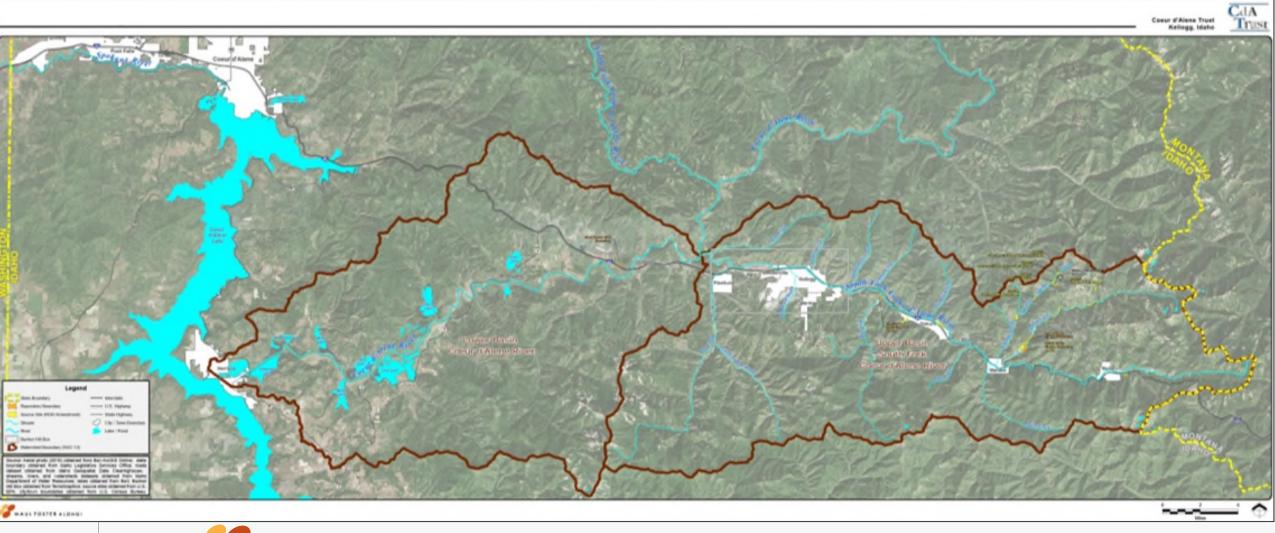
Presented by Christina Johnson, PG

Remedial Action Effectiveness at the Bunker Hill Superfund Site

June 6, 2023 - American Society of Reclamation Sciences, Boise, ID



Bunker Hill Superfund Site





Bunker Hill History



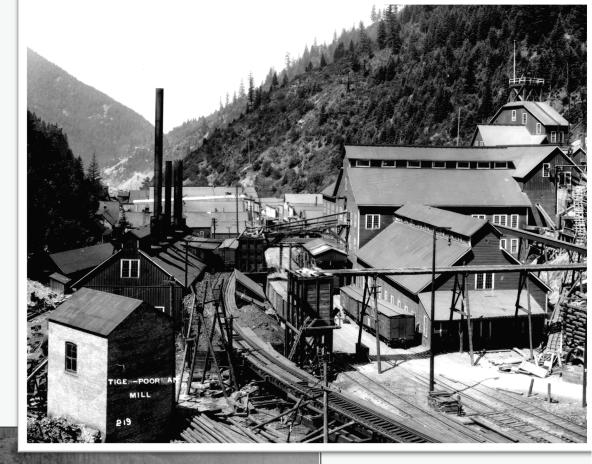


Photo credit: Wallace Mining Museum





BEMP Overview

VOLVO



The Structure

<u>Site-Specific Remedial Action Effectiveness</u> or Performance Monitoring

Groundwater
Surface Water
Soil
Sediment

• and/or biological monitoring as appropriate

Area Wide Monitoring

Ecological Monitoring (habitat recovery)

- Biological Monitoring of Indicators
- Applicable to the Area

(ex. bird, fish, benthic)

* Sediment, groundwater, and/or surface water as needed.

