

CITY COUNCIL STUDY SESSION

Bellevue staff analysis and recommendations regarding Cascade Water Alliance's future water supply options and the establishment of Cascade Water Alliance's Water Supply Development Fund

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Utilities

DIRECTION NEEDED FROM COUNCIL**INFORMATION
ONLY**

Per Council's request, Utilities staff will present its analysis and recommendations on the Cascade Water Alliance's future water supply options and its proposal to establish a Water Supply Development Fund (WSDF).

RECOMMENDATION

Additional Alternatives

- Cascade Water Alliance (Cascade) pursues a long-term water supply contract with Seattle, Tacoma and/or Everett.
- Cascade delays establishing the WSDF until contract negotiations are completed.

BACKGROUND & ANALYSIS

On September 27, 2021, Cascade briefed Council on its future water supply options and proposed establishment of the WSDF as a key part of its funding strategy.

What is the WSDF?

The WSDF is a means to accumulate cash in reserve in advance of potentially developing Lake Tapps for water supply. Cascade's goals are to (1) meet the 20 percent equity (cash) requirement for this project, and (2) moderate potential future rate impacts. Cascade seeks to begin WSDF funding in the fourth quarter of 2021 with a combination of rates, connection fees, reserves and investment earnings.

Cascade anticipates it will accumulate about \$30 million by 2030 in the WSDF. Of this amount, \$13 million is planned to be provided by additional member charges (including \$6.7 million from Bellevue). The remaining \$17 million will come from Cascade connection fees, reserves, and investment earnings. By approximately 2055, Cascade estimates accumulating about \$1.2 billion in reserves (which is 40 to 50 percent of the cash requirement for this project) by the time Lake Tapps is developed. About half of this amount will be paid by Bellevue ratepayers.

At the Council meeting on September 27, 2021, Council requested Bellevue staff return with its analysis on the following questions:

1. Why are Bellevue's water rates high?
2. What are Cascade's future water supply options and associated impacts on Bellevue ratepayers?
 - Why is the Seattle purveyor contract option no longer considered by Cascade?
3. Is there sufficient regional water supply to meet Cascade's needs in the future?
4. Are the effects of climate change considered in Cascade's water supply planning?
5. Going forward, what is going to be the best way to provide water for the future at the best rates?

Bellevue staff analysis and recommendations are as follows:

1. Why are Bellevue's water rates high?

There are two main drivers for Bellevue's water rates:

1. Investments in Bellevue's infrastructure. The City carefully plans for future costs of renewing and replacing the City's water infrastructure.
2. Water supply costs from Cascade. The City of Bellevue has historically chosen to purchase water rather than develop, operate and maintain its own water supply system.

Payments to Cascade, at \$24.3 million, make up 38 percent of the Water Utility budget and the rate payers' water utility bill. Per Council adopted policy, payments to Cascade are recovered from every Bellevue customer.

Cascade's expenditure budget is summarized below in Table 1 below into two main categories: 1) purchase of water from Seattle, and 2) debt service for capital projects, including Lake Tapps, and operating and other capital costs.

Table 1: 2021 Cascade Expenditure Budget

Expense Category	Budget
Seattle water purchase cost	\$21.4M
Cascade-specific costs:	
Debt service	\$ 9.8M
Operating/capital costs	<u>\$18.9M</u>
Subtotal	\$28.7M
Total Cascade budget	\$50.1M

Water supply costs from Seattle make up 43 percent of Cascade's budget.

2. What are Cascade's future water supply options and associated impacts on Bellevue ratepayers?

Cascade evaluated six options for procuring a source of water supply for its members beyond 2040. All options, except for Option 6, assume that Lake Tapps will be developed.

Development of Lake Tapps as a water supply source

To develop Lake Tapps as a water supply system, Cascade has identified the need for a treatment plant that could supply 87.5 million gallons per day, 30 miles of 66-inch transmission pipeline, a 20 million-gallon reservoir in south Bellevue, a pump station and a transmission pipeline through Bellevue.

Some factors associated with developing Lake Tapps as a potable water supply system that are yet to be determined including:

- *Water Quality:* It is uncertain what level of treatment will be necessary to develop Lake Tapps water into high quality drinking water. Lake Tapps has a residential community on its shores and is used for recreational purposes.
- *Infrastructure Needed:* The level of infrastructure needed for the project is not fully defined. Cascade has yet to decide if the plan is to use existing Seattle or Tacoma infrastructure, or whether parallel infrastructure needs to be constructed to deliver water to Bellevue and other Cascade members.
- *Development Timeline:* Based on the various water supply options, the timing of when Lake Tapps needs to be in service ranges from 2042 to 2059 for phase one which will provide 50 percent treatment plant capacity. A future second phase to expand the treatment plant to fully utilize Lake Tapps' water right will be needed. The timing and cost of this is uncertain.
- *Operating Costs:* Cascade has yet to estimate what the ongoing operating costs will be for the new Lake Tapps water supply system for each option.

