

Update on Molokai Water Projects and Issues

Hawaiian Homes Commission (HHC) Meeting (virtual & in person)

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April 18 - 19, 2022



Moloka'i Water Projects & Issues

Since April 2022

- I. Determining Water Availability and Issuing New Water Meters**
- II. Securing additional groundwater reservations**
- III. Securing additional surface water reservations**
- IV. Continued participation in the Molokai Water Use and Development Plan**

Background: DHHL's Kualapu'u Water Use Permit Application

Submitted October 12, 2020

Multiple CWRM requests for additional info

Accepted as complete April 12, 2021

APPROVED June 20, 2022

Pre-training with Ka Huli Ao for beneficiaries

Extensive beneficiary support

Working on implementation / meter issuance

Water Meter / Credit Management Policy

Approved November 2022

Implementation in process

I. Determining Water Availability

- **1990 Water Use Permit (WUP)**
 - **0.367 million gallons per day (mgd) granted**
 - **Less than what was being used at the time**
- **2021 WUP**
 - **0.595 mgd granted**
 - **Maximum that can be reliably pumped**
 - **Infrastructure (pumps, tanks, pipelines)**
 - **Aquifer properties**
 - **Impacts to nearshore**

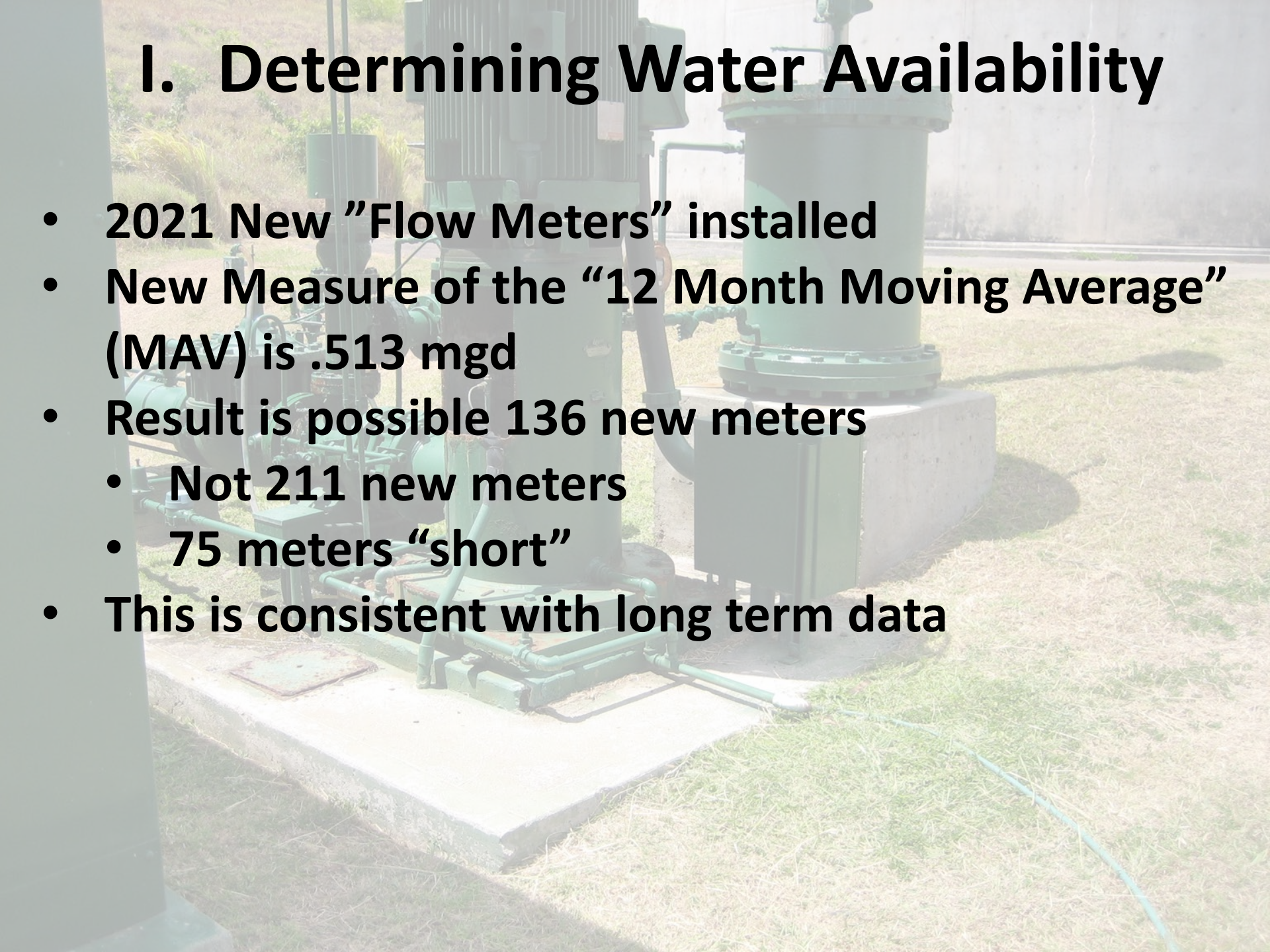
I. Determining Water Availability

- 2020 WUP Application (WUPA) based on
 - 2019 pumping data
 - 2019 delivery data
- 2020 WUPA Estimated following new meters

Area	Meters
Ho`olehua	13
Nā`iwa	58 (*66)
Kalama`ula Mauka	100
Subdividable lots	40
Total	211

