



Canby Water Supply Program

Joint City Council – Canby Utility Board Special Meeting
Kari Duncan, General Manager Canby Utility
April 8th 2026

Canby's Water System

- Service Population: 18,200
- Connections: 5300
- Water source: Molalla River
- Water treatment plant first constructed in 1970
8 million gallons per day
- Three water storage facilities
4.4 million gallons
- Two pump stations
- 66 miles of underground pipes
4- to 16-inch diameter



Canby has an excellent history of reinvesting in reliable water sources

Groundwater

Prior to 1920

Well and wooden elevated tank at NW 4th & Fir Street

1920

100,000-gallon elevated steel water tank replaces wooden tank and a new well “Old Stinky” (sulfur issues)

Molalla River Springs

1929, 1944, 1950

Molalla River bottom springs developed and expanded

Molalla River Surface Water

1968-1970

Molalla River source developed with water treatment facility (3.5 mgd)

1980, 1995, 2006

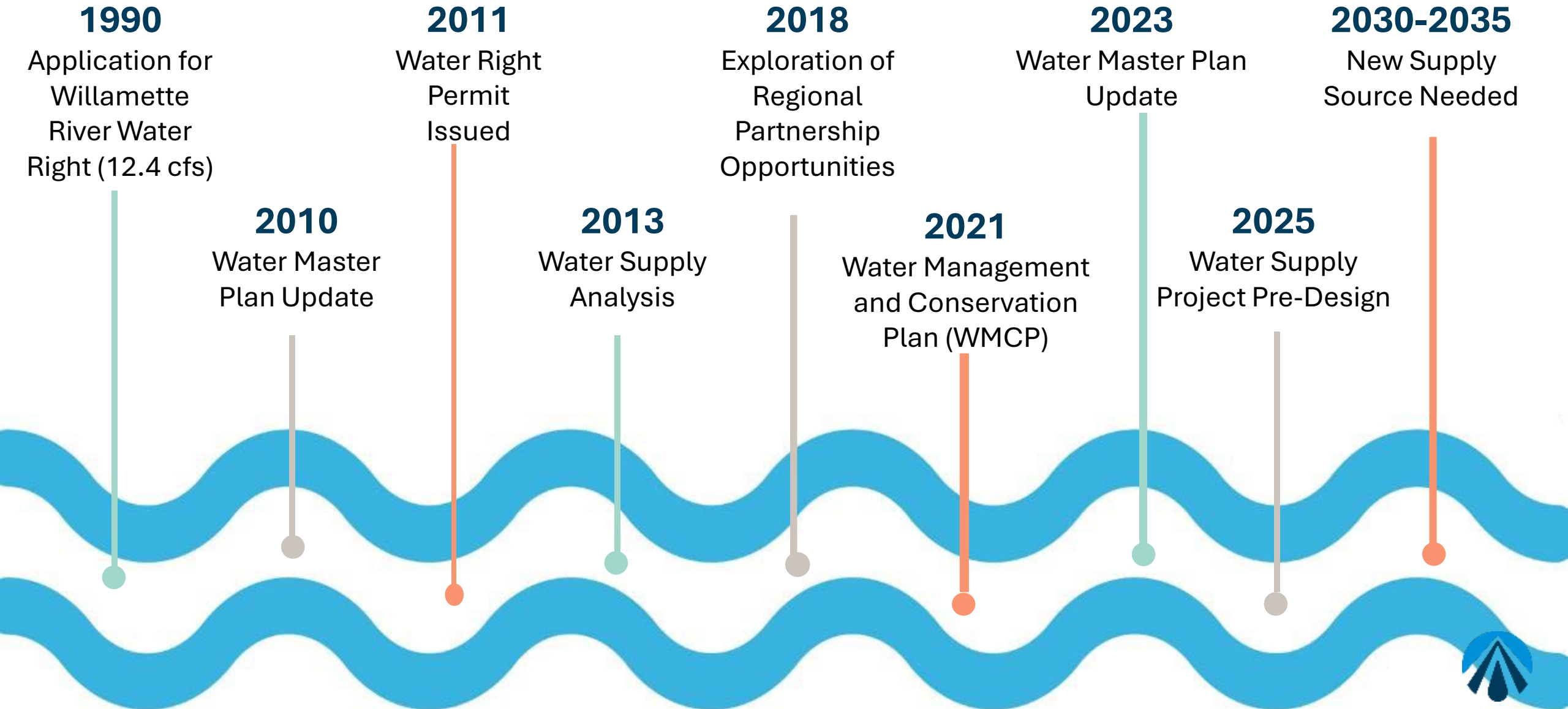
Molalla River water source expanded (8 mgd)

2023 to Present

Water Master Plan and New Source Study

Next Source

Planning For a Reliable Water Future





Need for a New Water Supply

- Current Water Supply from Molalla River
- Existing supply and WTP capacities reached in 2035
- Customer complaints with Tastes & Odors in water
- Cyanotoxin risk from source water
- Low summer flows in Molalla River

