

Frequently Asked Questions about Proposed Updates to the Honolulu Board of Water Supply's Water System Facilities Charges

GENERAL BACKGROUND

What is a Water System Facilities Charge (WSFC)?

- The WSFC is a one-time charge that is paid when connecting to the BWS water system for the first time, or when an existing customer needs a larger meter, for example, for a significant home addition.
- The WSFC helps pay for facilities that are required to expand the BWS water system to accommodate growth. It also equitably recovers costs of oversizing parts of the system, for example installing a larger diameter pipe even though the full capacity may not be needed for several more years.
- Very large developers are required to install new water systems for their developments rather than pay WSFCs.

Why does the BWS need to update the WSFC?

- The current charges were set in 1993 and many things have changed since then – costs, water use trends and patterns, growth, and available capacity in the existing water system. The charges need to be updated to more accurately reflect present conditions.
- The revenues collected from WSFC needs to recover more of the costs of growth-related capital improvement projects. These are projects that increase the capacity of the system to ensure that BWS can continue to deliver safe, affordable, and dependable water to the customers we serve.
- Because the charges are intended to pay for growth-related improvements to the water system over time, continuing the current charges means those costs are instead largely covered by all of our customers. These changes are intended so that “Growth pays for growth.”

How are the WSFC funds used?

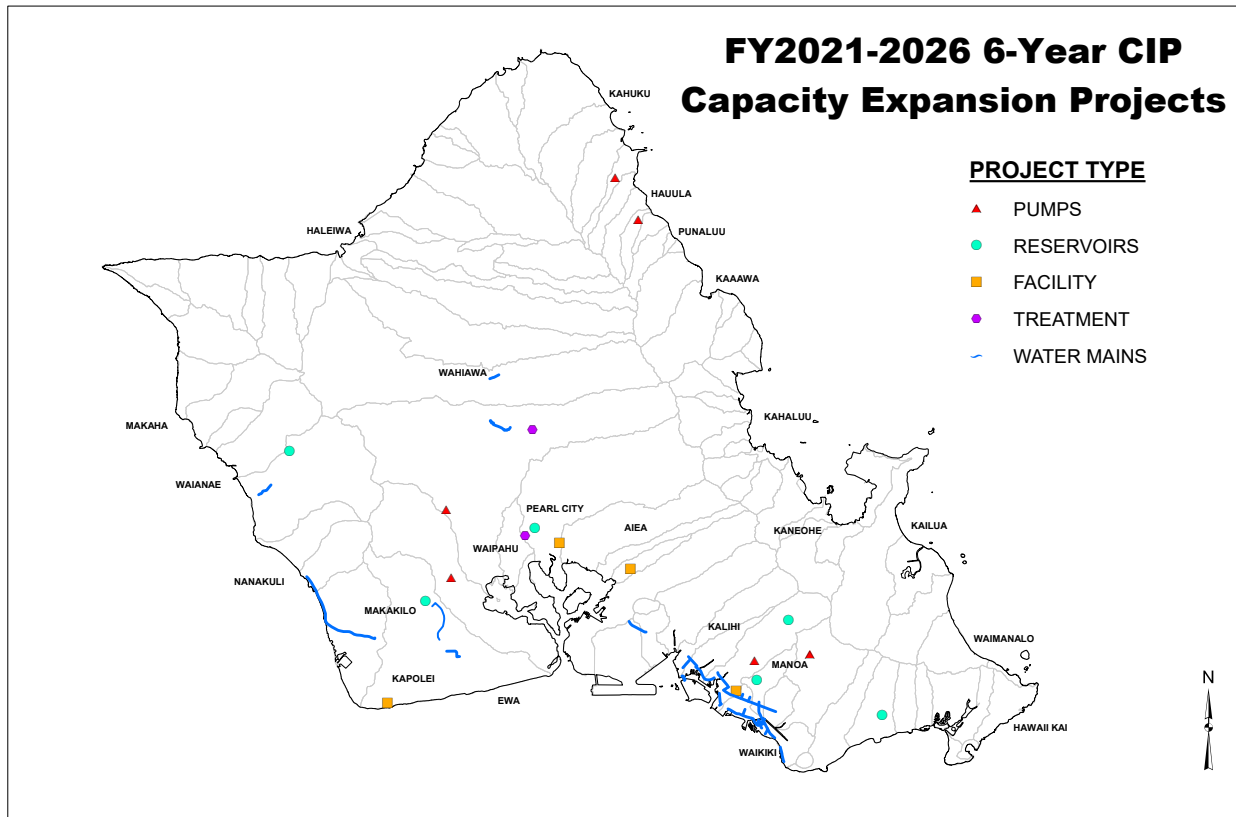
- The money collected from the WSFC pays for increasing the capacity of the backbone of the system to pump, treat, transport, and store enough water to serve our customers.
- Most of the money is used to build new wells, pumps, pipes, and storage tanks to accommodate new or expanding developments.
- The remaining fees buy into the existing capacity of the BWS water system that was previously oversized or made available through water conservation savings.

