

**DEPARTMENT OF WATER
ANNUAL REPORT
FISCAL YEAR 2011 – 2012**

I. MISSION STATEMENT

The following mission statement serves as the guiding principle for the Department of Water. The mission statement was developed during Fiscal Year 2000 as a collaborative effort by several employees from every division of the Department of Water.

Department of Water – Mission Statement

“Together, we provide safe, affordable and sufficient drinking water through wise management of our resources and with excellent customer service for the people of Kaua’i.”

II. ORGANIZATION (County Charter, §17.01)

There shall be a Department of Water Supply consisting of a Board of Water Supply, a Manager and Chief Engineer and the necessary staff.

A. BOARD OF WATER SUPPLY: (County Charter, §17.02)

The Board of Water Supply shall consist of seven (7) members, four (4) of whom shall be appointed by the Mayor, with the approval of the Council; one (1) of whom shall be the State District Engineer of the Department of Transportation; and two (2) of whom shall be the County Engineer and the Planning Director.

<u>For FY 2013:</u>	<u>Term Expires</u>
Daryl Kaneshiro, Chairperson	12/31/2
Clyde Nakaya, Vice Chairperson	12/31/12
Randall Nishimura, Secretary	12/31/12
Roy Oyama, Board Member.....	12/31/12
Raymond McCormick (State District Engineer)	(ex-officio)
Lawrence Dill (County Engineer)	(ex-officio)
Michael Dahilig (Planning Director).....	(ex-officio)

1. Power & Duties of the Board (County Charter, §17.03)

The Board shall manage, control and operate the waterworks of the County and all property thereof, for the purpose of supplying water to the public and shall collect, receive, expend and account for all other moneys and property provided for the use or benefit of such waterworks.

- a. The Board shall maintain accounts to show its complete financial status and the results of management and operations.
- b. The Board may provide for a reserve fund, issue revenue bonds, provide for payment of bonds, expend bond funds and other funds, establish rates and charges,

acquire property, sue and be sued, and engage in and undertake all other activities as provided for in Chapter 145-A, Revised Laws of Hawaii 1955, and as may be hereafter provided for by law.

- c. The Board may make and, from time to time, alter, amend, and repeal rules and regulations relating to the management, control, operation, preservation and protection of the waterworks. Such rules and regulations shall have the force and effect of law. Penalties for the violation of any rule or regulation shall be set forth in the rules and Regulations.

B. STAFF (County Charter, §17.04)

The Board shall appoint an engineer duly registered under Hawai'i State laws pertaining to registration of engineers. He shall be known as the Manager and Chief Engineer, and shall be head of the Department. He shall have the powers and duties prescribed by the Board.

For FY 2011-2012, The Department had one hundred three (103) positions funded. There are five (5) divisions under the administration of the Manager and Chief Engineer.

1. Administration Division

The Department's Manager and Chief Engineer is David Craddick, P.E. The administrative staff included fifteen (15) budgeted positions for FY 2011-2012. The administration division is responsible for the overall management of the Department and coordination between the Department and the public, including customers, governmental organizations, and public inquiries; personnel management; contract management; management of Board affairs; and providing service to, and oversight of the operation of each of the other four (4) divisions.

Program Description

Administration leads, directs and manages the activities of the Department and provides administrative support for the Divisions of the Department, including: personnel services, clerical support, legal support, community relations, information technology (IT), training and safety; intergovernmental coordination with Federal, State and County agencies; and coordination of long-range planning and departmental programs and activities among the divisions.

Program Objectives

- a. Provide support for the Board of Water Supply in its role to manage, control and operate the waterworks of the County, and all property thereof; adoption of the Department's budget and establishment of water service rates and charges; and facilitate development and implementation of administrative rules and Board policies.
- b. Administer the Department's staff and provide support for the operating divisions of the Department, through provision of clerical, personnel, legal and IT services; coordination of Department-wide programs; establishing goals,

objectives and assignments for the operating divisions; and providing operational financial and procurement oversight for the Divisions.

- c. Provide leadership for the Department's community relations and intergovernmental coordination with other federal, state, and county agencies.
- d. Coordinate Department-wide initiatives and programs, including long range planning, development of business and capital improvement program strategies, staff and organizational development, water system security and adoption and integration of new technologies.

