

# ITEM G-3 EXHIBIT A

STATE OF HAWAII

DEPARTMENT OF HAWAIIAN HOME LANDS

May 30, 2019

To: Chairman and Members, Hawaiian Homes Commission

Thru: Andrew H. Choy, Acting Planning Program Manager *AC*

From: Halealoha Ayau, Water Resource Management Specialist

Subject: Acceptance of Beneficiary Consultation Report on a Water Reservation Related to the East Maui Irrigation System's Request for Water Lease from the Department of Land and Natural Resources (DLNR), and Reauthorize the Chairman to Formally Request a Related Water Reservation from the Commission on Water Resource Management for Hawaiian Home Lands on Maui

## RECOMMENDED MOTION/ACTION

That the Hawaiian Homes Commission (HHC):

1. Accept the Beneficiary Consultation Report as the official record of beneficiary issues, questions, concerns, and comments regarding the East Maui Irrigation (EMI) Request for Water Lease from the Department of Land and Natural Resources (DLNR) and DHHL's proposed water reservation relating to the same; and
2. Reauthorize the Chairman to formally request a water reservation from the Commission on Water Resource Management for Hawaiian Home Lands in Kēōkea, Waiohuli, and Pūlehunui, supplementing and clarifying the authorization given in Action 1 of item G-3 taken on August 10, 2015; and
3. Take other actions as necessary to effectuate these requests.

## DISCUSSION

This discussion is broken into three major sections which discuss 1. The legal context of the EMI system and water leases; 2. The method for calculating and basis for requesting water reservations for these lands; and 3. The report from the Beneficiary consultation.

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## 1. The legal context of the EMI system and water leases

Each section itself is comprised of different elements. To describe the legal context of the EMI system which is essentially to understanding the reasons for requesting water reservations, the following are reviewed:

- a. The EMI system
- b. System ownership
- c. Legal requirements related to diverting water
- d. Water leases and DHHL reservations

### 1.a. The EMI System

The EMI system diverts waters into a 75-mile long network of tunnels, ditches, flumes, and reservoirs that spans across significant parts of East, Upcountry, and Central Maui. The system until recently diverted an average of 165 million gallons a day (mgd), and up to 450 mgd. It is the largest water diversion system in Hawai'i.<sup>1</sup>

The streams and the waters in them diverted originate largely on Crown and Kingdom lands taken by the Republic of Hawai'i, ceded to the US Federal Government at annexation, and transferred to the State of Hawai'i via the Admissions Act.<sup>2</sup> At least 27 named streams are diverted, including Honopou, Hanehoi/Puolua (Huelo), Waikamoi, Alo, Wahinepe'e, Puohokamoa, Ha'ipua'ena, Punalau/Kōlea, Honomanū, Nuaailua, Pi'ina'au, Palauhulu, 'Ōhi'a (Waianu), Waiokamilo, Kualani (Hamau), Wailuanui, Waikani, West Wailuaiki, East Wailuaiki, Kopiliula, Puaka'a, Waiohue, Pa'akea, Waia'aka, Kapaula, Hanawī, and Makapipi.<sup>3</sup> See Figure 1, below.