Table 2 below shows the estimated Lake Tapps development project costs for the six options that Cascade considered. Also shown is the estimated cash to be accumulated in the WSDF and how much would be financed.

The costs do not include the future phase two of the project. The figures below report phase one capital costs and do not include annual operating costs.

Table 2: Cascade proposed future water supply options (\$ billions)

Option	Description	Lake Tapps project cost (current \$)	Lake Tapps project costs (inflated \$)	WSDF accrual	Bond funding
1	<ul style="list-style-type: none"> • No extension/new contract • Develop Lake Tapps Ph 1 by 2042 	\$0.9	\$1.5	\$0.4	\$1.1
Options being pursued by Cascade					
2	<ul style="list-style-type: none"> • 15-year Seattle extension to 2055 • Develop Lake Tapps Ph 1 by 2055 	\$0.9	\$2.4	\$1.2	\$1.2
3	<ul style="list-style-type: none"> • 20-year Tacoma contract to 2059 • Develop Lake Tapps Ph 1 by 2059 	\$0.9	\$2.7	\$1.1	\$1.6
4	<ul style="list-style-type: none"> • 20-year Tacoma contract to 2059 w/ Seattle wheeling • Develop Lake Tapps Ph 1 by 2059 	\$0.9	\$3.0	\$1.2	\$1.8
Options considered but rejected by Cascade Board					
5	<ul style="list-style-type: none"> • 20-year Everett contract to 2059 • Develop Lake Tapps Ph 1 by 2059 	Option not fully evaluated.			

6	<ul style="list-style-type: none"> • Seattle purveyor contract • Lake Tapps not needed 	Option not fully evaluated.
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The following is a summary of assumptions Cascade has incorporated into each of its future water supply options.

- Option 1: Do not extend contract with Seattle - This is not an option Cascade is currently pursuing.
 - Current Seattle and Tacoma contracts will no longer be adequate to meet Cascade's needs beyond 2042.
 - Lake Tapps will be developed by 2042 as Cascade's permanent source of water supply.
 - WSDF will be established in 2021 to fund the development of Lake Tapps.
- Option 2: Negotiate 15-year Seattle extension to 2055
 - Current contract meets Cascade's supply needs through 2042.
 - There is adequate Seattle capacity to meet future Cascade needs through 2055.
 - Lake Tapps will be developed by 2055.
 - WSDF will be established in 2021 to fund the development of Lake Tapps.
- Option 3: Negotiate 20-year Tacoma contract to 2059
 - Identical to Option 2 except the future water supply is from Tacoma.
 - There is adequate Tacoma capacity to meet future Cascade needs through 2059.
 - Transmission line will need to be constructed between Tacoma and Cascade members.
 - Lake Tapps will be developed by 2059.
 - WSDF will be established in 2021 to fund the development of Lake Tapps.
- Option 4: Negotiate 20-year Tacoma contract to 2059 with Seattle wheeling
 - Identical to Option 3 other than using Seattle's pipes to convey water from Tacoma (i.e. wheeling) to Cascade members.
 - Assume Seattle will be agreeable to a wheeling agreement.
 - Lake Tapps will be developed by 2059.
 - WSDF will be established in 2021 to fund the development of Lake Tapps.

The Cascade Board has directed Cascade staff to explore options 2, 3 and 4.

The Board considered and rejected the following options:

- Option 5: Negotiate 20-year Everett contract to 2059
 - Build pipeline between Everett and Seattle's systems (Clearview to Woodinville).
 - Assume Seattle will agree to a wheeling arrangement.
 - Lake Tapps will be developed by 2059.
 - WSDF will be established in 2021 to fund the development of Lake Tapps.

Why was the Everett option rejected?

This option was rejected because the Clearview to Woodinville pipeline would be abandoned after Lake Tapps project is constructed.

- Option 6: Negotiate Seattle purveyor contract
 - Development of Lake Tapps for water supply is no longer needed.
 - Requires permanent supply commitment from Seattle.
 - Seattle will not offer competitive contract.
 - Sale or transfer of Lake Tapps is required.

Why was the Seattle purveyor option rejected?

This option was rejected due to concerns about the uncertainty of negotiating a cost effective, permanent contract with Seattle. It also assumes that transfer of ownership of Lake Tapps will be required.

3. Is there sufficient regional water supply to meet Cascade's needs in the future?

Cascade's analysis indicates an abundance of regional water supply through 2060 and likely beyond. Cascade reports that its contracts with Seattle and Tacoma are projected to provide sufficient supply to meet its members' needs through 2040 even with the effects of climate change.

Cascade's demand has significantly flattened in the last decade and is not currently fully utilizing the supply of water it purchases from Seattle and Tacoma. Cascade purchases 33.3 million gallons per day (MGD) of water from Seattle and 8 MGD from Tacoma. In 2019, Cascade's average daily water demand was 26.7 MGD or 65% of the total purchased amount.

