



HAWAIIAN HOME LANDS

HAWAIIAN HOMES COMMISSION · DEPARTMENT OF HAWAIIAN HOME LANDS

Hawaiian Homes Commission
Agenda Item G-4
DHHL Cost of Water Service Analysis

December 20 – 21, 2021



Agenda

- Overview
 - DHHL Water Systems
 - Technical, Managerial, Financial Capacity or “TMF”
- DHHL Cost Analysis Findings
 - The numbers
- Next Steps



Legal Authorities

- Hawaiian Homes Commission Act of 1920, as amended
- Enterprise Accounting Policy (2012)
- Water Policy Plan (2014)
- Hawaii Administrative Rules, Chapter 10-4.1
Management of Water Systems (2021)



Key Terms

- Enterprise
- Economies of Scale
- DHHL Financial Management System (FMS)
- True Costs vs. Hidden Costs
- Fixed Costs vs. Variable Costs
- Revenue billed vs. Revenue collected



Overview DHHL Water Systems

- WHAT are the “DHHL Water Systems”?
 - Ho‘olehua Public Water System No. 230 – Moloka‘i
 - Anahola Farm Lots Public Water System No. 432 – Kaua‘i
 - Kawaihae Unit #1 Public Water System No. 164 – Hawai‘i
 - Pu‘ukapu Water System (non-regulated) – Hawai‘i
- WHO are the customers?
 - Lessees
 - Non-beneficiaries (Ho‘olehua only) – Schools, Churches, businesses
- HOW many total customers statewide? – 881



