

# WAI Committee

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**From:** Eva Blumenstein <Eva.Blumenstein@co.maui.hi.us>  
**Sent:** Friday, June 28, 2019 10:45 AM  
**To:** WAI Committee  
**Cc:** Jeff Pearson; Christy Chung  
**Subject:** Wai-30(6)  
**Attachments:** WAI 070119 emb.pdf

Aloha,

Please find attached the Department of Water Supply's Water Conservation Program Presentation for July 1 WAI Committee meeting. Please let me know if I should bring the presentation on a jump drive as well on Monday.

Mahalo,

Eva Blumenstein

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Department of Water Supply

# Conservation Program

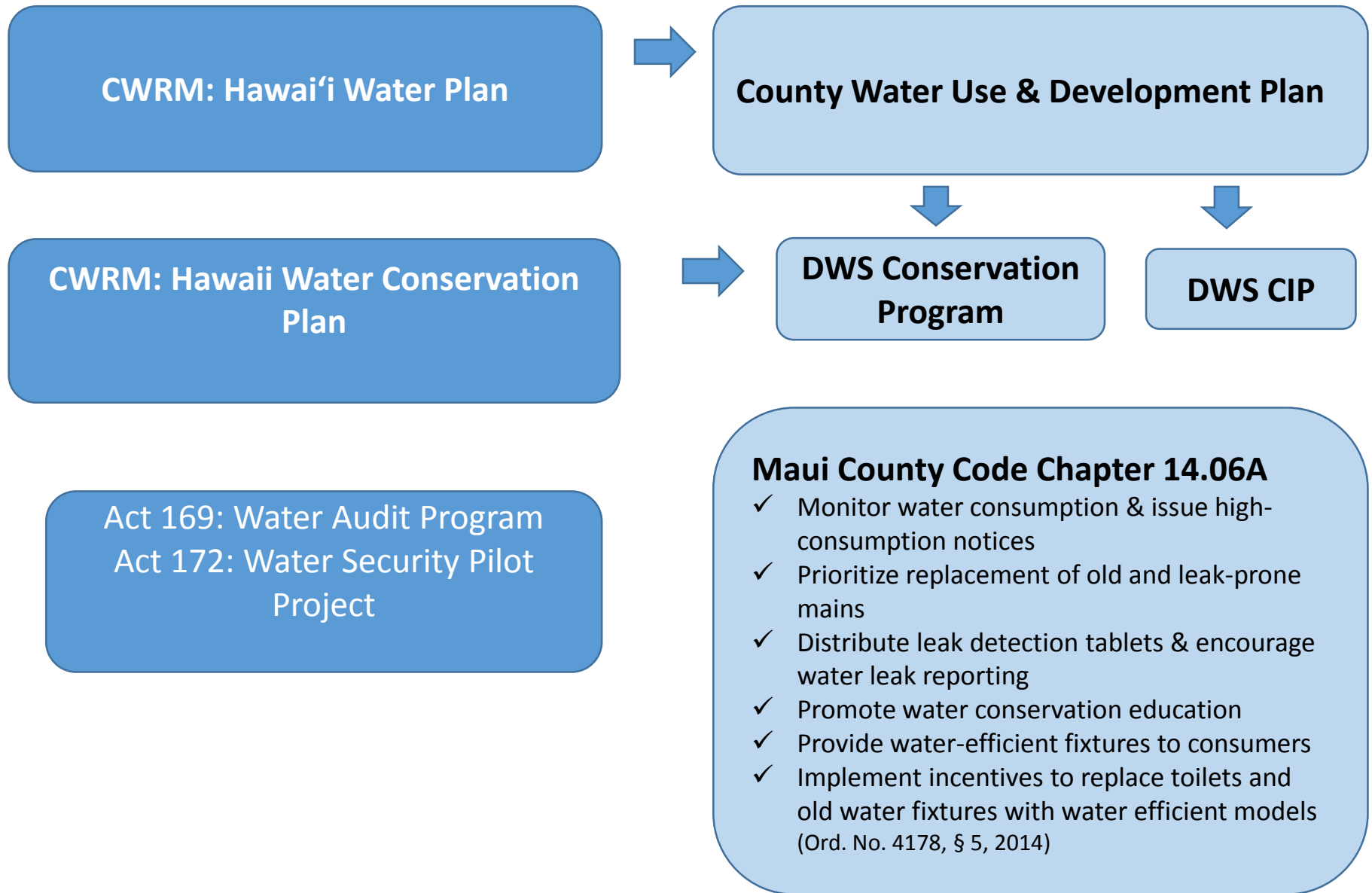
July 1, 2019

Council of the County of Maui  
Water and Infrastructure Committee

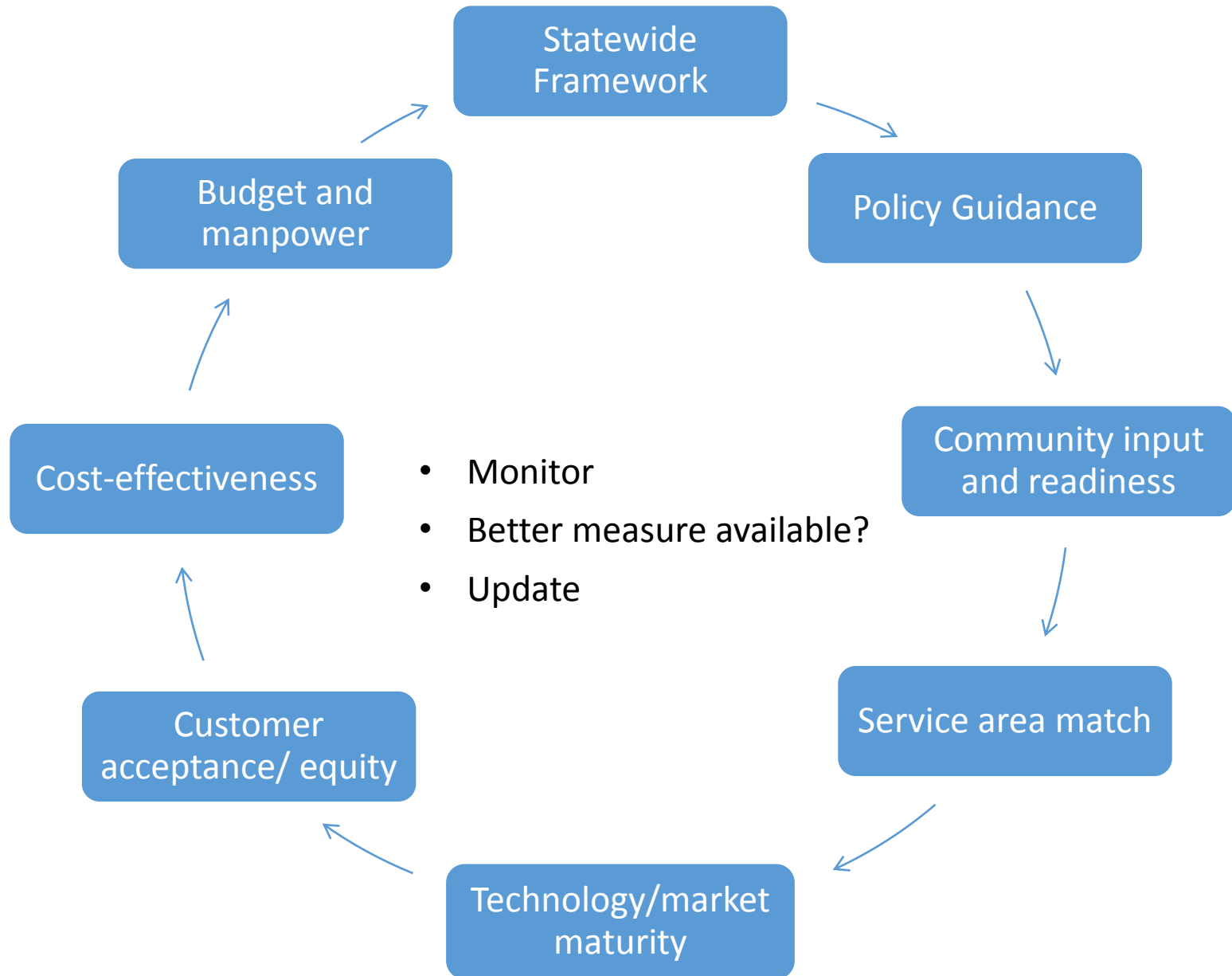
# Presentation Outline

- Conservation Framework
- DWS Conservation Program Development
- Survey Results
- Conservation Program Measures
- Water Demand and Savings