Program Highlights

During Fiscal Year 2011-2012, the Department continued working on WP2020 projects. Public outreach to promote water conservation and environmental education, including sponsoring Project WET (Water Education for Teachers), and coordinating of the Make-A-Splash Festival (MAS).

The following summary is an overview of some of the key department-wide accomplishments for FY2012

Board of Water Supply Items

- a. Approved in concept the reprioritization and updating of the Water Plan 2020 (WP2020) Project Priority List.
- b. Approved funding request in support of the Administration's training efforts and staff reorganization.
- c. The Department prepared for Board action, the annual budget as well as various contracts, agreements and recommendations to obtain necessary Board approval and policy direction for the proper management of the waterworks of the County.
- d. Rule Changes
 - i. December 25, 2011 the Board adopted amended changes to Part 5, Fixing Rates for the Furnishing of Water Service in the County of Kauai as it relates to rates and use charges for the furnishing of water service for fiscal years (FY) 2012-2016. Changes were amended to the following sections:
 - 1. Section I – General Use Rates
 - 2. Section III – Agriculture Rates
 - 3. Section V – Private Fire Line Service Charges
 - 4. Section VI – Public Fire Service Charges
 - 5. Section X – Cost of Power Adjustment Clause
 - 6. Section XI – Late Charges

Departmental Programs

- a. Tracking American Water Works Association (AWWA) Performance Indicators in areas of finance, customer service, operations and system replacement.
- b. Reduce operational costs by filling vacant positions and reducing overtime. This may be reducing due to furloughs in the past year and the added OT to cover needed functions.

- c. The Department continues to provide leadership in emergency preparedness through our participation in the County's Energy and Utility Council as assigned through the County's Emergency Operations Plan.

I.T. Accomplishments

The I.T. group, aside from maintaining databases for our core Financial (Great Plans) and Maintenance Management System (M-PET), is responsible for maintaining all applications including updating Document Imaging System and Water Plan 2020 databases. The staff of two (2) supports the Department's Business and SCADA Local Area Networks, as well as website development.

Twenty five (25) computers and servers were replaced in FY 2011-2012.

Our SharePoint server application was upgraded and is mainly being used in support of new GIS Systems. As-built drawings were scanned and indexed into Sharepoint. It currently houses all (or most) maps in the areas of Puhi-Lihue-Hanamaulu, Koloa-Poipu, Hanapepe-Eleele and Hanalei. These files are retrievable by all staff.

In the area of GIS, I.T. staff provided G.I.S. training and also provided support throughout the Department. Whether creating maps for possible landfill sites around water system locations or creating maps for new water projects and shut down areas, I.T. was involved. A new web page was specifically created to highlight Water Construction Zones and Water Outages.

A mobile workforce is a goal for the Department and I.T. setup vpn connectivity for mobile crews to be able to connect laptops in the field to our maintenance management program and also connectivity to our SharePoint server. This will allow crews to input/update work orders in the field and view maps online.

Honolulu Board of Water Supply is replacing its Billing System which provides the water billing for our Kauai customers. I.T. has been very instrumental in keeping Kauai on track and getting this new billing system (CC&B) in a place to go live. The live date is schedule by the end of the 2012 calendar year. In conjunction with this new Billing System, new points of access to the Honolulu Board of Water Supply was created (VPN), making for a quicker connection for our customer support staff once we GO LIVE. This access point will provide more users to access the new system.

I.T. supports all divisions with consumption/customer information and data to be populated into our hydraulic water model. These reports also serve as a basis for determining water needs for water service inquiries.

The Department's Water Quality Reports, also known as CCR's, were created and processed for mail delivery to our customers.

In an effort to go paperless, iPADS are now provided to Board members for all Board meetings. The agenda and corresponding documents are uploaded to each iPad.

I.T. developed a Long Term Strategic Plan which will be incorporated into an I.T. Master Plan in the next fiscal year. The plan looks at providing a more efficient I.T. environment by upgrading our network infrastructure and possible system application replacements.

