



WATER SUPPLY CONTRACTS OVERVIEW

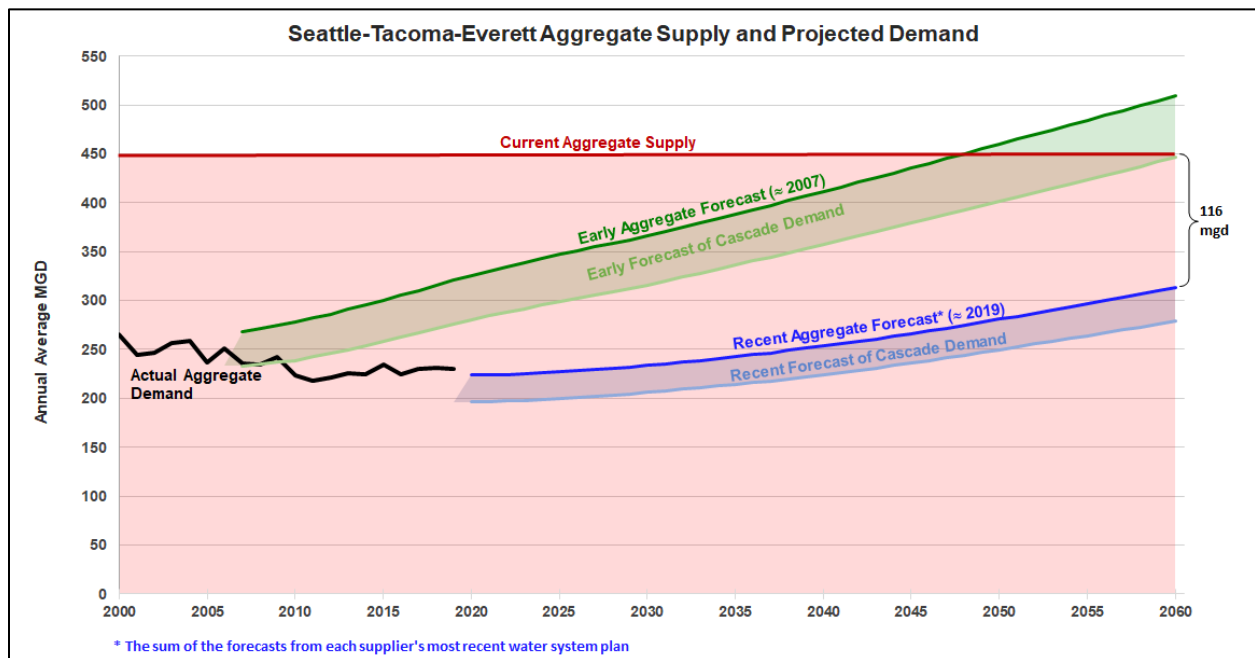
BACKGROUND

Cascade Water Alliance (Cascade) was created in 1999 to control its own destiny and ensure it had a voice and vote on the future of water supply for its members. Cascade will soon decide its long-term water supply – to either continue to contract with Seattle or transition to Tacoma.

Cascade current contract with Seattle Public Utilities (Seattle) for drinking water is a “take-or-pay” declining block agreement for 33.3 million gallons per day (MGD) for average use, and 63 MGD for peak use, through 2039. The take-or-pay aspect means Cascade pays Seattle for 33.3 MGD regardless of the actual amount of water used. Currently, Cascade uses about 28 MGD on average. Starting in 2039, the block of water begins to decline annually until reaching 5.3 MGD in 2064. After 2064, Cascade can continue to purchase 5.3 MGD for its members.

In 2009, Cascade purchased the White River-Lake Tapps Reservoir system as a source of future drinking water supply. Cascade’s **Base Case** scenario assumes the Lake Tapps Reservoir will need to be in service by 2042. The estimated cost to develop the Reservoir is about \$2 billion. Cascade needs 20 years to plan, conduct environmental review, secure permits and property rights, design, and construct the transmission pipes, treatment plant, and other facilities and assets. The map on page 6 shows the Base Case pipeline corridor. The same corridor will be used if Cascade decides to extend its contract with Seattle and later needs to develop the Lake Tapps Reservoir.

Based on Seattle’s, Tacoma’s, and Everett’s current water system plans, water supply in the region should be ample through 2060, as shown in the figure below.



Cascade’s business model calls for the use of available regional water to “bridge” demand until the Lake Tapps Reservoir is developed. Given this, coupled with the 20 years needed to develop Lake Tapps, Cascade’s Board of Directors directed staff to pursue two potential supply contracts with Seattle and Tacoma in July 2021, with the following objectives:

1. 20-year (or longer) extension of contract supply.
2. Extension sufficient to defer development of the Lake Tapps Reservoir.
3. Reasonable and predictable costs.
4. Net economic and/or rate benefit versus developing Lake Tapps Reservoir.
5. Flexibility in contract term and/or quantity to allow for future variation in supply and demand.
6. Possible further extensions if mutually beneficial given supply/demand status.
7. Possible partnership opportunities for assets of regional significance.

