

DEPARTMENT OF WATER SUPPLY

ROLE AND DUTIES

The Department of Water Supply of the County of Hawaii is a semi-autonomous agency that operates and maintains its public water systems. The Department's mission is to provide a continuous supply and adequate quantities of safe drinking water to its customers at a reasonable cost.

The Manager is the chief advisor to the Water Board and is the top administrator for the Department. The Manager directs the staff of the Department in fulfilling its primary purpose.

The Operations Division has the responsibility of providing high-quality drinking water on a 24-hour basis through the operation and maintenance of water sources, transmission and distribution waterlines, reservoirs, pumping stations, treatment facilities and communications equipment.

The Engineering Division is responsible for the planning and construction of the public water systems, compliance with State and Federal drinking water requirements, and land surveys.

The Finance Division is charged with the responsibility of customer services, accounting and financial reporting, and data processing.

STAFF

The Department has a staff of 146 employees operating from several locations around the island. In addition to its main office at the Waiakea Office Plaza on Kekuanaoa Street and the Operations Center on Leilani Street in Hilo, the Department maintains district offices and baseyards in Waimea, Keauhou, and Waiohinu. Other than its administrative personnel, the Department is organized into three major divisions.

Number of Employees by Division and Bargaining Units

<u>Division</u>	<u>Bargaining Unit</u>	<u>Employees</u>
Administration	Appointed	2
	Excluded-13	1
	Excluded-03	1
	Unit 03	5
	Unit 13	1
	Subtotal	10
Finance	Exempt	2
	Unit 03	16
	Unit 04	2

	Unit 13	3
	Subtotal	23
Engineering	Exempt	1
	Unit 03	15
	Unit 04	1
	Unit 13	11
	Subtotal	28
Operations	Exempt	1
	Unit 01	61
	Unit 02	8
	Unit 03	14
	Unit 13	1
	Subtotal	85
	Department Total	146

HIGHLIGHTS

Engineering Division

The following major capital improvement projects were under construction, in various stages of contract award, or in the planning and design phases during the fiscal year.

Puna:

Keaau-Pahoa Phases II and III 12-inch Trunkline. Bids were opened and the contract awarded for a new 12-inch trunkline which will be installed in conjunction with the State of Hawaii Department of Transportation Highway improvement project. The completion of this water improvement project will interconnect the Keaau system with the Pahoa water system.

Estimated Cost: \$1,700,000

Paradise Drive Fire Line. With available funds from the County of Hawaii, bids were opened and the contract awarded for a new water main which will be installed along Paradise Drive down to the volunteer fire station. The completion of this project will provide some means of fire protection services for the volunteer fire station, in addition to providing for fire hydrants and residential water metered service along Paradise Drive.

Estimated Cost: \$1,000,000

Happy Homes Subdivision Pipeline Replacement. A new 6-inch waterline will replace leaking, aged, galvanized iron waterlines from along the Huina Road area leading into the Happy Homes subdivision. The water system improvements will enhance flow capacity of the water mains leading into the subdivision. The project will be financed through the US Department of Agriculture Rural Assistance with a grant of \$777,500 and a loan of \$259,200.

Estimated Cost: \$1,000,000

Olaa Station No. 6 Exploratory Well Drilling. Planning, designing and well permitting applications were underway for this new well which is the first phase. Completion of the second phase, which will consist of development into a production well, will provide additional supply of water into our growing demand area of Keaau and Mt. View.

Estimated Cost: \$1,000,000

South Hilo:

Department of Water Supply New Office Space. Bids were opened for the renovation work at the existing Waiakea Office Plaza. This renovation work consists of demolition work of the interior and installing new partition work in place complete to create new office space for Administration, Fiscal and Engineering Division of the Department. The department occupied this new space in March.

Estimated Cost: \$810,000

Kaieie Mauka Exploratory Well. Bids were opened and a contract awarded for this first phase. The well will be constructed at the 1,140-foot elevation to provide a source of potable water to replace the surface water source, which is presently servicing the Kaieie Mauka water system. The well will be a reliable source of water during periods of low rainfall. This project will be financed through a loan under the State of Hawaii Drinking Water State Revolving Fund.