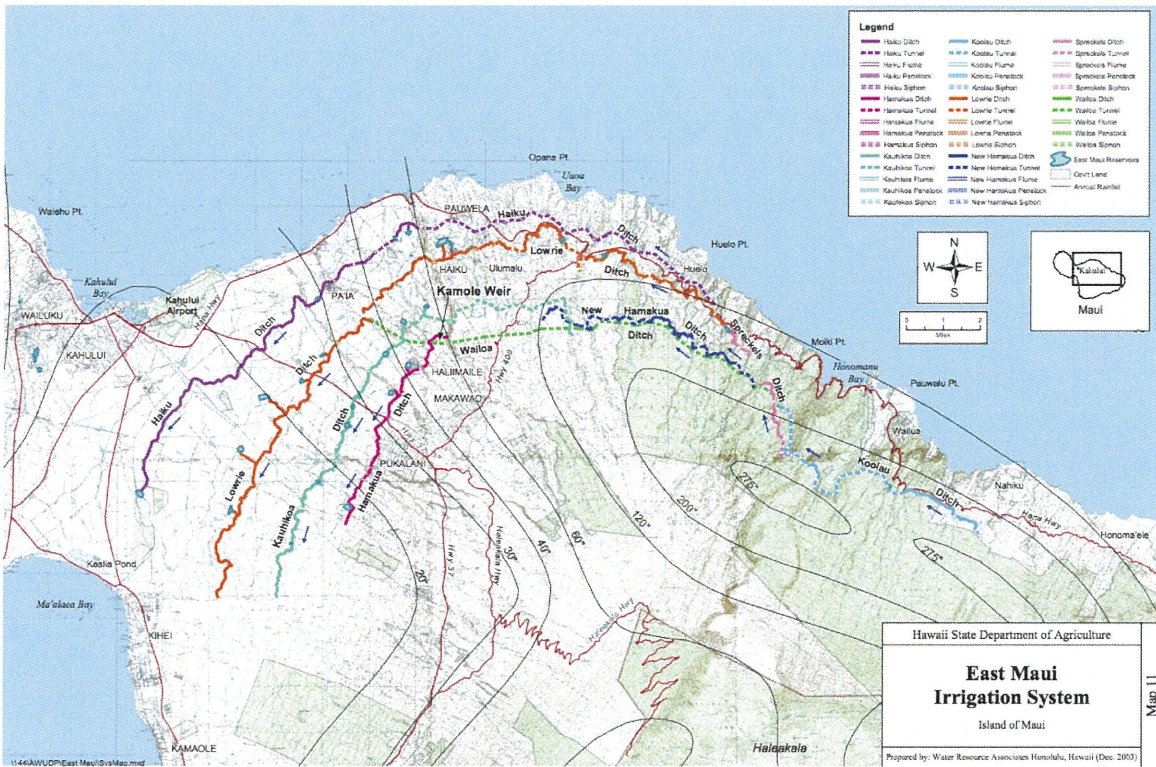
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<sup>1</sup> For comparison, the Honolulu Board of Water Supply in their Fiscal Year 2014 delivered approximately 139.2 million gallons of potable water per day and 10.8 million gallons of non-potable water per day to roughly one million customers on O'ahu. (Honolulu Board of Water Supply Fiscal Year 2014 Report, at 27).

<sup>2</sup> Van Dyke, John. 2008. Who owns the crown lands of Hawai'i? Honolulu: University of Hawai'i Press.

<sup>3</sup> Diacriticals for these stream names follow the use of Hawai'i Board on Geographic Names.

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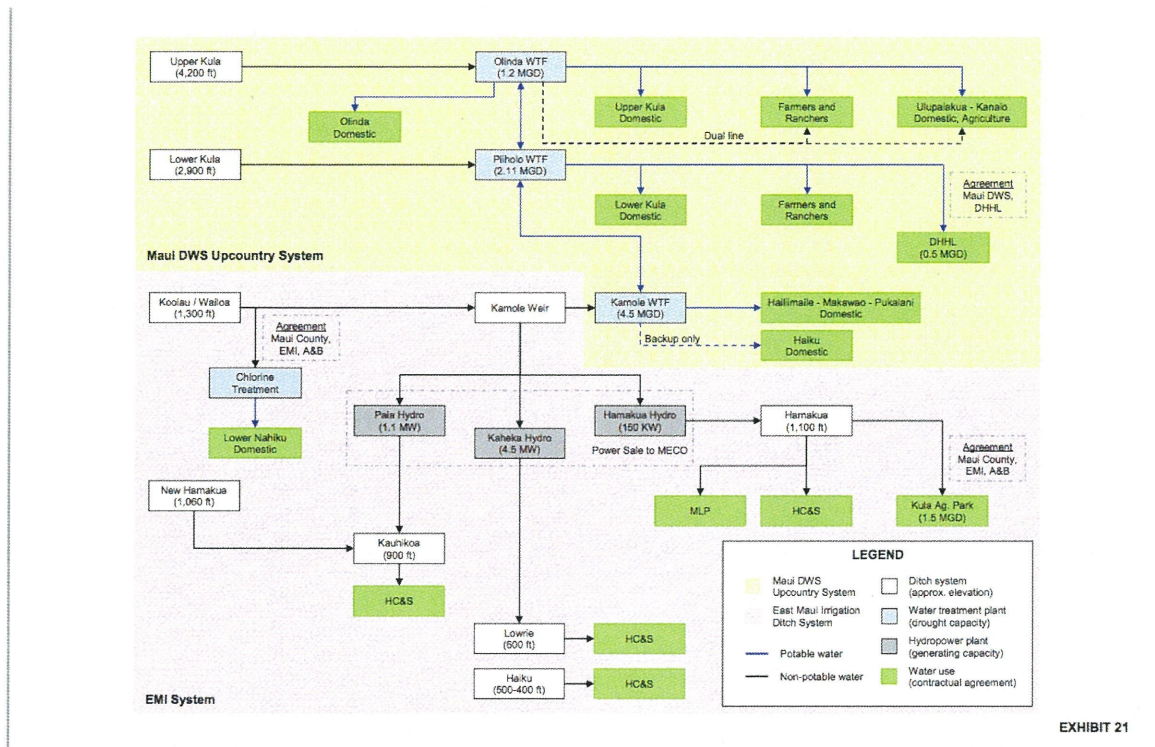


