

WIT-72 orig ✓



WASTEWATER RECLAMATION DIVISION

MAUI COUNTY
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

WATER, INFRASTRUCTURE, AND TRANSPORTATION
COMMITTEE

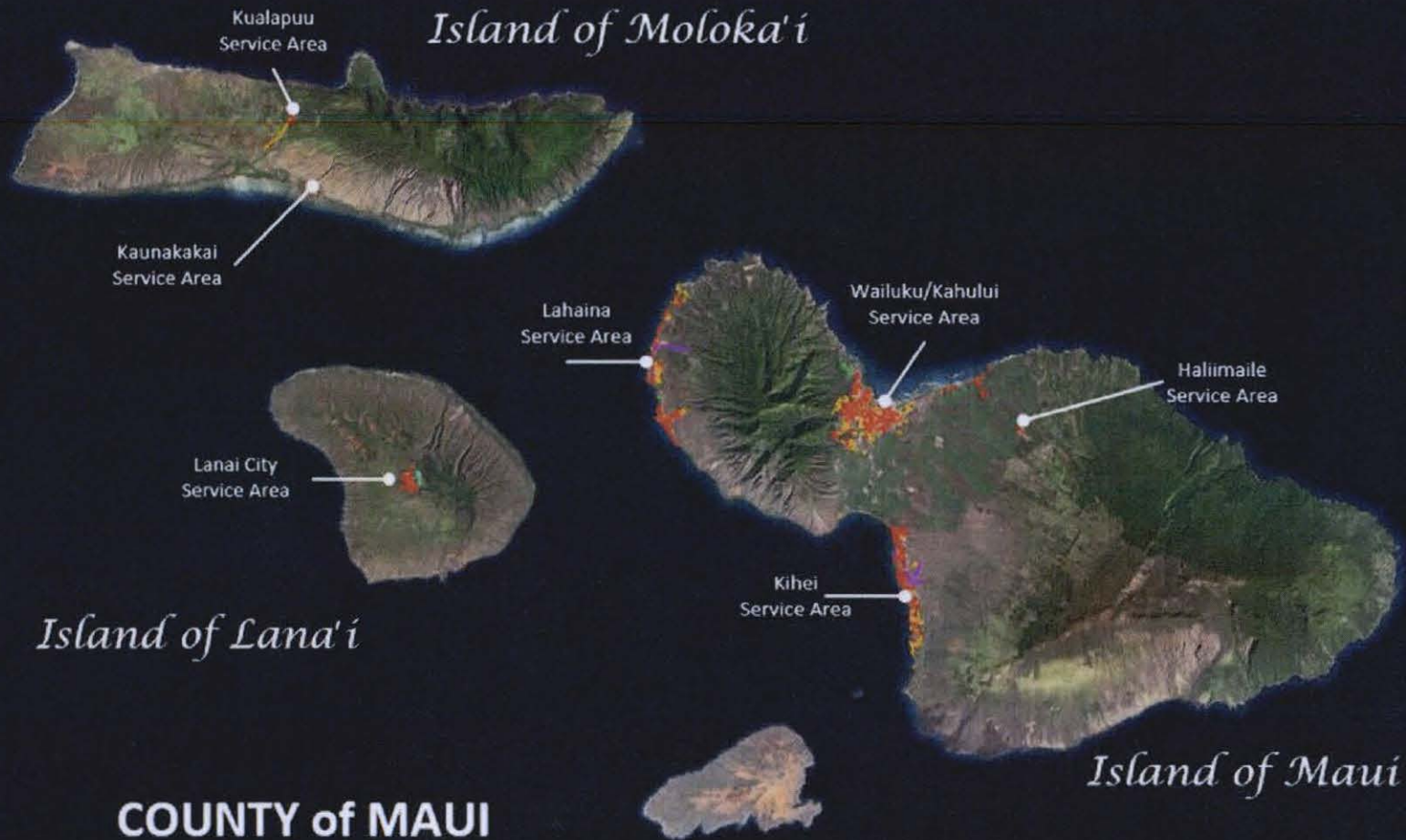
MARCH 9, 2020

RECEIVED AT WIT MEETING ON 3/9/2020
Scott Rollins

"GLOBAL" PERFORMANCE MEASURES

- Reliability of Existing Facilities Over the Long Term at the Lowest Possible Cost (99.9978%)
- Increase Volume of Reclaimed Water
- Expand Sewer System to Non-Sewered Areas
- Improve Quality of Treated Effluent

