



Leviathan Mine Superfund Site Community Involvement

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Freyja Knapp, Ph.D.
75 Hawthorne Street, SFD 7-2
San Francisco, CA 94105

(415) 972-3025
knapp.freyja@epa.gov

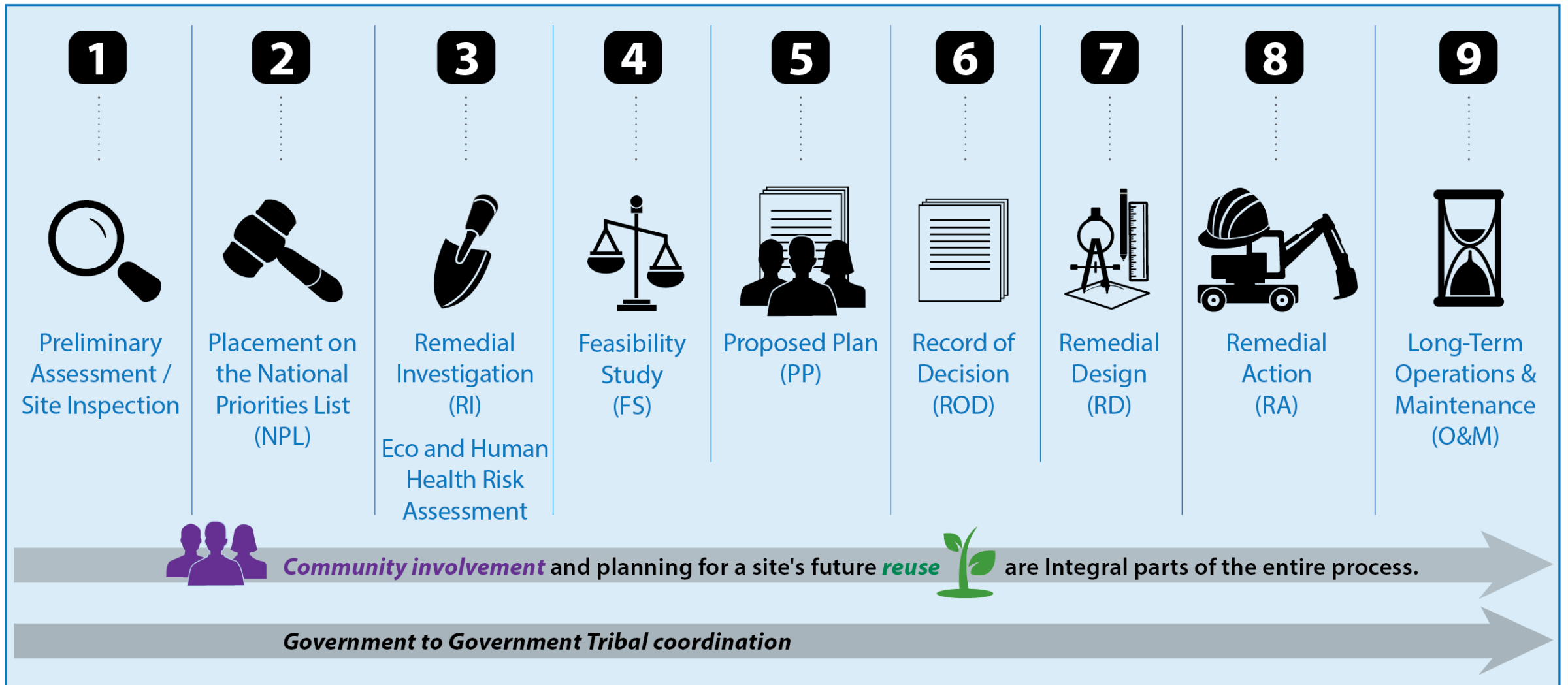
Topics

- Superfund Community Involvement
- Leviathan Updates
- Tribal Consultation

NCP: Community Involvement Objectives

- Conduct early, frequent and meaningful community involvement
- Keep the public well-informed of ongoing and planned activities
- Encourage and enable the public to get involved
- Listen carefully to what the public is saying
- Consider changing planned actions where public comments or concerns are considered by the site team
- Explain to community members how EPA considered their comments, what the Agency plans to do, and why this decision was made

The Superfund Process



Community Involvement Tools are bolded and in italics.

