# MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

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| TO: | Commissioners Barofsky, Schlossberg, Brown, Carlson, and Morris |
| FROM: | Karen Kelley, Chief Operations Officer and project team |
| DATE: | April 24, 2025 |
| SUBJECT: | Willamette Treatment Plant Project Annual Update |
| OBJECTIVE: | Information Only |

**Issue**

EWEB is actively advancing the Willamette River Water Treatment Plant Project—a cornerstone of our Water Capital Improvement Plan (CIP) and Long-Term Financial Plan (LTFP). This memo provides a comprehensive update on the project's status and next steps.

**Background**

The Willamette River Water Treatment Plant project is EWEB's most critical resiliency initiative to date. Once completed, the project will provide a second source of drinking water, ensuring essential redundancy to the McKenzie River source and Hayden Bridge Filtration Plant.

The project includes:

- A new raw water intake and pump station
- A state-of-the-art water treatment plant and associated facilities
- A new transmission main connecting to EWEB's existing system near Knickerbocker Bridge.

A map of the project site and renderings for the intake and treatment plant are included in Attachment 1.

EWEB is one of the largest utilities in the Pacific Northwest that relies on a single source of water. While our storage system provides 1-3 days of storage under normal conditions, reliance on one intake and treatment facility leaves our community vulnerable to natural or human-caused disasters, water quality issues, and equipment failures.

The Hayden Bridge Filtration Plant, which has been in continuous operation for 75 years, cannot be taken offline for substantial upgrades or seismic retrofitting due to the lack of a backup

supply and treatment. As a result, the plant's ability to withstand or recover from a major earthquake cannot be assured—placing the community's potable water supply at risk. While EWEB has constructed several emergency water stations to provide provisional groundwater access during crises, these facilities are not designed to replace full system operations.

Decades of analysis and long-term planning led EWEB to pursue the development of our Willamette River Water Rights. Over the years, the utility evaluated multiple alternatives—including developing groundwater sources and expanding interties with neighboring systems—but ultimately concluded that the Willamette River provides the best long-term solution. It offers a reliable volume of supply and high-quality water, with characteristics similar to our existing McKenzie River source, as shown in Table 1 below.