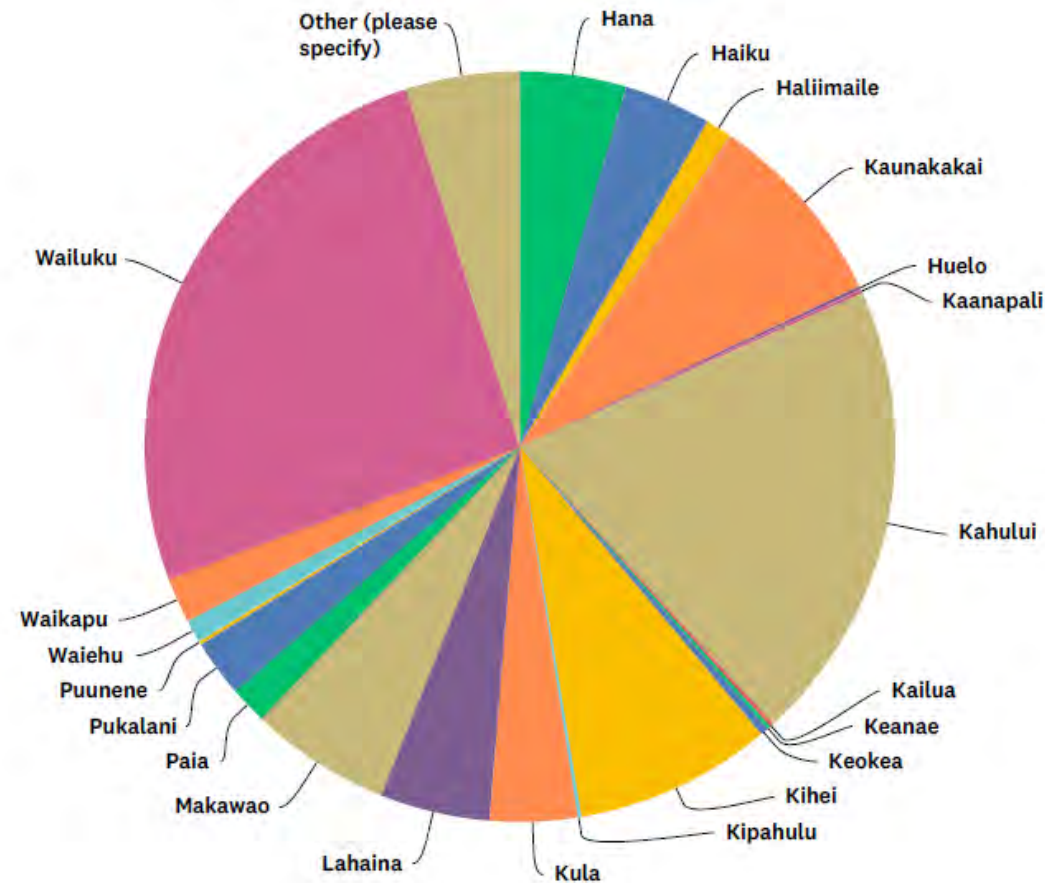
# Conservation Framework



# DWS Conservation Program Development

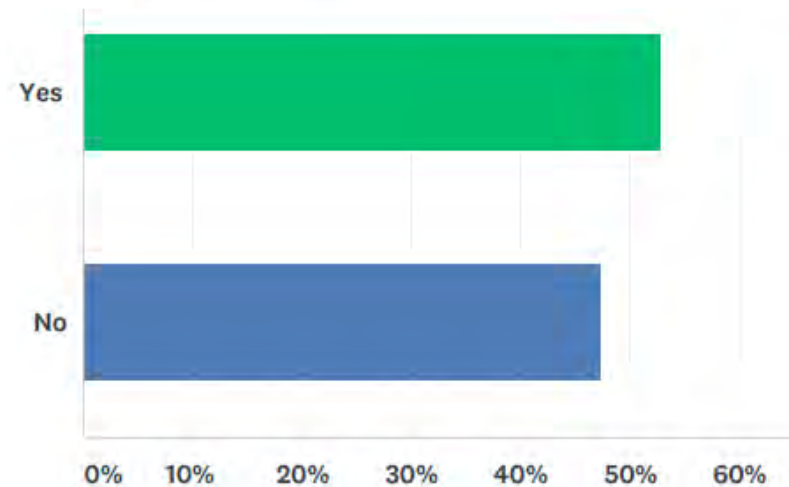
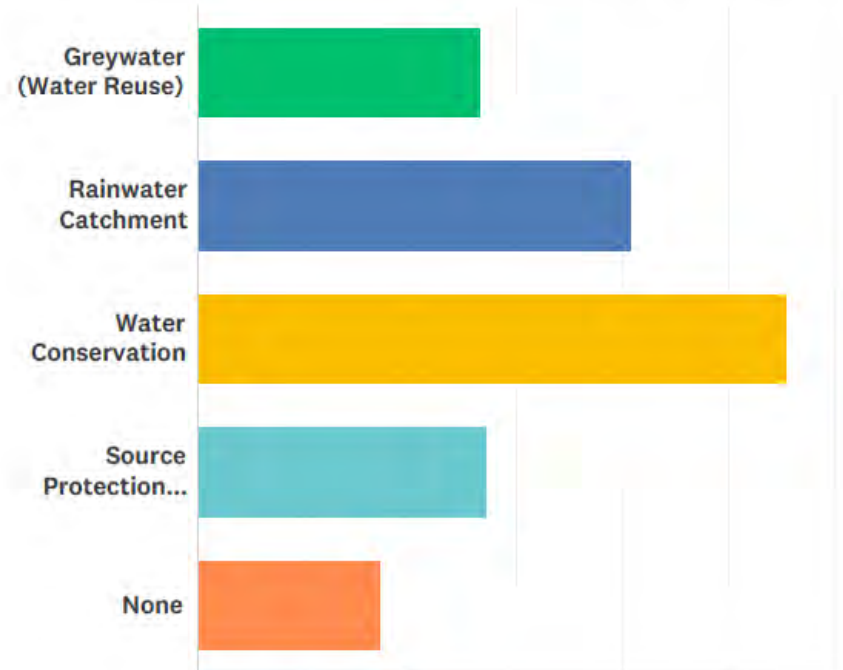


# Community Survey Results



Would you be willing to pay more for your water to support additional conservation and water source protection efforts?