Required Activities: Remedial

- National Priorities List (NPL) Listing
 - **Public notice**
 - **Public comments**
 - Responsiveness summary
 - **Technical Assistance Grant (TAG) notification**
- Remedial Investigation/Feasibility Study (RI/FS)
 - Conduct **community interviews**
 - Prepare **Community Involvement Plan (CIP)**
 - Establish **information repository (IR) and administrative record (AR)** - **Public notice**
 - **TAG notification**
- RI/FS Completion & Proposed Plan
 - **Public notice**
 - **Public meeting**
 - **Public comments**
 - Responsiveness summary
- Pre-Record of Decision (ROD) Significant Changes
 - **Public notice**
 - **Public comment**
 - **Public meeting**
 - Responsiveness summary
- ROD Issuance
 - **Public notice**
 - **Public comment**
 - Review **CIP** & revise if necessary
- Post-ROD Significant Changes/ROD Amendment
 - Issuance of an explanation of significant differences
 - **Public notice**
 - **Public comment**
 - **Public meeting**
 - Responsiveness summary
- Remedial Design/Remedial Action (RD/RA)
 - **Fact sheet** on RD
 - **Public meeting** at RD completion prior to RA, if appropriate
- Consent Decree
 - **Federal Register** notice
 - **Public comment**
 - Responsiveness summary
- Operations and Maintenance (O&M)
 - **Five-year review**
 - **Five-year review** results summary available in **IR**
- National Priorities List Deletion
 - **Federal Register** notice announcing intent to delete
 - **Public notice**
 - **Public comment period**
 - Responsiveness summary
 - Add deletion docket to **IR**

Discovery	PA/SI	Listing Process	RI/FS	ROD	RD/RA	O&M	NPL Deletion
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Community Involvement Tools are bolded and in italics.

Recommended Activities: Remedial

Discovery	PA/SI	Listing Process	RI/FS	ROD	RD/RA	O&M	NPL Deletion
	<p><u>Preliminary Assessment/Site Inspection (PA/SI)</u></p> <ul style="list-style-type: none"> Meet with local officials & opinion leaders Fact sheet Risk communication Designate a Community Involvement Coordinator (CIC) 	<ul style="list-style-type: none"> Create website or social media page Offer public meeting and webinar on Superfund process Press release 	<ul style="list-style-type: none"> Presentations to community Informational public meetings before RI begins Regular community visits Community advisory groups Media visits Public availability/poster sessions Speak to schools and civic groups Offer workshop on Superfund process Regular briefings for local officials TANA Offer community visioning for site reuse Contact the Conflict Prevention and Resolution Center (CPRC) for alternative dispute resolution (ADR) services 	<ul style="list-style-type: none"> Presentations to community Offer site tour or virtual site tour Public meetings, or conference calls to explain ROD Workshops or webinars on cleanup technology Fact sheet to explain process 	<ul style="list-style-type: none"> Public briefing prior to RA Presentations to community Post on website or social media page Contact CPRC for ADR Focus groups 	<ul style="list-style-type: none"> Review CIP Issue press release Post on website or social media page Communication strategy Public meeting Public availability/poster session 	<ul style="list-style-type: none"> Ceremony or special event to commemorate completion and recognize community members

Community involvement and planning for a site's reuse and redevelopment are integral to the entire process

SUPERFUND REMOVAL PROCESSES

TIME-CRITICAL REMOVAL - SIX-MONTH PLANNING PERIOD AVAILABLE

Assessment


Discovery/
Notification of
Contamination


Removal
Site
Evaluation


Removal Action
Determination

Removal


Action
Memorandum


Removal
Planning


Removal
Action

Post-Removal


Post-Removal
Site Control
(if needed)