**Figure 1: East Maui Irrigation System.** (Source: December 2003. Water Resource Associates. "Hawai'i Department of Agriculture Map 11")

These streams historically provided water for kalo irrigation, domestic purposes, and supported traditional and customary uses in Hawaiian communities on East Maui. The diverted waters in the EMI system provide or have provided water to Central Maui, including Pūlehunui lands; the Maui County Department of Water Supply (DWS) Upcountry water system, including Kēōkea and Waiohuli homesteads, and others.<sup>4</sup> These diversions are subject to the concerns of system owners as well as state control and regulation as described immediately below.

<sup>4</sup> State of Hawai'i Agricultural Water Use Development Plan, at 136-37 (Dec. 2003).

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**Figure 2. CWRM Simplified Schematic of the Maui DWS Upcountry System, EMI System, and System Users (Source: Beneficiary)**

### 1.b. System ownership

Historically the system was owned by Alexander & Baldwin (A&B). In late 2018, Mahi Pono, a farming venture between Pomona Farming and Canada's Public Sector Pension Investment Board, purchased 41,000 acres of land from A&B and announced plans for a creation of a joint venture to own and manage EMI.<sup>5</sup> The ownership of the physical infrastructure is unclear; previous long term leases of water may have required the reversion of ditches, even on privately owned land, to the Territory / state upon conclusion of the lease.

### 1.c. Legal requirements related to the EMI System

The amount of water currently diverted by the system is not readily determined. The maximum quantity of water that can possibly be diverted in the future by this system is also unknown and will be lower than the older historic flows due to recent state administrative, judicial, and legislative actions. Most significantly, on June 20, 2018, the Commission on Water

<sup>5</sup> <https://www.businesswire.com/news/home/20181220005936/en/Mahi-Pono-Purchase-HCS-Lands-Helps-Ensure>

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Resource Management (CWRM) adopted a final Decision and Order setting Interim Instream Flow Standards for the twenty-seven above mentioned streams. This action ordered the full restoration of some streams and partial restoration of others, and as a result reduces the available flow for the system compared to previous conditions where multiple streams were completely dewatered. Revision of the IIFS resolved some portions of more than two decades of litigation over these diversions, and was a precondition of the state considering issuing a new long-term lease of water diverted by this system.

Long term leases of water must issued by the Board of Land and Natural Resources (BLNR) under the authority of HRS 171-58; they may also issue shorter term Revocable Permits (RPs) for the same use. In January 2016, litigation related to the continued issuance of RPs for years resulted in a First Circuit court ruling by judge Rhonda Nishimura that the continued issuance of RPs was illegal for this system. In response, in 2016, the Legislature in 2016 amended HRS Ch. 171-58 to allow the continued issuance of RPs while long term leases were being pursued for no more than three years, which means the last possible RP would expire by December 31, 2019. In the 2019 Legislative session, various extensions to this deadline and other modifications of 171-58 were proposed, but none were passed; as a result, the three-year modification to the statute will revert to what it was prior to 2016. While this will not necessarily negatively affect other water RPs in Hawai'i, it may directly affect this system.

