#### CLACKAMAS COUNTY BOARD OF COUNTY COMMISSIONERS

Sitting as the Governing Body of Water Environment Services

#### **Policy Session Worksheet**

Presentation Date: April 21, 2020

Approximate Start Time: <u>11:30am</u>

Approximate Length: 30 Minutes

Presentation Title: Tri-City Water Resource Recovery Facility Outfall Project

Department: Clackamas Water Environment Services (WES)

Presenter: Greg Geist, WES Director

Other Invitees: Lynne Chicoine, Jeff Stallard and Shelly Parini

### WHAT ACTION ARE YOU REQUESTING FROM THE BOARD?

WES is seeking approval from the Board of County Commissioners to move forward with an Oregon City ballot measure to obtain support for the Tri-City Water Resource Recovery Facility Outfall Project (Outfall Project) from the citizens of Oregon City.

An Oregon City ordinance prevents the granting of an easement and construction of a permanent structure on city park property, other than for recreational purposes or park maintenance, without a vote.

The proposed direction is to have the City of Oregon City refer a measure requesting access to voters on the November 3, 2020 ballot. A "yes" vote would allow WES access to accommodate these improvements.

### **BACKGROUND & ISSUES:**

**History:** The current outfall from the Tri-City Water Resource Recovery Facility (Tri-City WRRF) was constructed in 1984 and is nearing capacity during peak wet weather events. In May of 2019 the Board approved the new Outfall Project which will be large enough to provide safe, reliable service for decades to come. The existing outfall is structurally sound and will remain in place for use when needed. This will create redundancy and build resiliency for WES' service area communities.

**Outfall Project Location:** The new outfall will run from the Tri-City Facility parallel to I-205 and under the OR 99E off ramp. It will continue under Jon Storm Park and discharge into the Willamette River just north of the I-205 Abernathy Bridge. It will use gravity to convey the water from the treatment facility, so it will not require energy to pump water.

**Issue:** A vote of the people is required for the Outfall Project to have access under Jon Storm Park. The proposed direction is to have the City of Oregon City refer a measure requesting access to the voters on the November 3, 2020 ballot. A "yes" vote would allow WES access to accommodate these improvements.

Construction impacts will be brief and temporary, lasting only a few months. Trenchless technologies are being explored to minimize impacts to the adjacent properties and parks. The project will include area enhancements such as native landscaping, riverbank restoration, trails and other identified needs within the City of Oregon City's park plans.

**Schedule**: Pending ballot approval, construction is anticipated in 2023 and 2024 — with operation starting in 2024.

### FINANCIAL IMPLICATIONS:

The budget for the project is estimated at \$21,500,000 and includes all project management and administration costs, engineering design and construction services, and construction.

Are these items in your current budget? YES

What is the funding source? FY19-20 WES Budget. No general fund dollars will be used for this project.

#### STRATEGIC PLAN ALIGNMENT

This aligns with several of WES' Strategic Goals and is identified in the 2020-2025 Capital Improvement Plan. It is also an identified project in WES' Collection System Master Plan. This project will build a pipeline that is expected to provide the necessary capacity to serve the Tri-City WRRF through 2080.

#### LEGAL/POLICY REQUIREMENTS:

WES will need to ensure compliance with all state and local legal requirements for placing a measure on the ballot.

### PUBLIC/GOVERNMENTAL PARTICIPATION:

Discussed with WES Advisory Committee. Hired JLA to help create a comprehensive Public Involvement and Outreach Plan. The Plan will guide outreach and communications for the WES Tri-City Water Resource Recovery Outfall Project. It will have a particular focus on WES ratepayers, Oregon City voters and the Oregon City Commission, as well as special interest stakeholder groups, such as recreational water users, environmental groups, and impacted property owners. Public engagement efforts will create opportunities for impacted and interested stakeholders to provide input that informs the permitting, design and mitigation process.

### **OPTIONS:**

- 1. Approval to seek support from the Oregon City Commission of an Oregon City ballot measure that would authorize WES to construct a new outfall under Jon Storm Park.
- 2. Take no further action on this request right now.

