

# Water Master Plan Quarterly Update

Safe, dependable, and affordable water now and into the future



Board of Water Supply  
City and County of Honolulu

Volume 4 • Issue 1 • February 2018

## Funding the Water Master Plan Implementation

Over the next 10 years, the Board of Water Supply is going to design and build more than 450 projects island-wide to begin implementing the Water Master Plan. BWS will gradually increase the amount of pipeline replaced from 6 to 21 miles every year. This is expected to drive the average number of water main breaks to less than 300 per year. BWS will be staffing up to lead this larger Infrastructure Investment Plan (IIP). (See figure at right.) This work will improve reliability and life of the water system for the long-term.

So ... how do we pay for this? First, BWS's financial team determined how much money will be needed for the next 10 years. This is also known as the "10-year revenue requirement." The following are the key drivers to determine that amount:

- ▶ Operating and Maintenance (O&M) Costs: BWS division and staff office managers projected 10-year O&M budgets, including additional staffing to implement the larger IIP, IT support systems, conservation and watershed management programs.
- ▶ Infrastructure Investment Plan: The next driver of the 10-year revenue requirement is the costs associated with delivering high priority infrastructure projects planned for FY 2018 – FY 2028. These projects include ramping up to 21 miles of pipeline replacement per year.
- ▶ Financing Strategy: Updating financial policies in 2017 supports using a 50/50 combination of cash and debt (mostly through issuing bonds) to help cover capital costs, which helps make the program more affordable for our customers.

Without the use of a financing strategy, over the next 10 years, annual costs will increase from \$250 million to almost \$500 million. In December 2017, the BWS Board considered alternative financing scenarios that incorporated the use of cash and bonds in varying amounts. These scenarios focus on affordability, equitable distribution of costs to customers for generations to come, best alignment with the life of the assets, and avoiding rate shock. The Board preferred a scenario that minimizes fluctuations in revenue adjustments year to year, gradually increasing to 6% over a 10-year period. Remember, "revenue adjustments" are not the same thing as "rate adjustments". The recommended financing scenario is the basis for exploring a range of alternative rate structures (e.g. tiers), which is the next step towards adjusting future water rates. 🌱

🗨️ Honolulu has risen to these challenges [of water sustainability] by preparing a comprehensive Water Master Plan, a strategic plan, as well as eight regional watershed management plans providing greater detail for each land use district on the island. The Water Master Plan provides a comprehensive understanding of Oahu's water supplies and needs as well as the water storage and distribution system, giving BWS a road map to meet future needs, establish priorities, and adopt sustainable financing strategies. 🏡

— February 2018, Journal AWWA,

Assessing the Sustainability of Urban Water Supply Systems, Richter et al.



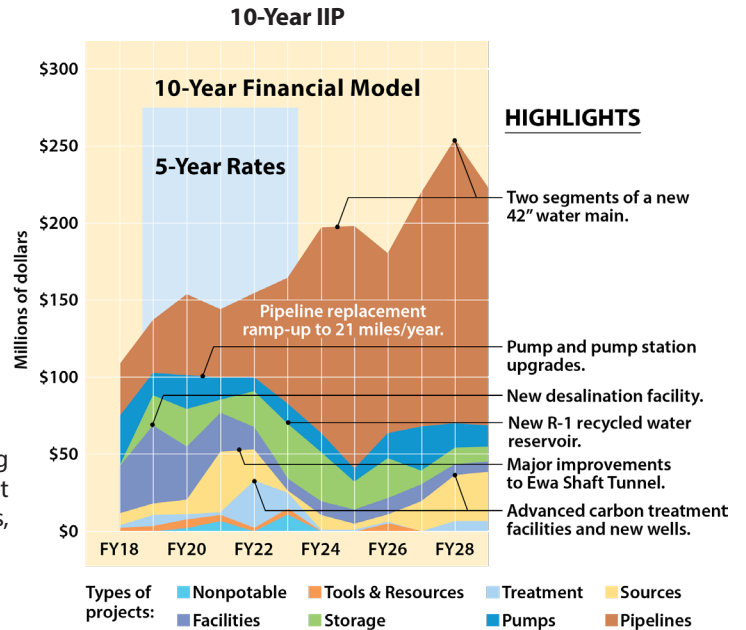
### The Long Range Financial Plan Links to the WMP and 30-Year IIP

The BWS prepared a Water Master Plan (WMP) that assesses the condition of the water system's components, estimates future water demands, and outlines projects to address wear, age, growth, and supply sustainability.