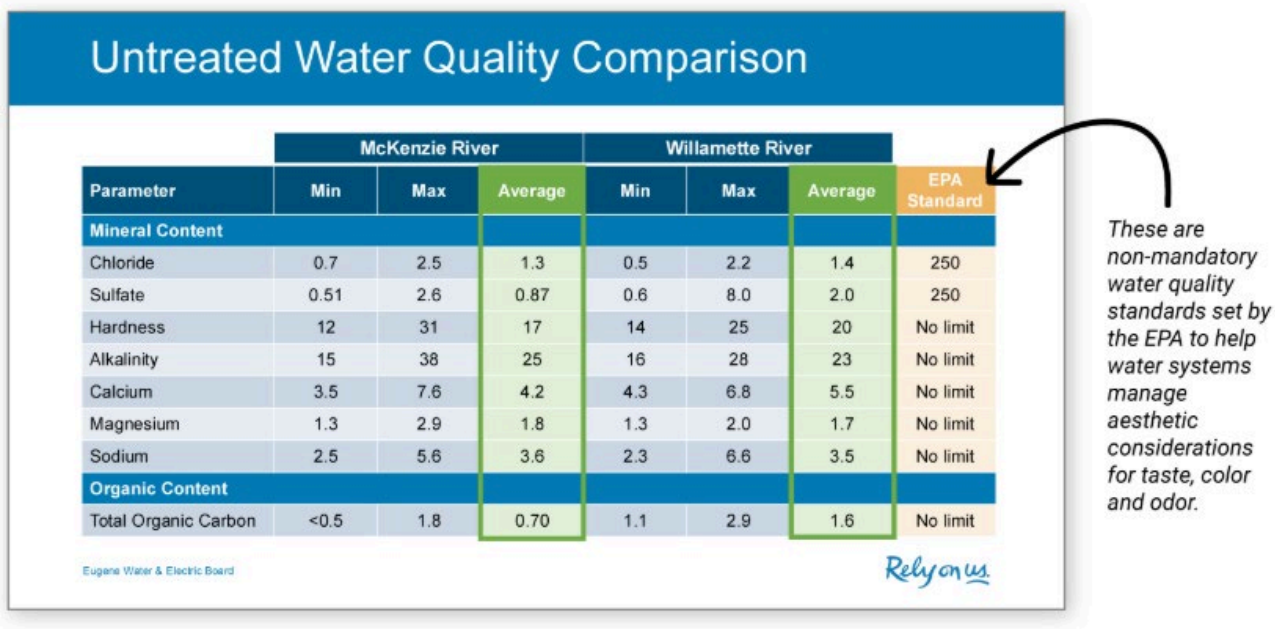



*Table 1: EWEB has tested water samples from the Willamette River for the last 10 years. The samples show that the water quality near the new proposed intake is similar to the water we pull from the McKenzie River less than five miles away. More detail pertaining to water quality can be found on the project website here.*

**Discussion**

The following sections discuss the preliminary design and land use work completed in 2017, renewed efforts to develop a second source, budgetary cost estimates, project risks and schedule.

# Historical Work

## Preliminary Design Work

In 2017, EWEB completed a preliminary, value-engineered design for the Willamette River Water Treatment Plant. The concept included a raw water intake sized for full system buildout and a treatment plant designed to initially provide 10 million gallons a day (mgd) at a high water quality, with the ability to scale up to 19 mgd under minimum water quality standards to meet state requirements.

## Land Use

In parallel with the preliminary design efforts, EWEB engaged with the City of Springfield (Springfield) to determine the land use approvals necessary to construct the intake and treatment plant. Springfield confirmed that the intake qualified as a *Low Impact Public Facility,* which is an allowed use within the Glenwood Refinement Plan (Plan) area.

However, the proposed treatment plant site presented additional challenges. Because the property was outside city limits, the City of Springfield required it to be annexed before development. Furthermore, under the City's Development Code (Code), the treatment plant was classified as a *High Impact Public Facility* —a designation not currently permitted within the Plan area.

To proceed, the City of Springfield recommended that EWEB:

- Include the project in the Eugene-Springfield Metro Area Public Facilities and Services Plan (PFSP), which requires an amendment to be initiated by the City Council.
- Include the project in the City's Master Plan, or
- Obtain a Discretionary Use Permit.

When the request was brought to the Springfield City Council, the Council denied initiating the PFSP amendment process and the project was subsequently delayed in 2017.

## Delay Period

The delay created an opportunity for EWEB to increase reliability and resiliency in the water distribution system. During this time, the utility advanced multiple projects, including:

- Constructed emergency well sites
- Built new base-level storage tanks
- Upgraded our transmission system
- Added a new on-site chlorine generation system at the Hayden Bridge Filtration Plant
- Installed standby power at the intake and filtration plant.

These investments paid off during events like the 2020 Holiday Farm Fire, the 2021 West Coast chlorine shortage, and the 2024 ice storm, helping EWEB maintain water service under extreme conditions.

## Restarting the Project

By 2023, multiple factors prompted a renewed and urgent focus on developing a second source of water:

- Customer support for the project reached an all-time high, reflecting growing public awareness of the system's vulnerabilities
- The political landscape surrounding water rights has grown increasingly complex
- Costs for construction continue to rise
- Permitting requirements are becoming more rigorous each year
- Events that can disrupt water supply—such as extreme weather and wildfires— are becoming more frequent and severe.

Given the age of Hayden Bridge Filtration Plant, and the escalating risks outlined above, EWEB has determined that now is the right time to move forward with developing a new water source on the Willamette River.

