



# Accelerating Cleanup: Portland Harbor ROD implementation

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USEPA



# Presentation Overview

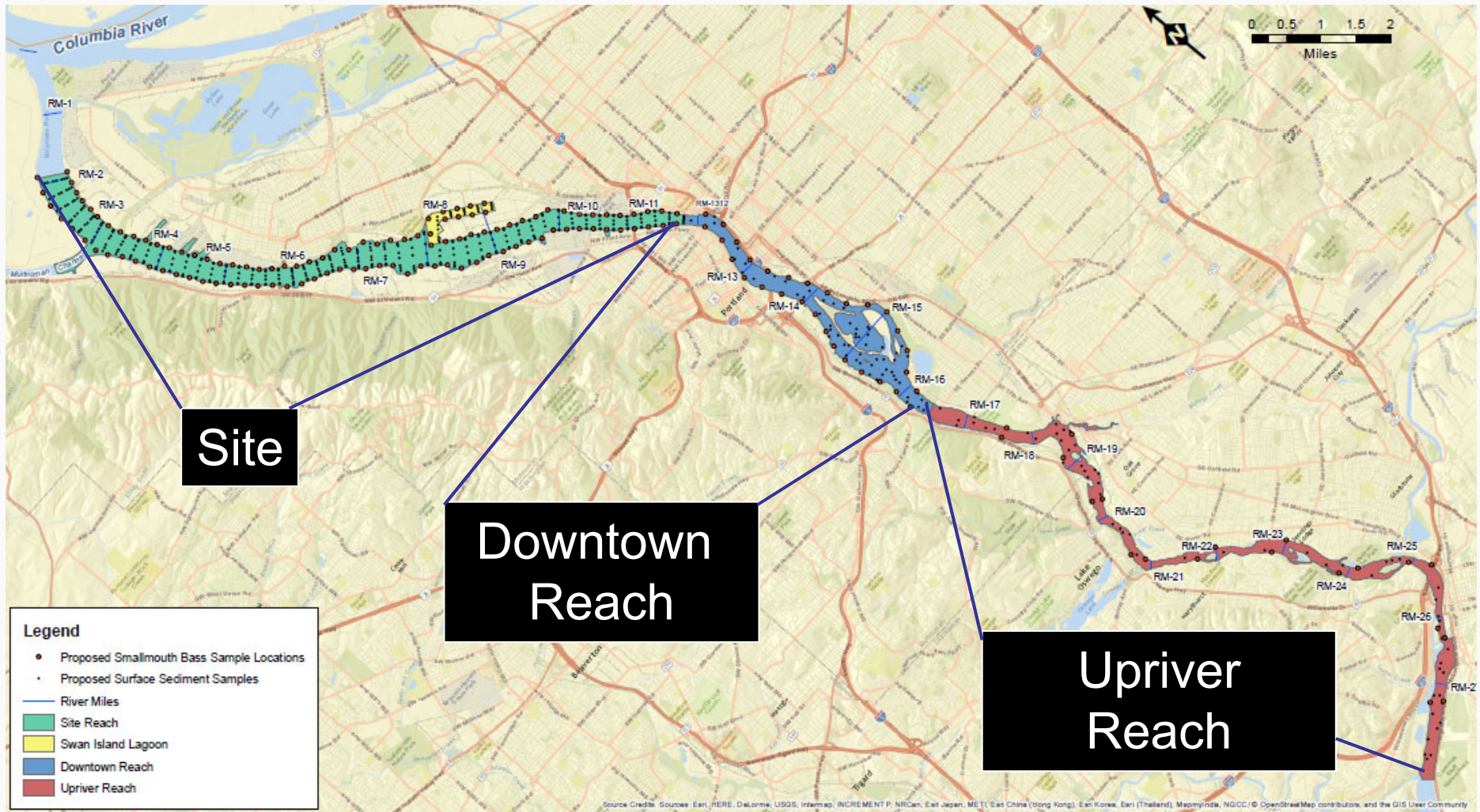
- Site Background
- Remedial Design
- Outside CERCLA, CWA 404
- Remedial Action
- Legal agreements
- Schedule