### **RECOMMENDATION**:

Staff recommends the Board Approve Option 1) Authorization to seek approval and support from the Oregon City Commission of an Oregon City ballot measure that would authorize WES to construct a new outfall under Jon Storm Park.

### ATTACHMENTS:

Power Point Public Involvement Plan Fact Sheet

SUBMITTED BY:

Division Director/Head Approval

Department Director/Head Approval \_\_\_\_GG\_\_\_\_\_

County Administrator Approval \_\_\_\_\_

For information on this issue or copies of attachments, please contact Lauren Haney at 503-742-4591

### SPRING 2020 **Tri-City Water Resource Recovery Facility Outfall Project**



### About Clackamas Water Environment Services (WES)

WES produces clean water and protects water quality for more than 190,000 people living and working in Clackamas County. WES operates and maintains five resource recovery facilities, 23 pumping stations and more than 340 miles of pipes that carry sewage from your home to our treatment facilities, where it is thoroughly cleaned and returned to the Willamette River.



### **Project Description**

The current outfall from the Tri-City Water Resource Recovery Facility (Tri-City WRRF) was constructed in 1984 and is nearing capacity during peak wet weather events.

In 2019 the Clackamas County Board of County Commissioners approved the new Outfall Project which will be large enough to provide safe, reliable service for decades to come. The existing outfall is structurally sound and will remain in place for use when needed. This will create redundancy and build resiliency for our communities.

### Why is it needed?

The new outfall will run from the Tri-City Facility parallel to I-205 and under the OR 99E off ramp. It will run under Jon Storm Park and discharge into the Willamette River just north of the I-205 Abernathy Bridge. It will use gravity to convey the water from the treatment facility, so it will not require energy to pump water.

An improved river discharge assembly, called a diffuser, will be built at the end of the outfall. This diffuser will be located at a particularly deep spot in the river, for better mixing that will enhance water quality.



### SPRING 2020 **Tri-City Water Resource Recovery Facility Outfall Project**



# What will it cost and how will it be paid for?

The project is fully funded as part of WES's Capital Improvement Plan. The estimated cost is \$21,500,000.

# What are the impacts to the river and local economy?

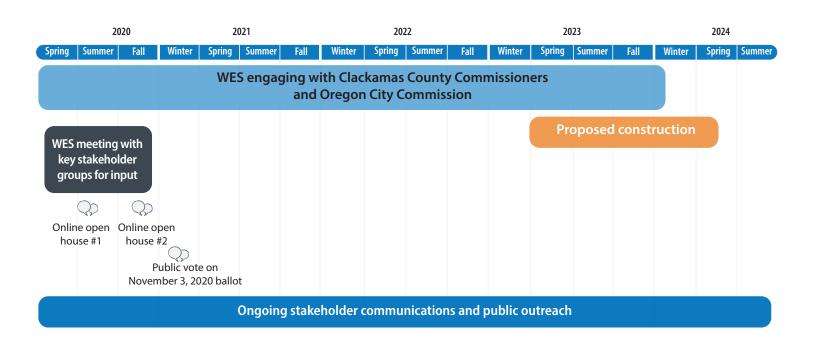
- Wastewater treatment, an essential service for the health and well-being of our community, will continue without interruption.
- Construction impacts will be brief and temporary, lasting only a few months. Trenchless technologies are being explored to minimize impacts to the adjacent properties and parks.
- Once completed, the outfall will operate without affecting other river uses.
- The outfall will be upstream of the current outfall, further away from a cold-water refuge for migrating fish at the mouth of the Clackamas River.
- The project will include area enhancements such as native landscaping, riverbank restoration, trails and other identified needs within the City of Oregon City's park plans.

### Schedule

Clackamas Water Environment Services is seeking support for this project from the citizens of Oregon City. A proposal is planned to be on the November 3, 2020 ballot. Pending ballot approval, construction is anticipated in 2023 and 2024 — with operation starting in 2024.