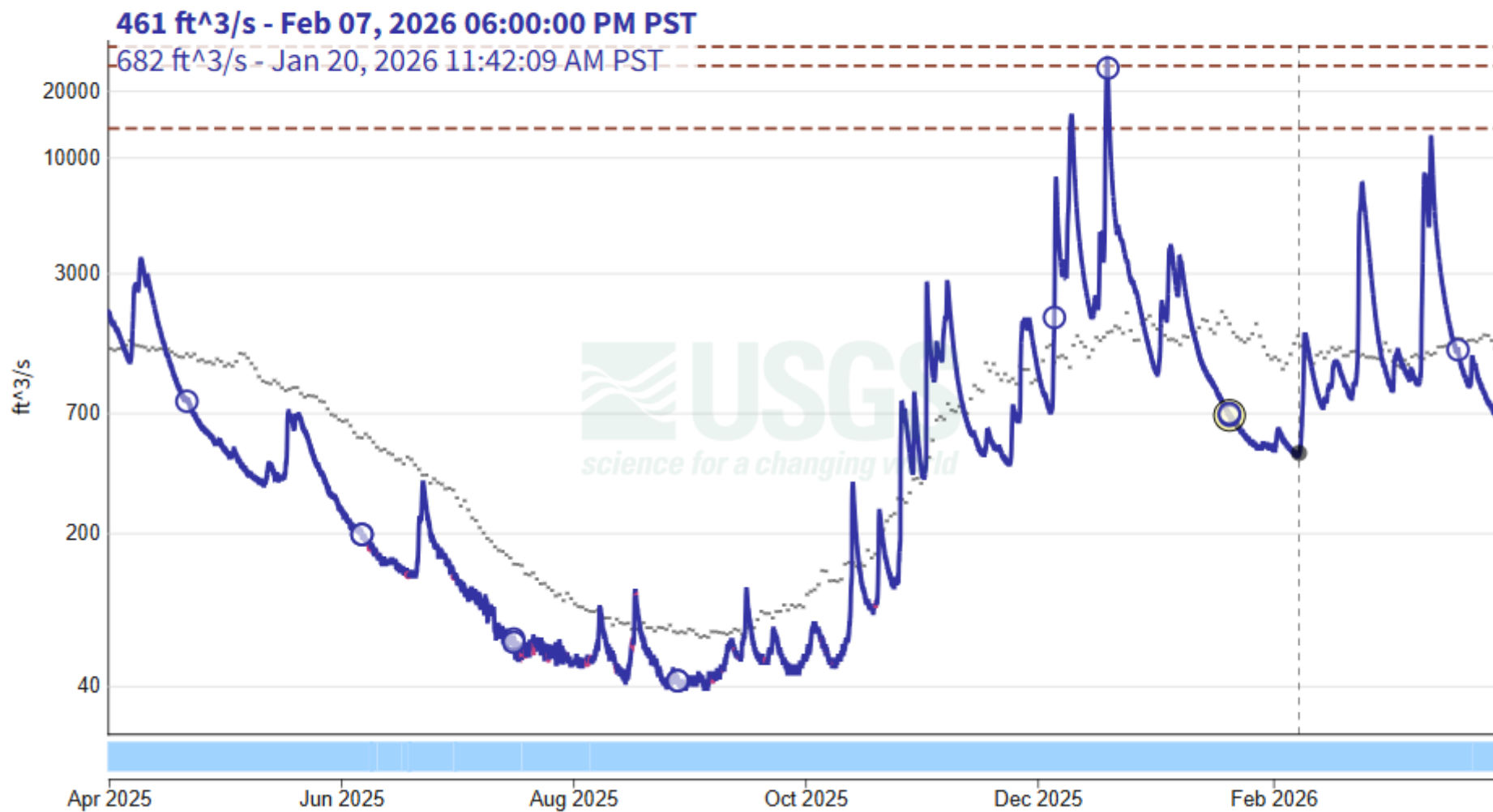


Continuous data

Molalla River Near Canby, OR - USGS-14200000

[Subscribe to WaterAlert](#)

March 31, 2025 - March 31, 2026
Discharge, cubic feet per second



Continuous data

Molalla River Near Canby, OR - USGS-14200000

[Subscribe to WaterAlert](#)

- using custom time span -
January 1, 2015 - December 31, 2015
Discharge, cubic feet per second



IMPORTANT Data may be [provisional](#)

[Hide legend](#) ^



Challenge:

Canby's Existing Treatment Facilities are aging, not earthquake resilient, and difficult to upgrade

Challenge: Emerging Contaminants

- **Cyanotoxins (historic detections in Molalla River)**
- PFAS (not detected)
- Manganese (not detected)



Algal bloom- some types of algae, or cyanobacteria- can produce toxins



Manganese Filter Installation at Rockwood Water PUD, Gresham, OR

Historic cyanotoxin, taste and odor detections in Molalla River

(note: cyanotoxin was not detected in finished tap water)

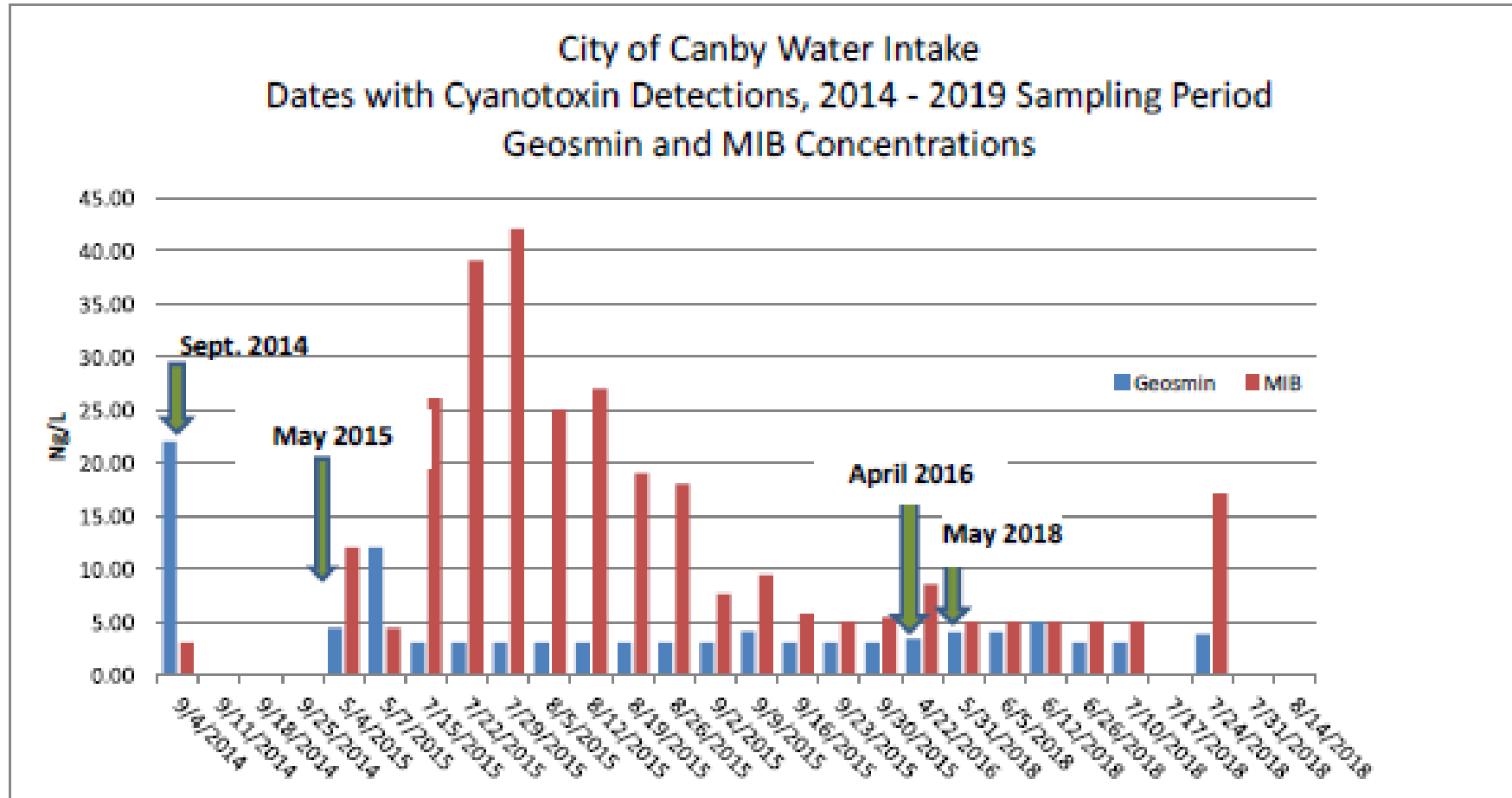


Figure 20. MIB and geosmin concentrations at the Canby water intake, 2014 – 2018. The arrows mark the date when MIB or geosmin was first observed for a given year. Source: Brian Hutchins, Veolia North America, 2020.

Water Provider Obligation and Project Need

Obligation is to provide a safe, reliable, long-term, and resilient water supply to meet the current and future water supply needs while supporting customer satisfaction with water quality, including taste and odor.

Objectives/Need:

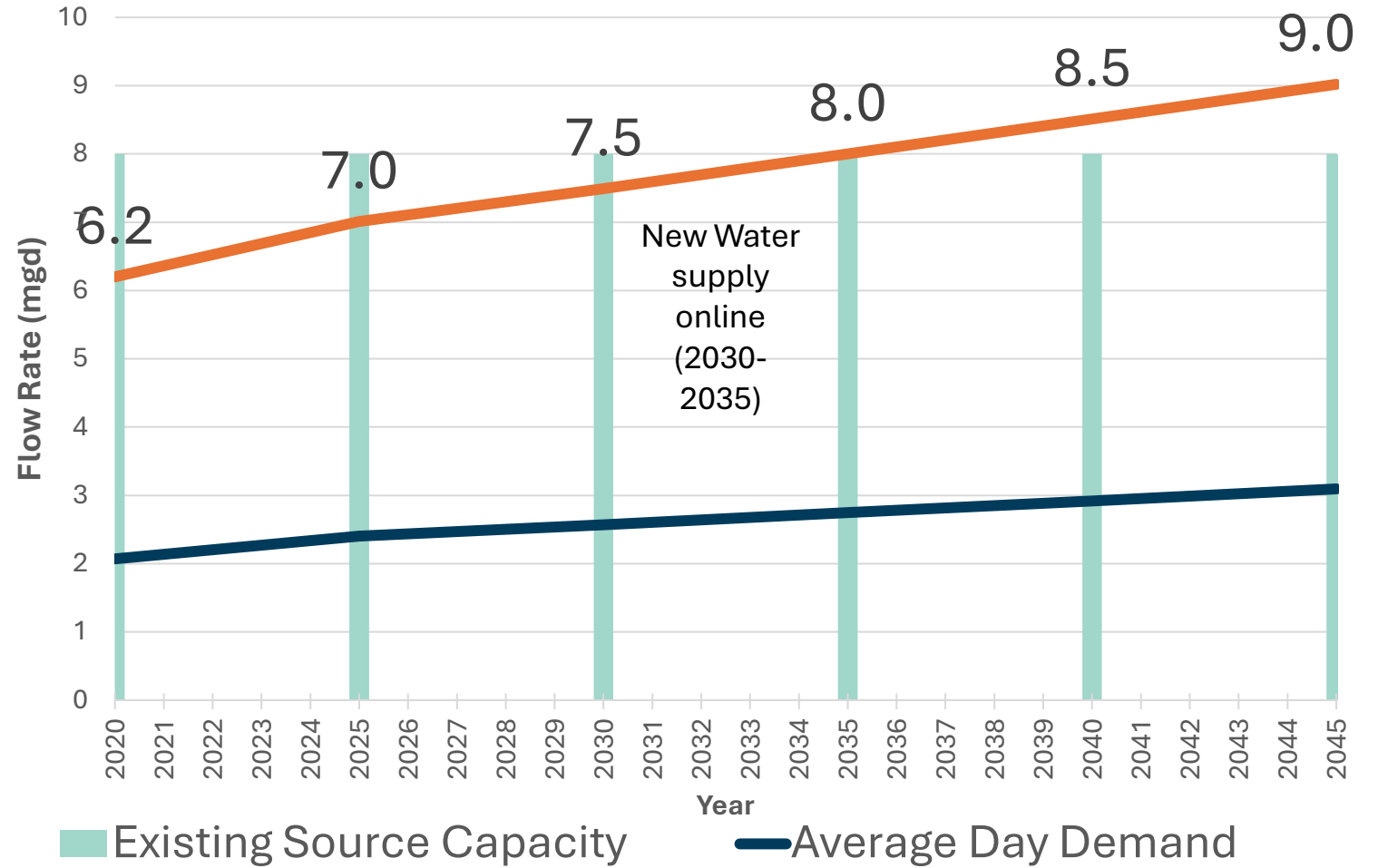
- Provide a new drinking water supply system that will reliably and efficiently meet the long-term water supply needs of the Canby community.
- Be of sufficient capacity to meet the CU's customer's water demands now and in the future.
- Achieve customer satisfaction with regards to water quality, taste, odor, and safety
- Utilize CU's existing water rights and water use authorizations to meet current and future demands, including developing the water right on the Willamette River.
- Provide a fiscally responsible supply source that will be in service before 2035

Canby Utility's Water System Needs

2023 Water Master Plan Water Demand Projection
Million Gallons Per Day (MGD)

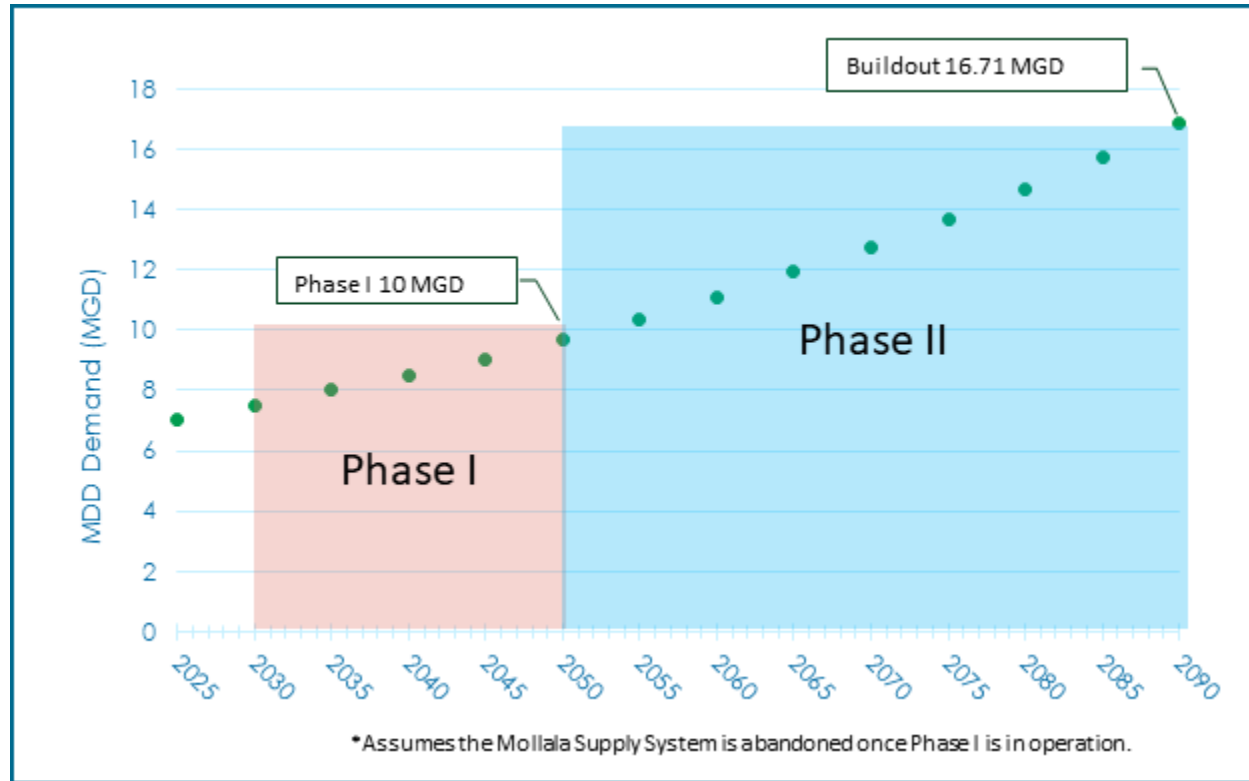
Source Water

- Existing source capacity is 8 mgd
- Capacity projected to be exceeded around 2035
- Limited opportunity for expansion of Molalla River supply