### 1.d. Water leases and DHHL reservations

A&B had previously applied to the Board of Land and Natural Resources (BLNR) for EMI to seek a new 65 year water lease under the requirements of Chapter 171-58, Hawaii Revised Statutes, an application that is still pending and is being pursued by EMI despite the change in ownership. As part of that water leasing process, Chapter 171-58(g) states:

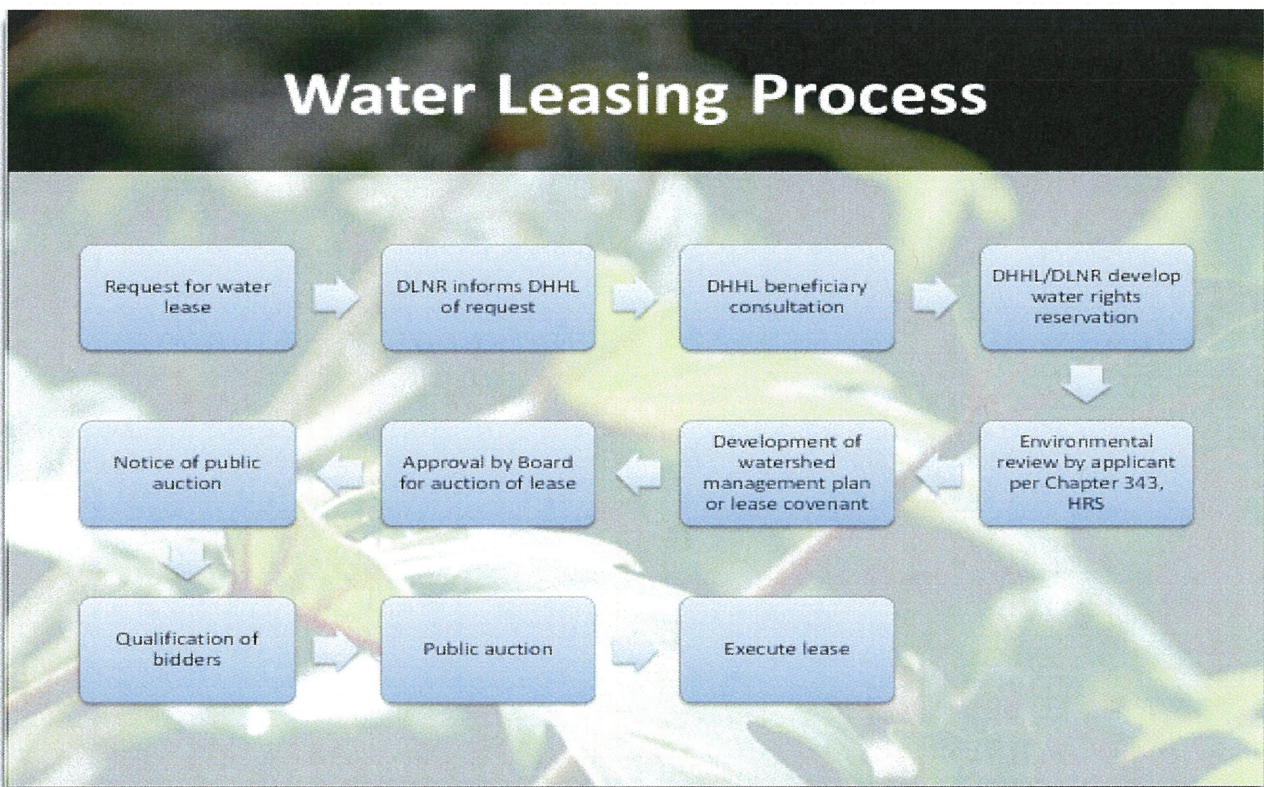
*"The department of land and natural resources shall notify the department of Hawaiian home lands of its intent to execute any new lease, or to renew any existing lease of water rights. After consultation with affected beneficiaries, these departments shall jointly develop a reservation of water rights sufficient to support current and future homestead needs. Any lease of water rights or renewal shall be subject to the rights of the department of Hawaiian*