WES will consult with potentially impacted parties and other key stakeholders to minimize construction impacts to natural habitats and recreational uses. See the schedule below for more information.

### For more information, contact: Shelly Parini Clackamas Water Environment Services sparini@clackamas.us 503-341-3395





Clackamas Water Environment Services Tri-City Water Resource Recovery Facility Outfall Project Public Involvement and Outreach Plan Executive Summary *April 2020* 

Tool/Activity	Description	Target Audience	Target for Completion
Stakeholder database and comment log	The database will be used for mailing materials, public event notification and outreach materials; plus tracking comments.	WES and JLA	Ongoing
Informational fact sheet	The informational fact sheet will be available on the website, shared during meetings with key stakeholders, and at public events.	Stakeholders and general public	April 2020
Project website	The project website will include a project overview, timeline, frequently asked questions document, contact information, and an educational video.	Stakeholders and general public	May 2020
Targeted Stakeholder Engagement	Key stakeholders, like the Oregeon City PRAC, neighboring businesses and area recreationist will be interviewed.The purpose of the interviews is to provide an opportunity for stakeholders to ask questions and learn more about issues that matter to them.	Targeted key stakeholder groups, as identified by WES	Spring/ summer 2020
Frequently Asked Questions sheet	An FAQ sheet will be created and posted to the project website.	Stakeholders and general public	Spring/ summer 2020
Educational Video	An educational overview video will convey the project purpose, need and benefits. The video may also communicate how various project challenges will be mitigated, such as wildlife habitat, construction methods, etc.	Stakeholders and the general public	Spring/ summer 2020
Newsletter articles	Two newsletter articles will be prepared for publication.	General public	Summer and fall 2020
Virtual Open Houses/ Public Meetings	Up to two virtual public meetings will be conducted in conjunction with the ballot measure process.	Broader public, impacted stakeholders and partners	Summer and fall 2020



# Tri-City Water Resource Recovery Facility Outfall Project

Greg Geist, Director April 21, 2020



# **Project Review**

- The current outfall from the Tri-City Water Resource Recovery Facility (TCWRRF) was constructed in 1984 and is nearing its capacity during wet weather events.
- The solution is to build a new outfall which will be large enough to provide potential capacity through 2080.
- In May 2019, the Board approved a contract with CH2M Hill (Jacobs), to design the new outfall.





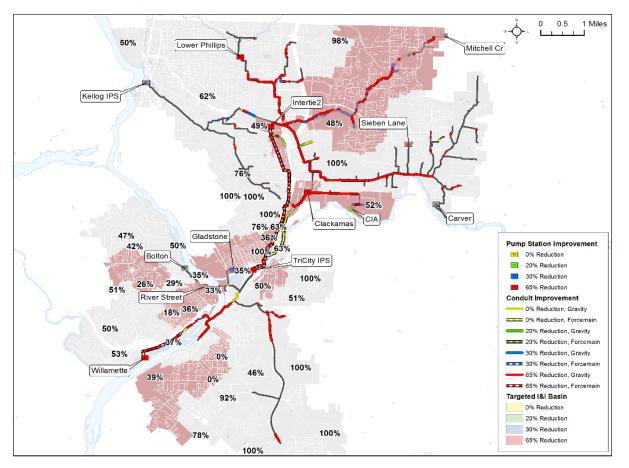
# Issue

 In order to move forward with placing the outfall in the preferred alignment through Jon Storm Park, we need the support of the Oregon City voting public through a ballot measure.