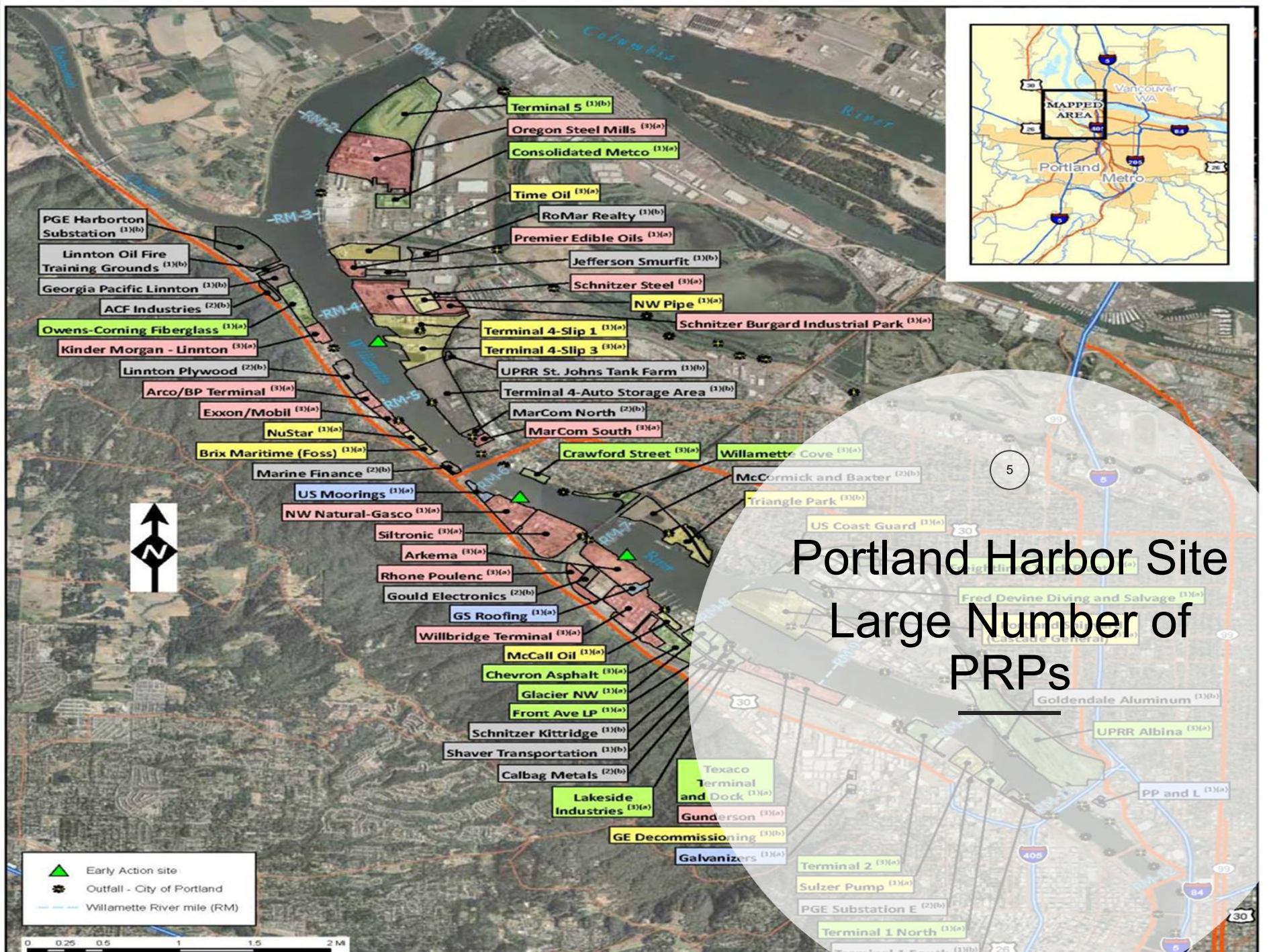


# Background






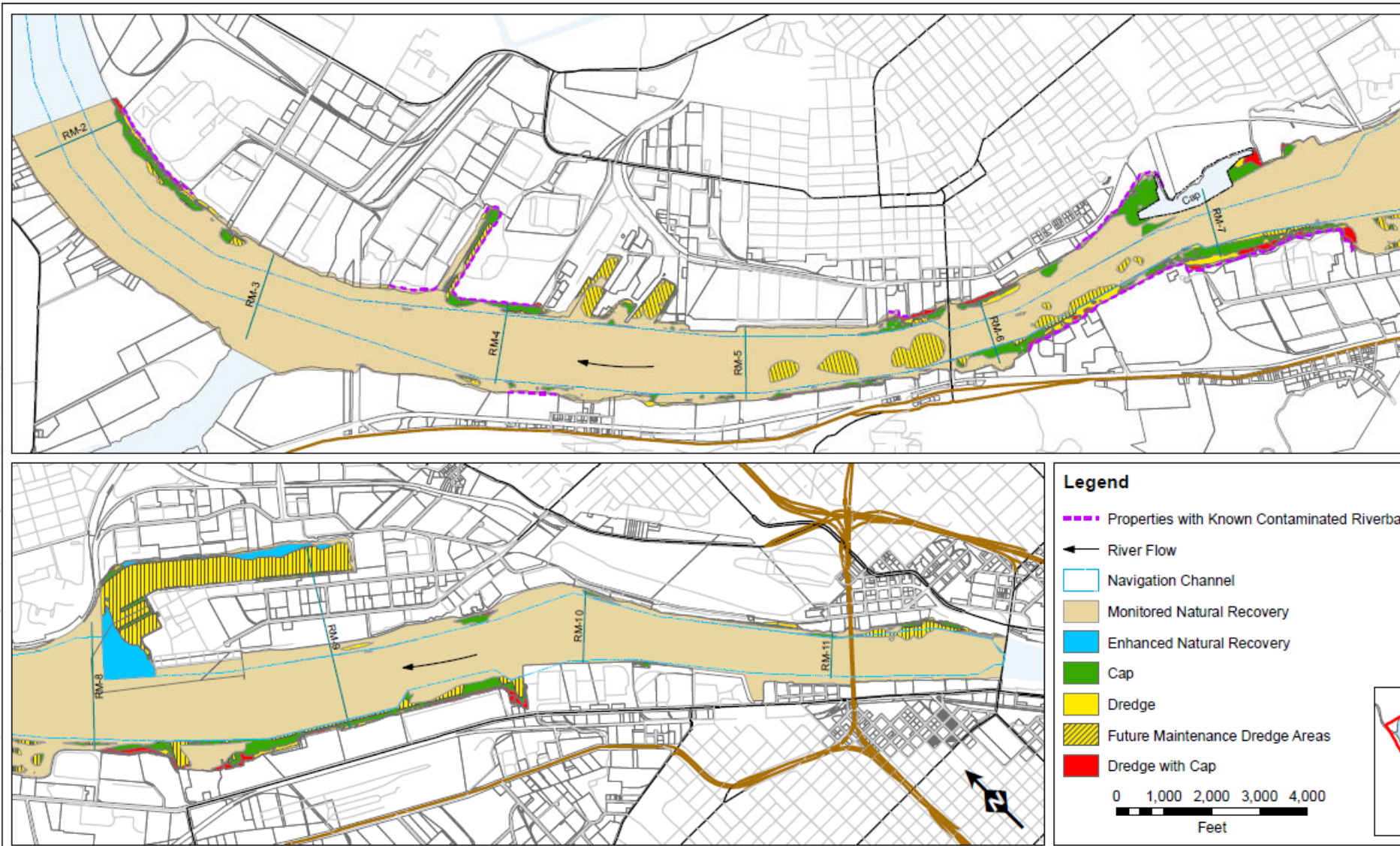
# Portland Harbor Site Vicinity Map





# Portland Harbor Site Large Number of PRPs

-  Early Action site
-  Outfall - City of Portland
-  Willamette River mile (RM)