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*home lands as provided by section 221 of the Hawaiian Homes Commission Act."*

Until 2017, this particular provision had never been implemented since its creation in 1990. In 2017, working with DLNR and the Hawai'i Electric Light Company on the Wailuku River (Hilo) leasing process, DLNR and DHHL piloted implementation. Staff of both departments determined that "beneficiaries" referred exclusively to DHHL beneficiaries, and DHHL staff recommended that consultation be completed in accordance with the DHHL Beneficiary Consultation Policy. Then, following adoption of a Beneficiary Consultation Report and an authorization to the Chairman to seek a reservation of water by CWRM, CWRM could act on a reservation request related to the possible lease.

Subsequent to the adoption of a water reservation related to the system for DHHL, other steps in the leasing process can be pursued. These are presented in Figure 3, below.



**Figure 3. Water Leasing Process - Chapter 171-58, HRS** (Source: Beneficiary Consultation DLNR Presentation)

The calculation of actual water needs for DHHL that can be the basis of the Department's reservation request to CWRM are based on DHHL land use designations and county and other water system

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standards. The specific manner in which staff calculated these is presented below.

### 2. DHHL Land Use Plans and Water Needs related to the EMI System<sup>6</sup>

DHHL has received water reservations from CWRM in non-designated areas since 2015 based on a consistent methodology. Whether taking data as contained in the current State Water Projects Plan (SWPP) or based on more current information, staff and consultants first identify the land use designations existing or proposed in Island, Regional, and Project Plans and the acreages involved. They then apply appropriate water system standards as contained in water system standards or other state plans or applicable documents. Finally, existing allocations, water credits, or other factors are considered.

#### 2.a. Lands at Kēōkea and Waiohuli (Upcountry Maui):

*Land Use Designations and areas.* The Department holds in trust 6,112 acres of the Upcountry Kula region lands on the slopes of Haleakalā at Kēōkea / Waiohuli: (1) Kula Residence Lots subdivision; (2) Waiohuli Undivided Interest subdivision; and (3) Kēōkea Farm Lots.<sup>7</sup> The Kēōkea / Waiohuli subdivision consists in 320 residential lots and 66 Kēōkea Farm Lots and the Department has long range plans to construct another 1,100 residential lots below this subdivision. Kēōkea/ Waiohuli are part of the Department's Upcountry planning region. A key community concern in the regional plan was water development. Land use designations are tallied in Table I, below.

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<sup>6</sup> DHHL is not seeking here to reserve water related to its parcels of land in Ke`anae and Wailuanui in East Maui as was anticipated in action related to item G-3 of August 10, 2015. At that time water was being diverted by the EMI system from those east Maui lands, and the DHHL would have needed to seek IIFS amendments or reservations to ensure water availability there. However, the streams feeding those `āina were ordered fully restored by the 2018 CWRM actions.

<sup>7</sup> Other lands in this broad area of Maui - including parcels near Ulupalakua, Makena, and the lands at Kahikinui - cannot be foreseeably provided water from the EMI system due to distance and infrastructure constraints.

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LAND USE DESIGNATION	TOTAL ACRES
Residential	1,160
Subsistence Agriculture	170
Community Use	69
Conservation	773
General Agriculture	3,940
<b>Total</b>	<b>6,112</b>

**TABLE I: KĒŌKEA & WAIOHULI HHC LAND USE DESIGNATIONS**

*Existing water allocations.* The Department's Kēōkea/Waiohuli developments currently receive water from EMI's diversions via its 1997 water credits agreement with DWS, but EMI's diversions also affect the Ha'ipua'ena, Waiakamoi and Honomanu streams, which feed into the Upper Kula System. However, there are no allocations for existing farm lot nonpotable needs, or general agriculture non potable needs.

The SWPP (page 4-26) identified 809,700 in potable needs and 578,000 in non-potable needs - for existing and planned lots. However, because the timeframe for the SWPP is the next twenty years, the time frame specified in the water code for reservations is "forseeable" needs (HRS 174C-101(a)). As a result, there is no existing reservation yet for the general agriculture designated lands in this area.

