





- Under OPA and CERCLA, Responsible Parties (RPs) are required to pay the cost of:
 - restoring injured natural resources to baseline conditions
 - · compensation for "interim loss", a.k.a. temporal loss,
 - · reasonable cost of a damage assessment
- NMFS and USFWS are among "trustees" for public trust resources.
- The Natural Resources Damage Assessment and restoration process can be very long and litigious.



Getting to Restoration via a NRDA Restoration Bank



Settlement or Litigation





- The project producing restoration credits = the restoration bank
- Project may be developed by PRP(s) who produce more credits than required to satisfy their own liability
- Project may be developed by non-PRP third party with the intent of marketing credits to PRPs
- Credits may be purchased by Trustee Council using funds from settlements

Why Restoration Banks?

Opportunities:

o Projects designed to address liability of multiple PRPs are larger, more cost effective and restore multiple ecosystem processes and services

The same of the sa

- Larger projects can be more durable, less susceptible to perturbation;
 therefore, higher probability of success
- Restoration banks can be implemented sooner; no waiting for damage assessment to be completed and settlements to take place

Why (Not) Restoration Banks?

Risks:

- o Restoration bank may fail to deliver the anticipated benefits
- o Cost and profit expectations of developer may be unrealistic
- Settlement delays that affect credit sales may put investment capital at risk
- Trustees may incur unrecoverable costs by providing substantial technical support to bank developers for a project that is not implemented or fails



- Site placed on National Priorities List in 2000
- Trustee Council formed in 2002
- Began restoration planning in 2009
- Began cooperative damage assessment in 2011
- Issued draft Restoration Plan/Programmatic EIS in 2012
- First restoration bank completed construction in 2015
- Final cleanup plan published in early 2017
- Final RP/PEIS expected in summer 2017



Restoration Banking in Portland Harbor

	Project Name	Proponent	Implementation Date	Acres	Status	Credits Sold
0	Alder Creek	Wildlands	2014 and 2015	52	Monitoring	33
•	Linnton Plywood	RestorCap	2018 and 2019	27	Monitoring	100
0	PGE Harborton Wetlands	Portland General Electric	2020	62	Construction	0
•	Rinearson Creek	Columbia Restoration Group	2017 and 2018	33	Monitoring	100

Trustee Role in Restoration Banks

- Provide technical assistance to project developer (site selection, project design, consistency with site restoration goals)
- Develop credit valuation or estimate
- Set standards and conditions for credit recognition (monitoring plan/performance standards, financial assurances, permanent site protection, stewardship)
- Recognize credits (through agreement between developer and Trustees describing standards and conditions for the bank)
- Accept credits (in settlement, in return for covenant not to sue)
- Purchase credits (with cash-out settlement funds)
- Ongoing Trustee oversight



Performance Period

Baseline Monitoring

(Pre-implementation)

- -Existing habitat conditions
 - -Reference conditions

Implementation Monitoring

(Year 0)

- -As built surveys
- -Performance criteria established

Effectiveness Monitoring

(Year 1 - 10)

- -Minimum monitoring requirements
 - -Adaptive management

Long-term Stewardship

(Year 11 - ∞)

-Site visits

- -Annual maintenance plans
- -Continued effectiveness monitoring
- -Adaptive management

Linnton Plywood Site:

- Being developed by private company RestorCap, initially for Portland Harbor NRDA market
- Approximately 25 acre site; restores Willamette River off-channel and riparian habitat for Chinook salmon, bald eagle, osprey, river otter, mink, and other species
- Proposing to provide ESA and CWA offsets, targeting mitigation for Portland Harbor CERCLA cleanup actions (dredging/capping)
- Common metric (HEA) will be used as the metric for both debit and credit for all three authorities







Joint Banks: Advantages

- Combining authorities creates greater leverage toward species conservation and recovery
- Projects designed to address multiple authorities may be larger, more cost effective and restore multiple ecosystem processes and services
- Larger projects can be more durable, less susceptible to perturbation;
 therefore, higher probability of success
- Multiple authorities create larger "market" for restoration credits, which reduces risk for project developers
- Potential for procedural efficiencies, reduced transaction costs for develor and government

Joint Banks: Issues and Challenges

- Design:
 - Tradeoffs sometimes occur in maximizing credit for various authorities
- Accounting:
 - Need a common metric for debit and credit
 - Preventing double-counting (selling the same function or service more than once)
- Transparency:
 - Tracking sale of credits for various authorities (RIBITS!)
- Monitoring and assurances:
 - Varying agency expectations for monitoring plan (period, parameters) and perform standards
 - Varying agency requirements for financial assurances, land ownership/management stewardship



- Portland Harbor Natural Resource Trustee Council's website: https://www.fws.gov/portlandharbor/
- Portland Harbor Restoration Planning: https://www.fws.gov/portlandharbor/restoration
- Final Restoration Plan and PEIS: <u>https://www.fws.gov/portlandharbor/sites/default/files/2018</u>
 <u>12/201706_FINAL_PEIS.pdf</u>
- Draft Supplemental Restoration Plan: https://www.fws.gov/portlandharbot/news/draft-supplemental restoration-plan-available-comment
- Linnton Mill Restoration Project: <u>https://www.fws.gov/portlandharbor/news/linnton-mill-restoration-project</u>