CLACKAMAS RIVER WATER BOARD OF COMMISSIONERS
REGULAR BOARD MEETING
April 9, 2026

COMMISSIONERS PRESENT:
Sherry French President
Tessah Danel, Treasurer
Rob Cummings

STAFF PRESENT:
Todd Heidgerken, General Manager

CRW Employees: IT Manager, Kham Keobounnam; Admin & Records Coordinator, Brandi Litteral Financial Officer, Christina Irish; Chief Engineer, Jason Branstetter; Engineering Manager, Joseph Eskew; Risk Manager, Ray Watkins

COMMISSIONERS ABSENT: Naomi Angier, Rusty Garrison

VISITORS: Michael G. via Zoom

Call Regular Meeting to Order

Commissioner French called the meeting to order at 6:00pm. Roll was taken and the pledge of allegiance was recited.

MOTION: Commissioner Danel moved to approve the agenda as Presented. Commissioner Cummings seconded the motion.

MOTION CARRIED 3-0

Ayes: Cummings, Danel, French
Nays: None
Abstentions: None

Public Comment- none

Consent Agenda

CA-1: Gross Payroll and Account Paid for March 2026
CA-2: Cash & Investment Ending Balances Report

MOTION: Commissioner Danel moved to approve the consent agenda as presented. Commissioner Cummings seconded the motion**.**

MOTION CARRIED 3-0

Ayes: Cummings, Danel, French
Nays:
Abstentions: **None**

Agenda Item 1.0 Consider Approval of Professional Services Agreement Amendment: 82nd Drive Waterline, Phase 2, Consultant Services During Construction- Added Funding for Services, Project 23-5303

- Mr. Eskew asked the Board for the current consultant to stay on the job and to add to the fees that have been allocated to extend services to what is projected to be the end of the project.
- At the start of the project, assumptions were made about how much time the consultant would be on the job site.
- The project is taking more time than anticipated and the money set aside for the contractor is now running out.
- Some money needs to be retained for post-construction work such as as-builts
- There is no contractor scheduled for paving yet.
- Commissioner Danel asked for clarification on the need for an inspector outside of CRW staff.
- Mr. Eskew explained that there is one inspector on staff and there is another active project, Monroe, similar to this project. For the inspector to go back and forth between projects doesn't seem practical.
- CRW staff values the continuity of the hired consultant.
- Commissioner Danel asked if the cost is due to limited availability or if that is a small part of it.
- Mr. Eskew explained that typically, CRW would do its own inspections, but the complexity of the project and unfamiliarity with underground work on the freeway encouraged the decision to hire a consultant to inspect. As the project design progressed, other projects came up limiting the staff inspector's availability.
- Jannsen and Manfield took longer than expected partially due to obstructions and groundwater. The Manfield project number budget was never filled to keep separate records for grants. When the maximum grant amount for underground bores was reached, CRW chose to fill the 82nd St. project with a single amendment.
- The contract expires in May.
- Commissioner Danel asked if it would make sense to hire another inspector. No, this is a one-off.

MOTION: Commissioner Danel moves to award a Professional Services Agreement Amendment for additional construction services connected with the I-205 Crossings/82nd Drive Waterline, Phase 2 Project to Consor North America, Inc. for $89,920.00 and authorize the General Manager's signature on the completed Contract. Commissioner Cummings seconded the motion