## Recent Work

Since restarting, EWEB has made significant progress in several key areas:

### Environmental Permitting

Most of the effort over the last year and a half has been associated with this task. Specific accomplishments include:

- Completed a value engineering study for the intake location, which resulted in a downstream shift to minimize excavation costs.
- Completed and submitted a Biological Assessment.
- Submitted Joint Permit Applications to the Army Corps of Engineers and the Division of State Lands (approvals anticipated in late 2026).
- Initiated river temperature modeling to determine the potential effects of the water withdrawal to be used to create a thermal trading plan if required.

### Land Use

EWEB staff initiated renewed land use planning efforts in partnership with the City of Springfield in 2023.

As previously noted, EWEB initially sought to include the project in the PFSP. However, since the project began, the Cities of Eugene and Springfield have decided to dissolve the metro area PFSP and develop independent plans. Unfortunately, this planning work will not be completed in the time required for this project schedule.

To keep the project moving forward, Springfield staff recommended that EWEB pursue a Discretionary Use Permit. This path requires annexing the properties into Springfield and obtaining the required code and plan amendment approvals.

EWEB successfully annexed the property into Springfield in March 2025. Code and Plan amendment applications were submitted that same month, and completeness review was received in late April 2025.

### Source Water Protection

With the renewed effort toward a Willamette River supply, EWEB's source water protection team is currently working on a source water protection plan for the upper Willamette River. In addition, they are identifying potential thermal mitigation projects related to the withdrawal of water, if required.

### Engineering Design and Construction Services

An Engineering Design Request for Proposals was advertised in April of 2025 with an anticipated contract approval at the July 2025 board meeting. The design will be based on the work completed in 2017 and will include a validation study, updated costs, final design documents, and construction services. The intent is to leverage the work already completed while at the same time validating the assumptions made to ensure that the project is in line with current regulations and EWEB's desired level of service goals.

### Public Outreach

Public outreach has been an ongoing component of this project and continues to evolve alongside project milestones. The public communication plan is currently being updated to reflect the latest developments and priorities.

Unlike EWEB's recent storage tank projects, which were located in residential areas, the new intake and plant site are in an industrial area of Glenwood. The most directly affected residents are primarily located in a single neighborhood across the river and along the necessary transmission pipeline route. While the project's location limits the number of nearby residential interest-holders, public engagement remains critical to its success.

Key outreach efforts include:

- Coordination with local governing bodies, including the City of Springfield, Lane County, and the City of Eugene, to support the land use process.

- Engagement with local environmental organizations, businesses along the pipeline route, and large water users such as the University of Oregon and local breweries.

EWEB has launched a project website, developed an "interested parties" email distribution list, and aligned public engagement with the environmental permitting timeline. Emails were proactively sent to environmental groups inviting participation in the public comment process for key regulatory submissions.

In January 2025, EWEB hosted a water industry users' forum to share project details and present water quality data to representatives from major water users, including the University of Oregon, breweries, and our top 10 industrial users. Additionally, an open house was held for nearby residents and businesses to introduce the project, explain permitting requirements, and discuss potential construction impacts.

Looking ahead, outreach will focus on supporting the land use application process with the City of Springfield through continued engagement with interest-holders and timely public communications

## Budget Update

The original 2017 Preliminary Design Effort estimate of $68 million was escalated to $90 million in the 10-year Capital Improvement Plan based on generalized nationwide indices.

Staff recently completed a budgetary update using regional construction data and contractor input, revealing a more realistic estimate of $160 million. This represents a very high-level cost and includes a 30% contingency to account for:

- Unpredictable inflationary pressures and market volatility
- Potential impacts of trade tariffs and federal workforce reductions
- Unknown permitting and mitigation requirements
- Potential changes in project scope

While deferring the project avoided early capital outlay, inflation and regulatory complexity have significantly increased project costs. That said, EWEB can manage some of these risks through:

- Careful scheduling and phasing (the project is EWEB driven and not required by regulators)
- Use of a Construction Manager/General Contractor procurement to validate assumptions and optimize construction timing
- Leveraging the work that was completed in 2017

## Funding Strategy

EWEB's water and finance teams are working to develop a comprehensive funding strategy for this project. While the project represents a significant investment, there are multiple funding pathways, each with their own benefits and drawbacks to be assessed.

