Port of Seattle
Habitat Restoration and Mitigation Bank Program

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AAPA Environment Committee
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Port is in unique position

- Ownership of extensive shoreline in critical areas for listed species
- Provide compensatory mitigation
- Promotes climate adaptation & resilience
- Generate revenue (mitigation banking)
- Maintain social license to operate
• 31 habitat sites, 21 parks, 15.4 miles of shoreline
• Compensatory mitigation sites (12 acres)
• Community stewardship sites (18 acres)
• Multi-site mitigation bank (~75 acres)
• Alternative Bankline Stabilization Program
• Innovation (R&D)
  – Smith Cove Blue Carbon Pilot Project
  – Floating Wetland Islands (aka Bio-Barges)
  – Underwater Noise Reduction
Alternative Shoreline Stabilization Program

Removed structures/fill

+20' MLLW
+16' MLLW
+12' MLLW
Alternative
Bankline Stabilization:

T-108
Pre-Project
Alternative Bankline Stabilization:

YEAR 1

YEAR 3
Mitigation Bank

- Prospectus submitted May 2019
- Main sites @ Terminal 117, Terminal 25, Auburn
- Marine, estuarine and freshwater habitat
- Service area = Green-Duwamish Watershed
- Mitigation market:
  - Wetland/stream (Section 404, Clean Water Act)
  - Listed species (Endangered Species Act)
  - Natural Resource Damages (CERCLA)
  - Floodplain storage (Municipal codes/FEMA)
  - Carbon?
Mitigation Bank (cont.)

- Derelict structure removal:
  - Terminal 5
  - Pier 34
  - Pier 16
  - Pier 48 (w/ Washington State Ferries)

- Other restoration projects
  - Terminal 115
  - Terminal 108
  - Terminal 107
  - Terminal 105
Multi-Site Mitigation Bank:

Auburn Wetlands

- Third Runway Mitigation Site (65 acres)
- New Mitigation Bank Site (34 acres)
- New Off-Channel Fish Access Area (11 acres)
Multi-Site Mitigation Bank:

TERMINAL 25
Multi-Site Mitigation Bank:

TERMINAL 25
Multi-Site Mitigation Bank:

TERMINAL 117
Multi-Site Mitigation Bank:

TERMINAL 117
Challenges/Issues

- Corps slow/inefficient review and approval process
- Poor performance of competition creates skepticism
- Competition
- Constraints in restoring industrial areas
- Labor agreements and tribal concurrence
- Need for joint banks
- Washington State and NOAA developing a marketplace of conservation banks
Overall what is working

- Completed/submitted our Prospectus in May 2019
- NRD Credits protocol is in final form (about to be signed)
- First bank project (T117) is shovel ready and will be under construction 2020
- We are already receiving inquiries about credit sales even though we have not begun marketing
- We have some interest from Nature Conservancy to provide financing
- We successfully lobbied for $10m in increased funding for Corps regulatory programs (passed through House)
PORTfolio Research & Development:

Blue Carbon Habitat

- Blue carbon is carbon that’s captured by nearshore processes
- Stored in biomass and sediments
- Mainly marsh, seagrass and algae
Smith Cove
Blue Carbon
Pilot Project
BLUE CARBON PILOT PROJECT

Step 1: Plant and install blue carbon enhancements:
- Kelp
- Eelgrass
- Shellfish beds
- Intertidal salt marsh
- Shoreline/riparian vegetation*
  *Size/scope/schedule TBD

Step 2: Monitor project over time:
- Water Chemistry (pH)
- Carbon sequestration
- Beneficial habitat changes

Step 3: Report results

The blue carbon project team includes staff from the Port, Puget Sound Restoration Fund, NOAA, City of Seattle, UW and Grette Associates.
.2% of the Ocean Floor
10% of the Carbon
PORTfolio Research & Development:

Floating Wetland Islands (Bio-Barges)
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Floating Wetland Islands (Bio-Barges)

GENERATION 1
BIo-BARGE VIDEO
Thank you
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