MOTION CARRIED 3-0

Ayes: Cummings, Danel, French
Nays:
Abstentions: None

Agenda Item 2.0 Potential Parking Fee and Enforcement Program

- Mr. Heidgerken explained that that Riverside Park has associated costs, and this program is meant to offset those costs and be consistent with what else is happening with other parks in the area.
- Mr. Watkins explained that Riverside Park is experiencing increased use and issues with unauthorized vehicles and security measures.
- The conditions impact park maintenance and safety.
- Riverside is the only local park without a parking fee
- Mr. Watkins shared the average fees from parks in the area
- Parking fees pay for the parking services
- Parking services are app-based, license plate photo based, or entered manually.
- There is a possible upfront cost up to $5,000
- Clackamas County prefers the app-based style of parking services.
- Infrastructure and maintenance cost come with manual kiosks. $6,000-$10,000 estimate for manual kiosk.
- Fees for baseball visitors would be free. This can be set up by CRW Administrator.
- Program would improve management, provide revenue, and support maintenance and security.
- Commissioner French asked if in other comparable areas $9 is for everyone whether using the park or launching a boat.
- Mr. Watkins explained that there are different variations in the fees. CRW can set the fees through an annual pass or day use parking fees.
- Commissioner French asked if the County pass structure means copying what the County does now. Mr. Watkins confirmed that is correct.
- Commissioner Danel asked who enforces collection.
- Mr. Watkins explained that CRW would enforce internally through the system. CRW could also partner with the Sherrif's office. CRW's security contractor or CRW authorized personnel could also enforce. All tickets would be generated through the app-based system.
- Commissioner Danel shared concerns around the inclusivity of requiring users to pay via app. There are access issues with that. Not everyone has bank accounts with a card or a phone.
- Mr. Watkins shared that sometimes app and kiosk providers are totally different companies.
- Commissioner French asked how much use the park gets outside of baseball season. A lot during the summer and fishing season.
- Commissioner Cummings mentioned that Mesner Park has several payment options that are not electronic
- Mr. Watkins clarified that the fee is for parking only, not the park in general. People could still walk in and not pay a fee.
- Commissioner French mentioned Option B sounds intriguing to regular use fishermen.
- Commissioner Danel asked if the annual pass includes a passenger vehicle and watercraft. The Board can make the distinction.

- Mr. Heidgerken shared that Commissioner Garrison wanted to make sure that there is a mechanism to not charge Little League participants as they already invest in the park.
- Mr. Heidgerken explained that there are flexible options available to adjust fees.
- Commissioner Danel thinks ratepayers would be supportive. She likes the idea of introductory pricing and supports being totally transparent with fees for inclusiveness and affordability.

Agenda Item 3.0 Management Report

- The monthly report will be emailed to commissioners and posted on the website next week.
- Mr. Heidgerken pointed out the NCCWC Planning Document and explained that it is not binding but looks at needs in the future. Todd and Wade have signed the Planning document.
- Commissioner French asked if the document is like CRW's agreement with Sunrise where they will help with CRW's treatment plant. No. CRW sells water to NCCWC. The CRW-NCCWC agreement includes a provision that requires a planning document to evaluate demands. The agreement says CRW can provide about 10million gallons a day, but CRW cannot currently meet those needs. The planning document addresses those types of issues.
- The other discussion about CRW and NCCWC and the possible creation of 190 Organization to assist with WTP is a totally separate conversation.
- Commissioner Garrison provided an NCCWC write up.
- CRW is using the bill insert as public notice for rate hearing on May 12th and to introduce Farshad as the next GM and alert ratepayers of annual backflow testing.
- CRWP has approved FY26-27 budget. There is a slight dues increase about 2.3%. There is an increase in the budget under personal services due to Kim Swan's retirement transition.
- Agenda setting meeting is April 30th at 9am. No April work session
- May Board meeting is on Tuesday, May 12th
- CRW just posted summer help positions. One position is posted for distribution. CRW will work to get an intern at WTP.
- Commissioner Danel shared that CCC's new building will be on Beavercreek. Oregon State University extension will be part of that building and will include a water-related program. Building will be completed in 2029.

No public comment- None

Agenda Item 5.0 Commissioner Reports and Reimbursements

- Commissioner French shared that Sunrise increased SDCs 30.6%. Sunrise updated their income assistance program from $42,750 to $63,375 and increased the number of users. Kaiser is working with Sunrise on their West campus to provide water. Sunrise has an opening for SCADA tech and engineer.
- Sandy's new plant $4.2million original estimate is now $11.5million

- C4 workforce development works with CCC and the Clackamas workforce office. They had a lot of discussion regarding AI programs. They are having issues with how to incorporate AI into training and education.
- There is a problem with funding the interstate bridge due to new federal budgets cuts.
- Commissioner French threw out the first pitch at Little League last Saturday

Open meeting is adjourned at 6:47pm

NCCWC Meeting Report: Thursday, Mar 26, 2026 (hybrid-lbg online)

Budget Committee meeting: Convened meeting at 5:30 PM, adopted FY 2026-27 budget. No details, proposed budget was not in the packet.