Population projections
2035: 22,234 2045: 25,056

- **Water Demand Forecast and WTP Phasing**



Water Supply Analysis Update

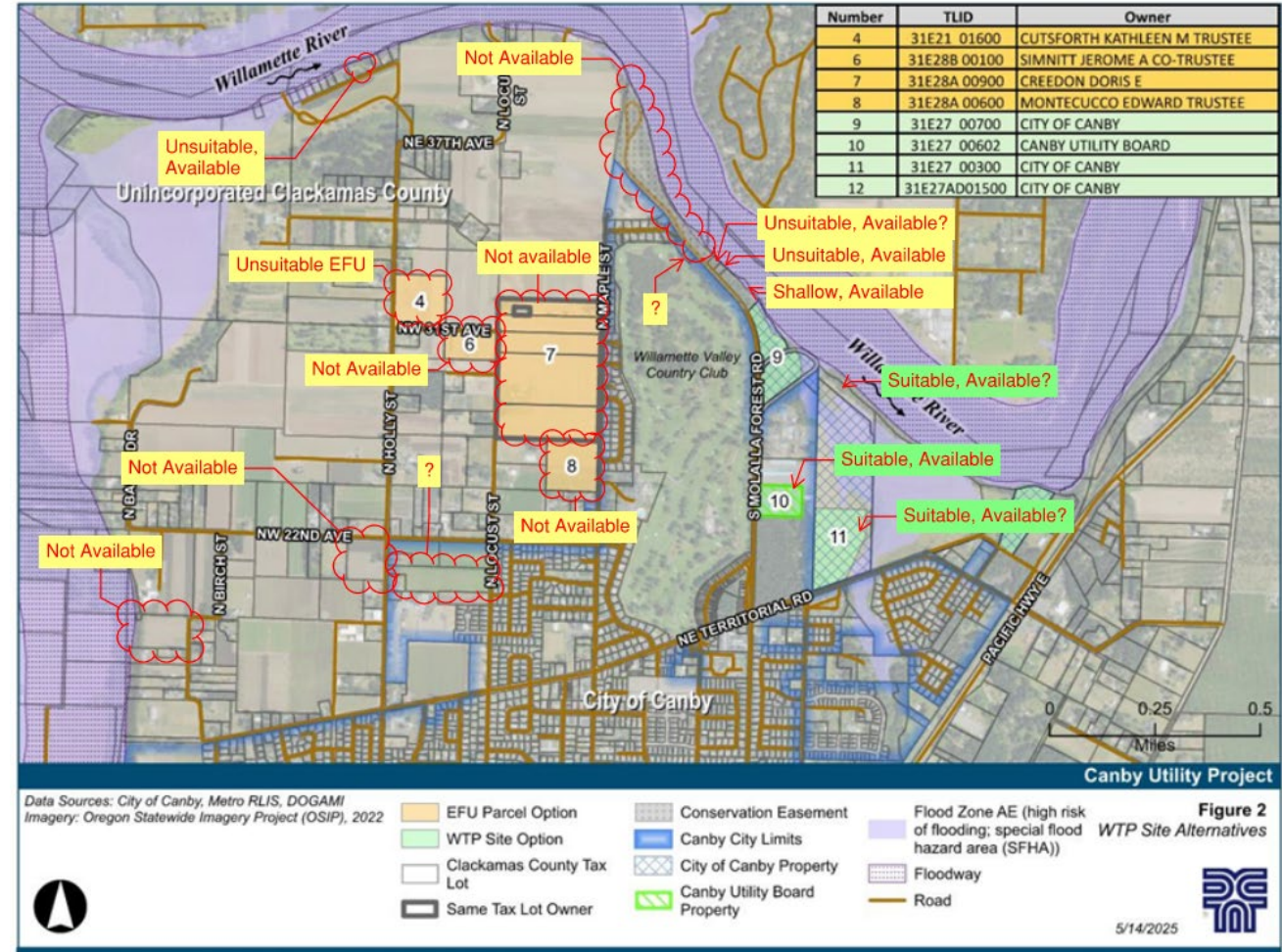
- **A new water source is needed in less than 10 years** to meet the community's water needs.
- There are **limited opportunities for water supply partnerships** with neighboring communities.
- Expansion of **Molalla River supply lacks reliable capacity and has increasing water quality issues.**
- **Proceed with developing the Willamette River source** near the water right “point of diversion.”
- Expanded supply is needed for **long-term needs and reliability.**



New Intake and Treatment Plant is planned for Utility owned Property near City Public Works Facilities

Alternatives Analysis

- Project requirement
- Original WTP and Intake site scored the highest in alternatives analysis
- Analysis identified viable backup Intake and WTP sites to the east that also meet criteria



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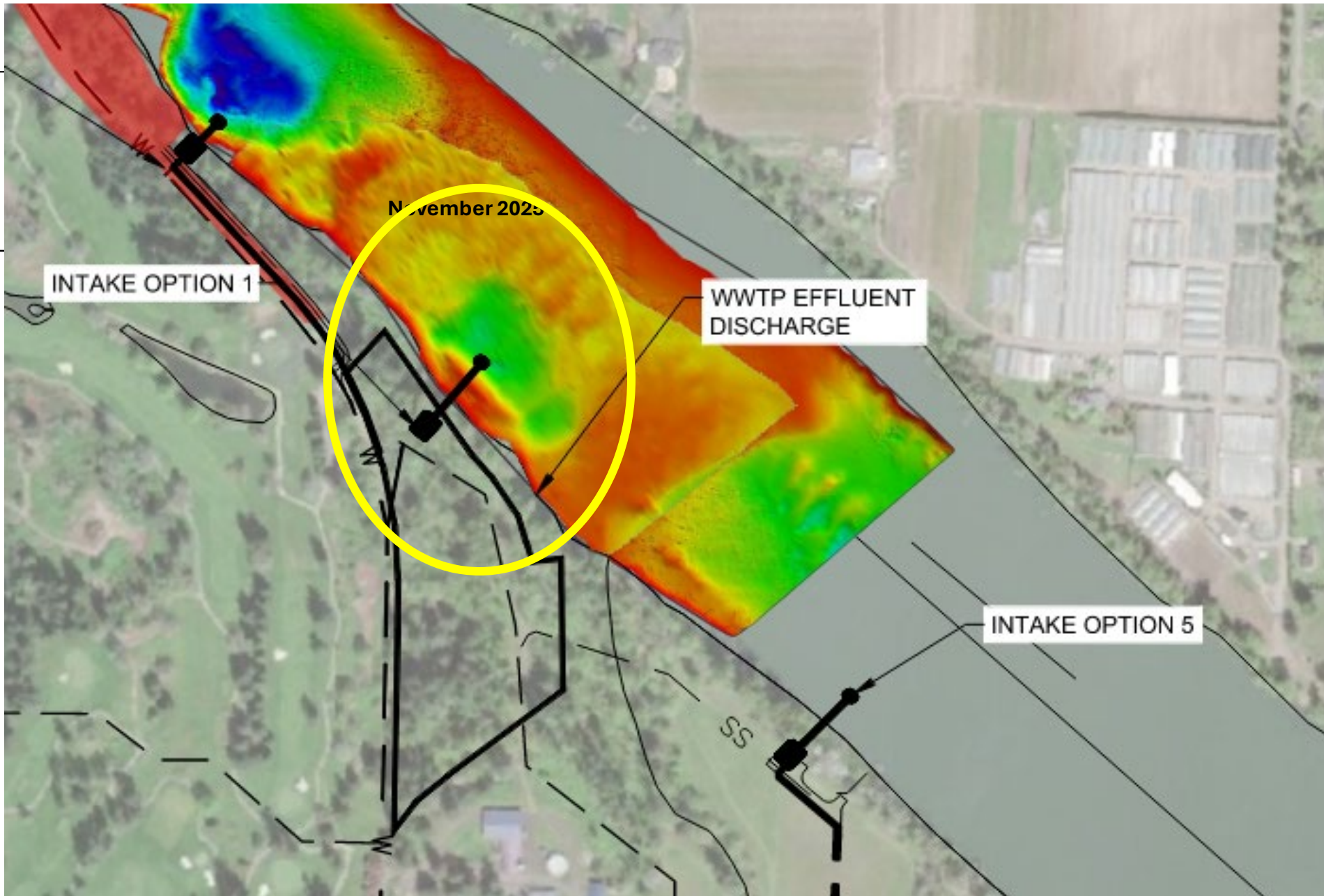
Site 10