Community Outreach

- a. Community outreach activities continued, including periodic television, radio, newspaper and magazine advertising to promote water conservation, and attendance at various school and community events to provide public education on water issues. In September, the Department sponsored the 8th Annual Make a Splash Water Festival providing an event focused on water issues for hundreds of school children. The Department continues to serve as the Project WET Host Institution and state coordinator for Hawai'i.
- b. The Department continues to support efforts of various environmental, educational and conservation organizations, such as the East and West Soil and Water conservation Districts and participation in the Annual Agriculture and Environmental Awareness Day. We continue to fund research on water resources in the Lihu'e District by the United States Geological Survey (USGS). The Department participates with the State and County Drought Councils, established to monitor and mitigate the effects of periodic droughts. The Department is also a part of the State's Water Conservation Advisory Group that is in the process of drafting the Hawai'i Water Conservation Plan.
- c. The Kaua'i Watershed Alliance, an organization for mauka landowners dedicated to watershed conservation, completed preparation of the watershed management plan, and has hired The Nature Conservancy of Hawai'i (TNCH) as the coordinator for the alliance. The Department, although not a landowner, is a member of the Alliance, and continues to support the conservation goals and efforts of this group in recognition of the critical importance of the watershed for maintenance and enhancement of the water resources of the island.

2. Water Resources & Planning Division

Program Description

The Water Resources and Planning Division are responsible for long-range planning and research and conducts analytical studies to meet the water needs of Kaua'i. Part of this planning includes interaction with our customers, developers and the County Planning Department for the review and planning of water systems of proposed developments to assure compatibility with the Department's water general plan. This Division also supports the Department's public education and water conservation efforts, and maintains the engineering records and mapping function of the Department. The Division also administers the Cross Connection and Backflow Control Programs. There were six (6) permanent positions budgeted for the Division

for FY 2011-2012. In January 2012, the budgeted Civil Engineer II position was filled.

Program Objectives

- a. Conduct the review and planning of water systems of proposed developments to assure compatibility with the Department’s planning and service availability requirements including the review of subdivision, zoning, land use and general plan amendments, building permits, and water service requests.
- b. Conduct investigations to obtain and analyze data to determine existing and future water system capacity requirements including long-range planning and research and analysis of water consumption and maximum demand to meet the water needs of Kaua’i.
- c. Determine hydraulic criteria for reservoirs, pumping stations and water mains and evaluate and develop water network requirements.
- d. Conduct water resource investigations for the development of potential sources and conduct and/or administer studies relating to the protection of watersheds and water resources.
- e. Perform various long-range planning efforts for the Department, including the update of Water Plan 2020, and completion of the Department’s Vulnerability Assessments and Emergency Response Plan Update.
- f. Maintain maps and records of all water facilities.
- g. Prevent contamination of its water system from other liquids, mixtures, gases or other substances through the implementation and enforcement of the Cross Connection and Backflow Prevention Program.

Program Highlights

- a. For FY 2011-2012, the Division reviewed and processed the following applications and requests for water service:

Subdivisions	21
Zoning, Use Permit, Land-Use, GPA/Z	93
Additional Dwelling Clearance	41
Water Service Inquiries	30
Water Meter Requests	278
Building Permits.....	851

- b. The Division has completed the review and approval of several water master plans for large development projects and/or subdivisions.

The Division is currently reviewing the water master plans for the following: Kapa’a Highlands Project, Waimea Plantation Development for Kikiaola Land Co., Workforce Housing Project for Kukui’ula Development co., and ‘Ele’ele Industrial park Subdivision and Residential Site for A & B Properties. The Division reviewed the ongoing “Dual Water Non-Potable System” discussion for the Grove Farm Līhu‘e – Hanamā‘ulu Master Planned Community Development.

- c. The Division continues to utilize and amend Water Plan 2020, adopted in 2001, as our long-range facilities plan and financial plan as a basis for the Department's CIP/CRP program. Since FY 2006-2007, the Division has participated in the development of the Strategic and Business Plan and in review and development of the WP2020 Sustainability Program. On March 24, 2011, the Division completed and the Board approved an update of the prioritized project listing for Phase I (FY 2009-2013) and for Phase 2 (FY 2014-FY 2018) and for Phase 3 (FY 2019-FY 2029) of WP 2020. The Division assisted the Administration division and provided updated WP2020 project costs to prepare and complete the Department's \$60,000,000 bond float application with the County. The Division assisted the Department in the preparation of a Needs Assessment Study and Facilities Reserve Charge Update report and the 2010 Kaua'i Water Rate Study & Financial Planning Analysis.