Capital projects: Carollo Engineers, contractor. A lot of projects, they will have to prioritize. Many improvements include heavy mechanical, chemical addition changes, slow sand, Membranes (hoping to NOT have to replace the membranes but get another year out of the existing ones).

Regular meeting: Convened meeting following Budget Committee meeting.

Board discussion: None; received financial reports.

Received Jan & Feb 2026 water production and cost summary report.

Received Manager Report, Wade Hathhorn, GM

The snowpack: it's the least (or close to it) snowpack reported on Mt. Hood. (*Note: The headwaters of the Clackamas River are on the west slopes of Olallie Butte, at about 5,000 ft, 50 miles south of Mt. Hood lbg*) Anticipating an early "retreat" of river flows.

A draft preliminary design report has been prepared by Carollo Engineers, and contracting is being finalized with Slayden Constructors. Next steps are to develop work packages with the contractor, and then actual construction.

Received Operations Report, (Brent Carrar, DRC) Wade Hathhorn, GM

Reported Monthly Water production for Jan & Feb. Finished Water (FW) pumps #1 & #4 recently rebuilt; replaced variable frequency drive for FW Pump #4.

Staff completed system integration of the new Hach WIMS (Rio) software and data collection system (water information management software).

Pinning (removal of) fouling at membrane pore openings is being completed and is expected to improve treatment performance by improved porosity of the membranes.

Collecting bids on security system upgrades including new camera and gate access.

Regarding production and delivery, noted that SWA is expanding use of water and also trying to spread use throughout the non-peak months as operations approach plant capacity each summer, and to take more water from CRW to improve its balance of demand. Gladstone also has usage going up, but peak use is going down.

Adjourned.

R/s,

Rusty Garrison CRW Commissioner

NCCWC / CRW Planning Document

April 9, 2026

Executive Summary

This Planning Document sets forth a coordinated, long-range water supply planning framework for the North Clackamas County Water Commission (NCCWC) and Clackamas River Water (CRW). It is intended to support informed policy direction, capital planning, and operational coordination by the governing boards of each agency.

Key objectives of this Planning Document include:

- Establishing shared planning assumptions for long-term water supply reliability
- Aligning demand forecasts with treatment and transmission capacity
- Identifying infrastructure investments needed to support projected growth.
- Providing a consistent reference document for board-level decision-making

While this document identifies anticipated demands, delivery capacities, and capital needs, it does not create binding obligations to purchase or deliver water. Rather, it serves as a planning and policy guidance document that may be updated as conditions change.

Section 1 – Purpose

The purpose of this Planning Document is to provide a clear and consistent framework for long-term water supply planning between NCCWC and CRW. It is intended to inform governing board deliberations, support capital investment decisions, and promote coordinated operational planning in a manner that protects system reliability, public health, and financial sustainability.

This document incorporates updated demand forecasts, treatment and transmission capacity information, and the policy framework established by the 2022 NCCWC–CRW Water Supply Agreement. It is organized around a five-year demand planning horizon and a ten-year capital improvement outlook, recognizing that longer-term conditions will continue to evolve.

The Planning Document identifies anticipated points of delivery, associated capacity considerations, projected average and peak demands, peak seasonal conditions, and major capital improvement needs. The forecasts and assumptions presented are intended for planning purposes only and do not constitute contractual purchase or delivery commitments by either party.

Once adopted, this Planning Document should be reviewed periodically and updated as necessary to reflect changing conditions, new information, and governing board direction.

Section 2 – Service Area and System Description

This section describes the service areas and major system components of Clackamas River Water (CRW) and North Clackamas County Water Commission (NCCWC)/Sunrise Water Authority (SWA), drawing from current system conditions reflected in this Planning Document. Although the agreement is between CRW and NCCWC, this document recognized that SWA will be the primary recipient of the water from CRW. The information is intended to provide context for demand forecasts, operational coordination, and capital planning discussed in later sections.