Are you interested in learning more about any of these water technologies and issues?



# Supply Side Conservation Measures

## **Water audit:**

Analyze water production, revenues, discrepancies and losses

## **Leak detection and repairs:**

Identify priority areas, detect and fix leaks

## **CIP projects:**

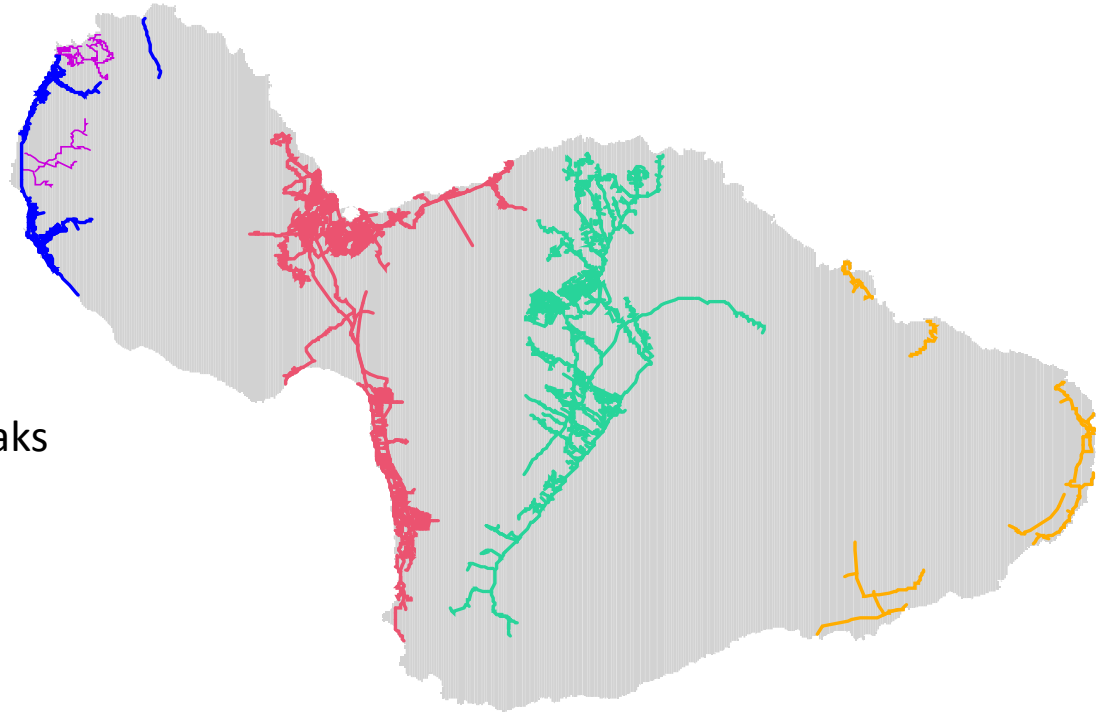
P.E. driscoll service lateral replacement

