

Seaport Stormwater Program



Port
of Seattle

Where a sustainable world is headed.™

Outline of Briefing

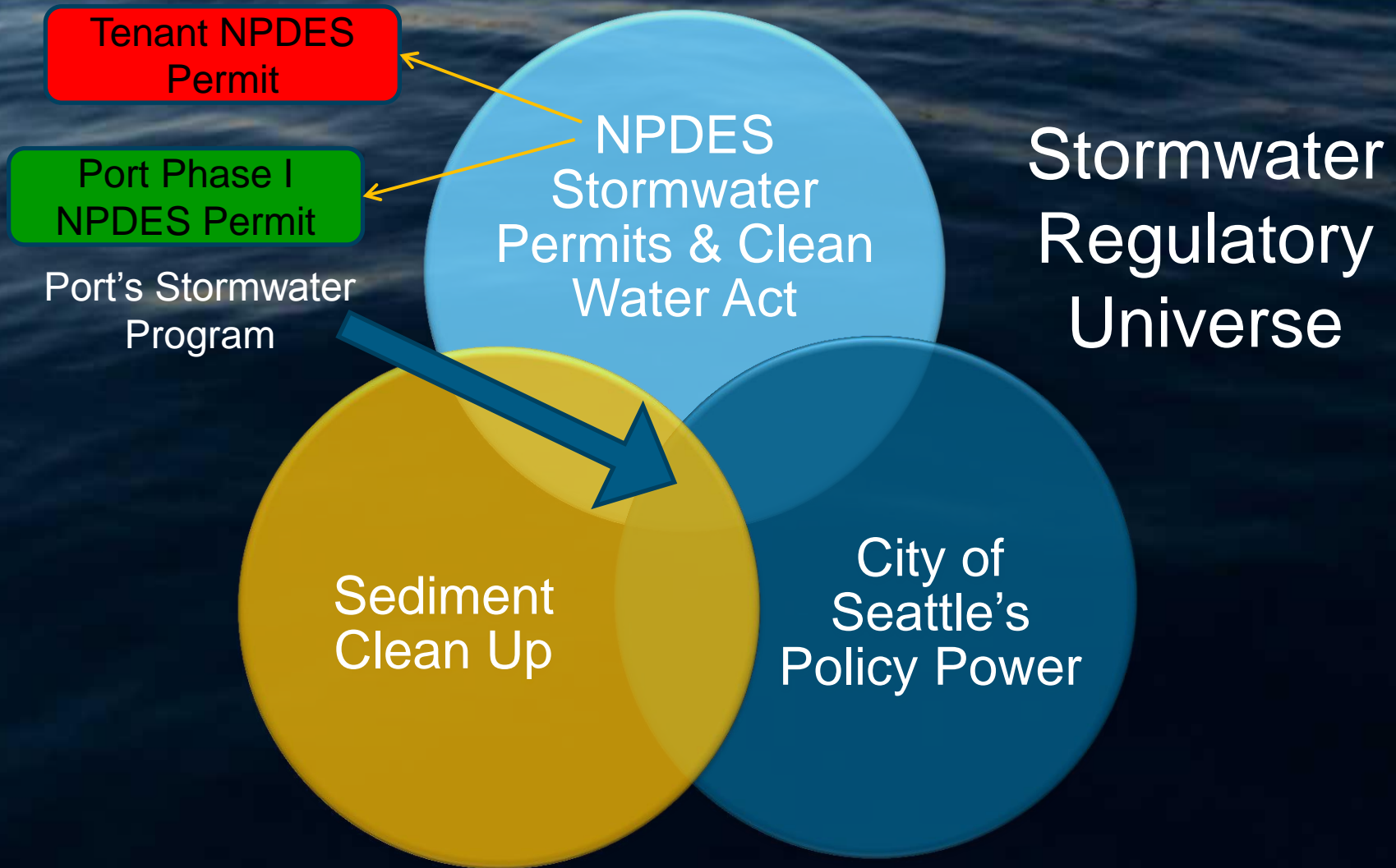
- I. Stormwater Overview
- II. Port's Stormwater Permits and Program
- III. Tenant Industrial Stormwater Permits
- IV. City of Seattle Stormwater Requirements
- V. Sediments and the Connection to Stormwater
- VI. Costs

I. Stormwater Overview

Stormwater Management Goal

- Prevent degradation of water and sediment quality from Port operations through effective and efficient compliance required by Industrial, Municipal and other NPDES permits.
- Collaborate, coordinate and provide technical assistance to tenants to assist in achieving tenant stormwater compliance.

I. Stormwater Overview



II. Port's Stormwater Permits and Program

Port's Phase I Municipal Permit

- In place since 2007
- Requires Port Stormwater Program
- Covers both Port operated and leased facilities
- Permits allow discharge of stormwater from our properties if permit conditions are met
- Ecology regulates compliance of all NPDES permits



II. Port's Stormwater Permits and Program

Port's Phase I Permit from DOE

- Requires the Port to Create and Implement a Stormwater Management Program (SWMP)
 - Nine required elements
 - Yearly management and monitoring costs – Seaport, Real Estate equals ~ \$ 1.0 M/ Year
 - Best management practices (sweeping, catch basin cleanup) approx \$500,000/year
 - Does not include CIP Stormwater Projects.

III. Tenant Industrial Stormwater Permits

- 70% of our properties are also covered by Tenant Industrial Stormwater permit (ISGP)
 - Permits issued to tenants
 - All Container terminals covered
 - Compliance is Tenant Responsibility by lease agreement
 - Requires monitoring with corrective actions if benchmarks are not met

Note:

- Port ISGP
 - Marine Maintenance Shop is also required to have permit

IV. City of Seattle Stormwater Requirements

- Port is also required to comply with City Stormwater Code
 - Ecology's Phase I Permit Requires Compliance with City Code
 - 1997 MOUs Requires Compliance
- Our Program is duplicative, but a smaller scale program
 - Except for "Structural Stormwater Controls" Program
- Stormwater Fees paid to the City
 - Currently \$ 2.6 M/year



V. Sediments & the Connection to Stormwater

- Source Control prior to sediment clean up
 - Identifying stormwater pollutants that carry contaminants to the sediments
 - Eliminating these stormwater sources



IV. Costs

Phase I Permit Required Stormwater Management Program (SWMP)

- For Seaport, Real Estate equals ~ \$ 1.0 M/ Year
- Operation and Maintenance on Port Properties ~ \$ 500k/year
- CIP Estimates - 2011 to 2016
 - Redevelopment Projects
 - Stormwater upgrades (T 10 & T 25) ~ \$ 1M
 - Port Miscellaneous pavement projects ~ \$ 1 M/year

Terminal ISGP Stormwater Improvements

- Corrective Action could cost \$ 20 to 35 M
- Timeframe = 2014 to 2016



Retrofitting

- This would require installing stormwater treatment for properties that don't currently have it.

IV. Costs Working to Reduce

- On-going and Proactive compliance
 - Staying ½ step ahead
 - Evaluate new technologies alternative operation procedures
- Working with Tenants
 - Environmental Compliance Assessments on Tenant and Port facilities
 - Education on Best Management Practices
 - Support tenants in finding solutions to Stormwater issues
 - Avoid adding cost or fees to tenants
 - Track fast changing regulations and get the word out
 - Tenant/port technical workgroup