Clackamas River Water

Clackamas River Water provides potable water service to approximately 13,000 service connections across an area of approximately 41.6 square miles in Clackamas County. The customer base includes residential, commercial, industrial, institutional, and wholesale users. CRW's system is supplied primarily by surface water from the Clackamas River and is supported by treatment, storage, pumping, and transmission infrastructure.

CRW owns and operates the Clackamas River Water Treatment Plant, which serves as the primary source of potable water for the system.

Key Water Treatment Plant characteristics include:

- Original construction in 1964 with major expansions in 1972 and 1991
- Nominal design capacity of 30 MGD
- Certificated water rights to support 30 MGD.
- Current firm production capacity of approximately 22 MGD

Planned improvements are intended to restore sustained production to the full 30-MGD design capacity while improving water quality performance and operational resilience.

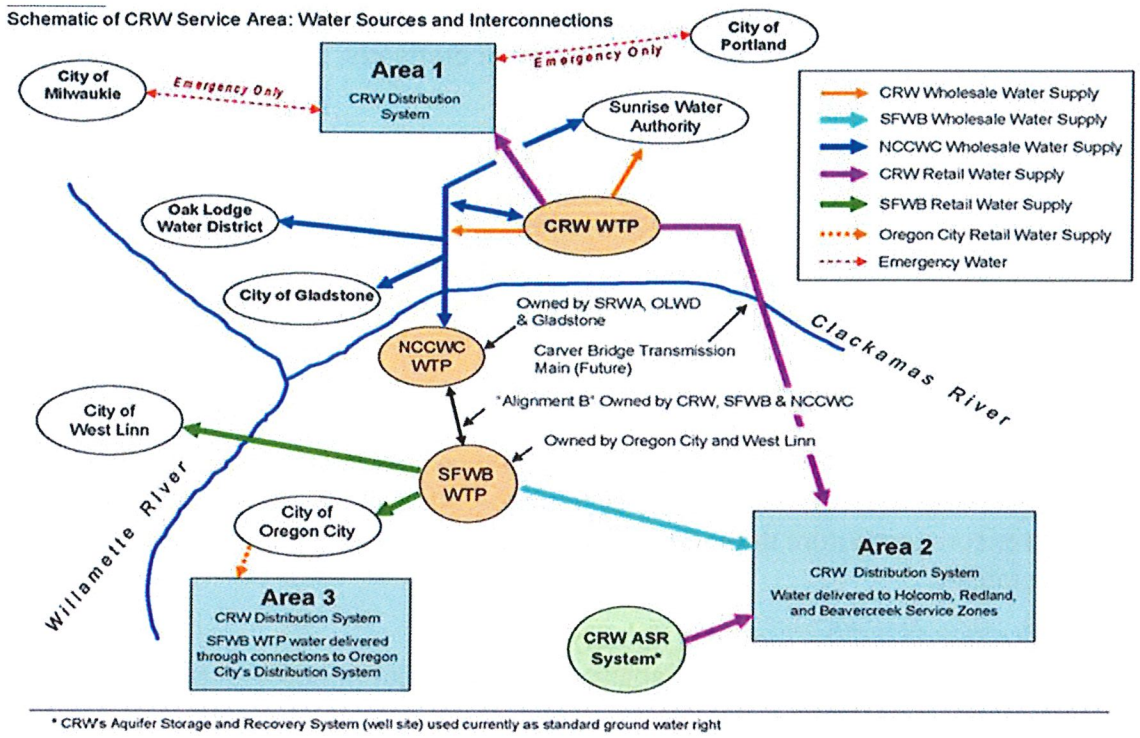
CRW's service territory is divided into three primary delivery areas (see Figure 4-1 below). Area 1 is the most densely developed portion of the system and encompasses approximately 11 square miles north of the Clackamas River near the I-205/Milwaukie Expressway interchange. This area serves an estimated population of approximately 30,000 and includes major commercial and industrial customers along Highway 212, the Clackamas Promenade, and the Clackamas Town Center Mall.

