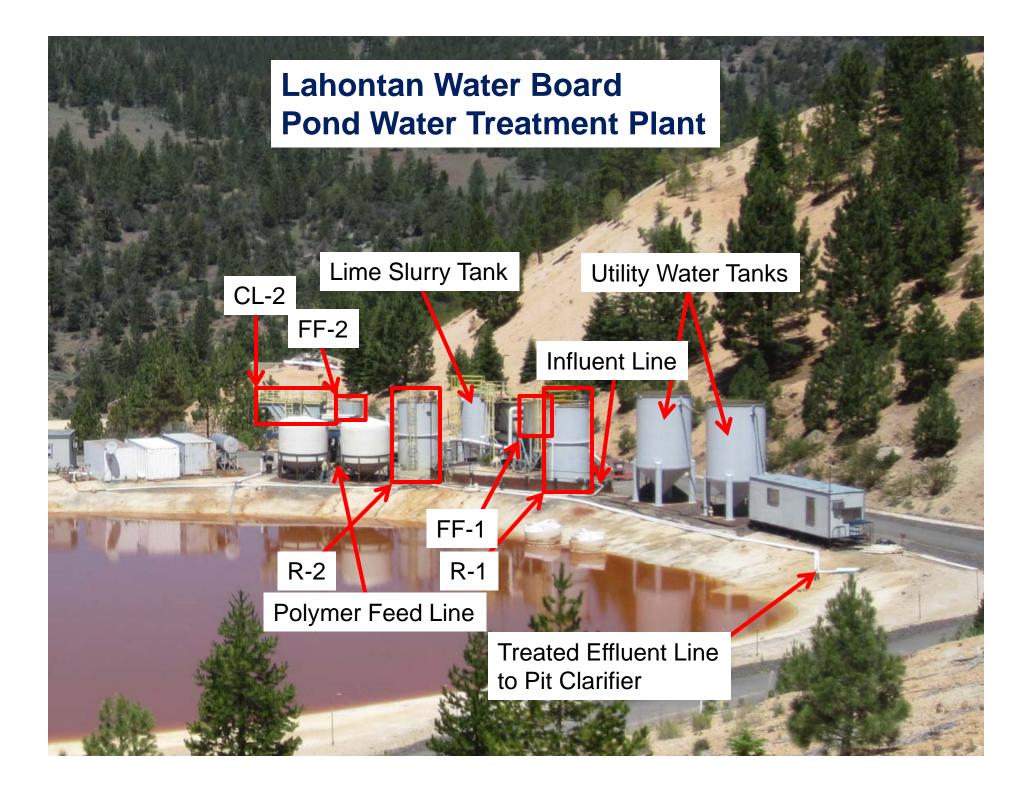
Leviathan Mine January 2016 Annual Technical Summary Meeting Lahontan Water Board

07/15/2015 12:00



# Tasks in 2015:

- •Summer Pond Water Treatment
- •Flow and Stage Monitoring
- Routine
   Maintenance
- Revegetation
   Study Completed



# 2015 Pit Clarifier Sludge Removal and Disposal



• Sludge generated during the treatment of 0.8 million gallons of AMD in 2014.

## 2015 Summer Pond Water Treatment Startup

- Assembly of pond water treatment plant
- Discharge of treated AMD to the Pit Clarifier began on July 15, 2015
- Discharge of treated AMD to Leviathan Creek began on July 21, 2015

### **2015 Summer Pond Water Treatment**

•2.5 million gallons of AMD treated and discharged
•Influent pH range 2.35 to 2.77 SU
•Influent average TDS 5,910 mg/L
•Field and lab data show USEPA discharge criteria met except for an occasional exceedance of total recoverable selenium

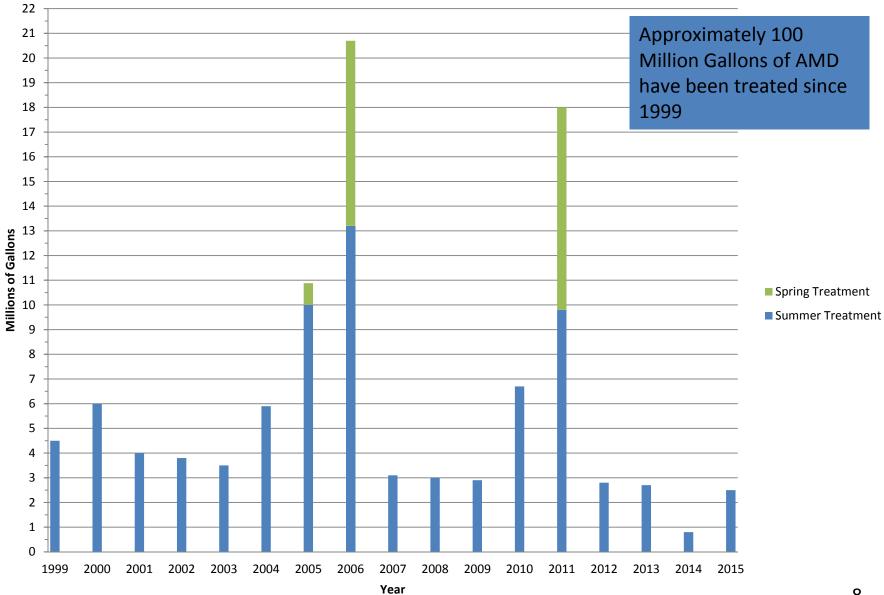
- 35.3 tons lime (dry weight)
- 1,100 gallons diesel
- 105 gallons gasoline
- 280 pounds of polymer
- 3,341 mg lime / liter AMD

# 07/30/2015 13:31

# Sludge generated is contained in the pit clarifier

# 10/07/2015 09:43

Approximately 212 - 255 tons of sludge generated during the 2015 season will be hauled off site for disposal in 2016.

