Evaluation of the long-term effectiveness of "Monitored Natural Restoration" (MNR) as a contaminated sediment management option

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Evaluation of Sediment MNR

Objective

Use existing historical site data to demonstrate and assess the long-term effectiveness of "Monitored Natural Restoration" (MNR) as a contaminated sediment management option in protecting human health and the environment.

Use this information as a basis in future management decisions for contaminated sediments.

Evaluation of Sediment MNR

Approach

Expert scientific review of existing historical site data from contaminated sediment sites where MNR has been implemented (by design or default)

Opportunity to examine historical data (sometimes up to 25 years) from a series of sites where MNR has been a integral component

		Surface	Dated	Sediment	Natural		Biological
	Chemical(s) of	Chemistry	Sediment		Recovery	Biological Trend	Analysis
	Concern	Record	Cores	Analysis	Model	Measures	Record
Bellingham Bay, WA (MTCA)	Hg, BOD/sulfite	30+ yrs	10	partial	Officer/Lyn ch; WASP	Fish/Shellfish Tissue & Benthic Infauna	25+ yrs
Commencement Bay, WA (CERC	PCB, PAH, L A s) HCBD, other	30+ yrs	20	partial	Officer/Lyn ch; WASP; others	Fish Histo. & Tissue	25+ yrs
Duwamish Waterway, WA (CERC	PCB, PAH, As, Pb, BOD	35+ yrs	0	partial	SEDCAM; EFDC; others	Fish Histo. & Tissue	35+ yrs
Eagle Harbor, WA (CERCLA)	РАН, Нд	20+ yrs	10	full	Officer/Lyn ch; others	Fish Histo. & Tissue	20+ yrs
Los Angeles Bight, CA (CERCLA	DDT, PCB, PAH	30+ yrs	20?	partial	SEDCAM; others	Fish Histo. & Tissue	25+ yrs
Central Puget Sound, WA	PAH, As	25+ yrs	50?	partial	SEDCAM; others	Fish Histo. & Tissue	20+ yrs
Seattle Waterfront, WA (CERCLA	HMTCK)B	25+ yrs	10	full	Officer/Lyn ch; others	Fish Histo. & Tissue	20+ yrs
Spokane River, WA	Cd, Pb, Zn, PCB	5+ yrs	5	partial	SEDCAM; others	Fish Tisuue	15+ yrs

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Deliverables

- Summary of relevant data from selected sites which address the effectiveness of MNR as a management option
- Critical evaluation and implication of the data
- Recommendations for type of data that would contribute towards assessing effectiveness of SED-MNR

Formulation of an approach for implementation of MNR for contaminated sediments

Outline

Mike Swindoll:

Sediment Monitored Natural Restoration Assessment Elements

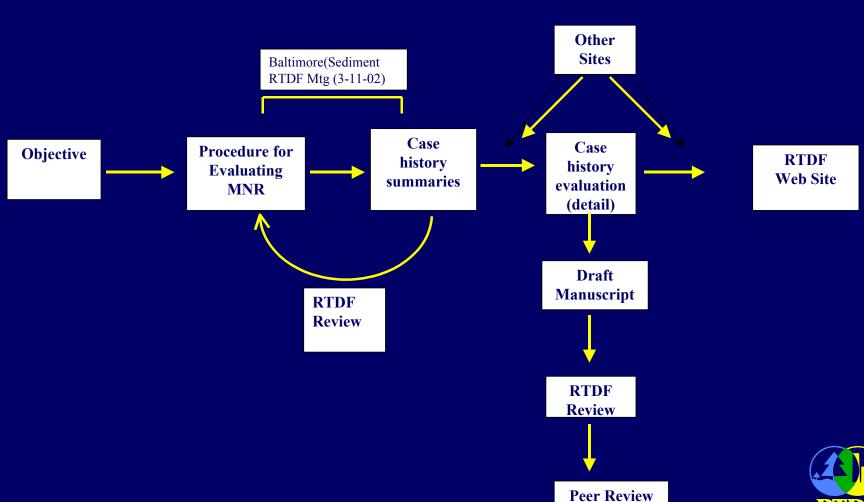
Clay Patmont:

Summary Review of 3 sites using assessment element (lines of evidence)

John Davis:

Path Forward





Publication

