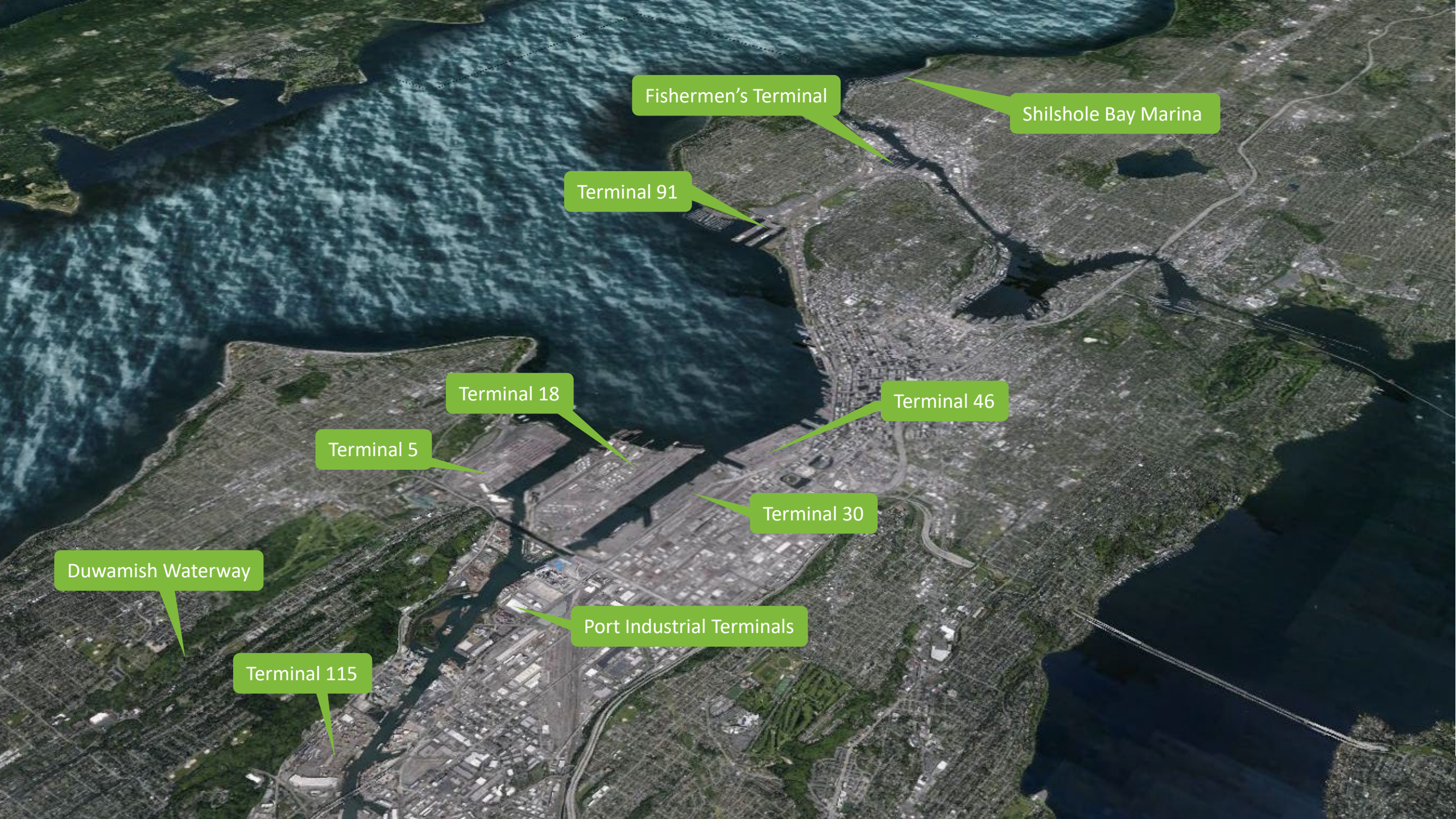




Stormwater Utility – E&O Programs

10/18/2023, Washington Stormwater Center Statewide Meeting





Fishermen's Terminal

Shilshole Bay Marina

Terminal 91

Terminal 18

Terminal 46

Terminal 5

Terminal 30




Duwamish Waterway

Port Industrial Terminals

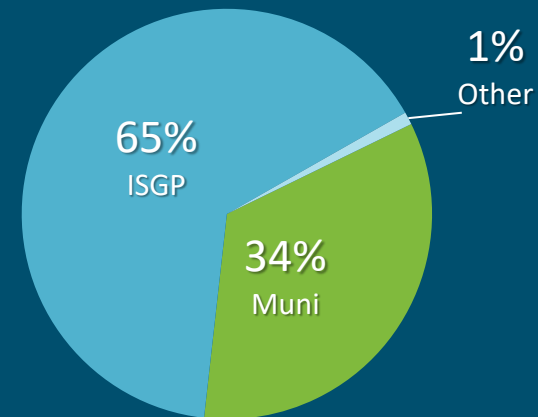
Terminal 115



Stormwater Permits

-  Phase I Municipal Stormwater Permit
-  ISGP Permits
 - 16 Tenant Permits
 - 1 Port Permit
 - Covering ~700 Acres
-  Other NPDES Permits
 - Individual, Boatyard, Construction

NPDES Permits
100% of Permit Coverage



Ports & Stormwater – Issues & Priorities



- Endangered salmon and orcas
- Public trust responsibilities
- WA stormwater regulations
- Third party lawsuits
- Heavy industrial work
- Proximity to waterways
- Aging public assets





Stormwater Utility & Innovations

Marine Stormwater Utility