Based on the SWPP, in September 2018 CWRM did reserve 2.5471 mgd of groundwater in this area from the Kamaole aquifer, based on Appendix B of the SWPP. The breakdown by tract was:

- 1.7340 for "Pu`unene" (Pūlehunui)
- 0.4608 for Kēōkea / Waiohuli
- 0.3489 for Kēōkea / Waiohuli Phase 1-4
- 0.0034 for lands Ulupalakua

Taking into account these existing reservations and unmet needs, staff believe the following table reflects the future water needs that could be met by waters collected and distributed by the EMI System at Kēōkea / Waiohuli.

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KĒŌKEA-WAIOHULI	POTABLE	NON-POTABLE
FROM SWPP	809,700	578,000
ALREADY RESERVED	813,000	
3,940 ACS. GEN. AG @2500 <sup>8</sup>		9,850,000
ADJUSTED TOTALS	-3,300 <sup>9</sup>	10,428,000

**TABLE II: KĒŌKEA & WAIOHULI REMAINING NEEDED RESERVATIONS**

### **2. b. Pulehunui (Central Maui):**

*Land Use Designations and areas.* The Department holds in trust 831 acres of lands at Pulehunui, also known as Pu`unene, in Central Maui. These lands were acquired in two different transactions from the Department of Land and Natural Resources (DLNR) as part of the larger settlement over previous trust breaches. These lands had designations placed on them in DHHL's Maui Island Plan (MIP) approved by HHC in 2004, and a subsequent Beneficiary Consultation Report accepted by the HHC. More recently, these lands were the subject of a master planning effort. Based on that last document, these lands have the following land use designations summarized in Table III, below.

LAND USE DESIGNATION	TOTAL ACRES
General Agriculture	546
Industrial	101
Commercial	184
Total	831

**TABLE III: PŪLEHUNUI LAND USE DESIGNATIONS**

As presented in Table II, above, the CWRM in September 2018 reserved ground water for DHHL lands in Pūlehunui. As was the case with reservations from the same aquifer for Kēōkea / Waiohuli, because they relied on the SWPP as the basis for

<sup>8</sup> In other areas such as Waimea Kaua'i, DHHL based its demands for general agricultural water on the water duty in the most recent version of the state's Agricultural Water Use and Development Plan. That figure of 3,400 gallons per acre per day for diversified agriculture is a useful planning number absent other information. In this area, the CWRM made specific findings (Finding of Fact number 697) as to the water demand for lands that could only be irrigated with stream water as part of the IIFS decision and order. Based on that, we use that 2,500 gallons per acre per day figure here.

<sup>9</sup> As described above the DHHL lands at Ulupalakua are not included in this reservation; the 3,300 gallons per day are left out of calculations of what has been reserved.

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calculating needs and the timeframe for that document is the next twenty years, the time frame specified in the water code for reservations is "foreseeable" needs (HRS 174C-101(a)), and water was not allocated for general agricultural lands.

	Potable	Non-Potable
Pūlehunui Demand	1,734,000	1,027,510
Already Reserved	1,734,000	
Adjusted Total	0	1,027,510

**TABLE IV: PŪLEHUNUI REMAINING NEEDED RESERVATIONS**

*Combined water needs from the EMI System.* Based on the above, staff calculated that a request for a reservation related to the EMI system for a combined **11,455,510 gpd**. That information was presented to beneficiaries and others during the beneficiary consultation process described next.

### 3. BENEFICIARY CONSULTATION

HRS Chapter 171-58(g) requires that for DLNR and DHHL "... After consultation with affected beneficiaries, these departments shall jointly develop a reservation of water rights sufficient to support current and future homestead needs." Based on previous experience working with DLNR and the Hawai'i Electric Light Company Wailuku River (Hilo) leasing process, the Departments determined that a beneficiary consultation meeting with presentations by EMI/Mahi Pono, DLNR, and DHHL would be prudent to submit a report of findings to the Hawaiian Homes Commission to ensure that beneficiary concerns are properly documented, compiled and reported.

#### Notification

On December 10, 2018, DHHL mailed an invitation letter (see Exhibit A) to 487 Kēōkea and Waiohuli residential and agricultural lessees and 2,180 Maui Agricultural Wait List applicants with Maui zip codes for a total of 2,667 invitation letters.