4. Are the effects of climate change considered in Cascade's water supply planning?

Per Cascade, the regional water supply information it shared with Council on September 27 reflects the assumptions made by Seattle, Tacoma and Everett regarding the impacts of climate change on water supply in the region.

Cascade is in the process of updating its Supply Plan for Lake Tapps. The impacts of climate change to the Lake Tapps water supply system will be incorporated in the updated plan.

5. Going forward, what is going to be the best way to provide water for the future at the best rates?

Both Cascade and City of Bellevue seek long-term financial planning to ensure current and future customer needs are met in a cost-effective, equitable, and environmentally responsible manner. The Bellevue City Council has consistently directed Bellevue Utilities to establish reserve funds to help pay for the renewal and replacement (R&R) of its existing utility infrastructure. This ensures each generation of ratepayers pay their share of system costs.

The WSDF is different from Bellevue's R&R program in that the WSDF is not for replacement of existing or aging infrastructure but rather for future development of a new water treatment and supply system.

Bellevue staff analyzed Cascade's proposed water supply options and have the following three observations and recommendations:

1. It is premature to establish the WSDF at this time.
 - a. Cascade reports ample regional water supply for the foreseeable future.
 - b. Given the available regional supply, the contractual right to water under existing contracts, and the variable dates by which Lake Tapps may be developed, it appears there is still time to negotiate agreements with Seattle, Tacoma, and/or Everett which will give a better sense of applicable timelines and anticipated project costs.
 - c. Further exploration of options will help inform the likelihood/timing of any Lake Tapps development, and in the event Lake Tapps were not developed, would avoid setting aside unneeded restricted funds.
 - d. Staff finds no adverse effect if WSDF establishment is delayed two years to facilitate conversations with purveyors.
2. Establishment of a WSDF places an additional cost burden on Bellevue customers.
 - a. Cascade has outstanding debt of approximately \$105 million, which is expected to be paid off by 2038.
 - b. At present, Cascade members pay nearly \$10 million per year toward debt.
 - c. Cascade proposes to implement rate increases to collect an additional \$6.7 million over the next eight years from Bellevue ratepayers to fund the WSDF.
 - d. There will be rate capacity (surplus cash) equal to \$10 million per year in the future after the outstanding debt is paid off in 2038. Instead of lowering rates at that time, this surplus revenue could be earmarked for future potential Lake Tapps development costs.
3. Bellevue would not have control over the WSDF reserves paid by Bellevue customers.
 - a. Cascade is considering proposals that result in a WSDF accrual of approximately \$1.2 billion (by mid-2050's), with about \$600 million paid by Bellevue ratepayers. The accumulation and use of these funds will be determined by the Cascade Board.
 - b. The Cascade Board will determine how the WSDF funds will be used if not applied to the Lake Tapps project.

Bellevue staff recommends consideration of additional alternatives

1. Fully explore Cascade Options 2, 3 and 4 plus another alternative, including long-term (e.g. 30+ years) contracts with Seattle, Tacoma, and/or Everett before considering developing Lake Tapps as a water supply source for Cascade members.
 - There is ample water supply in the region for the foreseeable future, and both Seattle and Tacoma have expressed interest in discussing possible contract options with Cascade.
 - The project needs certainty because Lake Tapps will be a very expensive project to develop, operate and maintain, and there will likely be environmental impacts.

2. While exploring alternatives, delay the establishment of the WSDF until contract negotiations are complete and there is more certainty on the need and timing to develop Lake Tapps.
 - If it is determined that Lake Tapps still needs to be developed, the Council might explore setting up City reserves to pay for its share of the project.

POLICY & FISCAL IMPACTS

Policy Impact

Per City financial policy, payments to Cascade for water supply are passed through to Bellevue's water customers via its utility charges.

Fiscal Impact

Cascade proposed to implement rate increases to collect an additional \$6.7 million over the next eight years from Bellevue ratepayers to fund the WSDF. The Cascade WSDF rate increases would be in addition to rate increases to operate and maintain Bellevue's Water Utility and invest in replacing and renewing Bellevue's water infrastructure.

Cascade is anticipating the following range of rate increases for its members through 2041, including WSDF funding, shown in Table 3.

Table 3: Cascade member rate increases including WSDF funding

Option	2021-2024	2025-2029	2030-2041
1	2.2%	3.0%	4%-8%
2	2.2%	3.0%	3%-4%
3	2.2%	3.0%	3%-7%
4	2.2%	3.0%	3%-5%
5	Not evaluated	Not evaluated	Not evaluated
6	Not evaluated	Not evaluated	Not evaluated

The City of Bellevue pays approximately half of Cascade's total costs. Cascade anticipates it will accumulate about \$1.2 billion in the WSDF before Lake Tapps is developed under the options it is currently pursuing. Bellevue ratepayers would pay about half or approximately \$600 million into the WSDF reserves.

OPTIONS

N/A

ATTACHMENTS & AVAILABLE DOCUMENTS

N/A

AVAILABLE IN COUNCIL LIBRARY

N/A