- Only port in country with its own stormwater utility
- Comprehensive asset management – assess, repair, rehabilitate
- Drainage rates below those of City of Seattle
- Budget ~\$7M/year

Stormwater Innovations

- Innovative treatment systems – ‘oyster barrels,’ ‘splash box,’ green stormwater opportunities
- Salmon-Safe certified parks and public access areas
- Clean Marinas and EnviroStar certified marinas
- Responsible dock washing





Port's Equity, Diversity & Inclusion



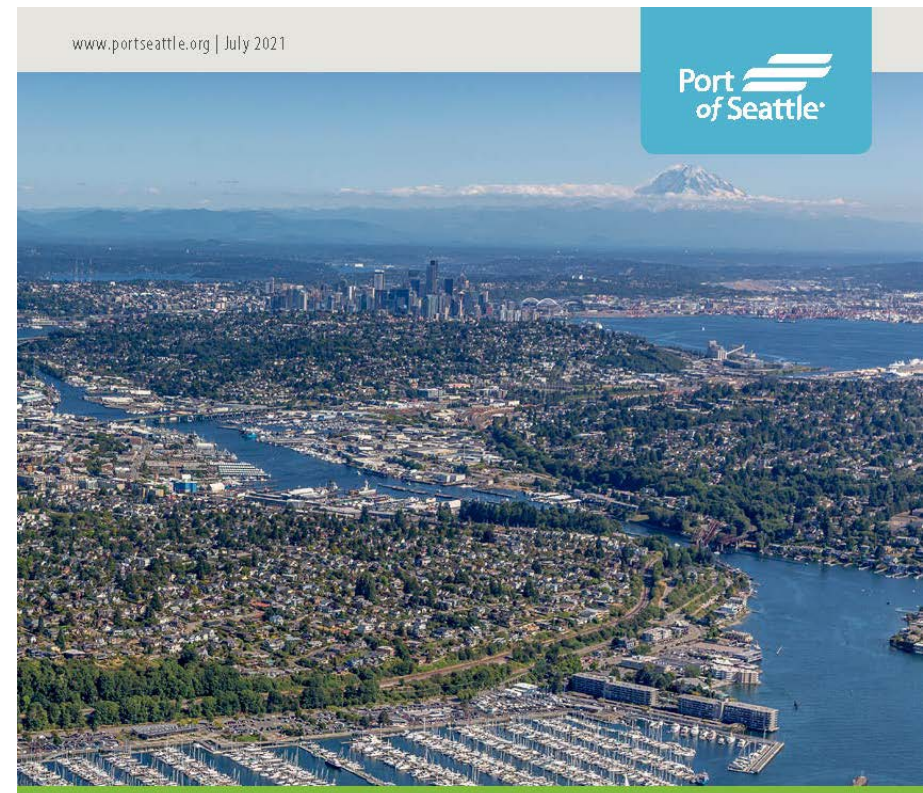
- Goal: The Port of Seattle commits to being a leader in regional and national efforts to achieve equity and social justice
- Core Principles
 - Integrating Values of Equity and Inclusion
 - Prioritizing the Most Vulnerable in developing policies, practices, and procedures
 - Ensuring Language and Cultural Competence
 - Supporting Community-Based Organizations