To put the WMP into action, BWS developed a 30-year Infrastructure Investment Plan (IIP) that prioritizes the repair and replacement of portions of the water system based on risk. The IIP provides an analysis-based, multi-decade strategy as to where and when specific water infrastructure projects should be implemented over the life of the WMP.

To assure sufficient funding for WMP implementation and maintaining functions of the organization, BWS is nearing completion of a Long Range Financial Plan. This plan will guide how to best finance annual costs that will run into hundreds of millions of dollars to keep BWS working efficiently and effectively, to make system repairs and replacement and expand infrastructure for appropriate accommodations for growth, system resiliency for drought and emergency response, and also keep water rates affordable.










## Designing Guardrails for Water Rates

The BWS Board held a Rates Workshop on January 5, 2018 to provide direction on nine key elements of the water rates structure. Their direction provides guardrails for the rate setting process over the coming months.

The Board evaluated multiple options for each element. Their open and thoughtful discussions included potential impacts to customers as well as feasibility for implementation. They took into account feedback from the BWS Stakeholder Advisory Group and testimony of those stakeholders in attendance – Dean Okimoto, Cruz Vina Jr., and Dick Poirier.

Results shown below highlight the BWS Board’s direction on the rate structure, including subsidies that reflect community values. The next steps are to draft rate scenarios for the Board’s further consideration, likely in March 2018. Following this, BWS will then begin ramping up public outreach related to rates, including a series of public meetings across the island in April and May of 2018. 🌱

### The BWS Board’s Direction on Guardrails for Rate Development

	<b>Cost of Service</b> Adjust single-family and multi-family rates closer to cost of service recovery
	<b>Affordability</b> Make no changes to current affordability efforts, with the exception of additional subsidies (see Fee Subsidies below)
	<b>Residential Rate Tiers</b> Shift tiers to encourage more conservation and establish an “Essential Needs” tier
	<b>Recycled Water Rates and Cost of Service</b> Increase recycled/non-potable rates to recover more of cost of service
	<b>Agricultural Rates Subsidy</b> Retain existing subsidy levels
	<b>Non-residential Rates Tiers</b> Make no changes to non-residential rate structure
	<b>Monthly Charge</b> Change the structure of the monthly charge to vary by meter size
	<b>Fee Subsidies</b> Provide subsidies for: • Affordable housing • Homeless shelters • Fire sprinkler retrofit
	<b>Fire Standby Charge</b> Establish a Fire Meter Standby Charge to recover the cost of service

*The BWS Board established “guardrails” (above) for upcoming rate structure planning. Several new things were recommended: an Essential Needs tier for residential customers, a monthly customer charge based on meter size, providing limited subsidies for affordable housing, and adjusting rate structure overall to encourage conservation and recover closer to actual costs of services.*

## Talking About Water Rates



*Ellen Kitamura and Joe Cooper talk about the financial planning process on the Hawaii Matters radio show.*

Transparency is a core commitment of BWS. Over the past several years, BWS has been fulfilling this promise through the development of the Water Master Plan, 30-year Infrastructure Investment Plan, and Long Range Financial Plan. The BWS has shared progress and outcomes of these interwoven plans with staff through meetings, Kai Wa Puna, and WMP Updates like this one; and with the community through the Stakeholder Advisory Group, Neighborhood Board updates, and interest-group presentations. BWS staff is ramping up community outreach, continuing to inform and listen to ratepayers and stakeholders.

- ▶ Neighborhood Board representatives are already talking about financial planning, the rate development process, and opportunities for public involvement.
- ▶ Hawaii Matters, a Sunday radio show, is featuring BWS managers and division heads, starting with Ernest Lau, Ellen Kitamura, and Joe Cooper. Interviews focus on the multi-year process to determine financial requirements and explain rate development. You may remember the interviewer, Devon Nekoba, who previously worked for the BWS Communications Office.
- ▶ Small group public presentations will launch this spring, with themes consistent with media outreach and Neighborhood Board presentations. Presentations and support materials are being developed by our Communications Office, so they are ready when this critically important outreach gets underway. 🌱



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