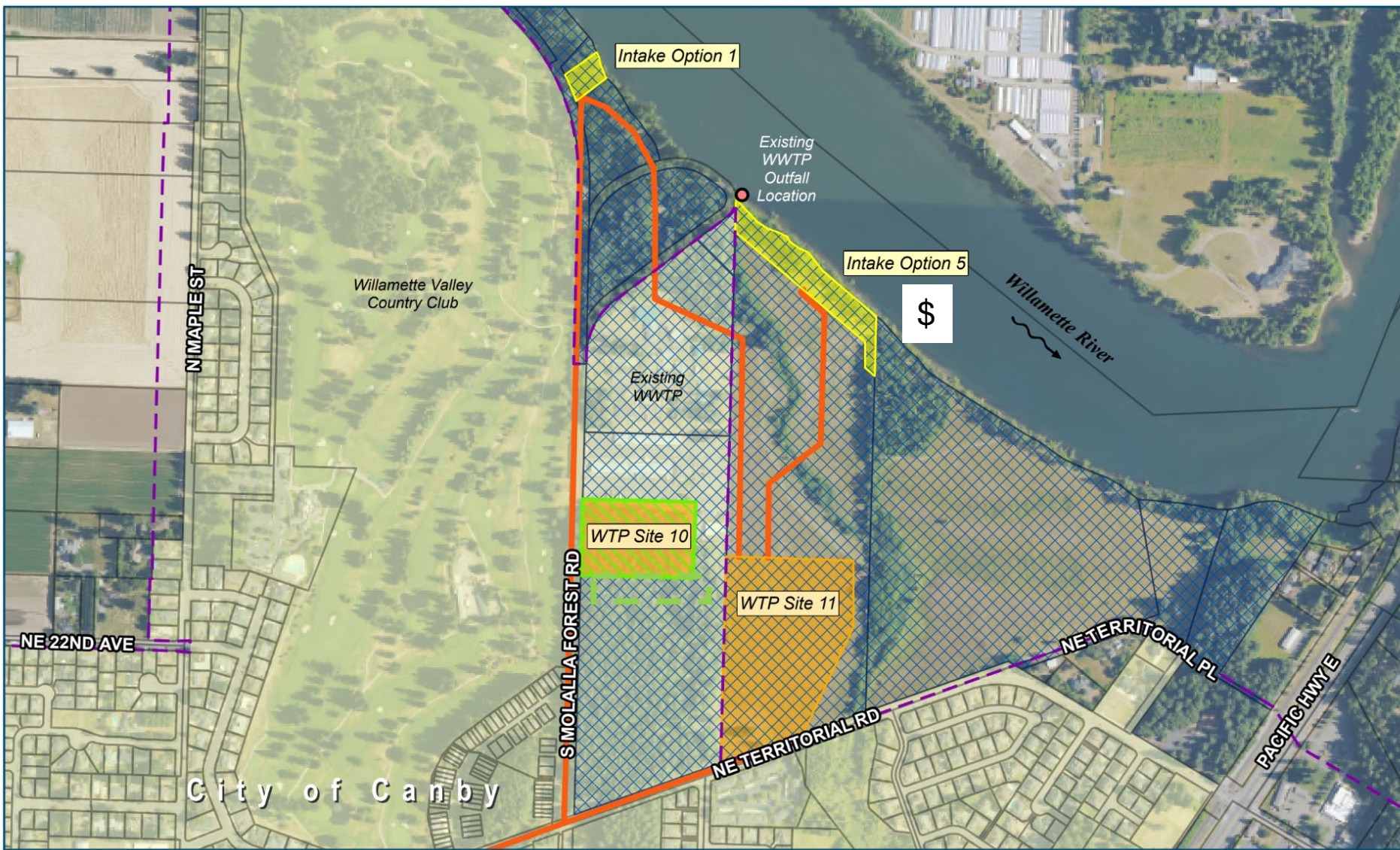
Site 11

Bathymetry – River Depth

Option 1
preferred

Option 5
viable backup

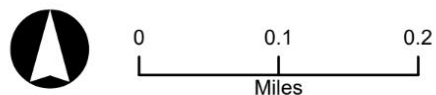




Canby Utility Project

Data Sources: City of Canby, Clackamas County
Imagery: OSIP, 2024

Project Alternatives



- Intake Option
- Water Treatment Plant Option
- Potential Pipeline Option
- Clackamas County Tax Lot
- Canby Utility Board Property
- City of Canby Property
- Canby City Limits
- UGB



1/17/2026

WTP Site Considerations

Site Option	Site Acreage	Land Use
10	5 acres	<ul style="list-style-type: none">• Allowed with Conditional Use review• Within City limits• City municipal services are available
11	8 acres proposed	<ul style="list-style-type: none">• Allowed with Conditional Use review• Outside City limits and the UGB• On-site sewage disposal may be required

Project Timeline

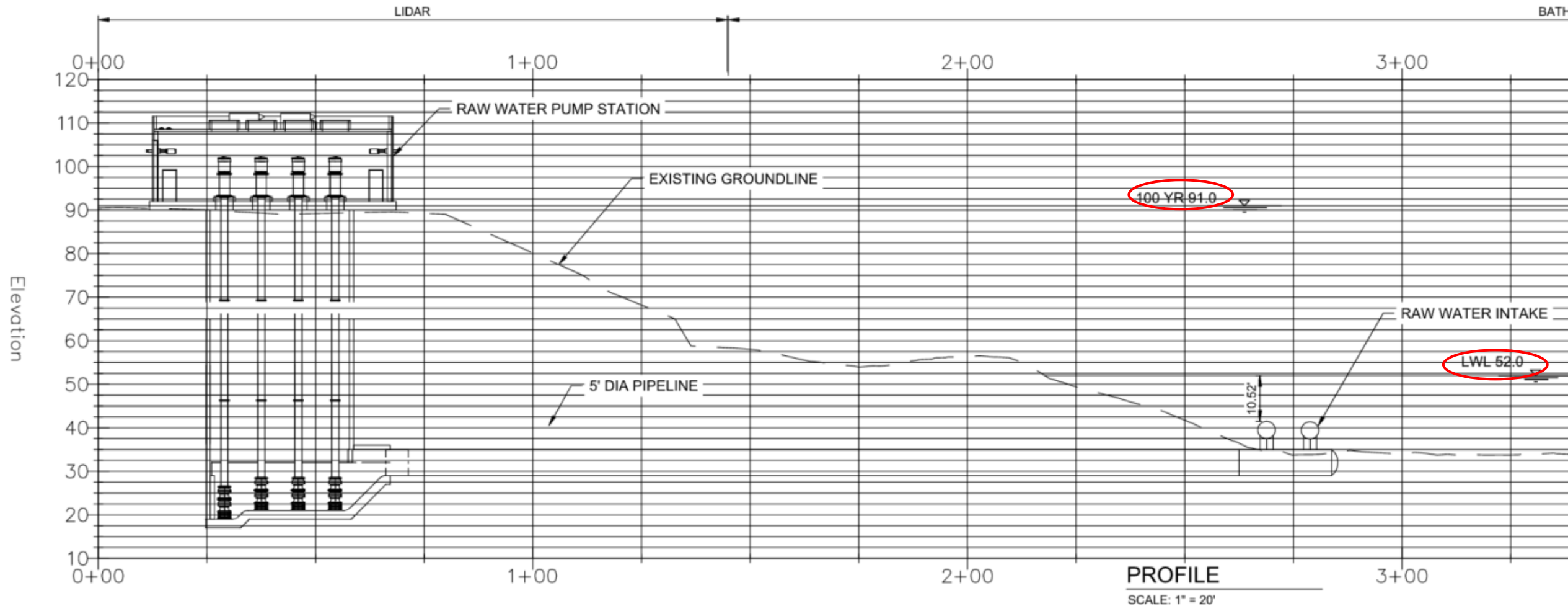
- Permits submitted 2026
- Agency review 2026 - 2028
- Final Design 2027-2028
- Construction start 2029
- Construction end 2032



Project Cost and Budgeting

Intake Structure

- Structure must be 80 feet underground due to River depth and fluctuations
- Pipeline tunnel to river
- In water work is challenging and costly



Wilsonville's Willamette Water Treatment Plant



Wilsonville's state-of-the-art plant has been operating since 2002 and has met, or is better than, every safe drinking water standard. Cost estimate is based on this process.

