



# Tribal Involvement with the Leviathan Mine Superfund Site

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**Washoe Tribe of Nevada and California**

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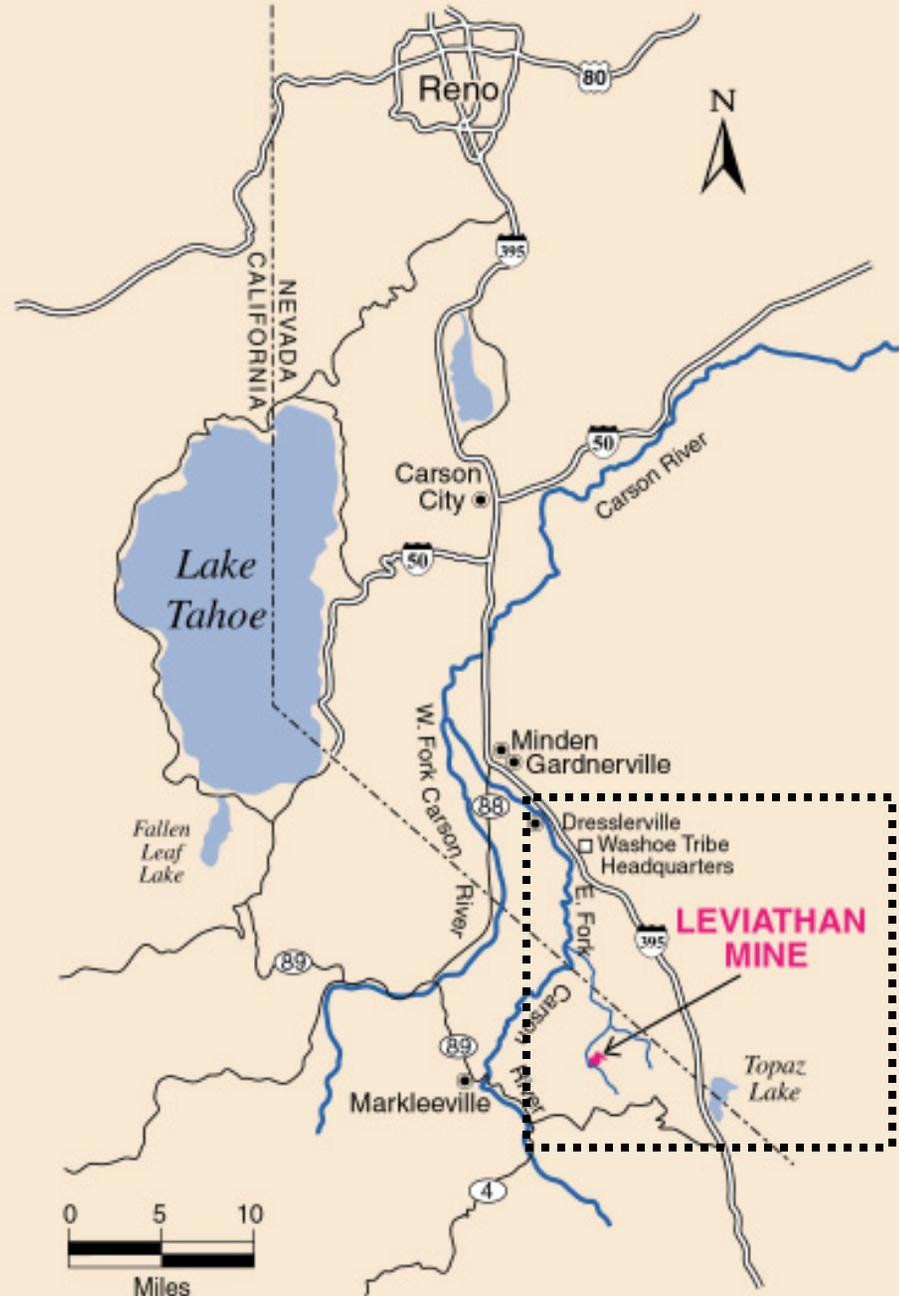
*Resources Policy Advisor*

