

BEYOND SEARSVILLE DAM

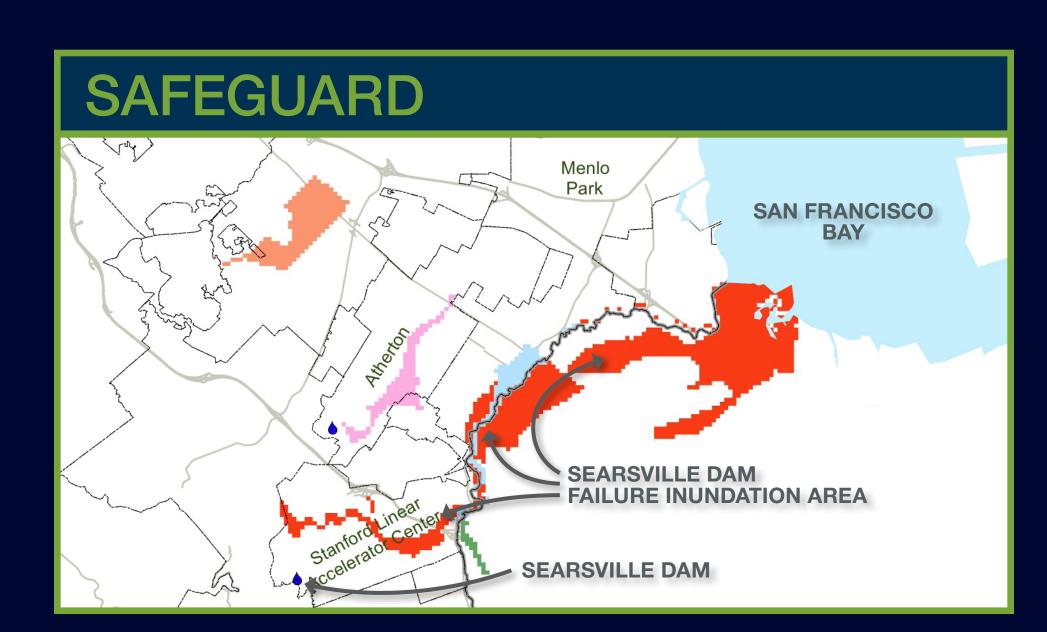
We share a common interest in supporting actions to evaluate and consider the removal of Stanford University's Searsville Dam in a manner that is beneficial to protecting creekside communities, watershed health, and the San Francisco Bay.



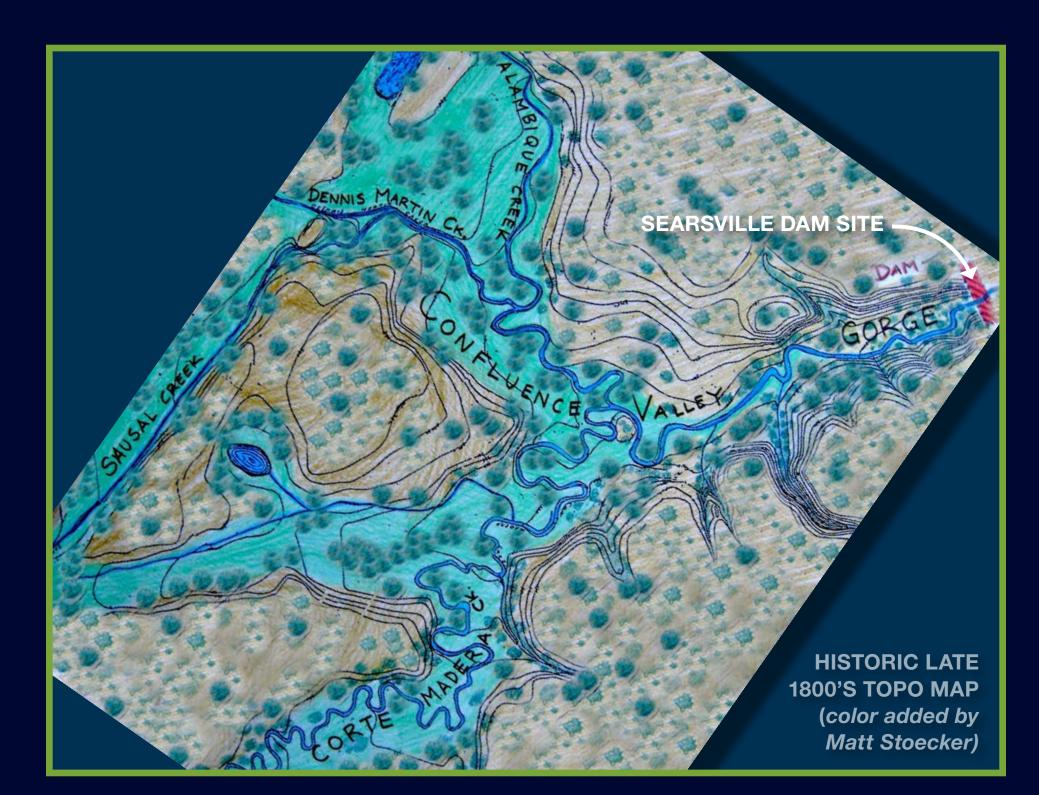
SEARSVILLE DAM Completed in 1892 and located within the Jasper Ridge Biological Preserve, Stanford University's 65-foot tall Searsville Dam has lost more than 90% of its original water storage capacity as roughly 1.5 million cubic yards of sediment have filled in the reservoir. The dam provides no potable water, no flood control, no hydropower, and only a small amount of water for irrigation.



