# RECEIVE

#### MICHAEL P. VICTORINO Mayor

JEFFREY T. PEARSON, P.E. Director

HELENE KAU

**Deputy Director** 



## DEPARTMENT OF WATER SUPPLY COUNTY OF MAUI 200 SOUTH HIGH STREET WAILUKU, MAUI, HAWAI'I 96793

April 8, 2019



APPROVED FOR TRANSMITTAL

Ms. Michele M. Yoshimura

NW
Budget Director, County of Maui
200 South High Street
Wailuku, Hawaii 96793

Honorable Michael P. Victorino Mayor, County of Maui 200 South High Street Wailuku, Hawaii 96793

For Transmittal to:

Honorable Keani Rawlins-Fernandez Chair, Economic Development & Budget Committee Maui County Council 200 South High Street Wailuku, Hawaii 96793

Dear Chair Rawlins-Fernandez:

SUBJECT: REQUESTS/QUESTIONS FROM THE APRIL 1, 2019 MEETING (WS-9) (EDB-1)

In response to your letter dated April 3, 2019, we respond as follows:

1. Besides the \$4,362,357 in carryover savings from the Water Fund (Budget bill, page 1), are there any other Department of Water Supply carryover savings from FY 2019?

#### Answer:

We do not anticipate any additional carryover savings from FY 2019.

2. Please justify the \$20,000 for new office equipment: "Furniture for reconfiguration of existing office area for 2 vacant positions and relocation of Engineering's conference room" (index code 953109C-7042, page 19-21 of the Budget Details).

#### Answer:

Engineering Division would like to fill two vacant positions. In order for DWS Engineering to provide a safe and efficient work environment for employees, the office must be reconfigured prior to filling the vacancies. The reconfiguration includes conversion of a storage area into a meeting room. We will need to purchase desks, chairs, a meeting table, cubicle partitions, etc.

3. Please justify all new equipment for DWS Field Operations (index code 953307C, page 19-44 of the Budget Details).

#### Answer:

Please see the detail provided in response to (BD-4) (EDB-1).

4. Please explain the cost of the DWS SCADA System licenses that are requested to be replaced (index code 953471C, page 19-45 of the Budget Details).

#### Answer:

The SCADA (supervisory control and data acquisition) is our computer system that runs our ground water well pumps, tank levels, and alarming for the entire distribution systems (Maui and Molokai) system. License upgrades plus annual support from the manufacturer provides technical support, product version updates and security patches. This extra added cost is part of system upgrades and expansion for more users to have greater access to SCADA for control and troubleshooting County wide problems/issues 24x7x365.

5. Please explain the cost and ages of the six DWS admin desktop computers that are being requested to be replaced (index code 953471C, page 19-45 of the Budget Details).

#### Answer:

Those computers were purchased in 2013-2014 to replace older computers used by supervisors on a daily basis for almost every administrative function in Plant Operations Division, ADP time

accounting, SCADA, E-mail communications, Purchasing forms, attendance, evaluations, job assignments, and much more. Replacement cost of new computers is \$2,300 each.

6. Please justify the replacement of two nine-year-old Motor Vehicles (1 Ton 4x4 Utility Box, Lift Gate, Pipe Rack) in the Water Operations Program (index code 953471C-7040, page 19-45 of the Budget Details). What is the trade-in value of each vehicle?

#### Answer:

Those two trucks are used for essential daily disinfection/chlorination system maintenance for all ground water sources which represents about 70 percent of total system demand. Driven off-road with four-wheel drive, those trucks take a beating hauling disinfection products up and down mountains in all weather conditions.

Our normal practice is to hold an auction for scrapped vehicles, equipment, etc. Items are usually sold for scrap value. If we pursue recycling of retired vehicles, cost per vehicle is about \$500 (we pay \$500 per vehicle). Rather than pay \$500 to recycle/scrap a vehicle, we usually sell them at auction for \$20-\$200 per vehicle.

7. Please justify the \$2,000,000 increase in the Meter Replacement Program Phase 1 (index code 953083B-6132, page 19-13 of the Budget Details). Please also provide more information on the Meter Replacement Program, including how often the meters need to be replaced.

#### Answer:

At FY end 6/30/2018, approximately 93 percent (33,598) of the water services maintained and managed by DWS were smaller sized meters (5/8" & 3/4") which are normally in the single-family dwelling (residential) rate category. Of these, approximately 70 percent were in excess of 15 years of age. With age comes a diminished ability to accurately record actual water use leading to a loss of revenue for the County. Typically, at this age, it has been determined that the cost of meter replacement is less than the loss of revenues with the continued use of the old meter. Most studies performed by the industry have concluded that residential meters should be replaced every 15-20 years.

Of the \$2.0 million being requested for the FY2020 budget, approximately \$200,000 - \$300,000 is being requested to fund a comprehensive Water Meter Replacement Plan. We are currently working with industry consultants to formalize a scope for this plan. The balance of the funds would be used to hire an outside vendor(s) to provide needed labor

resources to assist our two staff Water Meter Tech positions in the actual installation of the new meters.

8. Please justify the proposed purchase of a new Crew Cab (4WD) for \$85,000 (index code 953307C-7040, page 19-44 of the Budget Details).

