Capital Projects Briefing

Regional Water Quality Committee

October 1, 2025

King County | Wastewater Treatment

Capital Budget Highlights

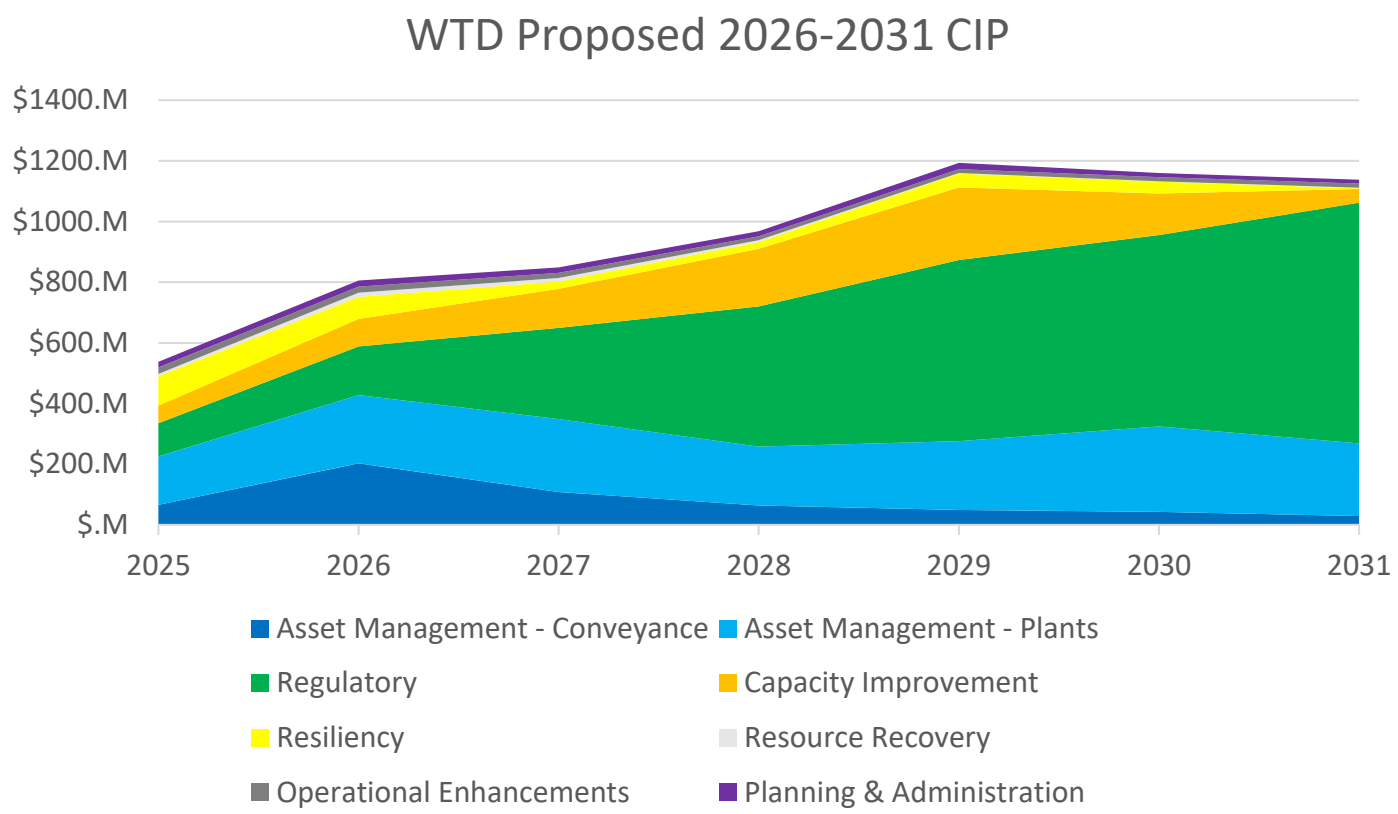
Continued significant ramp up of capital program to meet needs in the 2026 Sewer Rate. Major cost drivers for Wastewater Treatment Division's (WTD) proposed budget include:

- Meeting regulatory requirements
- Reaching critical asset management (renewal and replacement) goals
- Addressing growth in the region

The proposed 6-year Capital Improvement Program (CIP) aligns with the adopted 2026 sewer rate.