Additional
Site Evaluation
(if needed)

NON-TIME-CRITICAL REMOVAL - GREATER THAN SIX-MONTH PLANNING PERIOD AVAILABLE

Assessment


Discovery/
Notification of
Contamination


Site
Evaluation


Removal Action
Determination


Engineering
Evaluation/
Cost Analysis


Action
Memorandum


Removal
Planning


Removal
Action

Post-Removal


Post-Removal
Site Control
(if needed)


Additional
Site Evaluation
(if needed)

Community involvement is integral to the entire process

Community Involvement Tools are bolded and in italics.

Required Activities: Removal

- Designate agency spokesperson
- Establish Administrative Record (AR)
- ***Public notice*** to community about the availability of the AR

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- ***Public notice*** to community about the availability of the AR
- ***Public comment period***, if appropriate (*required by EE/CA*)
- Responsiveness summary

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- Establish AR
- ***Public notice*** to community about the availability of the AR
- ***Public comment period***, if appropriate (*required by EE/CA*)
- Responsiveness summary
- ***Community interviews***
- Prepare a ***Community Involvement Plan (CIP)***
- Establish an ***Information Repository (IR)***

- Designate agency spokesperson
- Establish AR
- ***Public notice*** to community about the availability of the AR
- ***Public comment period***, if appropriate (*required by EE/CA*)
- Responsiveness summary
- ***Community interviews***
- Prepare a ***CIP***
- Establish an ***IR***
- ***Public notice*** to community about the availability of the EE/CA
- ***Public comment period***
- Responsiveness summary

Emergency Response

Short-Term Time-Critical Removal *(on-site activity lasts less than 120 days)*

Long-Term Time-Critical Removal *(on-site activity lasts more than 120 days)*

Non-Time-Critical Removal

Community Involvement Tools are bolded and in italics.

Recommended Activities: Removal

Emergency Response

- ***Risk communication***
- ***Communication strategy***
- Meet with local officials
- Coordinate with On-Scene Coordinator
- ***Public comment period***, if appropriate (*required by Engineering Evaluation/Cost Analysis (EE/CA)*)
- Responsiveness summary
- Staff on-site command post

Short Term Time-Critical Removal (on-site activity lasts less than 120 days)

- Recommended activities for both short- and long-term removals
- ***Communication strategy***
 - ***Risk communication***
 - ***Public availability/poster session***
 - ***Fact sheets***
 - ***Public meetings***
 - ***Technical assistance***
 - ***Social media***
 - Prepare/distribute ***media*** talking points
 - Site tours
 - Presentations to community (in-person or online)
 - Work with existing community group
 - Contact the Conflict Prevention and Resolution Center (CPRC) for alternative dispute resolution (ADR) services

Long-Term Time-Critical Removal (on-site activity lasts more than 120 days)

Non-Time-Critical Removal

- Press releases/***media***
- ***Social media***
- ***Fact sheets***
- Distributing flyers
- ***Technical assistance***
- ***Public Availability/Poster sessions***
- Presentations to the community
- Contact CPRC for ADR services

Community involvement is integral to the entire process.

EPA and Environmental Justice

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

This goal will be achieved when everyone enjoys:

- The same degree of protection from environmental and health hazards, and
- **Equal access to the decision-making process to have a healthy environment in which to live, learn, and work.**

Leviathan Mine Activities - Examples

- Cooperative Agreement with Washoe Environmental Protection Department
- TASC support (Technical Advisor)
- Site Tours – Washoe tribal leadership, stakeholder groups, public
- Community Meetings
- Fact Sheets
- Presentations/Guest Speaking
- Tabling/Participation at Community Events
- (Updating) Community Involvement Plan
- Communication Strategies
- Website updates
- Video Updates

Environmental Protection & Superfund with Tribal Partners

... Indian Tribes may apply for support agency Cooperative Agreements to ensure their meaningful and substantial involvement in response activities, as specified in sections 104 and 121(f)(1) of CERCLA and the NCP (40 CFR part 300)...

