



BOARD OF WATER SUPPLY

Bryan P. Andaya, Chair; **Adam C. Wong**, Vice Chair; **David C. Hulihee**, **Kapua Sproat**, **Kay C. Matsui**, and Ex-Officio Members: **Ross S. Sasamura**, **Ford N. Fuchigami**, **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 delivered potable and non-potable water to approximately one million customers on Oahu in Fiscal Year 2017. The BWS carefully and proactively manages and invests in its intricate system, consisting of 94 active potable water sources, 171 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 by 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 (BOD), 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 BOD 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 repair, maintenance, and upgrade of aging water mains and 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, and fire hydrants. This division also maintains the BWS's corporation yards and conducts landscaping work at all of its facilities.

Finance Division

The Finance Division ensures financial resources are efficiently and effectively managed by providing support for all of the BWS's financial and 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 and County of Honolulu for BWS use through purchase, condemnation, lease, easement, and executive land order; recommends to the City 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 manages compliance with all federal and state drinking water and applicable environmental rules and regulations. This division also manages microbiological and chemical laboratories.

Water Resources Division

The Water Resources Division directs long-range water resource and capital planning for Oahu's water system, and ensures that there is an adequate water supply 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's 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 BOD 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 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

- Updated and published 5-year Strategic Plan (2018-2022), incorporating goals from the 2016 Water Master Plan (WMP) which is a comprehensive evaluation of water supplies, needs, and infrastructure over a 30-year period including population and water use projections, evaluation of the current system, and considerations for conservation, watershed management, recycled water and climate change adaptation;
- Initiated a comprehensive evaluation of fiscal needs including a Cost of Service study and rate design, revisions to financial policies, 10-year and 30-year financial budgets, and a long-term debt plan; this long-range financial plan will enable the BWS to maintain and improve the infrastructure of water mains, water sources, pumps and reservoirs;
- May 2017 marked the second year of the Stakeholder Advisory Group – a group comprised of nearly 30 local residents, civic leaders, and business and environmental professionals, covering all City Council districts – whose purpose is to provide feedback on the BWS WMP, financial plan, proposed rate study and other initiatives such as water conservation, recycled water and watershed management;
- Conducted 59,862 chemical tests, 10,843 microbiological tests, and 15,114 chlorine residual and other quality tests on samples collected from BWS sources, distribution systems, and treatment facilities to ensure water safety; tests performed include regulatory compliance testing, groundwater quality testing, and response to customer inquiries about water quality; and continued to monitor BWS wells near the Navy Red Hill Bulk Fuel Facility in response to a fuel leak reported by the Navy in January 2014, and conduct studies to assess the impact the leak may have on the groundwater aquifer;
- Completed annual Consumer Confidence Report, aka the Water Quality Report, and mailed it to all BWS customers on record to provide information on the water delivered from the BWS system; made the report available online, and placed ads in Honolulu newspapers, including various ethnic language publications, to inform community members of the report;
- Responded to 346 main breaks and awarded nearly \$58 million in contracts for design and construction projects for the upkeep and improvement of 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 Aiea, Hawaii Kai, Kaimuki, and Wilhelmina Rise areas; and initiated design work for future construction in the Haleiwa, Wahiawa, Kaneohe, Kailua, Lanikai, Kalama Valley, Hawaii Kai, Diamond Head, and Kalihi areas;
- Entered into a programmatic financing agreement with the Department of Health for the State Revolving Fund program that will allow for greater flexibility in obtaining funding for eligible programs; and doubled funding for watershed protection efforts with partner agencies, providing over \$500,000 toward invasive species control, fencing for ungulate control, native species restoration and vegetative firebreaks;
- Initiated partnership with University of Hawaii System Information Technology Services for hosting BWS equipment in their state-of-the-art data center to serve as a disaster recovery site, with implementation projected for FY 2018; and launched a pilot program of Water Smart, a mobile app utilizing web technology to encourage water savings through targeted, direct customer engagements and the use of data analytics;
- Expanded community presence by participating in the Ellison Onizuka Day of Exploration held by the Boy Scouts, and the Project W.E.T. training with the Department of Facility Maintenance; sponsored the 39th annual Water Conservation Week Poster Contest and the 9th annual Water Conservation Week Poetry Contest, receiving 877 posters and 307 poems from more than 60 Oahu schools, focused on the theme “Conserve to Preserve,” and the winning entries will be featured in the 2018 Water Conservation Calendar; increased the number of workshops at the Xeriscape Garden; and began updating exhibits for the Fred Ohrt Water Museum;
- Began development of a mobile software platform for near real-time information capture of work activity in the field that is expected to improve operations and provide increased visibility for enhanced customer service; completed the redesign of internal and external BWS websites; developed a new Customer Self-Service web portal; and improved customer service experience by creating a designated area in the Public Service Building lobby where a staff member directs lobby traffic and serves walk-in customers.