Why haven't I ever heard of the WSFC?

- It is only charged when connecting to the system for the first time or when a larger meter is needed. For most single-family residential customers, the cost was bundled into the purchase price of your home.
- The WSFC is not a part of your regular BWS water bill. It is paid in full, one time, up front, as a condition of issuing a building permit.

What are some of the benefits that the WSFC will provide?

- The map below shows capital improvement projects planned for the next few years that will add capacity to the BWS water system.
- Updated WSFC fees will pay for a portion of these growth-related projects. The amount of the updated WSFCs is calculated so that the funds collected will recover the costs that are tied to new and expanded development.



Typically, who applies for a connection to the water system and pays a WSFC?

- Developers or landowners, homeowners who are adding on, and farmers needing new or larger connections to the BWS water system pay a WSFC.
- BWS determines and charges the appropriate WSFC fee when we review building permits, based on the total capacity of the proposed plumbing fixtures to use water.

How much will the residential and non-residential (industrial, commercial, government) WSFC increase?

The proposed updated WSFCs are shown on the following pages along with the current charges. Please note that while most WSFC fees are proposed to increase, one customer group will see a significant decrease – small businesses with 133 or fewer fixture units. The proposed residential/non-residential WSFC is based on the number of fixture units that will be in the buildings.

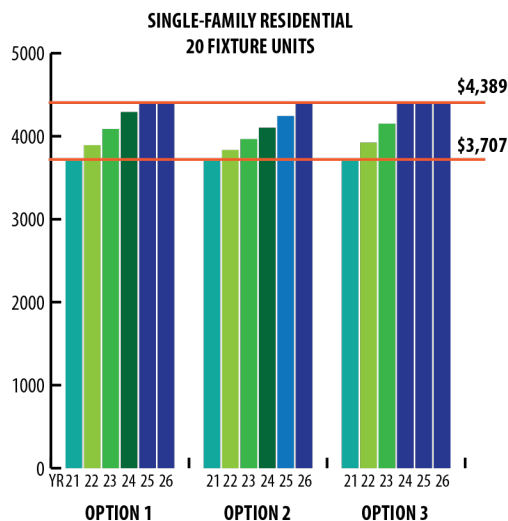
Proposed Updates to the Water System Facilities Charges RESIDENTIAL

Residential (Minimum 20 Fixture Units)	Current	Proposed
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Single Family Residential

Resource Development	\$80.04	\$64.43
Transmission	\$37.87	\$96.02
Daily Storage	<u>\$67.42</u>	<u>\$59.00</u>
Total charge per fixture unit	\$185.33	\$219.45

Example:



Options for phasing in the updated WSFC for single family residential

- Option 1 Phase in 5% maximum increase annually
- Option 2 Phase in evenly over 5 years
- Option 3 Phase in evenly over 3 years

The proposed updated WSFC for single-family residential appears to increase by about 18%. How much is that increase for a single-family residence vs. a subdivision?

The WSFC would increase by about \$680 for one single family residence with 20 fixture units. (See chart above.) For a subdivision, the amount would be the same per residence multiplied by the number of residences.

Why does the transmission cost go up while both resource development and daily storage go down?

- The WSFC is made up of 3 parts: resource development including new wells and treatment, transmission that includes the larger diameter pipelines to move water to where it is needed, and tanks and reservoirs to meet daily storage requirements. Each of these are evaluated separately.
- The transmission component of the updated WSFC increases significantly compared to the others. Transmission pipelines have less existing capacity available for growth. The capacity that is available has a much higher monetary value than either resource development or daily storage, based on replacement cost less depreciation. Additionally, more new transmission line capacity is needed than either new sources or reservoirs.

