



HAWAIIAN HOME LANDS  
HAWAIIAN HOMES COMMISSION  
DEPARTMENT OF HAWAIIAN HOME LANDS

# **Water System 101: TMF Capacity**

## **Hawaiian Homes Commission Item G-1**



# Agenda

- **Purpose**
- **Background**
  - What is a Water System?
  - DHHL owns 4 water systems
  - What is TMF Capacity?
- **How is DHHL doing in TMF ?**
  - Highlights and Accomplishments
- **Next Steps: Work Plan Priorities**

# Purpose

## Why are we talking about Water Systems?

### Because:

- HHC and DHHL own 4 water systems
  - Moloka'i, Anahola, Kawaihae, Pu'ukapu
- USEPA requires systems have "TMF" Capacity
- USDA Rural Development funding condition:  
"governing body must possess the necessary TMF Capacity . . . and receive routine training"

Note: USDA obligated \$30M to DHHL



# HHC and DHHL Kuleana

**Water system owners are responsible  
to provide access to clean, safe  
drinking water for the protection of  
public health and safety**

# HHC Water Policy Vision

Our vision is that there will be adequate amounts of water and supporting infrastructure so that homestead lands will always be usable and accessible, to enable us to return to our lands to fully support our self-sufficiency and self-determination in the administration of the Hawaiian Homes Commission Act, and the preservation of our values, traditions, and culture.

# HHC Water Policy Mission

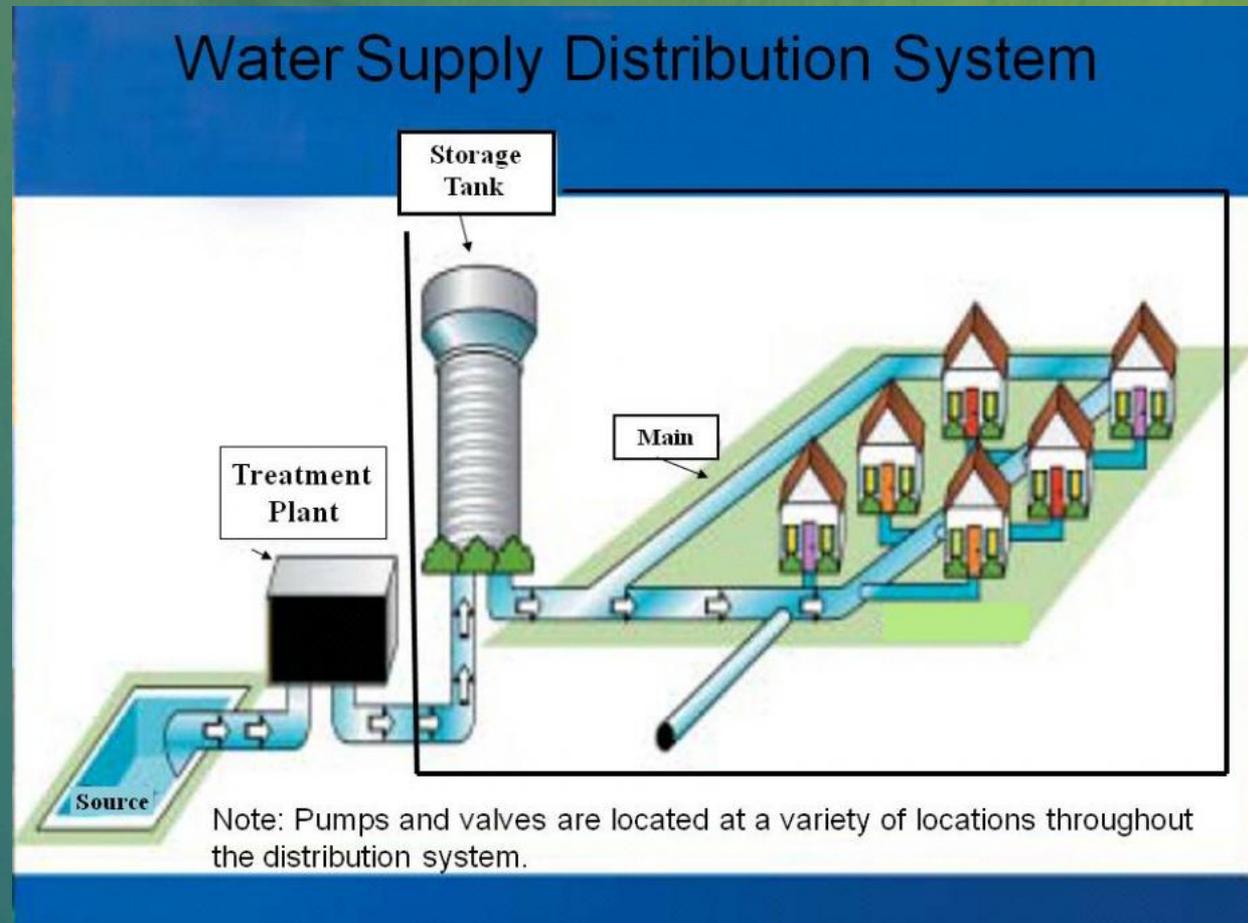
“In a manner consistent with our values, HHC and DHHL shall strive to ensure the availability of adequate, quality water by working cooperatively to:

