Applicant	01/30/2019
Noelani Lee Yamashita	Ka Honua Momona Intl. licensing Ali'i fishpond	01/30/2019
Gayla Mowat	Generational Lessee (East Kapa'akea)	01/30/2019
Noe Rawlins	Kapa'akea Lessee, Lot 11	02/01/2019
Aunty Leilani Wallace	Kapa'akea/Kamiloloa-One Ali'i Lessee Moved to Kapa'akea in 1962	02/01/2019
Georgette "Jody" Kaneakua	Georgette: Successor, Kapa'akea Lot 16	01/30/2019
Anthony Fukuoka	Maui County Building Inspector, Moloka'i	02/01/2019
Gene Ross Davis	DHHL (Acting District Supervisor) Kalama'ula lessee (multi-generational) former Moloka'i Hawaiian Homes Commissioner	11/20/2019
Zachary Helm	Kalama'ula lessee (first-generation) Current Moloka'i Hawaiian Homes Commissioner	11/21/2019
Henry Paleka	Kalama'ula shoreline lessee Rose's husband (multi-generation)	11/21/2019
Penny Martin	Kalama'ula shoreline lessee (multi-generational)	11/21/2019
Heli Silva Ducaroy	Kalama'ula shoreline lessee (multi-generational)	11/22/2019
Aunty Kanani Negrillo	Kalama'ula lessee (multi-generational) limu gatherer (Pe'elua 'Ohana)	02/10/2020
Liette Corpus	Pe'elua 'Ohana grandparents lived in Kapuāiwa Grove in caretaker's house	02/10/2020

What is your history and relationship to the project area?

Pinky & Boom – Grandmother's lease dates from 1949 – first lease issued in Kapa'akea. Rest of subdivision wasn't even done yet. We moved here in 1995 to take over Boom's grandmother's lease. Lot was all overgrown. Backyard was bushes, had to go through neighbor's lot. Shoreline was all mud. Had springs coming out in the front.

Georgette – Her mother has been there 60 years. Manintin and Bevins. [When the big flood came] Came full blast – regular high tide. Heavy rain came down, knocking the walls down. [Water was] 2-3 feet high.

How do you use the shoreline?

For recreation (stand-up paddle boarding), food, mālama, health and wellness. Growing limu, restoring kupe'e (cowries), enjoying the beauty of our place. Stewardship -teaching our youth traditional practices, how to mālama the shoreline.

Why is the project area, particularly the coastline, important to you?

Carrying on grandmother's legacy. Hers was the first homestead in Kapa'akea - was a place for the children to come and eat, sleep. Ocean is what makes us Hawaiian - we get our food from it. Lots of history - pa'akai place next door.

Based on your knowledge, what are the primary activities occurring along the shoreline? How many people? What time of day? Where are the users from?

Respect each other's places. Go in front of your place (to fish or gather). We all have special things in front – mālama. (Outsiders) come from Koheo side, at night – selling ogo (they gather in Kapa'akea).

Are you aware of existing user conflicts along the shoreline?

People living on the shoreline might not like others in the homestead subdivision in their backyards. Sometimes, tourists or other random people try to access the shoreline right through our lot, which is wrong. There are other access places next door but they aren't marked. Taking our resources is wrong too.

What time(s) of the year are the waves destructive or erosive?

Usually summer swell time. Also when King Tides are happening. If both, then we see the water coming up pretty far into our yard.

In what season have you observed loss of the shoreline? Do you feel that erosion is seasonal?

Spring and summer, sometimes late summer/early fall, but it seems to be happening more frequently. See a lot of erosion during a new moon at high tide.

Was the erosion gradual over time, or fast such as after a destructive event? Both. We saw some effects from the tsunami, but it seems to be happening more frequently and seems to be getting worse.

How has the vegetation along the shore changed over time?

When the saltwater comes in, it kills the pickleweed.

Are there any specific actions (improvements and/or management activities) that you would like to see to prevent or mitigate shoreline erosion?

Need to retreat, fill – raise the land, but use an angled wall

Do you have insights you'd like to share of the area's history, mo'olelo or placenames?

Lots, but she doesn't want all of it recorded. Canoes, burials etc. [Kapaakea Fishpond] was a double fishpond/fishtrap. Koheo is connected to Malama platform. Pa'akai – King's salt flat was here also. Canoe hiding place.

Changes in environmental conditions they have noticed:

Rock wall was inland. Water pressure came up. Neighbors to east were getting eaten up. Puts pipe in ground, metal [shoreline armoring]. Greenleaf's [shoreline armoring measures] are extensive. I'm in the picture – one w/wall, one next to it. Neighbor made wall – it [erosion rate] doubled. Lots of sand offshore. Supposed to be a sand mound --

Lot 10 – Aea – getting a lot of erosion. Seeing lots more sand – seems to be building up. [Originally] was only clay and mud, now there's sand.

Traditional practices, use of plants in shoreline area:

Georgette is known for limu, especially limu 'ele'ele. She's the go to person for cleaning limu 'ele'ele.

Threats:

Kapa'akea people used to use shoreline more. Was more limu before. People still fish offshore. Now - outsiders (Molokai people, but not Hawaiian) coming here and taking our limu, other resources, sometime they come at night - not pono. They aren't asking permission or harvesting correctly, and they're selling the limu in the grocery store.

Are there other people/organizations you think we should reach out to?

Get all the Kapa'akea lessees together – don't need outsiders.

Interviewers: Nancy McPherson, John Summers & Thorne Abbott

Interviewees affiliation: Ka Honua Momona Intl.; third house at 3MM, Kamiloloa; Molokai Applicant

What is your history and relationship to the project area?

Kupuna advisor to Ka Honua Momona Intl. Stay at Kamiloloa – on DHHL Waitlist for Molokai. Be who you are, but represent the community you're in. We're from somewhere else too. Loved fishing here – was his life. On Molokai, we're very fortunate. Abundance of fish, higher than other places. Last Hawaiian Island. He's traditional – no maha'oi – respect others' areas. Originally from Kane'ohe Bay, Ko'olauloa, O'ahu. Moved to Molokai 20 years ago, studied limu. Dr. Isabella Abbott – teaching about traditional food sources. KS grad – wrote about the limu. No poisonous limu – decline of limu. Gorilla ogo has caused problems – invasive. Native limu is getting overwhelmed.

How do you use the shoreline?

Used to dive a lot. Misses it. Young fishermen bring to the kupuna here. He lays net when his grandkids come to Molokai. Used to be an abundance of fish – we felt we couldn't catch too much. We can catch too much – with the amount of people here, commercial fishing. Boats are coming from O'ahu and Maui. Locals – respect your place. Kupuna can pick limu anywhere. There's a code – [resources are] self-managed. [Good example is] Uncle Mac Poepoe – Mo'omomi. Sea cucumbers [are a food source]. Mangrove creates an estuary. He has a pier – observe the fingerlings in the mangroves. The lots are leased [along the fishpond].

Why is the project area, particularly the coastline, important to you?

Fish is readily available. The Moloka'i lifestyle is special.

Based on your knowledge, what are the primary activities occurring along the shoreline? How many people? What time of day? Where are the users from?

There are lots of people coming from off-island to fish the spots.

Are you aware of existing user conflicts along the shoreline?

I'm very careful about respecting the community such as not fishing in other folk's community. I also help to manage the area.

What time(s) of the year are the waves destructive or erosive?

King Tides overcoming the fishpond walls. Maximum high tides come with the [full] moon. Winter tends to have the most destructive waves.

In what season have you observed loss of the shoreline? Do you feel that erosion is seasonal?

Yes.

Was the erosion gradual over time, or fast such as after a destructive event?

How has the vegetation along the shore changed over time?

Mangrove has been the biggest change.

Are there any specific actions (improvements and/or management activities) that you would like to see (or not see) to prevent or mitigate shoreline erosion?

Keep the shoreline as natural as possible. We need better shoreline management. Hedge [trim] the mangrove. Don't see [building erosion mitigation] structures on shoreline. Need better management of mangrove. Don't like idea of walls. Fishponds didn't cause erosion.

Do you have insights you'd like to share of the area's history, mo'olelo or placenames?

Kapa'akea is a landfill that's eroding – they covered up a rubbish dump. Ali'i Pond has no inner fishpond walls.

Changes in environmental conditions he has noticed:

Streams are bringing silt out onto the reef. Now the restored fishpond wall is being washed over by the sea. There's a climate change adaptation group on Molokai – Jeannine Rossa and Paul Hosten. We're seeing the changes. It's a challenge to understand what it [SLR] is. Along the south shore, [the changes are] subtle. East End [is worse]. [People] chose to build too close to the ocean – houses are in the wrong place. Places where sand is accumulating inside fishponds.

The fill, in combination with sea level rise, is causing land to subside.

Traditional practices, use of plants in shoreline area:

Limu was very important. Little limu is left. Part of the problem is the gorilla ogo. It is choking the coral.

Threats:

Mangrove, overfishing/overharvesting

Are there other people/organizations you think we should reach out to?

Uncle Mac Poepoe. Uncle Billy Akutagawa – knows fishponds. Ed Misaki (Nature Conservancy) – knows mauka [areas].

What other information could you share, based on your experience, that could help DHHL and the people living in the Kapa'akea and Kamiloloa-One Ali'i homestead areas?

Dealing with mangrove – need better management. The mangrove was protecting the shoreline [from erosion], but is now adding sediment to the fishponds. The mangrove areas are accreting.

Most of the silt problem is coming from mauka. We should try to catch the sediment in different stages (basins) and spread the stormwater out before it hits the ocean.

With sea level rise, I can see the ocean rise against the walls of the fishpond. The walls aren't high enough anymore.

Interviewers: Nancy McPherson, John Summers & Thorne Abbott

Interviewees affiliation: Exec. Dir., Ka Honua Momona Intn'l (KHMI), licensing Ali'i fishpond

What is your history and relationship to the project area?

License from DHHL, restoring a 30-acre fishpond. Collecting tide data with a tidal gauge – Brian Glazer at UH – also one at Kalokoeli.

How do you use the shoreline?

Auntie Vani (Ainoa) lives just east of Hotel Molokai. Limu 'ele'ele at her place. In 2005, we used to have 25 different species of limu. Limu kala disappeared 8 years ago. Celebrated Year of the Mullet. Native plant specialists. Need to reforest – need to do sediment mitigation between the forest and here. Native plants that could replace [invasives]. Dr. Keana Frank – Ph.D., Harvard – researches beach nourishment and beach restoration. Pa'u o Hiiaka, Pohuehue – crawler plants.

Why is the project area, particularly the coastline, important to you?

Based on your knowledge, what are the primary activities occurring along the shoreline? How many people? What time of day? Where are the users from?

Are you aware of existing user conflicts along the shoreline?

What time(s) of the year are the waves destructive or erosive?

In June 2017, had two significant high tides, also August and Sept. Out Hale Kia'i – King Tides caused it to erode. We have pictures of the erosion. We're seeing more wave action inside the fishpond.

We have had a tidal monitor in the fishpond through the University of Hawaii.

We are having more frequent high tide events.

In what season have you observed loss of the shoreline? Do you feel that erosion is seasonal?

Was the erosion gradual over time, or fast such as after a destructive event?

How has the vegetation along the shore changed over time?

The Gorilla Ogo is spreading into the eastern portion of the fishpond. There are large masses of Gorilla Ogo.

Are there any specific actions (improvements and/or management activities) that you would like to see to prevent or mitigate shoreline erosion?

Dr. Keana Frank – Ph.D., Harvard – researches beach nourishment and beach restoration. Pa'u o Hiiaka, Pohuehue – crawler plants.

I don't think mangrove is a good answer. It changes the habitat and drinks up the fresh water. Instead of mangrove, we should use native plants. I would also like to see the Gorilla Ogo removed.

There are small areas where you could remove the silt from the ocean and add it to the land.

Do you have insights you'd like to share of the area's history, mo'olelo or placenames?

Fishponds are fed by freshwater springs. Baby moi [need the brackish water].

Changes in environmental conditions you have noticed:

Interviewers: Nancy McPherson, John Summers & Thorne Abbott

The saltwater is coming up and into the coconut grove now. There are times now when the seawater is coming over the fishpond walls.

There was a big fire in 2008 that that increased the runoff. We are also seeing more rain and higher sediment loads in the fishpond.

Traditional practices, use of plants in shoreline area:

Threats:

Are there other people/organizations you think we should reach out to?

What other information could you share, based on your experience, that could help DHHL and the people living in the Kapa'akea and Kamiloloa-One Ali'i homestead areas?

It may cost 300K to 500K to remove the remaining mangrove in the [One Ali'i] fishpond.

Most of the shorelines are fed by freshwater springs.

Today, there are fewer parrot fish and more moi.

Interviewers: Nancy McPherson, John Summers & Thorne Abbott

Interviewees affiliation: Generational lessee, land east of Kapa'akea subdivision.

What is your history and relationship to the project area?

Our family has been here since 1929. Our 'ohana were cattle ranchers. 500 acres up mauka, 19 acres on the makai side. I remember the Army Corps of Engineers study in the 1970's. Pipeline.

Her grandparents put a lot of work into the place. Overgrown with kiawe. House was across the street. Added a kitchen, etc. There was a hunting cabin [up mauka]. [When building a house], soaked the lumber in saltwater – won't burn or get termites. In 1980's, 2008 – had big wildfires.

Lima family lived in Kapa'akea. There was a neighborhood swing. [Her] grandmother was a schoolteacher.

How do you use the shoreline?

Enjoy sitting on the shoreline in my yard, watching the sea, the sunset. It's very relaxing. Grow limu – good ogo -- had good rocks with limu, but someone took the rocks. We used to have lots of limu.

[People are] pulling limu off the rocks, by the roots – can't grow back that way. 'Opae. In 1980's – clams were clean. Now – started getting muddy.

Why is the project area, particularly the coastline, important to you?

Our family has been here for generations. I used to play on the beach as a kid.

Based on your knowledge, what are the primary activities occurring along the shoreline? How many people? What time of day? Where are the users from?

Sam Kealoha has a ramp. Rock walls were placed. Two years ago – springs were documented.

[Aunt Vani] Ainoa and [Todd] Ragsdale are getting a lot of erosion.

Are you aware of existing user conflicts along the shoreline?

Don't like people walking over from Molokai Shores. They [Molokai Shores] built a wall that is encroaching on Hawaiian Home Lands.

What time(s) of the year are the waves destructive or erosive?

In what season have you observed loss of the shoreline? Do you feel that erosion is seasonal?

Was the erosion gradual over time, or fast such as after a destructive event?

How has the vegetation along the shore changed over time?

Are there any specific actions (improvements and/or management activities) that you would like to see to prevent or mitigate shoreline erosion?

She's been planting naupaka – it's slowing the erosion. Others (Kamiloloa, Molokai Shores) have planted naupaka too.

Leave the kiawe – nature at its finest. She likes to look through the kiawe trees.

Do you have insights you'd like to share of the area's history, mo'olelo or placenames?

Gayla's place was a pasture. Grandpa and uncle put in the fenceposts. Found the fencepost pin that held the corner post – it's now in the water.

Aunt Vani is mentoring young people. She's a real kupuna.

Changes in environmental conditions they have noticed:

Reef is deteriorating. Have lost 3 feet of shoreline, at least. She has lots of photos.

There is too much silt.

Interviewers: Nancy McPherson, John Summers & Thorne Abbott

We have lost lots of trees to the ocean.

Fresh water [flowing to ocean] has been blocked off by the highway. Limu, 'opae, clams are dwindling.

The Wharf Road has disrupted the flow of water along the shoreline. It has exacerbated erosion.

Old Wharf Road – boat ramp was where the canoe shack is now. Used to be able to walk out on the

sandy bottom. Now – more mud, less sand, sinking into the mud. More coral, sand is disappearing.

Ocean bottom is not normal – currents have changed. [Before] If a coconut tree fell, if it was left there, sand would accumulate. Erosion is chronic now.

In Ho'olehua, the fence lines are all off – Busby surveyed them 10 feet off so people could drive down their fence lines for fence mending. USGS guy came – lot line actually runs down middle of Molokai

Shores driveway. Hotel Molokai is also encroaching.

Traditional practices, use of plants in shoreline area:

Threats:

Are there other people/organizations you think we should reach out to?

Gene Ross and George Maioho are cousins, and cousins with Gayla.

What other information could you share, based on your experience, that could help DHHL and the people living in the Kapa'akea and Kamiloloa-One Ali'i homestead areas?

DHHL put the lots in Kapa'akea – should be in Kamiloloa.

[Fishpond is] part of parcel Bridget got – supposed to be just the house.

Interview with Noe Rawlins, Kapa'akea lessee, Lot 11.

Has the board up – sand building up – Eleanor Aea on other side [of drainage ditch].

Susan Pua'a – Lot 33, 4th house down on the highway - her lot is dropping [subsiding]. Water in her yard at high tide. Ocean water coming in. She's by highway – she's been filling it up – need cinders.

Aunty Leilani's cesspool is leaching out into the ocean. DHHL used to help with cinders and fill. Backfill on top (mauka land) – goes behind [old] slaughterhouse.

Lot 66 – Sharon Wise – 13 or 14. On the ocean – two houses down from Aea – green house.

[In Kapaakea there's] no beach – nothing to save. Swampland.

{Because} stone walls along the highway, it becomes a river [when it rains hard].

Kamani trees are good.

Talk to Todd Ragsdale – next to Aunty Vani's place.

King Tides – Sand and saltwater are coming in if I don't have a big rain coming down (to flush it all out). Ditch used to be deeper – too shallow now. Not as much water coming down [as before]. David Rawlins – was muddy before. Flooding gets bad when there's a south swell and a King Tide.

2001 – big flood – Noe has pictures. Also has pictures of [seawater coming into her lot].

Aunty Susan [Pua'a] – on highway – [her husband was?] Leilani's uncle. Built a house, she built a second house, [converted from] cesspool to septic, then started overflowing.

Interviewers: Nancy McPherson, John Summers & Thorne Abbott

Interviewees affiliation: Moved to Kapa'akea in 1962.

What is your history and relationship to the project area?

Didn't gather limu there [in Kapa'akea] – gathered by Hotel Molokai.

How do you use the shoreline?

Important to get food from ocean – our icebox is from One Ali'i [beach park] down to Kalama'ula. Not the beach. Crab, pua – baby mullet. Oio and menpachi and papio. Outside the reef – Kala, kole, Manini, uhu, palani. Regula manuwai – thin, fine – outside.

Why is the project area, particularly the coastline, important to you?

Based on your knowledge, what are the primary activities occurring along the shoreline? How many people? What time of day? Where are the users from?

Are you aware of existing user conflicts along the shoreline?

Harder and harder to get the limu. Non-Hawaiians taking. Stones were placed in the ocean for the limu. Bobby Alcain.

What time(s) of the year are the waves destructive or erosive?

In what season have you observed loss of the shoreline? Do you feel that erosion is seasonal?

Was the erosion gradual over time, or fast such as after a destructive event?

How has the vegetation along the shore changed over time?

Are there any specific actions (improvements and/or management activities) that you would like to see to prevent or mitigate shoreline erosion?

Do you have insights you'd like to share of the area's history, mo'olelo or placenames?

[Kapa'akea] Was kiawe trees before. Never say metal [in the ground]. It was a swamp – had to fill with cinders. Homesteaders had to bring in more fill – were able to get cinders from Hawaiian Homes.

Changes in environmental conditions they have noticed:

Water coming in [to lots, up to road] when water [tide] is high. Used to come only one side for years.

Traditional practices, use of plants in shoreline area:

Threats:

Worried about next generation, younger generations following in our footsteps. How can we reinforce the traditions?

Are there other people/organizations you think we should reach out to?

Kamakana and Peelua. Liko Granbusch. Weymouth Kamakana.

What other information could you share, based on your experience, that could help DHHL and the people living in the Kapa'akea and Kamiloloa-One Ali'i homestead areas?

\$1 Million project to improve channels [drainage ditches] – Didn't go down deep enough – didn't do a good enough job. Only did half of the road – caused more flooding. Leilani [her lot] is in a low spot.

MOLOKA'I SHORELINE EROSION MANAGEMENT PLAN PROJECT
STAKEHOLDER INTERVIEWS

Interviewee: Jodi Kaneakua	Date: 01/30/2019
Interviewee affiliation: Lessee	Interview Location: One Ali'i
Interviewee residence address/homestead lot: Lot 17 Kapa'akea	
Stakeholder Type: Successor, Kapa'akea Lot 16	Interviewer: Nancy McPherson, John Summers, Thorne Abbott

1. **What is your history and relationship to the project area?**
I lived in Kapa'akea over 60 years.
2. **Why is the project area, particularly the coastline, important to you?**
We are slowly losing a portion of our property.
3. **How do you use the shoreline?**
Fishing, crabbing, limu picking, wading.
4. **Based on your knowledge, what are the primary activities occurring along the shoreline? How many people? What time of day? Where are the users from?**
Pole fishing, laying nets, picking limu, usually in the mornings, but sometimes it depends on the tide.
5. **Are you aware of any existing user conflicts along the shoreline?**
Someone is bringing people in for fly fishing, and he's getting paid. He doesn't come from this community.
6. **In what season have you observed loss of the shoreline? Do you feel that erosion is seasonal?**
It's always flooding. We having erosion during Kona winds. We don't have king tides too often.
7. **Was the erosion gradual over time, or fast such as after a destructive event?**
Gradual
8. **Does the shoreline regularly change in width in any particular place?**
Not for me.
9. **In your opinion, what are the three most important challenges or threats to the shoreline at this time?**
Losing more portion from property. Limu is getting scarce. King tides and flooding.
10. **Are there any specific actions (improvements and/or management activities) you would like to see taken to prevent or mitigate shoreline erosion?**
Rock walls or planting vegetation.

Other Comments:

1. When parents were alive, we had four mango trees, plum tree, kamani tree. Hurricane Iwa destroyed it.
2. The people that live towards the wharf is probably going through the same thing like us.
3. We still need to work on our flood control project.

Interviewers: John Summers & Thorne Abbott

Interviewees affiliation: Maui County Building Inspector – Molokaʻi

What is your understanding of the permitting process for Hawaiian Homelands?

There is no SMA in Hawaiian Homelands, the Planning Department just “NA” on the application. The Conservation District is similar to Hawaiian Homelands.