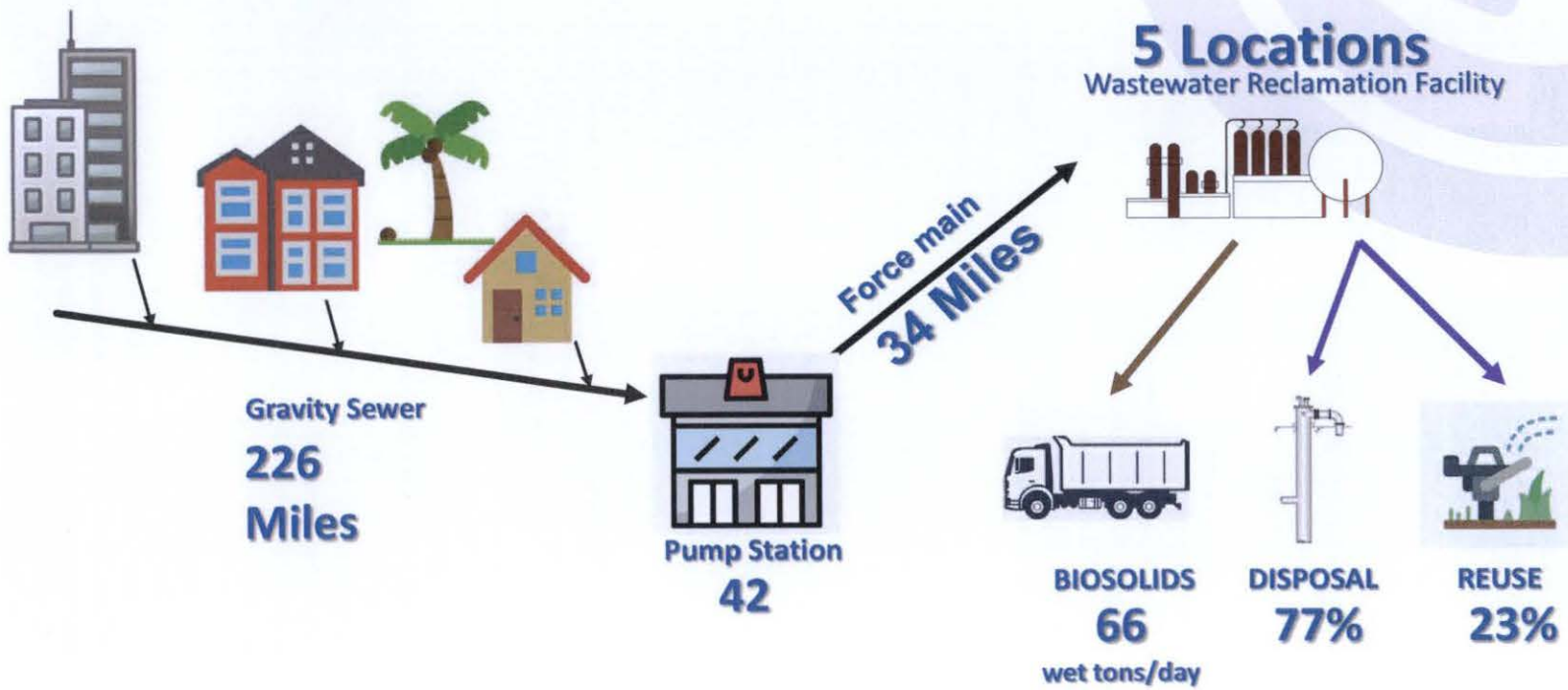




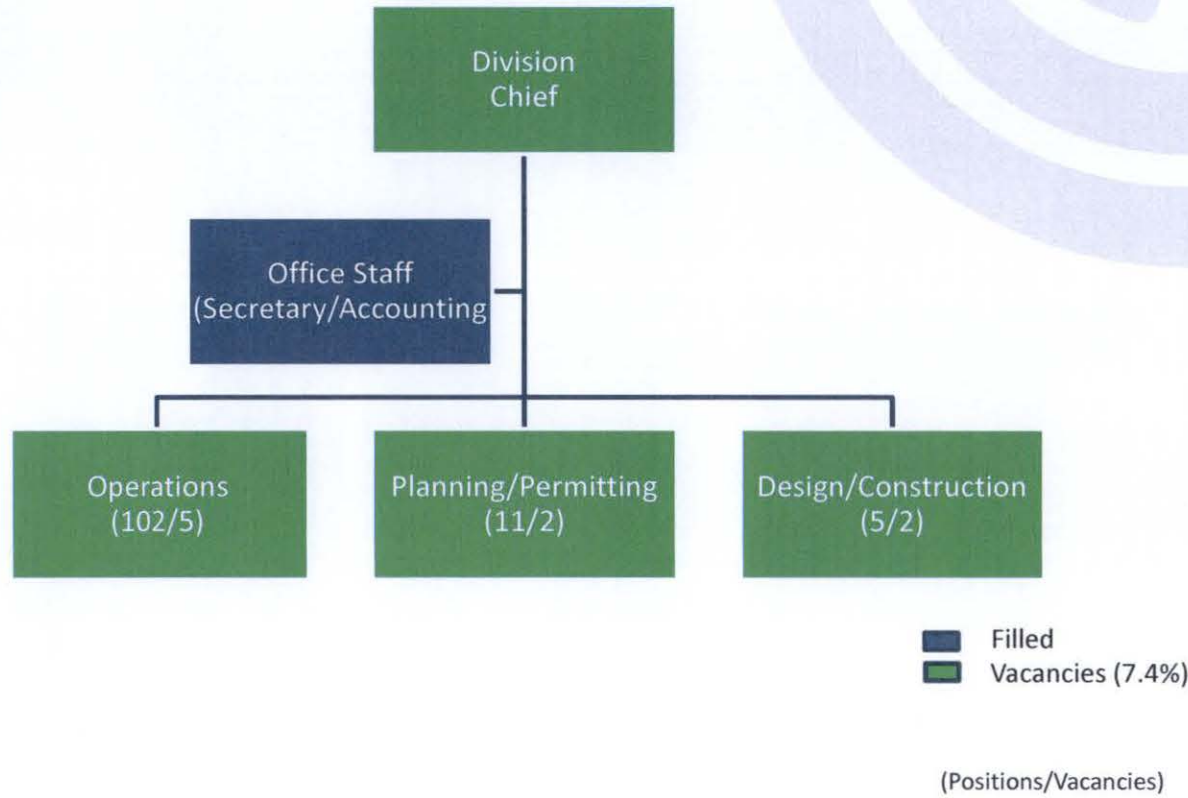
**COUNTY of MAUI
SEWER SERVICE AREAS**



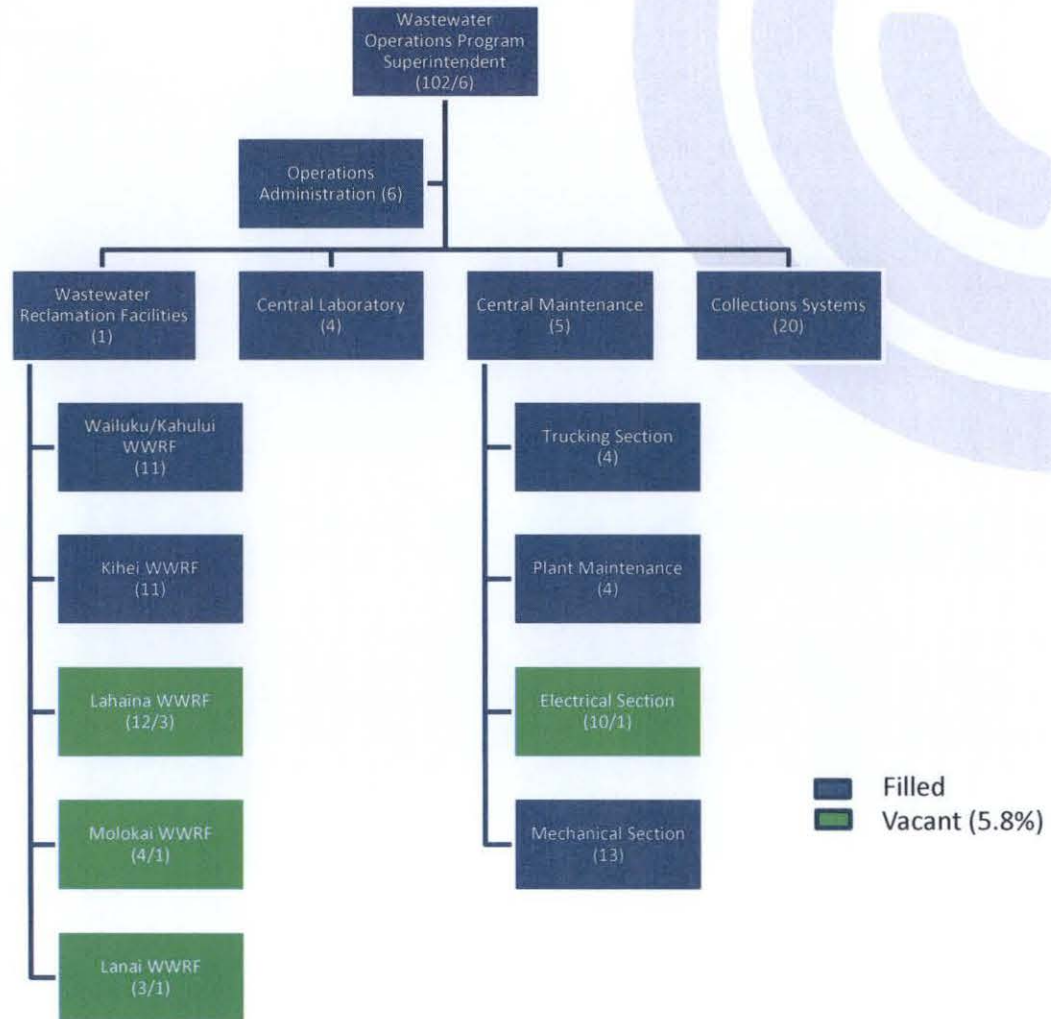
WHERE DOES MY SEWAGE GO?