Residential (Minimum 20 Fixture Units)	Current	Proposed
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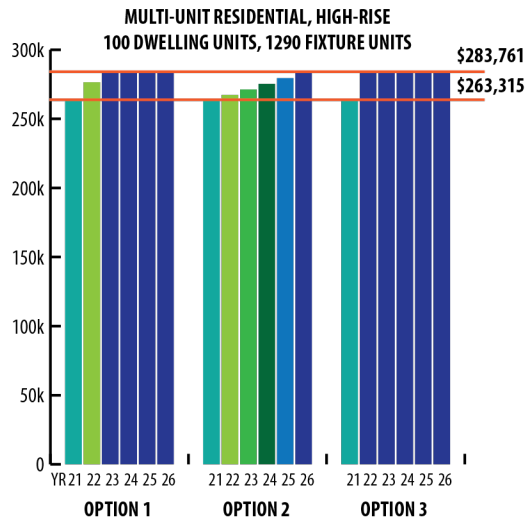
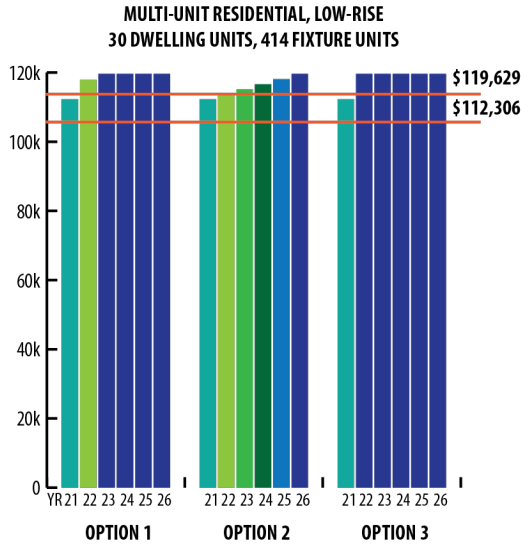
Multi-Unit – Low-Rise

Resource Development	\$117.14	\$98.17
Transmission	\$55.46	\$118.17
Daily Storage	<u>\$98.67</u>	<u>\$72.62</u>
Total charge per fixture unit	\$271.27	\$288.96

Multi-Unit – High-Rise

Resource Development	\$88.14	\$74.73
Transmission	\$41.73	\$89.96
Daily Storage	<u>\$74.25</u>	<u>\$55.28</u>
Total charge per fixture unit	\$204.12	\$219.97

Examples:



Options for phasing in the updated WSFC for multi-unit residential

- Option 1 Phase in 5% maximum increase annually
- Option 2 Phase in evenly over 5 years
- Option 3 Implement immediately, no phase in

What is a fixture unit?

A fixture unit is a unit of measure of flowrates from different kinds of water using fixtures: sinks, toilets, hose bibs, dishwashers, showers, full baths, half baths, washing machines, and so on. Fixture units are used in the design of plumbing systems and are specified in the Uniform Plumbing Code. Because a fixture unit reflects the capacity of any given fixture to use water, the BWS uses it to calculate its WSFC for both residential and non-residential customers.

How many fixture units does a typical house or apartment complex have?

Below are some examples of different sizes and types of residences, and the typical number of fixture units. Note that the number of fixture units in a building is only dependent upon the number and type of plumbing fixtures.

Number of fixture units typical for Single-Family Residential customers

House with 2 full baths and 1 half-bath*:	20 fixture units
Main house* with 2 full baths, 1 half-bath, and an ADU** with 1 full bath:	25 fixture units
House with 4 full baths and 2 half-baths*:	30 fixture units
House with 6 full baths*:	56 fixture units

*includes kitchen sink, dishwasher, washing machine, laundry tray and hose bib

** ADU includes a kitchen sink but no dishwasher, washing machine, laundry tray or hose bib

Number of fixture units typical for low rise multi-unit residential customers (1-3 stories)*

Complex with 10 apartments/condos:	138 fixture units
Complex with 30 apartments/condos:	414 fixture units

*Assumes that low-rise apartments in these examples are 1.5 baths with kitchen sink dishwasher, washing machine and hose bib

Number of fixture units typical for high rise multi-unit residential customers (4 or more stories)**