Technically you don’t need building permits, but most applicants apply for them for insurance or financial reasons. Flood zone permits don’t apply.

What percent of your workload does DHHL represent?

Roughly 30-40% of my workload.

How much shoreline erosion have you noticed?

Not too much.

What do you think is causing the erosion?

King tides / high tides. I haven’t seen too much seasonal erosion. The mangroves slow the erosion, but they are bad for the fishponds.

Are there any specific actions (improvements and/or management activities) that you would like to see taken to prevent or mitigate shoreline erosion?

I’d like to see native plant restoration, but you have to consider the ongoing maintenance and how the restoration will work with the seawalls.

Consider building a fishpond off Kapaʻakea to help with the erosion.

What about a big breakwater?

I’d prefer a fishpond.

How about relocation?

As a last resort you may need to relocate folks mauka.

How about coconut fiber sandbags?

For those lots without walls it might be a good option.

Are there other people/organizations you think we should reach out to?

Luigi Manera

Other Comments:

1. All the Hawaiian homelands have to be upgraded to septic systems – this will be a 5k to 7k upgrade.
2. I haven’t heard too much about the ground settling on the DHHL shoreline lots in the project area.
3. Most of the enforcement is complaint based.

Interviewee affiliation: DHHL (Acting District Supervisor); Kalama'ula lessee (multi-generational); former Molokai Hawaiian Homes Commissioner

'Ohana connection to place: His 'ohana were Kalama'ula lessees from the beginning. As a child, played in the "bomb shelter" on the shoreline. It was on the land before, now it's falling into the ocean. He likes to use the shoreline for fishing.

Changes he's noticed: the sand has more dirt in it now. The shoreline is getting seriously eroded. There was always the papa (before), by the spring. Under the _____. Akulikuli – was never there before. Always armored the spring area. The springs are caving in – the coral hardpan (is being undermined). Uncle Henry has more coral – petal rock on his side, papa on the other side. Coconut trees are falling over, being undermined. The soil is not being replenished.

Subsistence resources: Sand crab, blue pincher – kūhonu, Samoan half-breed crab, alamihi in rock areas, alo – shrimp. Healthy fish population – got everything out there. Fish come in (closer to shore) on the high tide. They live out in the reef – have house. The big sand channels are like their highway. Net fishing – we lay in the sand channels. Lay nets with a flat bottom boat. Or we can dive, spear fishing. The he'e place is out farther, past the sand. Eat the he'e. Go out at night to get crab. Seasonal -- check for he'e. Limu – not the best area for finding limu. Limu kohu, likes rough water, north shore. Used to have plenty limu 'ele'ele [in Kalama'ula] – gotta have a fresh water source. People used to grow it on their boats, lines. Was the limu of Kalama'ula. Always had limu on the papa – now have the gorilla ogo holding all the sediment.

Auku'u (was the bird we saw). Didn't see moorhens. Now seeing them in the inland ponds. Ducks – koloa. Were common before. Used ducks for food, feathers. Turtles – no (didn't see). But people would eat them. Inland pond at Pālā'au – wetlands. Noticing ducks.

My mom them, the whole family would go to the beach. Ohi'apilo – there was a path to the beach. We gathered food as a family. Perfect to be in this area (lots of resources). Coconut leaves, etc. 'Ōpae – plentiful shrimp. In the millions. We could gather 1-2 gallons of shrimp. Mosquito fish vs. pua. The old waterways got taken over by mangrove. Found the old waterway by Ohi'apilo. Plenty of 'ōpae. Had akulikuli. Mangrove was sparse before. Mangrove is impacting (our resources).

So many 'ōpae (before) – can't say why they're gone now. More people harvesting back in the day. Great bait. Hardly any, anymore – they don't mind the muddy water. Right next to shore, 15-20 feet within the shoreline. Nowadays, he buys his crab in the store. Not for a party, but will get from the ocean for his family.

Everything is falling into the ocean. 8-10 feet of hard shoreline lost in the last 15-30 years. Never had "King Tides" as a kid. My mom experienced a tsunami. Bangalan lost an ulu tree in the tsunami [tree died due to saltwater inundation]. Uncle Merv Dudoit – Kamiloloa – lost 6' of their lot. Land is not being replenished. Mo'omomi – was always rocky, but now has lost the sand. Sand doesn't come back (seasonally) any more. [An example of a] seasonal [shoreline that replenishes] is Pāpohaku.

People's boats were tied to wooden walkways. 'Ōpae box floating in the water. Was deep on that side before – now there's a sand bar there. By Kolo Wharf (Pālā'au side) – no channel. Pālā'au House channel – Rawlins family [house over the water]. Kamalō – sand has built up on both sides (of the old wharf). Kiawe trees – blocking the shoreline. Built up the shoreline. Kiawe and naupaka, Milo and Kou.

Some people are waiting for DHHL to relocate them. Some people don't like that idea and don't want to leave – they want to continue to live by the ocean. Need an incentive to retreat back on their lot. Natural solutions to try to retain the shoreline – plants. Do trials – naupaka on the sand. Pōhuehue.

In the coconut grove we have naupaka growing – that is good. The ākulikuli holds the soil, and it is good for restoration. We should plant milo trees, hala trees, and Hawaiian Ko.

You should prioritize areas that are impacting homesteader's properties that have minimal protection.

Talk to Russell Kallstrom at TNC, Kumu Akaka, Aunty Linda of Kamiloloa.

Other Comments:

1. There used to be a lot of Akule fish.
2. It's hard to come across the 'ōpae'ula (shrimp) now. I'm not sure why they have declined.
3. The mosquito fish used to be plentiful. They aren't around anymore. The encroaching mangrove may have caused the decline.
4. When he was a child the bomb shelter (bunker) was on land. There was always a sandy shoreline around the bunker. Now the bunker is out in the ocean.
5. Akulikuli Kai (pickle weed) wasn't there before.
6. Underlying the sand was "papa," which is limestone karst.
7. The coconut trees are dying because of age and mites
8. From the shore to roughly 200 feet it hard enough to walk. From roughly 200 feet to 400 feet it gets soft. Beyond 400 feet it gets hard again.
9. Kuahonu (kona crab) – folks eat. Samoan crab is also edible.
10. In the evenings we would catch crab.
11. People used to cultivate limu ele ele, but there is less now.
12. Nowadays, there is a lot more gorilla ogo out on the reef.
13. There are also turtles and monk seals out on the reef.
14. Some of the native birds that we have include:
 - a. Night Heron ('Auku'u)
 - b. Hawaiian Stilts (Ae'o)
 - c. Hawaiian ducks (Koloa) – we used to see them, but not so much anymore.
15. If you open the pier and allow the water to run through it may allow the sand to migrate.

Interviewers: E. Halealoha Ayau, Nancy McPherson, John Summers and Thorne Abbott

Interviewee affiliation: Kalama'ula lessee (first-generation); current Molokai Hawaiian Homes Commissioner, former Deputy Director, County of Maui Parks & Recreation Dept.

Adaptation to Sea Level Rise: Kapa'akea lots – need to elevate their homes (County Community Rating System – freeboard above BFE)

'Ohana originally from Maui. Asian population on Molokai. 'Ohana lived where Stacy [Helm Crivello] is now. Was all kiawe. Larry, Greg and Stacy all raised in Kualapu'u until 1950. California Packing Corp. was in Kualapu'u.

Georgia, George, Zach and Adolph (Helm) were all raised in Kalama'ula. Learned about farming. Expanded farming, raised dairy cows, had their own milk. Raised ducks, pigs, rabbits, chickens. Self-sufficient – we fed ourselves. Grew peanuts, potatoes, corn, cantaloupe, melons.

Subsistence resources: Went crabbing a lot. Where the old landfill was – there was a trail to the shoreline. He recalls the abundance of kūhonu and Samoan crab growing up in the nearshore areas of Kalama'ula and Pālā'au. He also recalls catching them with his brothers. Only took an hour to fill up two buckets, but that's not going to happen today. Not much fishing, but crabbed in Coconut Grove. He walked to town, walked to the shoreline. Asked friends and kupuna – to catch 'ōpae in the springs, kupuna were asked – they prepared limu 'ele'ele for them. Today, there is significantly less amount of crabs, especially near Coconut Grove (Kapuāiwa). There used to be lots of limu 'ele'ele.

Changes he's noticed: Shoreline was much farther out than it is today – at least twenty feet out. There were many more springs that were visible - water was percolating out of the ground. Never went swimming before (in the Coconut Grove) – wasn't right to swim in the springs. He also recalls having choke limu 'ele'ele (before). The shoreline ocean water was clean and they swam there. Saw shoreline erosion in the 1980's and 1990's, now – especially by the old pavilion in Kiowea Park – pavilion was way further from the shoreline. Erosion deteriorated the ocean conditions over the years and it became really muddy with runoff. Mangrove didn't used to be as widespread or abundant.

Other homesteaders we should interview: Hattie Silva, Kalani Johnston, Henry Paleka, Penny Martin. Maliu, Rawlins, Kimball.

Ben Kahalehoe was a fisherman in the area and built a fish hatchery in the ocean -- 'ōpae and mullet. He cut the mangrove – cut a channel through it to the ocean. Lori Myer (Kahalehoe). Henry Pali's gas station. Before Aunty Kauila's place – the stream – Makehe Stream – was an old Hawaiian man who built a hale inside the mangrove. Had people living inside.

Maka'ala – be watchful of the springs – mālama. Kupuna used to watch over the springs, take care of them. Harriet Smith and Aunty Kauila (Reyes). Interviewer asked the question, “did you guys understand the role or function of fresh water in the shoreline conditions?” He said not really, but Harriet Smith told them about the water springs, that they are sacred and “gotta mālama”.

Overcrabbing – some guys catch, give to everyone – catching them too small. Non-Hawaiians [catching]. Sediment in the water. Before – sand, hard, could walk on it. Now – you sink in. Mullet. Oio – they like the mangrove. Aku head used for bait. Samoan crabs. By Molokai Electric [in Pālā'au – Pascua's managed the pond. Palaau Road – used to be open, could see (open ocean) from the highway. Lived

Interviewers: E. Halealoha Ayau, Nancy McPherson, John Summers and Thorne Abbott

next to Chinens – lived past pond at Pālā'au. All Akulikuli – salt flats. All flooded during the winter. Neglect of maintenance. In my childhood – could fill the nets. Now – people are taking too much. People used to moor their flat bottom boats along the shoreline – tied to (poles in the water). Proper way to harvest (limu) – cut it with scissors. [Fresh] Water was boiling out of the sand. Mary Rawlins. Some folks built sinks close to the ocean. Older generation – taught them to be more maka'ala, mālama. Respectful of the ocean. Kakahai'a Park – picnic tables on the shoreline. Four of the tables are now gone – were falling into the ocean, had to remove them.

Planting naupaka – Merv Dudoit's wife – homes by Pa, Lawrence Joao, Billy Akutagawa. Seaside Place – planted naupaka down there. Planting in their yards, not right on the beach.

US Army Corps – piling rocks – no good. Molokai [shoreline] is different. Putting big boulders [at Kiowea Park] – Boy Negrillo– someone reported it. [Kiowea Park Improvements] Phase I & Phase II – Greg & Zach [Helm], National Guard provided labor. Phase I was in late 1980's / early 1990's. Phase II is happening now.

What effects have you noticed in your lifetime?: Kalama'ula area floods during heavy rains. Where the springs are – they overflow. The springs are sacred – kapu. The picnic tables [at Kakahai'a, that fell into the shoreline] were placed in the 1970's – Louis Hao got federal funds. 20-30 years ago, were 20 or 30 feet from the shoreline, so that's a rate of 1 foot per year of [shoreline] erosion.

What do you think is causing this?: A combination of factors – global warming, tradewinds and high tide makes a lot of current – [ocean] takes the land back out with it.

What would be some solutions?: How do you [get permission to] put a buffer, a mound, and plant with shoreline species?

Some people look at fishponds as sacred. For the parks that are already eroding, like Kakahai'a and Kiowea, restore the shoreline by bringing in boulders. You should elevate the houses rather than rebuild them.

Plant Naupaka along the shoreline to hold the soil and mitigate erosion. You can plant it in the yard and let it grow towards the shoreline.

Other Comments:

1. The picnic tables at One Ali'i Park provide a good example of shoreline erosion. The County built them about 30 feet from the shoreline, but due to erosion, 25 years later they had to be moved away from the shoreline.
2. Some folks over-harvested the crabs which reduced the population.
3. There used to be hard sand where the crabs lived, now it is mud.
4. Folks used lay net to capture the crabs.
5. There has been a loss of 'ōpae'ula (shrimp), probably because of over-harvesting.
6. For the limu 'ele'ele the presence of fresh water is important.
7. Sediment may be smothering the availability of fresh water.
8. The tradewinds and high tides constantly scour the shoreline and are the primary cause of erosion.
9. The homesteaders could use a workshop on how to build a berm back from the shoreline and landscape it with native plants to keep the soil and mitigate erosion.

10. For Kakahai'a Park, he supports bringing in boulders to stop the erosion. Similar to Kalama Park.
11. If we can use a proactive approach, we can slow down the erosion.
12. The County should designate the homeowners at Kapa'akea and do a demonstration project before doing that whole area with hardening.

Interviewee affiliation: Kalama'ula shoreline lessee Rose's husband (multi-generation); Uncle Henry's family homesteaded in Ho'olehua; volunteer caretaker for Kalaniana'ole Hall next door

Noticed when there's high tide with no wind, ocean doesn't come up onto the land. The [Kaunakakai] Harbor – the pier – blocks the waves, but also blocks the sand.

He lost about ten feet of land in front of his house. You can see World War 2 machine gun stand and bunker which are both submerged now.

Kapa'akea getting lickins down there. Storm surge affects the land more to the west.

Old School guys – father-in-law [Rose's father] put shoreline armoring in way back when. We got married in Kalaniana'ole Hall. We got flooding when Kūlana 'Ōiwi was built. Kahinu's place was underwater.

He used to go crabbing. There used to be lots of samoan and Kona crab. There aren't as many crabs as before.

'Olo'olo Spring is connected to the spring by the pavilion, and the springs in the grove. The springs have never stopped running all these years. The [makai] spring was always open to the ocean.

He was security for Molokai Ranch for many years. In the old days, was lots of crab – kūhonu crab, Alaheke [Alamihī?] crab. They still get, but not like before. People are taking too much. Now you have to go a mile out [to sea] to get fish.

People use the shoreline for parties, family gatherings.

Not as much limu 'ele'ele – grows in the sand. He thinks the gorilla ogo is smothering the limu 'ele'ele. Also, people are using the bullpen net – takes everything – a lay net.

When the river runs yellow, the water turns yellow, the tako run away. Sand channels, black limu – ogo stays near shore. Shoreline used to be muddy, now it's hard. Used to sink in up to your knees.

[Idea of opening up the Wharf] Makoa Trucking – could they put culverts in and still handle the weight?

Homesteaders along the shoreline – Kalani Johnston, Chinen, Kahalehoe, Maliu, Martin.

When Kalaniana'ole Hall was being restored, the land was further out. Coconut trees that are falling [into shoreline], that they had to cut, were alive and had coconuts.

Boy Scouts were replanting the grove before – they planted the younger ones [younger trees in the grove].

Are there any specific actions (improvements and/or management activities) that you would like to see taken to prevent or mitigate shoreline erosion?

It would be good to try natural shoreline restoration along the shoreline.

We get a lot of sediment coming out of the river. I hope that one day they will open up the pier so we can get sand transport along the shoreline.

Other Comments:

1. There used to be a lot of crab and fish when I was younger. Not as many nowadays.
2. The outer reefs are still healthy with fish.
3. They still have the Tako at Kalama'ula.
4. The coconut trees in the grove may be dying from the mites.

Interviewers: E. Halealoha Ayau, Nancy McPherson, John Summers & Thorne Abbott

Interviewee affiliation: Kalama'ula shoreline lessee (multi-generational)

She is employed primarily by Papahana Kuaola/Lelekamanu Project and does some work for The Digital Bus.

Why is the Kalama'ula area, particularly the coastline, important to you?

It's where I grew up. I can harvest and live off the land. It represents who and what we are. I can't imagine what the Kalama'ula area would have been like without the wharf and mangrove.

How do you use the shoreline, and when?

In the childhood days we did a lot of subsistence activities.

How the shoreline has changed over the years:

There has been a major expansion of the mangrove. I used to be able to see the wharf. Now, you can't see the wharf because of the mangrove. Her mother could walk from this lot to the wharf [unimpeded]. All mangrove now. There's a trail through the mangrove – Jeanette Kahalehoe [Lot 26] – her dad cut a trail through mangrove, cut squares out of the mangrove and had fishponds.

Native mullet – need freshwater seeps. Used to be way more fresh water. She has come to understand that kiawe trees and mangrove both use up lots of fresh water. She thinks there are less 'ōpae (shrimp) because there is less fresh water. She thinks there are less 'āholehole (Hawaiian flagtail) for the same reason.

She recommends removing the mangrove (shrub/small tree that grows in coastal saline or brackish water) and kiawe (*Prosopis pallida*) to counteract less fresh water reaching the shoreline.

Cattle up mauka – deer – eating the vegetation. [Soil is] running off. She said we must consider how to control erosion before removing the mangrove, which was planted to control erosion. Mangrove helps control silt run off but it takes/uses so much fresh water. She said the key to erosion control is managing mauka rain runoff and therefore proper management of the watershed.

Could see 'ōpae, 'o'opu – used to catch alo [aloalo; white mantis shrimp]. Mosquito fish. Used fence wire, turned _____. 'Ōpae, 'o'opu, lots of crab – alamihi, blue crab, 7-11 crab – he'e au. She recalls growing up that the shoreline had so much crabs including kūhonu, Samoan, 7-11, 'alamihi and also had lots of he'e (octopus). Don't catch 'em by the bucket any more. More crabbers [coming along her shoreline] – summertime. They start at the wharf. There will be five groups, 5-10 people [in each group], [crabbing] all night, lifting every rock. Now, hardly see aholehole (a brackish water fish), but still get plenty pāpio, barracuda, turtles. Used to be able to eat them (turtles). Billy Kalipi – breaded turtle meat. Pāpa'a [a flatfish], Pāku'iku'i [a surgeonfish], Hīnālea (wrasse), Uhu (parrotfish). Reef fishes. Kole (surgeonfish).

[She's seen /got a copy of her] homestead file – this was her grandmother's place – Kanealae (Rawlins). One of first ten awardees [of homesteads after passage of HHCA]. Always lived here – Rawlins 'Ohana. Had chickens, a garden, mango tree – everyone comes back. [Original house was a] Two-story house, big porch, lauhala mats on the floor. Would take in everybody. Pohaku in the yard.

Interviewers: E. Halealoha Ayau, Nancy McPherson, John Summers & Thorne Abbott

History on Kalola: She fled from Hawai'i Island to Maui, then to Kalama'ula. Kamehameha came here to ask her for her daughter (Liliha) and her granddaughter (Keopuolani). Upon her death, Kamehameha came here (to Kalama'ula) and took them with him.

Momona, where I grew up. Farmers of land, sea or both. Live off of your ahupua'a. Shoreline is who we are. South Shore Molokai is momona. What it would be like without mangrove? Need to revegetate with shoreline natives.

Ron Kula – DOE, DAGS – Field site packets for school huaka'i. Protocols, entry info – workbooks. Kapuāiwa. Interviewed Harriet Ne, who hand-drew the map, described the purposes of the springs. Hui Imi Na'auao – workbooks.

New pukas [in the Grove] – sinkholes. Some springs have disappeared. Springs weren't all kapu. There was plenty limu 'ele'ele – it's being overharvested. Also, mangrove and kiawe could be taking up the fresh water. Test the water – [someone should measure] the amount of fresh water [coming through the area]. Would be a good project for the homesteaders. Need an assessment of the marine life – used to be nice walking along [the shoreline]. Nature of the shoreline – it goes up and down. Goes past the taro, to the coconut tree [shows us where the high tide line currently is on her lot]. Effect of 1960 tsunami was bad [on Molokai]. Latest tsunami – it brought in the mud. In 2011, the front [makai side of her lot] went from sandy to muddy.

Cranes [on the wharf] to load pineapple – [used to] jump off [of them] Mangrove would catch the stuff from the land. Need to fix the mauka area [to stem erosion] before removing the mangrove. Third River [Kaunakakai Stream]. Wind erosion.

Revegetate with shoreline natives: 'Aki'aki [shoreline/dune grass] and naupaka. Better than mangrove.

[Look to the wisdom in the] Kumulipo – can't just fix down here, gotta also fix up there – makai to mauka.

Changes in environmental conditions she has noticed: [Paddled in the] Wahine o Ke Kai – had a reverse current. "Molokai Express" [is the east-to-west current]. Sometimes the wind blows west to east. Reverses the current.

Traditional practices, use of plants in shoreline area: She uses the mangrove to make wreath bases. Use kiawe wood for fencing, making imu. Can use kiawe for making charcoal. Niu – young midribs – niau. Panama hats – George Cooke. Mānienie (a type of 'Aki'aki grass), Kīpūkai [Seaside heliotrope] – little grey plants [with purple flowers]. Native 'ākulikuli (coastal succulent). [Limu types:] Wawae'iole, 'ele'ele, ulili, akekeke, "chop chop."

[Birds on] shoreline - ae'o, kolea, kioea. Auku'u (Blue Night Heron) – eats lots of fish. Molokai has more native birds. She observed that the presence of shore birds such as Ae'o (Hawaiian Stilt), Kioea/Kiowea (Bristle-thighed curlew), 'Auku'u (Black-crowned night heron) and Kōlea (Pacific golden plover) are more abundant here than in other places on Molokai.

Primary use of the shoreline [for homesteaders] is subsistence. Used heavy fence wire – whacked the fish with it.

Interviewers: E. Halealoha Ayau, Nancy McPherson, John Summers & Thorne Abbott

Kicking the mullet ['Olelo No'eau: "Ka i'a kā wawae o Hīlā" (the fish of Hīlā, kicked by the feet)].

She's constantly fighting the mangrove [to keep the shoreline clear]. Wants to borrow the DHHL chipper to chip the mangrove [to use as mulch]. [Have had to do a lot of amending in her yard] – was sandy dusty dirt on their place when she got there.