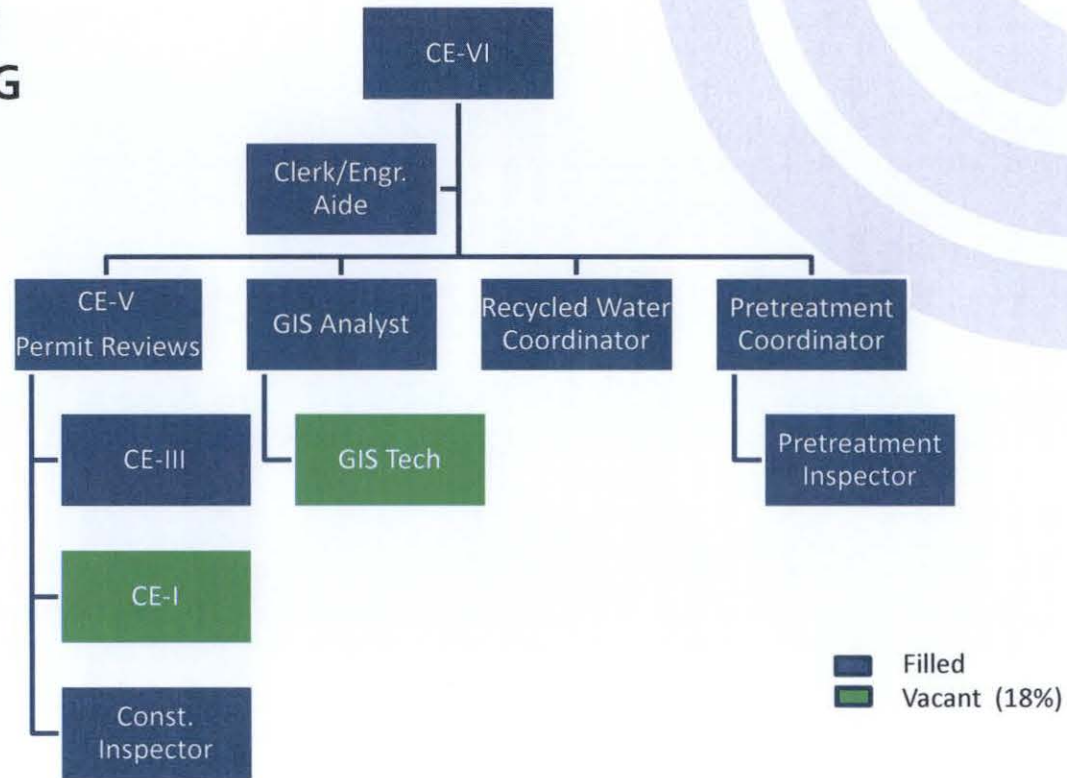
DIVISION STRUCTURE



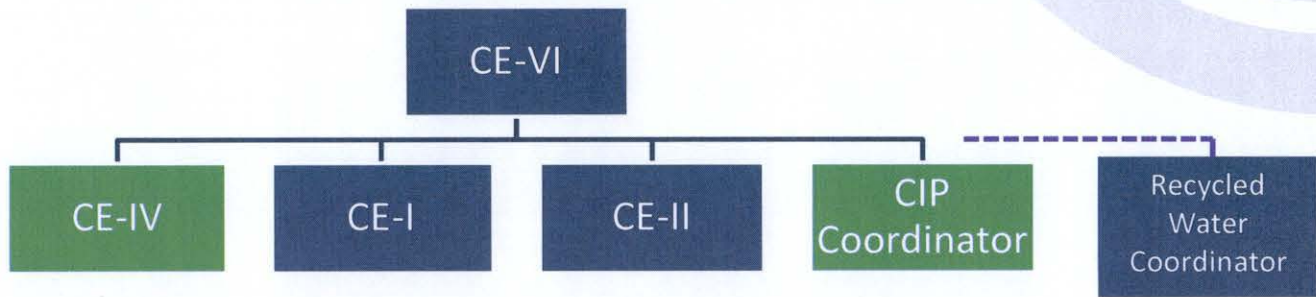
OPERATIONS



PLANNING/ PERMITTING SECTION



DESIGN / CONSTRUCTION SECTION



■ Filled
■ Vacant (40%)

**FY2020
CAPITAL IMPROVEMENT PROGRAM**

- 18 WWRD projects
- \$30,550,000

- 2 Added Council projects
- \$8,500,000



CIP PROJECT TYPES

- **Does it Work / Is it Safe ?**
 - 0 projects
- **Is it Reliable (end of useful life)?**
 - 10 projects budgeted \$10,250,000
- **Expansion of Service**
 - 2 projects budgeted \$2,900,000
- **Recycled Water Projects**
 - 6 projects budgeted \$23,550,000
- **Increase Quality of Treatment**
 - 1 project budgeted \$1,350,000
- **Other**
 - 1 project budgeted \$1,000,000



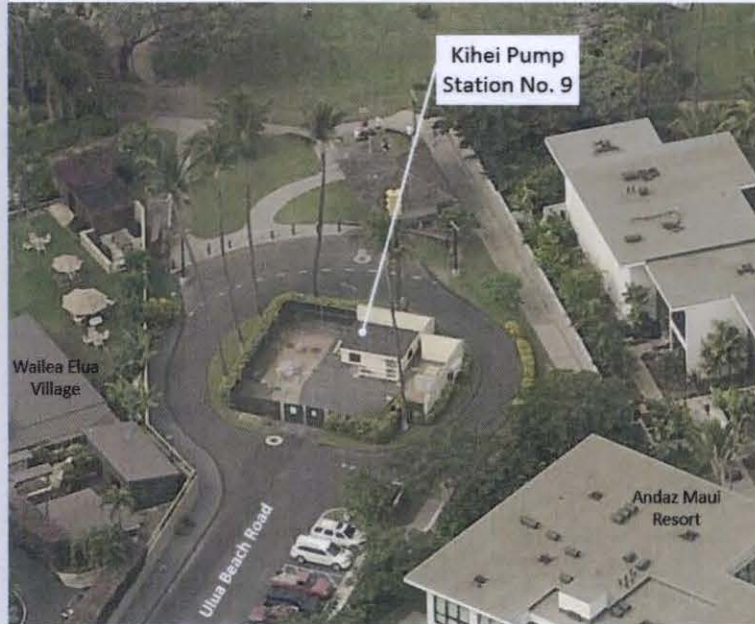
Still active from previous years:
23 CIP construction projects
35 CIP Design projects

IS IT RELIABLE (END OF USEFUL LIFE)?



