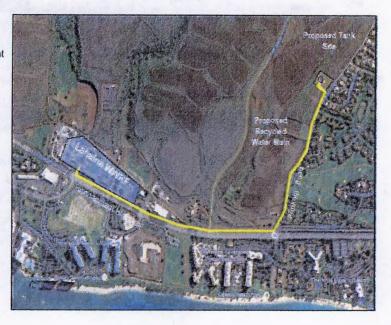
# ENVIRONMENTAL MANAGEMENT Capital Improvement Program

# **COUNTY OF MAUI**

CBS No: CBS-1124

Project Name: West Maui Recycled Water System Expansion Department: Department of Environmental Management District: West Maui Project Type: Sewer Anticipated Life: 30 years



| Prior Years | Appr    | Ensuing | Subsequent Years |         |         |         |         | Total      |  |  |
|-------------|---------|---------|------------------|---------|---------|---------|---------|------------|--|--|
| Expend/Encb | FY 2018 | FY 2019 | FY 2020          | FY 2021 | FY 2022 | FY 2023 | FY 2024 | 6-Year     |  |  |
| 3,947,331   | (       | 500,000 | 14,000,000       | 0       | 0       | 0       | 0       | 14,500,000 |  |  |

In order to increase the usage of R-1 treated effluent, the current distribution system requires several phases of upgrades, modifications and additions. By increasing R-1 usage we can reduce the amount of potable water used for irrigation and the volume of treated effluent disposed of through our injection wells. This phased project has constructed additional UV disinfection facilities so that all water processed at the Lahaina WWRF reaches R-1 quality before reuse or disposal. The next phase (1B) is to design and create a pressurized distribution system for nearby properties. This includes a new tank and force main located on current Kaanapali Land Company property.

### PROJECT JUSTIFICATION

Increased requirements by EPA (2011 Consent Agreement) to produce only R-1 quality water at the facility by December 31, 2013 for either reuse or underground injection required the construction of ultraviolet channels. Changing permit requirements will require increased reuse and an expanded and reliable distribution system. Expansion of R-1 usage for irrigation is a desire of the community and the administration.

#### STRATEGIC PLAN ALIGNMENT

Sustain Reliable Wastewater Infrastructure Ensure Facilities Meet Future Needs Provide Reliable Wastewater Service

**Department's Strategic Plan** 

- A Suitable Public Infrastructure
- A Strong, Diversified Economy
- An Efficient, Effective, and Responsive Government

**Countywide Priority Results** 

- A Prepared, Safe, and Livable County
- A Healthy and Sustainable Community

## **Operating Impact Narrative**

Significant increased costs in electrical power and maintenance anticipated due to R-1 production, pumping and system maintenance. Additional staff may be warranted upon completion of Phase 1 construction.

FISCAL YEAR 2019

## MAYOR'S PROPOSED BUDGET

675

RECEIVED AT 1EM MEETING ON 6/19/18 Committee Chair

# ENVIRONMENTAL MANAGEMENTCOUNTY OF MAUICapital Improvement Program

| FUNDING DETAILS   |              |      |         |            |         |         |         |         |
|-------------------|--------------|------|---------|------------|---------|---------|---------|---------|
| Phase Description | Fund<br>Code | Appr | FY 2019 | FY 2020    | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Acquisition       | WF           | 0    | 500,000 | 0          | 0       | 0       | 0       | 0       |
| New Construction  | OG           | 0    | 0       | 2,887,670  | 0       | 0       | 0       | 0       |
| New Construction  | SRF          | 0    | 0       | 11,112,330 | 0       | 0       | 0       | 0       |

| Schedule of Activities |            |            |            |  |  |  |
|------------------------|------------|------------|------------|--|--|--|
| Activity               | Start      | End        | Amount     |  |  |  |
| Acquisition            | 07/01/2018 | 12/31/2019 | 500,000    |  |  |  |
| Design                 | 07/01/2015 | 12/31/2016 | 0          |  |  |  |
| New<br>Construction    | 08/01/2019 | 12/31/2020 | 14,000,000 |  |  |  |
| Total Capital P        | 14,500,000 |            |            |  |  |  |
| Total O&M Cos          | 30,000     |            |            |  |  |  |
| Total Capital &        | 14,530,000 |            |            |  |  |  |

| Methods of Financing (Ensuing + 5 Years) |            |  |  |  |
|--|------------|--|--|--|
| Funding Source                           | Amount     |  |  |  |
| Other Grant Fund                         | 2,887,670  |  |  |  |
| Sewer Fund                               | 500,000    |  |  |  |
| State Revolving Loan Fund                | 11,112,330 |  |  |  |
| Total Funding Requirements               | 14,500,000 |  |  |  |

FISCAL YEAR 2019

| <ul><li>(i) Kuau No. 1 Force Main Replacement</li><li>(ii) Kuau No. 2 Force Main Replacement</li></ul>   | 50,000<br>50,000   |
|--|--------------------|
| 6. Wailuku-Kahului Community Plan Area   |                    |
| a. Drainage  |                    |
| <ul><li>(1) Bond Fund</li><li>(i) Central Maui Landfill Stormwater Management Improvements</li></ul>   | 750,000            |
| b. Sanitation  |                    |
| (1) Bond Fund  |                    |
| (i) Central Maui Landfill Monitoring Well Design/Construction  | 500,000            |
| (ii) Central Maui Landfill Land Purchase<br>(iii) Central Maui Landfill Phase III  | 250,000<br>250,000 |
|  | 200,000            |
| (2) Solid Waste Management Fund  |                    |
| (i) Leachate Collection and Recovery and Electrical Distribution   | 500,000            |
| System Upgrades<br>(ii) Central Maui Landfill System Control and Data Acquisition  | 300,000            |
|  | 000,000            |
| c. Sewer   |                    |
| (1) Sewer Fund<br>(i) Mailuku Kabului Epuironmental Protection Agency (EBA)  | 2,000,000          |
| <ul> <li>(i) Wailuku-Kahului Environmental Protection Agency (EPA)</li> <li>Compliance Sewer Rehabilitation</li> </ul>   | 2,000,000          |
| (ii) Wailuku-Kahului Wastewater Reclamation Facility (WWRF)<br>Emergency Effluent Force Main   | 450,000            |
| 7. West Maui Community Plan Area   |                    |
| a. Sewer   |                    |
| (1) Bond Fund  | 500.000            |
| <ul> <li>(i) West Maui Recycled Water System Expansion         <ul> <li>(a) Provided, that the Department of Environmental<br/>Management shall conduct community outreach before<br/>identifying a site and prior to encumbering or<br/>expending any funds.</li> </ul> </li> </ul> | 500,000            |
| (2) Sewer Fund   |                    |
| (i) Napili Wastewater Pump Station No. 4 Modifications   | 400,000            |
| (3) State Revolving Loan Fund  |                    |
| (i) Napili No. 3 Force Main Replacement  | 1,800,000          |
| (ii) Napili No. 4 Force Main Replacement   | 1,800,000          |
| B. Department of Finance   |                    |
| 1. Countywide  |                    |
| a. Other Projects  |                    |
| (1) Bond Fund  |                    |
| (i) Countywide Equipment   | 4,320,000          |
| <ul> <li>(a) Provided, that \$1,840,000 shall be for four automated<br/>refuse trucks: one each for Central Maui and West Maui</li> </ul>  |                    |
| and two for Makawao.   |                    |
| (b) Provided that 280,000 shall be for one roll-off truck for  |                    |
| residential drop-off at the Central Maui Landfill.   |                    |