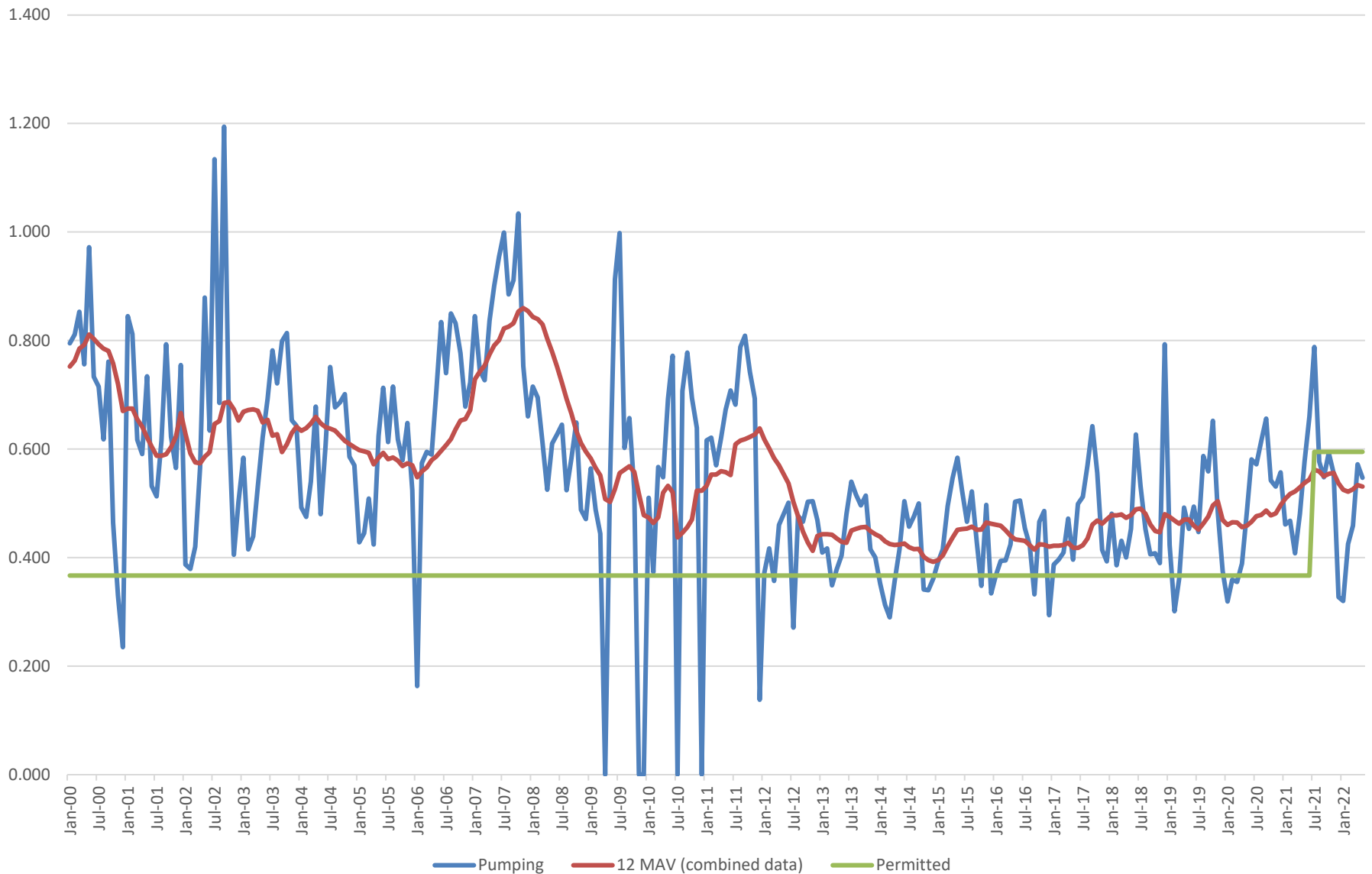
I. Determining Water Availability

- 2021 New "Flow Meters" installed
- New Measure of the "12 Month Moving Average" (MAV) is .513 mgd
- Result is possible 136 new meters
 - Not 211 new meters
 - 75 meters "short"
- This is consistent with long term data