**Site-Wide**  
**Cleanup Technologies for Selected Remedy**  
Portland Harbor Superfund Site

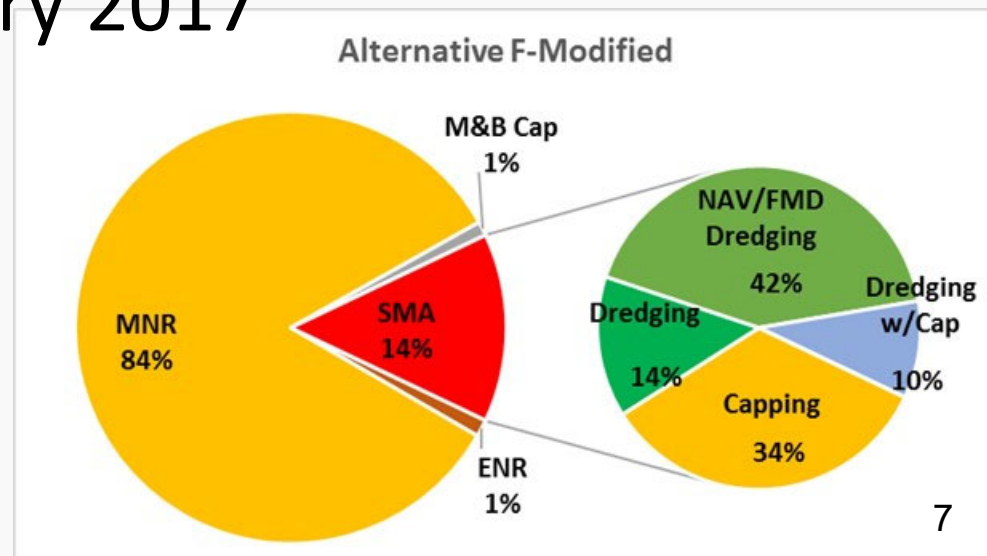


# Background

- Portland Harbor Superfund Site
  - RI/FS conducted between 2002 and 2016
  - COCs include PCBs, dioxins and furans, chlorinated pesticides, PAHs, metals and other chemicals

- ROD issued in January 2017

- Dredging (215 acres)
- Capping (150 acres)
- ENR (28 acres)
- MNR (1770 acres)



## Remedial Action Objectives (RAOs)

RAO		Media
H u m a n	RAO 1	Sediment
	RAO 2	Biota
	RAO 3	Surface Water
	RAO 4	Groundwater
E c o	RAO 5	Sediment
	RAO 6	Biota
	RAO 7	Surface Water
	RAO 8	Groundwater
H&E	RAO 9	Riverbanks

- **RAOs:** Media specific goals for protecting human health and the environment
- Cleanup plan established RAOs and cleanup levels for sediment, groundwater, surface water, and river bank soils
- Any change in remedial action levels must consider impact on all RAOs





## RD elements

- Flexibility vs. standardized approach
- RD guide
  - Seismic
  - Flood rise
  - Resiliency
  - Site specific cap model adjustment
  - Sufficiency assessment
  - Groundwater (RAOs 4, 8)
  - Surface water (RAOs 3,7)
  - Sediment (RAOs 1, 2, 6)
  - Riverbank (RAO 9)
  - Points of compliance
  - Technology specific approaches for dredging, capping, ENR



## Outside of CERCLA

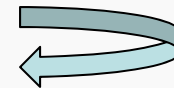
- CWA 404 permits
- Source control
- Upriver background efforts



## RA elements

- Flexibility vs. standardized approach
- Biological Assessment – programmatic and site specific
  - Standardized points of departure for habitat
- CWA 401
- Sequencing
- Fish windows
- Transload
- CQA, post construction confirmatory sampling

Data gaps sampling in RD





## Vehicles

- Standardized AOC/CDs
- RD under AOCs underway in parallel with CD negotiations
- All site areas highlighted in ROD starting design concurrently
- ICIAP
- Centralized data storage



## Schedule

- Design agreements by June
- CD negotiations in parallel with 2 year design process.
- Construction start 2021



## Summary

- Cleanup is moving forward
- MNR is happening, but will not work without active cleanup
- Design agreements are due by June



# Questions?

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