The Division provided several members to the Department's Core Team who prepared the 2007-2012 Strategic Plan and Annual Business Plan. A clearly stated vision and an outline for achieving it are highlights of the plan. The Division provided one member to co-champion the morale issue committee.

- d. The Division is currently assisting in the review and development of Department policies regarding meter restrictions, Facilities Reserve Charge (FRC) offsets, additional dwelling unit meter restriction, private water system developments, boundary adjustments, large lot subdivision exemption, leak rebate refund rule and private well policies. The Division also, assisted in the development of "draft" amended Rules and Regulations regarding the Water System Development Fee.
- e. The Division continues to assist in the Department's annual conservation programs. These included the Department's public education campaign water conservation.
- f. The Division assisted with the Department's Project WET program which included teacher education activities and the annual MAS Festival that invites students to learn about water through fun, hands-on activities.
- g. The Division assisted with new service applications and provided support to management, operations, fiscal and engineering divisions. During FY 2011-FY 2012, the division assisted the Fiscal Division with the Honolulu Board of Water Supply "Loihi" Customer Information System conversion for the Kaua'i DOW billing and backflow prevention programs. The Division provided staff and input to assist in the development of the Kaua'i DOW program.
- h. The Division remains responsible for the design and implementation of capital improvement source development, storage and transmission mainline projects as assigned by the manager.
- i. During FY 2011-20120, the annual backflow device test program continues to be refined and expanded. The Division continues to review and approve backflow

device construction plans as well as maintain an inventory and status of each device. The Division supported the Administrative Division effort to revise the water rate threshold schedule and require the installation of backflow devices prior to qualifying for the Department Rules during June, 2010.

- j. The Division was assigned to administer the Department's security programs. Security programs include: security fence projects, security directives, vulnerability assessment & emergency response plans. Emergency exercises and training, etc. The Division completed and submitted the vulnerability assessment of the Department to EPA in June 2004. In Fiscal Year 2004-2005, the Division administered the update of the Department's Emergency Response Plan (ERP) that includes response to man-made malevolent act. The Department continues to subscribe to the Water Information Sharing and Analysis Center (Water ISAC) water security information and reporting information system.
- k. The Division participated in meetings with various drought and watershed groups and community planning committees. The Division continues to assist Kaua'i's local Drought Committee to develop County mitigation strategies and drought mitigation projects for Kaua'i. The Division supports the activities of the Kaua'i Watershed Alliance. The Division participated in the County's Kapa'a Development Plan Citizens Advisory Committee meetings.
- l. The Division coordinated and administered the USGS cooperative research program that includes ground water data collection and a USGS study on lowering ground water levels for the Lihu'e-Kapa'a areas.
- m. The Division represents the Department at the County's Affordable Housing Task Force (AHTF) meeting that is conducted on a monthly basis. The AHTF continues to facilitate the development and approval of affordable housing projects on the island. The AHTF also addresses the development of affordable County rental projects on six (6) State land parcels in Kekaha and Kapa'a.

3. ENGINEERING DIVISION

Program Description

The Engineering Division provides service to government agencies and private developers who design and build water system improvements that will be dedicated to the Department. In that effort, Engineering performs construction plan review, construction inspection, reviews and approves post-construction documents. Typical projects include water storage reservoirs, pumping facilities and pipelines. The Engineering Division also maintains the Water System Standards.

There are six (6) permanent positions budgeted for the division for FY 2011 – 2012. Two (2) of the (6) positions are filled.

Program Objectives

The Engineering Division is committed to conduct its business and operations in a safe and efficient manner and to achieve the following objectives:

- a. Expansion of the water system by design of the Department's projects and plan review for integration of private development water system improvements into the Department's systems.
- b. Providing the necessary construction, engineering and inspection services to ensure the construction of water facilities adheres to the standards and policies of the Department.

Program Highlights

The Design and Construction Division has managed the Kaumuali'i Highway Widening Project which includes a pipeline upgrade during the State DOT's project. The Division also managed the 12" waterline along Ulaula and Uliuli Road in 'Ele'ele and the new booster pump installation at the Nawiliwili Tank for fire flow protection which are Water Plan 2020 Projects. They have provided plan review or/and construction inspection to approximately one hundred thirty-five (135) private projects ranging in size from individual water service installations to large residential subdivisions, with a total value of approximately twenty-five (25) million dollars.