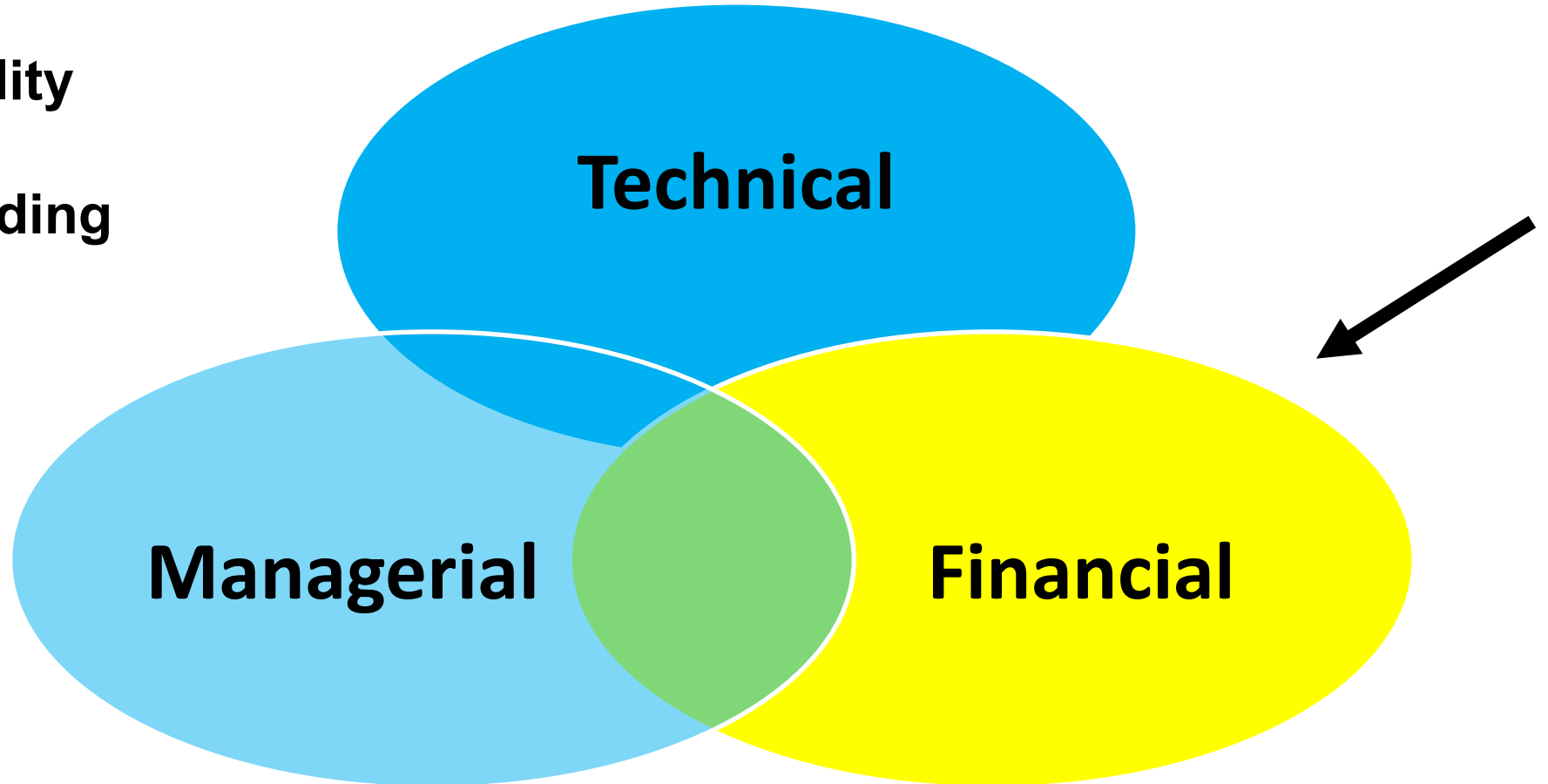
Water System “TMF” Capacity

Technical, Managerial, Financial Capacity – “TMF”

Owner responsibility

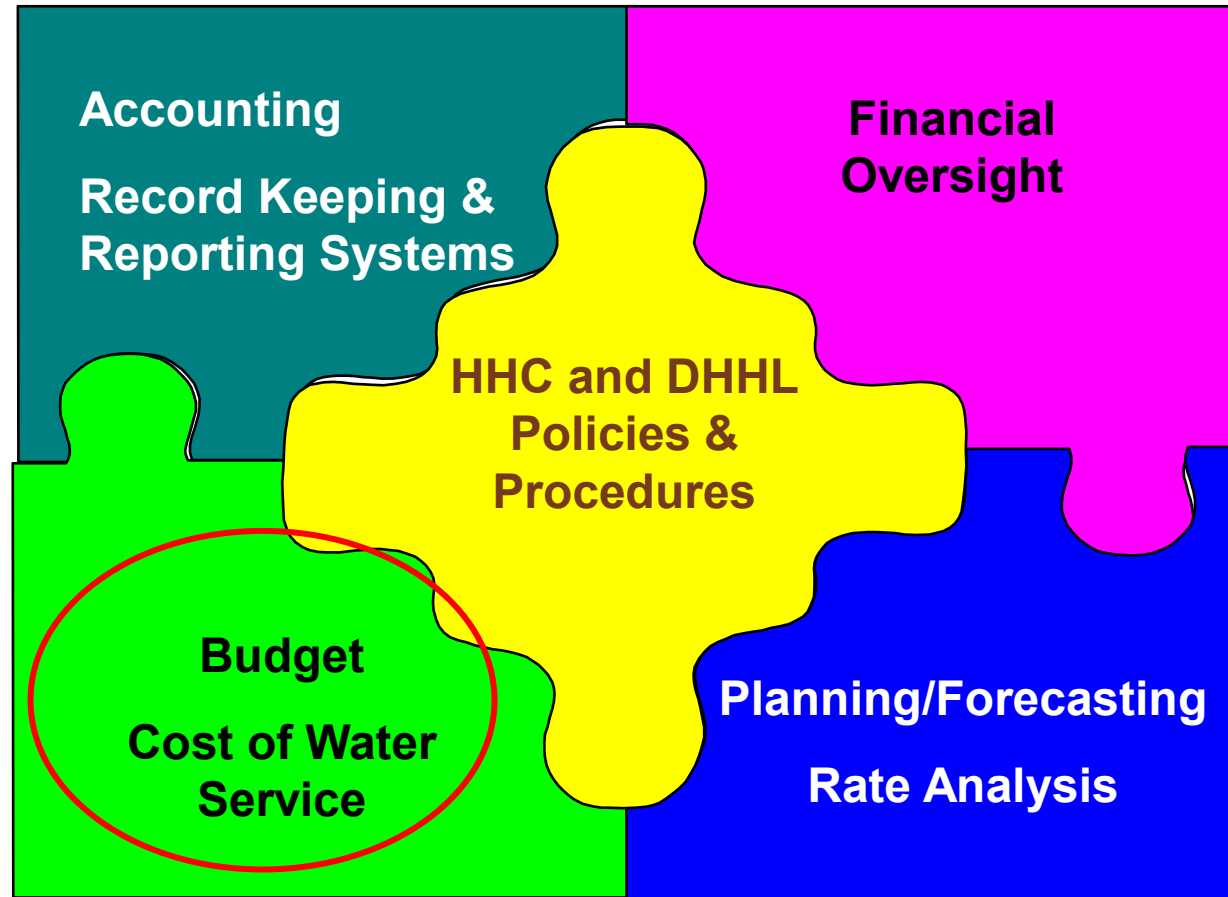
Federal USDA funding
condition

US EPA guidance





Basic Elements in “Financial Capacity”