DESIGN

- Kihei No. 3 Force Main
- Kihei No. 9 WWPS Upgrade
- Napili WWPS No. 3 Modifications
- Lahaina Emergency Generator Replacement
- Countywide EPA Compliance Projects



CONSTRUCTION

- Kuau #3 Force Main Replacement
- Kuau #4 Force Main Replacement
- Wailuku-Kahului EPA Compliance Sewer Rehabilitation
- Countywide EPA Compliance WWRF Renovation Projects
- Countywide Wastewater System Modifications

EXPANSION OF SERVICES



DESIGN

Wailuku-Kahului WWRP Facility Plan
(Capacity Expansion)



CONSTRUCTION

Lower Main Street Sewer Upgrade



RECYCLED WATER PROJECTS



DESIGN

- Lahaina WWRf R-1 Process Expansion
- Wailuku-Kahului Recycled Water Pump Station
- Wailuku-Kahului Recycled Water Force Main
- Kihei-Makena Sewer Expansion



CONSTRUCTION

- West Maui Recycled Water Expansion
- Kihei Effluent Pump Station Upgrade

KIHEI RECYCLED WATER SYSTEM

LEGEND

Recycled Water Users

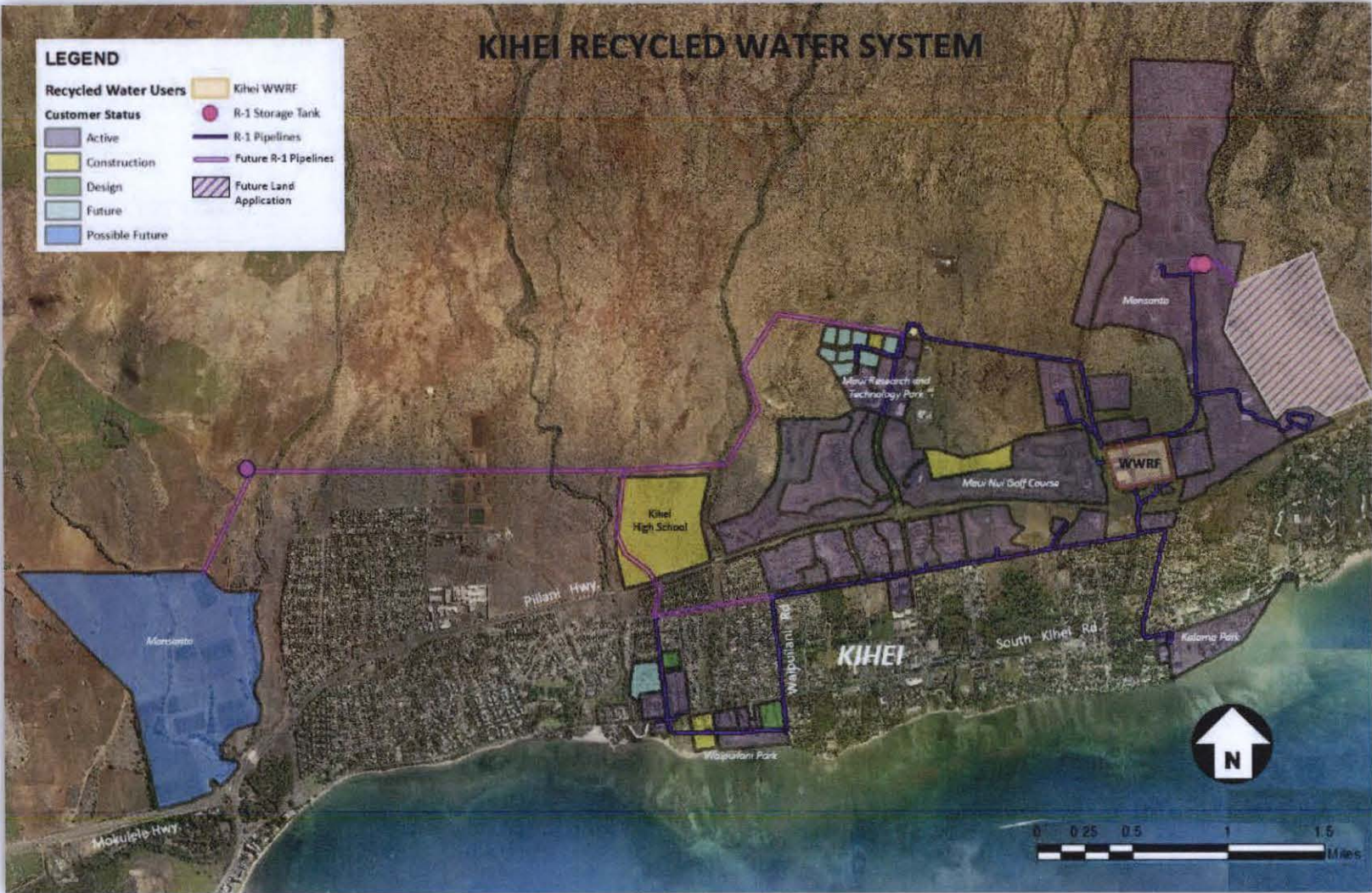
- Kihei WWRF

Customer Status

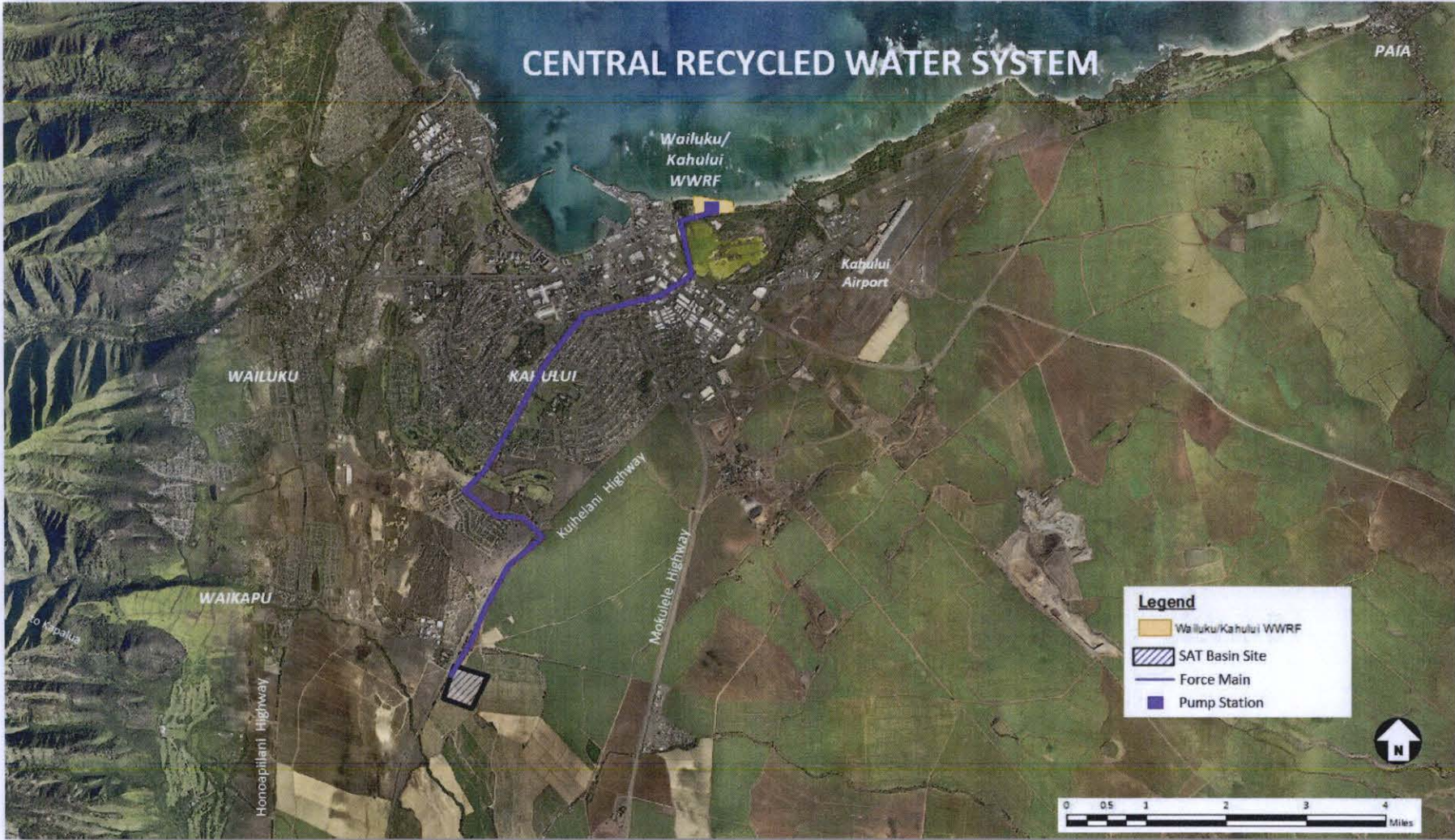
- Active
- Construction
- Design
- Future
- Possible Future