## **Customer meter replacement:**

Prioritize and replace aging meters, FY20 contract

## **Pipe replacement:**

Prioritize maintenance, repair and replacement





# Demand Side Conservation Measures

## Customer Incentives:

Toilet replacement

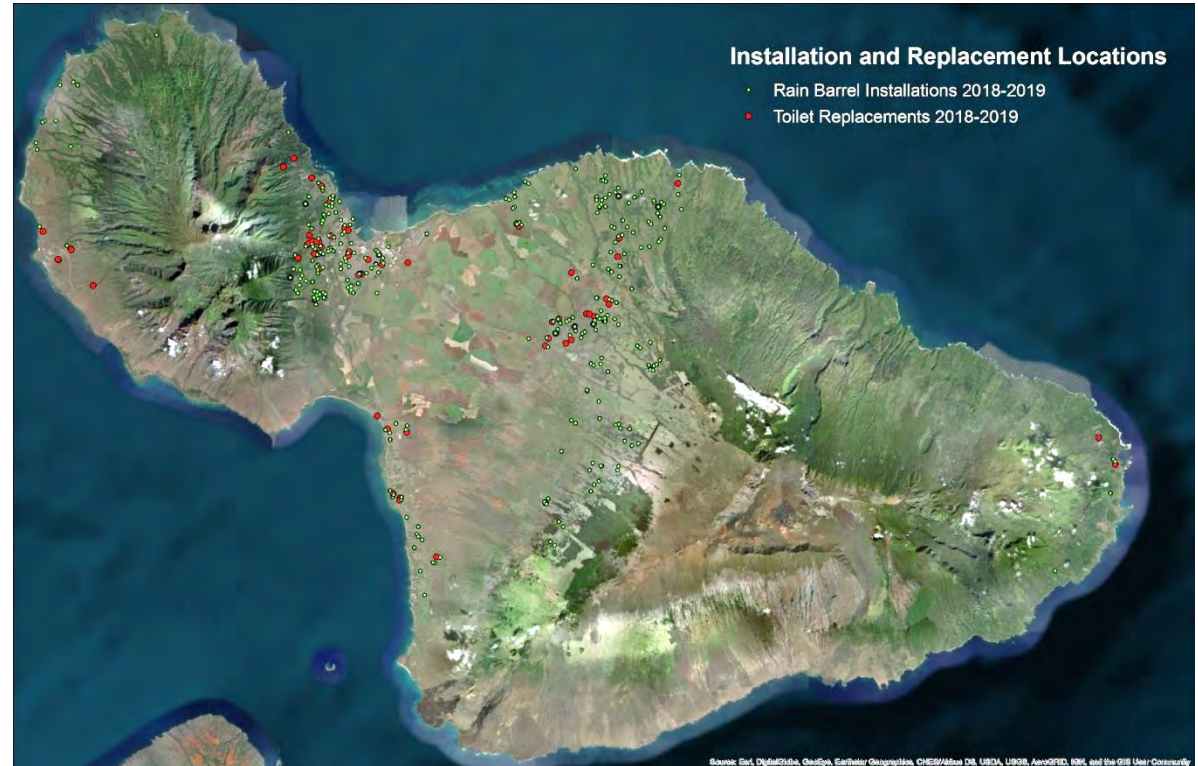
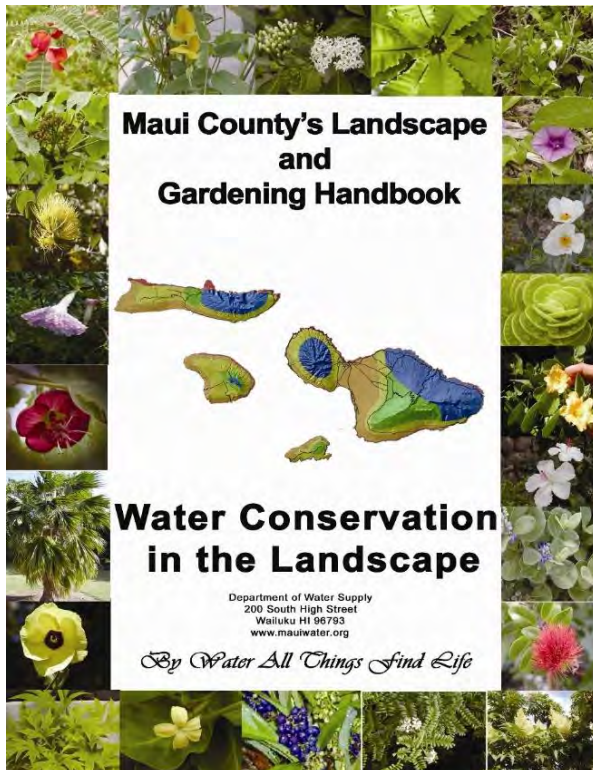
Rain barrel program