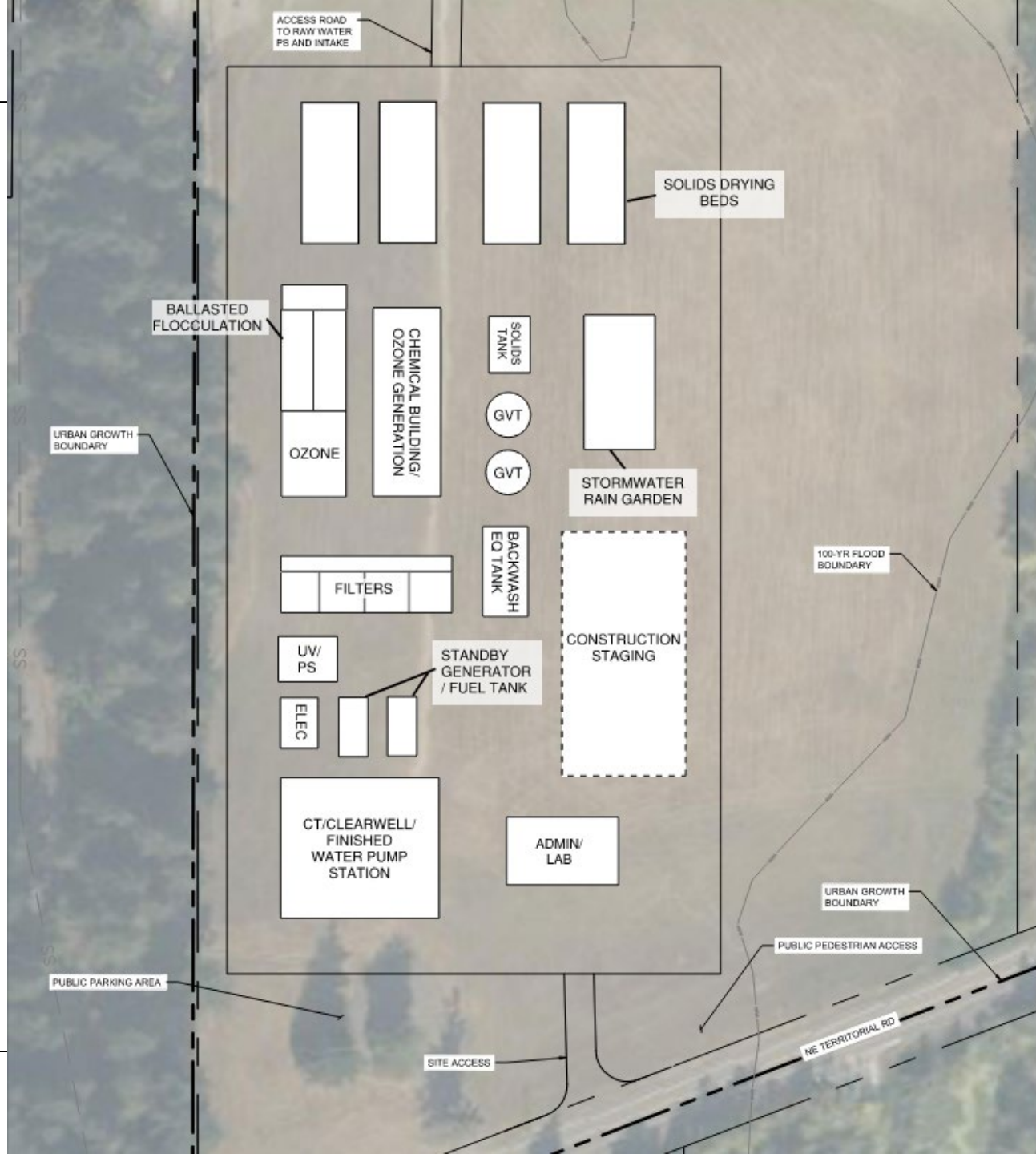
Key Treatment Steps Provide Multi-barrier Protection



Turbidity, Silt and Particles	✓				✓		
Pathogens	✓		✓		✓	✓	✓
Dissolved Metals	✓		✓				
Organics	✓		✓	✓			
Tastes & Odors			✓	✓			
Algae	✓		✓	✓	✓		
Algal Toxins	✓		✓	✓			✓
Contaminants of Emerging Concerns	✓		✓	✓			✓



Preliminary Site Plan



Similar Size Regional Water Treatment Plant Projects- WTP Construction \$

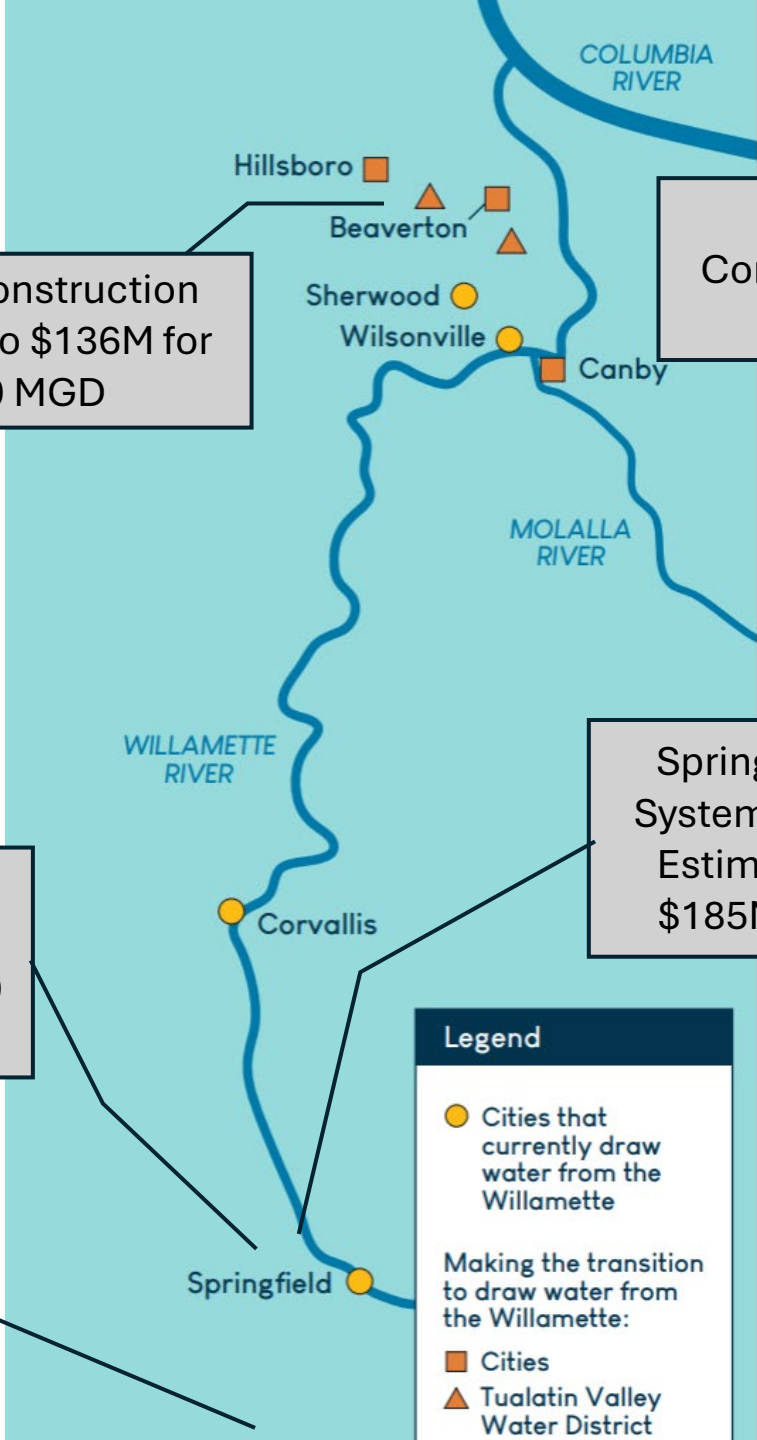
WTP Construction Scales to \$136M for 10 MGD