[Good plant for retaining sandy shoreline] Pohinahina [beach vitex] – hinahina [Native gray heliotrope]. Look at Ron Kimball's place. Kauna'oa [native dodder] is a parasite – encourage it for gathering [for lei making]. Workshop with teachers – invasives. 'Ilima – pōhuehue – native akulikuli. Naio [bastard sandalwood (Myoporum sandwicense)], milo – has to be maintained. Hau – introduced. Use to make 'iako (outrigger boom), cordage. Also used for medicine, hula skirts. Kou is good for lei, bowls. Beach heliotrope (hinahina) – can see it on Seaside Place.

Hinahina, crownflower – QLCC [the Queen's flower]. Kukui grove [at Kūlana 'Ōiwi?].

Threats:

- a. The mangrove. The mangrove is also going to spread out to the reef. There needs to be a major effort to push back the mangrove.
- b. The Malama Park area used to be the Kaunakakai Beach for gathering, fishing, swimming, etc. Everything changed after the war. It should be made a viable wetland again. Arleone and the Chevron people will help. Put in pathways and a boardwalk. Restore the platform. Have the professionals help with the platform. They would like to help with the wetland. Arleone has a PowerPoint on the salt ponds.

Mangrove, gorilla ogo, deer – erosion up mauka. She would like to start a kipuka of native plants up mauka.

Kawika Gonsalves – 6th graders – virtual museum.

Malama Park area: Kaunakakai's beach was for the royalty – wharf made them lose the beach. Surfing was better before. Name was Kaunakahakai – resting place for the canoes. Prince Kūhiō – famous canoe named A – Prince Kūhiō was famous for canoe racing, betting on races. She feels a kuleana to mālama that place. It's a good place to talk about wetlands – native plants. Fence the wetland, get rid of pickleweed, put in kalua[?], makaloa, make it a viable wetland there. Build a little boardwalk, create signage. Chevron [doing petroleum testing there]. Get professionals to help remove the vegetation. [Partners] Molokai Canoe Club, [She's a member of] Wa'akapaemua Canoe Club. [Appropriate landscaping is] Milo and kou, not monkeypod. Contact Hui Ku Maoli Ola – Rick Barboza [hawaiiannativeplants.com]. Papahana Kuaola [also has information]. Arleone has a good powerpoint.

Kiowea [Park] – banyan trees – banyan roots broke the sewer lines to the bathroom. [Ask] Alton Arakaki – get rid of the banyan [at Kiowea Park].

Kamani nuts. [Mitigation measures:] remove kiawe, banyan and mangrove. 'Uhaloa [Waltheria Americana – medicinal weed]. [Ask] Butch Haase – kiawe roots left a ring.

Others we should talk to: Kapua Lauifi. Kalani Johnston. Jeanette – go her house. Lori Buchanan – MoMISC. Ane Bakutis, Russell Kallstrom, Gayla Mowat. Sam Johnston. Sarin Wise.

Interviewers: E. Halealoha Ayau, Nancy McPherson, John Summers & Thorne Abbott

TNC [preserve at Mo'omomi] – Cats are hunting the ua'u [shearwaters]. TNC is clearing the kiawe [where the cats were hiding], chipping it. Pā'ū o Hi'iaka [Jaquemontia ovalifolia subsp. Sandwicense] [started growing there now that kiawe has been cleared].

Ko'o [pole used to push a canoe] – [traditionally] poled the canoes. Her uncle had poles, not engines. [Her grandmother] had a stone she used to wash clothes with.

Chickens are a hazard.

Have had waves and super high tide. The wharf boat launch is underwater [at times].

Other Comments:

1. If you cut the mangrove at the waterline the saltwater will kill it.
2. The banyan trees and Kiawe trees have lots of roots. It can be an issue and cause problems. Out at Mo'omomi the chipped kiawe wood was used for fertilizer for the native plants.
3. Native birds: a. Hawaiian stilt (Ae'o); b. Hawaiian ducks (Koloa); c. Heron ('Auku'u); and d. Pacific Golden Plover (Kolea) can be found along the coastline.
4. There are mullet along the shoreline
5. There used to be a lot more freshwater flowing from the springs. I think the flow has fallen because the cattle and deer are eating the vegetation. Also, the mangrove sucks up the water.
6. We used to have "choke" 'ōpae'ula (shrimp) over here.
7. The shrimp were in the holes in the mud. We also ate all kinds of crabs.
8. Nowadays, we don't catch as many of the crabs. There are less crabs than before.
9. Some of the Filipino ladys were catching all the 'ōpae'ula.
10. There are lots of turtles. I think its time to let us take some of the turtles. There are so many turtles now.
11. We used to eat the reef fish. I don't know about people eating them anymore.
12. There used to be a lot of limu ele ele. I think the limu ele ele has been negatively impacted by the kiawe and the mangrove. They consume the freshwater.
13. Signage might help too.
14. Remove the pickleweed.
15. The water doesn't come up very often.
16. The 2011 titlewave washed a lot of silty mud onto the shoreline.
17. I have slight recollections of "pukas" in the pier when I was a child.
18. I would love to see all of the mangrove removed. However, the mango does help to trap the sediment and keep it off the reef. If we remove the mangrove we will need to reforest the mauka watershed.
19. The mangrove area near my house used to be sandy beach.
20. We need to consider the mauka-to-makai inter-relationships.
21. There can be a cross-current.
22. At Kawela, the hinahina plant would be nice to hold the sand together for dune restoration. The pohuehue, 'ilima, 'Ākulikuli, naio sandalwood, and beach heliotrope would also be good.
23. The milo tree and hau tree are polynesian introduced.
24. If you are going to put native plants back, think about how we are going to use the plants. How are we going to maintain them.

25. If you can go native, go native.

Interviewee affiliation: Kalama'ula shoreline lessee (multi-generational)

[History of connection to this lot, Lot 9, Kalama'ula area] 1964 – Gomes – cleared the lot. [The area has] filled in [over the years] – there's a fishpond, freshwater springs.

My family is 5th generation Kalama'ula. My grandfather cleared out kiawe and mangrove. Auntie Hattie (her mother) lives here. [In back, between her lot and the fishpond] – there was a shed, Heli's dad turned it into a studio, then a small house. Cousin Kalani is there now – our moms are sisters. Has had the lease for a couple of years.

The rock wall (along the shoreline) has been there a long time. Shoreline hasn't changed much [over the years]. [In our yard,] had coconut trees – Akulikuli – Ocean is coming in - saltwater weeds growing. Want to put naupaka instead. Roots of tree –

Would you like to share of the area's history, mo'olelo or place names?

The original homestead was known as the colony. The original paved road was here. There are lots of freshwater springs. There used to be a small business district with a general store, autobody, etc.. The businesses were closed because they wanted to create lots. The businesses moved to Kaunakakai in the 1930s.

[Along Kalama'ula shoreline] was a beautiful sandy beach – sand was like at the bottom of the springs, until they built the pier [made the pier solid]. The soil is getting softer and softer. We are fifth generation homesteaders. Knows the history of the Kalaniana'ole Colony. 1860 – coconut grove was planted. We've lost 30-50 feet of shoreline. Kalama'ula is a wahi pana – goes up to Kala'e. [She is related to] Kapua [Lauifi – she's a] Kalama – [we have the same] great-great-grandfather.

Lots below the highway – [that area was originally a new settlement area prior to passage of the HHCA].

Kakaio – first paved road on island – Hoawa Road. There was a second business district [to the west]. Found fresh water at Olu'olu. Five spring pools. There was a store, other businesses.

[Kaunakakai/Malama Park area] – salt paddies, Kalaeakamanu Church [was relocated to Church Row, renamed]. [When HHCA was passed] the entire community was removed to Kaunakahakai [original name of Kaunakakai].

[When flooding happened] people [lessees below highway] were relocated to Upper Kalama'ula. This was in 1924-1925, 1930's.

We used the shoreline for everything. Crabbed. Used 'opae net – caught little clear shrimp. Shoreline is our icebox. 'Opae ula – red ones, in the ponds. Baby pua – mullet. Kahohu, alaheke.

As children we would play at the mouth of the spring.

[In Kapuāiwa Grove, there were] Military barracks in WWII, bomb shelter. In front of her lot, that was the shoreline. This is the third home on the lot. We never thought about shoreline erosion. We have plenty [of fish, sea life].

Based on your knowledge, what are the primary activities occurring along the shoreline? How many people? What time of day? Where are the users from?

The shoreline is still used as an ice box. There are still plenty of species for collection. There is a lot of misuse of this area. A lot of boats with trailers launch from my yard.

[By her house] It's not a legal boat ramp. Her Filipino great-uncle (Aunty Kauila's husband) made it. There is misuse of this area. There are 22 cars with boat trailers here on long weekends. She's been cleaning up the shoreline, finding syringes, condoms, underwear. Talking to Lynne DeCoite. It got fenced, signs posted. Since the Grove got cleaned up, now more people want to come in there.

What changes have you observed along the entire coastline fronting the homestead area you reside in?
There used to be a rock wall along the shoreline fronting my property. There was a sandy beach in front of the house that extended to the boats. Roughly thirty feet of shoreline has been lost to erosion.

The highwater goes up the boat ramp and the road, but it doesn't encroach onto the lawn.

Kuahulu – Aunty Rose [Paleka] was adopted. We wouldn't walk inside the Grove. Now – dead trees. There was lots of limu 'ele'ele where the spring comes out. Played out there [in the ocean offshore]. Au'au [bathing]. After the grove ____.

[When they were] Fixing the water main [on other side of highway – it was a [fresh water] vein – lost a water pump [in there]. Found an o'o in one of the pools.

Kiowea [Park area] – big pond – bottomless pond. There were hala trees and kukui trees before the park [was created]. [The springs have a] mo'o wahine – a mermaid – Maka'u – protects the water, the punawai. Kiowea -- Where the mo'o comes up and gasps for air. Mo'olelo. 'Ualapu'e is the other hole she would come up in.

In your opinion, what are the three most important challenges or threats to the Kalama'ula shoreline at this time?

- a. Weather
- b. King tides
- c. Humans

Are there any specific actions (improvements and/or management activities) that you would like to see taken to prevent or mitigate shoreline erosion?

- a. I would like anything that can help.
- b. Where possible, use natural structures rather than hard structures.

It would be good to have naupaka used as mitigation along the shoreline. It would be great to have a demonstration project from the coconut grove to Kiowea Park as a naupaka restoration project. I would replace the kiawe with native plants such as milo and the kamani tree.

[Along her shoreline] Need to plant naupaka. Had to move her sink inland in September. Maunaloa, hinahina. Sand just disappears – got washed away. [What could help her stem the erosion?] Wants to bring in gravel to protect the milo tree. Forming a Coconut Grove Task Force with community. Do education.

Ocampo – used to take care of coconut grove – John Jr.'s grandpa. Lived by the highway. Monique's father [lady who works for Helen Wai].

Karen Holt – her school [above Church Row] – they do community work. Halau Lokahi.

Land used to go out to white boat.

Poaha family reunion was two weeks ago – had a farewell [for Aunty Kauila Reyes].

There are two dialects of 'olelo. Pelehiana.

Weather, King Tides, humans [causing changes].

Pipipi, a'ama crabs. Other people/organizations.

Are there other people/organizations you think we should reach out to?

- a. Chamber of Commerce
- b. Molokai Chamber of Commerce
- c. Hawaii Tourism Authority (signs, educational)

[Others who we should interview] Earline Johnston, Auntie Leilani.

Kanohokolea – where the migrating birds sit. In Makakupa'ia. Moe kapu 'oe. Kolea – Kapa'akea is where they migrated to.

Helen – can kick the red fish with your feet. Kalama'ula – the red fish.

Limu 'ele'ele grows between the grove and the park. It was there before the mangrove came. Mangrove is suffocating the spring.

[Good shoreline plants/trees she uses] Kilo, Kamani – uses seeds and flowers.

For the fire hydrant [that used to be closer to her lot, in Kapuaiwa Place] – moved it more mauka.

Need prevention, education, signs. Would like to put up ahupua'a signs.

Auntie Louella Albino [knows about] Kihawahine, meaning of name of Kiowea.

Kalama'ula Anniversary Celebration – they went by the lot numbers – should have gone by the date the lease was first signed. Leases are expiring soon. Kahinu, Maliu. Rosie Kuahulu Paleka.

DHHL made her mother and her church [LDS] convert their cesspools into septic systems [IWS]

The ficus/banyan trees at Kapuaiwa [Kiowea Park?] are bad.

Malama Park: Chevron, Arleone. Canoe clubs should remain. Restore the wetland. Want to do events there – have a movie night – Moana Nui Akea film. John Borden – State Parks. State Highway. Kawika Gonsalves, 6th grade Kaunakakai Elem. Virtual Museum. School project on Malama Park. There were the Ranch offices, a store, and the ballpark [at Malama Park]. There are lots of info, old pictures, facts.

Salt encrusted soils. [Different conditions there] before the wharf road became solid.

Other Comments:

1. Kaunakakai was known for its salt ponds.
2. After the pier was constructed, the whole ecosystem changed.
3. The royal grove had a military barracks and a bomb shelter. In those days it wasn't submerged.
4. We need to educate the public about the sacredness and the safety of the coconut grove.
5. The freshwater springs were designated for specific types of uses in the Hawaiian days. The native hawaiian people didn't play in the springs outside of the prescribed rules.
6. There were hala trees and kukui nut trees.

7. The kiowea bird would come out. She would grasp for air on her way around the island.
8. Back in the day, Mr. O'campos would care for the springs and the coconut grove.
9. Kalama'ula = red fish
10. The mangrove suffocated the springs and killed the limu 'ele'ele.

Interviewer: Nancy McPherson

Interviewee affiliation: Kalama'ula lessee (multi-generational); limu gatherer (Pe'elua 'Ohana)

'Ohana relationship to this place: outhouse, outdoor shower, born and raised on that homestead – she's the third lessee. Grandma was the first lessee – she moved to Ho'olehua. Mary K. Poaha.

Grandfather Heli Pe'elua – lived on the beach lot – where we grew up, with her grandparents. Went crabbing, lay net before for the small fish – pua – small mullet. Her 'ohana only took what they could eat. Mother gathered limu – she was the limu picker. One time, the barge got stuck on the reef – fertilizer went in the ocean – this was in the '50's or '60's – there was an explosion of limu 'ele'ele on the reef. Mom was in Kamiloloa. Went with a big pakini – her mom and Auntie May – filled the pakini with limu in a half hour, but was all "rubbish" limu. We used to have the pineapple barge come in, but this time it was fertilizer, broke loose, and affected Kalama'ula from the wharf all the way down to Pala'au.

She knew where the freshwater was coming out – all the way from Kimball's place (now Penny's) down.

Used to swim in the pond from Kou Bush [fishpond on west end of grove] – Saturdays we all went to swim. Before, there was rationing of [fresh] water. Had a flume – used to go up and fix the flume. Our kupuna would tell us stories about all the sweet potato, vegetables being grown to feed the people of Kalama'ula. Brought the water all the way down. When there was rationing, we had to fill barrels with water, had to conserve – bathed with only a little water. Had droughts. Land was so full of food, up behind – all farms, where the flume was, because had water. Gathered big rocks for the flume. Had a hard life, but appreciated that life – had to work for our food, had to work for everything. That's why all the kupuna are so smart. Kids are now so lazy – don't want to work, even to rake the yard. There were lots of fruit trees in Kalama'ula – we fed ourselves.

People used the ocean, but didn't take plenty, also would share with the neighbors. If a family didn't fish, those who did would give them crab, fish.

Something is wiping out all the limu – not sure why it's happening. Maybe it's the pollution coming from other places. Where we used to pick up all the limu, in front of the spring, used to be plenty. Now – hardly any. Mrs. Ocampo is still going down there, maybe she's getting 'opae. Used to go Pālā'au every weekend. House in the water – walk at low tide. No more rock in the water, no springs – no limu. Pālā'au has crabs, lotta fish. Had mangrove, but still had limu 'ele'ele. My cousin is from East End, Hala Kalilikane – used to come over and pick a lot of limu at my dad's place. But most of the time it came from Bernadette Puihi's place in Kamiloloa. Used to go there all the time. Mom's house – 'ele'ele and manaua – by the rocks, by the hotel – between Hotel Molokai and & her Mom's place, but there was more in Kalama'ula. Respect the boundaries – your 'ohana's, respect, only go in front of their place. Used to get chop chop in Kawela. People aren't gathering as much anymore. Her daughters don't pick – Berna used to pick manaua. Now, most people go to the store and buy fresh ogo. Erma was picking for a while. Family brings crab, fish to her (Auntie Kanani), but younger generation doesn't want to go in the water. Auntie Marie Place knew limu – had a pond, had plenty limu. Knowledge is becoming lost -- not being passed on. Got crab, 'opae, but she didn't touch the limu until her thirties. Mom was still doing it, but hardly anything now. Something is killing it.

She's really upset [about the trespassing problems in Kapuāiwa Grove] – the way we were brought up, we never went in the Grove at all. Had two sets of grandparents that lived on either end of the Grove, but never did walk through the Grove. Knew we weren't supposed to – when we asked why, the kupuna

Interviewer: Nancy McPherson

just said "kulikuli!" [be quiet!] – we never did know the reason why, but knew we had to respect the Grove. Knew caretakers of the grove [Liette Corpus' grandparents] – they lived in the Grove, there was a house in the Grove by the spring – to the left of the spring. Pe'elua's are related to them.

When she was a child, all the kids in the neighborhood – Uncle Iopa Bush – all the kids would walk down the road in Kalama'ula and stop at all the other houses: Iopa, Ne, Rodrigues, Pe'elua, Naki, and everyone would walk into town to go to the movies. There was an open-air theater in front of the Teacher's Cottages. The road went to the Armory, ended there. Parents came and picked us up at Kukui Theater. The older boys took care of us [little kids].

Sunday – everyone went church, then there was a matinee on Sunday. Was pretty safe to walk down the highway, except for the pineapple trucks. People had pigs and chickens in their yards. There was lots of food – everyone had a home garden in the yard.

Ocean is coming in more – she's noticed coconut trees falling into the ocean, bomb shelter didn't used to be in the ocean. Born and raised over here, all raised on the land – her children and grandchildren all raised on the same homestead.

[Gene Ross] People [in Kalama'ula] don't have horses any more. In the old days, most people either walked or rode a horse. Gene's grandmother's house (Maioho) had the first flush toilet in Kalama'ula. Families were all close, all knew each other. Grandparents used to get fish and poi from Heli Pe'elua – delivered poi once a week.

[Aunty Kanani] Her family has land in Halawa, lo'i – Aunty Priscilla, lived across the bridge. Nobody told them that they had lo'i – had kuleana – granddaughter researched it – Pe'elua had plenty land – in Kawela, etc. Had land in Halawa. Hattie Kuahulu – grandmother. Kuahulu – great-grandmother. Family came to Molokai on the freight barge – Rose Allen and Uncle Dan Pua – he was the mailman in Halawa – on the weekends, they would send her Aunty to Halawa with the mailman. He would take people [in Halawa] to Kaunakakai to go shopping. Delivered mail once a week to Halawa. Telling her about their taro patch in Halawa. Rose Allen went to go clean the area. Uncle Heli used to pound poi – had a board, pounded poi from Halawa lo'i. Went pick opihi. Alana Nouri – lomilomi – daughter lives there [in Halawa]. More people planting kalo now.

[Gene Ross] Kalama'ula mauka – old-growth kiawe forest burned in the early 1970's – after that, no more forest. Homesteaders had cattle – his grandparents had cattle. Rubbish pile by Ohi'apilo – that was where the corral was. They would drive the cattle down the mountain to the corral.

[Aunty Kanani] Other side of the wharf was limu wawae'iole. This side was mainly limu 'ele'ele. Mo'omomi has the best limu kohu. Needs the rocks. No more rocks for limu [in Kalama'ula]. Place by McCorriston [Kawela side] has the rocks, doesn't even have springs, but had fresh water. Pond they used to swim in was a large pond – landlocked pond – everyone used to go through Aunty Ala Atchinson's place. Kalani Johnston. Gomes before – the shack was for Filipino people before. Was all fishpond before. Kenneth Om (?) was the big boss for Del Monte – asked my grandpa to use the road [Pond Place?] – built a net shed. Respected the pond. Wasn't a homestead – was a fishpond. Her sister was hurt when DHHM made the fishpond into a homestead lease. Aunty Kauila [Reyes, recently deceased] raised her, knew about limu but didn't go in the water. She was a hula dancer – they didn't go in to pick limu.

Interviewer: Nancy McPherson

Interviewee affiliation: Pe'elua 'Ohana; grandparents lived in Kapuāiwa Grove in Caretaker's House

'Ohana relationship to this place: Grandmother was one of the first lessees in Kalama'ula – Hannah Ku – Lot 42. Husband was John Burke. Grandmother ended up as a caretaker in the grove. Aunty Kanani contacted her for [Kalama'ula's] 90th anniversary – to represent the Burke family. She didn't know her grandmother had a [homestead] lot, because she was living in the Grove. The caretaker's house was out on the water on stilts by the falling down coconut tree, west of the big spring where people swim. Her grandmother had a story that the falling down coconut tree started leaning when her grandfather came home late one night, perhaps after drinking, hit the tree with the car, and knocked it over. That was the house her mother was born in – Ilona Sproat. Buzzy Sproat was her father. Stayed summers in Honokanaiki Valley, past Pololū. Her grandfather was the Kohala Ditch trail master. 'Awini – there was a freshwater pond with 'opae in it, formed from a waterfall.

Aunty Kanani is related to her through the Pe'elua's – Grandpa Burke. Didn't spend much time on Kalama'ula side. Her grandma said the grove was sacred, so she didn't go into the Grove. Aunty Kauila [Reyes] – when they went to go pick up the mom, everyone would walk along the shoreline. It was a sandy, nice shoreline, shallow. Never walked through the Grove because it was forbidden.

Her grandparents left Molokai to find work – he was a fisherman by trade, but became an underwater engineer – underwater surveying for reef runway, Keehi Lagoon. Grandmother became head seamstress at Schofield Barracks. Moved to Gulick Ave. Her grandfather died on the waiting list. He was raised in Pelekunu, came out to go to school. Her grandparents were married in the little church in Halawa – Kahu laea married them.