Areas 2 and 3 are located south of the Clackamas River and are generally more rural and less densely populated. Portions of these areas lie within Oregon City's urban growth boundary. Area 2 covers approximately 27.6 square miles, while Area 3 encompasses roughly 3 square miles. Together, Areas 2 and 3 serve an estimated population of approximately 15,450. Historically, these areas have relied on wholesale supply from the South Fork Water Board; however, planned system improvements will allow them to be served directly by CRW's treatment plant.

CRW's distribution system includes approximately 257 miles of pipeline, 14 reservoirs, and 11 pump stations. Major system improvements, including the Backbone Project, are intended to enhance hydraulic connectivity between service areas, improve fire flow

capability, strengthen system resiliency, and provide greater operational flexibility during peak demand and emergency conditions.

Figure 4-1. Clackamas River Water Treatment Plant Location and Service Areas



In addition to surface water supplies, CRW operates an aquifer storage and recovery (ASR) well with a production capacity of approximately 1.2 MGD. While available as a supplemental source, use of this well is limited due to aesthetic water quality considerations.

Sunrise Water Authority

Sunrise Water Authority serves approximately 17,500 service connections across a service area of roughly 22 square miles. The system primarily serves residential, light commercial, and multifamily customers and has experienced sustained growth in recent years, particularly within the City of Happy Valley and surrounding unincorporated areas of Clackamas County.

SWA's service territory is generally organized into two primary areas. The first is centered in and around the City of Happy Valley, while the second extends east and south across portions of the former City of Damascus and adjacent unincorporated areas. Growth within the system has been concentrated along the SE Sunnyside Road corridor east of SE 152nd Avenue and north along SE 172nd Avenue.

The Sunrise distribution system includes approximately 260 miles of pipeline, 14 reservoirs, and 17 pump stations. Recent system investments have expanded storage capacity, including a new 3-million-gallon reservoir in Happy Valley and a 2-million-gallon ownership share in CRW's 6-million-gallon reservoir located near SE 152nd Avenue.

SWA's water supply portfolio includes wholesale surface water supplies from CRW and the North Clackamas County Water Commission, as well as groundwater and aquifer storage and recovery facilities. SWA owns a 48 percent interest in the NCCWC water treatment plant and utilizes this supply in conjunction with CRW deliveries to meet customer demand. Groundwater wells provide up to approximately 3.5 MGD of peak capacity and are typically used to supplement summer demands, particularly in areas east of SE 172nd Avenue.

SWA also holds an aquifer storage and recovery license authorizing storage of up to 600 million gallons across five wells, with a total potential delivery capacity of approximately 8 MGD. At present, one ASR well has been constructed with a storage capacity of approximately 70 million gallons and a delivery capacity of about 1.0 MGD. Additional ASR wells are anticipated over the next five to ten years to enhance seasonal flexibility and peak-demand reliability.

Section 3 – Capacity and Demands

NCCWC and CRW face distinct but interrelated challenges related to water supply capacity, seasonal demand variability, and system operations. Coordinated planning is necessary to ensure that future demands can be met reliably while maintaining operational stability.

Key planning considerations include:

- Significant seasonal demand variability, particularly during summer peak periods
- Operational constraints associated with daily production fluctuations
- Transmission limitations at certain delivery points during high-demand conditions
- The timing and magnitude of future demand increases

Understanding these factors allows both agencies to better align operational practices with capital investment planning.

Clackamas River Water Demand Forecast

CRW's current and projected demands are summarized below.

Table 3-1. Clackamas River Water Demand Forecast

Planning Year	Average Day Demand (MGD)	Peak Day Demand (MGD)
2025	~6.3	~13.5
2030	~7.3	~15.6
2035	~7.9	~17.8
Buildout	—	~20.8

Assumes average annual growth of approximately 1.5 percent.

Sunrise Water Authority / NCCWC Demand Forecast

Projected demands for Sunrise and NCCWC are summarized below.

