Portland Harbor Stormwater Update & Proposed City of Portland Outfalls Source Control Decision

DEQ NWR Cleanup Program &
City of Portland Environmental Services
March 11, 2020

State of Oregon Department of Environmental Quality

Environmental Services City of Portland
Ted Wheeler, Mayor
Michael Jordan, Director

City Outfalls Source Control Decision – Public Notice Process:

- Overview presentations on proposed decision at PH Technical Coordinating Team & Community Forum/CAG.
- Proposed SCD Staff Report will be published for a 30 day public comment period (aiming for end of March 2020).
- City reports and DEQ staff available for questions during review period.
- DEQ will consider all comments received prior to finalizing the City OFs SCD Staff Report.
- Relevant comments will get responses, as warranted.

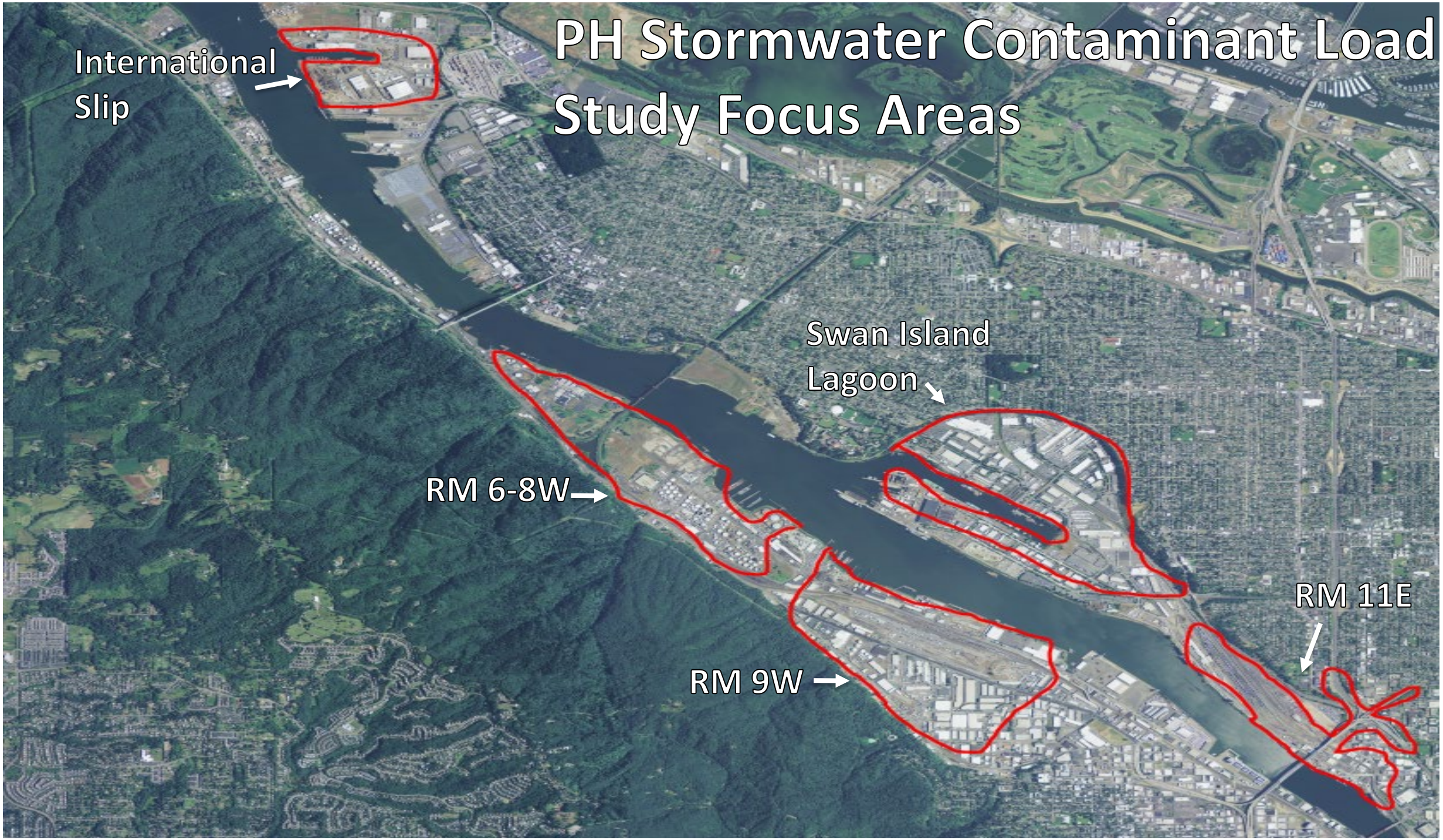
PH stormwater strategy – Who, what, why, when & how?