Utility Equity, Diversity & Inclusion Goals

- Stormwater Strategic Plan
 - Identify equity, diversity, and inclusion (EDI) benefits of stormwater program
 - Enhance visibility of the benefits of stormwater utility in local communities
 - Create scoring matrix for tenants with EDI considerations and use to prioritize tenant BMP training
 - Create scoring matrix including EDI considerations to prioritize infrastructure work
 - Incorporate EDI into contract decisions
- Need for translations grew out of EDI goals



PORT OF SEATTLE

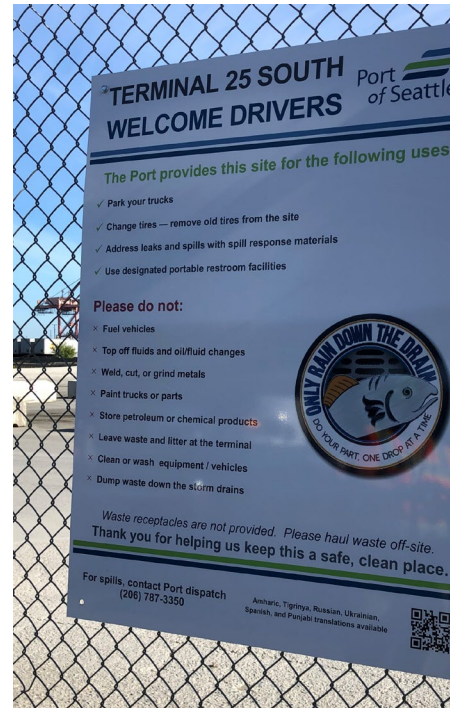
MARINE STORMWATER UTILITY STRATEGIC PLAN

2021-2025



Trucking Customers

- Truckers with diverse cultural and language backgrounds
- Importance of pollution prevention and best management practices
- Languages:
 - Amharic, Tigrinya, Russian, Ukrainian, Spanish, and Punjabi
- Signs with QR codes



TERMINAL 25 SOUTH WELCOME DRIVERS



The Port provides this site for the following uses:

- ✓ Park your trucks
- ✓ Clean up leaks and spills with spill response materials
- ✓ Remove tires from the site
- ✓ Use designated portable restroom facilities

Please do not:

- ✗ Fuel vehicles
- ✗ Change tires
- ✗ Top off fluids and oil/fluid changes
- ✗ Weld, cut, or grind metals
- ✗ Paint trucks or parts
- ✗ Repair chassis, vehicles, or equipment
- ✗ Store petroleum or chemical products
- ✗ Leave waste and litter at the terminal
- ✗ Clean or wash equipment / vehicles
- ✗ Dump waste down the storm drains



Waste receptacles are not provided. Please haul waste off-site.
Thank you for helping us keep this a safe, clean place.

For spills, contact Port dispatch
(206) 787-3350

Amharic, Tigrinya, Russian, Ukrainian,
Spanish, and Punjabi translations available





Duwamish River Community

- How the Stormwater Utility improves stormwater
- Information on pollution prevention and best management practices
- Identify relevant materials
- Identify non-English speaking audiences

What is an Illicit Discharge?

According to federal and state laws, an illicit discharge is any discharge to a municipal separate storm sewer system that is not made up entirely of rain water or snow melt (i.e. stormwater) that causes a risk to human health and safety, land, or water.

**ANSWER:
"ANYTHING THAT IS NOT RAIN"**



Remember...

Illicit discharges on the Port's terminals, facilities, parking lots, roads, and storm drains travel directly into our natural waterways, such as Elliott Bay and the Duwamish Waterway. Water contaminated by illicit discharges that enters storm drains is not cleaned or treated at any point before entering the waterways, and can damage the environment, harm wildlife, and restrict recreational activities.

If you see illicit materials present in a surface water, storm drain, street, or ditch,
Please Report It! You Can Help!

**Call the Marine Maintenance Dispatch
To Report Illicit Discharges
206.787.3350**

Report Illicit Discharges

Contact Marine Maintenance
24-Hour Dispatch
206.787.3350

****If Spill is Hazardous—Also Call 911****

Be prepared to provide the following information:

- Where is the discharge?
- What was released?
- How much was discharged?
- Who is responsible?
- Is anyone containing or cleaning up the discharge?

National Response Center —

Business: 800.424.8802

WA Emergency Management Division —

Business: 800.258.5990

Local Hazardous Waste Disposal —

Business: 206.263.8899

Where can I go for more information?