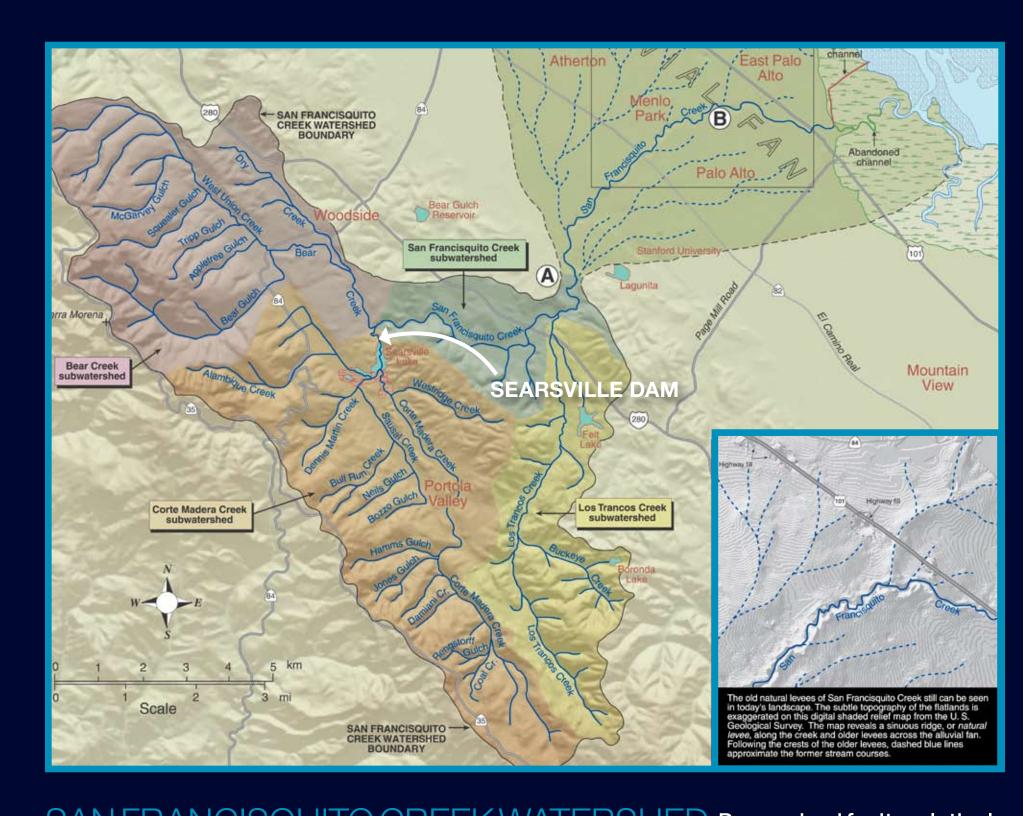
SEDIMENT TRAP For more than a century now, the dam and reservoir have blocked sediment and nutrients. The dam also traps woody debris and spawning gravel, which degrades creek habitat for a variety of native animals.



SAFETY HAZARD The San Andreas Fault runs adjacent to Searsville Dam. As shown on the Dam Failure Inundation Area map from San Mateo County, the dam's failure would devastate the downstream communities of Stanford, Palo Alto, Menlo Park, East Palo Alto, and unincorporated areas of San Mateo and Santa Clara counties. The dam currently causes flooding issues for upstream residents.



VALLEY AND WETLANDS SUBMERGED The dam's reservoir flooded and buried a confluence valley where six different streams merged among wetland ponds and riparian forests before squeezing through a small gorge where the dam now stands. These wetlands provided unique habitat and natural flood protection benefits.



SAN FRANCISQUITO CREEK WATERSHED Recognized for its relatively natural, unchannelized state and biological values, 45-square-mile San Francisquito Creek watershed is one of the Bay Area's ecological gems. Before Searsville Dam, it connected the mountains directly to the bay, providing nutrients and sediment to the wetlands that surround the West Coast's largest estuary.



DAMS DON'T WORK FOREVER Stanford's own National Performance of Dams Program states that the "average age for a dam is 40 years." Searsville Dam is almost 120 years old. Large cracks on the dam were first observed in the 1930s. Its current structural condition is unknown, as it's been more than four decades since the California Division of Safety of Dams thoroughly inspected the foundation.



ENDANGERING WILDLIFE The San Francisquito Creek watershed is home to endangered and sensitive species, including the red-legged frog, western pond turtle, San Francisco garter snake, and one of the last wild runs of steelhead trout in South San Francisco Bay. There are historic accounts of coho salmon in San Francisquito and adjacent creeks. Searsville Dam blocks these migratory fish, degrades water quality and downstream habitat, threatens native wildlife, and harbors and spreads harmful non-native species.



THREAT TO BAY WETLANDS A 2010 USGS study, "Limits on the Adaptability of Coastal Marshes to Sea Level Rise," found that coastal marshes, such as those on SF Bay, need sediment from nearby watersheds to survive rising sea levels. "Marsh survival strongly depends on sediment availability," it reads. With dams and other practices depriving coastal areas of much-needed sediment, it says sea level rise threatens coastal wetlands with ecological collapse.



DAM REMOVAL OPPORTUNITY More than 500 antiquated dams have been removed to restore natural ecosystems, improve flood protection, improve safety, save money, improve water supplies, and provide research opportunities. These benefits could be realized by removing Searsville Dam. On the Rogue River in Oregon, four antiquated dams were removed and damless diversions constructed. We encourage Stanford to consider the same.

