

### working for clean rivers

## CBWTP Outfall Diffuser Improvements (BES Project Number E06923)

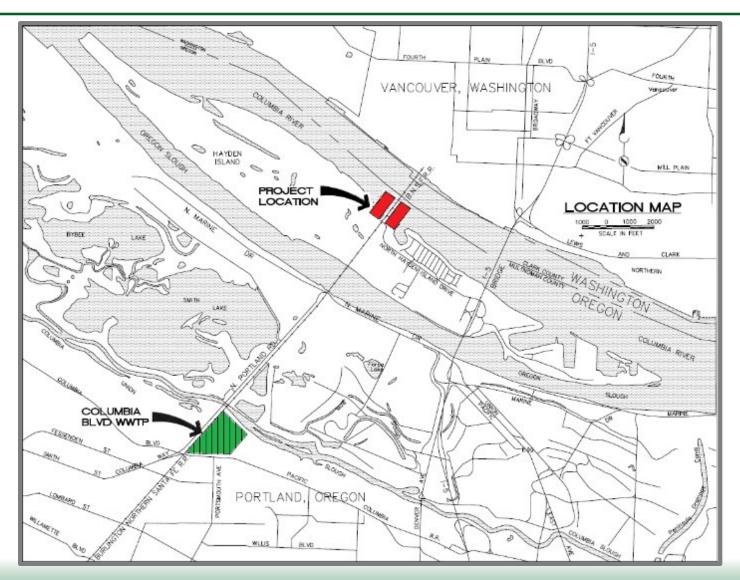
Philip McCormick | Project Manager Paul Suto | Engineering Manager January 27, 2021



