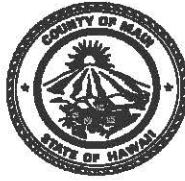


ALAN M. ARAKAWA  
Mayor



DAVID TAYLOR, P.E.  
Director

GLADYS C. BAISA  
Deputy Director

RECEIVED


2018 APR 12 PM 3:13

OFFICE OF THE MAYOR

DEPARTMENT OF WATER SUPPLY  
COUNTY OF MAUI  
200 SOUTH HIGH STREET  
WAILUKU, MAUI, HAWAII 96793-2155  
www.mauiwater.org

April 12, 2018

Honorable Alan M. Arakawa  
Mayor, County of Maui  
200 South High Street  
Wailuku, Hawaii 96793

APPROVED FOR TRANSMITTAL  
  
Mayor 4/12/18  
Date

For Transmittal to:

Honorable G. Riki Hokama, Chair  
Budget and Finance Committee of the Maui County Council  
200 South High Street  
Wailuku, Hawaii 96793

Dear Chair Hokama:

**Subject: FINANCE DIRECTOR'S QUARTERLY AND CAPITAL IMPROVEMENT PROJECTS (CIP) REPORTS (BF-4(1))**

Pursuant to your letter dated, April 4, 2018 pertaining to your March 28, 2018 meeting, the Department of Water Supply is providing the following response:

1. *Explain why the Department lapsed \$1,885,924 for the Pookela Well "B" Exploratory project.*

**RESPONSE:** The \$1,885,924 lapsed in Fiscal Year 2017 (FY17), was intended to fund the construction of a chloramine addition system at the Upper Kimo Booster Pump Station to streamline the disinfection process for supplementing the Upper Kula System with water from the Lower Kula System. Please refer CBS-1106 (a. Upcountry Reliable Capacity) - Item 3) of the attached, Appendix C for F17. The lapsing of funding is due to additional water quality analysis necessary for the consultant to be able to make a recommendation and estimated to be completed in April 2019.

CBS-1106 (a. Upcountry Reliable Capacity) provides for the following project items : 1) construction of an exploratory well for the Pookela Well 2; 2) design of the Pookela Well 2 facility, contingent upon the results of the exploratory well; and 3) construction of a chloramine addition system at the Upper Kimo Booster Pump Station to streamline

*"By Water All Things Find Life"*

the disinfection process for supplementing the Upper Kula System with water from the Lower Kula System.

2. *Provide the map of potential well sites sent to the United States Geological Survey (USGS) for the Kualapu'u Well Number 2 Exploratory project.*

RESPONSE: Please refer to the attached Exhibit A, which shows the potential well sites for Kualapu'u Well Number 2 Exploratory project that DWS sent to USGS for the modeling of the Kualapu'u Aquifer.

3. *As it relates to the Mahinahina Well #1 Drilling/Development project under Countywide Facility Improvements, explain why development of Well #1 was discontinued.*

RESPONSE: We would like to clarify that Mahinahina Well #1 is not being discontinued. Based on the pump test results and analysis, it is anticipated that if developed, Well #1 will be considered a backup source to the other existing wells and the surface water treatment plant.

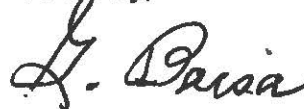
4. *As it relates to Mahinahina Well #1 and Well #2, provide the number of gallons per day that could be pumped from both wells and its long term sustainable yield.*

RESPONSE: Based on the pump testing results and analysis of Well #1, the well is drawing from a dike-confined, high-level groundwater aquifer rather than the basal aquifer and the hydrologist concluded that the sustainable pumping capacity cannot be definitively determined from the 10-day pump test data.

Based on the pump testing results and analysis of Well #2, the well long-term sustainable yield is 960,000 gallons per day.

Should further clarification be necessary, please contact Wendy Taomoto, Engineering Program Manager at ext. 7669.