APPENDIX B: FIVE MOLOKAI LAND DIVISIONS

FIVE MOLOKAI LAND DIVISIONS

A Report for Planning Consultants, Hawai‘i LLC

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<u>Section/Subsection</u>	<u>Page</u>
Molokai Nui a Hina	4
Kalama‘ula	5
Ka Inoa (The Name)	5
Nā Wahi Pana (The Celebrated Places)	6
Ka ‘Aumakua (Ancestral Deity)	10
Nā Makani (The Winds)	10
Nā Ua (The Rains)	10
Nā Wai (The Waters)	10
Nā Mele (The Songs and Chants)	11
Nā Mo‘olelo (The Stories, Histories)	11
Traditional Ecological Knowledge	13
Penny Martin, Kalama‘ula Shoreline Lessee (Multi-Generational)	13
Henry Paleka, Kalama‘ula Shoreline Lessee (Multi-Generational)	13
Kanani Negrillo, Kalama‘ula Lessee (Multi-Generational)	14
Kaunakakai	15
Ka Inoa (The Name)	15
Nā Wahi Pana (The Celebrated Places)	15
Ka ‘Aumakua (The Ancestral Deity)	16
Nā Makani (The Winds)	16
Nā Ua (The Rains)	16
Nā Wai (The Waters)	16
Nā Mele (The Songs, Chants)	16
Nā Mo‘olelo (The Stories, Histories)	16
Traditional Ecological Knowledge	17
Kapa‘akea	17
Ka Inoa (The Name)	17
Nā Wahi Pana (The Celebrated Places)	18
Ka ‘Aumakua (The Ancestral Deity)	18
Nā Makani (The Winds)	18
Nā Ua (The Rains)	18
Nā Wai (The Waters)	18
Nā Mele (The Songs, Chants)	18
Nā Mo‘olelo (The Stories, Histories)	19
Traditional Ecological Knowledge	19
Kamiloloa	19
Ka Inoa (The Name)	19
Nā Wahi Pana (The Celebrated Places)	19
Ka ‘Aumakua (Ancestral Deity)	20
Nā Makani (The Winds)	20
Nā Ua (The Rains)	20
Nā Wai (The Waters)	20
Nā Mele (The Songs, Chants)	20

Nā Mo‘olelo (The Stories, Histories)	21
Traditional Ecological Knowledge	21
Gayla Mowat, Kamiloloa Shoreline Lessee (Multi-Generational)	21
Makakupa‘ia	22
Ka Inoa (The Name)	22
Nā Wahi Pana (The Celebrated Places)	22
Ka ‘Aumakua	23
Nā Makani (The Winds)	23
Nā Ua (The Rains)	23
Nā Wai (The Waters)	23
Nā Mele (The Songs, Chants)	23
Nā Mo‘olelo (The Stories, Histories)	23
Traditional Ecological Knowledge	23
Noelani Lee, ED, Ka Honua Momona International Licensee Ali‘i Fishpond	23
Conclusion	24

FIVE MOLOKAI LAND DIVISIONS



There are many ahupua‘a incorporating watersheds or sub-basins within Molokai.¹ Of these, five have a direct influence on the DHHL properties within the SEMP study area including Kalama‘ula, Kaunakakai, Kapa‘akea, Kamiloloa, and Makakupa‘ia. The relationship of these ahupua‘a to the Kona District and the rest of the

island is briefly explored

Map: DHHL Molokai Community Plan 2010

through cultural lenses including ka inoa (name), nā wahi pana (celebrated places), nā ‘aumākua (ancestral deities), nā makani (winds), nā ua (rains), nā wai (waters), nā mele (songs), and nā mo‘olelo (stories/histories) and is not intended to provide comprehensive insights. In addition, traditional ecological knowledge in the management and stewardship of the coastal resources of these specific ahupua‘a in South Molokai is shared.

Molokai Nui a Hina

Origin accounts for the moku of Molokai include Paku‘i, a historian during the time of Kamehameha I, who reveals Molokai to be the child of the Goddess Hina and the Sky Father Wākea:

Loaa Hina he wahine moe na Wakea
Hapai Hina ia Molokai, he moku
O Molokai a Hina he keiki moku

Hina was found as a wife for Wakea
Hina conceived Molokai, an island;
Hina’s Molokai is an island child.²

Historian Kahako‘ikamoana recounts a different parentage for Molokai:

Na Kuluwaiea o Haumea he kane,
Na Hinanuiakalana he wahine
Loaa Molokai, ke akua, he kahuna,
He pualena no Nuumea.

Kuluwaiea of Haumea as the husband,
Of Hinanuiakalana as the wife
Was born Molokai, a god, a priest,
The first morning light from Nuumea.³

A third account involves the forming of the Hawaiian islands through the deification of coral pieces by the priest Lauliala‘amakua after coral was caught by the fisherman Kapuhe‘euanui.⁴

Traditional poetic names of the island include *Molokai ‘āina momona* (fat, fertile lands of Molokai), which refers to verdant lands that produce an abundance of food from lo‘i kalo (taro patches), loko i‘a (fishponds), kai (near-shore) and moana (deep-sea) fishing grounds. Another name, *Molokai nō ka heke* (Molokai is greatest, foremost), refers to the celebrated athletes of the

Makahiki competitions held at Na‘iwa and Kainalu. One of the most famous is *Molokai pule o‘o* (Molokai of powerful prayer), a reference to the powerful kahuna trained at Pu‘u Anoano and ‘Ili‘ili‘opae Heiau, in particular the ones who practiced ‘anā‘anā (black magic, evil sorcery). The other well-known name is *Molokai nui a Hina* (Great Molokai, Child of Hina).⁵

Historically, Molokai was subdivided into subareas to enhance the stewardship of the island’s resources. The initial land divisions were the Ko‘olau (windward) and Kona (leeward) *moku*, or districts:

Prior to 1859, the island was divided into two districts, called Ko‘olau and Kona. The Ko‘olau district was composed of the *ahupua‘a* located on the northern side of the island: Halawa, Wailau, Pelekunu, Waikolu, Kalawao, Makanalua and Kalaupapa. The rest of the island was the Kona district. In 1859 the Kona and Ko‘olau districts were dropped, and the island was made into just one district, called Molokai district. In 1909, the present division into Molokai district and Kalawao district was made.⁶

The poetic name Molokai Nui a Hina and its legendary origin establishes kuleana (duty, responsibility, privilege) to care for the island’s resources:

... the island of Moloka‘i, like a child, is small and fragile – unlike a large continent. The resources of an island are finite, and these finite resources need to be nurtured by the island’s “family” if the people are to grow strong, healthy and prosper. Many of the families of Moloka‘i trace their roots on the island back to antiquity, making the island an integral part of their ancestral family. Moloka‘i’s modern-day stewards have a special responsibility to care for the island as they would care for a member of their own family – a responsibility bequeathed to them by Hina, birth mother of this island.⁷

Kalama‘ula



Aerial View of Kalama‘ula Hawaiian Homestead Area. Photo: Courtesy of Ted Kanemitsu.

Ka Inoa (The Name). Kalama‘ula translates to mean, “the red torch or red lama tree.”⁸ *Hawaii Place Names* references the Hawaiian Home Commission Act of 1920 and provides:

Provisions were made for a commission to administer the lands and in 1925 Kalama‘ula became the first Hawaiian homestead subdivision in the islands. Among the first residents there were Marcelus and Emma Kala Dudoit. Fronting their home was a large stone that had a natural etching of a sun and five rays, *and it was from this stone called Kalama‘ula that the area took its name*. Mrs. Dudoit wrote a song entitled “Kalama‘ula” in honor of her home.⁹ (emphasis added)

Cultural Historian Harriet Ahiona Ayau Ne (pictured below, second from the left), was raised as a child in Kalama‘ula when her father Rev. Edward Haleaniani Ayau (second from the right) moved their family to lot 38, one of the original Hawaiian homestead leases at the Kalaniana‘ole Settlement. As an adult she moved back to Kalama‘ula when she married Jacob Iopa Ne. She translated the name to mean, “the scarlet rays of the sun.”¹⁰



‘Ohana of Edward Ayau and Olivia Townsend. Photo: Courtesy of Edward Halealoha Ayau.

Nā Wahi Pana (The Celebrated Places).

Catherine Summers identifies the special places in Kalama‘ula including ponds, a fishpond, heiau, a pool, kahua maika (stone rolling fields), petroglyphs, a spring, and house sites.

The area was also known for its food cultivation on land and the abundance of fish and other ocean foods gathered in the near shoreline area. The ponds and fishpond include:

- Kahokai or Kakokahi Pond... Kahokai, “mess up the work,” was 20 acres in area in 1901 (Cobb, 102: 429) Monsarrat in 1886 gave the name Kakokahi to the pond, and it appears this was on the Kualapuu map (U.S.G.S., 1922b) where it is shown as filled with mud. The pond is now filled.¹¹
- ‘Ohaipilo or ‘Ohi‘apilo Pond... ‘Ohaipilo, “smelly ‘ohai tree,” was 39 acres in area in 1901 (Cobb: 1902:429). On the Kualapuu map (U.S.G.S., 1922b) it is called ‘Ohi‘apilo, and is shown as filled with mud. The pond is now filled. Stokes gave the name of the pond as ‘Ohaipilo. When he saw it in 1909, two thirds of the 10-ft-wide wall was still intact...¹²
- ‘Umipa‘a Pond... Monsarrat reported ‘Umipa‘a as being a “dry fishpond mauka of Ohaipilo [Site 118]”...¹³

- Fishpond... Cobb listed a pond in Kalamaula with an area of 2 acres (1902:429). This is probably the pond that Stokes called Kamaloko; he reported the wall as being 5.5 ft high..¹⁴
- Kamaloko Pond... This pond was listed by Cobb as “nameless small pond, inland,” and described as having an area of 0.9 acre in 1901 (1902:429). According to the account of a native informant, prior to the mid-1930’s, there was practically no mangrove in the vicinity of the pond and the sea could be seen from the pond. Formerly there were all kinds of fish here. There was *awa*, *aholehole*, ‘*ama*’*ama* and small crabs, the ‘*alamihiki*... The water was deep and bubbled up from the earth...The *o*’*opu* of this place were large. My mother told me that, formerly, when the tide became low and the water in the pond lessened, the fish then, began to leap up and fall back. They leapt up and when coming down into the silt, the head would go down into the silt and remain fast. The fish would leap and become embedded in the silt. The fish was kapu as it belonged to the *konohiki*. That is the tale of this little pond. The name of this pond is Kamaloko..¹⁵



Photo: Ray J Baker, Bishop Museum.

The entire shoreline was called Hīlīa, “an off-shore area extending eastward from Pakanaka Pond through Kalama‘ula, it is now covered with mud, but formerly the shores had sandy beaches. Fish were very numerous here especially small mullet which often came in great schools near the shore. At times they were so numerous that ‘This little fish darkened all of the beaches’..¹⁶

The ‘ōlelo no‘eau for this shoreline area is

Ka i‘a kā wawae o Hīlīa

The fish of Hīlīa, kicked by the feet..¹⁷

Subsistence use of inland cultivation areas and marine resources into the 19th century is documented by historical information for Kalama‘ula, including rental receipts from 1858 to 1861 for taro patches, coconut trees, a fishpond and a squid fishery..¹⁸ The Ah Lee Pond was still in operation in the 1920’s, and subsistence use of the nearshore fishery by homesteaders continues to this day..¹⁹

In addition, there was extensive cultivation of ‘uala (sweet potato) in the kula (upland) areas:

It is safe to assume that potatoes were grown all along this coastal plain fringed with fishponds from Waialua to Punakou. On the slopes of Kakalahale and Luahine hills, between Kaunakakai and Kalamaula, there were potato plantations..²⁰

...In these land divisions (*kalana*) of Kalama‘ula and Pala‘au in early days there were sweet potatoes on all the rocky (‘*a*’*a*) high lands and from these places came the sweet potato eaters who knew potato cultivation... These are some of the potatoes planted by our ancestors at Kalama‘ula and Pala‘au, the hualani, hokeo, kala, hekili, lahaina, kalaponi, poni, huamoa, hepu, and ‘olapa... Among the sweet potatoes mentioned above there are two favorites of the sweet potato consumers of Kalama‘ula

and Pala'au, the kala and kalaponi. It is said that these taste best a day after they are cooked...²¹

The heiau (temples) in Kalama'ula include:

- Opae'ula Heiau... Located at the foot of the hills, this site is about 700 ft from the sea. From Kakalahale Δ it bears 61° 49' 20"; 16,820 ft. The heiau was destroyed in 1899 to build the pier at Kaunakakai. In its original condition, it was "...probably a combination of platform and enclosure in line...Indications are that its length was at least 115 feet and width 44 feet. The platform on the western half was 65 feet long"....²²
- Pu'upapai Heiau... Located near the crest of the plateau, this heiau is about 1500 ft from the sea. From Kakalahale Δ it bears 51° 28'; 12,775 ft. Originally, it was probably three enclosures. It is said, "...to have been dedicated to Kane and Kanaloa, that it was a platform, for human sacrifice, and that the drums were not heard at night" (Stokes, n.d.a:1). In another account, Stokes wrote further about this heiau. Puupapai was a very important heiau of the sacrificial class. It was torn down about 15 years ago [1899] and the stones used to build a pier about 300 yards long, 20 feet wide and 19 feet high. The natives say that only the stones of this heiau were used, and that the subsequent failure of the company [American Sugar Co.] carrying out the operations was due to the sacrilege of tearing down the sacred structure...²³
- Heiau... Cartwright... located a heiau on the northern bluff of a gulch, about 1.3 miles NE of Pu'u Luahine.²⁴
- Ka'anaopea Heiau... This heiau was "Reported by natives but not seen"... Ka'anaopea was the name of "the big gulch on the *kula* of Kalae."²⁵

The pool is named 'Olo'olo:

This pool is located inland of the coconut grove. An article in a Hawaiian newspaper stated: In the days prior to annexation, this pool was well cared for and used for bathing by the natives who lived on the beach. It was famous as a favorite bathing pool of the chiefs down to Kamehameha V... In the year 1888 there was a heavy downpour of rain which made a flood lasting for days and the water from the pool covered the whole land of Kaunakakai. This great pool of half an acre was fed by five springs. When the water subsided the pool was filled with mud. As it rained each time, the pool was filled up some more until in 1898, ten years later, there wasn't a trace of it left. From that time to this, kiawe trees grew up erasing all traces of the pool (*Ka Nupepa Ku'oko'a*, 1922b)."

When water was needed for the homesteaders at Kalama'ula, the oldtimers looked for and found 'Olo'olo; it was covered with 4 ft of silt. For a while, until the salt content became too high, the water from this spring was used by the homesteaders (see p.25).

A legend told about 'Olo'olo is recounted in the same Hawaiian newspaper. It is said that since that long ago time when the gods communed with men, a beautiful woman was often seen beside the pool combing her tresses. Perhaps no one had ever conversed with her but she was often seen on a mound of earth just mauka of the pool. Her breasts hung down and that may have been why the pool was named 'Olo'olo, (hanging down) (*Ka Nupepa Ku'oko'a*, 1922b).²⁶

The kahua maika include:

- Kahua Maika... This site is a flat area between Kauluwai and Mauna Hui (Mauna Hui is also known as Kawaeku). According to Cooke: “The trail going mauka from Kauluwai through Kaheka gulch to Mauna Hui, ascends a small gulch to a plateau. At the right of this flat, about a mile from Kaheka in a small gulch, is a hua maika course (bowling alley). Makai (towards the sea) of this hua maika there is a spring named Waiauni [Waianui?]” (1949:102).²⁷
- Kahua Maika Near Pu‘u Luahine... The course is located approximately 2000 ft due N of the bench mark on Pu‘u Luahine, and just N of the road (in 1963). Northwood studied the area quite extensively in 1933 and wrote in detail of it. As the road reaches the top of a slight rise, the course can be seen as a shallow trench, 35 ft. wide, starting at the right side of the road and slightly diverging from it, in an E.S.E direction and quite straight. There are three large half-buried boulders at the beginning of the course. For 350 yards the course is well marked, with a very slight down grade, beyond the grade increases more rapidly, with only traces of a slight depression, curving slightly to left [N], for another 150 yards. It is built across a slight slope, with considerable excavation for the first 200 yards and less after that. As there is no perceptible pile of earth near the course it was probably carried out in baskets and scattered evenly in the neighborhood. For the first 200 yards traces of a shoulder on each side, 7 feet from the bottom, can be seen. This is so regular that it can hardly be due to erosion, it may have been a later excavation in order to reduce the grade slightly. The depth of the course below the surrounding country (3 feet at the bottom) may have been devised in order to escape the effect of the wind in such an open country, the cup-like sides would also tend to direct an ulu which had been thrown a little off the line back to the bottom of the trench. I found three broken ulus, none fitting, within a distance of 5 yds. from the course at 350 yds., and a whole one 5 yds. to the right of the course at 100 yards. A short distance away towards Puu Luahine can be seen two lines of raised earth, meeting at right angles, possibly a house site (Northwood, n.d.). This is believed to be the only remaining *kahua maika* in the islands.²⁸

The petroglyphs are located at Waihi Gulch:

Cooke found these petroglyphs in 1916: “...after the big Kona storm, Sophie and I walked on foot up the Waihi Gulch at Kalamaula, mauka of the forest fence. On the way up on the left side of the gulch, the high water had cleared away the foliage and uncovered a pali. We discovered four or five petroglyphs about 6 feet above this stream bed” (1949:101).²⁹

A spring, whose name is unknown,

... is located near the boundary of Kalama‘ula and Kaunakakai. The Hawaiian Homes Commission developed this spring for irrigation purposes. Cooke, who visited the spring, wrote the following about it, “...This spring originally flowed into the ocean, but when it was relocated it was covered over with six feet of silt. The spring bubbled up through an eight inch vent. On clearing the silt away, one could see opae (fresh water shrimp) in the spring. John Puaa, who located the spring for me, told me that sugar cane, bananas and

taro were grown on its banks as it flowed towards the ocean. He related also a tale of women catching opae with nets in the mountains. One of the women left her net to dry while she went to gather plants. A fishnet washed down the valley and on her return the net was gone. This net found later in the spring at Kalamaula, which was at least six miles away from the mountains (Cooke: 1949:110).³⁰

There are also house sites in the area:

Mauka of Pu‘u Luahine are the remains of house sites on the ridges and in the small valleys. On one of these house sites, the framework of a grass house was still standing in 1908. As Cooke described the area: “In this district several stone walls are still standing which enclosed fairly large paddocks. Charles Buchanan told me that oxen were kept within these stone walls near the dwelling of the owner, Aa, between his trips from forest to shore” (1949:123).³¹

Ka ‘Aumakua (Ancestral Deity). Harriet Ne reports the ‘aumakua of this ahupua‘a is kukunaokalā (rays of the sun) based on her recollection of the image on a banner used during the last traditional makahiki ceremony at Na‘iwa in 1918, in which she was in attendance.³²

Nā Makani (The Winds). Two known wind names for Kalama‘ula are Alahou and ‘Ukiukiu.³³

Nā Ua (The Rains). No rain names were identified. Miki‘ala Pescaia, a cultural historian in her own right, aptly notes, “Our kūpuna knew all the kama‘āina by name. But none of them chose rain as a kinolau and hung out in Kalama‘ula...the ua ...visited once in a while... Wai preferred to travel and noho in Kalama‘ula in other forms – the springs...”³⁴

Nā Wai (The Waters). Kalama‘ula is one of three watershed areas in the Pālā‘au region comprising 5,838 acres with no perennial streams.³⁵ Known water names include ‘Olo‘olo (pool/spring), Waianui (spring) and Makehe Stream.³⁶



Kapuāiwa Grove as of 2018. Photo: Courtesy of DHHL Molokai District Office by Mickey Pau‘ole.