TACOMA’S AND SEATTLE’S PROPOSALS – CASCADE STAFF’S PRELIMINARY RECOMMENDATION

After two years of negotiations, Seattle and Tacoma both offered contract terms that would allow Cascade to cost-effectively defer development of the Lake Tapps Reservoir. Cascade staff has thoroughly analyzed both proposals, presented the information to the Board, and received Board feedback. In addition, both Seattle and Tacoma presented their proposals directly to the Board.

Staff’s preliminary recommendation to the Board is to contract with Tacoma for the reasons below.

1. **Longer Supply Certainty.** Tacoma offered Cascade a 20-year guaranteed supply of water, through 2059. Although its water supply is projected to be sufficient beyond 2059, Tacoma has not been able to assure supply post-2059 because of infrastructure constraints. However, Tacoma and Cascade have identified several viable options that could secure supply through 2064 or longer. Cascade’s analysis assumes a 25-year contract with Tacoma.

Seattle offered Cascade a 10-year guaranteed block extension through 2049. They also offered two five-year **conditional** block extensions through 2054 and 2059, respectively, followed by **conditional** 40-year contracts for **individual** Cascade members, not Cascade as an organization, through 2099. For the five-year extensions and 40-year contracts, the conditions are based on conservative supply and demand projections. In addition, for the 40-year contracts, Seattle must secure new supplies through intertie access by 2044. The likelihood of meeting the 40-year contracts’ conditions are highly speculative at best. Regardless of whether a member chooses to sign a 40-year contract, member agencies will still be legally responsible for maintaining the Lake Tapps Reservoir system unless it is sold or otherwise transferred to another entity.

2. **Cost Effectiveness.** Tacoma’s proposal provides more financial benefit than a 10-year, 15-year, or 20-year extension with Seattle in terms of total cost (net present value), unit cost, rate increases, and debt. Seattle’s proposal is more cost-effective than Tacoma’s **only** under the scenario in which individual members sign contracts with Seattle through 2099. As explained above, given Seattle’s conditions, the likelihood of this occurring is highly questionable.
3. **Reduced Construction Risk.** The financial analysis includes the cost to develop the Lake Tapps Reservoir for both the Tacoma proposal and Seattle extension options. Only the 40-year contract option with Seattle assumes the Reservoir will not need to be developed. Contracting with Tacoma allows Cascade to phase development over time by building two-thirds of the transmission pipelines in the 2030s and building the remaining pipelines and the treatment plant two decades later. A 10,

15, or 20-year extension with Seattle requires building the transmission pipelines and treatment plant concurrently within a compressed period of time, greatly increasing construction risk. A phased construction approach with the Tacoma option also enables Cascade to increase rates more moderately.

4. **Regionalism and Resiliency.** As mentioned earlier, projections show that the greater Puget Sound area (King, Pierce, and Snohomish counties) will continue to have an ample supply of water decades into the future. The challenge is that these systems are currently not connected. Cascade and Tacoma have a strong interest in partnering with each other and with other utilities to plan for the region's future today -- before a regional solution is needed. A contract with Tacoma would be a first step toward creating a regional water system in which water can move to where it is needed, similar to the electricity industry. Such a system would increase resiliency for Puget Sound water utilities. If and when the Lake Tapps Reservoir is developed, it could be an important part of the regional system. Maximizing the region's water supply and water rights can also defer the need for individual utilities to find new expensive sources of supply to meet their customers' demand.
5. **Flexibility.** Tacoma's proposal, with its longer term guaranteed supply, ability to phase construction, and opportunity to partner on a regionalized water system, also provides Cascade with more flexibility than Seattle's proposal. The future is uncertain, and Cascade needs to be able to adapt to changing circumstances, such as significant changes in regional supply and demand.

Tacoma has consistently expressed its interest in doing what's best for both parties and for the region. This provides an opportunity to explore other options that neither Tacoma nor Seattle has proposed. For example, under the current plan, if Cascade were to contract with Tacoma, Cascade will need to build the Central and the North transmission pipelines in the early 2030's to connect to Tacoma's system. (In the 2050s, Cascade would build the South pipeline and the water treatment plant to bring the Lake Tapps Reservoir on-line by 2065.) A possible alternative to building the Central and North pipelines is to limit construction to the Central pipeline and wheel water through Seattle's facilities, which would save a significant amount of money. At this time, however, Seattle does not support a wheeling option.