# Focus Points

- 1) Overview of Leviathan Mine
- 2) Washoe Tribe's Role in Listing Leviathan on the NPL
- 3) Tribe's Contributions in Reviewing Response Action Documents
- 4) Plans for a Washoe-Specific Risk Assessment
- 5) Lessons & Considerations for Tribal Involvement

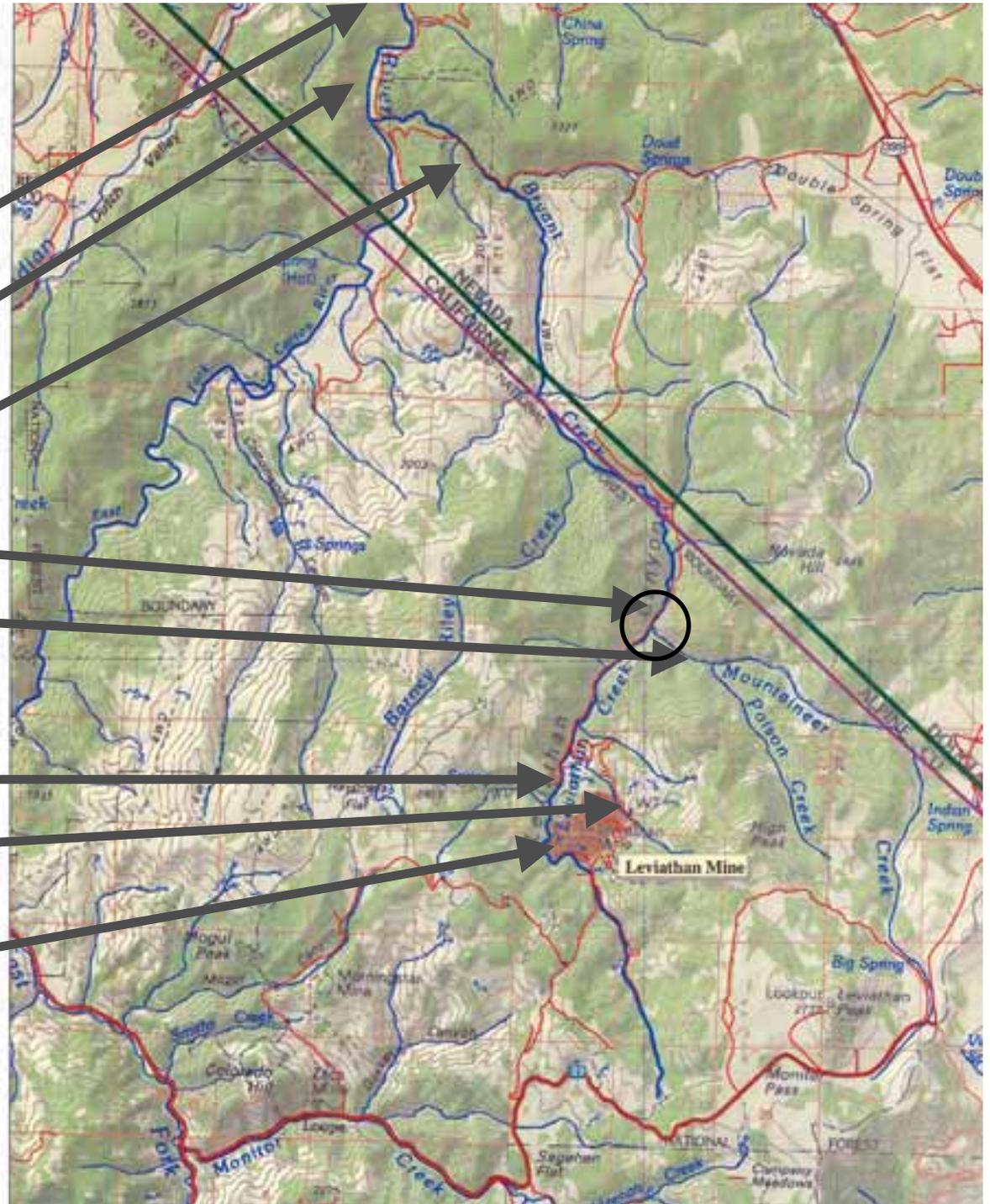
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# Overview of Leviathan Mine