Cost of Water Service Analysis is a Tool

Analytical Tool to Determine the “True Cost” of Providing Water Service to the Community

- Basis for Budget Controls
- Basis for Determining Actual Revenue Requirement
- Basis for Setting Rates



DHHL Financial Management Challenges

DHHL water systems are “small systems”
< 1,000 customers

- Operating costs exceed revenue billed
 - Economies of scale
 - Fixed costs disproportionately higher
- DHHL must continue to supplement to break even



Cost Analysis: Data Quality is KEY to usefulness

- The Findings of the Cost Analysis are only as good as the Data Quality and Assumptions that go into it.
- Even data with high uncertainty, can help us improve, including identifying how we can improve our data, which can lead to more useful results.



2017 DHHL Cost of Water Service Analysis

Since 2017 . . .

Accomplishments

- Rate Analysis completed, resulting in HHC approved rate increases
- Effective Utility Management paper completed, resulting in proposal to establish Water Branch
- Water Administrative Rules, effective 2021 with enforcement provisions



2021 COWSA FINDINGS

- Enterprise Accounting Policy not implemented
- De-centralized management and operations
- DHHL Financial Management System to be fully utilized
- Technology needs
- Education and Enforcement to be implemented



DHHL Water System Budget

“True COSTS”

- **Operating, Repairs, Maintenance**

Hidden Costs:

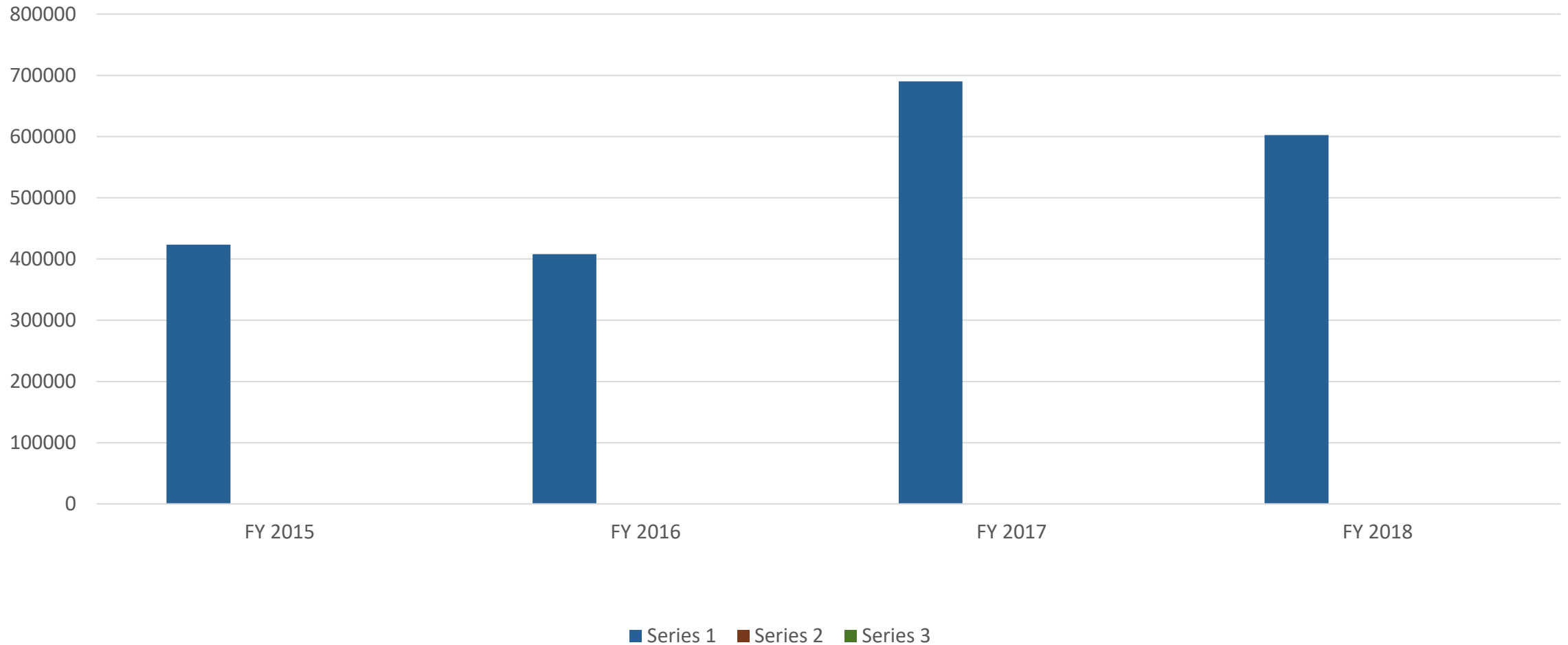
- Education and Enforcement
- Administrative
- Planning, Studies
- Regulatory compliance
- Funder requirements
- CIP
- Reserves