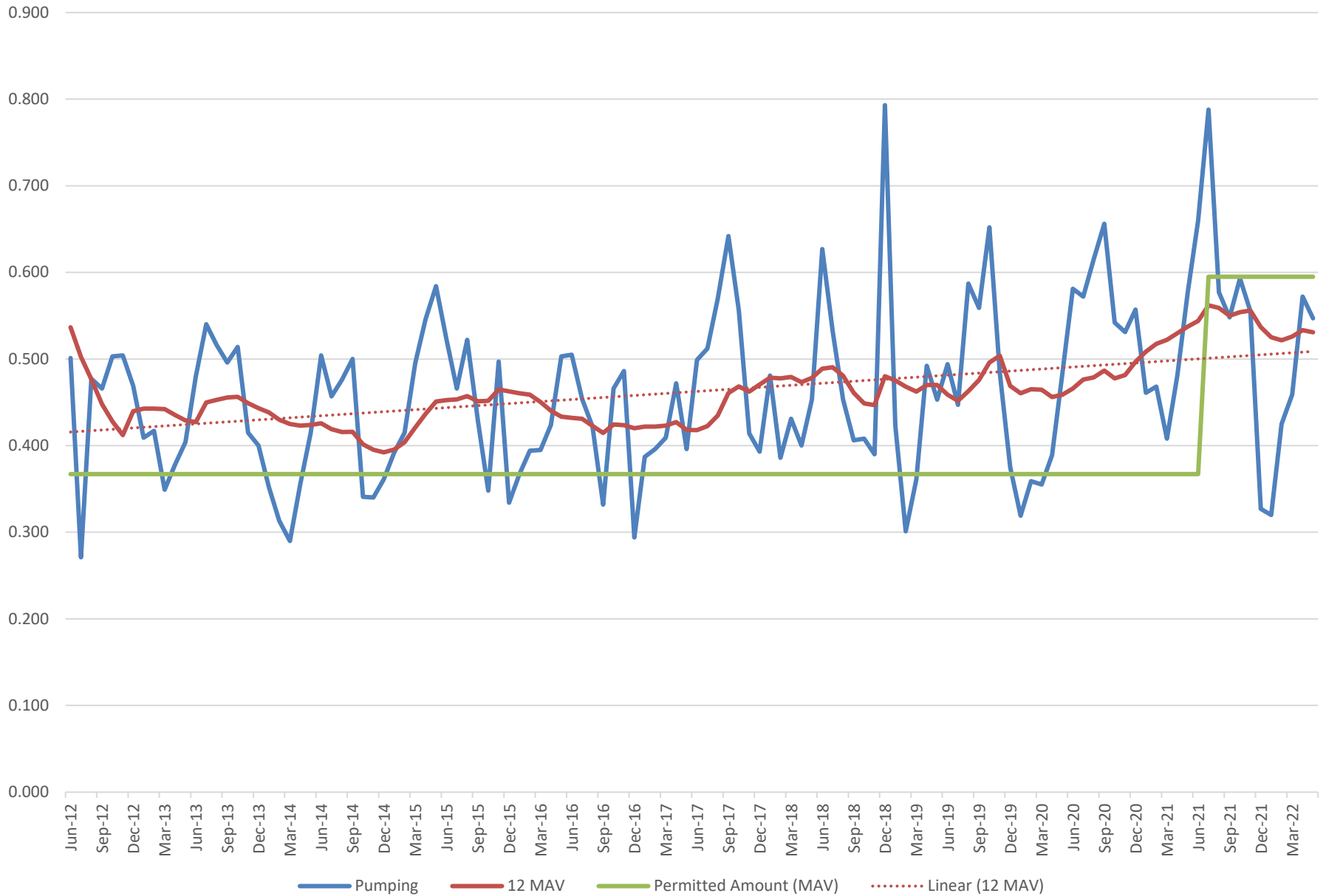


DHHL Kauluwai Wells Pumping, 12 MAV and Permitted Amount

Jan 2000 - May 2022



Kauluwai Pumping, 12 MAV, and trend lines, 2012-22



I. Issuing New Meters

- Follow new meter procedures
- Refine timing of demand for new meters in Kalama`ula Mauka;
- Continue implementation of the improvements to the system;
- Continue efforts to identify non potable uses that can be shifted to either the Molokai Irrigation System or the Mountain Water System;
- No “moratorium” but follow priorities in procedures

II. Additional Groundwater Reservations

- June 20, 2020: DHHL requested a reservation for Ualapu`e for .855 mgd
 - Reservations in WMAs are by rulemaking
 - CWRM asked for additional reservations
- DHHL reviewed needs for Kalama`ula, Kapa`akea, Kamiloloa, Makakupa`ia, Kalaupapa and Pālā`au
- Held beneficiary consultation on May 5, 2021
- HHC BC report approval July 19, 2021

