

Objectives

- Describe the hydraulic mining process including water sources for the operation, extraction of ore, processing the ore, and dealing with the tailings.
- Explain the impact of hydraulic mining debris on downriver activities.
- Understand the significance of the Sawyer Decision in terms of hydraulic mining in California and, more generally, environmental law nationally.
- Interpret a contemporary aerial photo of the Yuba River near Marysville, California in terms of the impact of hydraulic mining and subsequent dredging.

Materials/Equipment

- computer access to the [El Dorado: Hydraulic Mining](#) webpage and the various articles and photos linked there.
- video projector
- student access to computers.

- Introduction - Mining practices of the 49ers
- Introduce students to the the California gold rush and the mining practices of the early 49ers leading up to the use of hydraulic mining - see [The 49ers & Early Placer Mining](#)
- Jigsaw activity
- Divide students into groups of six by counting off.
- Introduce the [El Dorado: Hydraulic Mining](#) map indicating both the location of the river and the fact that the links follow both the Yuba River downstream out of the Sierra Nevada Mountains as well as the chronology of events related to hydraulic mining in California
- Have the 1s in each group read the first article (**The “Hydraulic” Method**), the 2s the second, and so on.
- Have each numbered group meet to briefly discuss their article making sure that each understands terminology, process, pictures, etc.
- Have students meet in their original groups with each member contributing an explanation of their part of the assignment and addressing classmates questions - note taking by all.
- Reading & whole class discussion
- Read **The Sawyer Decision** and discuss the specifics of the decision, the judge’s rationale, and the implications of the case as a precedent in environmental law.
- Reading
- Read **California As I Saw It** to gain a feel for 19th century travel literature and experiences in the gold fields of 1850 California.

Assessment

Write a travelogue following the instructions and the guidelines on the [El Dorado: Hydraulic Mining](#) webpage.