SUMMARY OF SEATTLE’S AND TACOMA’S PROPOSALS

The table below summarizes the key terms in Tacoma’s and Seattle’s proposals, the results of Cascade’s financial analyses, and the implications for capital infrastructure needs.

	Seattle Proposal	Tacoma Proposal
Terms, Capacity, & Payments	<ul style="list-style-type: none"> ▪ 10-year <u>guaranteed</u> block extension <ul style="list-style-type: none"> ○ 2040-2049 ○ 33.3 MGD average and 63 MGD peak through 2049, then declines annually ○ Annual payments increase from 2024 to 2034 plus additional lump sum payments of \$14M (in 2023 dollars) ▪ 5-year <u>conditional</u> block extensions: <ul style="list-style-type: none"> ○ Specific supply and demand conditions must be met ○ 1st extension: 2050-2054; if conditions <u>not</u> met, can extend by paying 25% rate premium ○ 2nd extension: 2055-2059 ○ 33.3 MGD average and 63 MGD peak ▪ 40-year <u>conditional</u> contracts: <ul style="list-style-type: none"> ○ Only offered to individual Cascade members, not Cascade as an organization ○ 2060-2099 ○ Conditions: both 5-year extensions occur, supply and demand conditions met, Seattle secures an intertie for more supply ○ Members pay a 25% rate premium ○ No limit on water use 	<ul style="list-style-type: none"> ▪ 20-year guaranteed contract (2040-2059) ▪ 5-year extension of full capacity not guaranteed but highly likely since several viable options are available ▪ 20 MGD average and 30 MGD peak through 2064. ▪ 10 MGD average and 15 MGD peak from 2065-2084 ▪ Rates roughly 20% below Seattle; payments based on water used
Financials	<ul style="list-style-type: none"> ▪ 10-year guaranteed extension plus two five-year conditional extensions (20 years total): <ul style="list-style-type: none"> ○ \$132M savings versus developing Lake Tapps by 2042 ○ Major rate spike in 2050s during Lake Tapps construction ▪ 40-year conditional contracts: <ul style="list-style-type: none"> ○ \$907M savings versus developing Lake Tapps by 2042 ○ No major rate spikes but steady upward trend 	<ul style="list-style-type: none"> ▪ 20-year guaranteed contract plus likely 5-year extension: <ul style="list-style-type: none"> ▪ \$299M savings versus developing Lake Tapps by 2042. ▪ Moderate rate increases spread out over more time
Capital Needs Prior to Lake Tapps	None	Central and North transmission pipelines in service by 2040, later used for Lake Tapps delivery
Capital Needs for Lake Tapps Supply	<ul style="list-style-type: none"> ▪ 10-year extension: Treatment plant, transmission pipelines in service by 2050 ▪ 10-year plus two 5-year extensions: Treatment plant, transmission pipelines in service by 2060 ▪ 40-year contracts: None 	Treatment plant and South transmission pipeline in service by 2065

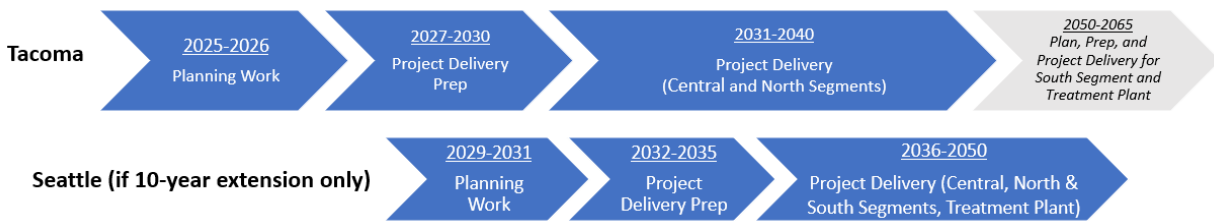
TIMELINES

Below are high-level timelines for the Cascade Board’s decision-making process and the Lake Tapps Reservoir development for both the Tacoma and Seattle options.

Cascade Board Decision Draft Timeline

	March	April	May	June	July	August	Sept	Oct	Nov
Board direction to CEO to negotiate									
Negotiate contract details									
Board authorization to finalize contract									

Post-Board Decision Draft Milestones



CONCLUSION

As noted earlier, Cascade was created in 1999 to control its own destiny and ensure it had a voice and vote on the future of water supply for its members. The fact that Cascade today has the ability to choose a new contract with Tacoma or extend its contract with Seattle is specifically why Cascade was formed. Either option is preferred and more cost-effective than the Base Case of developing the Lake Tapps Reservoir by 2042. Cascade staff recommend contracting with Tacoma because it provides longer term supply certainty at a lower cost, lower construction risks, more flexibility, and an opportunity to partner with Tacoma to regionalize the water system for improved resiliency.

POTENTIAL SUPPLY SYSTEM