Projects of note:

- Koloa District: The 'Ele'ele Iluna Subdivision.
- Lihue District: The Kohea Loa Subdivisions, Wailani Ahukini Makai Subdivision, Wailani Molokoa Subdivision, Waiola Subdivisions, and the Kaumuali'i Highway Widening project.
- Kawaihau District: The Kulana subdivision.

4. SPECIAL PROJECTS DIVISION

Program Description

The Special Projects Division administers the majority of the Capital Improvement Projects (CIP) and Capital Rehabilitation and Replacement Projects (CRP/CRPL) and provides engineering and inspectional services to the Operations Division during emergencies.

The Special Projects Division administers engineering consultant and construction contracts; evaluates the feasibility of pipeline alignments and sites for water facilities; prepares plans and specifications and bid documents for new water facilities and implements and inspects Department's standards and policies. The Division performs all necessary construction plan review and construction inspection for Water Plan 2020 projects.

The Special Projects Division coordinates and administers the activities and functions of the Microbiological laboratory. Their responsibility is to monitor water

quality and see that it meets all the parameters required by EPA's Safe Drinking Water Act. This entails both chemical and microbial sampling/reporting. The Laboratory maintains State Certification for microbial analysis. Limited physical and chemical testing is performed by the Laboratory as well. The Division also receives, evaluates and responds to information and complaints on the water quality and prepares the data for the annual "Consumer Confidence Reports" (CCR) as required by the Safe Drinking Water Act amendments.

Program Objectives

The Special Projects Division is committed to conduct its business and operations in a safe and efficient manner and to achieve the following objectives:

- a. Implementation of the capital programs identified in WP2020, including new facilities (well sources, storage tanks and waterline) through its CIP Program, and maintaining and upgrading existing water facilities through the CRP/CRPL Programs.
- b. Providing the necessary construction, engineering and inspection services to ensure the construction of water facilities adheres to the standards and policies of the Department.
- c. Performing water quality testing, as required under the Safe Drinking Water Act (SDWA) for all required microbiological and chemical constituents. As part of water quality assurance, the Division is also designated to receive, evaluate and respond to consumer complaints regarding water quality.

The Special Project Division is responsible for the design, construction and inspection of water projects such as reservoirs, pumping facilities and pipelines by planning, contracting for design and conducting design review, preparing construction bid documents and subsequent construction management, and inspecting water system improvements funded by the Department as outlined in Water Plan 2020. The Special Projects division is also responsible for the administration of the Department's laboratory and performing the water quality monitoring for our water systems.

There are ten (10) permanent positions budgeted for the division for FY 2011 – 2012. Of the ten positions, seven (7) are filled.

Program Highlights

During FY 2011-2012, the Department's Special Projects Division has made substantial progress in utilizing the \$60 million Build America Bond (BAB) issuance of March 2010. In the process, the Special Projects Division completed construction on several projects and several other projects are nearing completion. Design has progressed or been initiated on several WP2020 projects to improve source, storage or transmission infrastructure in various parts of the island.

The major project accomplishments by the Special Projects Division on the

Department's Water Plan 2020 Projects during the period of July 1, 2011 through June 30, 2012 include:

- a. The Special Projects Division completed the design and construction of the following projects:
 - KW-05 – Kekaha Well B Renovations, Kekaha
 - LO-04 – Piwai 677' 0.5 MG Storage Tank and Connecting Pipeline
 - PLH-25 – Eiwa, Umi, Akahi, Elua and Hardy Streets, Alohi Place, Uiki Place and Lalei Place, 8-inch Main Replacement, Līhu'e
 - WK-32 (Phase II) – Kapa'a Homesteads Pipeline Replacement
- b. The Special Projects Division completed the design of the following projects and will be bidding shortly or have been bid on and contracts awarded:
 - PLH-39A - Lihue Baseyard Improvements, Phase I (Master Plan)
 - WK-28 - Wailua Houselots Main Replacement
 - WK-30 – Waipouli and Olohena Road Main Replacement
 - WK-12 – Waipouli Main Replacement along Kuhio Highway
- c. In the Kekaha District, the Department's Kekaha Well "B" Renovations were completed. The Amfac Shaft 11 water quality results and engineering report has been submitted to Department of Health and design will commence once approved by DOH.
- d. In the Waimea District, the Department's Waimea Well "A" Renovations is under construction.
- e. In the Hanapēpē District, the construction for the Rehabilitation of the Eleele Two (2) 0.4 MG Steel Tanks is in progress.
- f. In the Kalāheo District, the Department is currently designing various water system improvements which include a new 0.5 MG Yamada Tank and Clear Well Storage System with Connecting Pipelines.