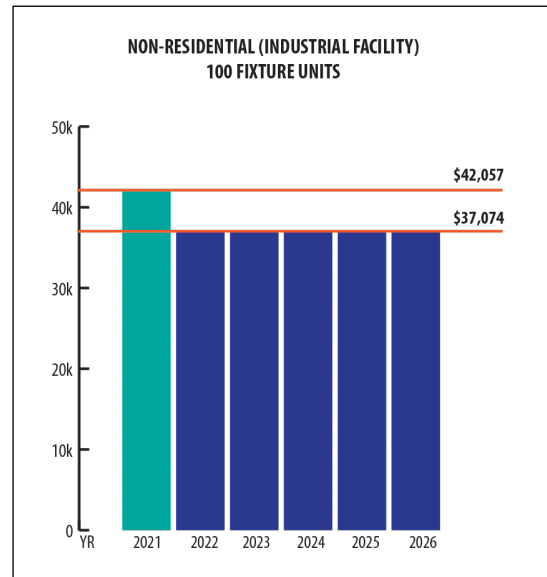
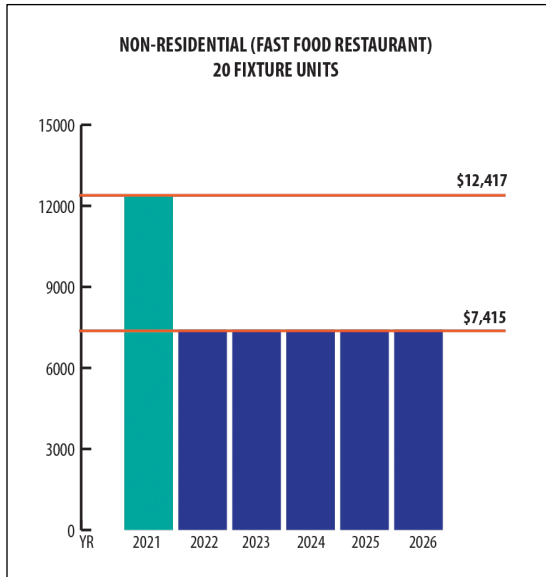
Complex with 40 apartments/condos:	516 fixture units
Complex with 100 apartments/condos:	1290 fixture units

**Assumes that high-rise apartments in these examples are 2 baths with kitchen sink dishwasher, washing machine.

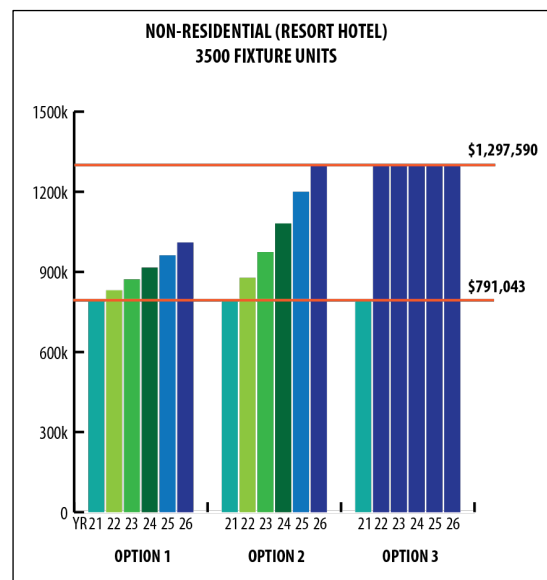
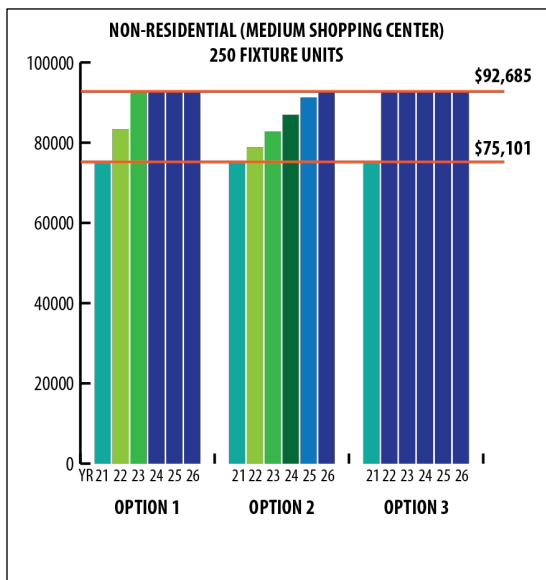
**Proposed Updates to the Water System Facilities Charges
NON-RESIDENTIAL (COMMERCIAL/OTHER)**