Beneficiaries were invited to attend a consultation meeting on January 14, 2019 from 6:00 pm - 8:00 pm at the Paukūkalō Hawaiian Homes Community Center (655 Kaumuali'i Street, Wailuku). The meeting was held to share information on EMI/Mahi Pono farming plans and to get mana'o regarding DHHL's water needs for its lands at Kēōkea, Waiohuli, and Pūlehunui in order

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to make a water reservation as part of the process identified above.

### Beneficiary Consultation Meeting

Twenty-three people registered at the sign-in desk, but the actual attendance was estimated at approximately 35. A total of 11 individuals self-identified as beneficiaries. In addition, three DHHL staff and 2 consultants were in attendance.

The meeting presentations started with Alexander & Baldwin who shared a power point on the EMI Ditch System followed by Mahi Pono who presented its farming plans. DLNR then shared an overview of the water leasing process (Chapter 171-58, HRS). Lastly, DHHL provided the planning and land use context of its lands at Kēōkea, Waiohuli, and Pūlehunui by reviewing the Maui Island Plan, Kēōkea-Waiohuli Regional Plan and Pūlehunui Regional infrastructure Master Plan and provided its water needs context by reviewing the State Water Project Plan and CWRM groundwater reservations for Kēōkea-Waiohuli and Pūlehunui. DHHL also discussed how historically this system affected its lands at Ke'anae and Wailuanui, but stream restoration has now made formerly diverted water available to those tracts. Based on these plans and needs, DHHL reviewed the estimated water demands for the three areas and a potential water reservation amount that is proposed to be requested from the CWRM.

At the close of the presentation, the following questions were used to facilitate discussion and solicit feedback from beneficiaries:

- (1) Should DHHL's water reservation request include only non-potable uses?
- (2) Where should this water come from to meet those water needs?
- (3) Are there any water needs that DHHL did not account for? What are they?

Meeting Notes that include questions and comments raised during the meeting, agenda, handouts, invitation letter, a copy of the EMI presentation, and a copy of the DHHL presentation are presented in Exhibit A. The deadline to submit comments was set for February 14, 2019 and extended to March 4, 2019.

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### Consultation Findings & Analysis

The table below summarizes information DHHL received from all sources including:

- Questions and comments made during the Consultation Meeting (Exhibit A)
- Email comments received before the deadline for comments (Exhibit B)

DHHL's potable and non-potable water demands for its lands at Kēōkea, Waiohuli, and Pūlehunui can be met by a variety of water sources that may include but not be limited to ambient rainfall, surface water from the EMI Ditch System and ground water. These sources should account for redundancy and potential climate change (i.e. utilize both rainfall and surface water for non-potable demands, not just one or the other).

Distribution and use of these water sources can be provided in various ways that include but are not limited to water catchment systems, reservoirs, river/stream/tributary diversions, treated or grey water reuse, the existing Department of Water Supply Kula Water System, or new well development. The water reservation request may want to identify quantity, source, and where applicable, the mechanism to distribute water to DHHL Kēōkea, Waiohuli, and Pūlehunui lands.

Based on the approved plans and land uses by the Hawaiian Homes Commission, the SWPP and CWRM existing groundwater reservations, a water demand of 11,455,510 gpd of non-potable water is an adequate and foreseeable amount of water for future needs in DHHL's Kēōkea, Waiohuli, and Pūlehunui lands. There currently is no mechanism to base water demands and reservations on the number of applicants on the waitlist.

The State has yet to implement Chapter 171-58(g) since its promulgation and establish a reservation for DHHL in the course of converting a revocable permit to a water lease. This is only the second conversion to proceed to beneficiary consultation following the HELCO Wailuku River Hydroelectric Plant project in Hilo. DHHL will work closely with both DLNR and EMI/Mahi Pono in this water lease process to ensure that DHHL's rights to water are protected and that revenues generated from the water lease meet constitutional mandates. Similar processes with other permit to lease conversions will continue to be forthcoming, so aggressively asserting DHHL's rights to water is essential and a requirement per the HHC's Water Policy Plan of 2014.