Sincerely,

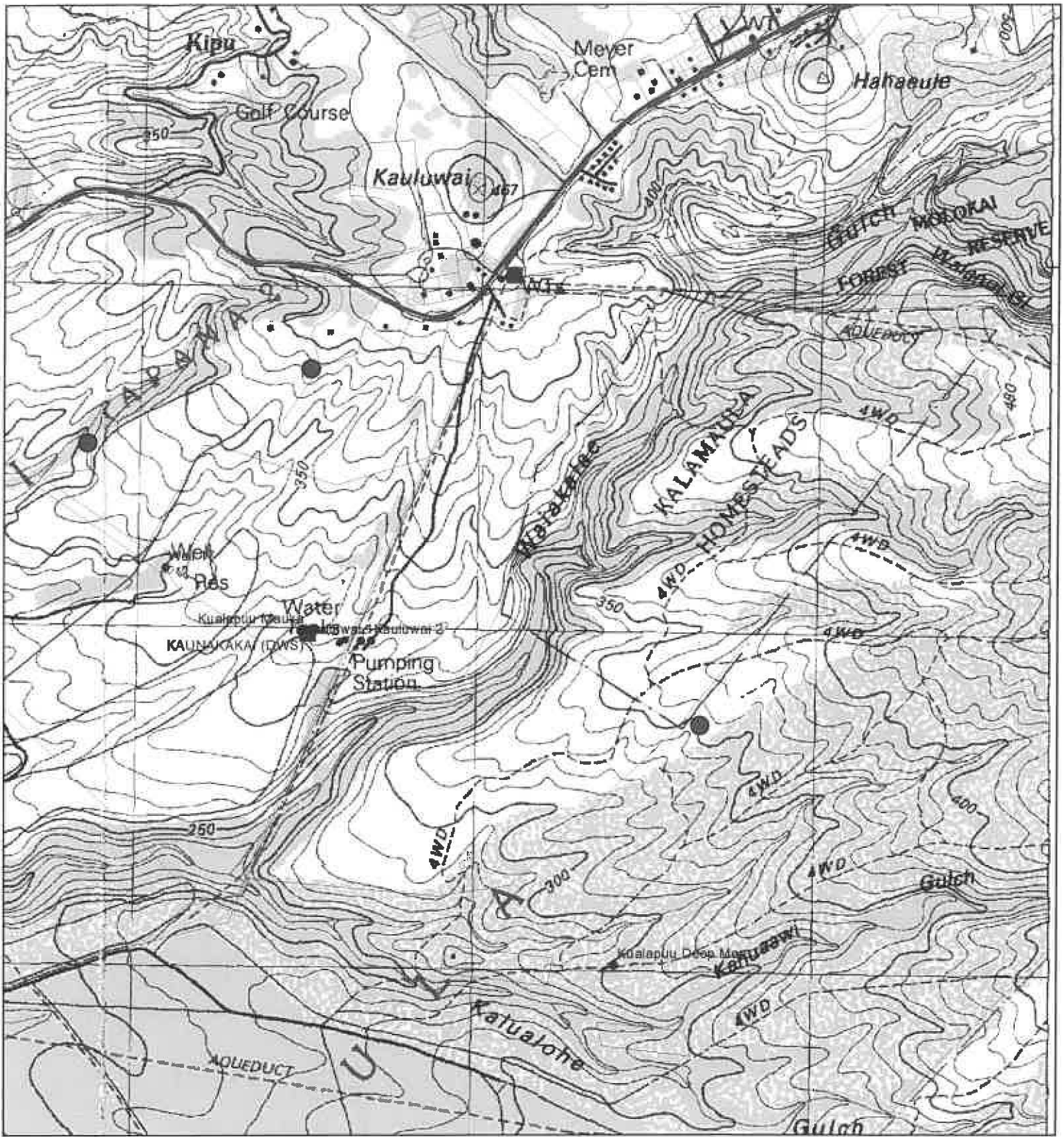


GLADYS C. BAISA  
Deputy Director

Attachment: Exhibit A  
xc: DWS Engineering Division (w/attachment)

GB/WKT

# Kualapu`u Pump Scenarios



- New\_Kualapuu\_candidate\_sites
- Molokai\_MDWS-Wells
- All wells
- MDWS Tank
- Molokai\_Pipes
- Road



APPENDIX C - Capital Improvement Projects			
CBS NO.	PROJECT TITLE/DESCRIPTION	APPROPRIATION	
Capital improvement project funding may not be used for any purpose other than as described in this appendix. If more than one work-phase designation is shown in the right-most column, the amount for each designation shall not be interpreted to restrict the use of the appropriation to that amount. The total amount appropriated for a project may be used for the work phases provided in the project description. A budget amendment shall be requested if the total amount appropriated will be insufficient to complete all work phases set forth in the project description.			
<b>Department of Environmental Management</b>			
<b>1. Countywide</b>			
CBS-2722	<b>a. Countywide Landfill PV/Wind Turbine Lighting</b>	195,000	C
	Design and installation of renewable energy lighting systems for site safety and security at county landfills in areas where no electric power exists.		
CBS-3182	<b>b. Environmental Compliance System Design and Construction</b>	100,000 150,000	D C
	Design and construction services to address environmental compliance opportunities and operational improvements at all county solid waste management facilities in alignment with state and federal requirements.		
CBS-1132	<b>c. Countywide Environmental Protection Agency (EPA) Compliance Projects</b>	500,000	C
	Replacement or remediation of damaged or deteriorated sewer lines throughout the county as a requirement of the 1999 Consent Decree.		
CBS-1119	<b>d. Countywide Environmental Protection Agency (EPA) Consent Decree Wastewater Reclamation Facility Renovation Projects</b>	1,600,000	C
	Design, construction, remediation, or replacement of equipment at Wastewater Reclamation Facilities (WWRF) as required by the 20-year Rehabilitation and Replacement Plan, developed under the 1999 Consent Decree. FY 2017 projects include: Electrical system upgrades at the Lahaina and Kahului WWRFs, repairs to headworks, repairs to chlorine mixing rooms and replacement of aeration discs at Kahului WWRF.		
CBS-2732	<b>e. Countywide Satellite Recycled Water Facilities</b>	200,000	P
	Feasibility study to identify possible locations of facilities necessary to recycle wastewater close to the generation source.		
CBS-1128	<b>f. Countywide Wastewater System Modifications</b>	200,000 300,000	D C
	Design and construction services to address environmental compliance opportunities and operational improvements at all county wastewater system facilities in alignment with state and federal requirements.		
CBS-2734	<b>g. Countywide Wastewater Reclamation Facility (WWRF) Chlorination System Upgrade</b>	2,000,000	C
	Upgrade of a chlorination system required for algae control and effluent disinfection to maintain quality water processing.		
<b>2. Hana Community Plan Area</b>			
CBS-1908	<b>a. Hana Landfill Makai Berm Waste Removal</b>	2,000,000	G
	Remediation of unpermitted waste dumped outside of the existing permitted waste limits of Hana Landfill by removing waste from the Makai side of the landfill, and relocating the waste to the current permitted landfill parcel in alignment with Hawaii Department of Health remediation requirements.		
<b>3. Kihei-Makena Community Plan Area</b>			
CBS-3196	<b>a. Kenolio Road/Koki Place Sewer Rehabilitation</b>	50,000	D
	Design the replacement of existing sewer lines in disrepair on Kenolio Road and Koki Place in Kihei.		