- Given that EWEB's water rates remain among the lowest in the region, there may be room to evaluate a rate adjustment as part of a responsible long-term financial plan.
- In parallel, there are several borrowing options to spread costs over time and reduce immediate rate impacts.
- There are capital projects in the distribution system that can be evaluated and potentially deferred.
- EWEB is also actively seeking grant opportunities. Although anticipated funding from the FEMA Building Resilient Infrastructure and Communities (BRIC) grant was recently withdrawn at the federal level, staff remain engaged in identifying new grant opportunities. We remain optimistic that federal funding will become available to support infrastructure resiliency efforts like this one.

## Schedule

The current target schedule includes Board approval of a design contract in July 2025 with construction anticipated to begin in fall of 2026, following receipt of all required environmental permits.

To meet this timeline, several critical steps must be completed in the interim:

- Determine a new funding strategy and integrate it into EWEB's long-term financial plan.
- Select a design consultant.
- Complete a validation study of past work completed and verify assumptions.
- Update project cost estimates and align the design with current budget constraints.
- Complete temperature modeling and develop a thermal trading plan if required by Oregon DEQ.
- Obtain land use approvals.
- Obtain permit approvals.
- Select a procurement methodology.
- Start detailed design and construction planning.

The high-level schedule is included in Figure 1 below.

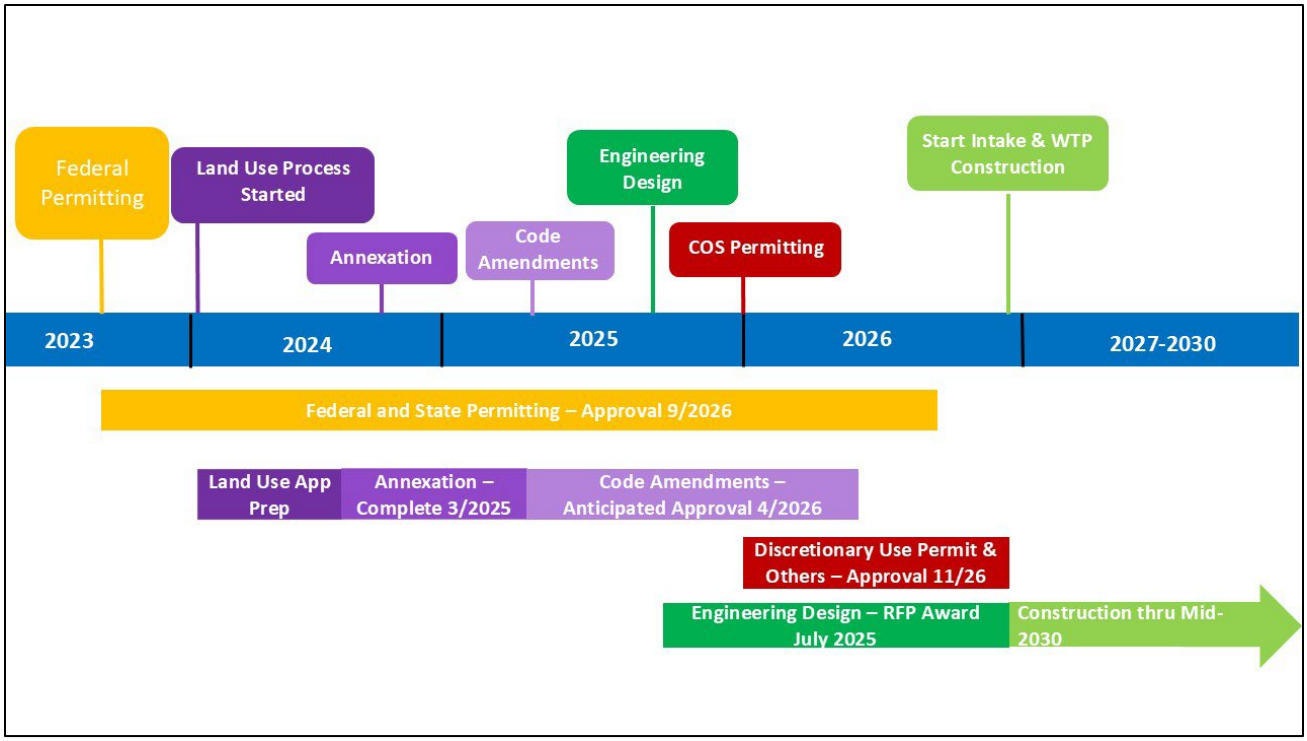



*Figure 1. Project Timeline*

Attachments:

A. Willamette River Intake and Treatment Plan Project Location Map

B. Artist rendering of EWEB Willamette River Treatment Plant

C. Preliminary photorealistic renderings of the Willamette River Treatment Plant

**Recommendation**

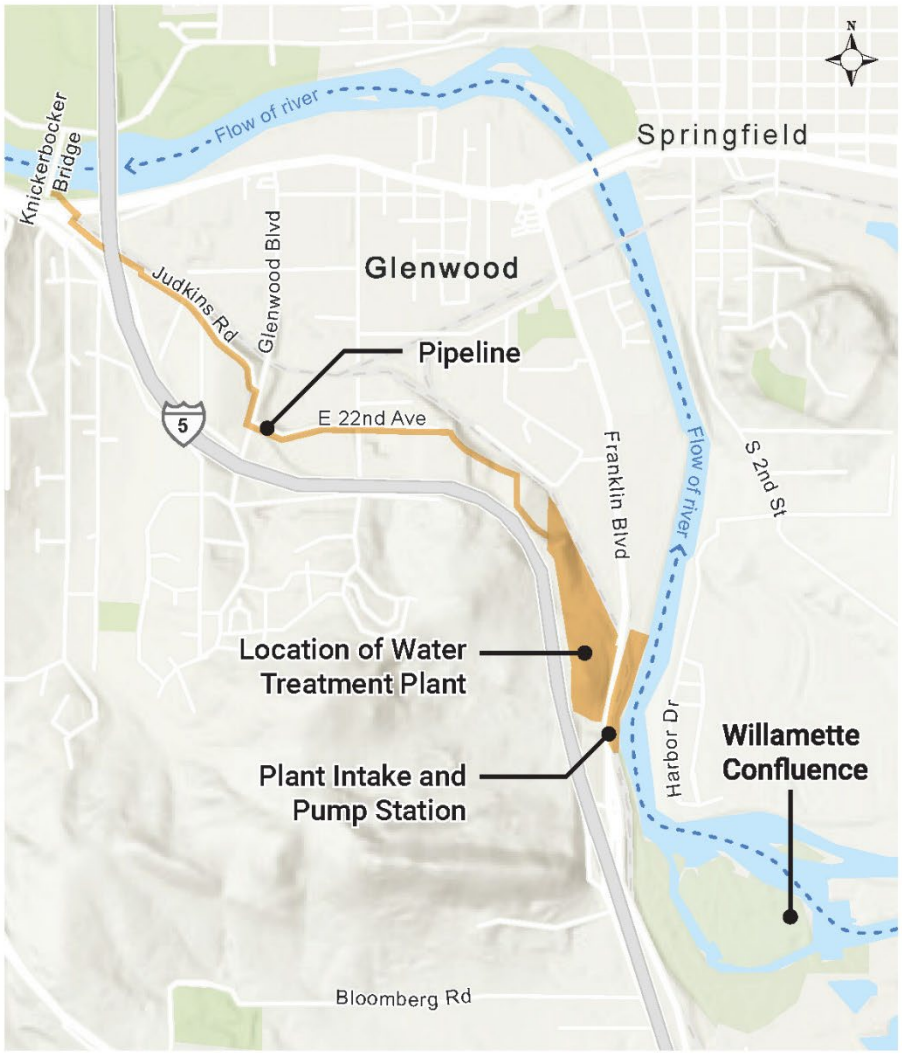
Information Only

**Requested Board Action**

None

## Attachment A

Willamette River Intake and Treatment Plant Project
Location Map




EWEB

Attachment B – Raw Water Intake Rendering

Attachment C – Treatment Plant Renderings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ADMIN. / MAINTENANCE
CHEMICAL AND OZONE
GENERATION BUILDINGS


