

CLACKAMAS RIVER WATER
BOARD OF COMMISSIONERS
WORK SESSION

October 27, 2025 at 6:00pm

THIS MEETING WILL HAVE REMOTE ACCESS VIA ZOOM*

AGENDA

16770 SE 82nd Drive, Clackamas, OR 97015



Clackamas River Water

Anyone who wishes to attend the meeting remotely may do so by internet at <https://us02web.zoom.us/j/87240159064> or by calling the following number [12532158782](tel:12532158782) and join meeting 872 4015 9064#. Passcode: 885754

Work Session @ 6:00pm

Call to Order, Roll Call

1. **North Clackamas County Water Commission (NCCWC) Planning Document-** *Todd Heidgerken, General Manager & Steve Houck, Water Resources Manager*
2. **CRW Water Treatment Plant Improvements Planning-** *Todd Heidgerken, General Manager*
3. **Commissioner Communications-** *CRW Board of Commissioners*
4. **General Manager Update-** *Todd Heidgerken, General Manager*

Public Comment

Adjourn Work Session

Work Session Reminders:

- a. Work Session – audio only
- b. No decisions will be made by the CRW Board
- c. Staff may get direction or a sense of the board on key issues
- d. Members of the public are allowed to attend but not participate (*public comment provided at the end of the session*)

Public Comment: If there is a member of the public that wishes to address the Board are encouraged to submit a request through email to kholzgang@crwater.com no later than 4pm the day of the meeting.

Members of the public are welcome to speak for a maximum of three minutes, citizens must state their name, address, if they are a customer or not for the record.

The meeting location is accessible to persons with disabilities. A request for accommodations for persons with disabilities should be made at least 48 hours before the meeting to Adora Campbell (503) 722-9226.

CLACKAMAS RIVER WATER

BOARD WORK SESSION

October 27, 2025

SUBJECT	CRW and North Clackamas County Water Commission (NCCWC) Planning Document
PRINCIPAL STAFF PERSON	Todd Heidgerken, General Manager & Steve Houck, Water Resources Manager
DOCUMENTS ATTACHED	None

Agenda Summary

BACKGROUND In 2022, Clackamas River Water (CRW) and the North Clackamas County Water Commission (NCCWC) entered into a long-term Water Supply Agreement. The agreement creates a framework for CRW to provide up to 10 million gallons per day (MGD) of treated water to NCCWC, based on available capacity and system constraints. Recognizing that current system demands and infrastructure do not yet require that full amount, both agencies agreed to collaborate on a Planning Document to guide future delivery expectations, capital improvements, and operational coordination.

The Planning Document provides for a five-year forecast for demand and a ten-year forecast for capital improvements, identifying delivery points, seasonal peaks, and infrastructure needs. Importantly, it does not obligate either party to purchase or deliver fixed volumes of water but instead provides a shared planning approach for aligning supply capacity with anticipated demands. Operationally, the plan seeks to balance NCCWC’s higher summer demands with CRW’s interest in maintaining consistent plant operations, staffing, and transmission capabilities.

To achieve this balance, the planning framework introduces operational parameters such as a “daily minimum”, “annual average”, and “peaking factors”, ensuring flexibility while maintaining baseline stability. These parameters help CRW manage production within system limitations (such as the current 4 MGD transmission restriction to the 152nd Reservoir) and position both agencies to respond strategically to changing demands and seasonal variability. Once finalized, the Planning Document will be approved by both General Managers, providing a roadmap for coordinated investment and future water supply planning.

CRW staff will provide an update and overview of the approach to the planning document.

CLACKAMAS RIVER WATER

BOARD WORK SESSION

October 27, 2025

SUBJECT	CRW Water Treatment Plant Improvements Planning
PRINCIPAL STAFF PERSON	Todd Heidgerken, General Manager; Jason Brandstetter, Chief Engineer; and Steve Houck, Water Resources Manager.
DOCUMENTS ATTACHED	None

Agenda Summary

BACKGROUND CRW’s Water Treatment Plant (WTP) has served as a valuable and reliable water supply since its original construction in 1964. It has undergone expansions in 1972 and 1992, increasing its design capacity to 30 MGD. In 2021, CRW completed a WTP Facilities Plan to evaluate the plant’s condition, capacity, and long-term needs. The study identified four key drivers for consideration:

- water quality
- capacity
- aging infrastructure
- resilience

The WTP facility plan ultimately led to the selection of “Alternative 2b”, an incremental, phased approach to modernizing and expanding treatment capabilities. This alternative retains core infrastructure while upgrading systems to improve reliability and enable eventual operation at the full 30 MGD design level.