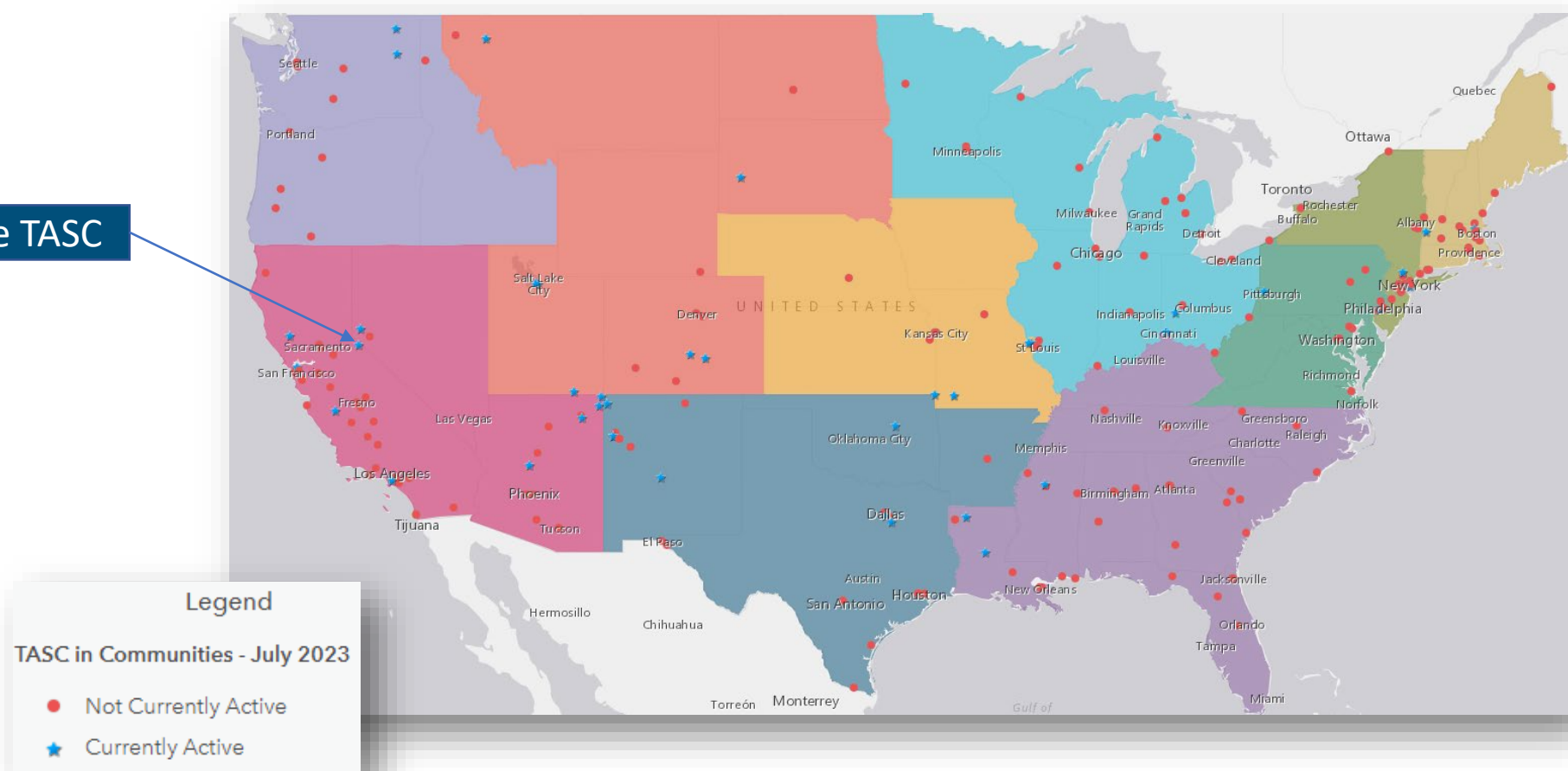
Leviathan Mine Cooperative Agreements with the Washoe Tribe of Nevada & California