The Kukuilono (886') 0.5 MG Tank project consultant was selected and is currently in the design phase.

The new 8" Waterline along Halewili Road project consultant was selected and is currently in the design phase.

- g. In the Koloa -Lāwai-Omao District, the Piwai 0.5 MG Tank was completed.

The Koloa 6" and 8" Main Replacement consultant was selected and is currently in the design phase.

- h. In the Līhu'e District, the Department is currently in the construction phase of Līhu'e Main Replacement for the area north of the County Civic Center the project.

The Department is currently in the construction phase of the Nāwiliwili-Kupolo Main Replacements.

The Department is completed the Master Plan for the Līhu'e Baseyard Improvements, Phase I. We are currently in the design phase of the Baseyard Improvements.

The Grove Farm Tank project consultant was selected and is currently in the design phase.

The Kokolau Tunnel improvements are in the design phase of a treatment plant that is planned for the new Grove Farm Tank site that is currently in design.

The Department selected a consultant for the Kauai Water System Energy Conservation Project (Kahili Horizontal Directional Drilled Well) and in the planning, permitting and investigation phase.

- i. In the Kapa'a District, the construction is completed for Kapa'a Homesteads Pipeline Replacement (Phase II) and the Pipeline Replacement for Vivian Heights and Kanaele Road is near final completion.

We started construction for the Wailua Main Replacements (Wailua/Kuamoo Road area), and Waipouli Main Replacement (County Roads) projects. Construction is near completion for both projects.

The designs for the Wailua Houselots Pipeline Replacement and the Waipouli Main Replacement (Kūhi,,ō Highway) were completed.

The design for the Waipouli/Hauiki Roads Main Replacement has been completed.

The Akulikuli Tunnels Rehabilitation project is in the design phase of a treatment plant that is planned for the new Kapahi 1.0 MG Tank site.

The design for the new Kapahi (Ornellas) 1.0 MG Tank and Kapaa Homesteads Well 4 is nearing completion.

The Moalepe Tunnel and Access Road Improvement project consultant was selected and is currently in the design phase.

- j. In the Moloa'a District, the design of the Koolau Pipeline Improvements and the Moloa'a 0.10 MG Tank has been stalled due to issues with the acquisition of an easement from the landowner. The land acquisition has been agreed upon and is in the process of being completed.

- k. In the Kīlauea District, the Department has selected a site for a 1.0 MG tank and well to supplement the East Kīlauea area. The project is in the design phase.
- l. In the ‘Anini District, the ‘Anini and Kalihiwai Road 6-inch Main Replacement design is in progress.
- m. In the Hanalei District, the renovations to the Maka Ridge Well and Tank Pipeline and Access Road Renovations are in the construction phase. A new Hanalei tank and well is in the design phase.
- n. In the Wainiha-Hā‘ena District, the construction for the Wainiha Booster Pump and 0.10 MG Hā‘ena Tank Renovation is in progress. We are still awaiting response from Public works with regards to drainage and grading concerns before starting site work. The design for Wainiha well 4 is near completion.

In summary, the Special Projects division is currently managing various phases of approximately \$36.1 million of Water Plan 2020 projects. There are currently twenty-seven (27) design consultant contracts which total approximately \$9.1 million. Another thirteen (13) projects are in various stages of construction, with a total value of approximately \$27 million. Individually, approximately \$13.2 million reflects CIP projects, \$9.4 million towards CRP projects, and another \$13.5 million for CRPL projects. See Table 1 for detailed amounts.