At Kiowea Park and Kapuāiwa Grove (pictured above and named for Lot Kapuāiwa, Kamehameha V, who is said to have ordered the planting of the coconut trees in the 1860s; his name means, ‘mysterious taboo’), the following springs are identified by their contemporary use, while their traditional names are unknown:

- “Spring for menstruating women”

- “Spring for kanaka mahiai (Farmers)”
- “Community bath spring”
- “Drinking water spring”
- “Kitchen sink spring”.³⁷

Nā Mele (The Songs and Chants)

Mele for this area includes *Kalama‘ula*, written and the music created by Emma Kala Dudoit. It was made famous by many singers including George Helm, himself a Kalama‘ula homesteader. This mele speaks of the original Hawaiian homestead of Marcelus and Emma Dudoit:

A he sure maoli no e a	Surely, it is so, the genuine
Me ke onaona, auwē he	Attractiveness and
Me ka nani, o Kalama‘ula	Splendor of Kalama‘ula
E kapaia nei ea	There in the bower
He u‘i mai hoi kau, auwē he	We arrive and behold the beauty and
Me ka nani, o Kalama‘ula	Splendor of Kalama‘ula
‘Āina ua kaulana	This land is famous
I ka ho‘opulapula, auwē he	A homestead land
Me ka nani, o Kalama‘ula	The splendor of Kalama‘ula
E ho‘i kāua ea	Let us return
E noho i ka ‘āina, auwē he	And reside in
Me ka nani, o Kalama‘ula	The splendor of Kalama‘ula
Ha‘ina ka puana ea	Tell the refrain
Ho‘i mai kāua, auwē he	Let us return to the
Me ka nani, o Kalama‘ula	Splendor of Kalama‘ula. ³⁸

In addition, the mele *‘Ula Kala‘eloa I Ka Lepo a Ka Makani* provides a glimpse into places on Molokai including the red dust that concentrates at Kalama‘ula:

‘Ula Kala‘eloa i ka lepo a ka makani	Red is Kalaeloa with dust by the wind,
Kai ho‘onu‘anu‘a ‘ia ‘āpua Kalama‘ula	The dust concentrates at Kalama‘ula as though it were a basket
‘Ike a ku‘u mana‘o ia‘u kula	At the sight of it I thought of my plain.
Hea mai Kaiolohia	Kaiolohia calls to me
‘Eu ho‘i māua i Kā‘ana ē.	To return to Kā‘ana.
Aloha ia‘u ke kula o Niniwai	In love am I with the plain of Niniwai,
O‘u hoa i Kala‘iakamanu ē	With my companions at Kala‘iakamanu (haunt of birds)
Manu a hoa laukona i ke ke‘e lau	Bird companions that shy among the leaves.
Au‘a ‘ia e ka moe i na ke loha lā he ‘ai	Love that is dreamt of is held back by
lili kā,	jealousy,
Aia ua ‘ike au.	This is known. ³⁹

Nā Mo‘olelo (The Stories, Histories). The famed historian Samuel Mānaiakalani Kamakau recounts historic events that took place at Kalama‘ula during the rise to power of Kamehameha I:

O‘ahu Chief Kapi‘ioho‘okalani was encamped at Kalama‘ula:

While he was at Kihei, Alapa‘i heard that the ruling chief of Oahu was making war upon Molokai... Alapa‘i's sympathy was aroused, for these were his own brothers and children [relatives], and he made ready to go to their help on Molokai. He sailed from Maui and landed at Puko‘o... The fighting was in progress at Kamalo‘o with Ka-pu-lei as the battlefield. There the forces of Hawaii, joined with those of Molokai, made a formidable array. The chief of Oahu, Ka-pi‘i-o-ho-o-ka-lani, was encamped at Kalama‘ula...⁴⁰

Kalola meets Kamehameha at Kalama‘ula and offers him Keōpūolani:

While Kamehameha was at Wailuku with his followers he heard of Ka-lola's being on Molokai with her daughters and granddaughter and he sent word by Kikane for her not to proceed to Oahu as he was coming to escort her to Hawaii. He sailed with a great company, among them Ke‘e-au-moku, Keawe-a-heulu, Ka-me‘e-ia-moku, and Kamanawa, the brothers of Ka-lola, and landed at Kaunakakai. They met Ka-lola at Kalama‘ula and, when Kamehameha saw how ill she was and of an incurable disease according to the kahuna's diagnosis, he asked, "Since you are so ill and perhaps about to die, will you permit me to take my royal daughter and my sisters to Hawaii to rule as chiefs?" (He referred to Ke-opu-o-lani and her mother and aunt, Ke-ku‘i-apo-iwa and Kalani-kau-io-kikilo). Ka-lola answered, "If I die, the girl and the sisters are yours."⁴¹

Kamehameha's war canoes cover the whole coast from Kawela to Kalama‘ula:

In February, 1795, Kamehameha's fleet of war canoes landed at Lahaina, covering the sands along the coast from Launiupoko to Mala. All that part of Lahaina given over to food patches and cane fields was at that time overrun by the men from Hawaii. At Molokai, again, the whole coast from Kawela to Kalama‘ula was covered by canoes.⁴²

Kalola dies at Kalama‘ula and Keōpūolani is taken by Kamehameha to Hawai‘i island:

Ke-opu-o-lani was nine or ten years old when the great battle was fought at ‘Iao in which Ka-lani-ku-pule and the Maui chiefs were routed by Kamehameha's forces. The fugitives fled ... until they were able to escape to Molokai, where they remained on account of the illness of Ka-lola [grandmother of Ke-opu-o-lani] instead of going on to join Ke-ku‘i-apo-iwa's brother on Oahu. They were at Kalama‘ula when the chief's [Kamehameha's] messenger came with the request that they remain on Molokai instead of sailing to Oahu. After the death of Ka-lola, Kamehameha took Ke-opu-o-lani to Hawaii...⁴³

Ka‘iana stayed at Kalama‘ula, before leaving Kamehameha to join Kalanikūpule:

...while Kamehameha and his chiefs were quartered at Kaunakakai on Molokai, in 1795, on their way to make war upon Ka-lani-ku-pule, Ka-lani-moku one night approached Kamehameha's sleeping house and found Ka-‘ahu-manu still awake ... "It is because I was afraid and could not sleep, so I came to see you." Ka-‘ahu-manu inquired the reason, he told her of Ka‘iana's visit on his return from Kalama‘ula and of his fear lest the chiefs think he had betrayed the secret council..."⁴⁴

In addition, this ‘ōlelo no‘eau (proverb) references Kalama‘ula in the provocative game of kilu,

Unu mai a ho‘onu‘anu‘a ke kilu o Kalama‘ula, ho‘ole‘ale‘a i ke kaha o Kaunalewa.
Bring all the kilu for amusement at Kalama‘ula to make merry on the field of Kaunalewa.

To come together for a gay time and bring whatever you have to add to the fun. There is a play on lewa, which refers to the swinging of the hips in hula.⁴⁵

A kilu (quoit) is used in a game where the player chanted as he tossed the kilu towards an object placed in front of one of the opposite sex and if he hit the goal he claimed a kiss...⁴⁶

Traditional Ecological Knowledge. With regard to the management and stewardship of coastal resources in Kalama‘ula, homesteaders were interviewed and shared their ‘ike (knowledge) and mana‘o (thoughts) as follows.

Penny Martin, Kalama‘ula Shoreline Lessee (Multi-Generational):

How the shoreline has changed over the years: Her mother could walk from this lot to the wharf [unimpeded]. All mangrove now. Native mullet – need freshwater seeps. Used to be way more fresh water. She has come to understand that kiawe trees and mangrove both use up lots of fresh water. She thinks there are less ‘ōpae (shrimp) because there is less fresh water. She thinks there are less ‘āholehole (Hawaiian flagtail) for the same reason. She recommends removing the mangrove (*Rhizophora mangle*, a shrub/small tree that grows in coastal saline or brackish water) and kiawe (*Prosopis pallida*) to counteract less fresh water reaching the shoreline. Cattle up mauka – deer – eating the vegetation. [Soil is] running off. She said we must consider how to control erosion before removing the mangrove, which was planted to control erosion. Mangrove helps control silt run-off but it takes/uses so much fresh water. She said the key to erosion control is managing mauka rain runoff and therefore proper management of the watershed... Momona, where I grew up. Farmers of land, sea or both. Live off of your ahupua‘a. Shoreline is who we are. South Shore Molokai is momona (fertile). What it would be like without mangrove? Need to revegetate with shoreline natives... New pukas [in the Grove] – sinkholes. Some springs have disappeared. Springs weren’t all kapu... There was plenty limu ‘ele‘ele – it’s being overharvested. Also, mangrove and kiawe could be taking up the fresh water. Test the water – [someone should measure] the amount of fresh water [coming through the area]. Would be a good project for the homesteaders. Need an assessment of the marine life – used to be nice walking along [the shoreline]. Nature of the shoreline – it goes up and down... Mangrove would catch the stuff from the land. Need to fix the mauka area [to stem erosion] before removing the mangrove... Revegetate with shoreline natives: ‘Aki‘aki [shoreline/dune grass] and naupaka. Better than mangrove... [Look to the wisdom in the] Kumulipo – can’t just fix down here, gotta also fix up there – makai to mauka. *Threats:* Mangrove, gorilla ogo, deer – erosion up mauka. She would like to start a kipuka of native plants up mauka.

Henry Paleka, Kalama‘ula Shoreline Lessee (Multi-Generational):

A volunteer caretaker for Kalaniana‘ole Hall next door. Noticed when there’s high tide with no wind, ocean doesn’t come up onto the land. The [Kaunakakai] Harbor – the pier – blocks the waves, but also blocks the sand... ‘Olo‘olo Spring is connected to the spring by the pavilion, and the springs in the grove. The springs have never stopped running all these years. The [makai] spring was always open to the ocean... In the old days, was lots of crab – kūhonu crab, Alaheke [Alamihi?] crab. They still get, but not like before. People are taking too much. Now you have to go a mile out [to sea] to get fish. People

use the shoreline for parties, family gatherings. Not as much limu ‘ele‘ele – grows in the sand. He thinks the gorilla ogo is smothering the limu ‘ele‘ele. Also, people are using the bullpen net – takes everything – a lay net. When the river runs yellow, the water turns yellow, the tako run away. Sand channels, black limu – ogo stays near shore. Shoreline used to be muddy, now it’s hard. Used to sink in up to your knees.

Kanani Negrillo, Kalama‘ula Lessee (Multi-Generational):

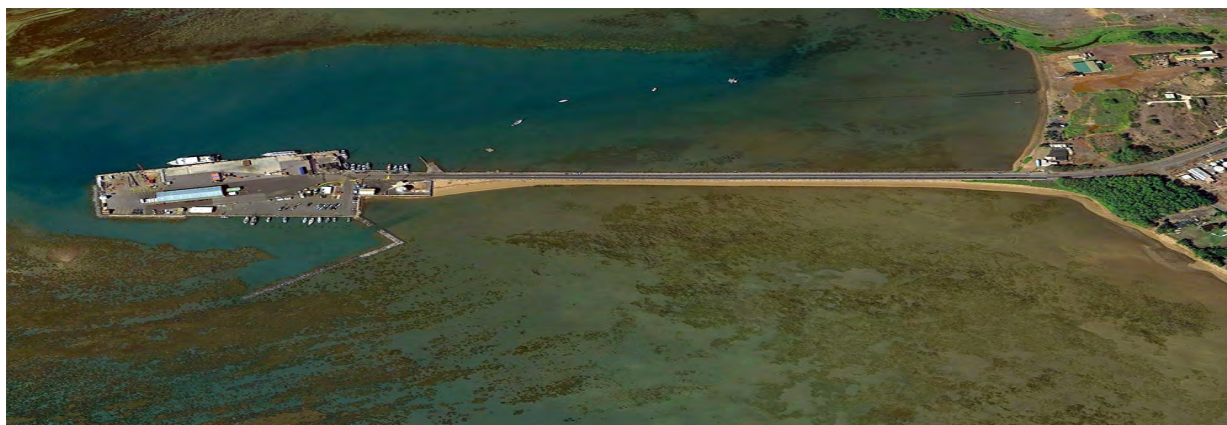


Grandfather Heli Pe‘elua – lived on the beach lot – where we grew up, with her grandparents. Went crabbing, lay net before for the small fish – pua – small mullet. Her ‘ohana only took what they could eat. Mother gathered limu... She knew where the freshwater was coming out – all the way from Kimball’s place (now Penny’s) one... Our kupuna would tell us stories about all the sweet potato, vegetables being grown to feed the people of Kalama‘ula. Brought the water all the way down. When there was rationing, we had to fill barrels with water, had to conserve – bathed with only a little water. Had droughts. Land

was so full of food, up behind – all farms, where the flume was, because had water. Gathered big rocks for the flume. Had a hard life but appreciated that life – had to work for our food, had to work for everything. That’s why all the kupuna are so smart. Kids are now so lazy – don’t want to work, even to rake the yard. There were lots of fruit trees in Kalama‘ula – we fed ourselves. People used the ocean, but didn’t take plenty, also would share with the neighbors. If a family didn’t fish, those who did would give them crab, fish. Something is wiping out all the limu – not sure why it’s happening. Maybe it’s the pollution coming from other places. Where we used to pick up all the limu, in front of the spring, used to be plenty. Now – hardly any. Mrs. Ocampo is still going down there, maybe she’s getting ‘opae... I’m really upset about the trespassing problems in Kapuāiwa Grove [pictured above in the early 1900s, Photo: Courtesy of Bishop Museum] – the way we were brought up, we never went in the Grove at all. Had two sets of grandparents that lived on either end of the Grove, but never did walk through the Grove. Knew we weren’t supposed to – when we asked why, the kupuna just said “kulikuli!” [be quiet!] – we never did know the reason why, but knew we had to respect the Grove. Knew caretakers of the grove [Liette Corpus’ grandparents] – they lived in the Grove, there was a house in the Grove by the spring – to the left of the spring. Pe‘elua’s are related to them.

Kaunakakai

Ka Inoa (The Name). “The old name for Kaunakakai was Kaunakahakai, “Resting-(on)-the beach.” It was the place for the canoes to come, for here there were plenty of fish (Pukui, personal communication).”⁴⁷ Pukui and Elbert, citing Fornander, translate the name Kaunakahakai to literally mean, “beach landing.”⁴⁸



Aerial View of Kaunakakai Harbor and Shoreline. Photo: Kaunakakaiharbor.com.

Nā Wahi Pana (The Celebrated Places). Summers, et al identify the following special places in Kaunakakai:

- West of the approach to the Kaunakakai wharf is a platform that was part of Kamehameha V’s home, Malama... The beach in front of this site was used exclusively by the *ali‘i* for sun bathing. There formerly was a spit of sand in front of here called *Ka Lae o Ka Manu*, so named because the plover used to settle here. At the site of the County Park was a canoe shed (Cooke, 1949: 110, 151).⁴⁹
- Pukui, Elbert and Mookini indicate that Malama means “month or moon”⁵⁰ and Harriet Ne further provides that, “It was called Malama because its open doors faced the rising and setting sun. To avoid breaking the kapu against that, the steps leading up to the doors were built on the makai side.”⁵¹
- Saltworks... Located at the site of the Kaunakakai dump in 1961, the salt pans were made “something like a taro patch.” Sea water was run into the pans at high tide, and when the tide ebbed, some of the water remained. The water was allowed to stand from one to three weeks, after which the salt was gathered and dried. The salt formed here was not as salty as the salt formed by waves from the deep sea-- “Our salt here is not too sour...”⁵²
- Kamalae Heiau... Located behind Kaunakakai village, the site of the heiau is at the foot of the median ridge. From Kakalahale it bears 35°29’30”; 12,890 ft. Stokes wrote of it, “Heiau entirely destroyed. It is said to have been for human sacrifice, and that the drums were heard at night”...⁵³
- Mahinahina Heiau... This heiau is located 500 ft NE of the pier at Kaunakakai. According to Stokes, “The site pointed out was a low platform lined with ala, on which a church stood... Said to have been for human sacrifice, and that the drums were heard at night”...⁵⁴
- Kahua Maika... N. B. Emerson said that he saw a curved kahua maika “... on the plains back of Kaunakakai” (Malo, 1951:221, note 2).⁵⁵



Ka ‘Aumakua (The Ancestral Deity). Harriet Ne indicates the ‘aumakua of Kaunakakai is pa‘akai (salt) based on her recollection of the image on a banner used during the last traditional makahiki ceremony at Nā‘iwa in 1918, in which she was in attendance.⁵⁶

Nā Makani (The Winds). Three wind names for Kaunakakai are identified as Hauāliaia,⁵⁷ Mālūa, and Pelu.⁵⁸

Nā Ua (The Rains). The rain name associated with Kaunakakai is Mālūa, which is the same as Mālūalua. It is also the name of a wind for this area.⁵⁹

Nā Wai (The Waters). In 1950, the Kaunakakai Flood Control Project was constructed under the River and Harbors Act of 1935 to enlarge

Harriet Ne Dancing Hula. Photo: Courtesy of Edward Halealoha Ayau

Kaunakakai Stream. It is unclear whether this is a traditional or contemporary name for this stream. No other water names are known at this time.

Nā Mele (The Songs, Chants). A traditional chant that recalls the rain and wind of Kaunakakai provides as follows:

Hā‘ule iho, he Mālūa ka ua	It falls, Mālūa is the rain
He Pelu ka makani	Pelu is the wind
Hauāliaia Kaunakakai	The Hauāliaia wind is at Kaunakakai ⁶⁰

A contemporary song made popular is *Cockeyed Mayor of Kaunakakai*, words and music by R. Alex Anderson.⁶¹ Although some say the song disparages Kaunakakai because of its reference to drunkenness, it is nonetheless part of its historic identity.

Nā Mo‘olelo (The Stories, Histories). Historian Kamakau further recounts historic events that took place at Kaunakakai prior to the time of Kamehameha I and during his stay on Molokai preparing to invade O‘ahu and the army of Kalanikūpule:

Ka‘eokūlani’s war party lands at Kaunakakai:

When Ka-‘eo-ku-lani, ruling chief of Kauai, heard how narrowly Ka-lani-ku-pule and the other chiefs of Maui had escaped death in the war on Maui, and how the waters of ‘Iao had been choked with the bodies of the slain in this war, he was so perturbed that he set sail to war against Kamehameha... The war party landed at Kaunakakai on Molokai, and when the Kauai chief saw for the first time, by the ovens they had left, the size of the camp which Kamehameha had occupied he said, "Where a big squid digs itself a hole, there crab shells are heaped at the opening."⁶²

Ka‘iana betrayed by the Hawai‘i island chiefs at Kaunakakai:

While Kamehameha remained on Molokai with his forces, awaiting a proper time to set sail for Oahu, he consulted with many of his counselors and orators and his secret advisers; but he never summoned Ka‘i-ana-Ka-‘ahu-‘ula to such councils, and this made Ka‘i-ana suspect that the counselors were plotting his death. These councils took place at Kaunakakai. Ka‘i-ana stayed at Kamiloloa . . . Ka‘i-ana told his younger brother, “I fear that the chiefs are conspiring to kill us.”⁶³

In addition, the following two ‘ōlelo no‘eau (proverbs) reference Kaunakakai,

Hele i Kaunakakai i Hikauhi.
Go to Kaunakakai to seek Hikauhi.

Go to seek that which is lost. One day, when a man of Moloka‘i was fishing, his wife felt the beginning of labor pains and went to the upland to seek help from her mother. When the husband returned, he searched everywhere in Kaunakakai for his wife. After a time she returned with their daughter, whom they named Hikauhi.⁶⁴

Wā ‘ōlelo i Kaunakakai.
Loud talking at Kaunakakai.

Said of much boisterous talking. The chiefs liked to play games such as kōnane at Kaunakakai, and their shouts and laughter could be heard for some distance.⁶⁵

Traditional Ecological Knowledge. With regards to the management of and stewardship of the coastal resources in Kaunakakai, the ‘ike (knowledge) and mana‘o (thoughts) shared by homesteaders Penny Martin, Henry Paleka and Kanani Negrillo with regards to Kalama‘ula specifically involving resource conservation and proactive watershed management, apply to Kaunakakai due to the immediate proximity and similar landscapes of both ahupua‘a.

Kapa‘akea



Aerial View of Kapa‘akea Hawaiian Homestead Lots and Kōheo Wetlands to the west. Photo: © 2017 Google Earth

Ka Inoa (The Name). The literal meaning is “the coral or limestone surface.”⁶⁶ A description of the land use in 1895 indicated:

Kapaakea was originally part of the unassigned lands from the Mahele, turned over to Crown Lands in the 1890 Act. This land forms the eastern boundary of Kaunakakai with the government land of Kamiloloa to the south-east. It is very long and narrow, being

only a little more than one-half miles wide at the sea where the government road crosses the land. Mostly grazing land. There is a large fishpond at the coast. Area of 2078 acres.⁶⁷

Nā Wahi Pana (The Celebrated Places). In Kapa‘akea, such special places include:

- Ka La‘i o Kioea...*Ka la‘i o kioea*, “The tranquil spot of the kioea (curlew, *Numenius tahitiensis*),” was the name of a place where the homesteads are now located in Kapa‘akea. “Here there were numerous plover and curlews. The curlews are said to have called to the canoes to go out to sea to fish. Hence the saying, ‘Molokai i ke kioea ho‘olale ka wa‘a (Molokai where the kioea urge on the canoes).’”⁶⁸
- This location is also home to the Kōheo Wetlands, Ka La‘i o Ke Kioea Bird Sanctuary, which is a 10-acre coastal salt marsh.⁶⁹
- Kapa‘akea Pond... “A *pu‘uone* having an area of 5.45 acres, this pond extended from the seashore to the Government road. The pond is now filled. According to Stokes there was one *makaha*... After examining it nearly 50 years later, Dunn described its condition: The pond has been neglected for a long period of time and can hardly be called such any more. It has been almost totally filled by silt washed down from the highlands mauka of the road and is covered with a dense growth of mangrove with some kiawe. The undergrowth is a thick mat of *akulikuli*. The old springs which fed this pond are either clogged or dried up and no longer available...”⁷⁰
- Kapa‘akea Cemetery, which is a public cemetery established in the late 1800s on lands now owned by the County of Maui.
- Pu‘umaninikolo, which literally means, “hill [for] seining *manini* fish or creeping *manini* fish hill.”⁷¹ It is one of three prominent hills in Kapa‘akea and is located mauka of the Kapa‘akea Homesteads. The other two hills are Pu‘u Hele and Pu‘u Makokilo‘a.⁷²

Ka ‘Aumakua (The Ancestral Deity). Harriet Ne reports the ‘aumakua of Kapa‘akea is *lolo malo* (loincloth worn by men) based on her recollection of the image on a banner used during the last traditional makahiki ceremony at Nā‘iwa in 1918, in which she was in attendance.

Nā Makani (The Winds). No wind names were identified for Kapa‘akea.

Nā Ua (The Rains). No rain names were identified for Kapa‘akea.

Nā Wai (The Waters). There are no perennial streams in the ahupua‘a. Two intermittent streams run during heavy rains and were diverted around the west and east boundaries of the Kapa‘akea Cemetery and “pass under Kamehameha Highway through a 24-inch reinforced concrete pipe and an 8-foot by 3-foot box culvert, respectively, and then through two shallow open swale ditches in the Kapaakea Homestead before entering the ocean.”⁷³ In addition, when the flooding would overwhelm the pipe and culvert, the water sheets across Kamehameha Highway into Kōheo Wetlands and the Kapa‘akea Homestead area causing flooding. The first stream is named Kamiloloa and the second stream name is unknown. In addition, the name(s) of the spring(s) once associated with the Kapa‘akea Fishpond is/are also unknown.

Nā Mele (The Songs, Chants). There were no songs or chants found that referenced this ahupua‘a or any of its natural features.

Nā Mo‘olelo (The Stories, Histories). There were no stories or historical references regarding Kapa‘akea or any of its natural features.



Traditional Ecological Knowledge. With regards to the management of and stewardship of the coastal resources in Kapa‘akea, the ‘ike (knowledge)

Aerial View of the Eastern boundary of Kapa‘akea homestead lots. Photo: © 2017 Google Earth

and mana‘o (thoughts) shared by homesteaders Penny Martin, Henry Paleka and Kanani Negrillo with regards to Kalama‘ula specifically involving resource conservation and proactive watershed management, apply to Kaunakakai and Kapa‘akea due to the proximity and similar landscapes of the three ahupua‘a.

Kamiloloa



Aerial View of the Western boundary of Kamiloloa Hawaiian Homesteads. Photo: Courtesy of Ted Kanemitsu 2021.