Site-Wide Monitoring

Surface Water

Site-Specific Monitoring of

- * Implemented Remedial Action
 - A Source Area (ex. Interstate Millsite)
- Site-Specific Performance Monitoring
 - A Waste Consolidation Area or Repository (ex. East Mission Flats Repository)

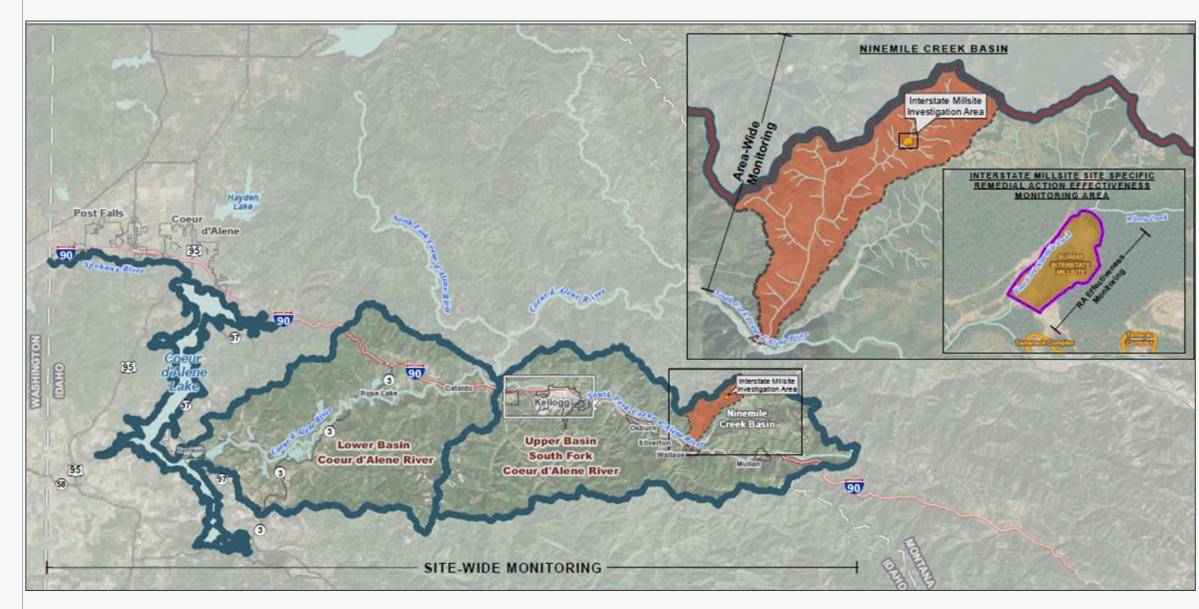
 Assess Changes in Area from Cumulative Remedial Actions and Climatic Variation

- Reach, Area, or Sub-Basin (ex. Ninemile Creek Basin)

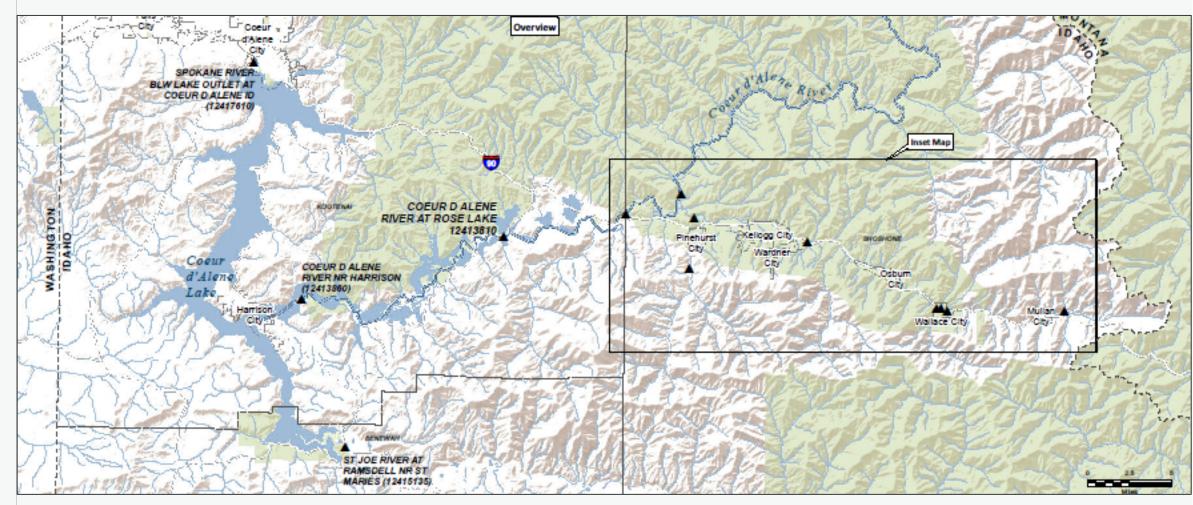
 Assess Large Geographic Areas (Long-Term Trends), Catastrophic Events, and Regional Climatic Shifts

