



## **BOARD OF WATER SUPPLY**

**Bryan P. Andaya**, Chair; **Kapua Sproat**, Vice Chair; **Kay C. Matsui**, **Ray C. Soon**, **Max Sword**, and Ex-Officio Members: **Ross S. Sasamura**, **Jade T. Butay**.  
and Ex-Officio Members: **Ross S. Sasamura**, **Jade T. Butay**.  
**Ernest Y.W. Lau**, P.E., Manager and Chief Engineer  
**Ellen E. Kitamura**, P.E., Deputy Manager and Chief Engineer

### **POWERS, DUTIES AND FUNCTIONS**

The Board of Water Supply (BWS) manages Oahu's municipal water resources and distribution system, providing residents with a safe, dependable and affordable drinking water supply now and into the future. As the largest municipal water utility in the state of Hawaii, the BWS delivers potable and non-potable water to approximately 1 million customers on Oahu. The BWS carefully and proactively manages and invests in its intricate system, consisting of 94 active potable water sources, 172 reservoirs and nearly 2,100 miles of pipeline.

The BWS is a financially self-sufficient, semi-autonomous agency of the City and County of Honolulu. Its operations and projects are financed with revenues generated from water transmission and distribution fees. It receives no tax money from the city. The BWS also issues revenue bonds and pursues federal grants and State Revolving Fund loans to help subsidize BWS projects.

The BWS is governed by a board of directors (board), consisting of seven members. Five members are appointed by the Mayor and confirmed by the Honolulu City Council. The remaining two members serve in their capacities as the Director of the state Department of Transportation and the Director and Chief Engineer of the city's Department of Facility Maintenance. The board appoints the BWS Manager and Chief Engineer to administer the department.

#### **Capital Projects Division**

The Capital Projects Division ensures improvements to Oahu's municipal water system are designed and constructed in accordance with the BWS Water System Standards; formulates the annual Capital Improvement Program; implements the design and construction of new source, storage, treatment, transmission and distribution facilities; and is responsible for the replacement and upgrade of aging water mains and waterworks facilities.

#### **Customer Care Division**

The Customer Care Division interfaces with BWS customers to provide services in the areas of bill payments, delinquent bills, account inquiries, water service investigations, review of building permit applications, new water services, and investigation of water leaks and possible causes for high water bills.

#### **Field Operations Division**

The Field Operations Division maintains and repairs Oahu's water delivery system, which includes all pipelines, valves, fire hydrants, water meters and automatic meter reading components. This division also maintains the BWS's corporation yards, reservoirs, and control buildings, and conducts landscaping work at all BWS facilities.

### **Finance Division**

The Finance Division ensures financial resources are efficiently and effectively managed by providing support for all BWS fiscal functions, including financial reporting, general accounting, payroll, accounts payable, planning and analysis, fixed assets, treasury, debt and investment management, meter reading and customer billing.

### **Information Technology Division**

The Information Technology Division plans, designs, implements, maintains and supports BWS information technology (IT) and geographic information system (GIS) applications, the water system hydraulic models, and the BWS IT infrastructure, which includes physical and virtual data centers, servers, personal computers, mobile computing, wired and wireless network communications, telephone systems, the call center system, cyber security and video surveillance systems.

### **Land Division**

The Land Division acquires real property and interests therein, in the name of the city for BWS use through purchase, condemnation, lease, easement and executive land order; recommends to the council the disposal of surplus real property; and manages real property and real property interests that are under the control of the BWS.

### **Water Quality Division**

The Water Quality Division is responsible for all matters relating to the administration and compliance of Oahu's water system with all drinking water and environmental laws, rules, and regulations, and protecting water quality from contamination entering the potable water system through backflow prevention and the identification and elimination of cross-connections.

### **Water Resources Division**

The Water Resources Division directs long-range water resource and capital planning for Oahu's water system, and ensures the health of Oahu's water resources, conserves freshwater supplies, and plans for the expansion of water system infrastructure to ensure an adequate water supply for domestic use and fire protection for current and future water users.