- **1999** – City of Portland PH Outfalls Investigation begins
- **Dec 2000** – Portland Harbor listed as Superfund site
- **Aug 2003** – City-DEQ Intergovernmental Agreement on OFs
- **Dec 2005** – JSCS finalized with App D: Framework for PH Stormwater Screening Evaluations
- **Apr 2005-Mar 2009**– DEQ SW work group → PH SW Group formalized (DEQ, EPA, City, GSI) → DEQ Guidance for Evaluation of SW Pathway at Upland Sites
- **July 2010** – PH SW Group settles on these 3 components as the overall PH SW strategy
- **Oct 2010** – DEQ updates Guidance with App E curves tool
- **Oct 2015** – DEQ updates curves tool
- **2017** – DEQ PH SW contaminant load study
- **Mar 2020** – PH SW strategy update & proposed City OFs SCD

PH SW Strategy Components

1. Control of upland legacy SW sources
2. Portland Harbor stormwater permit for on-going discharges
3. Monitoring and adaptive management

PH Stormwater Contaminant Load Study Focus Areas



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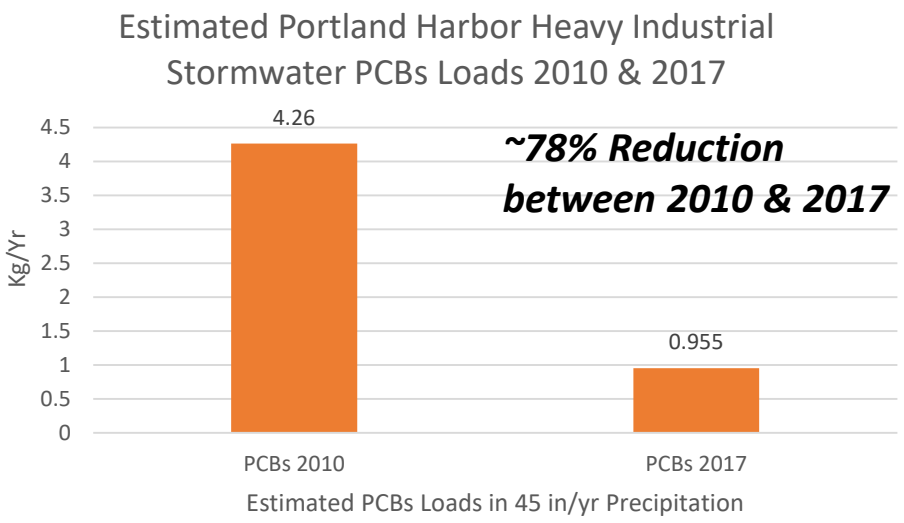
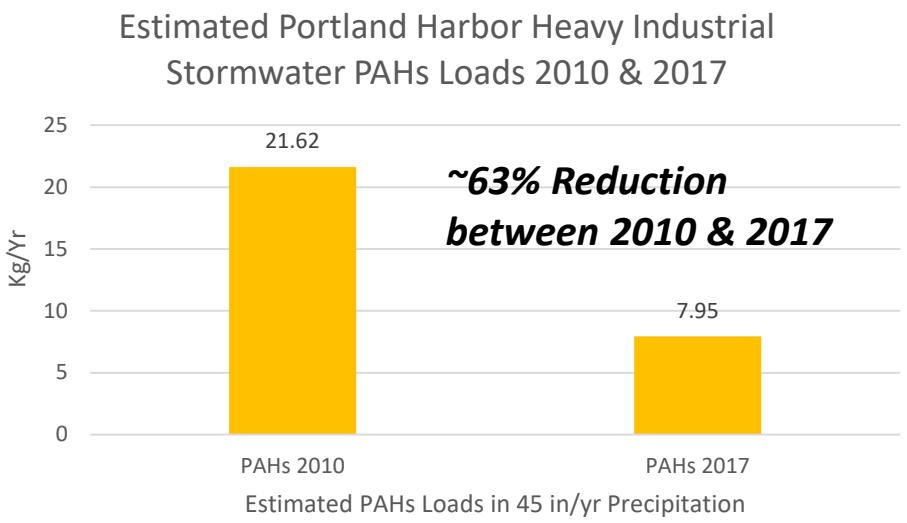
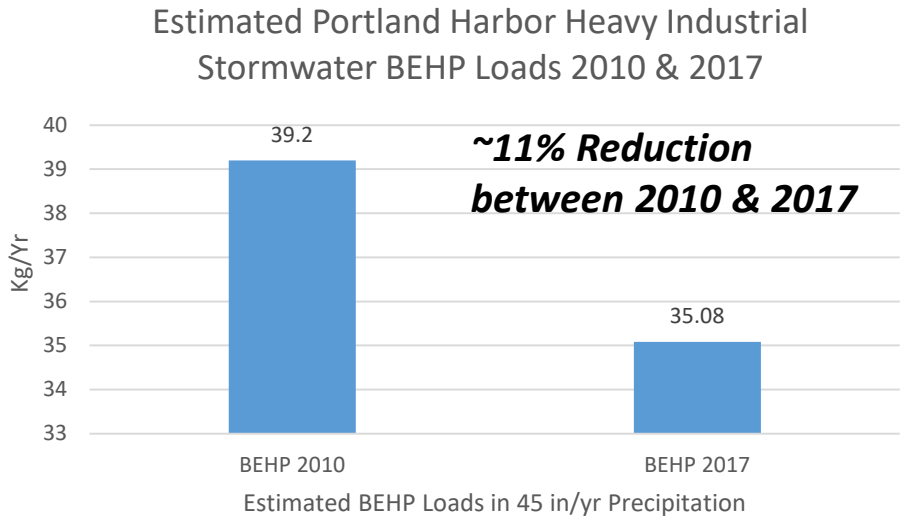
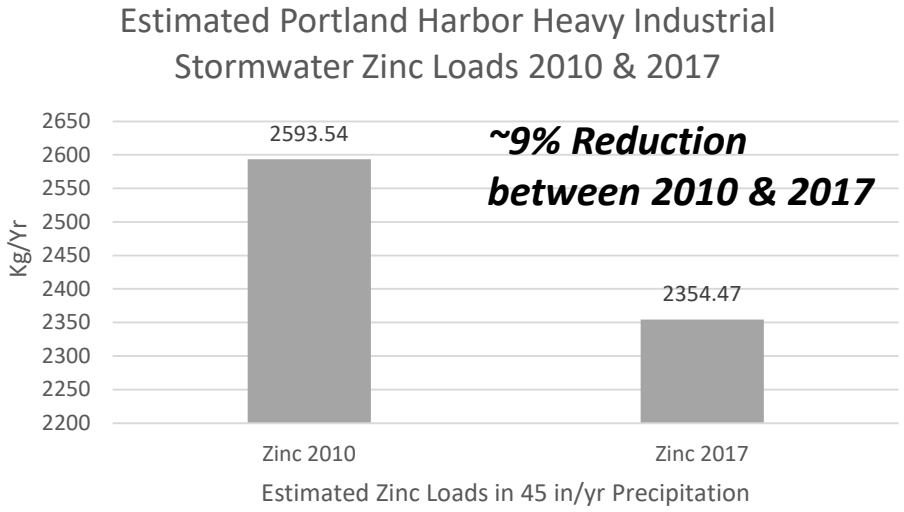
Effectiveness of PH Stormwater Strategy