Idaho WTP Construction \$100M for 3.5 MGD

EWEB WTP Construction Estimate \$160M to \$185M for 10 MGD

Springfield Supply System Construction Estimate \$165M to \$185M for 10 MGD

Ashland WTP Construction 9 MGD \$120 M



Legend

- Cities that currently draw water from the Willamette
- Cities
- ▲ Tualatin Valley Water District

Making the transition to draw water from the Willamette:

Current Cost Estimate

- Cost estimates this early in the project are considered between a class IV-V with a + 50% / - 30% range
- This estimate is prior to cost reduction efforts

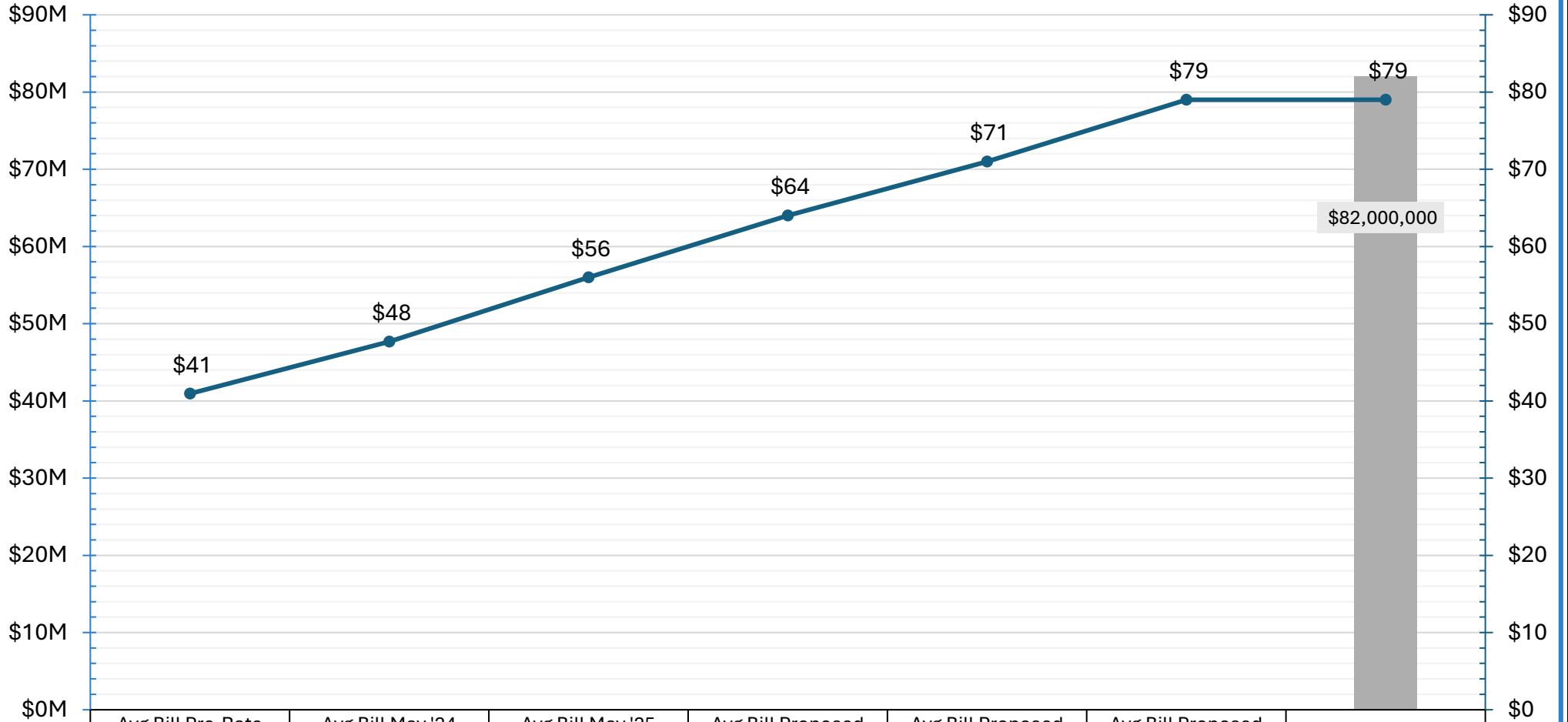
Supply Element	
Treatment Plant Elements	Current OPCC
Raw Water Intake and Pumping Facilities	\$32,210,000
Transmission System ²	\$3,150,000
New 10.0 MGD WTP	\$152,500,000
Subtotal	\$187,860,000
Planning & Design Efforts	
Develop Project Implementation Plan,	\$100,000
Complete Conceptual Design and	\$3,750,000
Permitting	\$2,000,000
Final Design	\$18,790,000
Contingency	\$20,470,000
Subtotal	\$45,110,000
Escalation	\$17,420,000
Total	\$250,390,000

Budgeting Considerations

Supply Element	Estimated Project Cost ¹
Treatment Plant Elements	Master Plan (2023)
Raw Water Intake and Pumping Facilities	\$7,500,000
Transmission System ²	\$5,750,000
New WTP	\$40,000,000
Subtotal	\$53,250,000
Planning & Design Efforts	
Develop Project Implementation Plan, Proc	\$100,000
Complete Conceptual Design and Alternat	\$3,750,000
Permitting	\$2,000,000
Final Design	\$9,600,000
Contingency	\$13,300,000
Subtotal	\$28,750,000
Escalation	
Total (Project ID S-1)	\$82,000,000

Supplement Molalla	Replace Molalla - VE	Replace Molalla - OPCC
Potential Budget	Potential Budget	Current OPCC
\$20,930,000	\$27,380,000	\$32,210,000
\$1,790,000	\$3,150,000	\$3,150,000
\$40,000,000	\$100,000,000	\$152,500,000
\$62,720,000	\$130,530,000	\$187,860,000
\$100,000	\$100,000	\$100,000
\$3,750,000	\$3,750,000	\$3,750,000
\$2,000,000	\$2,000,000	\$2,000,000
\$9,600,000	\$13,050,000	\$18,790,000
\$13,300,000	\$19,580,000	\$20,470,000
\$28,750,000	\$38,480,000	\$45,110,000
\$25,910,000	\$12,100,000	\$17,420,000
\$117,380,000	\$181,110,000	\$250,390,000