REVENUE

- Customer Rates
- Trust Funds
- State General Fund (Personnel only)
- Trust Funds for CIP
- State Leg funds for CIP and Repairs/Maintenance
- Federal funds for CIP

Shortfall: Operating Costs and Revenue Billed

FY2015 – FY2018





FY2018: Shortfall (based on best available data)

	Ho'olehua Water System	Anahola Farms Lots Water System	Kawaihae Unit #1 Water System	Pu'ukapu Water System	TOTAL
Collected (customer rates)	\$326,525	\$54,684	\$92,567	\$59,161	\$532,937
O&M Expenses	\$618,000	\$168,000	\$300,000	\$225,000	\$1,311,000
Shortfall	-\$291,475	-\$113,316	-\$207,433	-\$165,839	-\$778,063
Highest expense	Electricity \$386,000	Fee for Service \$141,000	Fee for Service \$231,000	Fee for Service \$164,000	
Next highest	Fee for Service \$135,000	Electricity \$20,000	Maintenance \$56,000	Water \$35,000	
Delinquent Accounts (estimate)	Commercial 22% Beneficiaries 40%	43%	24%	20%	



Financial Outlook: Long Term Impact on Trust Funds

- Increasing operating costs
- Increase in rates by Hawaii County and Kohala Ranch
- Constructing more irrigation systems, not everyone signing up for water service
- Ho‘olehua and Anahola Improvement Projects – cost overruns
 - Photo-Voltaic for Ho‘olehua postponed
- \$14 million federal loan



How to balance the budget?

There's only one way to balance the budget
Increase Revenue and Reduce Costs



Suggestions to balance the Budget

INCREASE REVENUE

- Address un-collectibles
- Increase rates (again)
- Pursue State Leg for Repairs and Maintenance
- Min. charge to all lessees
- Leaks/un-accounted for water
- Use by Non-beneficiaries
- “Right size” the system

DECREASE COSTS

- Complete Ho‘olehua and Anahola improvements
- Convert operator contracts to staff positions
- Centralize management and operations
- Smart meters for Kawaihae, Pu‘ukapu, future systems



Next Steps: Complete within Next 3 Months

Water system management and operations

- ❑ Appoint interim point of contact (interim)
 - With water expertise and decisionmaking authority
 - Coordinate across divisions
 - Contract oversight
- ❑ Centralize billings and collections
 - Support DOs and Fill MODO position



Next Steps: Complete within 6 Months

Water Systems Management & Operations

- Meter readings (by April 2022)
- Centralize Billing and Collections
 - Separation of duties
 - Assess causes of billing delinquencies

DHHL Financial Management System

- Consistent use of coding across all divisions



Next Steps: Complete within 12 Months

Water System Management and Operations

- Implement Water Branch

DHHL Financial Management System

- Produce financial reports for DHHL management & USDA

Implement rigorous education & enforcement

- Develop program to address delinquencies
- Implement new Rules enforcement provisions



Next Steps: Complete within 12 Months

Technology

- Assess billing system (Utility Star)
- Improve cell signal for smart meters
- Automate data collection



Long term: Other next steps

- Rate Setting: consider minimum charge to lessees within service area
- Equipment inventory
- GIS
- Reserves policy
 - USDA reserve requirements
 - CIP reserve funding schedule
- Current and Future DHHL water systems
 - Improve internal coordination in planning, design, construction, system management and operations, system budgets, and communications with community and stakeholders



What's the Risk?

Without implementing these critical steps, we are not able to . . .

- Understand the Trust Subsidy
- Produce financial reports for DHHL management
- Produce required financial statements (Balance Sheet, etc.) for USDA
- Set better customer rates and fees



Questions?

Mahalo!