TABLE 1: Design/Construction Totals for CIP, CRP and CRPL Projects

	DESIGN	CONSTRUCTION	TOTAL
CIP	\$6,127,716.80	\$7,140,000.00	\$13,267,716.80
CRP	\$1,356,558.19	\$8,002,965.94	\$9,359,524.13
CRPL	\$1,641,032.00	\$11,929,300.00	\$13,570,332.00
TOTAL	\$9,125,306.99	\$27,072,265.94	\$36,197,572.93

5. Fiscal Division

Program Description

The Fiscal Division is responsible for administering the fiscal programs of the Department. Under the direction of the Waterworks Controller, the Division consists of Accounting Section and Consumer Service/Billing Section. There were 19 permanent positions budgeted for the division for FY 2011-12. Programs of the Division include:

- a. Administers the general and customer accounting systems including cash management, cost accounting, payroll, leave records, accounts payable, general and utility plant accounting, consumer billing and accounting, and meter reading.

- b. Prepares financial and statistical reports: Conduct internal audits and financial and statistical studies of the Department for reports and rate making.
- c. Assists the Manager in the development of the annual budget.

Program Objectives

Waterworks Controller

- a. Administer the affairs of the Fiscal Division and all programs assigned to it.
- b. To preserve the financial integrity of the Department through internal control and annual financial audits.
- c. To generate a return of investments and to insure deposits with financial institutions are fully collateralized.
- d. Ensuring the availability of funds to meet cash flow requirements.

Accounting

- a. To provide accurate, complete, and timely recording and reporting of the financial transactions and activities of the Department.
- b. To process the Department's payroll in a timely manner.
- c. To process accounts payable and issue payments in a timely and efficient manner.
- d. Accountability of the Utility Plant Assets and Property.

Consumer Service

- a. To provide timely billing, collection, accounting and depositing of water bills and jobbing invoices.
- b. Process meter applications and new services.
- c. Service customers who inquire about billing, payment and collection matters.
- d. Maintain records of accounts receivable.

Program Highlights

- a. Water sales revenues for the fiscal year ended June 30, 2012 amounted to \$21.025 million. The Department provided water service to approximately 21,271 customers and the quantity of water sold totaled 4.085 billion gallons.
- b. Operating expenses and debt service amounted to \$19.913 million; \$6.433 million of which was for debt service, while cost of water purchased and electrical power purchased for pumping amounted to \$1.559 million and \$3.101 million respectively which represent the other major components of our total operating expenses.
- c. The Department has been working with the Honolulu Board of Water Supply towards the implementation of the LOIHI project nka CC&B; a major component of this project is the conversion of the bi-monthly billing into a monthly billing system. This conversion was expected to be implemented mid of December, 2011 but now rescheduled to January, 2013 implementation date.
- d. The Department has an approved budget to engage the services of an IT Consultant to do a Strategic Review & Assessment of the DOW's existing IT infrastructure, programs & applications. From this study, an IT Plan will be

generated and DOW anticipates implementing these IT plans in phases. The study is anticipated to begin in early FY 2013.

- e. A summary of changes in the physical assets of the Department is included in Attachment A.

6. OPERATIONS DIVISION

Program Description

The Operations Division is responsible for maintaining and operating the Department's water distribution network, water storage facilities and water producing sources. This infrastructure provides potable water to approximately twenty-thousand (20,000) metered services in sufficient quantities, at adequate pressures, with minimum interruptions and of a quality safe and suitable for human consumption as mandated by the United States Environmental Protection Agency (USEPA) and the Safe Drinking Water Act (SDWA)

As water is an essential commodity, emergency repairs and trouble calls are provided round-the-clock on an as-needed basis. In order to accomplish its mission, the Operations Division maintains and stocks a complete inventory of materials and supplies for assurances that repairs are completed in a timely manner. This Division handles the smaller construction projects and participates in large pipeline installation projects. It also initiates field engineering to ensure efficient operations. Along with the responsibilities of providing potable water, it provides the Department's fleet management functions and is responsible for the maintenance, repairs and replacement of vehicles and equipment.

Under the direction of the Chief of Operations, the Division consists of the Plant Operations Section and the Field Operations Section. There are forty-eight (48) permanent positions budgeted for the Division for FY 2011-2012.