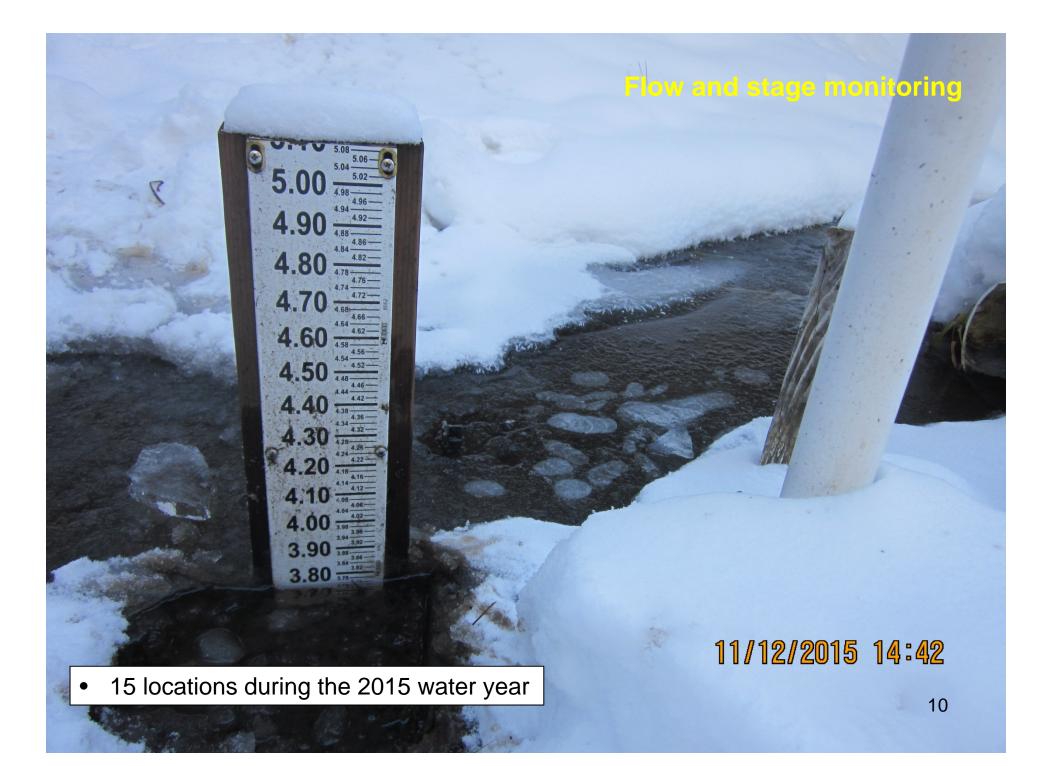


#### AMD Neutralized by Treatment Year

Maximum capacity is available for AMD storage entering the 2015/16 winter

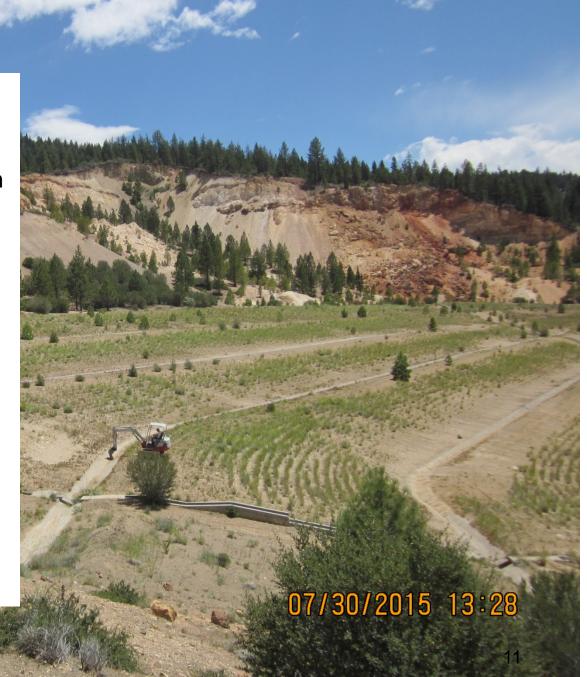
# 07/31/2015 11:22

Ponds 2 North and 2 South essentially dry due to pond water treatment



## **2015 Routine Maintenance**

- Removed accumulated sediment from 14,000 linear feet of storm water conveyance ditches and from the Flow Control Structure
- Repaired perimeter fence
- Performed drainage work above flow control structure and installed BMPs in and around the Pit access road
- Coordinated with El Dorado County Department of Agriculture to spray invasive Tall Whitetop and Dyer's Woad



### **Revegetation Study**

- 2 Year Revegetation Study Completed by UC Davis
- Final Report available at: http://www.waterboards.ca.gov/lah ontan/water\_issues/projects/leviath an\_project/index.shtml









Vic Claassen Soils and Revegetation UC Davis June 2015 Final Report

# **Questions?**

01/11/2016 09:38