Low flow fixtures giveaway

## Direct Install Programs:

Toilets and low flow installations

Synthetic turf installation



## Reuse and Harvesting:

Greywater systems at County Parks

## Public Education and Outreach:

Xeriscaping and native plants promotion

School poster contest

Media advertisements

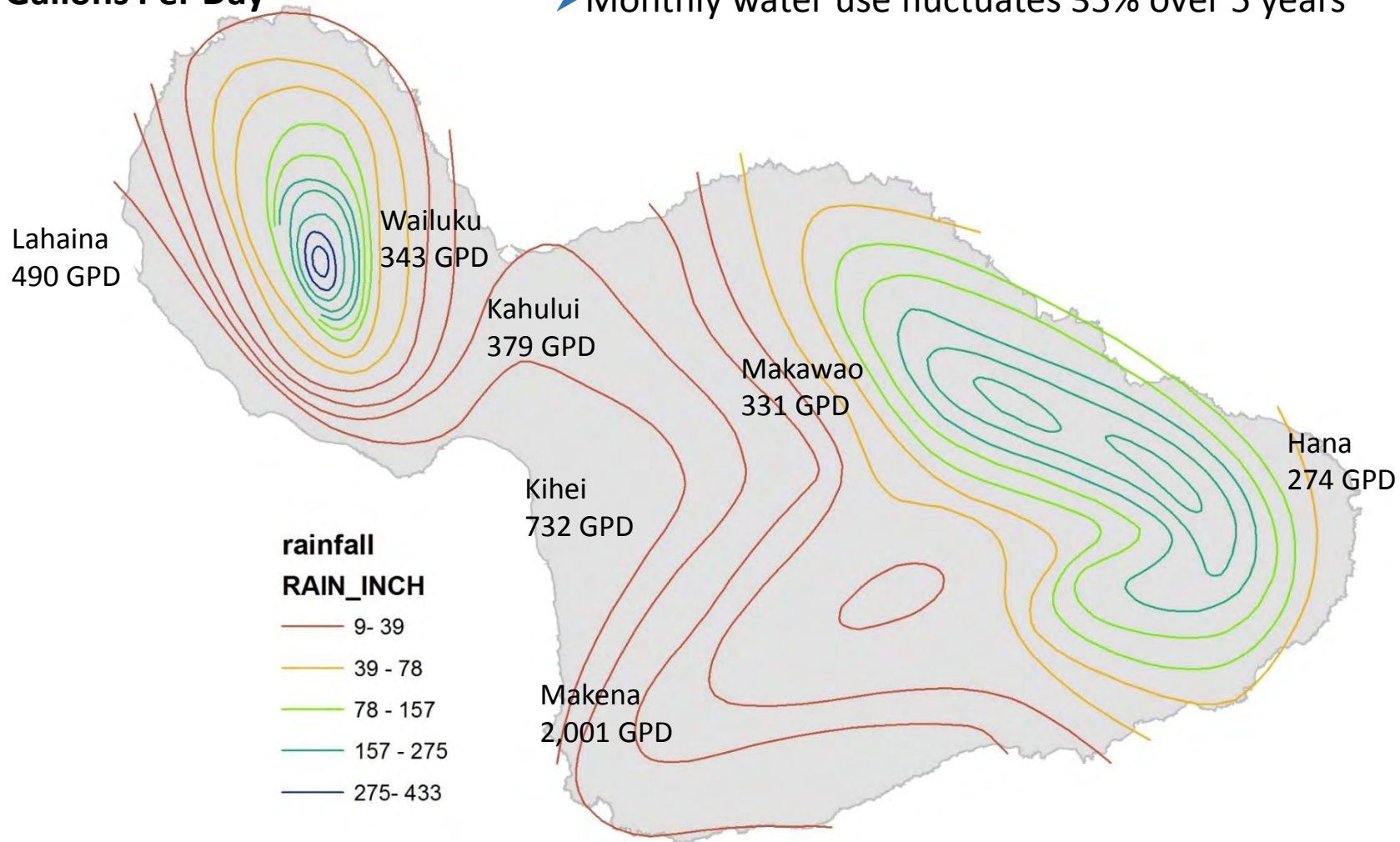
Public events, work groups, presentations