Non-Residential (Commercial, Industrial, Hotel, Parks and Schools)	Current First 50 Fixture Units	Current Additional Fixture Units >50	Proposed All (Minimum of 20 fixture units)
Resource Development	\$274.74	\$95.15	\$111.88
Transmission	\$130.65	\$45.04	\$160.33
Daily Storage	<u>\$232.46</u>	<u>\$80.10</u>	<u>\$98.53</u>
Total charge per fixture unit	\$620.85	\$220.29	\$370.74

Examples:



▼ **Charge decreases: no phase-in; implement immediately**



▲ **Charge increases: three options for phasing in:**

Options for phasing in the updated WSFC for non-residential

- Option 1 Phase in 5% maximum increase annually
- Option 2 Phase in evenly over 5 years
- Option 3 Implement immediately, no phase in

How many fixture units does a typical business have?

Below are some examples of different sizes and types of businesses and other non-residential developments, and the typical number of fixture units.

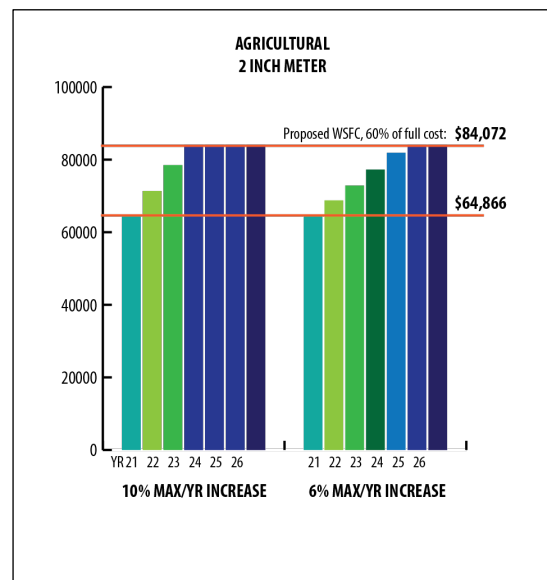
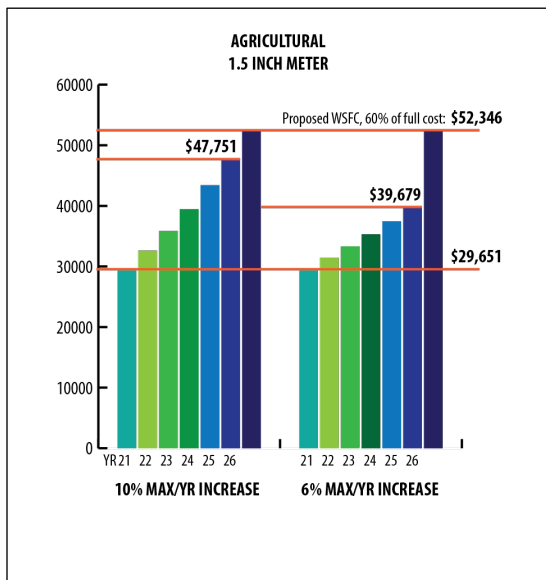
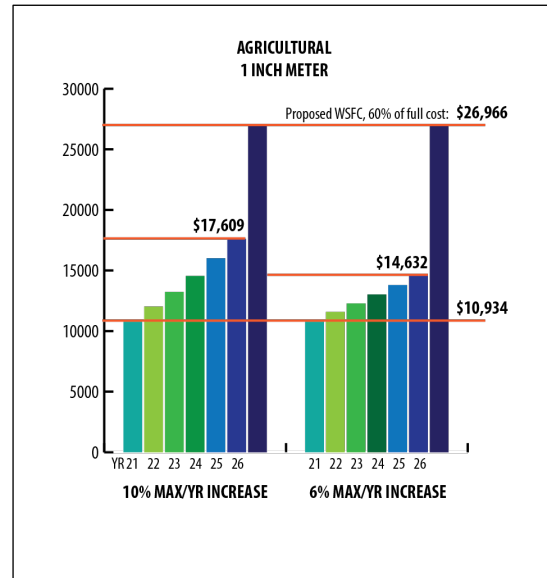
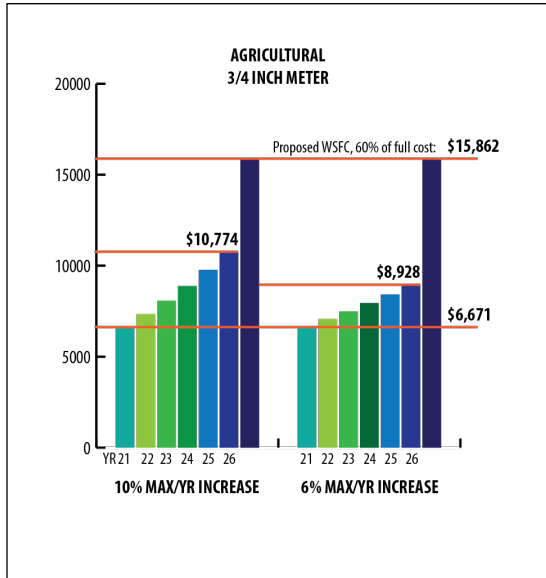
Number of fixture units typical for different types of Non-residential customers