Ka Inoa (The Name). The literal translation is “the tall milo tree.”⁷⁴

Nā Wahi Pana (The Celebrated Places). Summers identifies the special places in Kamiloloa to include:

- Two adjoining land sections are called Kamiloloa; the one to the W is referred to as Government, the other was known as Konohiki. The two land sections formerly made the

ahupua'a of Kamiloloa. The section known as Konohiki had a *lele*, Kukaenui, containing 2.34 acres, situated near the Waikolu Stream in Waikolu...⁷⁵

- In the water off Kamiloloa was a sea fishery known for the *he'e* (Monsarrat, n.d.e:183) "Formerly the *he'e* found here were the *i'a kapu* of Bernice P. Bishop. The time for catching them was from November to March 1"...⁷⁶
- Kaloko'eli Pond... Kaloko'eli, "The dug up pond," was a *loko kuapa* having an area of 27.6 acres in 1901 (Cobb, 19902:429). In 1922 the walls of the pond were broken. More than 30 years later, Dunn reported the area of the pond as being 32 acres and wrote: "...About 600 feet of the pond wall has been washed away by the action of wave and tide. Some of this rock is scattered about the ocean floor in shallow water...Along the east wall of the pond and along the inshore line there is a growth of mangrove and *akulikuli*...Within the pond itself are a few small mangrove plants..."⁷⁷
- Ka Lua Na Moku 'Iliahi...*Ka lua na moku 'iliahi*, "The pit (of) the sandalwood ships," is located approximately 1580 ft SW of Pu'u Ka'eo, just N of the road. The site is a trench about 110 ft long, 40 ft wide, and 7 ft deep. Its sides are sloping, resembling the hull of a ship. Cooke told the following story about its use: After the discovery of the Hawaiian Islands [by Capt. Cook], the first commercial venture developed was the obtaining of sandalwood from the forests, which were owned by the Chiefs...Under the feudal system, ... the common people were sent to the mountains to cut, stack and haul sandalwood. In order to measure the product, trenches were dug to simulate the size and depth of a ship's hold. When these had been filled with sandalwood logs, the Chiefs then could bargain with the captains of trading vessels. After a value was agreed upon, the commoners carried the sandalwood to the shore on their backs..."⁷⁸

Ka 'Aumakua (Ancestral Deity). Harriet Ne reports the 'aumākua of this ahupua'a to be large milo trees. This information is based on her recollection of the image on a banner used during the last traditional makahiki ceremony at Nā'iwa in 1918, in which she was in attendance.

Nā Makani (The Winds). The one wind name for this area is Pai.⁷⁹

Nā Ua (The Rains). There were no rain names identified at this time.

Nā Wai (The Waters). There are no perennial streams in Kamiloloa. The two intermittent streams that run during heavy rains and were diverted around the west and east boundaries of the Kapa'akea Cemetery also pass through this ahupua'a. Again, the first stream is named Kamiloloa and the second stream name is unknown. No spring names were identified at this time.

Nā Mele (The Songs, Chants). Although no chants or songs have been identified for Kamiloloa, two famous haku mele (song and music composers) hail from this ahupua'a. In 1865, Esther Kawahineaukaioamoana Keliana Kekula Bishaw was born in Kamiloloa. She wrote the famous mele, a waltz, entitled *Only You*,

Nāu a me a'u i kui a lawa	You and I will weave a lei
Nāu a me a'u i haku i lei	You and I will sew till completed
Nāu a me a'u i kui i lei nani	You and I have expectations of your lovely lei
Kāhiko malia i luna you and I	To adorn you and I
Only you, only you	Only you, only you

Ka i awaiāulu me a‘u
Only you, only you
Ka ‘ike i ka hana wela a ke aloha
You and I

He has recuring thoughts of me
Only you, only you
See the hot passion of love
You and I.⁸⁰

Keliana’s daughter Mary Kanealae Bishaw was born on April 20, 1885 in Kamiloloa. She composed *Kuhi ‘ō Bay*, a famous song about the Bay in Hilo in 1928. Mary died in Ho‘olehua on August 23, 1944.⁸¹

Nā Mo‘olelo (The Stories, Histories). Resharing the account from Kamakau relating to the betrayal of Ka‘iana while he stayed in Kamiloloa:

These councils took place at Kaunakakai. Ka‘i-ana stayed at Kamiloloa . . . Ka‘i-ana told his younger brother, “I fear that the chiefs are conspiring to kill us.”⁸²

There are no additional known stories or historical references regarding Kamiloloa or any of its natural features at this time.



Aerial View of the Kamiloloa Hawaiian Homestead Area. Photo: Courtesy of Ted Kanemitsu 2021.

Traditional Ecological Knowledge. With regards to the management and stewardship of the coastal resources in Kamiloloa, the following ‘ike (knowledge) and mana‘o (thoughts) are shared.

Gayla Mowat, Kamiloloa Shoreline Lessee (Multi-Generational):

In response to the question *‘how do you use the shoreline?’* she replied, “I enjoy sitting on the shoreline in my yard, watching the sea, the sunset. It’s very relaxing. Grow limu – good ogo -- had good rocks with limu, but someone took the rocks. People are pulling limu off the rocks, by the roots, can’t grow back that way. ‘Opae. In 1980’s clams were clean. Now, started getting muddy.” In response to the question, *‘are there any specific actions (improvements and/or management activities) that you would like to see to*

prevent or mitigate shoreline erosion?”, she replied that she’s been planting naupaka and it’s slowing the erosion. Others (Kamiloloa, Molokai Shores) have planted naupaka too.

In addition, the ‘ike shared by homesteaders Penny Martin, Henry Paleka and Kanani Negrillo with regards to Kalama‘ula specifically involving resource conservation and proactive watershed management, apply to Kaunakakai, Kapa‘akea and Kamiloloa due to the proximity of the first three and similar landscapes of all four ahupua‘a.

Makakupa‘ia



Aerial View of the Makakupa‘ia Hawaiian Homestead Area, Ali‘i Fishpond. Photo: Courtesy of Ted Kanemitsu 2021.

Ka Inoa (The Name). *Place Names of Hawaii* does not offer a translation of the name except to state, “two land division and road. Kaunakakai qd., south Moloka‘i; a game management area.”⁸³ Harriet Ne is also silent on the translation of the name.

Nā Wahi Pana (The Celebrated Places). Summers identifies the special places of Makakupa‘ia to include:

- Two adjoining land sections are called Makakupaia; the one to the W is referred to as Government, the other was known as Konohiki. Formerly the two land sections made the ahupua‘a of Makakupaia.⁸⁴
- Ali‘i Pond... Cobb (1902:429) listed a “nameless pond in Makakupaia 1” as being 46 acres in area. Now called Ali‘i Pond, it has an area of 25.80 acres. The wall of this *loko kuapa* is 2710 ft long, about 4 ft wide, and 4.5 ft high..., There was one *makaha*. In 1957 the pond was filling with mud and about 4 acres along the E wall and inshore line were covered with mangrove. The *makaha* was broken...⁸⁵
- Kaoaini or Kaonini Pond... This site was a *loko kuapa* having an area of 9.3 acres in 1901 (Cobb, 1902:429). The wall, which was approximately 1770 ft long, is now destroyed, although the foundations can still be seen...Cobb gave the name Kaoaini for this pond; Stokes called it Kaonini... Kaonini is listed as a fishing ground “...known by the people to have shoals of fish remaining upon [it]...” This fishing ground was placed under protective taboo for the King in 1839...⁸⁶

- Burials...When the bulldozing was done for the construction of Del Monte Park, numerous burials were uncovered (Henry Meyer, personal communication, 1965).⁸⁷

Ka ‘Aumakua. Harriet Ne reports the ‘aumākua of Makakupa‘ia to be one (sand). This information is based on her recollection of the image on a banner used during the last traditional makahiki ceremony at Nā‘iwa in 1918, in which she was in attendance.

Nā Makani (The Winds). Wind names for this area were not identified at this time.

Nā Ua (The Rains). There are no known rain names at this time.

Nā Wai (The Waters). There are no perennial streams. There is one intermittent stream that appears to be named Onini and a second stream that does not have a name. No spring names were found to be associated with Ali‘i Pond or Kaoaini/Kaonini Pond.

Nā Mele (The Songs, Chants). No chants or songs have been identified for Makakupa‘ia at this time, nor were any famous haku mele from this place.

Nā Mo‘olelo (The Stories, Histories). There are no known stories or historical references regarding Makakupa‘ia or any of its natural features.



Aerial View of the Makakupa‘ia Hawaiian Homestead Area. Photo: Courtesy of Ted Kanemitsu 2021.

Traditional Ecological Knowledge. With regards to the management and stewardship of the coastal resources in Makakupa‘ia, the following ‘ike (knowledge) and mana‘o (thoughts) are shared.

Noelani Lee, Executive Director, Ka Honua Momona International Licensee Ali‘i Fishpond:

In response to the question *‘how do you use the shoreline?’* she replied that Auntie Vani (Ainoa) lives just east of Hotel Molokai. Limu ‘ele‘ele at her place. In 2005, we used to have 25 different species of limu. Limu kala disappeared 8 years ago. In response to the

question, *‘are there any specific actions (improvements and/or management activities) that you would like to see to prevent or mitigate shoreline erosion?’* she replied, We celebrated the year of the mullet. Native plant specialists. Need to reforest, need to do sediment mitigation between the forest and here. Native plants that could replace invasives. Dr. Keana Frank, Ph.D., Harvard researched beach nourishment and beach restoration including Pā‘ūohi‘iaka and Pōhuehue, crawler plants.

With regards to the management of and stewardship of the coastal resources in Makakupa‘ia, the ‘ike (knowledge) shared by homesteaders Penny Martin, Henry Paleka and Kanani Negrillo with regards to Kalama‘ula specifically involving resource conservation and proactive watershed management, apply to Kaunakakai, Kapa‘akea, Kamiloloa and Makakupa‘ia due to the proximity of the first three and similarity in landscapes of all five ahupua‘a.



Aerial View of Kaunakakai and Kalama‘ula Looking West. Photo: Courtesy of Ted Kanemitsu.

Conclusion

It was clear that more information was readily available for the cultural lens categories for Kalama‘ula and Kaunakakai, with less available for Kapa‘akea and very little for Kamiloloa and Makakupa‘ia. These revelations hint at the importance of these ahupua‘a to the Kona moku and mokupuni of Molokai in terms of where the island’s population and activities became centered. Historically, these areas served a role in the rise to power of Kamehameha, and the place where the first Hawaiian Homelands settlement was established.

The poetic name *Molokai Nui a Hina* establishes the kuleana (duty, responsibility, privilege) to care for the island’s finite resources including its watersheds and shoreline resources. The ‘ike (knowledge) shared by homesteaders Penny Martin, Henry Paleka and Kanani Negrillo with regards to resource conservation and proactive watershed management speak to this kuleana. The nickname Molokai ‘āina momona aptly describes these specific ahupua‘a known for their ability to provide land and ocean food (although most of the fishponds, springs and pools are filled in). And the ecological knowledge shared will help support the development of strategies to care for and protect these shoreline and mauka resources. These cultural insights raise understanding and awareness of the identity of these ahupua‘a and strengthen and continue the legacy by the homesteaders who reside there currently and whose pulapula (offspring) will do so in to the future.

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- ¹ The author's family on his paternal side is from Pelekunu, Molokai. His tūtū wahine (grandmother) Harriet Ahiona Ayau Ne taught him the island's name is to be pronounced without an 'okina. She based this on her life experiences growing up in Pelekunu, Kamalo, Kalama'ula and Ho'olehua and a conversation with 'Mother Pukui' who told her the name means to interweave and interlace, to tie securely (molo) of the rough ocean (kai) of the north with the calm ocean (kai) of the south. The author follows the teaching of his tūtū who also stated that use of an 'okina is fine if that is how one was taught by their kūpuna.
- ² Fornander, Abraham, *Hawaiian Antiquities and Folk-Lore*. Bernice Pauahi Bishop Museum Memoirs, Vol. 4, Honolulu, 1916-1917: 12, 13.
- ³ *Ibid* at 2, 3.
- ⁴ *Ibid* at 22.
- ⁵ Teaching of Harriet Ahiona Ayau Ne.
- ⁶ Summers, Catherine C. *Molokai: A Site Survey*. Bernice Pauahi Bishop Museum Pacific Anthropological Records No. 14, Honolulu, 1971:2.
- ⁷ See, <https://www.molokai.org/about-molokai/myths-of-molokai/index.html>, Molokai Community Service Council, viewed on October 22, 2020.
- ⁸ Pukui, Mary Kawena; Elbert, Samuel H; Mookini, Esther T. *Place Names of Hawaii Revised and Expanded Edition*. The University of Hawaii Press, (1974:74).
- ⁹ *Ibid*.
- ¹⁰ Ne, Harriet Ahiona. *Teacher's Guide to Molokai Field Trips for Hawaiiana Vol. II*, Office of Library Services, Teacher Assist Center for the Maui District Office, Molokai Educational Complex, Dept. of Education, State of Hawaii, Pub. No. TAC 72-5093; December 5, 1974: 2. Mrs. Ne was formally recognized as a Cultural Historian of Molokai by Governor John Burns in 1974. She was consulted about the island's cultural history by Dr Kenneth Emory and Mary Kawena Pukui.
- ¹¹ Summers (1971:84).
- ¹² *Ibid*.
- ¹³ *Ibid*.
- ¹⁴ *Ibid*.
- ¹⁵ Summers (1971:85).
- ¹⁶ Tomonari-Tuggle, M.J. Archaeological Reconnaissance Survey, Road Corridor, Kalama'ula Mauka (1983:1) and Tomonari-Tuggle, M.J. Archaeological Inventory Survey of a Portion of Kalama'ula, Island of Molokai (1990:8).
- ¹⁷ Summers (1971:72) citing Pukui.
- ¹⁸ Hommon, Robert J. and Ahlo, H.M. (June 1983). An Archaeological Survey of Selected Lands, Proposed for Military Training Near Kaunakakai, Island of Molokai, Hawaii (1983:14-15).
- ¹⁹ Tomonari-Tuggle (1990:9-10).
- ²⁰ Handy, E. S. C. and Handy, E. G. *Native Planters in Old Hawaii: Their Life, Lore, and Environment*. Bishop Museum Press (1972:517) in Tomonari-Tuggle (1990:7-8).
- ²¹ Summers (1971:38) citing a 1922 *Ka Nupepa Ku'oko'a*.
- ²² Summers (1971:84-85).
- ²³ Summers (1971:85).
- ²⁴ Summers (1971:86).
- ²⁵ Summers (1971:87).
- ²⁶ Summers (1971:85).
- ²⁷ Summers (1971:86).
- ²⁸ Summers (1971:86-87).
- ²⁹ Summers (1971:86).
- ³⁰ *Ibid*.
- ³¹ Summers (1971:87).
- ³² Ayau, Edward Halealoha. *Na 'iwa: Home of the Hawaiian Olympic Games Celebrated as Part of the Molokai Makahiki*, Based on the mana'o of Harriet Ahiona Ayau Ne, Molokai Dispatch, October 1, 1989 at 8. Notably, the author is the grandson of Harriet Ne and spent time learning Molokai's cultural history from her.
- ³³ Summers (1971:84).
- ³⁴ Personal communication with the author. Miki'ala Pescaia is the author's sister who was also taught by tūtū Harriet Ne.
- ³⁵ See, [http://cramp.wcc.hawaii.edu/Watershed Files/Molokai/WS Molokai molokai Palaau.htm](http://cramp.wcc.hawaii.edu/Watershed%20Files/Molokai/WS%20Molokai%20molokai%20Palaau.htm),

Coral Reef Assessment & Monitoring Program Hawaii, viewed on October 13, 2020.

³⁶ See, Interview No. 2_Zach Helm, “Before Auntie Kauila’s place – the stream – Makehe Stream – was an old Hawaiian man who built a hale inside the mangrove.” (November 2019).

³⁷ Ne (1974:9-11).

³⁸ See, <https://www.huapala.org/KAL/Kalamaula.html>, viewed on October 10, 2020: “Source: John Clark, author of “Hawai‘i Place Names: Shores, Beaches and Surf Sites” - Excerpted from an interview with Valentine Dudoit, retired HFD Captain, the son of Emma Kala Dudoit, the composer of this song. Emma Kala Dudoit, originally from Kekaha, Kauai, wrote this song when the family moved to Kalama‘ula from Kaka‘ako in 1922. She died shortly after in 1923. Well-known composer and entertainer Emma Bush recorded the song in 1928 and was inadvertently listed as the composer. Hannah Dudoit, Emma Dudoit’s daughter, then copyrighted the song in order to acknowledge her mother as the composer. Hannah Dudoit has since been listed as the composer. This information was substantiated by John Dudoit, retired HFD Captain, brother of Valentine Dudoit. Copyright 1929, renewed EMI Miller Catalog, Inc.”

³⁹ Pukui, Mary Kawena. *Nā Mele Welo Songs of Our Heritage Selections from the Roberts Mele Collection in Bishop Museum Honolulu Translated by Mary Kawena Pukui* (1995:74). “Notes: Contributor Waiwaiole Ka La [Kala Waiwaiole], Kapaa, Kauai. Mele olioli no Moloka‘i [Chant from Moloka‘i].”

⁴⁰ Kamakau, S.M. *Ruling Chiefs of Hawaii Revised Edition*, Kamehameha Schools Press (1961:70).

⁴¹ *Ibid* at 149.

⁴² *Ibid* at 171.

⁴³ *Ibid* at 259-260.

⁴⁴ *Ibid* at 312.

⁴⁵ Pukui, Mary Kawena. ‘*Ōlelo No‘eau Hawaiian Proverbs & Poetical Sayings*, No. 2879, Bernice P Bishop Museum Special Publication No. 71, Bishop Museum Press (1983:314).

⁴⁶ Malo, David. *Hawaiian Antiquities (Moolelo Hawaii)*, Bernice P Bishop Museum Special Publication 2, Second Edition, Translated from Hawaiian by Dr Nathaniel B. Emerson 1898 (1951:216-18).

⁴⁷ Summers (1971:87).

⁴⁸ Pukui, Mary Kawena; Elbert, Samuel H; Mookini, Esther T. (1974:95).

⁴⁹ Summers (1971:87).

⁵⁰ Pukui, Mary Kawena; Elbert, Samuel H; Mookini, Esther T. (1974:143).

⁵¹ Ne (1974:1).

⁵² Summers (1971:87).

⁵³ *Ibid*.

⁵⁴ *Ibid* at 88.

⁵⁵ *Ibid*.

⁵⁶ Ayau (1989:9).

⁵⁷ Summers (1971:87).

⁵⁸ Akana, Collette Leimomi; Gonzalez, Kiele. *Hanau Ka Ua Hawaiian Rain Names*, Kamehameha Publishing (2015:175).

⁵⁹ *Ibid*.

⁶⁰ *Ibid*, “From the legend of Pāka‘a and Kūapāka‘a. Hawaiian Source: Fornander, Fornander 5: 101. English trans. by Collette Leimomi Akana. Additional sources: Kuapuu, “He wahi moolelo” 5/8/1861; Nakuina, Moolelo 62, Wind 56. Note: “Kaunakahakai” is the same as Kaunakakai.”

⁶¹ See, https://www.huapala.org/Cockeyed_Mayor_of_Kaunakak.html reports, “Source: - Paul Fagan, owner of Pu‘uohoku Ranch, Molokai requested a song for his special guest, movie star, Warner Baxter, in 1934. The mythical mayor became cockeyed because the last two syllables rhymed with Kaunakakai. Although Baxter liked the tune and lyrics, his studio did not, fearing it would create a bad image of drunkenness for Hollywood. © 1935 Edward B. Marks Music Corp.”

⁶² *Ibid* at 159.

⁶³ *Ibid* at 172.

⁶⁴ Pukui, Mary Kawena. *Ōlelo No‘eau Hawaiian Proverbs & Poetical Sayings*, No. 742, (1983:82).

⁶⁵ *Ibid*, No. 2919 at page 319.

⁶⁶ Pukui, Mary Kawena; Elbert, Samuel H; Mookini, Esther T. (1974:86).

⁶⁷ See, <http://kipukadatabase.com/kipuka/CrownLands.html?ObjectID=6&b=2#view2>. See also, Iaukea, Biennial Report, 1894. Viewed on October 13, 2020.

⁶⁸ Summers (1971:88).

⁶⁹ See, www.conservationconnections.org/site/koheo-wetland-ka-lai-o-ke-kioea-bird-sanctuary. Viewed on October 13, 2020.

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- ⁷⁰ Summers (1971:88).
- ⁷¹ Pukui, Mary Kawena; Elbert, Samuel H; Mookini, Esther T. (1974:202).
- ⁷² *See*, Map of Kapa‘akea, Molokai.
- ⁷³ *See*, Final Environmental Statement, Kapaakea Homestead Molokai, Hawaii (December 1976: 2-2).
- ⁷⁴ Pukui, Mary Kawena; Elbert, Samuel H; Mookini, Esther T. (1974:82).
- ⁷⁵ Summers (1971:88).
- ⁷⁶ *Ibid.*
- ⁷⁷ *Ibid.* A loko kuapā is a fish pond made by building a wall on a reef.
- ⁷⁸ Summers (1971:88-90).
- ⁷⁹ Summers (1971:88).
- ⁸⁰ Mahoe, Noelani Kanoho. Ho‘āhu ‘Ana O Nā Mele Ho‘okahi Iwakālua a Hapa Kākini ■ One Score and Half a Dozen ■ A Collection of Songs, Stories & Pictures compiled by Noelani Kanoho Mahoe Vol. One (2015:46-48).
- ⁸¹ *Ibid* at 48. The author’s mother is a Bishaw and ‘ohana to these two famous haku mele (music composers).
- ⁸² Kamakau (1992:172).
- ⁸³ Pukui, Mary Kawena; Elbert, Samuel H; Mookini, Esther T. (1974:140).
- ⁸⁴ Summers (1971:90).
- ⁸⁵ *Ibid.* A loko kuapā is a fish pond made by building a wall on a reef.
- ⁸⁶ Summers (1971:90-91).
- ⁸⁷ Summers (1971:91). It is unclear what happened to these burials. They were not removed to the Bishop Museum.