Infrastructure

- R-1 Storage Tank
- R-1 Pipelines
- Future R-1 Pipelines
- Future Land Application



CENTRAL RECYCLED WATER SYSTEM

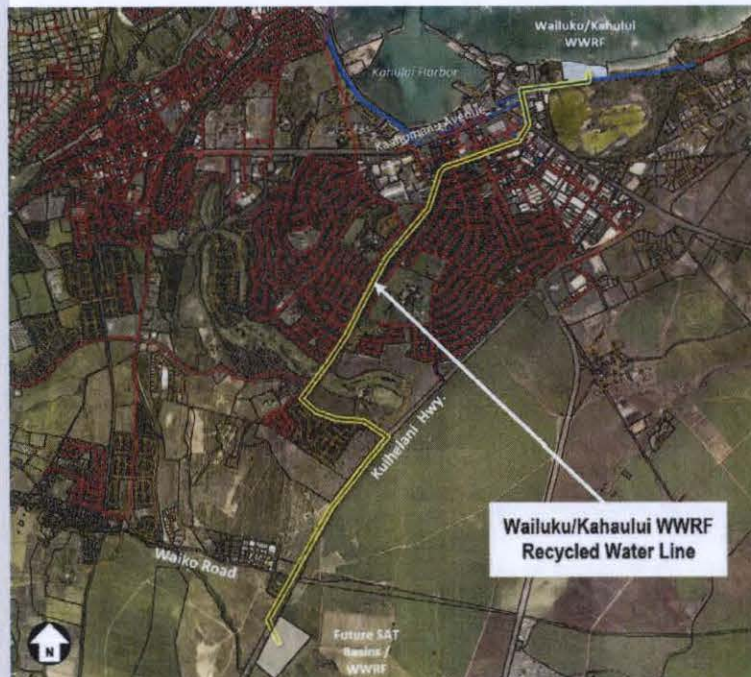


INCREASE TREATMENT QUALITY / OTHER



DESIGN

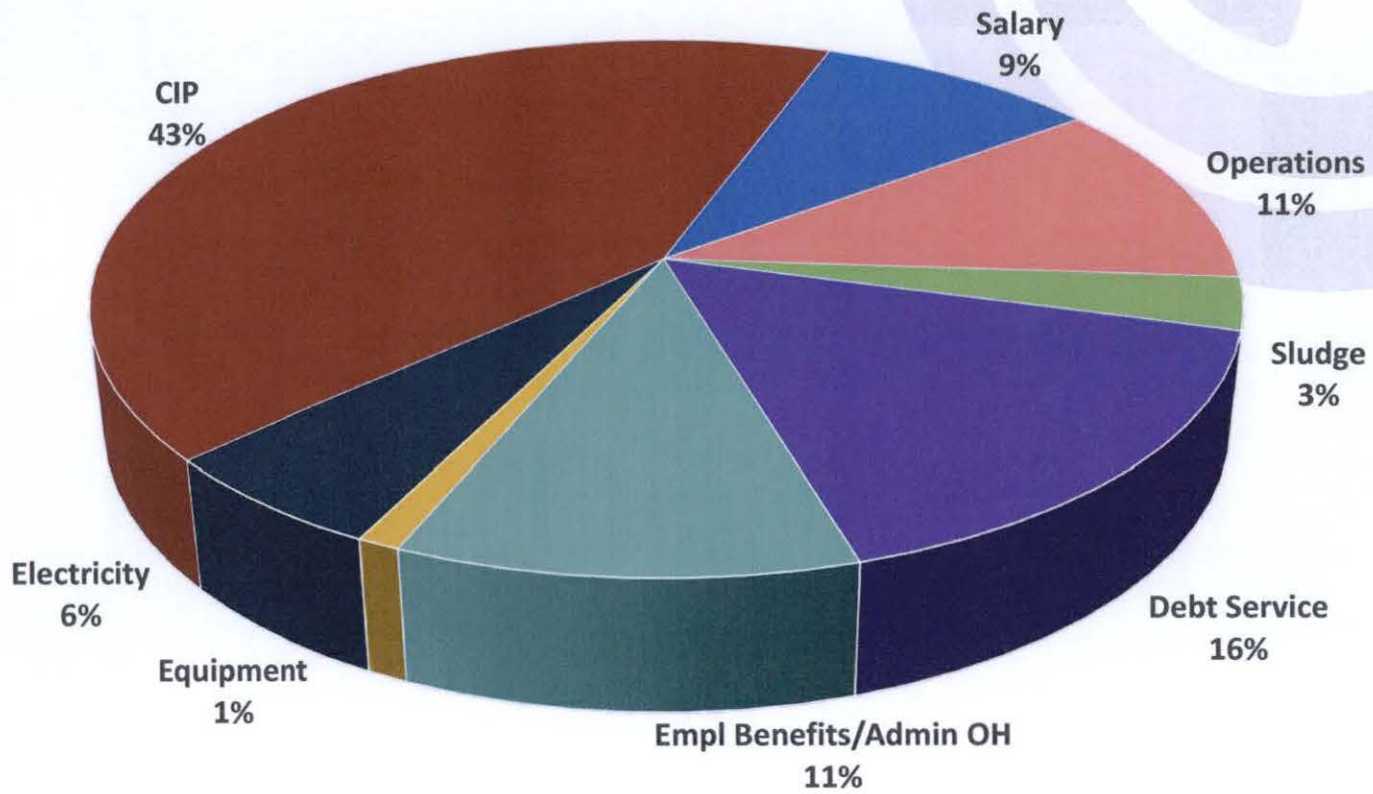
Wailuku-Kahului SAT Basins



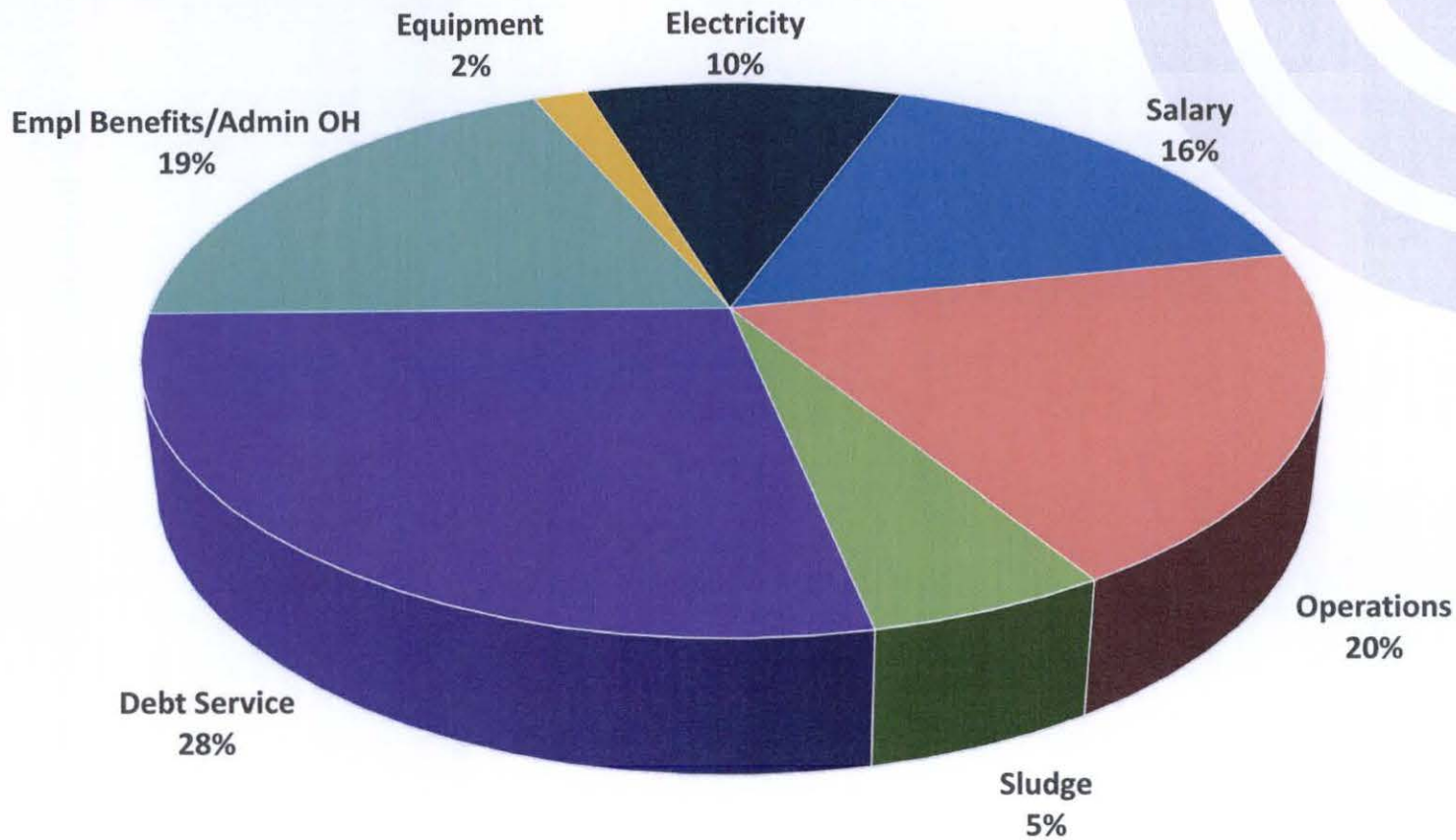
OTHER

Upcountry Sewer System Upgrades

**WASTEWATER RECLAMATION DIVISION
TOTAL FY2020 - \$92,193,361**