Initial cost estimates for the project were approximately \$40 million in 2021, but current projections suggest a cost closer to \$55 million. Since developing the WTP facilities plan, CRW has undertaken several near-term projects to address urgent maintenance and optimization needs, including pump and instrumentation replacements, polymer system improvements, and SCADA modernization. These projects lay the groundwork for the larger expansion effort to follow.

The 2025–2027 Budget includes funding for the Water Treatment Plant Expansion Planning, with an RFQ/P process underway to select an engineering consultant by early 2026. The initial phase of the project will be to produce a 30 % design for planning and budget refinement, followed by a potential 50 % design depending on available funds.

Importantly, the 30 MGD planning horizon also incorporates the 10 MGD supply consideration to NCCWC under the 2022 Agreement, reinforcing regional coordination. As CRW advances this work, future discussions with the Board will focus on long-term funding strategies, including rate-based financing and potential partnerships to ensure the plant's improvements aligns with both CRW needs and partnering opportunities.

CLACKAMAS RIVER WATER

BOARD WORK SESSION

October 27, 2025

SUBJECT Commissioner Communications

PRINCIPAL STAFF PERSON CRW Board of Commissioners

DOCUMENTS ATTACHED

Agenda Summary

BACKGROUND Time is being set aside during the work session to provide an opportunity for Commissioners to:

- Identify topics for consideration at future works sessions or board meetings;
- Discuss future agenda items.

CLACKAMAS RIVER WATER

BOARD WORK SESSION

October 27, 2025

SUBJECT General Manager Update

PRINCIPAL STAFF PERSON Todd Heidgerken, General Manager

DOCUMENTS ATTACHED None

Agenda Summary

BACKGROUND Time has been set aside to briefly update and inform the Board on topics since the October Board Meeting.

Clackamas River Water

Water Treatment Plant Improvements Planning



Clackamas River Water

Background

Water Treatment Plant

- Originally constructed in 1964 (10 MGD) and expanded in 1972 and 1992
- “Design” capacity is 30 MGD
 - used to certificate water rights at 30 MGD
 - actual capacity is less
- Direct Filtration Treatment
 - little sedimentation takes place prior to the filters
- 2021 Water Treatment Plant Facilities Plan Completed