Key Appropriations

- **Mouth of the Duwamish Wet Weather Facilities**
- **East Ship Canal Wet Weather Facilities**
- **Combined Sewer Overflow (CSO) Supplemental Compliance and Corrective Action**
- **South Park Conveyance Rerouting to Rainier Vista Interceptor**



Key Project Changes compared to 2025 Adopted Budget

- **Elliott West Wet Weather Treatment Station:** Estimate at completion increased ~$75M as project moved from 15% to 30% design, project scope refined, and contractor overhead and delivery costs were updated. WTD anticipates further increases during 2027 proposed sewer rate process.

- **Division Wide Offsite Level Controls and Communication Upgrade:** Programmatic cost estimate increased ~$320M to $500M upon completion of programmatic alternatives analysis driven by increased scope complexity. Project will be phased to reduce near-term impacts on sewer rate.

- **South Plant Electrical Improvements:** Programmatic charter level cost estimate increased ~$170M to $240M from initial conceptual cost estimate based on additional identified scope and updated material pricing.

- **Sammamish Plateau Diversion:** Cost estimate updated for alternatives analysis increased ~$160M to $270M from initial cost estimate based on increased scope definition of pipe alignment.

Key Cash Flow Changes since Adoption of 2026 Sewer Rate

- **Mouth of Duwamish Wet Weather Facilities** – Shifted $550M of costs (net) into 2032-2034
- **East Ship Canal (University/Montlake) Wet Weather Facilities** – Increased ~ $200M
- **South Treatment Plant Secondary Aeration Modified Ludzak Ettinger Retrofit** – Shifted $85M beyond 6-year CIP
- **Conceptual regulatory projects** – Deferred ~ $165M beyond the 6-year CIP for these projects
- **Eastside Interceptor Section 8** – $104M reduction from deferral based on asset condition
- **West Point Treatment Plant Critical Gate Refurbishment** – Deferred $87M by extending program timeframe to balance funding in the short-term.
- **Division Wide Level Controls** – Deferred $60M by extending program timeframe to balance funding in the short-term
- **Lake Hills and NW Lake Sammamish –** Increased $90M due to updated cost estimates

Capital Projects Overview

Mouth of Duwamish Wet Weather Facilities

Overview

- **Objective:** Control overflows from five combined sewer overflow (CSO) outfalls at the mouth of the Duwamish River.
- **Project Scope:** Construct wet weather facilities to meet regulations by controlling combined sewer overflows from areas in West Seattle, SODO, and Beacon Hill
- Project required to be complete by 2034 under Consent Decree with U.S. Environmental Protection Agency (EPA) and Washington state Department of Ecology.
- Draft Engineering Report submitted to Ecology on September 2, 2025, and on track to meet the December 31, 2026, submission deadline.
- **Benefit:** Project will prevent ~430 million gallons of polluted water from entering Elliott Bay and the Duwamish River every year on average.

East Ship Canal (University / Montlake) Wet Weather Facilities

Overview

- University Regulator Station (RS), Montlake RS and Belvoir Pump Station (PS) outfalls do not meet the state Combined Sewer Overflow (CSO) control standard.
- **Objective:** Control the University RS, Montlake RS and Belvoir PS CSO outfalls to the CSO control performance standard.
- **Project Scope:** Conceptual project scope anticipates construction of a large storage facility around the University / Montlake area and an upgrade to the Densmore Pump Station.
- Project required to be complete by 2037 under Consent Decree with EPA and Ecology.
- **Benefit:** Reduction of combined stormwater and sewage entering the Ship Canal.