Program Objectives

Our daily activities are centered along the following:

- a. Operating, monitoring and maintaining fifty-two (52) deep-well pumping stations, nineteen (19) booster pumping stations along with its associated electrical motor control centers and chlorination disinfection equipment, four (4) tunnel sources, sixty (60) storage tanks, and seventy-five (75) control valve stations.
- b. Maintaining, repairing, and replacing mechanical and electrical malfunctioning components, equipment and infrastructure to maintain water service.
- c. Maintaining and repairing the Department's forty- six (46) vehicles, two (2) backhoes, four (4) skid steer loaders along with their various attachments, one mini-excavator, one (1) portable air compressor, twelve (12) trailers, seventeen (17) trailer-mounted generators ranging in sizes from seventy (70) KW to four

hundred (400) KW, two (2) light towers, two (2) directional arrow boards and numerous motorized hand-operated construction equipment.

- d. Operating, monitoring and maintaining four hundred (400) + miles of pipelines and approximately more than twenty-thousand (20,000) consumer water service connections and meters, four thousand (4,000) + valves, twenty-four hundred (2400) + hydrants and standpipes.
- e. Installing new service connections and meters including the replacement of defective meters and those in service for twenty (20) years. Providing temporary water services through hydrant meter connections for construction activities like dust control and landscaping.

Program Highlights

Field Operations Section Statistics FY 2011 – 2012

Repair Mainline Leaks	125
Repair Service Lateral Leaks.....	148
Repair Leaks within Meter Boxes	19
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Besides our daily activities, some of the major occurrences and tasks performed by the Operations Division during FY 2011 – 2012 were:

- a. A temporary as needed position of Heavy Equipment Operator was approved by the Department of Personnel Services.
- b. The following vacant positions were filled: (1) Chief of Operations, (2) Pipefitters and (1) Pipefitter Helper.
- c. Amfac Shaft temporary pump and motor were re-installed for further water quality sampling and testing.
- d. Two (2) veteran DOW employees, a utility worker and a power generator repairer retired this Fiscal Year.
- e. The Department of health conducted Sanitary Surveys in our Puhi-Lihue-Hanamaulu, Wailua-Kapaa, and Kekaha-Waimea Water System this past fiscal year.
- f. We worked with our CMMS contractor to begin electronic timesheets. It is the Departments goal to have all Operations Division employees submit electronic

timesheets that will be seamlessly utilized by the Fiscal Division for the labor distribution and payroll.

- g. Our Water Plant Operators are working at some of our deepwell sites to convert the existing gas chlorination disinfection systems to liquid sodium hypochlorite disinfection systems. This fiscal year, twelve (12) sites were converted to sodium hypochlorite.
- h. Operations Division crews worked with Special Projects team to bring online one (1) new water storage tank: 0.5 MG Piwai Storage Tank.
- i. Maintenance crews completed construction of three (3) SCADA shelters in Kilauea Booster Station, Kilauea Well, and Kekaha-Waimea Booster station.
- j. Maintenance and field crews completed the re-roofing of the Kalaheo Deep Well site.
- k. Six (6) new vehicles were purchased and received; two (2) mid-sized pick-up trucks and four (4) small SUVs. One (1) electrician's van was purchased and awaiting delivery.
- l. Operations Division personnel worked with Department of Public Works personnel in replacing damaged water main along Pua Nani Street. Damage occurred during heavy rains on March 2012.
- m. The following remote sites sustained electro-mechanical damages during the March 2012 heavy rains: Kilohana Well B, Puhi 510' tanks, Nawiliwili tank, Paanau tank, Wailua Homesteads Well B, Hanapepe Cliffside tank, Kilauea Well #2, Nonou Well C, Anahola Well A, Kekaha-Waimea booster pump, Kekaha-Waimea sub-master, Hanapepe Well A, Lawai Well #22, Paua Valley Well, and Haena Well.
- n. On several occasions, field operations personnel assisted Water Plan 2020 contractors performing overnight work and tie-ins by operating valves and going house-to-house notifying customers and residents of planned water outage to allow the contractors to tie-in to existing water mains. Such projects are located in Waimea(1), Eleele(3), Koloa-Poipu (2), Puhi(5), Lihue(10), Kapaa-Wailua(12), Wainiha-Haena(1)