MICHAEL JORDAN, DIRECTOR

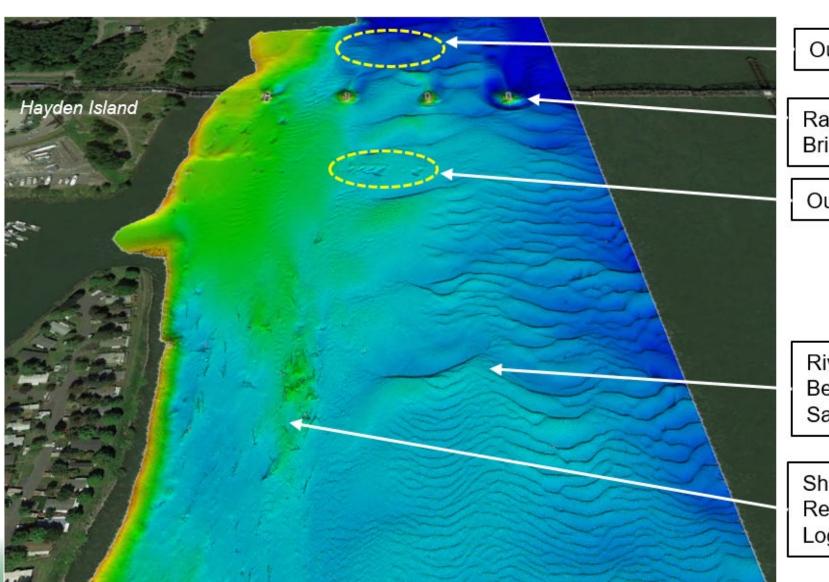


#### **Project Location**





#### **Project Location**



Outfall 001

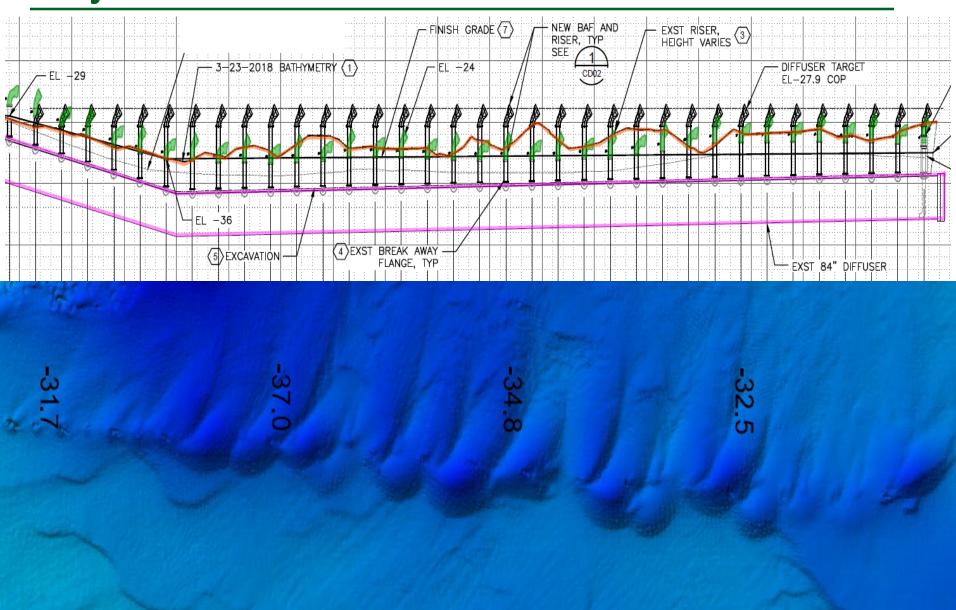
Railroad Bridge

Outfall 003

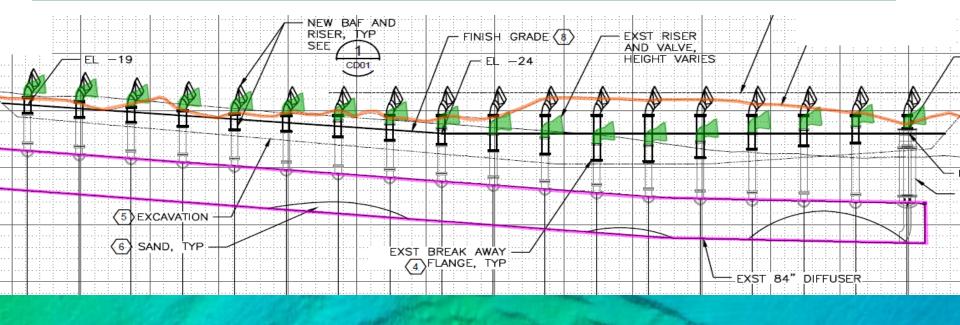
River Bedform Sand Waves

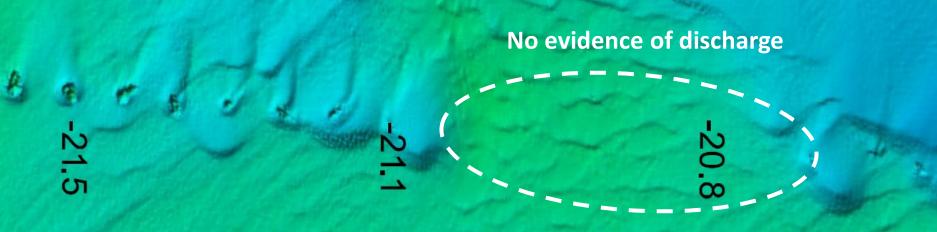
Shallow Region with Logs

#### **Project Overview – Outfall 1**



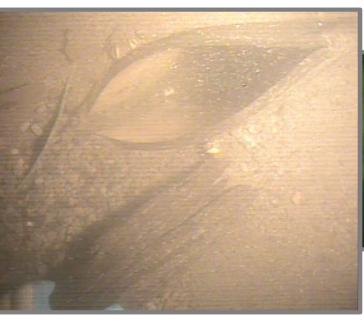
#### **Project Overview - Outfall 3**





#### **Project Objectives**







- Restore risers and diffuser ports to provide full discharge capacity.
- Improvements to increase resiliency and reduce probability of future sand burial.
- Improved dilution performance to meet Department of Environmental Quality permits and water quality standards for future effluents.

#### **Project Budget and Schedule**

- <u>Total</u> project cost at completion is estimated at \$7,151,000.
- The estimated <u>construction</u> contract cost is \$5,500,000.
- The estimate includes 5% contingency.
- Project Schedule:

Project Phase	Start	Finish
Design	April 2017	Dec 2020
Advertise	Feb 2021	June 2021
Construction	Aug 2021	Feb 2022
Warranty / Closeout	Mar 2022	Mar 2024



#### **Questions**

# Thank you