1998 – present



Technical Assistance Services for Communities (TASC) Program

Leviathan Mine TASC



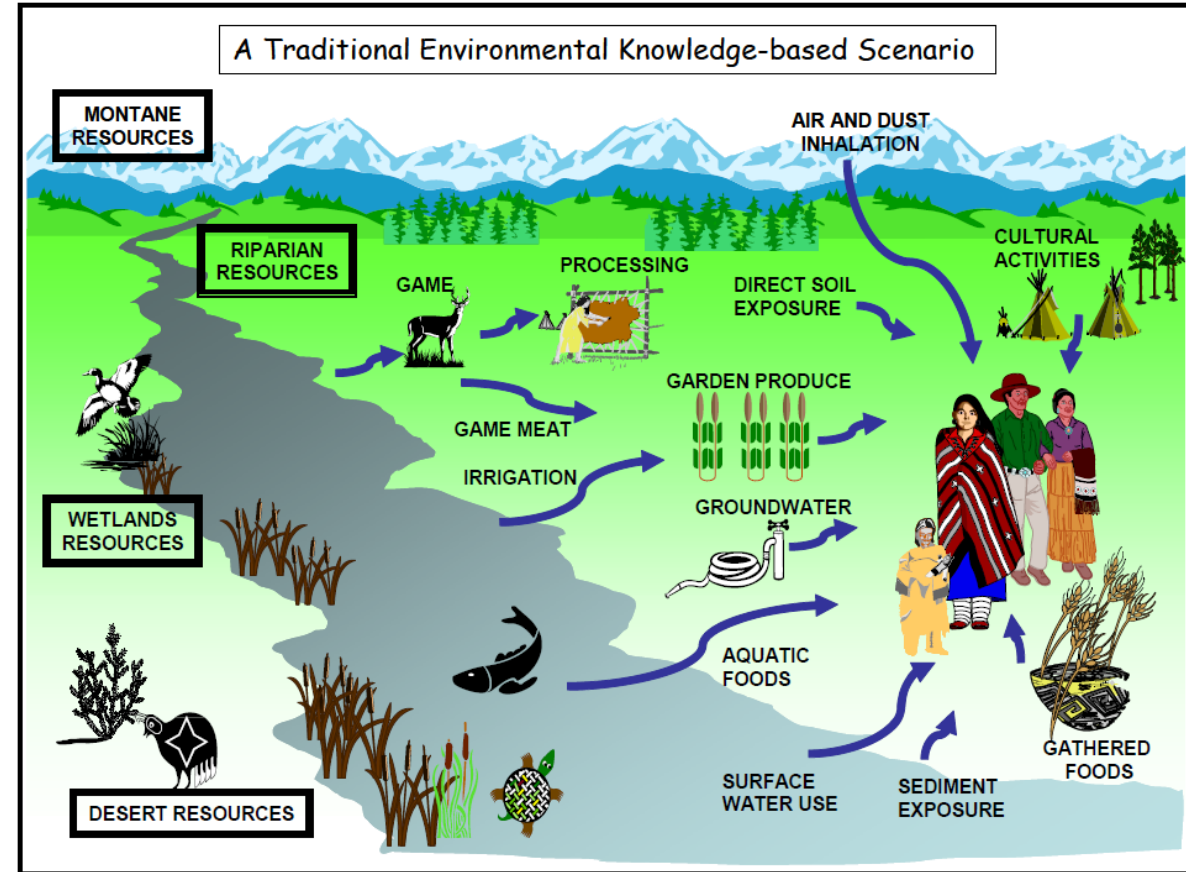
TASC: Technical Advisor Services

Review and Comment on Site-Wide Results

- Remedial Investigation Report
- Baseline Human Health Risk Assessment
- Baseline Ecological Risk Assessment