**WASTEWATER RECLAMATION DIVISION
TOTAL ABC ACCOUNTS FY2020 - \$53,143,361**



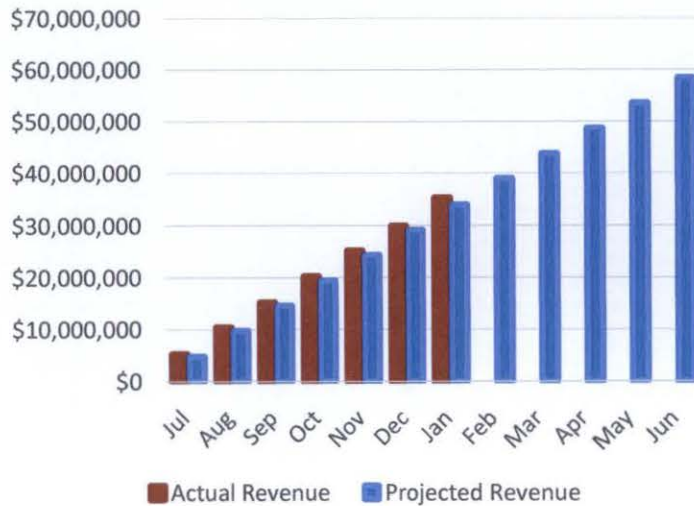
Category	Expended to Date
Salary	53%
Operations	49%
Sludge	49%
Debt Service	52%
Empl/Benefits Admin	57%
Equipment	44%
Electricity	57%

Through Jan 31, 2020 58% of Time

BUDGET STATUS THRU JANUARY 31, 2020

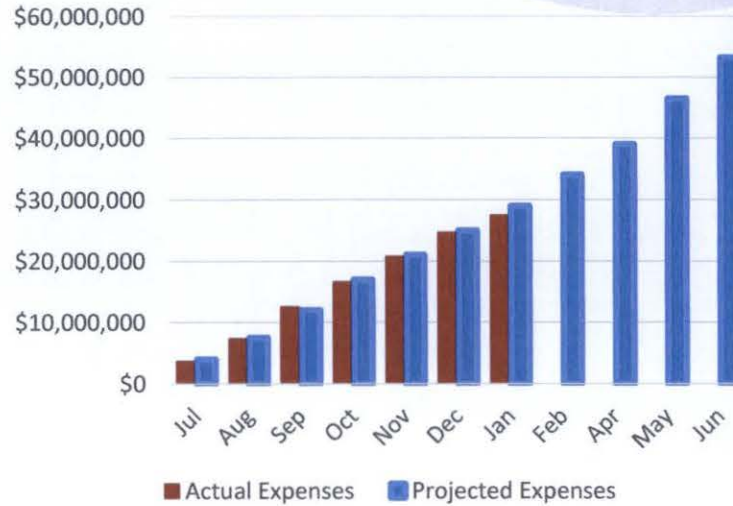
Projected Revenue \$58,395,180
Billed to Date \$35,433,034 (60%)
Time Passed - 7 months (58%)