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What is the goal of Source Control?

The process of identifying, evaluating and controlling sources of contamination that may reach the Willamette River.... Upland source control should be completed to the extent practicable prior to sediment cleanup in the Portland Harbor Superfund Site.

-Portland Harbor Joint Source Control Strategy, 2005

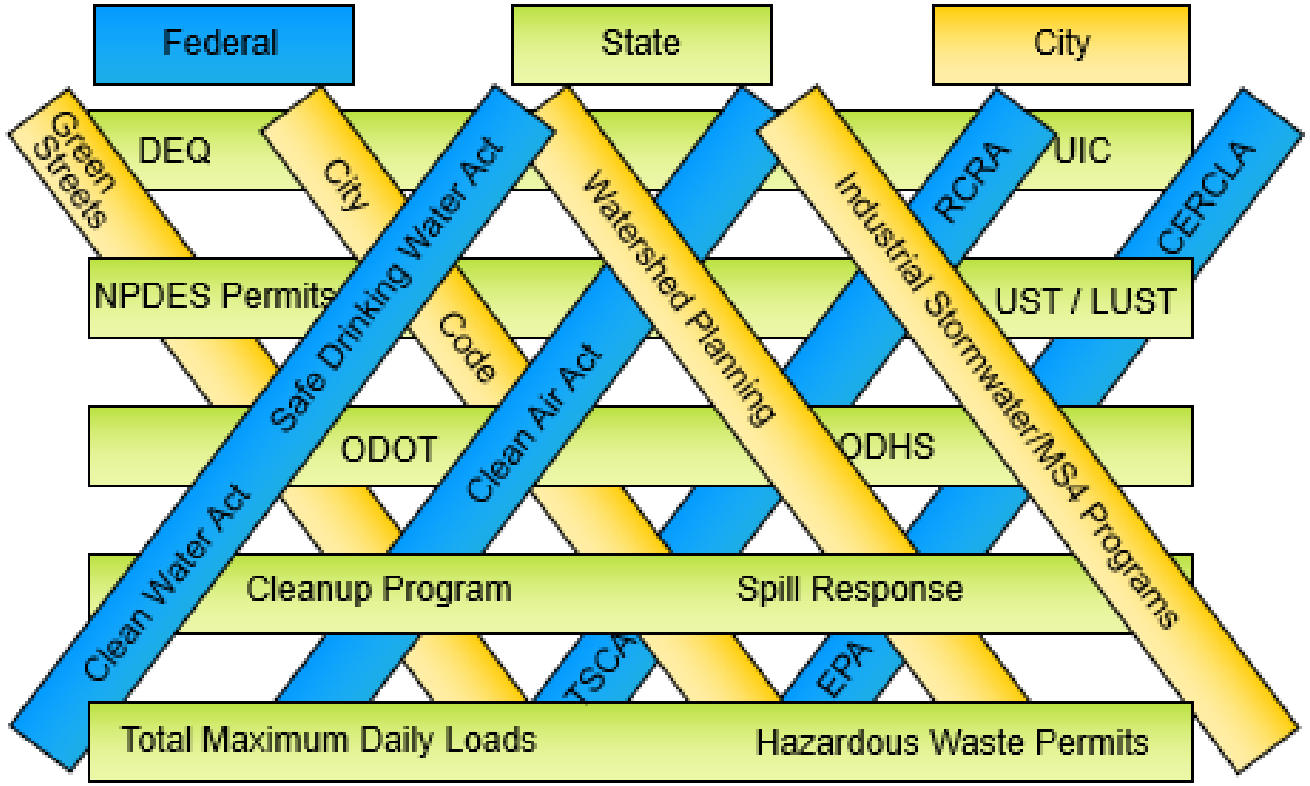
Portland Harbor Outfalls

City of Portland Source Control

Identify and control sources to City conveyance systems to prevent recontamination:

- Protection of the public conveyance system is a shared responsibility
- Control contaminants at the source
- DEQ/City partnership critical to address overall stormwater issues
- DEQ/City regulatory programs were evaluated and improved, as needed
- City conducted confirmation sampling to show source control is effective in City basins.

Source Control Never Ends!



City Outfalls Source Control Decision –

Criteria for Source Control Decision from 2003 IGA:

1. Characteristics of each basin (data, magnitude of CUL/SLV exceedances, hydrology, etc.)
2. Source Control Measures and effectiveness (City and site-specific SCMs: BMPs, treatment features, line cleanouts, programmatic elements, etc.)
3. Additional measures needed? (basin priorities, high exceedances, lack of measures, etc.)
4. Adaptive management and effectiveness monitoring

Recontamination via Stormwater: Unlikely

- CSOs controlled
- 50% of PH stormwater from Forest Park
- Two decades of comprehensive source control & 1200Z implementation
- Loads and concentrations trending down by up to ~80%
- Annual stormwater volume = 0.07% Willamette volume
- Annual TSS load = ~0.23% Willamette TSS, and decreasing
- Modeling indicates incoming bedloads mask stormwater loads
- Harbor-wide or georegion scale recontamination via stormwater unlikely
- Site-scale evaluations may be needed during SC Sufficiency Assessments for all pathways

Recontamination Prevention Conclusions

- Completion of site-related stormwater source controls and on-going NPDES stormwater discharge permit oversight is needed
- DEQ and EPA will continue to coordinate on:
  - Geographically specific source control sufficiency assessments;
  - Implementation of the active sediment remedies; and,
  - Post-remedy monitoring to detect, differentiate sources and adaptively respond to any recontamination threats that emerge.

Questions?

Cindy Ryals

City of Portland

Portland Harbor Program

cindy.ryals@portlandoregon.gov

Alex Liverman

Oregon DEQ

Portland Harbor Stormwater Coordinator

liverman.alex@deq.state.or.us

503-229-5080

ENVIRONMENTAL SERVICES
CITY OF PORTLAND
TED WHEELER, MAYOR
MICHAEL JORDAN, DIRECTOR

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