Special Attention to Washoe Tribal Lifeways

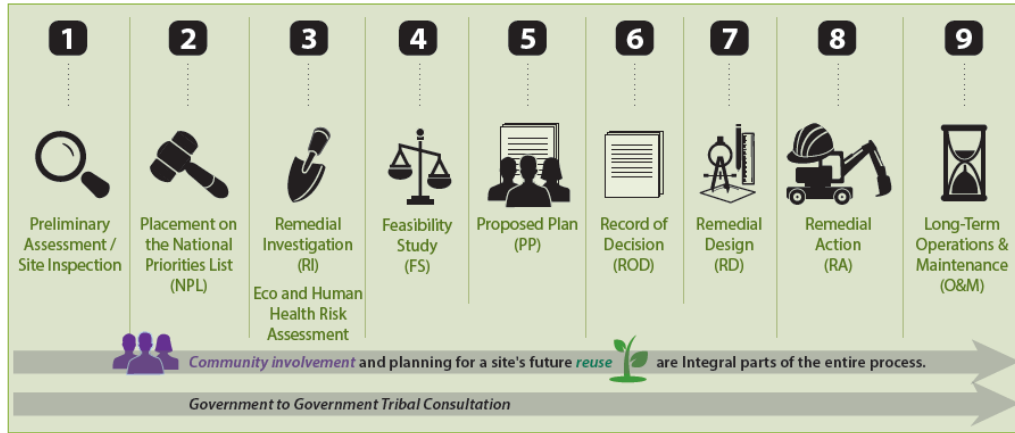
- Formerly submitted to EPA by WEPD
- EPA required Responsible Party to incorporate into Risk Assessment
- Currently being reviewed by WEPD, TASC Technical Advisor, EPA



Site Tours & Community Meetings



The Superfund Process



What Happens Next

Remedial Investigation & Feasibility Study

- Atlantic Richfield Company will submit a draft Remedial Investigation Report summarizing the nature and extent of contamination, including Ecological and Human Health Risk Assessments.
- Based on the RI Report, a Feasibility Study will be developed to evaluate options for remaining contamination.

Early Final Remedial Action: Year-Round Capture of Five Primary Sources of Acid Mine Drainage

- EPA will develop and release for public comment a Proposed Plan for the EFRA.
- After responding to public comments, EPA will issue a Record of Decision.
- EPA and the Responsible Parties will negotiate a Consent Decree for Remedial Design and Remedial Action.

For More Information

Washoe Tribe of Nevada & California Role:

EPA's Policy on Consultation and Coordination with Indian Tribes discusses EPA's responsibility to consult with tribes and consider their interests when taking action that may affect them or their resources. EPA works with the Washoe Tribe and provides funding through a cooperative agreement to facilitate meaningful involvement.

Talk with one of the EPA or Washoe Tribe of Nevada & California representatives:

Freyja Knapp
U.S. EPA Region 9
Remedial Project Manager
(415) 972-3025
knapp.freyja@epa.gov

James Gatzke
Washoe Tribe of Nevada & California
Environmental Program Coordinator
(775) 265-8680 X 11010
james.gatzke@washoetribe.us

Visit the Information Repository located at:

EPA Superfund Records Center
95 Hawthorne St., 4th Floor
San Francisco, CA 94105
(415) 536-2000

Be included on the Leviathan Mine Superfund site mailing list by contacting Freyja Knapp.

Websites:

Leviathan Mine Superfund Site – <http://www.epa.gov/superfund/leviathanmine>



Leviathan Mine Superfund Site

U.S. Environmental Protection Agency • Region 9 • San Francisco, CA • Oct 2022

History and Timeline

Background

Leviathan Mine is an abandoned open-pit sulfur mine. The mine is located approximately 25 miles southeast of Lake Tahoe high on the eastern slope of the Sierra Nevada mountain range, in a remote portion of northeastern Alpine County, CA surrounded by national forest and private land. The acid mine drainage (AMD) from Leviathan Mine has historically contaminated a nine-mile stretch of the Leviathan-Bryant Creek watershed, impacting Leviathan, Aspen, and Bryant Creeks, as well as the East Fork Carson River. In 2000, the U.S. Environmental Protection Agency (EPA) added the mine and the impacted areas (the "Superfund site") to the National Priorities List (NPL). The NPL is the list of the most complex, uncontrolled hazardous waste sites throughout the United States that threaten public health and the environment.