WTP Facilities Plan Drivers

- Water Quality
- Resilience (Hazards)
- Aging Infrastructure
- Capacity



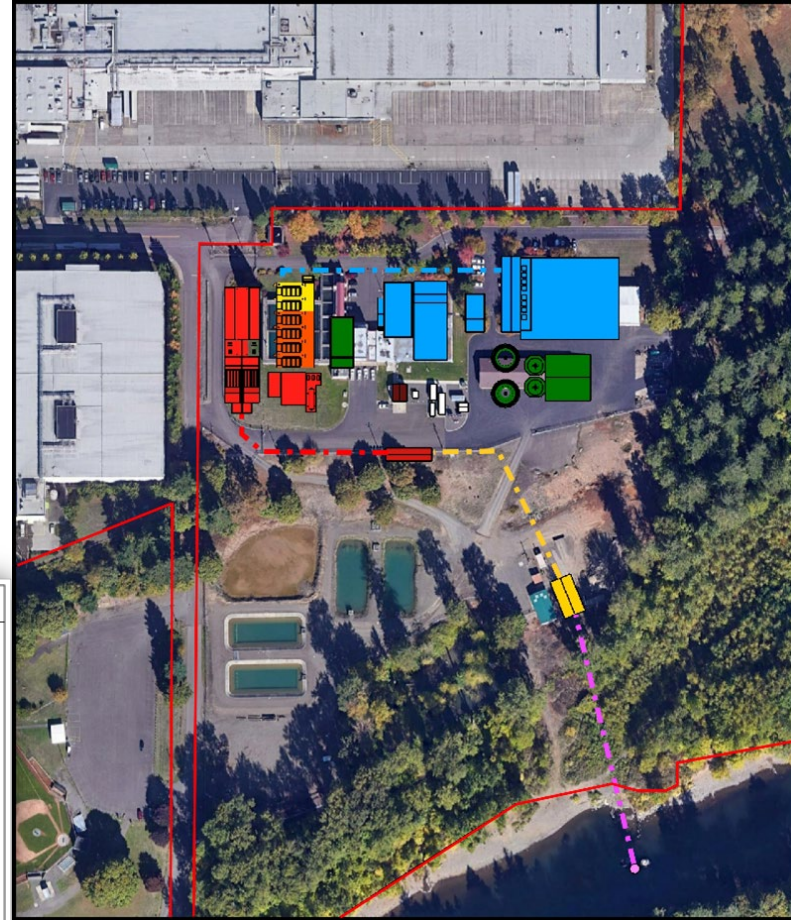
Selected Alternative 2b

Incremental replacement

Enhanced treatment

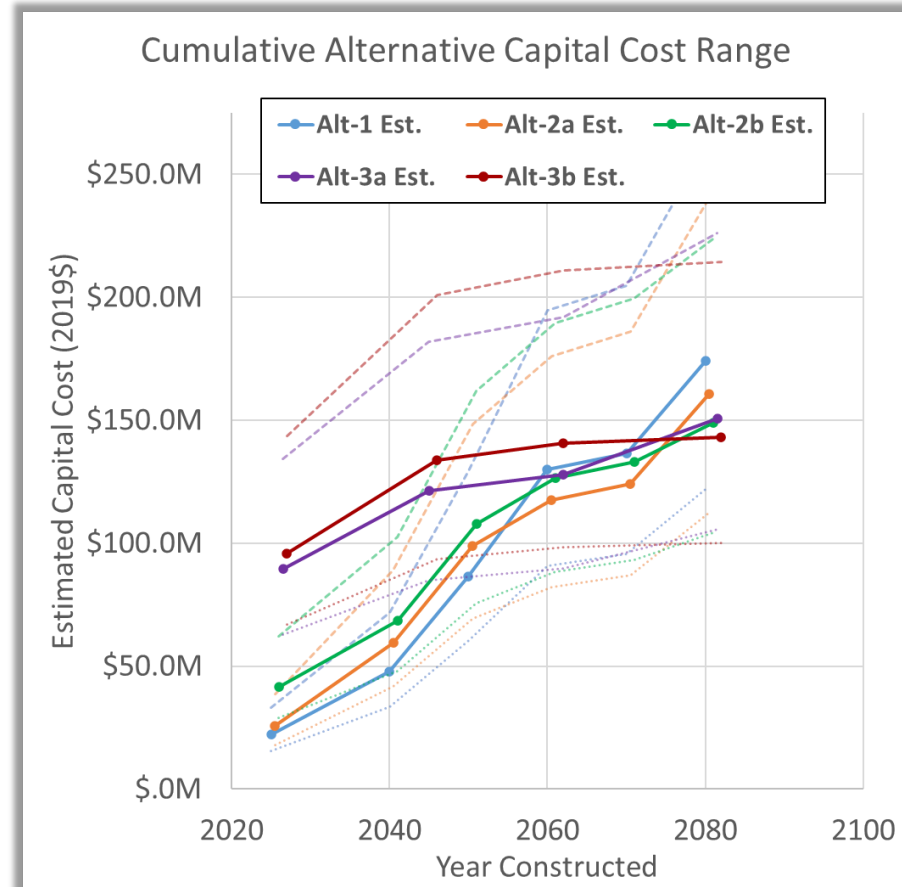
Uses existing infrastructure

KEY	
Red	PHASE 1
Yellow	PHASE 2
Blue	PHASE 3
Orange	PHASE 4
Pink	PHASE 5
Green	PHASE X



Cost Evolution

- Facilities Plan Est for Phase 1 was \$40M (in 2019 dollars)
- Most recent rate study, we planned for \$55M (in 2025 dollars)
- Additional work on long-term funding plans (rates, loans, etc.)