Division-Wide Offsite Level Control and Communication Upgrade

Overview

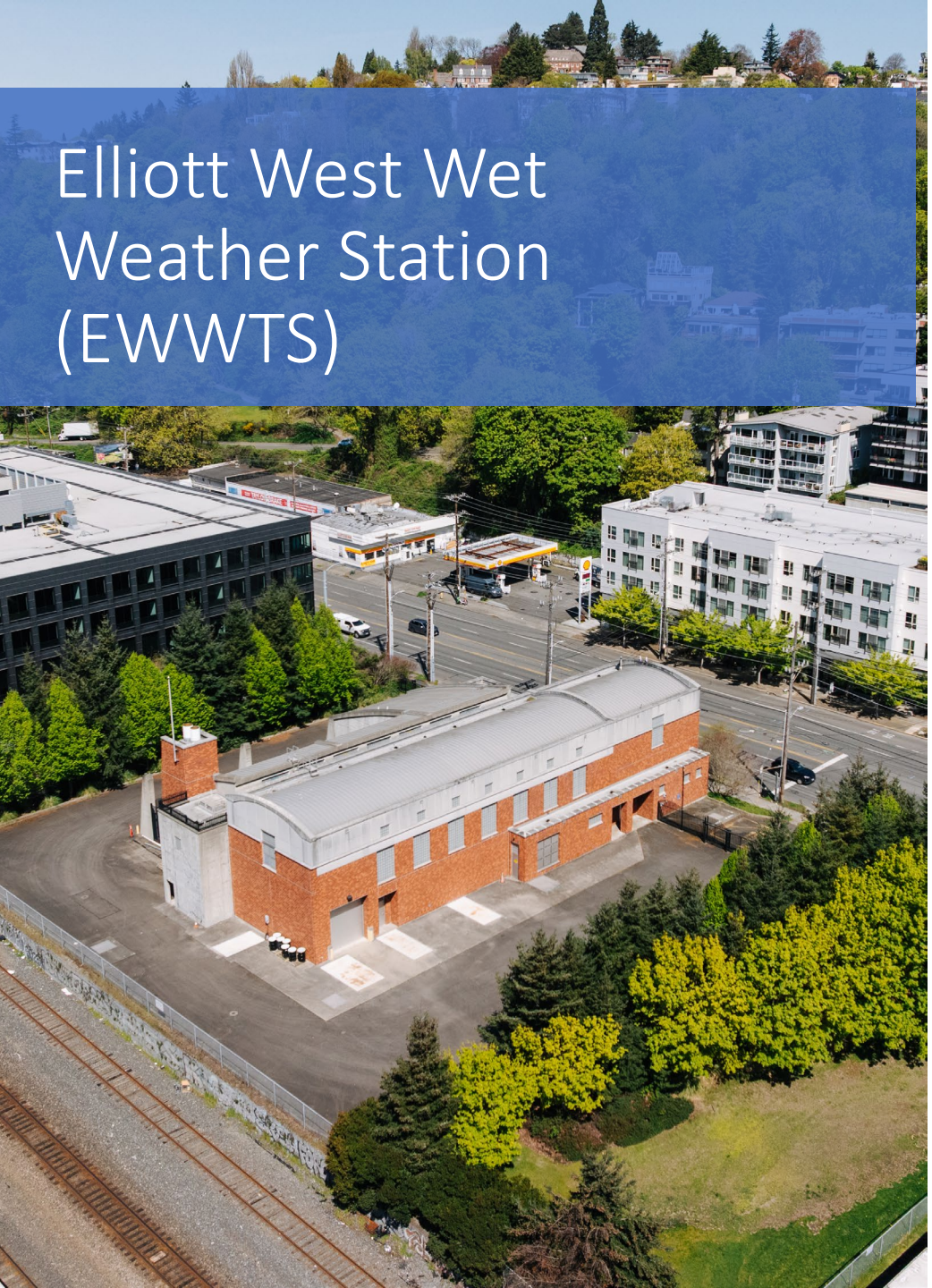
- **Objective:** Bring all offsite facility wet well level controls and communications equipment up to modern design standards.
- Wet well level controls at offsite facilities help prevent overflows and keep systems running efficiently.
- No direct replacements are available for the existing equipment and WTD faces increasing challenges to find parts for the equipment.
- **Project Scope:** Programmatic upgrade of obsolete level controls and communication systems at approximately 70 facilities.
- **Benefits:** Improved system reliability, maintenance, and operability.

West Point Treatment Plant Electrical Improvements

Overview

- **Objective:** Modernize and enhance electrical infrastructure.
- Electrical assets installed in West Point's original construction (1960s) and secondary treatment expansion (1990s) are beyond or near end of expected life.
- **Project Scope:** Replace approximately 330 aged electrical assets.
- **Benefits:**
  - Risk reduction by replacing aged assets.
  - Enhances system resiliency by reducing single points of failure and relocating critical assets out of flood-prone areas.