The historical activities from the Leviathan Mine have created AMD, impacting the surrounding environment. Sulfuric acid is created when water (rainwater, snowmelt and subsurface water) interacts with rocks containing sulfur-bearing minerals. The resulting highly acidic water moves into the surrounding environment, such as the groundwater, surface water and soil, and may have harmful effects on humans, animals and plants.

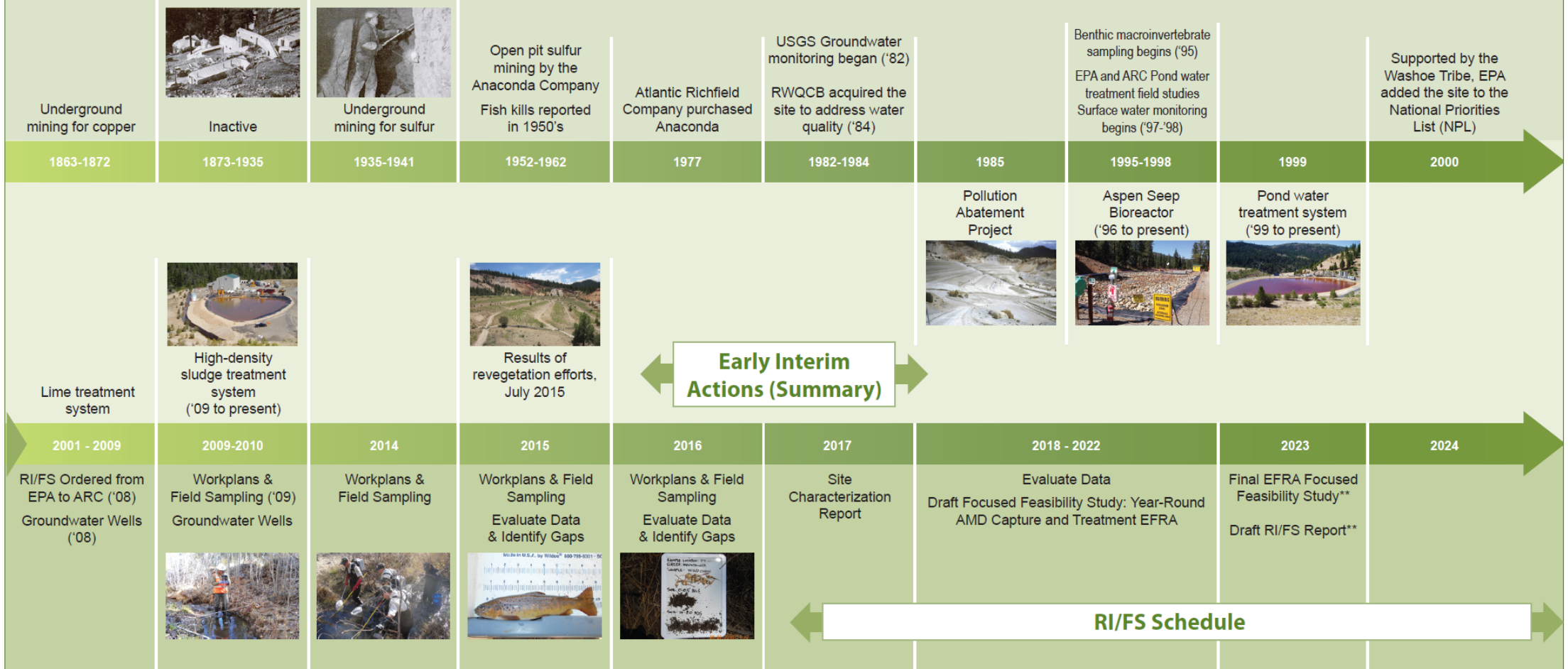
Although a long-term cleanup plan has not been developed, early cleanup activities are being conducted to reduce the discharge of untreated AMD. In the mid-1980s, the Pollution Abatement Project began which included re-grading the site, building evaporation ponds, and channeling the creek. Interim treatment systems have greatly improved the water quality of the Leviathan-Bryant Creek watershed.