- Understand our trust water assets;
- Plan for our water needs;
- Aggressively understand, exercise and assert our kuleana as stewards of water;
- Develop and protect water sources; and
- *Manage water systems.*”

# What is a Water System?

U.S. EPA:

- Water may be **BASIC.**
- But it sure isn't **SIMPLE.**



# Water System Goals

- Provide safe, clean drinking water
- Provide reliable water delivery service (24/7)
- And cover all operating costs & have Reserve Funds for emergencies, cash flow, capital improvements

# DHHL Water Systems

Water system	Description
<p>Ho'olehua Built in 1930s</p>	<p>Serves total of 600 beneficiaries, non-beneficiaries, "commercial" in Ho'olehua and Kalama'ula Supplies water to two other PWS Wells, storage tanks, 50 miles of pipe, 400+ fire hydrants</p>
<p>Anahola Built 1985</p>	<p>Serves 75 beneficiaries only in Anahola Farm Lots and Bay View residential; Emergency connection to DOW Well, 1 storage tank</p>
<p>Kawaihae Built in 1997</p>	<p>Serves 155 beneficiaries only in the Kailapa homestead Water source is from the privately-owned Kohala Ranch system 1 storage tank</p>
<p>Puukapu Built in 2014 (Non-potable)</p>	<p>Built to serve 184 lots. Currently 43 beneficiaries hooked up. Serves only the Pu'ukapu homestead Supplies non-potable/stock water Water source is from DWS 3 tanks, 4 fire tanks, 1 spigot for drinking water</p>

# DHHL's Source Water for Ho'olehua & Anahola

**EXCELLENT  
water quality!**

However, water quantity  
can be an issue



# DHHL Water Systems

- ✓ All DHHL Water Systems are in compliance with Department of Health.
- ✓ Ho'olehua and Anahola will have significant capital improvements in the near future.
- ✓ DHHL Staff are incredibly dedicated individuals who want to do the right thing.
- ✓ The DHHL water systems face significant challenges.

# Ho'olehua Source Water

- Two Wells
  - Kauluwai Well No. 1 (USGS No. 0801-01) @ elevation 1,005 feet with a pump capacity of 600 gpm
  - Kauluwai Well No. 2 (USGS No. 0801-02) @ elevation 1,011 feet with a pump capacity of 750 gpm
  - Generally protected



# Storage Tank – 2 x 3.5 MG Concrete Tanks



- In operation since 1934
- Remarkable shape given their age
- The majority of the valves, safety railings, ladders, etc. are rusted or non-operational.
- Existing flow control valves are non-operational.
- USDA is funding improvements to the above items and security improvements

# Ho'olehua Treatment



# Fire Hydrant Flushing



# Anahola Storage



# Anahola Source

- Approximately 500 feet deep and is outfitted with a 125 horsepower line shaft pump with a capacity of at least 700 gallons per minute
- No flow meter which does not meet well DLNR requirements.
- Not reporting pumping to DLNR.
- Wellhead shows sign of lack of maintenance activities.



