

Portland Harbor NRDA: Phase 2 Work Plan

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Agenda

- Interaction between trustees and participating parties
- Debit calculations
- Restoration planning
- Credit calculations

Interaction between the Trustees and the Participating Parties



Year 1 of Phase 2

- Trustees will propose inputs for HEA, REA, and BT systematically, efficiently, and with real opportunities for participation
- Participating parties must decide how to participate efficiently and meaningfully
- Regardless, trustees will move through all of the necessary inputs the first year
- Best way to determine whether settlement is achievable (for both sides)



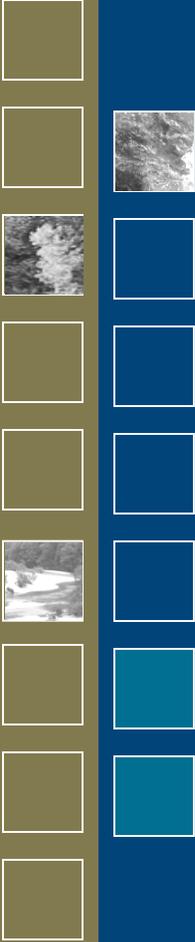
Year 1 of Phase 2 (cont.)

- Trustees will forecast topics for each quarterly meeting, and will prepare analyses and propose inputs for each meeting
- Participating parties can propose different or additional topics, prepare alternative analyses and inputs, but must decide how to be efficient
- Purpose of Year 1 is to create an initial view of the entire field to determine the viability of settlement (for both sides)



Year 2 of Phase 2

- Iterate
- Context (which disagreements matter?)
- Reasonable compromises evident?
- Reasonable analyses available to narrow disputes?
- Reasonable data collections available to narrow disputes?
- Efficient, purposeful scheduling and execution



Year 3 of Phase 2

- Consequential disputes either narrow or not
- Each side (or individual parties) determines whether time and energy are better spent on Phase 2 or Phase 3
- Document agreements in principle (binding?) and prepare for timely settlements

Debit Calculations





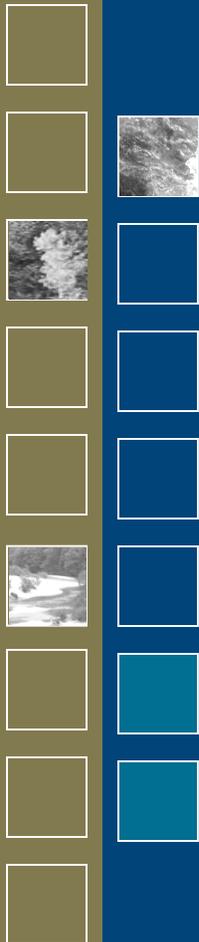
HEA Debit

- Many “easy” issues (e.g., discount rate and time period)
- First difficult issue: converting sediment concentrations via relevant thresholds into rational habitat % service losses
 - How much of the wheel to reinvent?
 - Benthic versus vertebrate (REA?)
 - Background and baseline
 - Combining chemicals, species, and endpoints



HEA Debit (cont.)

- Easy to disagree
- Easy to point to uncertainty
- Impossible to know how hard to fight without the context of scale and cost of practical restoration opportunities
- So: populate the HEA debit inputs and identify the priorities for further discussion in Year 2
- NOAA tool will allow efficient testing of inputs



Other Debits

- BT
 - How much site-specific data to fine tune transfer from existing economics literature?
 - How much site-specific data to fine tune PH use estimates?
- How to combine HEA, REA, BT, and navigation debits?

Restoration Planning



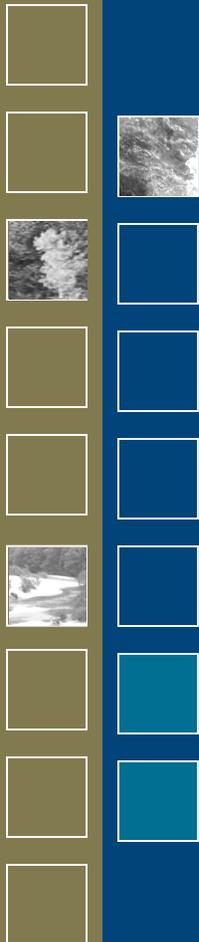


Restoration Planning Underway

- Criteria
- Opportunities and priorities within the PH Study Area
- Opportunities and priorities within the larger geographic boundaries for restoration
- How to compare relative costs, relative benefits, and relative cost-effectiveness
- Opportunities to address tribal and recreational losses

Credit Calculations





HEA Credit Calculations

- Site-specific data needed to resolve likely arguments about benefits/effectiveness?
 - Timeline for preservation benefits to accrue (development likelihood)?
 - Timeline for restoration actions to begin and mature (can we really build it?)
 - Geographical nexus
 - Realistic, complete cost estimates that include monitoring and contingencies



HEA Credit Calculations (cont.)

- How to compare assessment habitats (with and without hazardous substances) with restoration habitats (with and without restoration actions) with ideal habitats: Baseline
- Can we explain cost-effectiveness variability enough to create reasonable \$/DSAY metrics?
- Practicality and timing of restoration banking?



Other Credits

- How to ensure that restoration for BT navigation debits are sufficiently of natural resources?
- How to combine HEA, REA, BT, and navigation credits to allow for comprehensive settlements?