Table 3-2. Sunrise Water Authority / NCCWC Demand Forecast

Planning Year	Average Day Demand (MGD)	Peak Day Demand (MGD)
2025	~6.2	~13.6
2030	~6.9	~15.2
2035	~7.7	~16.9
Buildout	~8.6	~19.0

These projections represent reasonable planning assumptions based on current development trends and available information.

Section 4 – Water Supply Sources

The primary source of drinking water for both CRW and NCCWC is the Clackamas River. In times of shortage or in emergencies, the systems can be supplemented by groundwater, aquifer storage and recovery facilities, and wholesale supply arrangements.

Clackamas River Water

CRW owns and operates the Clackamas River Water Treatment Plant, originally constructed in 1964 and expanded in 1972 and 1991. The plant has a nominal design capacity of 30 MGD. However, current firm production capacity is approximately 22 MGD. Planned upgrades are intended to restore and sustain full 30-MGD capacity while improving water quality performance and operational reliability.

Historically, the treatment plant has served CRW's northern service area, while wholesale supplies from the South Fork Water Board have served southern areas. Ongoing South Service Area improvements are intended to allow CRW's plant to supply both northern and most of the southern service areas directly. In emergencies, CRW also has a well with a capacity of approximately 1.2 MGD, though its use is limited due to aesthetic water quality considerations.

Sunrise Water Authority (primary recipient of water)/NCCWC

Sunrise obtains water through a combination of wholesale supplies from CRW and NCCWC. In addition, groundwater wells, and aquifer storage and recovery facilities, and wholesale supplies from South Fork Water Board (SFWB) are available. Under the NCCWC–CRW Water Supply Agreement, CRW may provide up to 10 MGD of treated water to NCCWC. Sunrise currently utilizes approximately 2.5 MGD of this capacity, primarily through the SE 152nd Avenue and Mather Reservoir connections, with additional capacity available as future demands increase.

Sunrise also owns a 48 percent interest in NCCWC's 20-MGD treatment facility and continues to expand its use of that supply. Groundwater and ASR facilities provide additional seasonal and peak-demand flexibility, particularly in eastern portions of the service area.

Section 5 – Water Availability

Present-Day Conditions

Under current conditions, CRW's treatment plant can reliably produce approximately 22 MGD, with peak demands well below that level when combined with existing wholesale commitments. NCCWC, however, is approaching its current peak availability during high demand periods and is expected to require additional peak-day capacity within the next five years. This need may be met through increased use of CRW supplies or other available regional sources.

Twenty-Year Projection

By 2035, combined peak demands for CRW and Sunrise are projected to approach or exceed currently available supply capacity. At that point, CRW's treatment plant will also be approximately 70 years old, reinforcing the need for significant rehabilitation and capacity upgrades. Additional capacity from NCCWC facilities may also be required.

Buildout Conditions

Beyond 2035, regional peak demands are projected to approach 50 MGD. The most feasible long-term option to meet this demand is to have the CRW treatment plant address the need for a total capacity to 30 MGD, in addition to the NCCWC supply. Such an expansion would rely on existing water rights and require substantial improvements to treatment facilities.

Curtailment

In the event of a water supply shortage or curtailment, NCCWC and CRW will share shortages proportionately, consistent with the provisions of the 2022 NCCWC–CRW Water Supply Agreement, provided that comparable customer water use restrictions are adopted and enforced by all parties.

Key Interconnections

The key interconnections that allow shared reliability and peak-season transfers are at the following locations:

- Mather Road- Up to 4,500 gallons per minute (previously contracted amount); 3,000 gallons per minute available pumping capacity; located next to Mather Reservoir (Mather Pump Station) at SE 97th Avenue and SE Mather Road (on reservoir site owned by CRW).
    - Current- 1600-1700gpm= 2.38mgd
    - Future- 1800gpm= 2.59mgd (adding VFD's and upsizing one pump)
- Otty Road- Emergency use only (per previous contract); 1100 gallons per minute available capacity; located near SE 92nd Avenue and SE Otty Road. (SWA Pump Station #4 on the Otty Road Reservoir site owned by CRW).