OZONE
ELECTRICAL
RESERVOIRS
FILTERS
ADMIN.
CHEMICAL AND OZONE
GENERATION BUILDINGS


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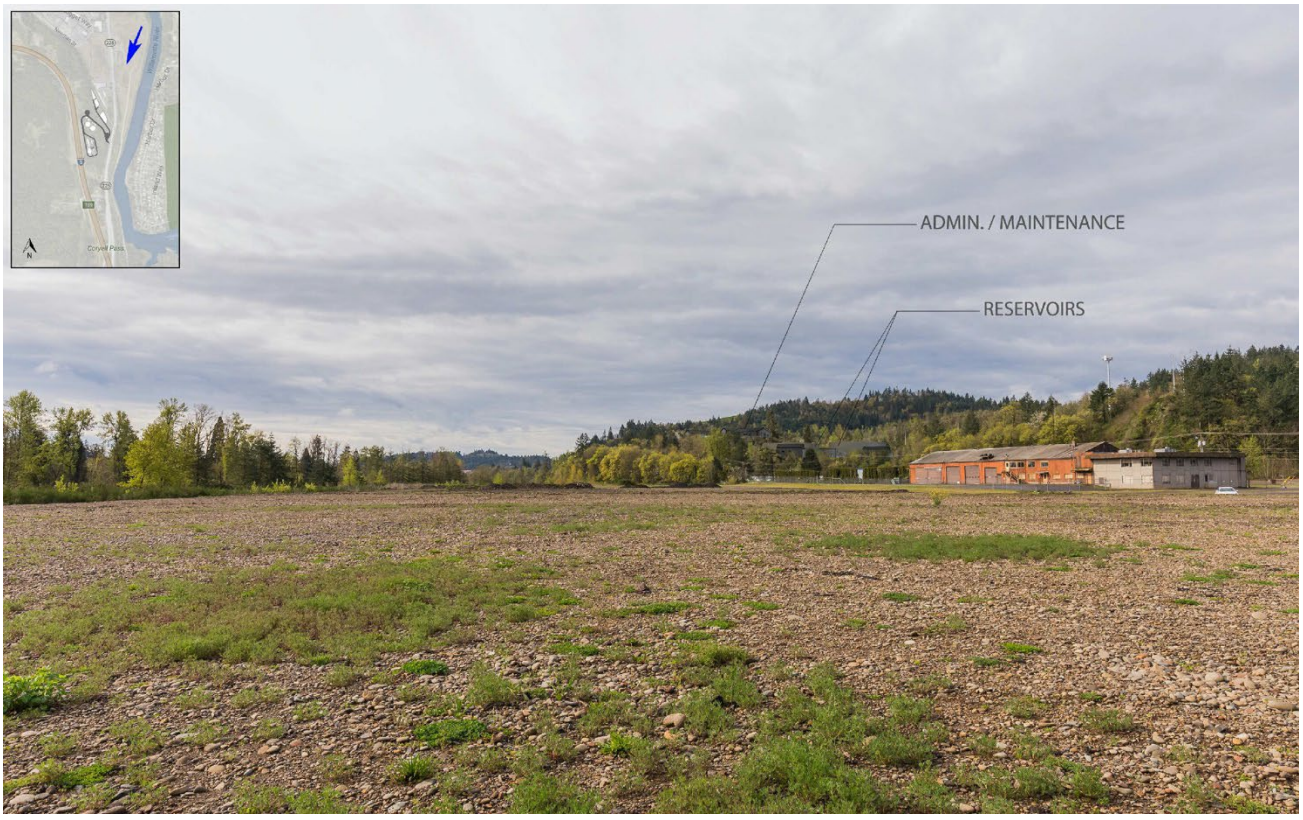
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