Ongoing Projects

Since the 2021 WTP Facilities Plan Refinement of needs has included:

- Repairs and Replacements
 - Pump replacements
 - Instrumentation
 - Polymer System
- System optimization or improvements
 - SCADA (Supervisory control & data acquisition)
 - Instrumentation



Planning for Long-Term Expansion

- Request for Qualifications/Proposals (RFQ/P) to identify an engineering consultant
- WTP Improvement engineering consultant selection anticipated early 2026
- Initial milestone is 30% design in time for budgeting purposes.
- Additional milestone is 50% design (dependent on funding resources)

Funding and Partnerships

Open Discussion

- Funding Strategy
 - Rates
 - Capacity
 - Phasing
- Partnership Opportunity
 - Incorporate in wholesale rates
 - Ownership Opportunity



Status and Next Steps

Current Status:

- The RFQ/P process is underway (Due November 13)

Next Steps:

- Presentation to the Sunrise Water Authority (SWA) Board (November 20)
- Board award of consultant contract for design (January)
- Continue discussion with the Board on partnership approach
- Water Rates Planning – Early Spring 2026

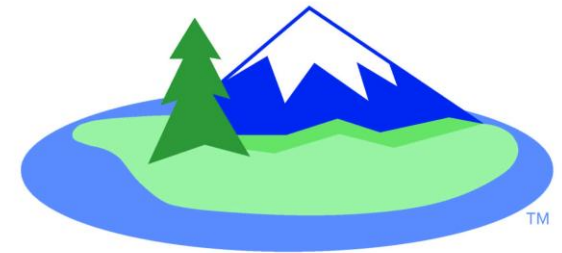
TIME FOR QUESTIONS



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CRW and NCCWC (North Clackamas County Water Commission)

Coordinated Supply Planning



Clackamas River Water

Background

- NCCWC/CRW Water Supply Agreement created in 2022
- Goal: Eventually make available up to 10 MGD to the NCCWC
- Collaborative approach between CRW and NCCWC through creation of a “Planning Document”

WATER SUPPLY AGREEMENT

This agreement is entered into this 1st day of July, 2022, between the Clackamas River Water District (hereinafter “CRW”), an ORS Chapter 264 Domestic Water Supply District, and the North Clackamas County Water Commission, (hereinafter “NCCWC”), a municipal organization formed under ORS 190 Intergovernmental Agreement, or collectively hereinafter referred to as the “Parties.”

WHEREAS, the NCCWC currently purchases wholesale drinking water from CRW under an existing agreement dated March 8, 2001; and

WHEREAS, the existing water supply agreement is set to terminate June 30, 2022; and

WHEREAS, the NCCWC desires to renew a long-term supply agreement with CRW wherein allowing for greater flexibility and adaptability in meeting present and future demands, as well as emergency supply; and

WHEREAS, the NCCWC intends to expand its future purchases of wholesale water from CRW based on availability and the strategic interests of both Parties.

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

1. Contract Period
 - A. This Agreement shall remain in effect until December 1, 2042, commencing with the execution of this Agreement, unless so approved otherwise by mutual written consent of the Parties.
 - B. The NCCWC agrees to notify CRW in writing of its desire to extend the term of this Agreement, but not later than two (2) years prior to the termination of this Agreement.
2. Available Capacity
 - A. CRW intends to provide up to 10 million gallons per day (mgd) of available treated water capacity to the NCCWC. In no event shall CRW be required to deliver water beyond that which is technically feasible through existing infrastructure, or which otherwise would create hardship to CRW.
 - B. The Parties shall mutually determine desired points of delivery and related transmission (flow rate) capacities for both regular and emergency service. The Parties may amend these points of delivery and capacities through mutual agreement among the Parties’ General Managers or through the approved Planning Document, set forth under Section 3.B below.
 - C. In no event shall either Party be required to construct added pumping or transmission capacity to meet (or create) said desired points of delivery or flow rate capacities, unless so mutually approved in writing by both Parties. Any future construction of jointly owned assets shall be arranged under separate agreement among the Parties.