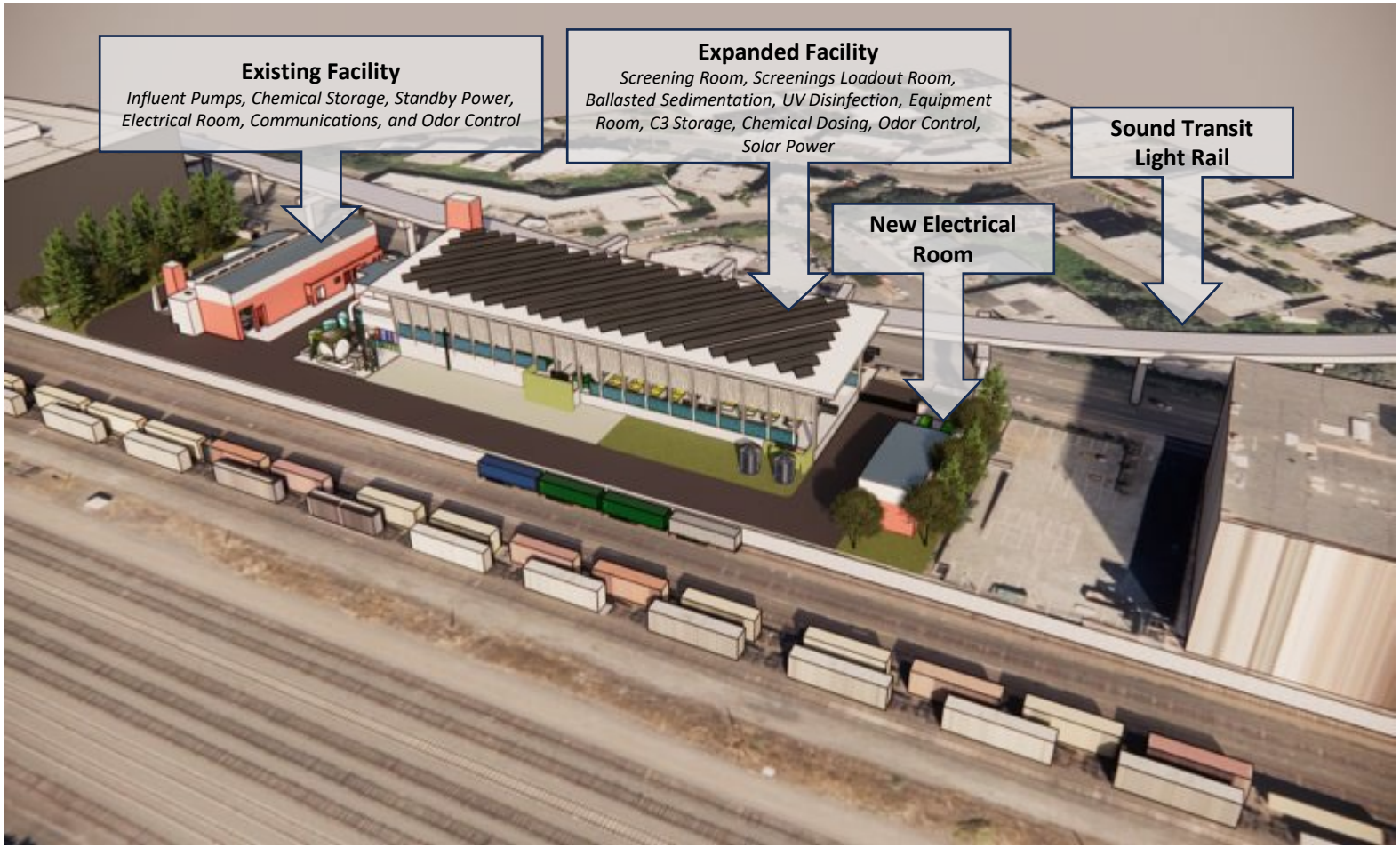
Elliott West Wet Weather Station (EWWTS)



Overview

- **Objective:** Bring EWWTS into full compliance with discharge permit and water quality standards.
- Effluent quality not always compliant with discharge permit since facility completed in 2005.
- **Project Scope:** Upgrade treatment at EWWTS to meet permit standards.
- 2024 discharge permit from Ecology includes compliance schedule with interim milestones, targeting full completion by December 2031.
- **Benefits:**
  - Ability to meet stricter environmental standards and adapt to changing climate.
  - Compliance with discharge permit.

EWWTS Project Overview



EWWTS Project Team is:

- WTD communicated to Ecology concern with meeting completion requirement of December 2031.
- Developing documentation to support request to Ecology for extending project schedule.
- Anticipating presentation to Ecology in October 2025 and resubmittal of Engineering Report to Ecology in November 2025

Market Trends in Capital Delivery

Market Conditions at a Glance

Continuing to experience **high cost** but **less volatility** within the industry.