Estimated Cost: \$375,000

Saddle Road Well "A" Production Well. Bids were opened and a contract awarded for this project. The existing well at the 1,906-foot elevation will be outfitted with a deepwell pumping unit and appurtenances. The completion of this project will provide a source of potable water to replace the present Olaa Tunnel surface water source.

Estimated Cost: \$1,350,000

Piihonua-Kukuau 1.0-MG Reservoir and Transmission Line. A new 1.0-mg reservoir and a 16-inch transmission waterline will improve the storage and flow capacities of the Piihonua-Kukuau water system. This system serves portions of Kaumana, the entire Sunrise Estates subdivision, the University of Hawaii-Hilo, and portions of the Waiakea Homesteads areas in South Hilo.

Estimated Cost: \$3,600,000

Kawailani 1.0-MG Concrete Reservoir. This project consists of the replacement of our existing 0.5-mg steel tank with a larger storage reservoir. This project will provide much-needed storage capacity for the growing Waiakea area.

Estimated Cost: \$1,500,000

Akaka Falls Road Waterline. This project consists of the replacement of some old distribution lines to increase the carrying capacity for certain segments of the Honomu water system.

Estimated Cost: \$500,000

Hamakua:

Pohakea Water System Improvements. Bids were opened and a contract awarded. This project consists of two new booster pump stations, two new 100,000-gallon concrete reservoirs, and new 6-inch reservoir inlet-outlet waterline. These water system components will replace several existing water system facilities in the area, which are outdated. The completion of this project will improve system operations for this area.

Estimated Cost: \$2,600,000

Kukuihaele Exploratory Well. Bids were opened and a contract awarded for this first phase. This project consists of an exploratory well at our existing Kukuihaele Reservoir Site. When the second phase is completed which is for the development into a production source, this well will replace our existing Kukuihaele Spring source. This project will be funded under a loan through the State of Hawaii Drinking Water State Revolving Fund.

Estimated Cost: \$325,000

North Kohala:

Makapala Exploratory Well. Plans, design and permitting applications were ongoing for this well drilling project, which is in the first phase. When the second phase is completed which is for the development into a production source, this will replace an existing tunnel source. It is anticipated that this project will be funded under a loan through the State of Hawaii Drinking Water State Revolving Fund.

Estimated Cost: \$500,000

South Kohala:

Waimea Baseyard Improvements. Bids were opened and a contract awarded for this project. The project consists of the construction of a new Operations center building to house the Waimea Baseyard's personnel and equipment. The building will provide expanded space for equipment storage, personnel offices and conference rooms and a customer service facility. Another baseyard improvement is a fuel filling station for the Department's use.

Estimated Cost: \$1,000,000

North Kona:

Pua Puaa 2.0-MG Concrete Reservoir. Planning and design were ongoing for the department's first pre-stressed concrete reservoir. This reservoir will provide for much-needed storage capacity for our lower system in Kailua Village.

Estimated Cost \$3,000,000

South Kona:

Waipunaula 1.0-MG Reservoir and Transmission Line. A new 1.0-mg concrete reservoir will replace the existing steel tank. Acquisition of land from properties adjacent to the reservoir site will allow adequate area to construct the new reservoir. A 12-inch diameter transmission waterline from the reservoir site to the Hawaii Belt Road will be constructed to make use of the increased storage capacity for future developments in the Captain Cook area.

Estimated Cost: \$1,200,000

Ka'u:

Pahala Exploratory Well No. 2. Planning, design, land acquisition and permitting requirements were in progress for this fiscal year. This exploratory drilling is the first phase. Subsequent phase is for the outfitting of this well into a production source. The completion of both phases will provide for a backup source for our Pahala Water System. It is anticipated that this project will be financed through a loan under the State of Hawaii Drinking Water State Revolving Fund.

Estimated Cost: \$1,000,000

Pahala 0.5-MG Concrete Reservoir. Planning and design were ongoing for this project, which consists of replacing the existing steel tank with this new reservoir.

Estimated Cost: \$900,000

Finance Division

During the past fiscal year, a new financial management system was installed and implemented, which included a new utility billing program. Improvements were made to automate and integrate more of the accounting functions, and the water bills were converted to a new "page" bill from the previous "postcard" bill format. Along with expanded information on the bill itself, important information and messages to our customers can now be included on a separate sheet, and a self-addressed return envelope is also provided. An automatic water-bill payment service is being worked on and will soon be offered to all customers.