## Points of Interest:

- ❖ Dresslerville Indian Colony (downstream)
- ❖ East Fork Carson River
- ❖ Pine Nut Allotments
- ❖ Bryant Creek
- ❖ Mountaineer Creek
- ❖ NFS Land
- ❖ Leviathan Creek
- ❖ Aspen Creek/Seep
- ❖ Leviathan Mine property



# The Source of the Problem: Leviathan Mine



# Leviathan Mine



- ❖ Former copper and copper sulfate underground mine
- ❖ Former open-pit sulfur mine, Anaconda (Atlantic Richfield Co.)

# Leviathan Mine

Pond 2 South

Pond 2 North

channelized Leviathan Creek  
channel underdrain  
outfall

Pond 1

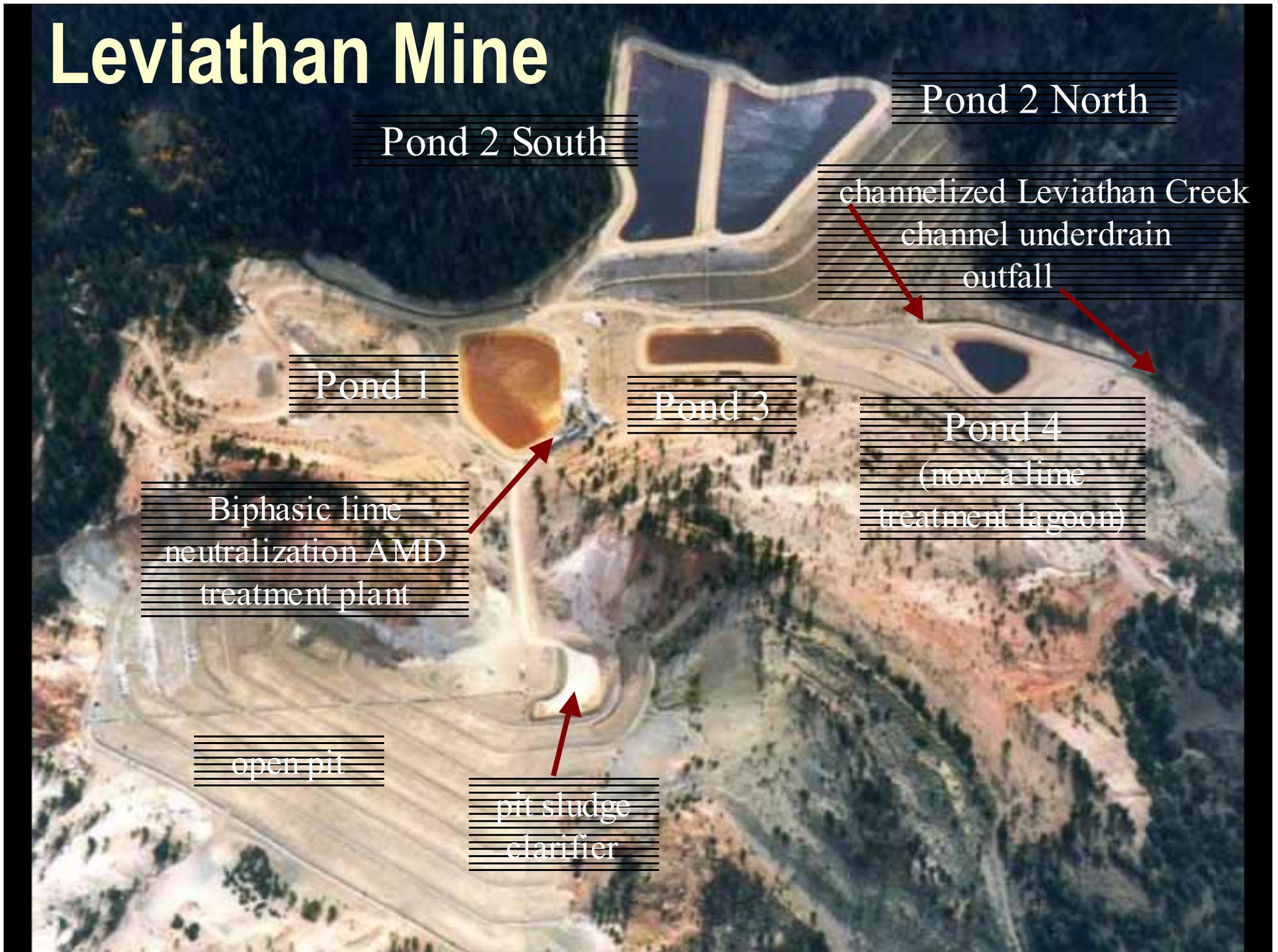
Pond 3

Pond 4  
(now a lime  
treatment lagoon)

Biphasic lime  
neutralization AMD  
treatment plant

open pit

pit sludge  
clarifier



# Pond 1 and Biphasic Lime Neutralization AMD Treatment Plant



# Pit Sludge Clarifier



**Delta Seep** (enters Leviathan Creek downstream from Channel Underdrain outlet)



# Leviathan Creek concrete channel



# Channel Underdrain outlet



# Lime Treatment Lagoon

Leviathan Creek  
concrete channel



Pond 1



# Downstream Impacts



# Confluence of Leviathan and Mountaineer Creeks, forming Bryant Creek



08 6 29

# Timeline:

- ❖ 1951 — Anaconda acquires Leviathan Mine, begins process of open pit mining
- ❖ 1962 — Anaconda ceases mining operations, sells the Mine property
- ❖ 1984 — California acquires Leviathan Mine property
- ❖ 1985 — California completes construction of Pollution Abatement Project
- ❖ 1997 — EPA makes last minute, aborted attempt at removal action
- ❖ 1998 — EPA enters into AOC with ARCO
  - ARCO makes failed attempt to reduce volume in ponds, causing pond overflow, violating UAO