CBS-2730	<b>b. Kihei Wastewater Reclamation Facility (WWRF) RTU Upgrades</b>	1,500,000	C
	Replacement of twelve radio transmitting units and the associated programming to make the new units function properly.		
CBS-2321	<b>c. North Kihei Mauka Transmission System</b>	200,000	P
	Preliminary study and planning for the design and construction of a wastewater collection and transmission system for development mauka of Piilani Highway.		
CBS-1917	<b>d. Kulanihako Street Recycled Water Line Extension</b>	1,700,000	C
	Design and construction of an extension to the Kihei recycled water distribution system to deliver recycled water for irrigation use at the planned Kihei High School and other multi-family and commercial customers.		
	<b>4. Molokai Community Plan Area</b>		
CBS-3184	<b>a. Molokai Landfill - Environmental Assessment Amendment</b>	160,000	P
	Complete an Environmental Assessment amendment to include provisions for future phases 5 & 6, which will expand the landfill footprint to approximately 19 acres and extend the life of the landfill by approximately 26 years.		
	<b>5. Wailuku-Kahului Community Plan Area</b>		
CBS-1109	<b>a. Central Maui Landfill (CML) Phase V Gas Collection System Expansion</b>	2,500,000	C
	Construction of infrastructure expansion to collect and control landfill gas at Central Maui Landfill Phase V, per state and federal regulations.		
CBS-3181	<b>b. Central Maui Landfill System Control and Data Acquisition</b>	80,000	D
	Design to provide the necessary infrastructure and equipment to monitor and record data in real time critical regulatory monitoring systems such as landfill gas, leachate collection, storm water, and meteorological data on-site and remotely for both operations and engineering sections for compliance requirements at the Central Maui Landfill.		
CBS-3175	<b>c. Leachate Collection and Recovery and Electrical Distribution System Upgrades</b>	80,000	D
	Design of upgrades to modernize the leachate collection and recovery system at the Central Maui Landfill Phase IV-A Wet Well and Leachate Storage Tanks, including upgrading electrical distribution systems, mechanical design upgrades, and providing reliable and uninterrupted operation of the system.		
CBS-1131	<b>d. Environmental Protection Agency (EPA) Sewer Rehabilitation</b>	1,000,000	G
	Remediate or replace major gravity sewer lines that are damaged or in disrepair, identified through video investigation or other means. Scope of work to include construction of a replacement line at Ku Drive, and design of replacement lines at South and North Mokuhanu Roads, and Piihana Road.		
CBS-3233	<b>e. Wailuku-Kahului Wastewater Reclamation Facility Solids Building Renovation</b>	1,000,000	G
	Renovations to the Solids Handling Building located at the Wailuku-Kahului Wastewater Reclamation Facility. Scope of work includes structural, electrical, and cosmetic aspects to the interior and exterior of the structure.		
	<b>6. West Maui Community Plan Area</b>		
CBS-3174	<b>a. Lahaina Refuse Office</b>	250,000	G
	Acquisition and installation of a new mobile office for Lahaina Refuse collection employees because the current office trailer is damaged beyond repair.		
CBS-3202	<b>b. Lahaina Wastewater Reclamation Facility Upgrade for Direct Potable Reuse</b>	150,000	P
	Completion of a Project Engineering Report to determine the requirements of additional processes required to refine treated wastewater to a quality suitable for introduction to the County's potable water supply.		

CBS-1161	<b>c. Napili No. 3 Force Main Replacement</b>	200,000	D
	Design for the replacement of a 2,074-foot long, 16-inch diameter ductile iron pipe force main, constructed in 1985. This line is located within Lower Honoapiilani Road (between Hui Nui Place and Hoohui Road, Lahaina).		
CBS-1174	<b>d. Napili No. 4 Force Main Replacement</b>	200,000	D
	Design for the replacement of a 2,040-foot long, 14-inch diameter ductile iron pipe force main, constructed in 1985. This line is located within Lower Honoapiilani Road (between Hui Road "F" and Napilihau St., Lahaina).		
CBS-1162	<b>e. Napili Nos. 5 and 6 Force Main Replacements</b>	3,200,000	C
	Construction to replace two interconnected 14-inch diameter ductile iron pipe force mains within Lower Honoapiilani Road, which were constructed in 1985 and nearing the end of their useful life.		
CBS-1144	<b>f. Lahaina Wastewater Reclamation Facility (WWRF) Modifications, Stage IA</b>	12,500,000	C
	Provide engineering consultant services to design long term operational process changes to the 1975 and 1985 treatment facilities; provide complete design plans and bid documents for required work; and complete construction of basins and other required facilities.		
CBS-1163	<b>g. Sheraton Wastewater Pump Station Modifications</b>	1,000,000	C
	Construction of upgrades (pumps, motors, generators, SCADA, etc.) and required modifications (building, piping, electrical) to the existing pump station located on the Kaanapali Golf Course and originally constructed in 1967.		
	<b><u>Department of Finance</u></b>		
	<b><u>1. Countywide</u></b>		
CBS-3210	<b>a. Countywide DMVL Satellite Office Upgrade</b>	10,000 39,700 87,500	D E G
	Design and renovation of the Kihei Department of Motor Vehicle and Licensing (DMVL) Office, along with acquisition and installation of additional furniture and equipment. Acquisition and installation of security systems and cameras at the DMVL offices in Molokai and Hana. Acquisition and installation of plexiglass at all work stations at the Kihei and Lahaina DMVL offices to provide greater staff safety.		
CBS-1218	<b>b. Countywide Equipment</b>	3,190,000	E
	Purchase of equipment for the Department of Environmental Management (Solid Waste Operations) in the amount of \$2,880,000 as follows: (3) 28-Cubic-Yard Automated Refuse Trucks, one of which shall be for the West Maui District; (1) 17-Cubic-Yard Rear Loader w/lifters for the Wailuku District; (1) Landfill Waste Compactor; and (1) 20-Cubic-Yard Automated Refuse Truck for Lanai. Purchase of equipment for the Department of Public Works (Road, Bridge, and Drainage Maintenance Program) in the amount of \$310,000: (1) Vacuum Street Sweeper for the West Maui District.		
CBS-3235	<b>c. Acquisition of Launiupoko Lands</b>	2,273,000	A
	Land acquisition and related costs for Launiupoko, TMK: (2) 4-7-014:012, totaling approximately 37.7 acres to be used for open space.		
	<b><u>Department of Fire and Public Safety</u></b>		
	<b><u>1. Lanai Community Plan Area</u></b>		
CBS-1005	<b>a. Lanai Fire Station Improvements</b>	10,000	A
	Land acquisition for the Lanai Fire Station apparatus bay addition to store specialized department equipment currently at the Lanai Fire Station.		