# Anahola Treatment Subsequently Corrected

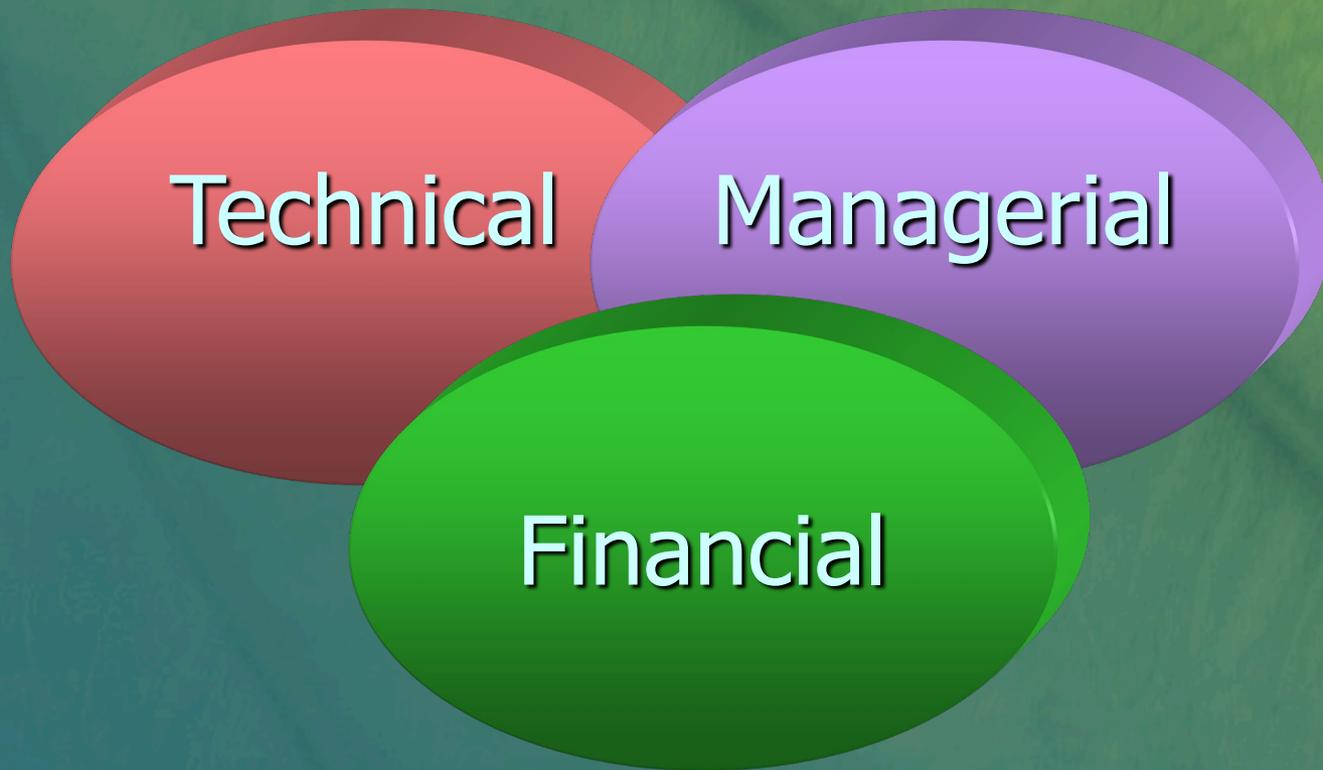


# Anahola Treatment Subsequently Corrected





# Essential Elements of Water System TFM Capacity



**How is DHHL doing?**

# Technical Capacity

- ✓ All systems have the required DOH certified operators
- ✓ DOH recent inspections determined “no significant deficiencies”
  - ✓ DOH recommendations for Anahola & Ho‘olehua, includes add 2 operators
- ✓ Fill key staff vacancies to oversee operations statewide

# MANAGERIAL CAPACITY

- Ownership Accountability
- Staffing And Organization
- Effective External Relationships
- Education
- Communication
- support



# Managerial Capacity

- ✓ Concept approved to create a DHHL Water Branch
- ✓ Draft Water System Administrative Rules approved by HHC
- ✓ Improve internal coordination
  - ✓ planning new water systems
  - ✓ budgeting & tracking expenses for existing systems
- ✓ Increase staff with expertise

# Typical Water System Expenses

## ADMINISTRATION

## OPERATIONS

- Certified Operator
- Well Pumps
- Electricity
- Storage tank
- Booster pumps
- Pipes, fire hydrants
- Security
- Purchase water supply

## RESERVE FUNDS

- Operating = cash flow
- Emergency = when pumps break down
- Capital improvement = Rainy Day fund
- Debt service on loans

# Financial Capacity

- ✓ Completed COS and Rate studies
- ✓ Created and filled Water Account Clerk
- ✓ Planning Office granted access to online Oracle accounting system to track water system expenses & generate reports
- ✓ DHHL was awarded additional \$15M from USDA RD
- ✓ DHHL continues to struggle w/water billing, collections & addressing delinquencies



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# **Next Steps: Work Plan Priorities to be completed by December 2021**

# Work Plan Priorities

## TECHNICAL

- Satisfactorily respond to DOH recommendations
  - Includes add 2 more operators in Ho'olehua
- Strive to maintain DOH “no significant deficiencies”
- Complete water audits, per new state rules

## MANAGERIAL

- Establish new Water Branch, recruit expertise
- Establish Internal communication & coordination protocol to monitor existing systems & plan for future water systems
- Start construction on USDA-funded projects
- Customer education on DHHL water systems

# Work Plan Priorities

## FINANCIAL

- Training on water system budgeting & expense tracking
- Successfully utilize & manage USDA RD federal funds
- Complete Cost of Water Service & Water Rate studies
- Strive to keep beneficiary rates affordable & reduce Trust Subsidy
- Improve timeliness for water billings & collections
- More aggressively address delinquencies, prepare aging reports for management

# Authorities

- Hawaiian Homes Commission Act
  - Retain exclusive control of water systems
- Water Policy Plan, 2014
  - Secure revenue & reduce costs to “break even”
- Enterprise Accounting Policy, 2012
  - Treat each system as a business enterprise
- Water Administrative Rules (pending)
  - Water bill payments, options, Shut-Off (last resort)



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***Mahalo!***