### **Water System Operations Division**

The Water System Operations Division monitors, maintains, repairs and operates the BWS's diverse water systems, including well and booster stations, control valves and the various water treatment facilities. This division also inventories, maintains and repairs the BWS fleet of motor vehicles, construction equipment and trailers.

## Office of the Manager and Chief Engineer

The Office of the Manager and Chief Engineer administers the affairs of the BWS in accordance with policies and regulations adopted by the board and the provisions of the Revised Charter of the City and County of Honolulu; provides comprehensive strategic communication services and support to all divisions, including internal communications and external communications with key stakeholder groups such as customers, community/advocacy groups, neighborhood boards, media and elected officials; oversees the development and execution of the operating budget, capital improvement program and departmental revenues; administers and provides procurement services; administers and manages human resource classification, recruitment and examination, and labor relations; develops and implements plans and policies to improve security for BWS employees, water resources and distribution system; and develops and executes risk management and emergency preparedness and response in coordination with other city, state and federal agencies.

## ACCOMPLISHMENTS

- Issued \$59 million of municipal bonds in March 2020 to finance capital improvement projects and \$47.5 million to refinance older bonds at a lower interest rate, resulting in savings of \$5.3 million in interest payments, and received \$15 million in State Revolving Fund loans;
- Replaced 39,265 automated meter reading transponder units as part of a \$5 million initiative to change out 80,000 units in order to improve automated drive-by meter reads and improve billing process efficiency;
- Awarded \$87 million in construction contracts and \$17 million in professional service contracts for projects to maintain and improve water system facilities, including well and booster stations, reservoirs and corporation yards, and for the systematic replacement of aging and corroded water mains and fire protection improvements;
- Scheduled construction work for the replacement of 7 miles of pipelines in the Haleiwa, Kahaluu, Kamehameha Heights, Makakilo, Pauoa, Waikele, Waimanalo, and Waipio areas;
- Initiated design work for future construction of 15 miles of water main replacements in Ala Moana, Ewa Beach, Hauula, Hawaii Kai, Kaneohe, Kapolei, Kuliouou, Manoa, Moanalua, Waialae Iki, and Waipahu;
- Awarded design and construction contracts for renovations and improvements of the following BWS facilities: Aiea Wells, Halawa 418 Reservoir, Haleiwa Wells, Hoaeae Wells, Honouliuli Well II, Iolekaa Wells, Kaahumanu Wells, Kaluanui Wells, Kapolei 215 Reservoir No. 1, Koko Head 170 Reservoir, Kuliouou Well, Kunia Wells II, Maakua

Well, Makaha Wells, Manoa Wells II, Mauna Olu 530 Reservoir, Mililani 994 Booster Station, Mililani Wells I, Mililani Wells II, Mililani Wells IV, Moanalua and Quarry Tunnels, Newtown Wells, Pearl City 285 Reservoir No. 1, Punaluu Wells III, Wahiawa Wells I, Waialae West Well, Waiiau Wells, Waipahu Wells I, and Waipahu Wells III;

- Conducted 42,259 chemical tests, 35,094 microbiological tests, and collected 21,656 samples from BWS sources, distribution systems and treatment facilities to ensure all water served is safe to drink; tests performed during Fiscal Year 2020 include regulatory compliance testing, groundwater quality testing, and response to customer inquiries about water quality;
- Issued \$295,449 in rebates and achieved an estimated freshwater savings of more than 28 million gallons per year through the BWS water conservation rebate program for efficient clothes washing machines, rain barrels, and weather-based irrigation controllers;
- Completed the Haiku Stairs final environmental impact statement with options for eliminating BWS liability on a non-mission critical asset; the comprehensive evaluation shared a preferred legal access route process, and more than 3,700 testimonies were submitted for the May 2020 public hearing, where the BWS board of directors approved the transfer of Haiku Stairs and underlying parcel to the city Department of Parks and Recreation;
- Mitigated effects of the coronavirus pandemic by implementing infection prevention measures and workplace controls; establishing procedures and guidelines for identifying sick employees, visitors, and customers; and completing the design and construction of safety improvements for BWS employees and visitors who conduct business at the BWS Public Service Building Customer Care Lobby.