Growth in the in Seattle Metro area construction sector remains **at an all time high.**

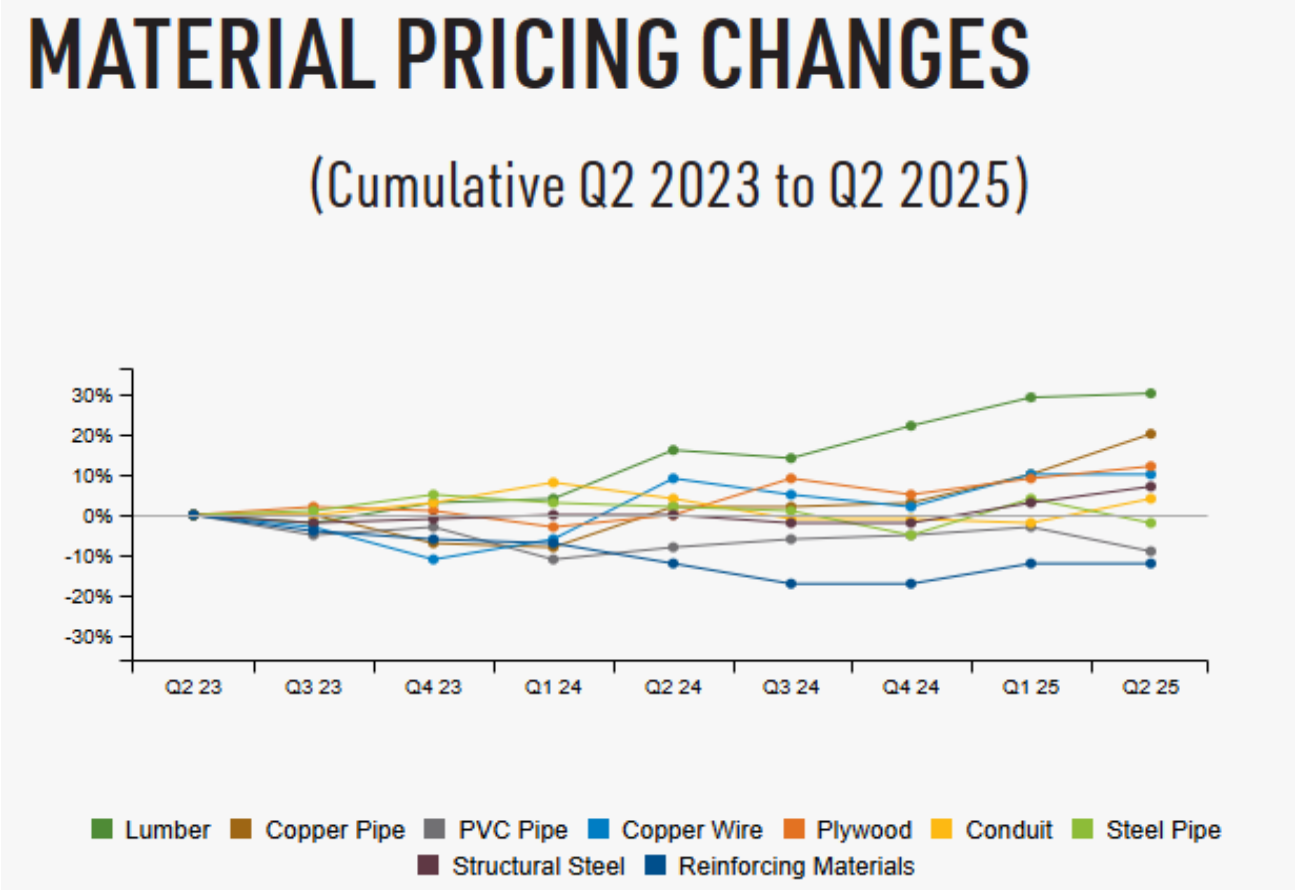
Local bidding environment reflects construction industry's overall trend **limited labor capacity.**

Uncertainty due to tariffs and the fear of record inflation (again) may lead to speculation and **possible volatility** (again).

These market conditions result in **increased construction costs and O&M costs.**

Potential Tariff Impacts on WTD Projects

- 50% tariff on imported steel and aluminum (effective June 4, 2025), plus 25% tariff on most imports from Canada and Mexico, including lumber, cement, and most construction materials
- 30% total tariff on Chinese imports, affecting equipment, electrical components, and fixtures
- 10% baseline tariff on all countries
- WTD issued interim guidance on potential tariff impacts in early 2025.
- Whenever feasible, project teams consider options to reduce the reliance on high-tariff regions by allowing alternative sourcing options.



Q & A

King County | Wastewater Treatment