Water revenues totaled \$22.5 million compared to \$20.9 million the previous year, an increase of \$1.6 million or 7.7%. This increase is due to an increase in the number of services, water consumption, and the water rate increase implemented late in the fourth quarter of the fiscal year. The number of services increased 1.9% from 35,303 to 35,962. Total consumption increased 3.8% from 8.3 billion gallons to 8.6 billion gallons. The

islandwide average consumption was 23.7 million gallons per day compared to 22.9 million gallons per day the previous year.

Operations Division

Deep well pump production was 9.22 billion gallons as compared to last year's 9.16 billion gallons, a 0.65% increase. Power costs increased from \$7,370,246 to \$8,066,008, an 8.6% increase, attributable to HELCO fuel oil rate increases.

Noted Division Projects were:

Construction of a new metal frame garage at the Kona Baseyard.
Mana Booster Pump Electrical Improvements
Haina Deep Well Repair
Panaewa Deep Well #3 Repair
Piuhonua Well B Repair
Kahaluu Well D Repair

In-House Projects:

Upgrade Telemetry Systems Islandwide
Installation of Naalehu #2 Booster Pump
Alameida Booster Pump Improvements
Waiohinu Booster Pump #2 Repair
Panaewa Booster Pump #1 Upgrade
Miscellaneous Repairs due to damages caused by the 11/02/00 flood
Miscellaneous repairs to pump and tank sites to comply with Department of Health sanitary surveys
Improvements to pump and tank sites to comply with Department of Health standards
Repaint Haihai Tank, Kealakehe School Tank, Harbor Tank, Piuhonua Camps 4 & 5 Tanks, and the Hilo Operations Center gas station
Installation of a temporary metal tank at the Mahuna Tank site
Renovation of chlorination building at Pahala Tank #5
Repair and repaint building and pump apparatus at Hakalau Deep Well

OPERATIONS DIVISION WORK SUMMARY

July 1, 2000 to June 30, 2001

PLANT REPAIR SUMMARY

TANK:
Mechanical Repairs 59
Electrical Repairs 156

PUMPS:
Motor Repairs 190
Control Repairs 889

CHLORINATION:

WATER SERVICE SUMMARY

NEW SERVICE: 1232

CHANGE METERS: 1628

LOCK/REMOVE METERS 783

UNLOCK/REINSTALL METERS 682

RELOCATE SERVICE/METERS 24

System Repairs	7		
Pump/Motor Repairs	7	SERVICE LATERAL:	
Control Repairs	7	Changes	84
		Repairs	630
PRV REPAIRS:	126		
		MAIN REPAIRS/CONNECTIONS:	82
BUILDING STRUCTURE REPAIRS:	28	HYDRANTS:	80
RESERVOIR STRUCTURE REPAIRS	54	METER BOX REPAIRS	306
TELEPHONE ANSWERING SERVICE CALLS:	1178		

BOARD

Water Board

The Water Board consists of nine members who are appointed by the Mayor and confirmed by the County Council. Members serve five-year staggered terms and are representative of the nine political districts of the island. The Board elects its Chairman and Vice-Chairman at the beginning of each calendar year. In accordance with the County Charter, the Water Board manages, controls, and operates the waterworks of the county.

The Board meets regularly on the fourth Tuesday of each month when it conducts the business affairs of the Department. In addition to these meetings, the Board conducts a public hearing annually on the Department's operating and capital improvement projects budgets. The Board may also conduct public hearings periodically on the Department's water rates and Rules and Regulations.

Since January 2001, Yukio Takeya and John S. Tolmie, Jr., respectively, have served as Chairman and Vice-Chairman of the Board.

Mr. George A. Harai's term was extended (90 days) until March 31, 2001.

The following is a list of the current members and term expiration:

George A. Harai (extended to 3/31/01)	12/31/00
Glenn Y. Kuwaye	12/31/01
Yukio Takeya	12/31/01
John W. Clark	12/31/02
Robert H. Makuakane	12/31/02
Raymond M. Kawamata	12/31/03
John S. Tolmie, Jr.	12/31/03
Earl T. Nakashima	12/31/04
Pamela H. Hons	12/31/04
Sandra Scarr (effective 7/6/01)	12/31/05