Port of Seattle —

<https://www.portseattle.org/page/maritime-stormwater-tenant-information>

Maintenance Dispatch: **206.787.3350**

Washington Department of Ecology —

<https://ecology.wa.gov/Regulations-Permits/Reporting-requirements/Stormwater-monitoring/Stormwater-Action-Monitoring/SAM-source-identification>

Northwest Region: **425.649.7000**

Scan this QR code & share!



Working To Protect Our Waterways

Illicit Discharge
Detection & Elimination
(IDDE) Program



Port
of Seattle

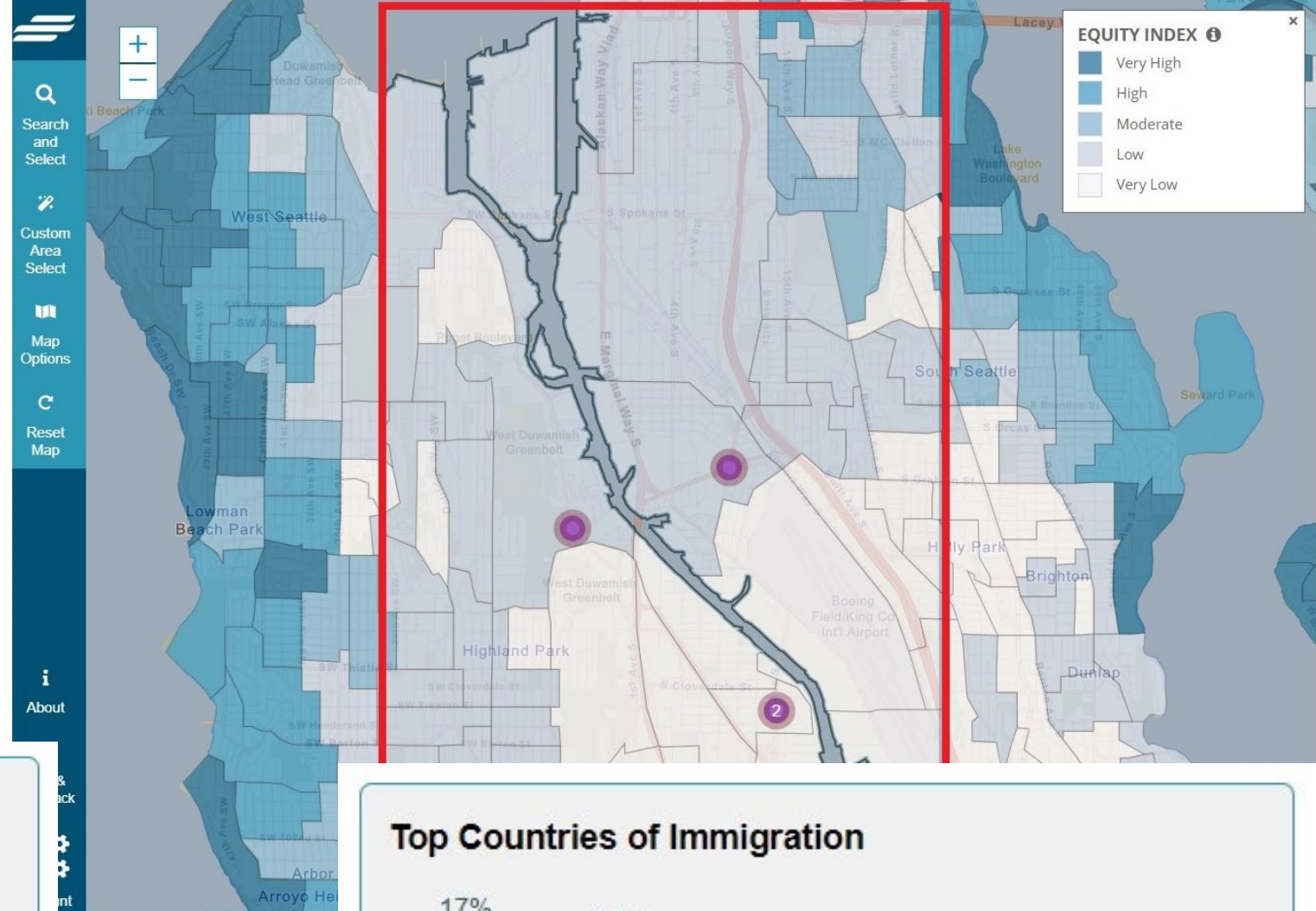
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2023

