

working for clean rivers



City of Portland Environmental Services
**Pollution Prevention
Services Group**

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Group Manager

Presentation to the Portland Utility Board
November 1, 2016



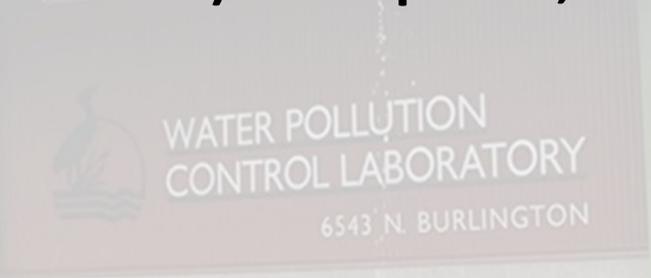
ENVIRONMENTAL SERVICES
CITY OF PORTLAND

NICK FISH, COMMISSIONER
MICHAEL JORDAN, DIRECTOR

Pollution Prevention Services Group

Protects the environmental assets, employees and citizens of the City of Portland through:

- Management of the bureau's regulatory compliance and enforcement programs related to City, state, and federal regulations; and**
- Provision of cost-effective technical and analytical services in support of BES decisions (e.g., Engineering Services, Wastewater Operations, and Watershed Services) the public, and other bureaus and agencies.**

A brown sign with white text and a logo. The logo depicts a stylized figure holding a water droplet above waves. The text on the sign reads "WATER POLLUTION CONTROL LABORATORY" and "6543 N. BURLINGTON".