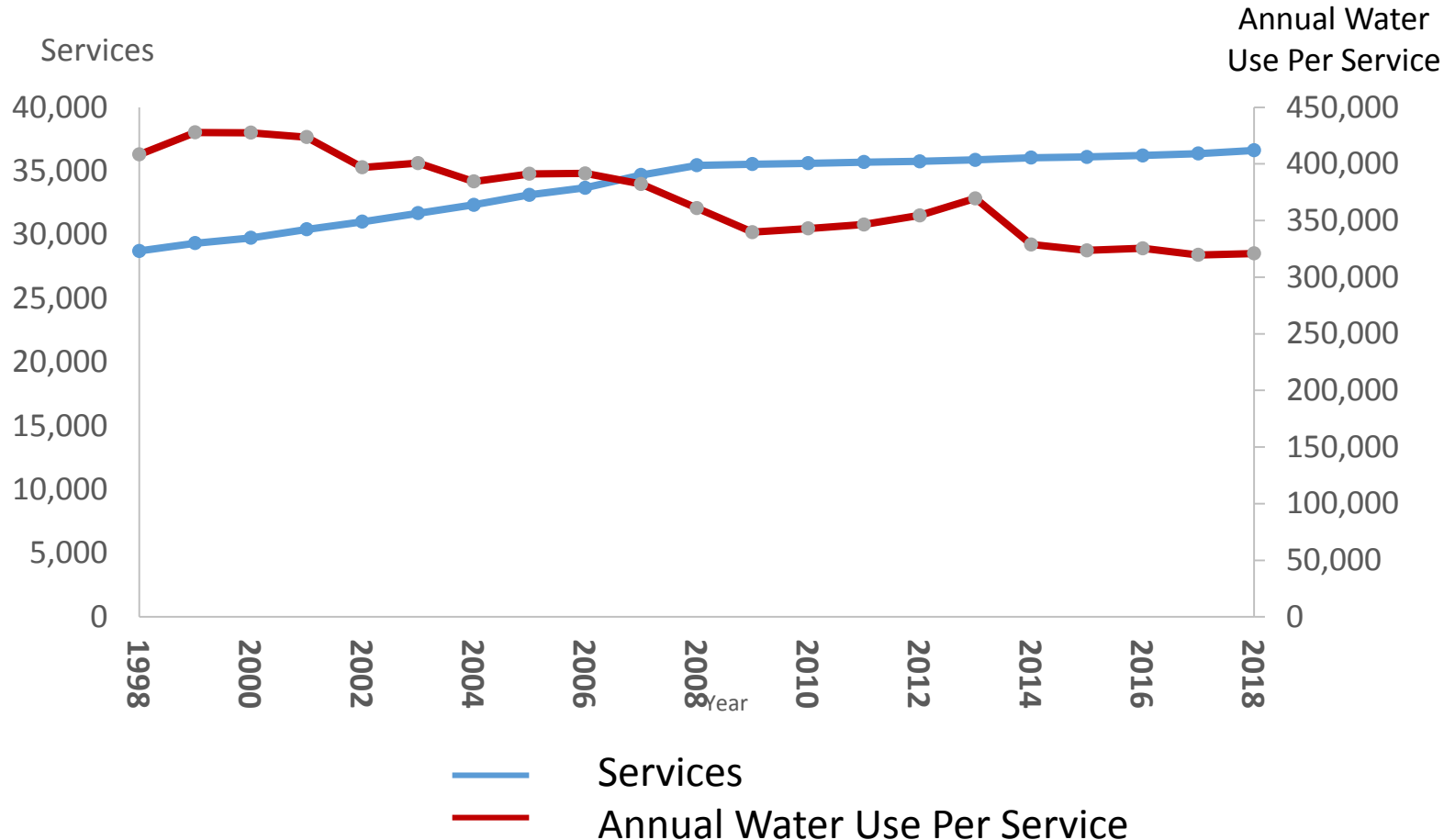
# DWS Water Use and Demand

**Average water use Single Family  
Meters Gallons Per Day**

- Demand not necessarily tied to micro climate
- Strong seasonal outdoor water use
- Monthly water use fluctuates 35% over 5 years



# DWS Water Use Statistics



**1998 – 2018 Number of meters +36.3%**  
**1998 – 2018 Overall water use +5.9%**  
**1998 – 2018 Water use per meter – 22.3%**

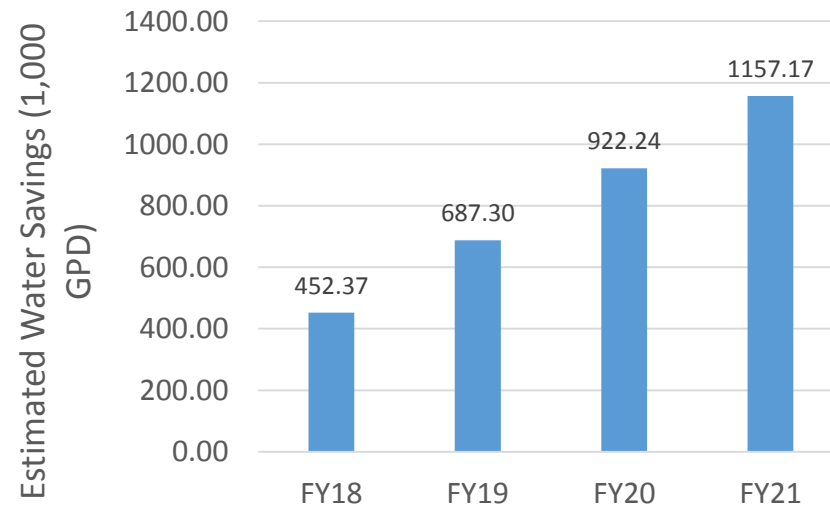
# Projected Demand and Water Savings

Facility	No. of Fixtures Replaced			Savings GPD/%
	Toilets	Shower heads	Faucet Aerators	
Ka Hale A Ke Ola Homeless Resource Center	282	276	348	5,600/ 43%
Hale Mahaolu Elua	173	181	181/180	7,378/ 19%
Luana Gardens - low income family housing	148	122	122/152	2,116/ 14%
Hale Mahaolu Akahi (elderly housing)	110	110	110/110	4,547/ 24%
Lahaina Surf - MF	109	0	0	2,028/ 27%
Komohana Hale - MF	21	0	0	1,955/ 28%
Hale Mahaolu Home Pumehana	0	86	0	1,750/ 7%
Total	843	775	61/442	

54 Unit Kihei Condo Average Gallons per Day (GPD) Water Use, Low Flow Fixtures Obtained 2016



Estimated Compounded Water Savings in 1,000 Gallons Per Day by FY





# Mahalo!