- SE 152nd Avenue- Up to 2,000 gallons per minute (previously contracted amount); 4,000 gallons per minute available pumping capacity; located at SE Pinegrove Loop near SE 152nd Avenue; also, site of new CRW/SWA 6 MG reservoir.
    - Current- (2) pumps= 1800-2000gpm= 2.74mgd
    - Future- (3) pumps= 2600-2800gpm= 4.03mgd (Currently only use 3 pumps in an emergency or extreme demand)

- Oak Lodge / NCCWC connection- Up to 4,500 gallons per minute (previously contracted amount). An additional intertie consists of the Oak Lodge pump station with up to 7,500 gallons per minute available pumping capacity; located at the CRW plant site which can be used to provide water to SWA through the NCCWC system. Upgrades to the 135th-to-152nd pipeline are anticipated within 5 years to increase summer delivery flexibility. This would enable the use of three pumps at 152nd on a regular basis and not only for emergencies.

Section 6 – Operational Planning and Allocation Framework

The NCCWC–CRW Water Supply Agreement establishes the framework under which CRW may provide up to 10 MGD of treated water to NCCWC. While this full amount is not immediately required or available under current conditions, the agreement raises important planning questions regarding how future increases in delivered water should be phased, managed operationally, and supported by infrastructure investments.

This Planning Document serves as the primary mechanism for addressing those questions. It aligns projected demand growth with treatment and transmission constraints and establishes planning-level assumptions to guide operational coordination and capital investment decisions over time.

Planning Horizons and Assumptions

Operational planning is organized around two complementary timeframes:

- A **five-year demand planning horizon**, used to evaluate near-term operational needs and delivery expectations.

- A **ten-year capital planning horizon**, used to identify and sequence infrastructure investments needed to support future demands.

Within these horizons, the Planning Document identifies anticipated points of delivery, associated peak flow capacities, projected annual average demands, maximum day demands, and peak seasonal (30-day) demands. These values are intended to support planning and coordination and do not represent binding purchase or delivery obligations.

Operational Considerations

Effective coordination between NCCWC and CRW is necessary due to differing demand profiles and operational objectives. Both water providers experience the highest demands during summer peak periods, while typically maintaining excess capacity during winter months. Both water providers also seek to minimize large fluctuations in daily production,

as variability increases operational strain on treatment processes, staffing, and system reliability.

In addition to seasonal variability, physical system constraints influence operational planning. The water treatment plant has a finite daily production capacity, and delivery through specific interties is constrained by transmission and pumping limitations. For example, deliveries to the SE 152nd Avenue reservoir are currently limited to approximately 4 MGD under peak conditions. These constraints make it essential to understand not only how much water may be required in the future, but when that demand will occur.

Future Delivery Timing and System Readiness

Projected demands indicate that incremental increases in NCCWC deliveries are most likely to occur after completion of key transmission upgrades, particularly the planned 135th-to-152nd Avenue pipeline improvements. While these upgrades will improve delivery flexibility, they must be matched by sufficient treatment capacity at CRW's water treatment plant.

To reliably support higher deliveries, CRW will need to restore and sustain treatment capacity of at least 25 MGD, with longer-term planning focused on achieving and maintaining the full 30-MGD design capacity. Current operational bottlenecks include turbidity loading on filters and limited sedimentation capacity, both of which restrict sustained high-flow operation during peak periods.

Allocation Framework

To balance flexibility with operational stability, this Planning Document outlines a planning-level allocation framework based on key operational parameters established in the NCCWC–CRW Water Supply Agreement. The framework is intended to guide discussions and refinements over time as system conditions evolve.

The allocation framework is based on the following elements:

- **Annual Average Purchase Amount**, initially established at approximately 2.5 MGD under current operations, with the ability to increase over time.
- **Daily Minimum Delivery Amount**, which establishes a consistent operational baseline for treatment and transmission planning.
- **Peaking Factor Limits**, used to manage short-term demand spikes and evaluated using two approaches:
    - Peak demand relative to the annual average purchase amount
    - Peak demand relative to the daily minimum delivery amount

This framework is intended to:

- Comply with minimum purchase provisions of the Water Supply Agreement
- Support seasonal coordination of deliveries to smooth treatment operations.
- Establish predictable baseline flows for operational planning.
- Place reasonable limits on maximum peaking to maintain system balance.