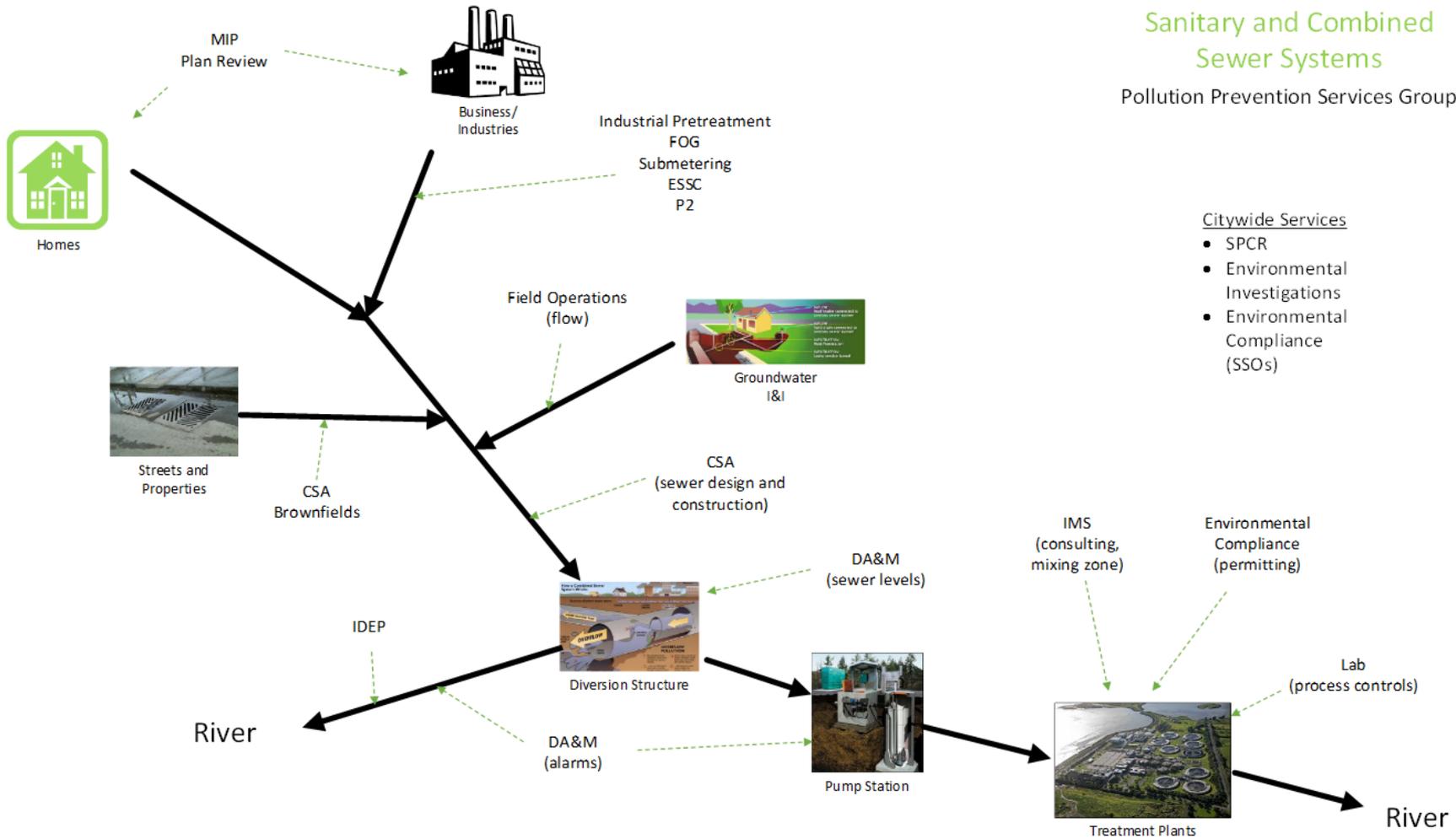
WATER POLLUTION
CONTROL LABORATORY
6543 N. BURLINGTON

Pollution Prevention Services (PPS) Group

- ***Environmental Compliance:*** Manages the bureau's regulatory enforcement process including industrial pretreatment, stormwater, and other environmental regulations under the bureau's authority. This service area also ensures bureau compliance with its state and federal regulatory obligations including permits governing wastewater collection and treatment, influences environmental policy and regulations developed by other entities; and manages the City's stormwater and groundwater permits under the Clean Water Act and the Safe Drinking Water Act.
- ***Environmental Investigations:*** Provides wastewater, stormwater, surface water, groundwater, gas, soil, sediment, and ecological sampling and monitoring services to all groups within the bureau. It includes project managers, field staff and a full-service environmental laboratory to support bureau regulatory requirements, system design and operation, watershed assessment, and environmental site analysis for utility construction and property acquisition. The group provides consultation, data analysis, and reporting for the bureau, other City bureaus, and outside agencies. These centralized services minimize contracting costs, allow for data sharing across programs and agencies, and generate consistent and high quality data.
- ***Portland Brownfield Program:*** Provides assistance for assessment and cleanup of contaminated properties through use of federal brownfield grants, matching funds from public agencies, and investment by private sector partners. Program services address soil and water contaminants to protect human and watershed health. Brownfield Program projects return contaminated sites to productive economic and community use through partnership with neighborhoods and businesses.



Sanitary and Combined Sewer Systems Pollution Prevention Services Group



Citywide Services

- SPCR
- Environmental Investigations
- Environmental Compliance (SSOs)



Regulatory Compliance

Administer Permits and Negotiate Permit Requirements with DEQ

- NPDES Permits for Columbia Boulevard and Tryon Creek Wastewater Treatment Plants
- NPDES MS4 & WPCF UIC stormwater permits
- TMDL Implementation

PPS Activities in Direct Support of City Permits

- Regulate ~4,000 facilities and wastewater discharges to meet City discharge limits
- Collect ~1,200 industrial wastewater samples per year and run ~1,700 analyses to characterize discharges
- Assess ~\$11M in extra strength charges, permit fees, and submeter fees
- Administer ~450 1200Z industrial stormwater permits
- Maintain a 24/7 hotline to investigate and eliminate illicit discharges. Team receives ~800 complaints/year and responds to ~500 SSO calls/year
- Collect and report data for MS4 and UIC permit compliance
- Collect and provide operators real-time conveyance system performance data (e.g., pump stations and diversions) to maintain compliance with permit provisions related to CSOs.
- Provide process control data to treatment plant operators to maintain effective treatment.



Site Review & Development

Review of Private Development

- Review commercial and industrial development for compliance with Source Control Manual.
- Lead City (PBOT, WB, Portland Harbor, Watershed) review of contaminated site redevelopment to assess potential risks to BES assets.
- Determine compatibility with BES development standards and evaluate suitability for onsite stormwater disposal on contaminated sites.

Provide Technical Analyses for Public Infrastructure Projects (e.g. sewer, streets, rail, water, sites)

- Conduct Level I/II and Phase I/II Environmental Assessments (e.g., research, subsurface investigations) to identify and report environmental considerations for design phase.
- Provide technical assistance to infrastructure bureaus (BES, WB, PBOT) on management and disposal options for contaminated media.
- Develop and implement plans for addressing groundwater encountered in utility corridors (e.g., obtain necessary permits and approvals for treatment and disposal of groundwater to sanitary sewer).
- Coordinate with DEQ to investigate and remediate contamination and on unanticipated issues (e.g., Underground Storage Tank removals) encountered on City properties.

Brownfield Development

- Manages an EPA grant for Brownfield environmental site assessment and a \$1M revolving loan fund for cleanup
- In 2014 the program provided assistance on 12 properties throughout Portland



Environmental Project Services

Example: Watershed Health Assessment

- Recommended and designed the Portland Area Watershed Monitoring and Assessment Program (PAWMAP):
 - Saves costs by consolidating monitoring efforts
 - Provides better assessment of ecological resources (e.g., measures habitat and biological communities, not just water quality) and effectiveness of watershed actions
 - Project design aligns with national standards and protocols allowing for broad comparability
 - Allows for statistically robust data evaluation to identify short and longterm priorities
 - Demonstrates City compliance with state and federal environmental regulations
 - Data used for sewer system design, construction, and maintenance activities
- Gather data from Portland rivers and streams:
 - Collect and analyze water quality samples during wet and dry conditions
 - Survey aquatic communities (e.g., macroinvertebrate monitoring and electrofishing)
 - Assess habitat quality
 - Install and maintain continuous temperature monitors
- Evaluate and provide data to end users to meet bureau objectives:
 - Watershed Services Science Integration Team– used to identify watershed improvement projects, to create Watershed Health Index, and Watershed Report Cards
 - MS4 program – used to meet NPDES permit monitoring requirements & TMDL regulations