REVENUE STATUS



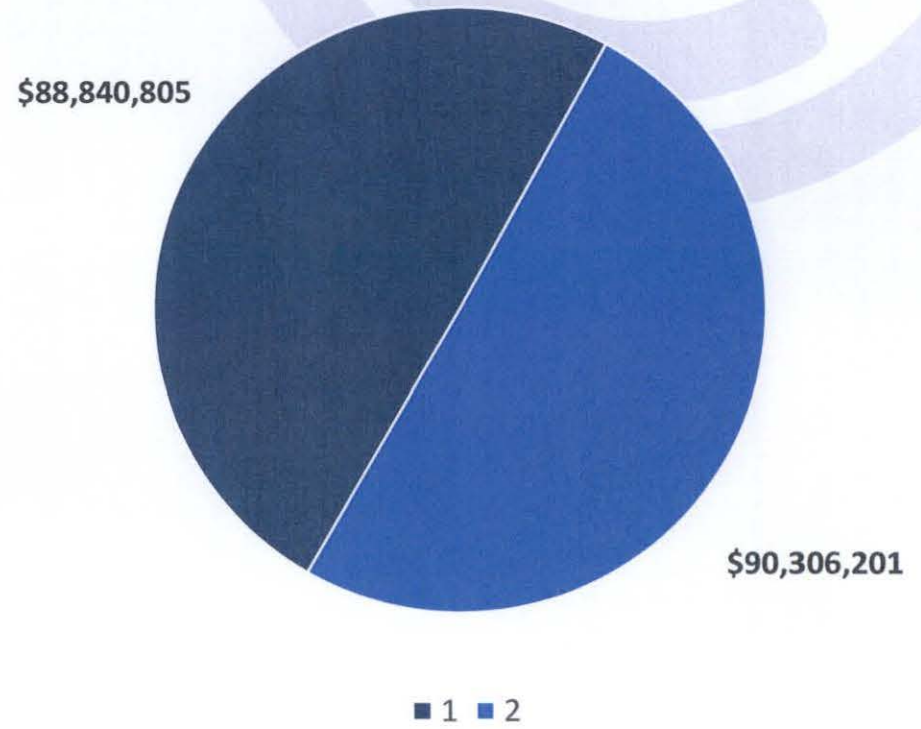
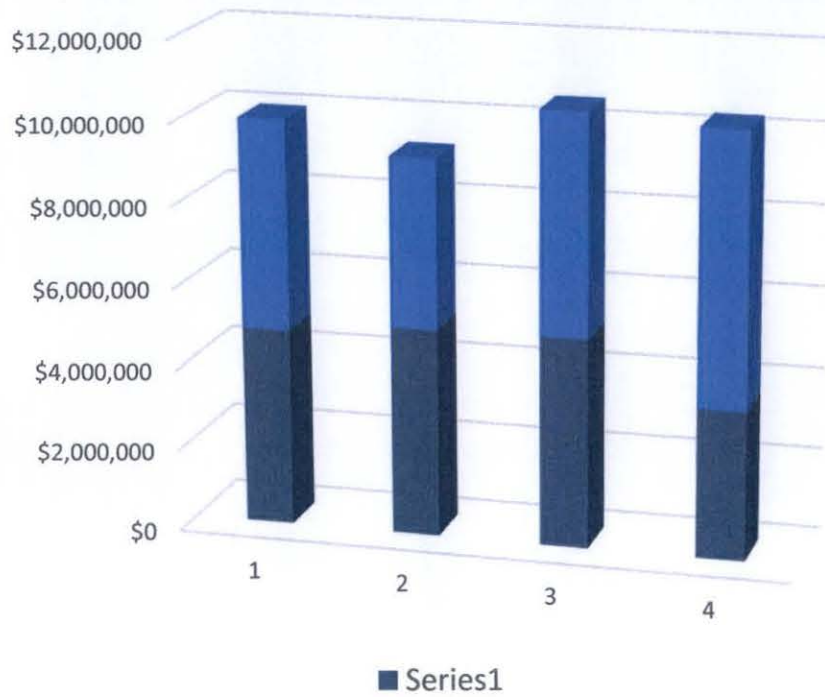
Projected Expenses \$53,143,361
Expended to Date \$27,946,739 (53%)
Time Passed - 7 months (58%)