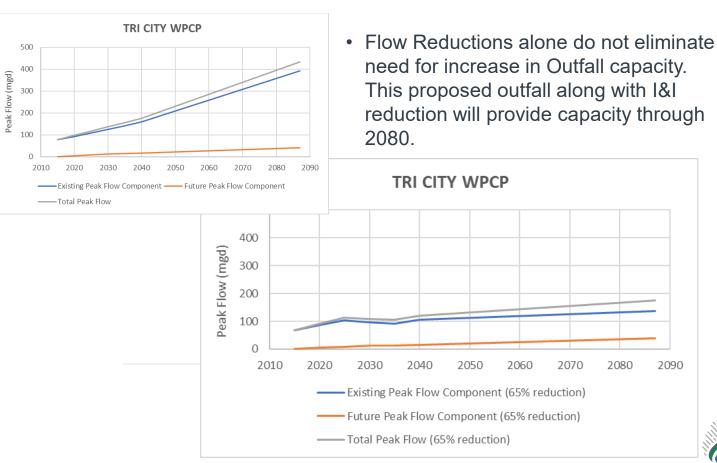


# Tri City WRRF Outfall Driver



WATER ENVIRONMENT SERVICES

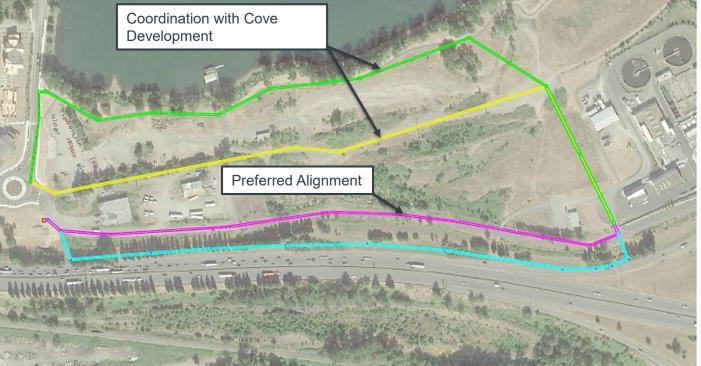
## Wet Weather Flow Projection at Tri-City WPCP





# **Outfall Routing Study**

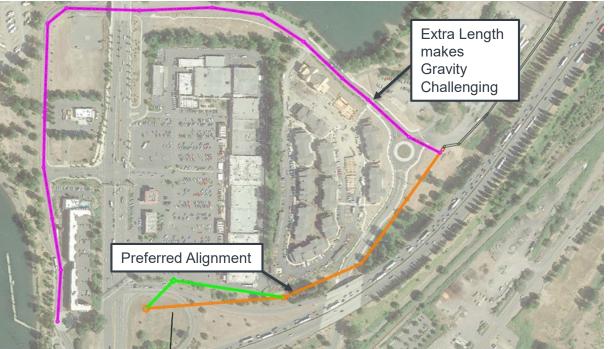
- First Step in Project was to perform a Routing Study.
- The alignment was broken into three pieces starting at the plant.





## **Outfall Alternatives Evaluation**

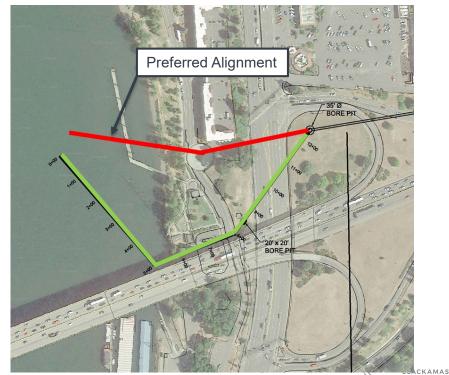
- Study looked for fatal flaws with alignments and potential synergy with other planned projects along the corridor. (ODOT Bridge and Cove Development).
- Construction methods will include Traditional Open Cut, but a large amount Tunneling.





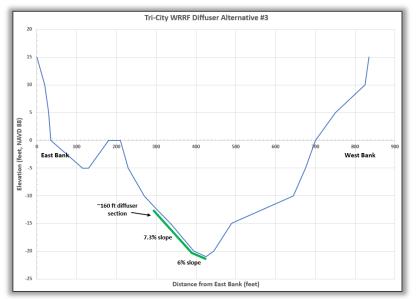
## **Discharge Location and Route**

- Alignment with Abernathy Bridge Project evaluated closely to minimize construction impacts to Jon Storm Park.
- ODOT Alignment was a less cost effective and included a uncertain schedule.