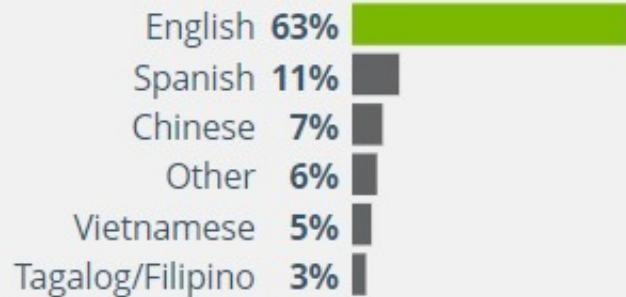


Duwamish River Community

- Demographics to inform translations
- Port Equity Index



At Home Languages



Top 6 classifications by % are shown

Top Countries of Immigration





Duwamish River Community

- Languages:
 - Spanish, Chinese, Vietnamese, Somali, Khmer, and Tagalog
- Other outreach:
 - Video: Save it on a Rainy Day!
 - Direct work with tenants and community groups
 - Duwamish student summer interns

什么是非法排放物？

根据联邦和州法律，非法排放物是指排放到市政独立雨水管道系统中的任何并非完全由雨水或融雪（如暴雨水）组成且会为人类健康和安、土壤或水域带来风险的排放物。

答：
“任何不是雨水的东西”



请记住……

港口码头、设施、停车场、路面和雨水渠中的非法排放物会直接流入我们的天然水道，如 Elliott Bay 和 Duwamish Waterway。被非法排放物污染并进入雨水渠的污水在进入水道之前没有经过任何净化或处理，可能会破坏环境、伤害野生动物并限制娱乐活动。

如果您看到地表水、雨水渠、街面或沟渠中有非法排放物，

请进行举报！您可以助我们一臂之力！

致电 Marine Maintenance 调度中心
举报非法排放

206.787.3350

举报非法排放

联系 Marine Maintenance
24 小时调度中心

206.787.3350

**如果泄漏物有危险——请同时
拨打 911**

举报时需提供以下信息：

- 排放物在哪里？
- 排放物是什么？
- 排放量有多少？
- 负责人是谁？
- 是否有人控制或清理排放物？

National Response Center (国家响应中心) —

行动单位：800.424.8802

WA Emergency Management Division (华盛顿州应急管理署) —

行动单位：800.258.5990

地方危险废物处置处 —

行动单位：206.263.8899

我可以在哪里获取更多信息？

Port of Seattle (西雅图港) —

<https://www.portseattle.org/page/maritime-stormwater-tenant-information>

Marine Maintenance 调度中心：206.787.3350

Washington Department of Ecology (华盛顿州生态部) —

<https://ecology.wa.gov/Regulations-Permits/Reporting-requirements/Stormwater-monitoring/Stormwater-Action-Monitoring/SAM-source-identification>

西北地区：425.649.7000

扫描此二维码并分享！



共同保护 我们的水道

Illicit Discharge Detection
& Elimination (IDDE,
非法排放物检测和
清除) 计划



使用再生纸印制

2023



Oyster Shell Treatment



BUILD YOUR OWN OYSTER SHELL BARREL STORMWATER TREATMENT SYSTEM

Oyster shells are a great natural resource to remove heavy metals from roof outflows. Here's how to build your own treatment system like the ones we use at the Port of Seattle.



1 STEP
Drill a 5-inch hole in barrel in the side of the barrel for a drain. Approximately 18 inches from the top of the barrel.



2 STEP
Drill a hole in the barrel's lid. Make sure it is offset so it doesn't flow directly into the interior pipes.



3 STEP
Install 4-inch schedule 80 PVC bulkhead fitting in the hole drilled in step one.



4 STEP
Install 4-inch schedule 80 PVC threaded nipple on to bulkhead fitting.



5 STEP
Build interior piping with 4-inch schedule 40 PVC Tee and pipe.



6 STEP
Install interior piping to the bulkhead fitting.



7 STEP
Install 4-inch schedule 40 PVC 90-degree elbow downspout to the threaded nipple.



8 STEP
Optional: used only if the overflow part of the tee inside drum is not going to be utilized.



9 STEP
Fill with 25-30 gallons of cleaned crushed oyster shells, about 2-3 inches below the interior overflow pipe.

Questions?