Figure 1: Leviathan Mine Superfund Site Location

Acid Mine Drainage (AMD)
When highly acidic water that is rich in metals moves (or drains) out of a mined area into the environment

Timeline for the Leviathan Mine Superfund Site



Treatment System Achievements 1999-2021				
	CA RWQCB	ARC	TOTAL	
Water Treated	166,053,904	210,645,233	376,699,137	Gallons
Aluminum Removed	570,900	79,046	649,946	Pounds
Arsenic Removed	8,751	438	9,189	Pounds
Iron Removed	891,872	343,352	1,235,224	Pounds
Nickel Removed	9,297	1,783	11,080	Pounds

Acronyms
RWQCB – California Regional Water Quality Control Board
USGS – United States Geological Survey
ARC – Atlantic Richfield Company
EPA – United States Environmental Protection Agency
EFRA – Early Final Remedial Actions
RI/FS – Remedial Investigation/Feasibility Study

****Proposed Schedule**

Community Involvement Plan (CIP)

- Discusses EPA's site-specific strategy for informing and engaging community members
- Required for all Remedial actions and Removal actions longer than 120 days
- Incorporates interviews with the community
- Incorporates comments from the community on the draft CIP

CURRENTLY BEING UPDATED



June 2004

COMMUNITY INVOLVEMENT HELPS SHAPE CLEANUP DECISIONS

This Community Involvement Plan (CIP) for the Leviathan Mine Superfund Site (Site) provides a framework for public involvement activities at the site. It is a living document meant to reflect the needs of the community over the life of the project. The U.S. Environmental Protection Agency (EPA) believes that effective community involvement helps project staff make better decisions during investigation and cleanup of sites. This CIP describes past community outreach activities related to the Leviathan Mine Site and outlines plans for future public involvement in the cleanup of the site. EPA welcomes your ideas on how to make our public outreach strategy most effective.

LEVIATHAN MINE SUPERFUND SITE

A healthy environment and a thriving watershed are important to all California and Nevada



Aerial photo of Leviathan Mine

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citizens, especially those who live near and use the different creeks in the Leviathan watershed of Alpine County. However, the watershed has been impacted by the former Leviathan Mine, one of the world's largest open-pit sulfur mines, which has been operating intermittently since 1863. Water from Leviathan Creek that flows through the former Leviathan Mine site becomes impacted when it contacts sulfur and metals-bearing rock, which are remnants from the acid-generating mine waste. In addition to Leviathan Creek, Bryant and Aspen Creeks and

Environmental Protection & Superfund with Tribal Partners

Government-to-Government Consultation (for example in decision-making)

- The *EPA Policy on Consultation and Coordination with Indian Tribes* establishes clear EPA standards for the consultation process
 - It defines when and how consultation takes place
 - It designates EPA consultation contacts to promote consistency and coordination of the process
 - and It establishes management oversight and reporting to ensure accountability and transparency

Regional Tribal Operations Committee (RTOC)



The Tribal Superfund Working Group (TSFWG)



Summary

- Superfund Community Involvement
 - Tools, activities (required and recommended)
 - Remedial and Removal pathways
 - Technical support and capacity building examples: Cooperative Agreements, TASC, RTOC, ITEP
- Leviathan Updates
 - Site specific examples
- Tribal Consultation
 - Formal process of Government-to-Government Consultation
 - Ongoing additional tribal coordination



Thank You

Freyja Knapp

~ US EPA Project Manager for Leviathan Mine ~

US EPA Region 9

(415) 972-3025

Knapp.Freyja@epa.gov