#### **Answer:**

The new Crew Cab is necessary to tow the valve exerciser and transport the men and tools to operate the valve exerciser. Valves are the devices that regulate and stop or start water in the distribution system and are an integral part of a drinking water utility. Ensuring valves are functioning properly through a valve exercising program is critically important.

Benefits of a valve exercising program include having:

- -accurate records of detailed valve information;
- -valve reliability in emergencies;
- -the ability to immediately isolate main breaks (resulting in lower water losses and the least possible disruption of service to customers);
- -extended valve life; and
- -less employee overtime in dealing with emergency repairs and more confidence in our water system.
- 9. What has been the percentage increase in water rates for the last ten years?

#### **Answer:**

Fiscal	Percent		
<u>Year</u>	<u>Increase</u>		
2010	8.3%		
2011	7.0%		
2012	5.5%		
2013	4.5%		
2014	5.0%		
2015	6.5%		
2016	0.0%		
2017	5.0%		
2018	0.0%		
2019	0.0%		

4.2% 10 year average

10. What is the purpose of the proposed three-percent average water rate increase?

#### Answer:

The proposed three-percent average water rate increase is necessary to support operational expenses, maintenance of an aging water system, and necessary capital improvements.

11. What new water sources has the County developed on Maui in the last 20 years?

#### Answer:

The Table below includes water sources that were developed in the last 20 years:

DWS Water Sources Developed in the last 20 years (1999-current)					
Community Plan Area	Well Name	Year Drilled	Year Online	Well Designation	
Hana	Keanae 2	2000	2001	Backup	
Hana	Hamoa 2	2006	2014	Backup	
Hana	Wakiu C	2013	2016	Backup Replacement	
Makawao-Pukalani-Kula	Pookela A	2003	2004	Additional water source	
Wailuku	Kupaa 1	1999	2000	Additional water source	
Wailuku	Kanoa 1	1999	2000	Additional water source	
Wailuku	Kanoa 2	2000	2001	Additional water source	
Wailuku	Waikapu Tank Site	1999	2012	Replacement	
Wailuku	lao Tank Site	2005	2012	Replacement	
Wailuku	Wailuku 1	2012	2016	Replacement	
Wailuku	Wailuku 2	2012	2016	Replacement	
				Additional water	
Haiku	Kaupakalua	1998	2000	source	

12. Please identify any expenditures in the FY 2020 Budget related to resolving the Upcountry water meter problem.

#### **Answer:**

The following Fiscal Year 2020 Capital Improvement Projects are projects related to the issuance of water meters from the Upcountry Water System:

## <u>Countywide Facility Improvements (Lower Kula Raw Water Transmission Line - Tree Clearing):</u>

This project involves the clearing of trees adjacent to the transmission line providing raw water to the Piiholo Water Treatment Plant (WTP) 50- million storage reservoir. This provides a higher level of assurance that delivery of raw water to the WTP reservoir will not be impacted by fallen trees that have in the past damaged the transmission line resulting in restricted or no water flow into the WTP reservoir. Reduction of raw water has a direct impact on the production of potable water for the Upcountry Water System.

## Countywide Facility Improvements (Piiholo WTP Sludge Lagoon Booster Pump - Motor Control Center Replacement):

This project involves the replacement of the existing motor control center for the Piiholo WTP Sludge Lagoon's Booster Pumps. This equipment has reached its service life. A failure of these booster pumps would delay the ability to remove sludge from the lagoons, thereby potentially leading to a plant shutdown that would have a direct impact on the production of potable water for the Upcountry Water System.

## <u>Countywide Upgrades and Replacements (Kaupakalua Well and Booster Pump - Motor Control Center Replacement):</u>

This project involves the replacement of the existing well motor control center for Kaupakalua Well and Booster Pumps. This equipment has reached its service life. A failure of the motor control center would impact the delivery of potable water to the Kokomo-Peahi area.

## <u>Countywide Upgrades and Replacements (Kaupakalua Well - Pump and Motor Replacement):</u>

This project involves the replacement of the existing pump and motor for Kaupakalua Well. A failure of the pump and motor would impact the delivery of potable water to the Kokomo-Peahi area.

#### <u>Upcountry Reliable Capacity (Pookela Well B):</u>

This project involves the development Pookela Well B. This development phase includes the installation of the well's pump and motor, replacement of the existing motor control center for Pookela Well A that will be shared

"By Water All Things Find Life"

with Pookela Well B, Supervisory Control and Data Acquisition (SCADA) equipment, and related appurtenances. Pookela Well B will provide a back-up source to the existing Pookela Well a thus providing increased system reliability for the Upcountry Water System.

## <u>Countywide Facility Improvements (Kamole WTP Clearwell Structural Repairs):</u>

This project involves structural repairs to the interior and exterior of the existing 3-million gallon clearwell at the Kamole Water Treatment Plant. Addressing this structural repair improves reliability for the Upcountry Water System.

In advance, thank you for your attention to this matter. If you have any further questions, please contact me.

Sincerely,

JEFFREY T. PEARSON, P.E.

Director

JP:HK:lkk