- Regional Hydrologic Units (ex. HUC 8)
- Administrative or Regulatory Units (ex. Bunker Hill Mining and Metallurgical Superfund Site)

BEMP Monitoring Structure

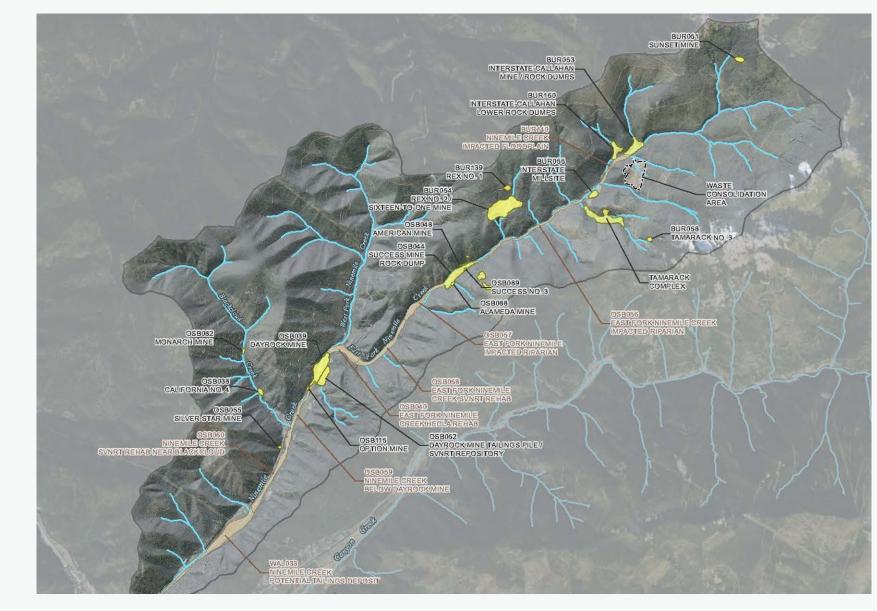


Site-Wide Monitoring



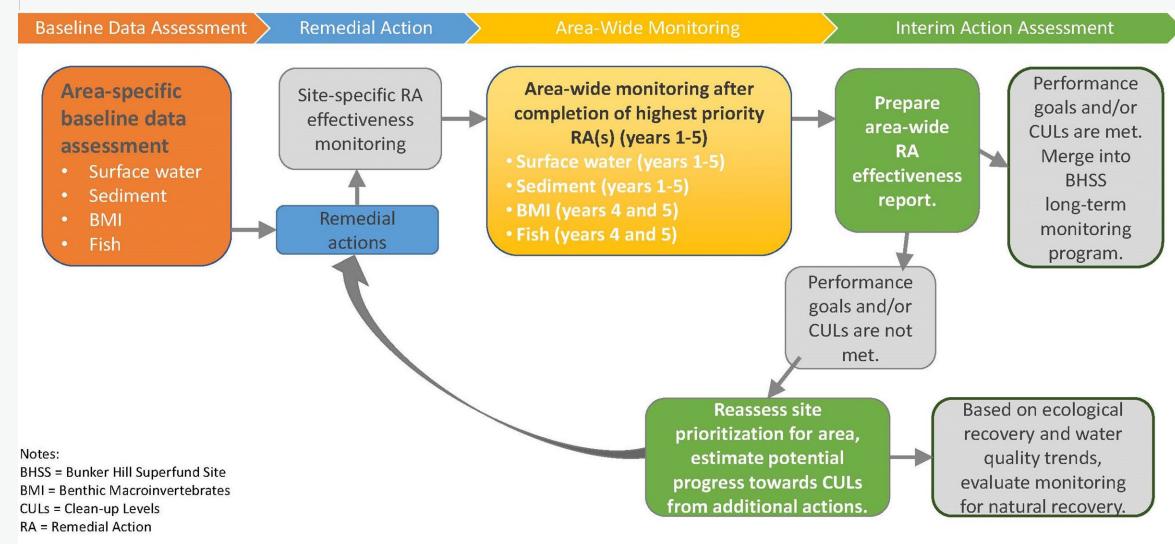