EXPENSE STATUS

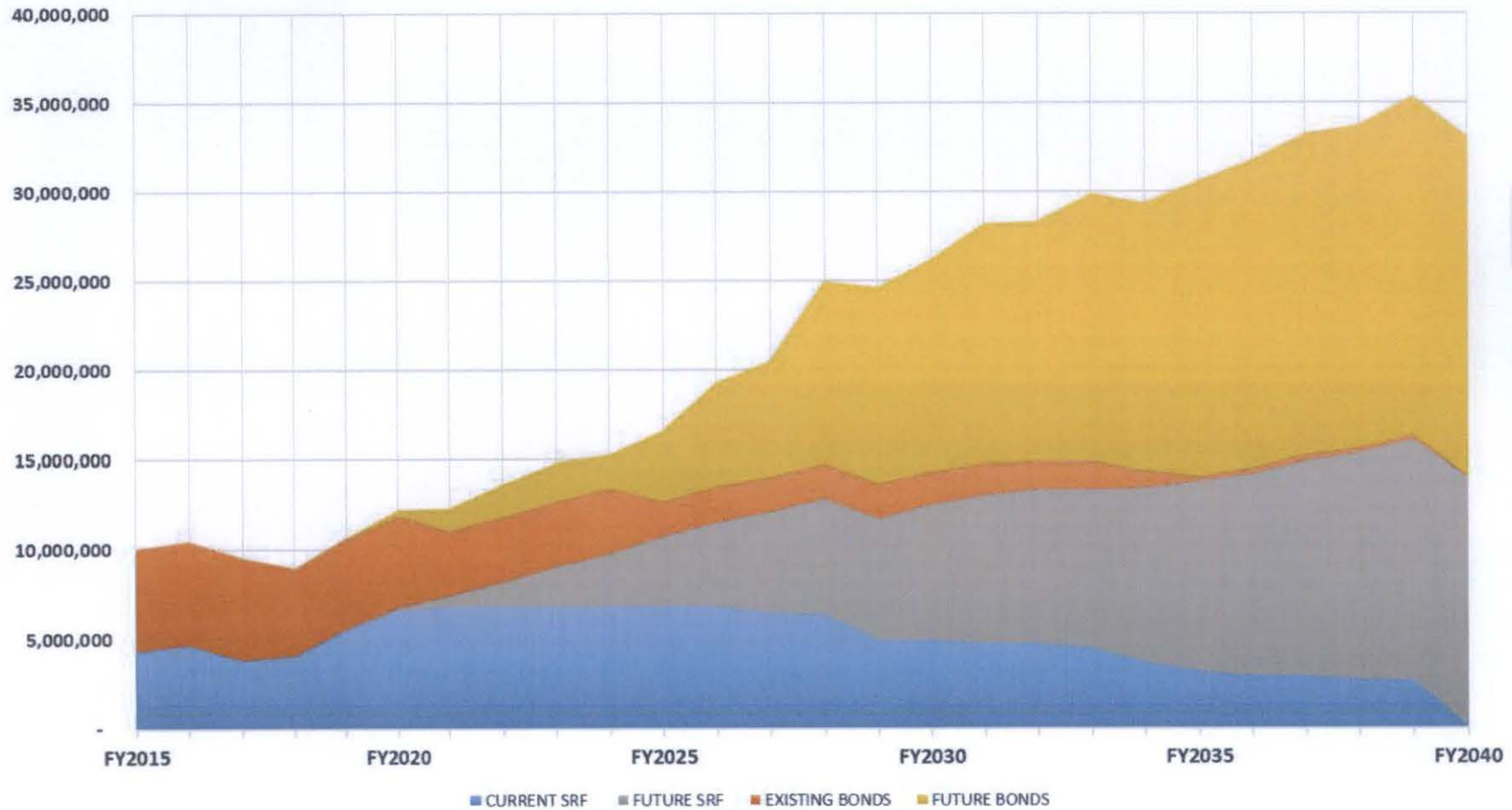


WWRD DEBT SERVICE

ANNUAL DEBT SERVICE

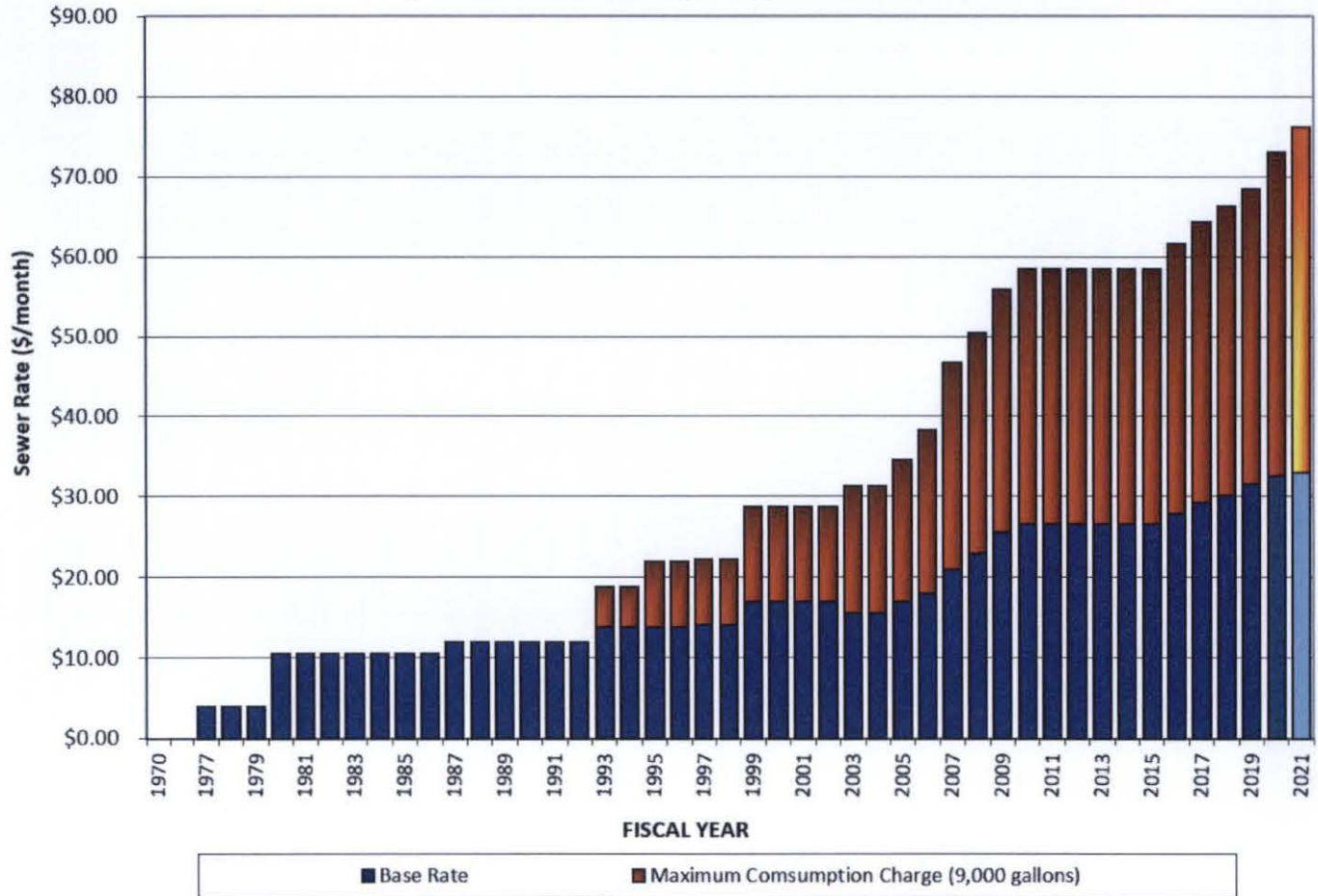


EXISTING & PROPOSED DEBT SERVICE



SEWER RATES

HISTORY OF MAUI SEWER RATES (Maximum Billing Single-Family Residence)



FUTURE CHALLENGES FACING WWRD



REDUCING ENERGY COSTS

Expected greater energy usage due to additional treatment and pumping, and cost increases due to rate increases.

Old equipment replaced with higher efficiency models, reducing carbon footprint.



CIP VS. SEWER RATES

Balancing the amount of money spent on CIP projects with reasonable increases in sewer rates and debt allocation.



AGING INFRASTRUCTURE AND EQUIPMENT

It keeps getting older and everything has a useful life.

Gravity Sewer, Manholes, Pump Stations, Force Mains, Pumps, Blowers, Generators, Reuse Lines, Meters, Tanks, Basins, UV Equipment, Filters, Buildings, Vehicles, Trucks, Maintenance Vehicles etc.



STRICTER REGULATORY REQUIREMENTS

New UIC permitting requirements, possible NPDES permit requirements, sludge disposal issues



INCREASING DEBT

SRF Loans and GO Bonds to accomplish County goals.
SRF Loan Amounts limited, Bond Rates are increasing.

THINGS THAT WILL HELP WWRD

FUNDING

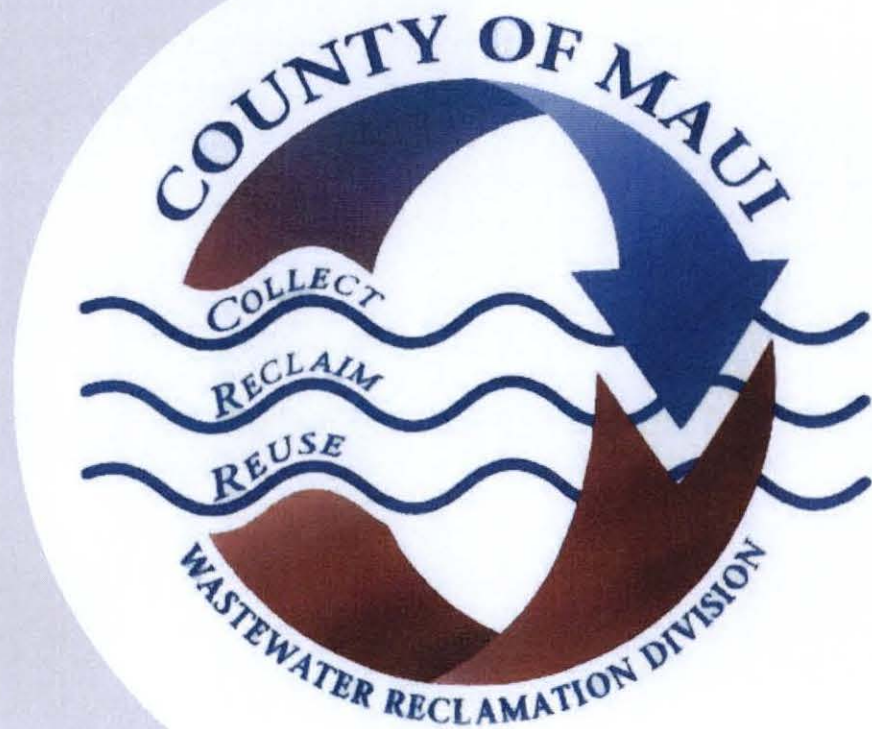


- Bonds payed by the General Fund instead of by sewer customers
- Money from the General Fund to pay for projects

- Property owners need to CCTV private sewer lines to verify adequate condition, if not repair/replace
- Banning flushable wipes



LEGISLATION



THANK YOU AND QUESTIONS



SCOTT ROLLINS
ACTING DIVISION CHIEF