How Reservation are Calculated

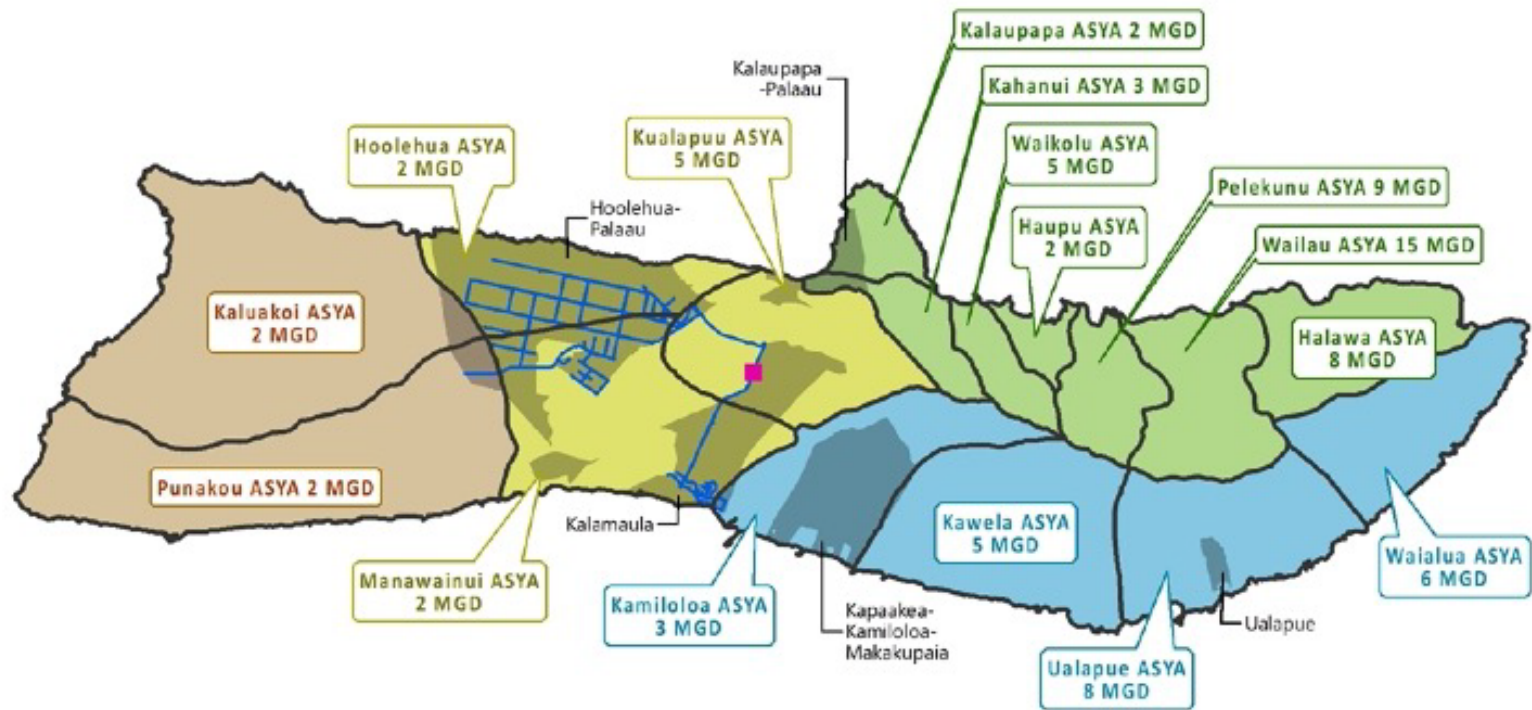
- **HHC Land Use Designations x Relevant Standards = Reservation Request**
- **Ualapu`e example**
 - **Molokai Regional Plan approved 2.18.2020**
 - **Up to 175 kuleana homestead lots at Ualapu`e on 376 acres**
 - **MCWSS – 600 gpd for single family home**
 - **2,500 gad / 300 irrigable acres**
- **Estimates also adjusted per SY**

LEGEND

Aquifer System Areas

- Central Sector
- Northeast Sector
- Southeast Sector
- West Sector

- DHHL Well
- DHHL Water Lines
- DHHL Lands



ISLAND OF MOLOKA'I

II. Additional Reservations Status

COMMISSION ON
WATER RESOURCE MANAGEMENT

ISLAND OF MOLOKAI

TOTAL = 79 MGD

HYDROLOGIC UNITS
Field / Aquifer Code

1" = 5 MILES

- Because need > availability, < request
- March 2022 CWRM meeting
 - Approval to move to rule making
 - Notable community concerns expressed
 - Additional listening and outreach needed
 - Coordinating with CWRM, County on timing
- Since April 2021: still awaiting CWRM,
- Ualapu`e Planning
- WUPA will still be needed



III. CWRM initiated surface water reservations

- **CWRM is modifying IIFS for streams diverted by the MIS and the MWS**
 - **MWS Wasting complaint initiated by Moloka`i Nō Ka Heke**
- **CWRM Staff initiated DHHL reservations related to the IIFS**
 - **6.094 from Waikolu Stream**
 - **.15 mgd from the MWS**
 - **Remainder from the MIS**
- **Approved April 2021**

IV. County Molokai WUDP

- MDWS initiated MWUDP in 2021
- DHHL staff and consultant participation
- Coordination and communication w beneficiaries
- Draft plan forthcoming

Nīnau?