Area-Wide Monitoring



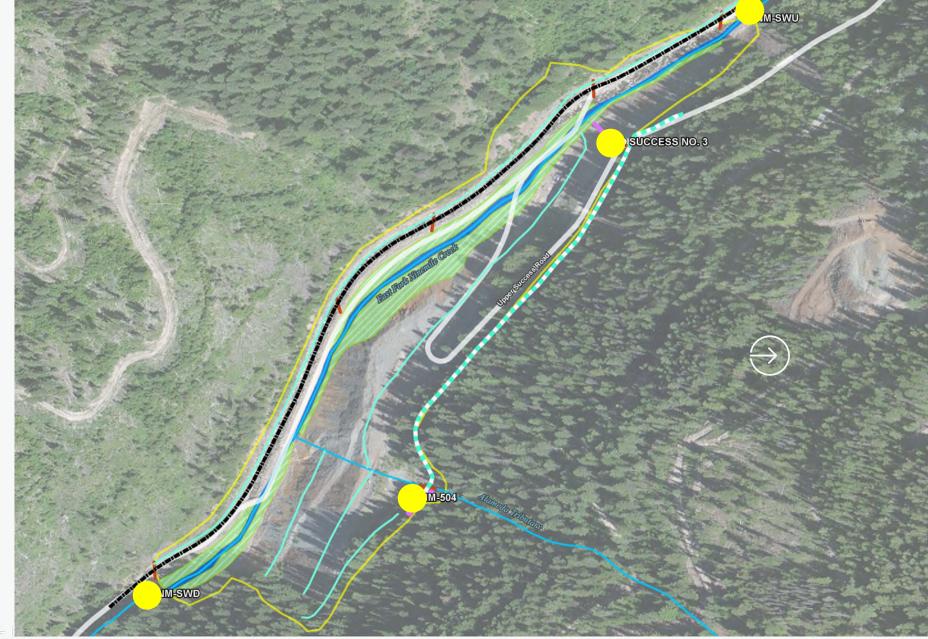


Area-Wide Monitoring



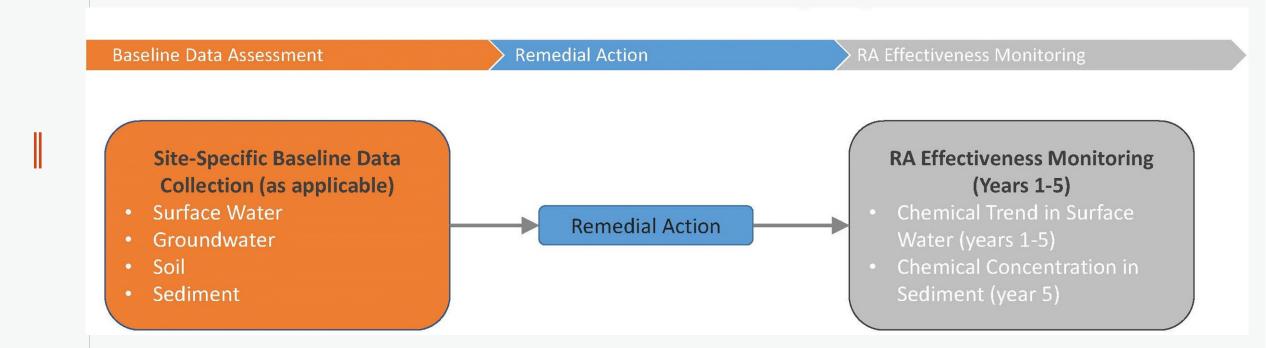


Site-Specific Monitoring



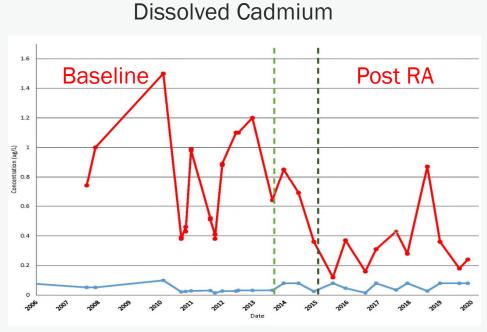


Site-Specific Monitoring

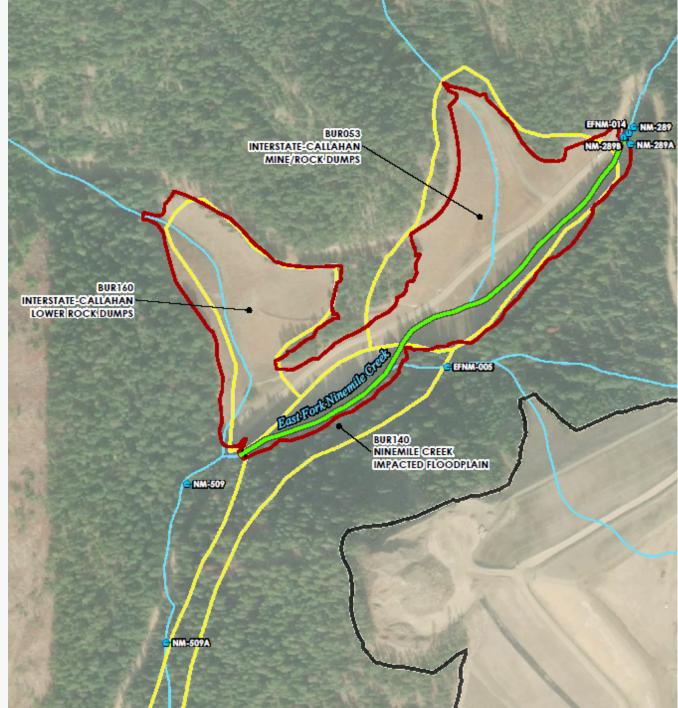