APPENDIX C: FLOOD ZONES, SHORELINE SETBACKS, AND THE STATE CERTIFIED SHORELINE

FLOODING

The Federal Emergency Management Agency (FEMA) has created Federal Insurance Rate Maps (FIRM) delineating flood zones and base flood elevation. A property’s topography and elevation above sea level indicate a sites vulnerability to flooding. However, the FIRM maps do not account for a location’s substrate or soil composition which can affect the sturdiness or stability of a structure or house subjected to flooding.

The FIRM’s for Moloka’i have been updated to incorporate digital elevation models that are more accurate than previous inundation models. Any building proposed to be located in a flood zone should be designed to withstand inundation (breakaway walls, sealed utilities, absence of living areas where inundation risk is high, etc.). Alternatively, the building can be raised (post and pier) to allow floodwaters to pass unimpeded below the building. However, the posts and piers must be sufficiently anchored so as to prevent floatation of the building. They should also be fortified to withstand the forces behind the flood waters so the building doesn’t move or become dislodged by debris or waves.

The County of Maui participates in FEMA’s voluntary Community Rating System (CRS). As a result, Maui property owners receive a discount on their flood insurance. On properties within and subject to the County of Maui regulations, a Flood Development or Flood Way permit may be required when building in a flood zone. The permit is triggered during the building permit review process and can influence the structure’s design, location, configuration and building materials. Without the permit, the property owner may not be able to obtain homeowners insurance or a bank loan for the building such as a mortgage. Without the permit, some DHHL beneficiaries may have difficulty in securing funding from a federally insured bank or commercial lending institution for home construction as a result. Despite whether DHHL and/or its beneficiaries are subject to federal flood prevention programs, the lending banks are and thus may be unwilling to make loans to properties at risk of flood inundation. Considering the cost of construction, it makes sense to invest in flood prevention and building strengthening to avoid or mitigate potential damage.

If a home was built before 1995 in Moloka’i, it probably does not have hurricane clips to tie the roof to the walls and strong connectors from the walls to the foundation to create a continuous load path. The County building code was revised after the devastation caused by Hurricane Iniki in 1992 on Kaua’i and newer buildings are much stronger and resistant to wind and water damage.

Types of Flood Zones

Flood zones are established based on data from actual storms and floods that have occurred in the past. Flood zones X and XS have low to moderate risk of flooding and there is no mandatory flood insurance purchase requirement, but coverage is available in participating communities (CRS). A Flood Development Permit is not required for construction in these low-risk areas.

Flood Zone X represents areas outside the 0.2% annual chance floodplain. Flood Zone X is an area that is outside of the 100-year floodplain and includes areas where the 100-year sheet flow flooding is less than one foot in depth, and areas of 100-year stream flooding where the contributing drainage area is less than one square mile. No base flood elevation (bfe) or depths of flooding are listed within the X zone on FIRM maps.

Flood Zone XS is an area of 0.2% annual chance flood. It includes areas of 1% annual chance flood with average depths of less than one foot or with drainage areas less than one square mile, and areas protected by levees from 1% annual chance flood.

In contrast to low-risk areas, areas exposed to the 1% annual chance flood are within Special Flood Hazard Areas (SFHA). These flood prone areas are exposed to rising waters (A, AE, AEF) or wave action (V, VE flood zones). A Flood Development Permit is required and triggered when a building permit is requested in a SFHA. The base flood elevation (bfe) is the depth of flooding from the 1% annual chance flood. This depth has a 1% chance of being equaled or exceeded in any given year. Mandatory flood insurance purchase requirements apply in these flood prone areas and a Flood Development or Floodway Permit may

be required within areas subject to Maui County zoning or land use ordinances (MCC Title 19). The permit helps guide the applicant in designing a building or site that can withstand, minimize, mitigate and/or avoid damage from flooding. The most common SFHA flood prone areas are detailed below.

Zone AE is an area subject to rising water. The depth of the rising water is predicted as the base flood elevation (bfe). A bfe of 10 feet indicates that everything 10 feet in elevation and below will become wet from flood waters. In an AE zone, damage to sheet pile, carports, paneling, electrical outlets and connections, and appliances may occur as a result of becoming saturated with water, whether it be fresh or saltwater in origin. Drywall and wood can quickly become moldy after flood waters subside. Flood waters are frequently laden with sediment which can lead to additional damage and cleanup challenges. Flood proofing is recommended where feasible.

Zone AEF is a floodway area in Zone AE. The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment or obstructions so the 1% annual chance flood can be carried through it without increasing the bfe. Structures that obstruct or could catch debris in the floodway are not allowed because they could form a dam that could cause or amplify flooding on adjacent and/or downstream property.

The V and VE Flood Zones are coastal high hazard areas. They are a Special Flood Hazard Area that is subject to high velocity wave action from storms or seismic sources. They are in the 100-year coastal floodplain and are exposed to waves. Zone V does not have an established bfe, whereas Zone VE has a base flood elevation derived from detailed hydraulic analyses. Mandatory flood insurance purchase requirements apply when building habitable structures. New structures in these zones must meet special standards of design and strength to resist wave action and erosion of the building’s footings or foundation. Fill may not be used to create the foundation pad or to elevate the building above bfe, since the fill and any slab-on-grade foundations could be under scoured by wave action. Instead, post and pier construction is often used to elevate the lowest floor joist one foot above bfe such that flood waters and waves can pass under the structure unimpeded.

MCC 19.62 regulates construction of structures, including homes, ohana dwellings, and accessory structures that are proposed to be located in flood prone areas. Within Special Flood Hazard Areas, a Flood Development Permit (FDP) may be required before the structure can be built and is normally obtained at the building permit stage. The FDP application may require a no rise analysis to ensure neighboring properties will not be flooded by water displaced or redirected by the new structure. The FDP may also require an elevation certificate conducted by a licensed surveyor that indicates the elevations and relation to base flood elevation.

Flood Zone Maps

DHHL homestead lands are exposed to flooding with wave action (VE) along the seaward (makai) side of almost all the homestead properties. Other properties are mostly exposed to the risk of potentially rising waters (AE, AEF zones). More mauka properties near the highway are generally in the X or XS zones, which have low risk of flooding. Base flood elevations (bfe) are the predicted depth of flood waters above sea level and may not fully account for a site’s topography or height above the ocean.

Kapa’akea flood risk is mapped on Panel Number 150003 0193F (November 4, 2015) and 0195E (September 25, 2009) on the Flood Hazard Assessment Report for the Kamiloloa watershed. The community is subject to VE (bfe 12), AE (bfe 7 to 10) and AEF flood zones around Kamiloloa Gulch.

Kamiloloa flood risk is mapped on Panel Number 150003 0193F (November 4, 2015) and 0195E (September 25, 2009) on the Flood Hazard Assessment Report for the Kamiloloa watershed. The community is subject to VE (bfe 10), AE (bfe 7) and X flood zones along Kamehameha V Highway and exposed to Flood Zone A in some areas primarily above and mauka of the Kamehameha V Highway.

One-Ali’i flood risk is mapped on Parcel Number 150003 0193F & 0194F (November 4, 2015) and 0195E (September 25, 2009) of the Flood Hazard Assessment Report for the Kamiloloa watershed. The community is subject to VE (bfe 10), the fishpond is

in VE (bfe 9), and flood zones AE (bfe 7) up to and including the Kamehameha V Highway. Areas mauka of the highway are in the X flood zone, and are of low (but not zero) risk of flooding.

SHORELINE SETBACKS AND THE STATE CERTIFIED SHORELINE

SHORELINE SETBACKS

Setbacks from the shore and ocean should be large enough to allow for the coastline to shift and move according to season dynamics and storm events. Limiting construction and development in areas bordering the ocean using setbacks is a practical and effective way of preventing damage to structures and buildings and protecting the people who use or reside in them. Setbacks can account for the size of a property, or for past change in the shoreline’s position. In contrast to fortifying buildings to withstand coastal hazards, like a Flood Development Permit may encourage, locating inland based on projections of shoreline erosion seeks to avoid coastal hazards and applies a common sense, pragmatic approach to shoreline erosion. Locating out of harm’s way is an effective means of avoiding coastal hazards ([Hwang, 2005](#)). For example, locating a building inland of a sandy beach, cobble shore, or sand dune allows the setback area to serve as natural buffer dissipating waves and absorbing energy that helps mitigate the potentially damaging effects of coastal hazards on a building ([MOE, 1991](#)).

Locating inland may also reduce or eliminate the need to harden the shoreline. Shoreline setbacks are intended to reduce risks to buildings from coastal hazards, protect access along the shoreline, and conserve beach and environmental resources. The Shoreline Rules for the Moloka’i Planning Commission, 12-304, implement a building setback from the ocean that is based on a property’s average lot depth (ALD). The ALD setback is 25 feet, 40 feet, or 25% of the ALD up to 150 feet measured inland from the shoreline. But like the FIRM maps, the ALD setback does not account for a location’s substrate or soil properties, so a home built on volcanic dike material would be treated the same as a home built on an eroding sandy shore or a marshy wetland.

The shoreline setback line is projected inland and parallel to the shoreline at a horizontal plane. This would be like drawing the setback line on a two-dimensional site map of the parcel. The setback calculation does not account for topography, substrate, unusual configurations such as flag lots, peninsulas, lots separated from the ocean by a sliver of property or a fishpond, or where the ocean borders more than one side of the parcel. The setback extends inland and is measured from the State Certified Shoreline, or more conservatively from the mean high-water mark in some cases. The setback is measured from the current shoreline’s position inland and not from the property line. Area seaward of the shoreline that erodes, or becomes submerged, can fall within the public domain.

The shoreline setback area includes all the land between the shoreline setback line and the shoreline or mean high water mark and extends along the property’s entire seaward frontage between its side boundaries. However, the Hawaii Coastal Zone Management Act, HRS 205A establishes setbacks of a minimum of forty (40) feet for the shoreline.

State-certified Shoreline

The main purpose of a shoreline certification is to officially delineate the shoreline’s position. It is defined as the highest wash of waves during the highest tide of the year, normally evidenced by the vegetation or debris line, whichever is more landward. The process helps distinguish between public trust land from privately-owned land. The certification process ensures that any encroachments onto the public domain are resolved either through removal, permit, or lease and serves as the basis from which the shoreline setback line is measured.

The shoreline is established by the DLNR OCCL and certified by the BLNR during a public meeting. The shoreline delineates the jurisdiction between the county (mauka) and the state DLNR (makai) and defines public lands (makai) and private lands (mauka) land. A survey completed by a licensed surveyor is submitted to the DLNR and verified with a site visit by DLNR staff. A notice of the survey and its purpose is published in the OEQC Environmental Notice and offers the public an opportunity to comment. The DLNR DAGS also posts pictures and copies of the survey on their website for review and comment. Based on public comments and recommendations from DLNR OCCL and DAGS staff, the BLNR may accept or reject the shoreline survey

application, with certifications valid for one-full year. In cases where the shoreline is fixed by a man-made structure that has received government approval, or was constructed prior to the need for permits applicable at that time, a new shoreline survey certification may not be needed, provided the shoreline’s position is fixed by the structure. In cases where natural features such as rocks or cliffs set the shore’s position, a certification may not be necessary for some permitting matters.

In the case of the Kamiloloa and One Ali’i DHHL Homestead lots on Moloka’i, there is a small sliver of land between the individual homestead lots and the ocean that is owned by DHHL. These separate parcels are shown on county plat maps from 1950. These buffer lands connect to mauka-to -makai foot paths that connect to the public highway (Kamehameha V.) and may have been intended to protect access to and along the shoreline for gathering, fishing, and recreational and cultural practices.

APPENDIX D: SHORELINE EROSION ASSESSMENT (SEVERITY AND RISKS)

Severity and Risks:

The following figures are excerpts from the County's plat maps that provide reference features to compare with today and estimate change along the shoreline. Homestead beneficiaries identified shoreline reference features that suggest the shoreline fronting Kapa'akea has retreated twenty to twenty-five feet over the past half-century. The finding was confirmed during site visits in February 2019 by comparing the present length of the public access paths and drainage ditches to those of the County's 1950 plat maps (Figures A.1 and A.2) sourced from Taxation Maps Bureau, 7/21/1950, Dwg # 3978 & 3979, plat maps (2) 5-4-007 & 008¹. The observation suggests the shoreline has retreated an average of ~ 0.33 feet per year over the past 70 years. In comparison, the island of Maui's sandy shores have retreated an average of 1.1 feet per year (Fletcher, et. al., 2003 Maui Shoreline Atlas).

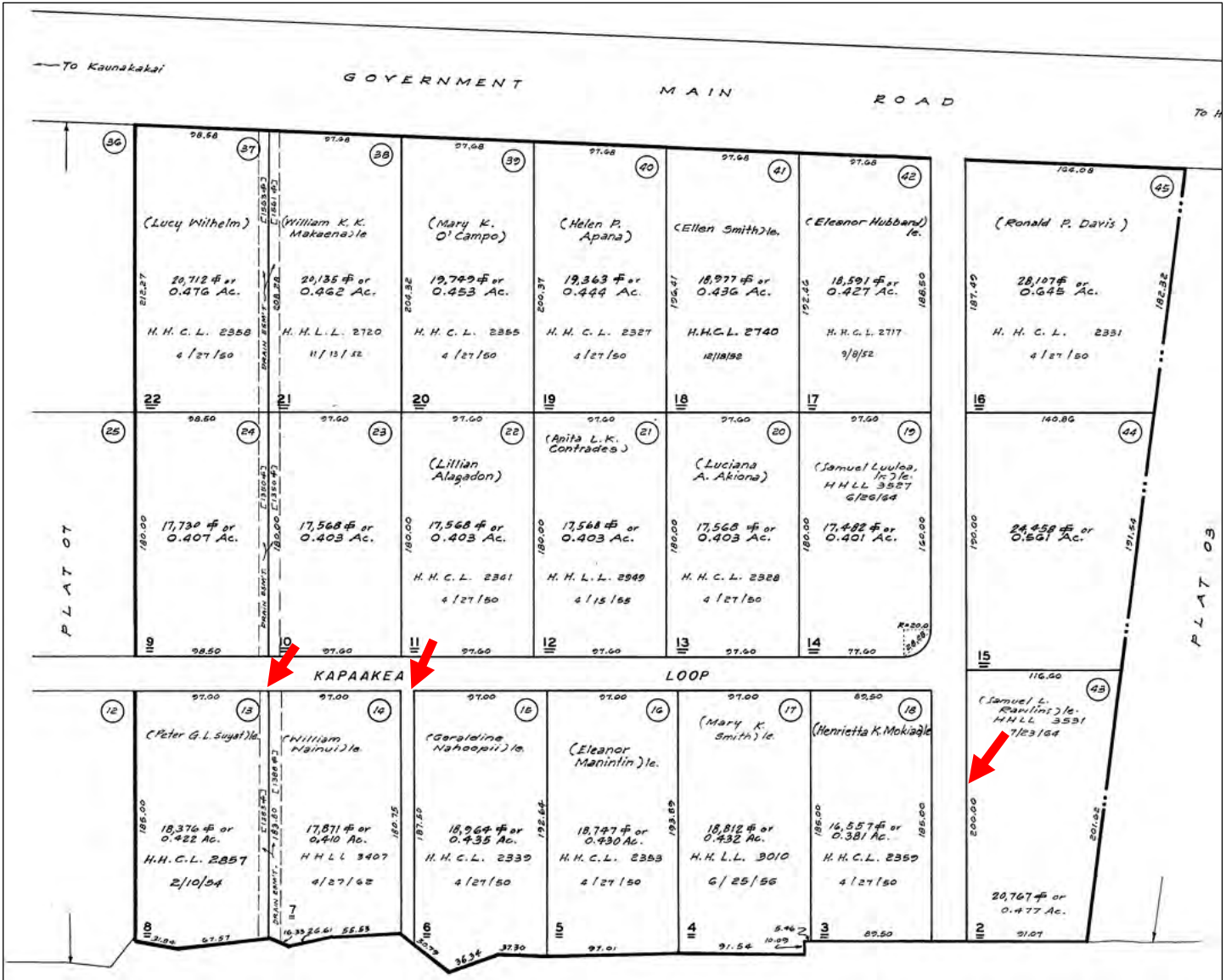


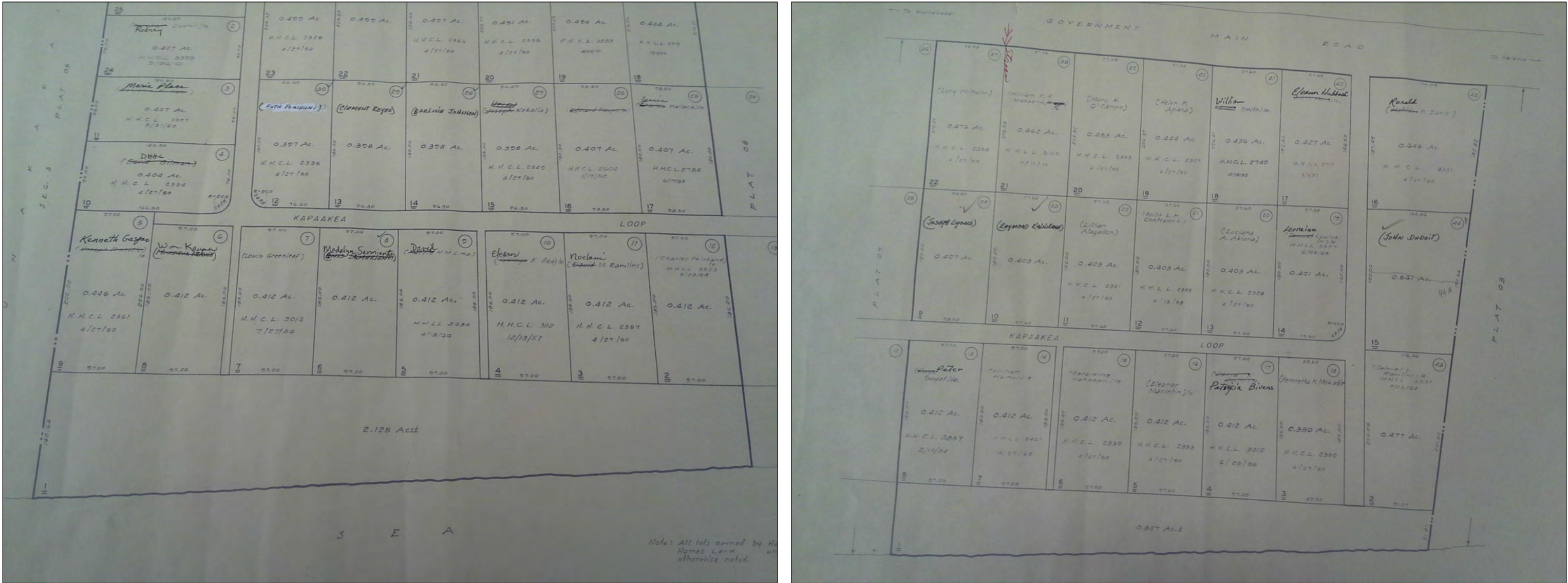
Figure A.1: Plat map dated 7/21/1950 of Kapa'akea western half of the subdivision (Tax Maps Bureau & Survey Department).

Figure A.2: Plat map dated 7/21/1950 of Kapa'akea eastern half of the subdivision (Tax Maps Bureau & Survey Department).

¹ Each map lists the length of a shoreline access path and a drainage easement between the central roadway (Kapa'akea Loop) and the coastline.

Submerged Land and Buffer Strips:

Another way to visualize shoreline change at Kapa‘akea is to compare the aforementioned maps to the two plat maps shown below (Figures A.3 and A.4). The maps below are on file in DHHL offices in Moloka‘i. They have the same date as the above (7/21/1950), but are labeled as from the Taxation Maps Bureau, Territory of Hawai‘i. As is apparent, parcel 1 fronts the entire Kapa‘akea subdivision on the maps below. The western side of parcel 1 is 140.64 feet wide, comprising a 2.125-acre portion of land. The eastern side of parcel 1 is 51.27 feet wide, comprising a 0.827-acre portion of land. If the measurements listed below accurately reflect the shoreline’s location at the time they were drawn, it would suggest the shoreline has retreated nearly 66 feet on the parcel’s western extent and around 51 feet on its eastern extent equating to a loss of ~3 acres of land fronting the subdivision. If parcel 1 did exist, then some of the beneficiary leases makai of Kapa‘akea Loop may not have extended to the ocean. As such, parcel 1 may have served as a buffer strip similar to the DHHL owned buffer strips fronting beneficiary lots in Kamiloloa and One Ali‘i subdivisions.



Figures A.3 & A.4: Plat maps west and east dated 7/21/1950 of a 3.052-acre parcel (#1) fronting the Kapa‘akea subdivision with a somewhat “wavy” makai boundary (Tax Maps Bureau & Survey Department).

To the east of Kapa'akea is the One Ali'i-Kamiloloa subdivision. Its plat maps are numbered M54002 and M54006 by Maui County. For plat M54002, Figure A.5 illustrates that over 33 years, between 1934 and 1967, the shoreline accreted between 50 to 182 feet. This accretion occurred in front of three parcels situated between the Hotel Moloka'i and the Kaloko'eli fishpond on its eastern, up drift side (Taxation Maps Bureau, 6/26/1934, Dwg # 2090, TMKs (2) 5-4-002).

Parcel 5, adjacent to the fishpond, gained ~ 0.83 acres along ~250 feet of frontage (Figure A.5). Added sediment expanded the lot by 136 feet along its eastern boundary to nearly 183 feet along its western boundary where it abuts the fishpond wall. The accretion registered in front of these lots suggests a considerable amount of sediment transport in the down drift direction over the past 85 years. The sediment probably came from the east noting that there is a stream outlet up drift of the parcels.

At Kamiloloa, DHHL owns a long sliver of land that stretches 0.6 miles or about 3,200 feet from the Hotel Moloka'i (west) to the edge of the Kamehameha V Highway (east). From west to east, DHHL owns parcel 30 of 0.47 acres, parcel 29 of 0.42 acres, and parcel 26 of 0.40 acres, respectively. The plat map is dated December 17, 1941, or 78 years ago and all but parcel 30's full extent appears in Figure A.6. The map has two separate parcels (029, 030) that are owned by DHHL that extend in front, and seaward of, each of the individual lots and may have been to protect access along the shoreline (Figures A.6 and A.7). Given its length and acreage, the strip of land is estimated to be ~ 18 feet wide, on average.