# Timeline (cont'd):

- ❖ 1999 — EPA proposes Leviathan for listing on NPL
  - California begins biphasic treatment on ponds
- ❖ 2000 — Leviathan listed on NPL
  - EPA issues UAO to ARCO for early response actions and RI/FS
- ❖ 2001 — ARCO produces Site Management Plan (SMP)
  - ARCO & Calif. conduct early response actions
- ❖ 2002 — Atlantic Richfield produces new SMP and Early Response Action Work Plan
  - Atlantic Richfield produces Draft Phase 1 RI/FS Work Plan
  - ATSDR's Public Health Assessment released for public comment, declaring Leviathan Mine a public health hazard

(2)

# Washoe Tribe's Role in Listing Leviathan on the NPL

# Bringing attention to Leviathan

- ❖ **Getting EPA involved**
- ❖ **Tribe's organization of Natural Resource Trustees and the Leviathan Mine Council**
- ❖ **EPA support for the Washoe Tribe's involvement through a Superfund Support Agency Cooperative Agreement**
- ❖ **Tribe and other Trustees' push for NPL listing**

**(3)**

**Washoe Tribe's Ongoing  
Involvement with Leviathan Mine  
Response Actions**

(4)

# Plans for a Washoe-Specific Risk Assessment

**(5)**

# **Lessons & Considerations for Tribal Involvement**

# Lessons

- ❖ **Keep tribes informed**
- ❖ **Provide opportunities for review and input**
- ❖ **RESPOND to input from tribes**
- ❖ **Consider tribal risks up front**

# Considerations (or, Why Bother?)

- ❖ Tribes are on the front lines
- ❖ Tribes are sovereign governments
- ❖ EPA has a federal trust responsibility

**Tribes can be your allies**

— tribal involvement can be an asset