Fast food restaurants	20 fixture units
Industrial facility	100 fixture units
Medium-sized shopping center	250 fixture units
Secondary school with turf grass	3,000 fixture units
Large resort hotel	3,500 fixture units

Proposed Updates to the Water System Facilities Charges
AGRICULTURAL

Agricultural (By Meter Size)	Current	Proposed
<u>3/4 " Meter</u>		
Resource Development	\$2,881.05	\$4,924.80
Transmission	\$1,363.35	\$6,774.60
Daily Storage	\$2,427.04	\$4,163.40
Total charge	\$6,671.44	\$15,862.80
<u>1 " Meter</u>		
Resource Development	\$4,721.68	\$8,371.80
Transmission	\$2,234.38	\$11,517.00
Daily Storage	\$3,977.65	\$7,077.60
Total charge	\$10,933.71	\$26,966.40
<u>1-1/2 " Meter</u>		
Resource Development	\$12,804.55	\$16,251.00
Transmission	\$6,059.34	\$22,356.60
Daily Storage	\$10,786.66	\$13,738.80
Total charge	\$29,650.75	\$52,346.40
<u>2 " Meter</u>		
Resource Development	\$28,014.53	\$26,101.20
Transmission	\$13,254.81	\$35,905.20
Daily Storage	\$23,596.26	\$22,066.20
Total charge	\$64,865.60	\$84,072.60

Examples:



Choices for phasing in the updated WSFC for agricultural customers:
 Phase in 10% maximum increase annually, or
 Phase in 6% maximum increase annually

How does the proposed updated Agricultural WSFC differ from the current fee?

- The current WSFC assumes that there is a house on the farm property and bases the number of fixture units by comparing the farm’s meter size to other houses with the same meter size. This is an outdated method and does not correlate well with a farm’s actual water usage or the impacts of that usage on water system capacity.

- The proposed updated WSFC is based on a more realistic and “apples-to-apples” method, which is to charge by the size of water meter being installed. For agricultural customers, the size of the water meter is a much more realistic indicator of the water use capacity.
- Lastly, the updated WSFC for agricultural customers is only 60% of the full cost, providing the same percentage subsidy as with their regular water rates. Our Board and our Stakeholder Advisory Group consider agriculture to be essential for our island and that some of the costs of connecting to the water system should continue to be financially supported by all BWS customers.
- New agricultural customers will be required to develop a water use plan that helps determine an appropriate meter size for their planned activities. And no, it’s not better to buy the largest water meter possible.
- All BWS agricultural customers, including those making new connections, will be encouraged to conserve water.

Does the BWS offer waivers from the WSFC?

- Yes, waivers are currently offered for up to 500 units of affordable housing developments and homeless shelters per year. Contact the Honolulu Board of Water Supply for more information.

When does the updated WSFC increase (or decrease) take effect?

- If adopted by the BWS Board late in 2021, the updated WSFC fees would go into effect on July 1, 2022. The Board will consider public feedback on the new charges.

For more information on the BWS and the water system, please visit our website at boardofwatersupply.com or contact the BWS Communications Office, at (808) 748-5319.