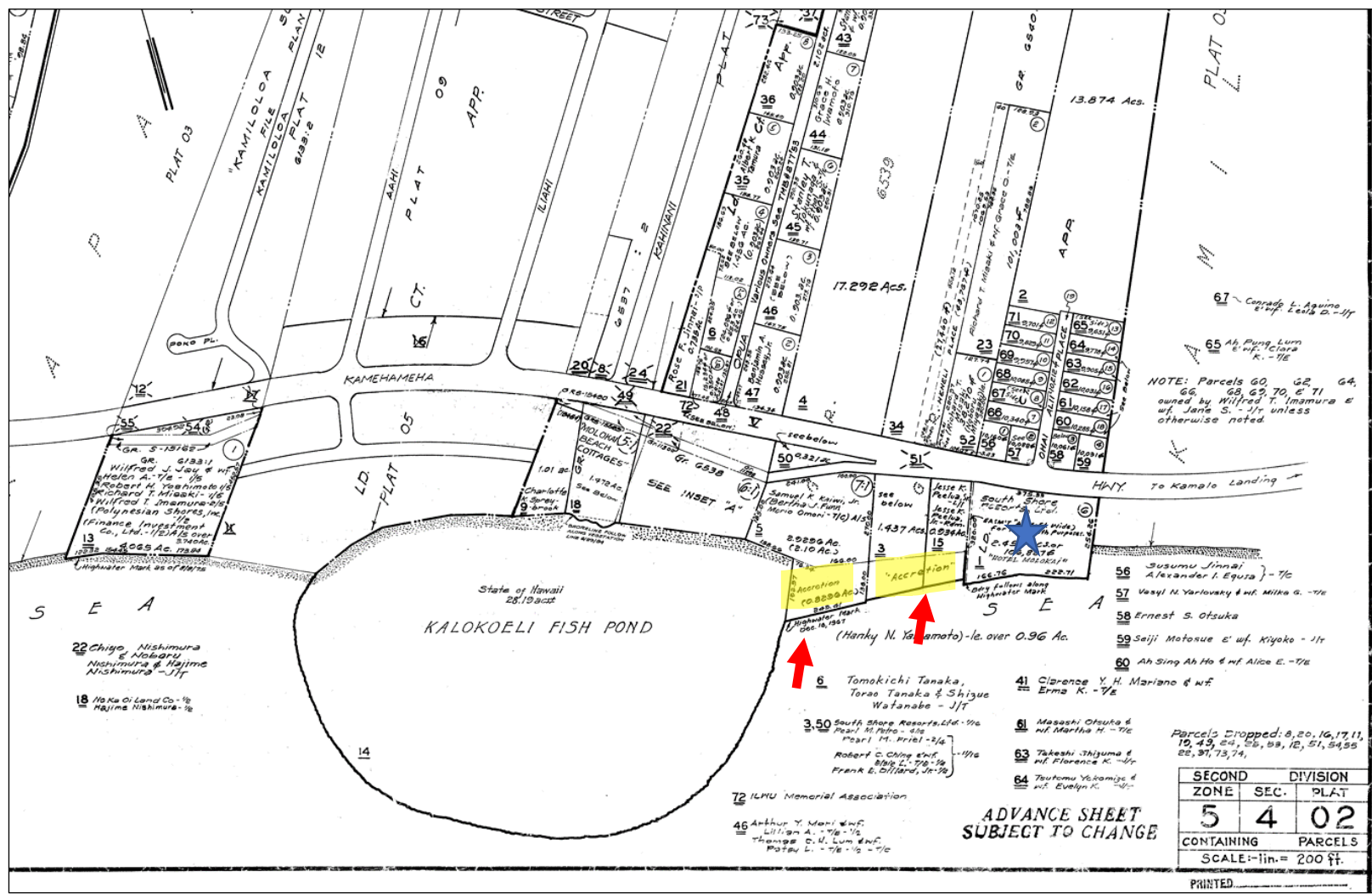


Figure A.5: Plat map dated 6/26/1934 of the Kaloko'eli Fishpond and areas of accretion down drift of the Hotel Moloka'i (Tax Maps Bureau & Survey Department).

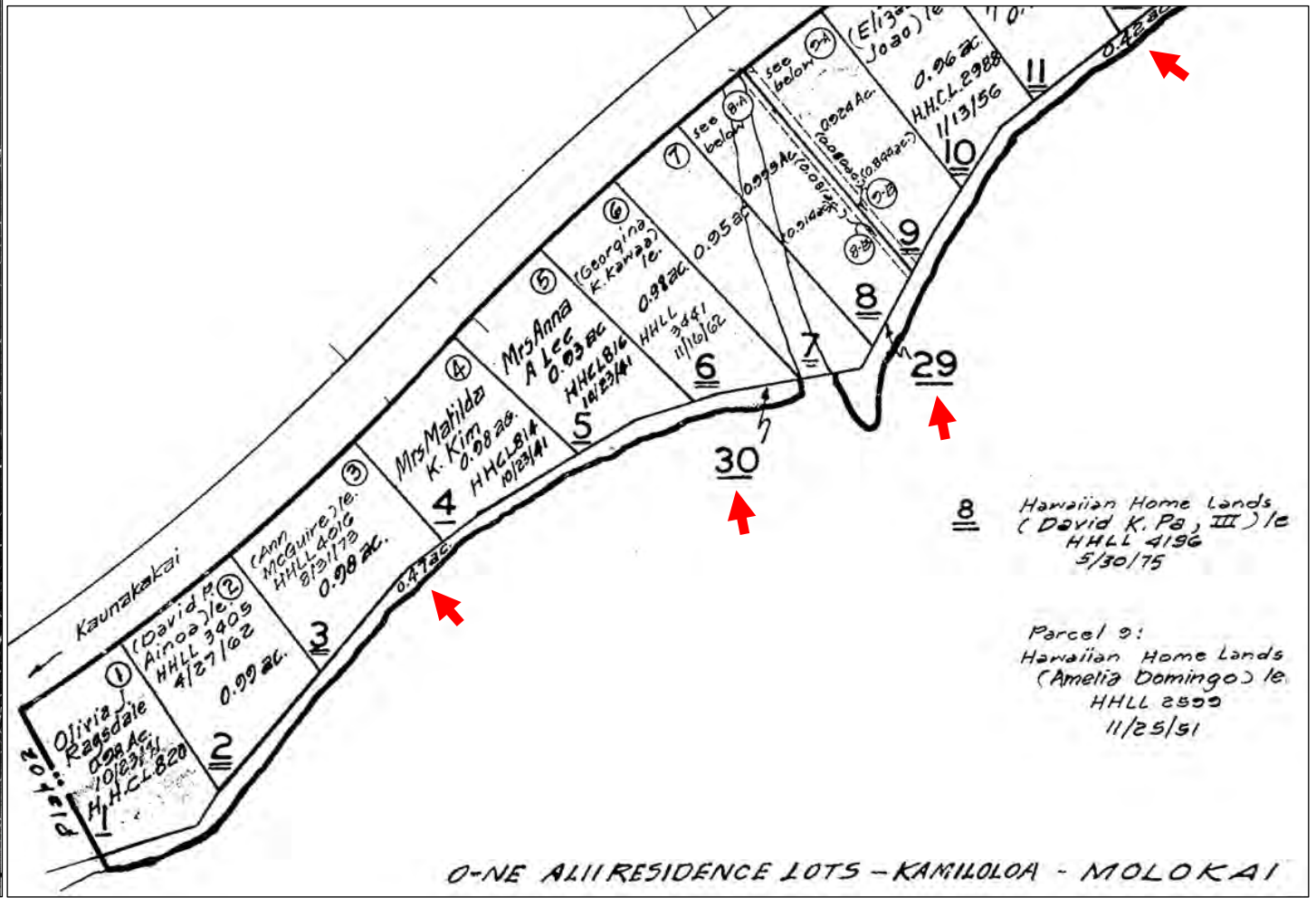


Figure A.6: Plat map dated 12/17/1941 of the Kamiloloa subdivision (Government Survey Request Map 3057).

Subdivision Notes and Characteristics:

The DHHL homestead subdivisions along the island’s coastal plain consist primarily of rectangular parcels platted for residential use.

- The One Ali’i – Kamiloloa subdivision plat maps are numbered M54006 and M54002 by Maui County. DHHL owned 14 adjacent lots that extend from the Kamehameha V Highway towards the ocean. The first drawing is dated December 17, 1941, or roughly 78 years ago. The map has two separate parcels that are owned by DHHL that extend in front, and seaward of, each of the individual lots and may serve as an access buffer along the coastline. While no lengths or widths are provided for the strips of DHHL land, their acreage is defined, and they are estimated to be 25 to 30 feet wide.
- At Kamiloloa, DHHL owns a long sliver of land that stretches 0.6 miles or about 3,200 feet from the Hotel Moloka’i (west) to the edge of the Kamehameha V. Highway (east). The 1.29-acre strip of land is estimated to be 17 to 18 feet wide on average and fronts the parcels between the homestead lots and the ocean. From west to east, DHHL owns parcel 30 of 0.47 acres, parcel 29 of 0.42 acres, and parcel 26 of 0.40 acres, respectively. DHHL also owns the balance of parcel 26 of 1.16 acre that fronts Kamehameha V Highway.
- At One Ali’i there are a dozen lots that extend from the highway towards the fishpond. However, there is a 1.54-acre strip of DHHL-owned land between the mauka edge of the Ali’i fishpond and the makai edge of the homestead lots (Taxation Maps Bureau, 12/17/1941, Dwg # 3551, TMKs (2) 5-4-006). Over 33 years, between 1934 and 1967, the shoreline accreted between 50 to 182 feet in front of three parcels situated between the Hotel Moloka’i and the Kaloko’eli fishpond (Taxation Maps Bureau, 6/26/1934, Dwg # 2090, TMKs (2) 5-4-002).
- Historically, there was a salt marsh fed by two gulches and the ocean where the Kapa’akea subdivision now exists. Based on an American Sugar Company map circa 1900’s, a railway line to Kawela was parallel and just makai of the Kamehameha V Highway, abutting the salt marsh that is now the Kapa’akea homestead lots. Ash from Kaunakakai’s trash incinerator was allegedly placed as fill in the marsh ([Nancy McPherson, personal communication January 31, 2019](#)). After World War II, and in the 1950’s, the marsh was filled to make the land for the Kapa’akea subdivision (ibid.). At one juncture, commercial interests attempted to fill portions of the 23-acre Koheo Wetland leading to citizen action that prevented development and resulted in the wetland’s undeveloped status ([Aleone Gibbons personal communication, January 31, 2019](#)).
- The two plat maps that comprise the Kapa’akea subdivision are numbered M54007 & 008 by Maui County. The drawings for both plat maps are dated July 21, 1950, or roughly 70 years ago (Taxation Maps Bureau, Dwg # 3978 & 3979). The 45-lot residential subdivision is organized around a loop road with fifteen of the lots being oceanfront. Originally, according to plat maps, circa 1950, at DHHL offices in Kaunakakai, parcel #1 of the subdivision was situated between the ocean and the individual homestead lots. The platted parcel stretched the entire length of the subdivision when it was drawn. On its eastern end, parcel #1 was ~50 feet wide and its western end was ~140 feet wide. Its makai boundary was considerably further offshore when the original subdivision was drawn compared to today. However, parcel #1 does not show up on Maui County’s current maps of the subdivision. The makai boundary for 11 of the 15 lots is irregular, which is indicative of a seaward boundary reflective of the shoreline or seaward boundary. On the eastern end of the subdivision, four lots (parcels 2, 3, 4 and 5) have rectangular boundaries. Further archival research would be needed to accurately determine the status of parcel 1, and the shoreline boundaries for the oceanfront lots, which may necessitate a review of the actual lease documents or metes and bounds descriptions of the parcels.

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

March 21 & 22, 2022

TO: Chairman and Members, Hawaiian Homes Commission

FROM: Andrew Choy, Acting Planning Manager

SUBJECT: G-3 For Information Only – The Importance of Land Stewardship in the Face of
Climate Change in Hawai'i

This is a presentation only.

ITEM NO. G-3 Dummy

STATE OF HAWAI'I
DEPARTMENT OF HAWAIIAN HOME LANDS

March 21, 2022

To: Chairman and Members, Hawaiian Homes Commission
Thru: Andrew Choy, Planning Program Manager
From: Pearlyn Fukuba, Planner *plf*
Subject: For Information Only - Status Update on Plan
Implementation in the Waimānalo Region

Recommended Action

None; for information only.

Background

By request of the Chairman, the Planning Office provides the HHC with a status report on prior policies and/or plans that affect lands and homestead communities where the HHC conducts its monthly community meeting. For March 2022, the Planning Office will be providing an update on the DHHL plans related to the region of Waimānalo, O'ahu.

Discussion

EXISTING PLANS & IMPLEMENTATION STATUS

O'ahu Island Plan Policies Related to Waimānalo

The purpose of each DHHL Island Plan is to:

- (1) Provide a comprehensive resource for planning and land management purposes;
- (2) Establish Land Use Designations(LUD)for all land holdings to promote orderly land use development and efficient development of infrastructure systems; and
- (3) Identify island-wide needs, opportunities, and priorities.

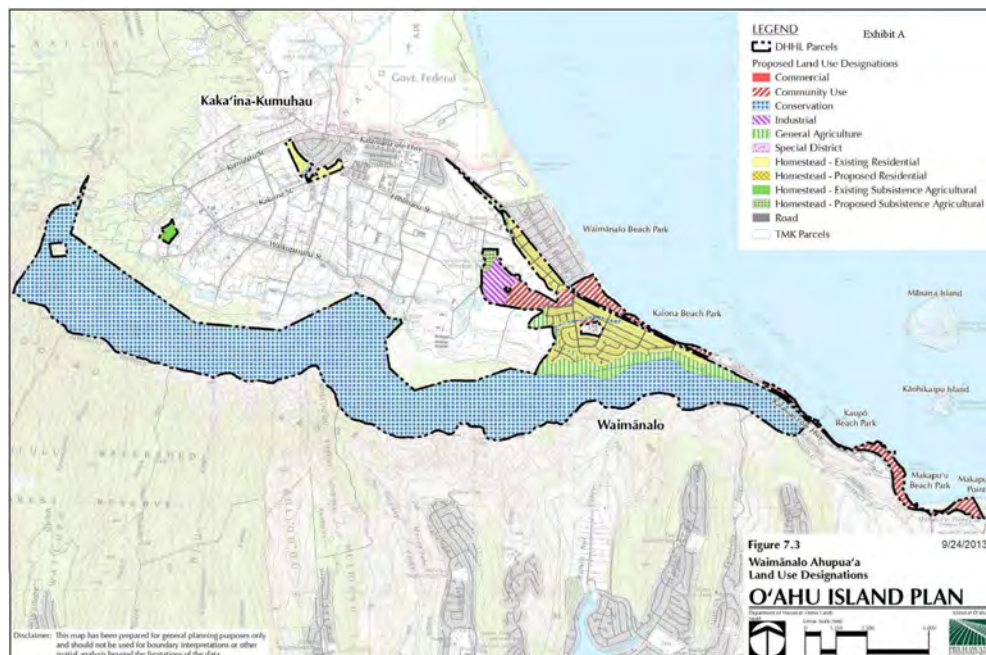
The O‘ahu Island Plan was adopted by the HHC in 2014. The Island Plan delineated four planning regions or moku for the island of O‘ahu: Wai‘anae, ‘Ewa, Kona, and Ko‘olaupoko.

The 2014 O‘ahu Island Plan identifies the following land use designations and acreage amounts for Waimānalo. In Table 1, columns two and three (colored green) report the amount of LUD acres in Waimānalo. Columns three and four (colored yellow) provide a comparison of Waimānalo LUD acres to the amount of LUDs acres on O‘ahu. Map 1 illustrates the location of the LUDs.

Table 1: Waimānalo LUD Acres

2014 O‘ahu Island Plan Land Use Designation (LUD)	Acres in Waimānalo	Percent of LUD In Waimānalo Region	Acres on O‘ahu	Percent of LUD on O‘ahu
Residential	210	11%	1650	13%
Subsistence Agriculture	15	1%	220	7%
Industrial	35	2%	680	5%
General Agriculture	100	5%	905	11%
Community Use	120	6%	310	39%
Conservation	1,430	75%	2605	55%
TOTAL	1,910	100%	6,370	29%

Map 1: Waimānalo LUD Map



O'ahu Island Plan Implementation Status

Since its recent adoption in July 2014, no suggested land use amendments or updates to the Waimānalo region are being considered at this time in the O'ahu Island Plan.

In 2018, DHHL completed the process to acquire a 50-acre parcel commonly known as "Wong Farm" from the Department of Land and Natural Resources. DHHL submitted a subdivision application to the City and County of Honolulu's Department of Planning and Permitting for the purposes of conveyance and has contracted a consultant to conduct the planning and design to develop additional homestead opportunities for O'ahu Island waitlist applicants.

The Waikupanaha parcel, also commonly referred to as the "Char" property (TMK 4-1-008:095) was returned to DHHL's inventory. Per the O'ahu Island Plan, the parcel is designated for subsistence agricultural homesteading. However, due to the findings of an Environmental Assessment (2020), the project was terminated due to poor soil conditions and high costs.

Waimānalo Regional Plan

The Waimānalo Regional Plan was first adopted by the HHC in August 2008 and subsequently updated in November 2011. Outreach with Waimānalo beneficiaries through the planning process identified the following priority projects:

- (1) Emergency Evacuation Plan
- (2) Hawaiian Cultural Learning Center
- (3) Honolulu Police Department Satellite Office
- (4) Develop Affordable & Obtainable Homestead Alternatives in Waimānalo
- (5) Waimānalo Business Park (Industrial / Technology)

Waimānalo Regional Plan Implementation Status

Table 2 Priority Projects identifies the "project champion" as well as summarizes the status of each regional plan priority project.

Table 2: Priority Projects

PRIORITY PROJECTS	PROJECT CHAMPION	STATUS
Emergency Evacuation Plan	Hawaii Hazards Awareness and Resilience Program (HHARP)	In-Progress. HHARP, a program of the state Civil Defense Department, was created to help communities prepare to be self-reliant during and after natural hazard events. Waimānalo is one of the recognized communities that completed HHARP.
Hawaiian Cultural Learning Center	Halāu Nā Pualei O Likolehua	Not Started. In 2016, DHHL completed a rock fall mitigation feasibility study for the same site that the halāu requested a long-term use agreement. The rock fall mitigation measures which were suggested in the study are exceedingly expensive, \$30M plus, making homestead use of the site not financially viable at this time. Any party proposing a non-homestead use for the site would need to cover cost of rock fall mitigation.
Honolulu Police Department Satellite Office	State Rep. Chris Lee & HPD	Not Started. Funding for the project did not materialize. However, DHHL continues to pursue health and safety improvements for the homestead community. In 2020, the Hawaii State Legislature appropriated \$800,000 in Capital Improvement Funds for Nakini and Huli Streets traffic calming measures. DHHL formulated and presented improvements plans to the community in February 2022 and will start to implement Phase I, which will include installation of an asphalt

		<p>speed table (raised cross walkwalk) at the intersection of Nakini and Ala Koa Streets. Delinators will also be installed on the west side of the speed table to serve as a bulb out and shorten exposure distance for crossing pedestrians and physically restrict illegal parking.</p>
Support & Develop Affordable & Obtainable Homestead Alternatives in Waimānalo	DHHL	<p>In-Progress. This issue continues to be a priority for beneficiaries. The DHHL has been analyzing various affordable housing alternatives, including rentals as well as providing financial literacy services via its HALE program.</p> <p>On August 10, 2019, DHHL offered 15 vacant lots within the Kaka`ina Subdivision to beneficiaries on the Waimānalo waitlist. The vacant lot awards provide future lessees an opportunity to build a home that meets the needs of their budget and family structure. Construction by beneficiary families are in various stages.</p> <p>The DHHL completed a draft environmental assessment for the development of subsistence agriculture in Waikupanaha that will promote self-sufficiency through farming opportunities. The HHC issue a Finding of No Significant Impact determination in March 2020.</p>

Waimānalo Business Park (Industrial/Technology)	Waimānalo Hawaiian Homestead Association (WHHA)	In Progress. WHHA completed construction of its Community Technology, Education and Employment Center(CTEEC). The CTEEC is Phase IV of the WHHA's Ka Ho'oilina Na Kūhiō Community Center.
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DHHL Water Policy Plan Implementation Status

In Windward O`ahu, DHHL has an existing water reservation of 0.124 mgd for its foreseeable future needs. The Honolulu BWS is providing DHHL Waimānalo homestead residents with water on its system.

Recommendation

None; for information only.

STATE OF HAWAII

DEPARTMENT OF HAWAIIAN HOME LANDS

March 21, 2022

TO: Chairman and Members, Hawaiian Homes Commission
FROM: Rodney K. M. Lau, Administrative Services Officer
SUBJECT: Transfer of Hawaiian Home Receipts Money at the End
Of the Third Quarter, FY 2022



RECOMMENDED MOTION/ACTION

That the Commission approve the transfer of the entire receipts deposited in the Hawaiian Home Receipts Fund as of March 31, 2022 to the Hawaiian Home General Loan Fund.

DISCUSSION

Section 213 (g) of the Hawaiian Homes Commission Act, 1920, as amended, reads in part as follows:

"(3) Hawaiian home receipts fund. All interest moneys from loans or investments received by the department from any fund except as provided for in each respective fund, shall be deposited into this fund. At the end of each quarter, all moneys in this fund may be transferred to the Hawaiian home operating fund, the Hawaiian home administration account, the Hawaiian home trust fund, and any loan fund in accordance with rules adopted by the department."

Section 10-3-52(b) of Title 10, DHHL Administrative rules, provides that:

"If the Commission fails to approve a plan for transfer, all moneys in the Hawaiian home receipts fund shall be transferred at the end of that respective quarter as follows:

- (1) Nine per cent to the operating fund; and
- (2) Ninety-one per cent to the general loan fund."

As of March 31, 2022, the estimated balance in the Hawaiian Home Receipts Fund will be approximately \$1,300,000. Based on the

on-going loan requirements for fiscal year 2022, it is recommended that cash receipts in the Hawaiian Home Receipts Fund for the quarter ending March 31, 2022 be transferred to the Hawaiian Home General Loan Fund.