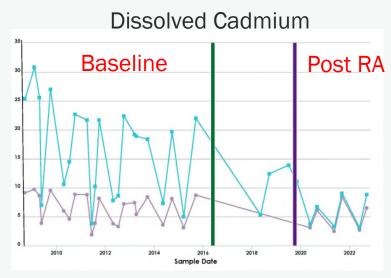
Case Study – Interstate-Callahan Rock Dump



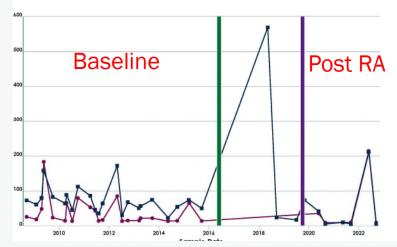


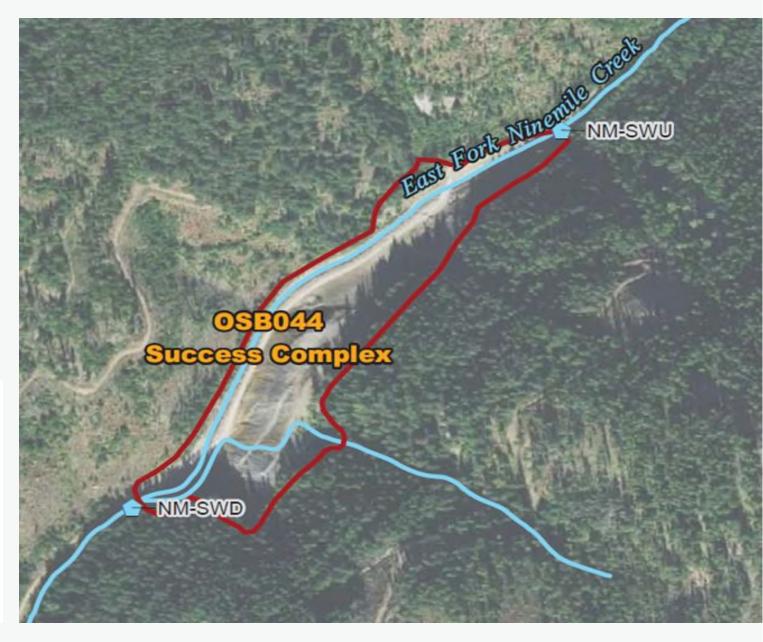


Case Study – Success Complex



Total Lead









QUESTIONS?

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