

Is it possible or even practicable to restore a valley that has been under water for almost a hundred years? Yes, it is. Numerous studies have confirmed this. In 1988 the National Park Service outlined several different approaches to the restoration of the valley. Restoring Hetch Hetchy Valley will be the most ambitious and audacious act of environmental preservation in our history – yet it is totally doable.

Removing some dams can be difficult, because sediment has built up behind them. This will not be a problem at Hetch Hetchy – there is little sediment behind the dam due to the granite rock of the Tuolumne watershed.

The dam will be removed down to the former streambed elevation at 3500 feet, with the outlet restored using pre-dam photographs. In recontouring the valley and stabilizing the river banks, the goal will be to mimic the native terrain using historical accounts and scientific data.

Deconstruction will require the use of heavy equipment, and some rough roads may need to be built for access. These can later be eliminated or converted to trails. Alternatively, a conveyor system could be used; this would be the least environmentally damaging means of removing materials from the valley and could be later modified to act as the means of transporting visitors into the valley.

As the reservoir is drained and the valley floor is exposed, aggressive replanting of native plants will take place as soon as the soil dries sufficiently. Revegetation will consist in planting a mixture of native trees and shrubs consisting of black oaks, white alder, black cottonwood, Douglas fir, dogwood, willow, azalea, manzanita, and ceanothus. The various species of trees and shrubs will be planted in areas where those species originally occurred, along with an understory of herbaceous plants.

Native bunch grasses and sedges would be collected and propagated before the reservoir is drained. These will be planted in meadows and oak woodlands as these habitats return following drainage. Complete restoration will involve planting approximately 100,000 trees and shrubs, dense planting of bunch grasses, and widespread seeding of native meadow and woodland species for ground cover.

Non-native plants that will likely invade the environment in the first few years after the valley is drained, such as Mediterranean annual grasses, will have to be suppressed. The “bathtub ring” from the reservoir will fade naturally and surprisingly quickly, as lichen colonies return. Prescribed burning will be used to prevent conifer encroachment in oak woodlands and meadows, and maintain the fire ecology of the valley as it was before European immigrants arrived.

As the environment comes back to life, animal, insect and bird life will recolonize the valley.

During this process, public access will necessarily continue to be limited, but people from around the world will want to see the dam being dismantled and the famous valley recovering. Engineers, ecologists, environmental restoration experts, native plant and fish specialists, and other scientists will want to study and learn from the restoration. School groups and the public will be able to observe the process, and some of the cost of the restoration could even be covered by guided tours for fee-paying visitors.

The restoration of Hetch Hetchy Valley will present exciting and unprecedented opportunities for scientific understanding, education, and volunteerism. It’s going to be the world’s greatest environmental regeneration effort, and you can be part of it – as a supporter, observer, and participant in the journey.

Acknowledgements:

*Beyond And Beneath O’Shaughnessy Dam: Options To Restore Hetch Hetchy Valley And Replace Water And Energy Supplies*, Gerald H Meral, Golden Gate University Environmental Law Journal, Volume II/22 (2008)

*Alternatives for Restoration of Hetch Hetchy Valley Following Removal of the Dam and Reservoir*, National Park Service, 1988