	<b>Department of Housing and Human Concerns</b>		
	<b>1. Paia-Haiku Community Plan Area</b>		
CBS-3195	<b>a. Kaunoa Senior Center - Property Sewer Service Manhole Installations</b>	40,000	C
	Construction of two new sewer manholes to be installed at Kaunoa Senior Center in Spreckelsville, as required by the Maui County Code, Chapter 14.25A.130(F), and administered by the Department of Environmental Management, Wastewater Reclamation Division.		
	<b>Department of Management</b>		
	<b>1. Countywide</b>		
CBS-1009	<b>a. Public Safety Radio System Replacement</b>	3,800,000 750,000	C G
	Site improvements, construction, and acquisition of required components for replacement of the Public Safety Radio System. FY 2017 scope includes constructing new radio sites at Lahaina Water Treatment Plant and Mahinahina Water Plant, acquisition of equipment and electronics required within the facilities, and additional user equipment system-wide. Begin design and permitting process for new radio site at Hana.		
	<b>Department of Parks and Recreation</b>		
	<b>1. Countywide</b>		
CBS-3232	<b>a. Countywide Park Playground Improvements</b>	1,115,000	G
	1) Replacement of playground safety surfacing at Waiale Park and Keopuolani Park; construction of playground shade structures at South Maui Community Park and Kalama Park. 2) From the West Maui Park Assessment Fund, \$115,000: Construct shade structure at Napili Park Playground, Honokowai Park, and Lahaina Recreation Center. 3) Provided that, \$30,000 shall be for the Wailuku Heights Park, provided, the Wailuku Heights Association contributes an additional \$5,000 for improvements to the Park.		
CBS-1117	<b>b. Countywide Parks Americans with Disabilities Act (ADA) Improvements</b>	300,000	G
	Renovations at county park facilities to meet the county's ADA Transition Plan to provide handicapped accessibility for park facilities. Scope of work will involve the following: Kahului School Park, Kepaniwai Park, Sun Yat-Sen Park, beach parks, community centers, swimming pools, and the Waiehu Golf Course.		
CBS-3215	<b>c. Countywide Toilet Trailers</b>	440,000	A
	Acquisition and installation of toilet trailers for county park facilities that do not have restrooms. Trailers can also be moved to facilities for special events or where restrooms are out of order.		
	<b>2. Hana Community Plan Area</b>		
CBS-3236	<b>a. Hana Civic Center</b>	50,000	P
	Planning for land acquisition, design, and construction of a multi-agency civic center to serve the community in Hana.		
CBS-2350	<b>b. Hana-Keanae-Kailua Parks System</b>	250,000	G
	Planning and renovations of Helene Hall to include replacement of flooring, entry doors, ceiling, ceiling fans, and jalousie windows, and to repaint the interior; renovations to Helene Hall restrooms to include replacement of toilet partitions, patch holes, install tiles in plumbing walls and replace jalousies.		
CBS-1971	<b>c. Helene Hall Improvements</b>	50,000	D
	Planning and design for the construction of pumping system and absorption field, at the Hana Ball Park, for the aerobic treatment system at Helene Hall.		