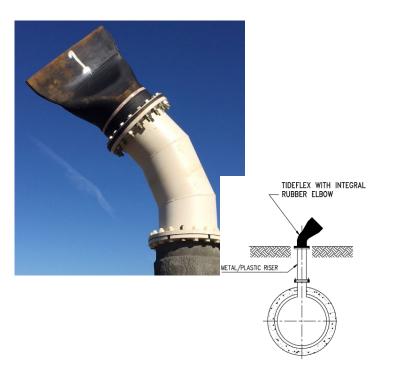




### **In Water Section**

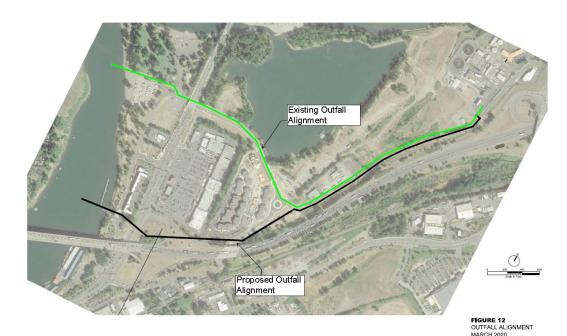


 Portion of pipeline above river bottom is just the diffuser valve.





## Routing Study Recommended Alignment Recommendation and Next Steps



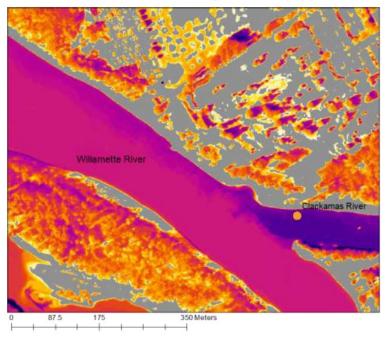
- Gather additional Geotechnical Data on the preferred route to confirm construction approach.
- Finalize Size (90") and Pipe Material (FRP).
- Develop a permit strategy.
- Ask for voter support.

TRI CITY WWRE OUTFALL



### Cold Water Refuge: Clackamas and Willamette River

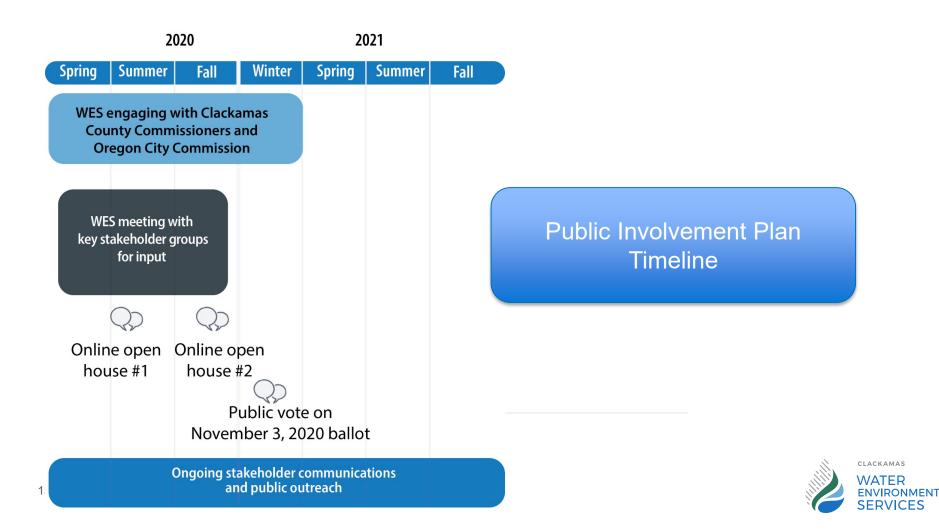
Clackamas River 1009 cfs (NorWeST)



The Clackamas River is the largest cold water refuge in the lower Willamette River Basin.

This image shows the cold water plume created at the confluence of the Clackamas and Willamette Rivers.







# Recommendation

• Approval to seek support from the Oregon City Commission of an Oregon City ballot measure that would authorize WES to construct a new outfall under Jon Storm Park.