Purpose of the Planning Document

Work Together to Forecast:

- 5-year water demand forecast

Note: Demands are for planning and do not create an obligation for purchase or delivery of wholesale water by either party.

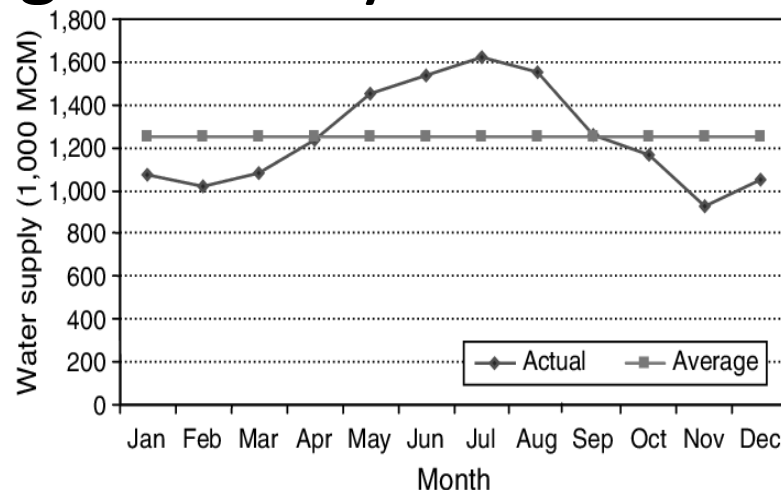
- 10-year capital improvements forecast

Key Components Include:

- Delivery Points
- Peak Flow Capacities at Delivery Points
- Seasonal Demands
- Capital Improvement Schedule

Operational Challenges

- General seasonal variation in water demand
- NCCWC – needs more in the Summer “Peak” period and less in the “Winter” low period
- CRW – values steady operations
- Balancing flexibility and efficiency



System Constraints

- Limited production and delivery
 - Hours of operation
 - WTP Improvements needed to achieve capacity
- Transmission restrictions
 - Current 4 MGD limitation to 152nd Reservoir



Managing Supply and Demand

Identify Operational Factors to Manage By:

- Daily Minimum
- Annual Average
- Peaking Factor
 - Peak to Annual Average
 - Peak to Daily Minimum



Managing Supply and Demand

This Approach Accomplishes the following:

- Complies with the minimum purchase language in the agreement
- Allows for some flexibility in how much water is taken during what periods of time
- Creates a “baseline” or minimum amount that is always taken.
- Creates limits on the Maximum Peaking Amount
- Provides some operational consistency
- Allows for numbers to be adjusted based on future needs.

Example Scenarios

- **Current Demand Scenario:**
 - NCCWC Annual Average Purchase = 2.5 MGD
 - Establish a Daily Minimum (Planning Document) of 2.0 MGD
 - Establish Peaking Factors (Planning Document):
 - Peak is equal or less than 2.0 times the Annual Average.
 - Creates a Peak limit of 5.0 MGD (2.5 MGD x 2.0 Peaking Factor = 5.0 MGD)
 - Peak is equal or less than 2.5 times the Daily Minimum.
 - Creates a minimum daily purchase amount of 2.0 MGD (5.0 Peak MGD divided by 2.5 Peaking Factor = 2.0 MGD)

Example Scenarios

- **Maximum Demand* Scenario:**
 - Annual Average Purchase = 5.0 MGD
 - Establish a Daily Minimum (Planning Document) of 4.0 MGD
 - Establish Peaking Factors (Planning Document):
 - Peak is equal or less than 2.0 times the Annual Average.
 - Creates a Peak limit of 10.0 MGD (5.0 MGD x 2.0 Peaking Factor = 10.0 MGD)
 - Peak is equal or less than 2.5 times the Daily Minimum.
 - Creates a minimum daily purchase amount of 4.0 MGD (10.0 Peak MGD divided by 2.5 Peaking Factor = 4.0 MGD)

* Assumes full 10 MGD is only needed during peak times

Next Steps

- Staff from both CRW and NCCWC/SWA are working on capturing this information in a “Planning Document”



- Once completed, approval of the planning document has been delegated to the General Managers (before the end of the year)

TIME FOR QUESTIONS



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