	<b>3. Kihei-Makena Community Plan Area</b>		
CBS-2345	<b>a. South Maui Parks System</b>	900,000	G
	Replace wood ramps with concrete ramps at Kalama Skatepark; Roof replacement of Kalama Park Pavilion; Fencing of Kalama Park baseball and softball fields; Replacement of Kalama Park Bandstand roof; Replacement of ambulance station roof at Kenolio Recreation Center; Cold plane and 2-inch asphalt overlay on parking lot at Kamaole III Park; Construction of new parking lot entry for parking lots at Poolenalena Park; Cold plane and 2-inch asphalt overlay of parking lots at Kamaole I Park; Cold plane and 2-inch asphalt overlay of parking lots at Kilohana Park (Keawakapu); Seal coat parking lot at Haycraft Park; Slurry seal of parking lot at Waipuilani Park; Perimeter fencing replacement at Kenolio Recreation Center.		
CBS-2359	<b>b. Waipuilani Park Irrigation System</b>	100,000	D
	Design and permitting of an automatic irrigation system utilizing R-1 water from the Department of Environmental Management for the second phase of Waipuilani Park across drainage channel.		
CBS-2742	<b>c. South Maui Building Maintenance Repairer Baseyard</b>	150,000	D
	Design of a baseyard for the South Maui Parks District maintenance operations at South Maui Community Park.		
CBS-1118	<b>d. South Maui Community Park</b>	650,000	D
	Update the master plan and design for the continued construction of the South Maui Park.		
	<b>4. Lanai Community Plan Area</b>		
CBS-2347	<b>a. Lanai Parks System</b>	450,000	G
	Design, acquisition, and construction of a replacement maintenance building for large equipment storage; building renovations to the Lanai Community Center, replacement of door/windows and painting.		
	<b>5. Makawao-Pukalani-Kula Community Plan Area</b>		
CBS-2349	<b>a. Makawao-Pukalani-Kula-Ulupalakua Parks System</b>	350,000	G
	Replace inoperable jalousie windows at Eddie Tam Gym; Repair/replace fascia at Eddie Tam gym; Repair roof structure, replace metal roofing, and repair floor at Haliimaile gym.		
CBS-3208	<b>b. Upcountry Skate Park</b>	1,200,000	C
	Construction of a multi-skill-level skate park with lights and ADA accessibility from nearby parking in Pukalani.		
CBS-2329	<b>c. Waiakoa Gym Improvements</b>	75,000	D
	Design for renovations to existing gym building to include replacement of existing roofing material, repair and repainting of building exterior, and repair and refinishing of the court flooring.		
	<b>6. Molokai Community Plan Area</b>		
CBS-2346	<b>a. Molokai Parks System</b>	900,000	G
	Replace finishes, fixtures, add new water storage tanks and a septic system at Halawa Park; Upgrade outdoor lights and electrical system at Kilohana Recreation Center; Replace pavilion roofing at One Alii Park I; Asbestos removal, re-roofing, and termite repairs at Mitchell Pauole Office Building; Repair termite-damaged wood and repainting of Kaunakakai Gym; Repair termite-damaged wood and repainting of Kaunakakai Youth Center; Repair termite-damaged wood and repainting of Maunaloa Community Center; Repair termite-damaged wood and repainting of Kilohana Recreation Center.		



	<b>7. Paia-Haiku Community Plan Area</b>		
CBS-2348	<b>a. Paia-Haiku Parks System</b>	720,000	G
	Replace (4) four sliding glass doors at Paia Community Center; Modify existing roof drains in concrete for proper drainage and missing wood vents at storage, replace Plexiglass windows near doors, and paint entire building at Paia Community Center; Paia Community Center ADA compliance; Parking lot improvements planning, permitting, design, and construction of Lower Paia Park; Replace roof on scorekeeper booth at Haiku Field; Resurface existing cracked basketball court with new acrylic at Paia Gym; Resurface existing cracked basketball courts with new acrylic at Haiku Field; Resurface existing cracked basketball court with new acrylic at Lower Paia Park; Replace 6' high perimeter chainlink fencing along property of Paia Gym.		
	<b>8. Wailuku-Kahului Community Plan Area</b>		
CBS-2351	<b>a. Central Maui Parks System</b>	1,000,000	G
	Cold plane and 2-inch overlay of parking lot at Velma McWayne Santos Center; Repair Concrete Masonry Unit walls for restrooms at Mokuohau Park; Design consultant to conduct structural analysis, create bid documents for structural steel repair for Maehara Baseball Stadium; Seal coat with patch and crack sealing at Leisure Estates Park; Resurface two basketball courts with modular surfacing at Wailuku Elementary School Park; Re-build one basketball court and replace sports lighting at Puuohala Park; Resurfacing of two basketball courts with modular surfacing at Kahului School Park; Replace chain link fence and rails at Mokuohau Park; Replace chain link fence and rails at Leisure Estates Park; Resurfacing of one basketball court with modular surfacing at Waihee Ball Park; Replace two backstops at Kahului School (Fields I and II).		
CBS-1202	<b>b. Waiehu Golf Course Starter Booth and Restaurant</b>	500,000	D
	Planning, design, permitting, and construction of a new restaurant, pro shop, and starter booth at the Waiehu Golf Course.		
CBS-3231	<b>c. Waiehu Golf Course Wastewater Improvements</b>	50,000	D
	Design for the construction of a wastewater treatment system at the Waiehu Golf Course clubhouse, including design and construction of an absorption field for the wastewater treatment system at the 14th fairway restroom.		
CBS-2330	<b>d. Waikapu Community Center Basketball Court Improvements</b>	500,000	G
	Reconstruction of the existing basketball court at Waikapu Community Center, Wailuku.		
CBS-3214	<b>e. Waikapu Community Center Expansion</b>	500,000	G
	Construction of improvements and expansion of the existing Waikapu Community Center building and ADA improvements to the facility.		
CBS-3224	<b>f. Wailuku Pool Improvements</b>	50,000	D
	Planning, investigation, and design of pool improvements along with the construction of a backwash water retention system at the Old Wailuku Pool.		
CBS-1209	<b>g. War Memorial Complex Paving Improvements</b>	100,000	D
	Design for the reconstruction of the parking lot serving the football and baseball stadiums.		