Proposed Average Monthly Water Bills (10 CCF) with 2023 Master Plan Project Cost

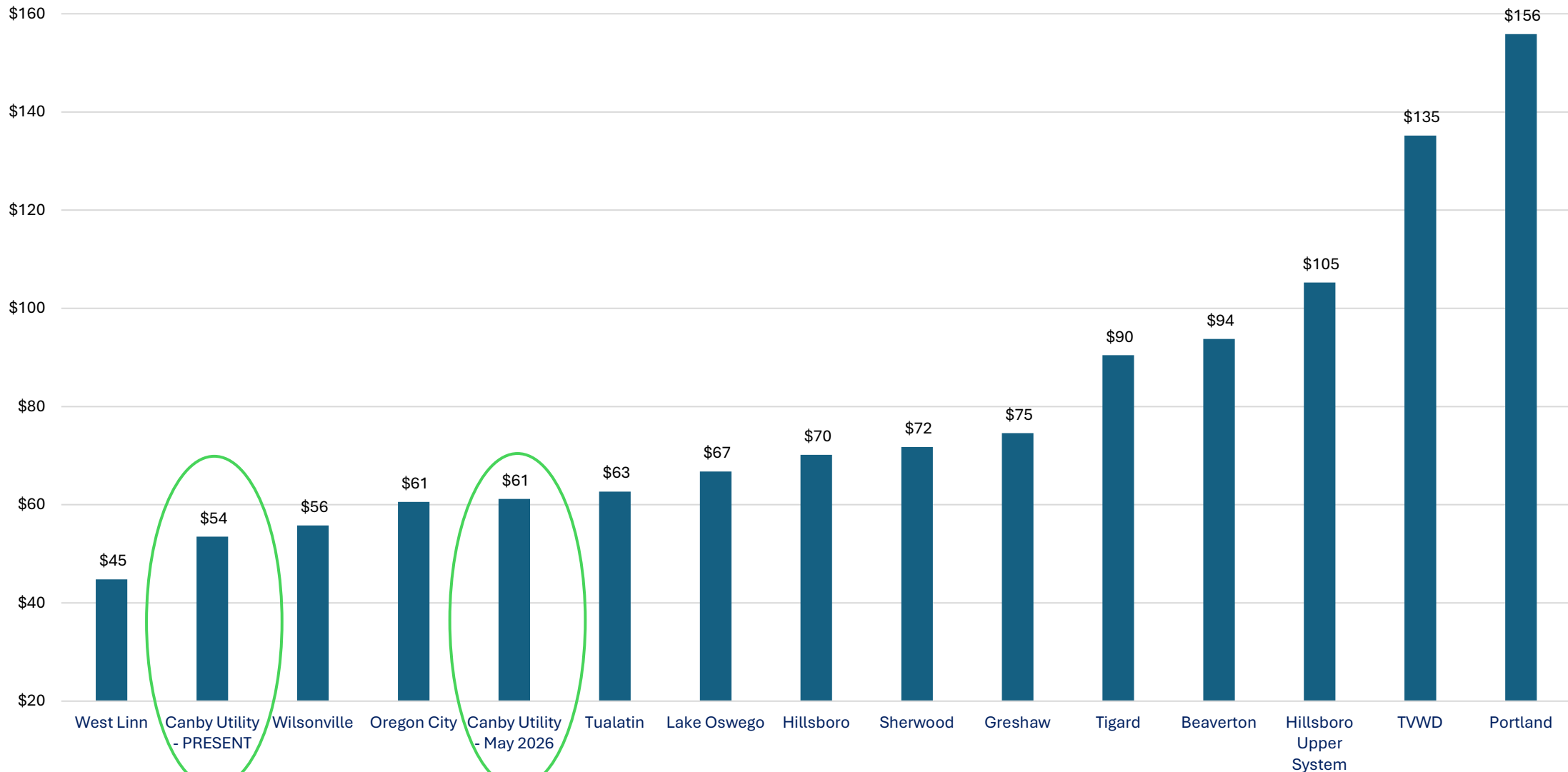


	Avg Bill Pre-Rate Increases	Avg Bill May '24 Rates	Avg Bill May '25 Rates	Avg Bill Proposed May '26 Rates	Avg Bill Proposed May '27 Rates	Avg Bill Proposed May '28 Rates	Master Plan (2023)
Project Cost							\$82,000,000
Average Monthly Bill	\$41	\$48	\$56	\$64	\$71	\$79	\$79

■ Project Cost ● Average Monthly Bill

Regional Water Bill Comparison 2025

Residential Monthly Bill for 1,000 CF and 5/8" Meter



Funding Plan

- Water Infrastructure Finance and Innovation Act (WIFIA) Loan
Communities under 20,000 eligible for 80% funding
- US Treasury Rate as of 4/2026 approx. 4.9% - rate is set at time of issuance or time of first draw, whichever is less.
- Revenue Bonds (alternate or supplement if WIFIA is not available)
- Current City Charter does not allow CUB alone to issue debt for the water system



The Water Infrastructure Finance and Innovation Act (WIFIA) program accelerates investment in our nation's water infrastructure by providing long-term, low-cost supplemental loans for nationally and regionally significant projects. Borrowers benefit from receiving low, fixed interest rate loans with flexible financial terms.

WIFIA LOANS OFFER A LOW, FIXED INTEREST RATE

A SINGLE FIXED RATE IS ESTABLISHED AT CLOSING. A borrower may receive multiple disbursements over several years at the same fixed interest rate.

RATE IS EQUAL TO THE U.S. TREASURY RATE OF A SIMILAR MATURITY. The WIFIA program sets its interest rate based on the U.S. Treasury rate on the date of loan closing. The rate is calculated using the weighted average (WAL) life of the loan rather than the loan maturity date. The WAL is generally shorter than the loan's actual length, resulting in a lower interest rate.

RATE IS NOT IMPACTED BY BORROWER'S CREDIT OR LOAN STRUCTURE. All borrowers benefit from the AAA Treasury rate, regardless of whether they are rated AA or BBB. The WIFIA program does not charge a higher rate for flexible financial terms.

WIFIA LOANS PROVIDE FLEXIBLE FINANCIAL TERMS

CUSTOMIZED REPAYMENT SCHEDULES. Borrowers can customize their repayments to match their anticipated revenues and expenses for the life of the loan. This flexibility provides borrowers with the time they may need to phase-in rate increases to generate revenue to repay the loan.

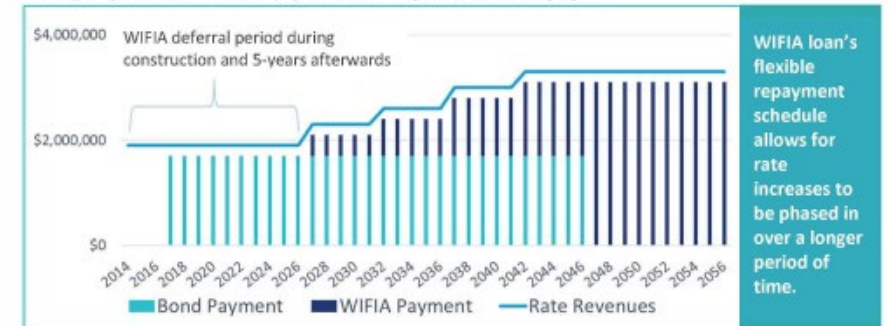
LONG REPAYMENT PERIOD. WIFIA loans may have a length of up to 35 years after substantial completion, allowing payment amounts to be smaller throughout the life of the loan.

DEFERRED PAYMENTS. Payments may be deferred up to 5 years after the project's substantial completion.

SUBORDINATION. Under certain circumstances, WIFIA may take a subordinate position in payment priority, increasing coverage ratios for senior bond holders.

WIFIA LOANS CAN BE COMBINED WITH VARIOUS FUNDING SOURCES. WIFIA loans can be combined with private equity, revenue bonds, corporate debt, grants, and State Revolving Fund (SRF) loans.

Example of a customized debt repayment structure for a \$100 million project



Possible Funding Opportunities (cont.)

- IJA Funding- Emerging Contaminants (applied- \$3.)
- State Legislative Capital Funding (applied)
- BRIC Grant (FEMA)
- Federal Community Directed Spending
- Grant Opportunities
- Forgivable Loans
- State low interest loans

Next Steps and Discussion

- Consultant Contract Amendment to review cost savings alternatives
- Conduct community survey and outreach efforts
- Move forward with site selection and permitting
- Continue funding strategy and applications



Questions?

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*Acknowledgements

Stantec Engineering (CWSP Consultant)