- Provide flexibility to adjust parameters as demands and infrastructure change.

Illustrative Operating Scenarios

The following examples are provided for planning and illustrative purposes only and demonstrate how the allocation framework may function under different demand conditions.

2025 Planning Example (Current Conditions)

- Annual Average Purchase: 2.5 MGD
- Daily Minimum Delivery: 2.0 MGD
- Peak-to-Average Limit: ≤ 2.0 times annual average (maximum peak of 5.0 MGD)
- Peak-to-Minimum Limit: ≤ 2.5 times daily minimum

Future Maximum Case Example (Up to 10 MGD Peak)

- Annual Average Purchase: 5.0 MGD
- Daily Minimum Delivery: 4.0 MGD
- Peak-to-Average Limit: ≤ 2.0 times annual average (maximum peak of 10.0 MGD)
- Peak-to-Minimum Limit: ≤ 2.5 times daily minimum

These examples illustrate how delivery flexibility can be provided while maintaining operational predictability and system stability. Specific operating parameters will be refined over time through mutual agreement as infrastructure improvements are completed and demand patterns become clearer.

Section 7 – Capital Improvements and Future Expansion

CRW is undertaking a multi-year program to restore and secure firm treatment capacity at the Clackamas River Water Treatment Plant while addressing water quality, reliability, and resilience needs.

Key drivers for capital improvements include:

- Aging treatment infrastructure
- Capacity limitations during peak-demand periods
- Water quality challenges related to turbidity and seasonal conditions.
- Seismic and operational resilience considerations

Table 7-1. Summary of Major Water Treatment Planning Milestones (Planning-Level Schedule)

Phase	Description	Purpose	Anticipated Timing
Facilities Planning	Evaluation of treatment alternatives and phasing strategies	Establish preferred approach and planning-level cost assumptions	Completed
Engineering Procurement	Selection of engineering/design firm	Initiate formal design and technical analysis	2025
Preliminary Design	Development of 30–50% design documents	Refine scope, cost estimates, and implementation sequencing	2025–2027
Final Design & Permitting	Completion of detailed design and regulatory approvals	Prepare project for construction	TBD
Construction & Commissioning	Phased construction and startup of treatment improvements	Restore and expand firm treatment capacity	TBD

Future expansion beyond 30 MGD will be evaluated as demand conditions warrant, with consideration given to funding approaches and cost allocation consistent with regional benefits.

Section 8 – Next Steps

Following adoption, the next steps associated with this Planning Document include advancing planned engineering and design efforts for water treatment and transmission improvements, refining cost estimates and funding strategies, and incorporating updated information into future capital improvement programs.

Staff will provide periodic updates to the governing boards of NCCWC and CRW regarding demand trends, infrastructure planning, and implementation progress. As major milestones are reached or conditions change, this Planning Document will be updated to ensure it remains an accurate and effective guide for policy direction and long-term planning.

Acknowledgement:

Pursuant to the Water Supply Agreement between Clackamas River Water (CRW) and the North Clackamas County Water Commission (NCCWC), the parties are to develop a Planning Document as described in Section 3 B of the agreement. The agreement further requires that the General Managers from both organizations must approve the Planning Document and any amendments in writing. If any part of the Planning Document requires approval by either governing party's governing board or by law, a resolution from that governing body will be required to provide that party's approval.

The signatures below confirm approval of this Planning Document and acknowledge that no additional actions are needed by either party to approve this agreement.

Todd Heidgerken

Todd Heidgerken, General Manager

Clackamas River Water

Date: Apr 3, 2026

Wade Hathhorn

Wade Hathhorn, General Manager

North Clackamas County Water Commission

Date: Apr 3, 2026

04_09_2026_CRW_NCCWC Planning Document_Final (002)

Final Audit Report 2026-04-03

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