	<b>9. West Maui Community Plan Area</b>		
CBS-2344	<b>a. West Maui Parks System</b>		
	Replace existing shower with proper drainage and accessibility at both DT Fleming and Honokowai Parks; A/C unit replacement for social hall at Lahaina Civic Center; Replace fixtures and finishes in six restrooms and two locker rooms at Lahaina Civic Center; Replace social hall kitchen equipment, fixtures, and casework at Lahaina Civic Center; Rebuild parking lot (above courthouse) at Lahaina Civic Center; Replace fixtures and finishes in restroom, upgrade accessibility at Lahaina Recreation Center I. From West Maui Park Assessment Fund: \$10,000 for Little League scoreboards in West Maui; \$150,000 for canopy covers for bleachers at the Lahaina Aquatic Center; \$125,000 for batting cage at Lahaina Recreation Center.	2,285,000	G
	<b>Department of Planning</b>		
	<b>Government Facilities</b>		
	<b>1. Wailuku-Kahului Community Plan Area</b>		
CBS-2789	<b>a. Wailuku Redevelopment Municipal Parking Lot Expansion</b>	3,380,447	D A C
	Design and construction for the redevelopment and expansion of the Wailuku Municipal Parking Lot; Acquisition of property, design and construction of surface parking within Wailuku Town. Provided, that the Maui Redevelopment Agency shall be the contracting agency for the project and may receive assistance from the Department of Planning or other County Departments, as needed.		
	<b>Department of Police</b>		
	<b>1. Countywide</b>		
CBS-1010	<b>a. Countywide Police Facilities</b>	940,000	G
	Repaving of Wailuku Police Station Parking Lot; Renovation of the Wailuku Police Dispatch Center; Purchase and installation of a Medical Waste Incinerator for the proper disposal of narcotics and other illicit drugs.		
	<b>2. Molokai Community Plan Area</b>		
CBS-1883	<b>a. Kaunakakai Police Station</b>	390,000	A
	Land acquisition for a new Molokai District Police Facility.		
	<b>Department of Public Works</b>		
	<b>1. Countywide</b>		
CBS-1027	<b>a. Countywide Drainage Improvements</b>	200,000 800,000	D C
	Design, construction, and implementation of various drainage improvements to conform to regional drainage master plans.		
CBS-1032	<b>b. Countywide Facility Building Improvements</b>	350,000	G
	Retaining wall repairs at the Kalana O Maui Building and design services for the 2nd floor Mezzanine level, to include repairs and mechanical rooms water proofing.		
CBS-3177	<b>c. Bridge Inspection and Evaluation of Various County Bridges</b>	80,000	P
	Bridge inspections in accordance with the requirements of the Federal Highway Administration National Bridge Inspection Standards and the American Association of State Highway and Transportation Officials (AASHTO) Manual for Condition Evaluation of Bridges. Report for each bridge shall include inspection findings, recommendations for repair, and cost estimates.		

CBS-1031	<b>d. Countywide Bridge Improvements</b>	20,000 350,000	D C
	Design and construction of various bridge replacement projects and to implement various drainage improvements to conform to regional drainage master plans. Provide plans and specifications for in-house bridge repair and maintenance forces.		
CBS-1034	<b>e. Countywide Pavement Preservation</b>	500,000	C
	Countywide slurry seal design and construction program, which will extend the life of existing asphalt and delay resurfacing. Application typically utilized for asphalt pavement 7-10 years old.		
CBS-1023	<b>f. Countywide Road Resurfacing and Pavement Preservation</b>	5,634,267	D C
	Fund Countywide road resurfacing program. In-house and consultant design.		
CBS-1024	<b>g. Countywide Safety Improvements</b>	50,000 550,000	D C
	In-house and consultant design, and construction of various improvements such as striping, guardrails, signs, shoulder widening, realignment, street lights, traffic signals, and sidewalk reconstruction. FY 2017 priorities include: accessibility improvements via curb ramp construction and reconstruction at various locations.		
CBS-1037	<b>h. Countywide Sidewalk Improvements</b>	25,000 475,000	D C
	Design and construction of sidewalk improvements, countywide. These funds will address numerous requests for sidewalk improvements in various areas. FY 2017 priorities include: accessibility and pedestrian improvements fronting the Kahului Fire Station, and Waiale Road between Kaohu Street and Waiinu Road in Wailuku.		
CBS-1035	<b>i. Countywide Traffic Calming Program</b>	200,000	C
	Construction of speed humps, countywide to slow drivers down, making our roads safer as well as to address traffic calming projects. Includes funding for construction of speed tables or other traffic calming devices as determined to be supported by evaluation on Olinda Road, Haiku Road (E. Kuiaha Road to Peahi Road), Apana Road, Kokomo Road, Kaluanui Road, and at the intersection of Piihana Road, Mokuahau Road, Kahekili Highway, and N. Market Street.		
	<b>2. Hana Community Plan Area</b>		
CBS-3183	<b>a. Kalepa Revetment and Seawall Repairs</b>	500,000	D
	Design and permitting for reconstruction of revetment, seawall, and roadway near Kalepa. Approximately 400-foot section of roadway was damaged and undermined by large waves in 2014 during Hurricane Iselle.		
CBS-1046	<b>b. Koukouai Bridge Rehabilitation</b>	600,000	D
	Assessment and design for the remediation, reconstruction, replacement, or construction of a new bridge built in the Hana Highway Historic District near Kipahulu due to structural deficiencies.		
CBS-3225	<b>c. Piilani Highway Road Improvements at Nuanualoa</b>	1,900,000 250,000	C G
	Rebuild a portion of Piilani Highway at Nuanualoa, which was damaged due to a landslide. Improvements include installing retaining walls with tie-backs, guardrails, pavement structure, and striping.		
CBS-3176	<b>d. Rockfall and Embankment Assessments Hana District</b>		
	Planning and evaluation for future remediation of several potential rockfall and undermined embankment areas. Includes areas near Kalepa, Waiopai, and Manawainui.	350,000	P

