City of Stayton – Summary of USACE Presentation
Date: Wednesday, May 28, 2025 | **Time:** 6:00–8:00 PM
Location: Virtual

City of Stayton Representatives Present:

- Mayor: Brian Quigley
- City Manager: Julia Hayduk
- Interim Public Works Director: Barry Buchanan, P.E.

---

1. Background and Project Overview

Detroit and Big Cliff Dams were constructed in 1953 as part of the U.S. Army Corps of Engineers' (USACE) Willamette Valley Project to provide the following public benefits:

- Flood control
- Hydropower generation
- Navigation
- Water quality management
- Irrigation
- Recreation
- Fish and wildlife protection
- Potable water supply

2. Reservoir Storage Zones

The dam's storage is functionally divided into the following zones:

- **Dead/Inactive Storage:** Bottom zone; top elevation corresponds to the minimum power pool
- **Power Storage (25'):** Ends at the minimum conservation/flood pool level
- **Winter Flood Pool (Seasonal):** Varies from empty to full during the wet season
- **Summer Conservation Pool (Seasonal):** Varies from full to empty over the dry season (range: 113')
- **Full Pool:** Maximum elevation

3. Flood Event Summary (April 2–19, 2025)

- Detroit Dam alone prevented an estimated **$8 million** in flood damage
- The full Willamette Valley dam system (13 dams total) is estimated to have prevented **$1.8 billion** in damage during the same event

---

4. 2019–2024 USACE Operations & Maintenance Environmental Impact Statement (EIS)

- The final EIS for the 30-year operations and maintenance of the 13 Willamette Valley dams was submitted in **April 2025**
- It includes proposed changes to both **operational practices** and **physical dam infrastructure**

However, due to recent federal inquiries—specifically regarding the potential phase-out of hydropower operations—and in response to the **National Marine Fisheries Service (NMFS) Biological Opinion (BiOp)**, which includes a **Deep Drawdown** at Detroit, the USACE is now undertaking a **Supplemental EIS (SEIS)**. This review will consider compliance with:

- The **Endangered Species Act (ESA)**
- Other applicable federal treaties, laws, and regulations
- Additional input from **water purveyors**, including requirements to maintain **potable water supply operations**

---

5. Deep Drawdown Proposal (Detroit Dam)

To facilitate fish passage downstream via the **Regulating Outlet (RO)**—which is below both the hydropower and spillway outlets—USACE proposes:

- **Maximum Drawdown:** 55 feet below the winter pool level (~30 feet lower than historical minimums)
- **Target Elevation:** 1,395 feet
- **Exposed Sediment Area:** Estimated at 0.8 square miles (for comparison: Green Peter = 4.5 sq. miles)
- **Turbidity Increase Potential:** Estimated at 101% (Green Peter: 337%)
- **Drawdown Timing:** Initiated in December, phased over multiple years
- **Controls:** Drawdown governed by turbidity thresholds measured downstream; stop-orders issued accordingly

---

6. Some Key Questions to be Raised by the City

1. What is the current elevation of accumulated sediment relative to the RO intake?
2. What specific turbidity thresholds will trigger cessation of the drawdown?
3. Where will turbidity monitoring stations be located?
4. Who is responsible for determining, monitoring, and enforcing turbidity-based stop criteria?

5. What resources or support will be provided to municipal water suppliers in advance of the drawdown to mitigate potential turbidity impacts?
6. What is the adjudication process for mitigation or compensation measures?

---

7. Next Steps

- Draft the City's formal response to the USACE SEIS scoping request
- Engage legal counsel (Jennifer Gates, Perl Legal Group PC) for review and strategic guidance
- File comments and documentation with USACE in accordance with published timelines
- Confirm the next meeting of the newly formed City working group for this issue
- Continuing engagement with other water purveyors in the region
- Work season(s) with Council and legal advisor to confirm future strategies
- Work to establish worst case mitigation approach and implementation strategies

---

Prepared by:
Barry Buchanan, P.E.
Interim Public Works Director
City of Stayton
Date: June 2, 2025