	<b>3. Kihei-Makena Community Plan Area</b>		
CBS-1926	<b>a. North South Collector Road - Lokelani School to Auhana Road</b>	100,000	A
	Acquisition of land for the construction of the Kihei North South Collector Road between Lokelani School and Auhana Road, to resolve traffic congestion and safety issues in this area.		
CBS-2764	<b>b. Pavement Rehabilitation at Various Locations - South Maui</b>	1,360,000 500,000	C M
	Rehabilitate various roads in South Maui: Kulanihakoi Street, Waipuilani Road, Lipoa Road, and Welakahao Road between Piilani Highway and South Kihei Road. Road improvements to include: pavement resurfacing, striping and marking, signage, and safety improvements.		
CBS-1044	<b>c. Waipuilani Bike Path</b>		
	Design of a bike and pedestrian friendly path near Waipuilani Road in South Maui.	150,000	D
CBS-3239	<b>4. Lanai Community Plan Area</b>		
	<b>a. Lanai Baseyard Improvements</b>	300,000	G
	Renovations to the Public Works baseyard facility in Lanai City. The current facility is deteriorated and requires significant improvements to continue to be usable.		
	<b>5. Makawao-Pukalani-Kula Community Plan Area</b>		
CBS-3187	<b>a. Ditch Improvements at Waipoli Road</b>	800,000	C
	Repair existing ditch along Waipoli Road. The current ditch is eroded and in need of stabilization measures to prevent further damage to the roadway and adjacent properties.		
CBS-2774	<b>b. Guardrail and Shoulder Improvements at Various Locations</b>	300,000	C
	Installation and upgrade of guardrails and roadway shoulders. Improvements to include: upgrade of outdated guardrail hardware, installation of new roadside barriers where warranted, repair of damaged hardware, and expansion of roadway shoulders for safety.		
CBS-2765	<b>c. Kokomo Road and Makawao Avenue Pavement Reconstruction, Phase 2</b>	1,700,000 700,000	C M
	Reconstruct Kokomo Road from Haiku Road to milepost 3.1, and Makawao Avenue from Piiholo Road to Kokomo Road. Improvements to include striping and marking, signage, and safety improvements.		
	<b>6. Molokai Community Plan Area</b>		
CBS-2775	<b>a. Kaunakakai Drainage System B</b>	200,000	D
	Design of drainage improvements to complete the last segment of the drainage system located in Kaunakakai, Molokai, which will outlet to an existing wetland. The scope of work includes preparation of construction documents and environmental permits. Permanent drainage infrastructure will address the flooding conditions in this portion of Kaunakakai town.		
CBS-1211	<b>b. Molokai Baseyard</b>	5,000,000	C
	Construction of an administration building, maintenance shop, garage, subsurface drainage facilities, and material storage bunkers to meet current and future operational needs.		
	<b>7. Paia-Haiku Community Plan Area</b>		
CBS-1066	<b>a. Kaupakalua Road Pavement Reconstruction</b>	550,000	D
	Design for the resurfacing/reconstruction of Kaupakalua Road with improvements to include pavement rehabilitation, striping and marking, signage, and safety improvements.		

CBS-2310	<b>b. Pauwela Road Sidewalk Repairs</b>	500,000	C
	Reconstruction of sidewalks on Pauwela Road to Haiku Elementary School, to address accessibility improvements in this area.		
	<b>8. Wailuku-Kahului Community Plan Area</b>		
CBS-1951	<b>a. Papa Avenue Drainage Improvements</b>	400,000	C
	Install sub-surface drainage system on Papa Avenue to address ponding issues after major storm events.		
CBS-3189	<b>b. Central Maui Drainline Repairs</b>	850,000	C
	Remediate and/or replace existing drainlines whose interiors have corroded and formed sinkholes at various locations in Kahului and Wailuku.		
CBS-3193	<b>c. Testing and Inspection of Existing Wailuku/Kahului Injection Wells</b>	300,000	C
	Perform injection well testing and analysis at existing drywells in the Wailuku and Kahului areas. Develop maintenance and rehabilitation plan for existing drywells in accordance with Department of Health requirements.		
CBS-3192	<b>d. Wakea Avenue and Niihau Street Drainage Improvements</b>	450,000	C
	Installation of drainage improvements at the intersection of Wakea Avenue and Niihau Street, to address ponding issues in this area.		
CBS-3190	<b>e. Kalana O Maui Building Leak Repairs</b>	500,000	C
	Construction, upgrades, repair, and re-caulking of exterior panel due to spilling and leaking. Install backer rod at panel joints as needed. Repair and waterproof existing flooring at 2nd floor deck. Repair and waterproof mechanical rooms. Complete building envelope assessment for Kalana O Maui Building.		
CBS-1060	<b>f. Kahakuloa Stream Bridge</b>	550,000 100,000	C M
	Construction and construction management to either remediate or replace the bridge located on Kahekili Highway, which is structurally deficient.		
CBS-2768	<b>g. Onehee Avenue and Kea Street Pavement Rehabilitation</b>	200,000	D
	Design for the rehabilitation of Onehee Avenue and Kea Street between Wakea Avenue and Papa Avenue, including pavement resurfacing, striping, marking, signage, and safety improvements.		
CBS-1945	<b>h. Central Maui Signal Upgrades</b>	270,000	D
	Design for signal system upgrades (communication, visibility, and programming) on Wakea Avenue at Kea Street, Onehee Avenue, and Lono Avenue, which must be coordinated with the repavement of these streets.		
CBS-3178	<b>i. Kamehameha Avenue Sidewalk Improvements (Lono Avenue to Puunene Avenue)</b>	330,000	C
	Construction of sidewalk and accessibility improvements on Kamehameha Avenue between Lono Avenue and Puunene Avenue.		
CBS-1916	<b>j. Wakea Avenue and Kamehameha Avenue Intersection Improvements</b>	240,000	C
	Construction of intersection improvements to consider upgrade of the existing traffic signal. Includes a re-evaluation of the intersection's operation, timing and lane requirements, providing communication connections, or a roundabout.		
	<b>8. West Maui Community Plan Area</b>		
CBS-1026	<b>a. Lahaina Watershed Flood Control</b>	500,000	A
	Acquisition of land for drainage improvements in the Lahaina Watershed Flood Control Project.		
CBS-3240	<b>b. West Maui Greenway Pilot Project</b>	300,000	D
	Design of West Maui Greenway Pilot Project, consisting of a bike and pedestrian-friendly path from Olowalu to Hokiokio Place along old cane haul roads.		

	<b>Department of Transportation</b>		
	<b>1. Countywide</b>		
CBS-1039	<b>a. Bus Stops and Shelters</b>	100,000 400,000	D C
	Design and construction of infrastructure and shelters to provide safe, comfortable, and convenient transit facilities for the safety of the members of the community who use public transportation.		
	<b>Department of Water Supply</b>		
	<b>1. Countywide</b>		
CBS-2299	<b>a. Countywide Upgrades and Replacements</b>	100,000 1,100,000 3,300,000	A D C
	1) Replace an existing booster pump and related electrical components as part of the Omaopio Tank replacement project; 2) Construct a water tank to replace the existing 50,000 gallon Keanae Water Tank to address corrosion and deficiencies identified by the Department of Health; 3) Construct a chlorine scrubber and enclose the chlorine storage room at Kamaole Water Treatment Plant to protect against chlorine gas leaks; 4) Design a water line to upsize existing 6-inch and 8-inch water lines along Baldwin Avenue in Paia to be at least a 12-inch line to address substandard water pressure for fire protection; 5) Design a water line to upsize an existing 4 inch water line along Hobron Avenue in Kahului to address leakage and insufficient flow for fire protection; 6) Design improvements to the spillways at the six raw water reservoirs serving the Mahinahina, Olinda, and Piiholo Water Treatment Plants to address compliance with Department of Land and Natural Resources dam safety regulations; 7) Design improvements to the water system served by the Opaepilau Water Tank in Haiku to address low pressures and inadequate storage capacity for fire protection; 8) Acquire easements on property adjacent to the Maluhia Tank site in Makawao for booster pump station upgrades; 8) Upsize existing 6-inch water line to an 8-inch water line on Mokuhaui Road in Happy Valley by December 31, 2016.		
CBS-1076	<b>b. Countywide Conservation Program</b>		
	Locating and replacing of leaking waterlines (transmission, distribution, and service laterals) identified by Leak Detection, repair of leaking tanks, design of projects to provide supply side conservation, including a water audit.	1,000,000	C
CBS-1075	<b>c. Countywide Facility Improvements</b>		
	1) Well and booster pump replacements, including granular activated carbon filters at Napili and Hamakuapoko; and booster pumps at North Waihee, Wakiu Well B, Kula Agricultural Park Station B and Napili Well B. 2) Replace the roof of the NASKA Baseyard mechanic shop; 3) Replace the roof of the clearwell at the Olinda Water Treatment Plant; 4) Reinforce the embankment of the sludge dewatering reservoir at the Olinda Water Treatment Plant; 5) Repair and recoat the interior and exterior of the clearwell at the Lahainaluna and Mahinahina Water Treatment Plants; and 5) Repair and recoat the interior and exterior of the Maunaolu Tank in Haliimaile.	2,150,000	C
	<b>2. Makawao-Pukalani-Kula Community Plan Area</b>		
CBS-1106	<b>a. Upcountry Reliable Capacity</b>	200,000 4,500,000	D C
	1) Construction of an exploratory well for the Pookela Well 2; 2) Design of the Pookela Well 2 facility, contingent upon the results of the exploratory well; 3) Construction of a chloramine addition system at the Upper Kimo Booster Pump Station to streamline the disinfection process for supplementing the Upper Kula System with water from the Lower Kula System.		

	<b>3. Central Maui Community Plan Area</b>		
CBS-1102	<b>a. Central Maui Reliable Capacity</b>	200,000	A
		225,000	D
	Land acquisition and design for a new water tank near the existing Makai Heights water tank in North Kihei.		
	<b>4. West Maui Community Plan Area</b>		
CBS-1092	<b>a. West Maui Reliable Capacity</b>	10,000,000	C
	Construction of the Mahinahina Well 1 facility and related transmission improvements.		
	<b>Capital Improvement Projects Legend</b>		
A	Acquisition of land		
C	Construction		
D	Design		
E	Equipment		
G	General (previously "Other" and "Renovations, rehabilitation, replace")		
M	Management (i.e., Construction management)		
P	Planning		