

What's wrong with the Calaveras Dam project?

The proposed stream flow releases are clearly inadequate for migratory fish and are unlikely to sustain a run of steelhead in the creek

The proposed operation of Calaveras Dam and the related Alameda Diversion Dam violate the Endangered Species Act, state Fish and Game Codes, and San Francisco's own policies

No fish passage will be provided at the Alameda Diversion Dam or Calaveras Dam

The project does not include an element of restoring steelhead and salmon to the creek, which would give environmental considerations equal footing with water supply reliability

The proposed mitigations for what will be significant construction impacts on habitat for numerous endangered species are meager and inappropriate. They seem to be a sham, as they would consist of enhancing and changing management on existing SFPUC watershed lands that are already protected and supposed to be managed according to their watershed stewardship policy.

There are no real mitigations for greenhouse gas emissions from the project

What's right with the project?

Flow releases are proposed for resident rainbow trout below the dam and for steelhead trout when they have access to the upper watershed (although the flows are too low)

The proposed summer flows will improve rearing habitat conditions for cold-water fish

The proposed pre-construction surveys, exclusion measures, avoidance of sensitive habitats, buffer areas, and best-management practices for avoiding harm to imperiled species during construction are generally pretty good

What are the stream flows proposed after the dam is rebuilt?

The proposed base stream flows (in cubic feet per second – cfs) starting in winter of 2015:

Jan 15-Mar 15	20 cfs
April 5-Oct 31	7 cfs
Nov 1-Jan 14	5 cfs

These are the flow schedules that the SFPUC committed to in 1996 but has not yet implemented.

The SFPUC will release 2 cfs from Calaveras Dam year-round. An additional 10 cfs will be bypassed past the Alameda Diversion Dam from December 1 to April 30 when sufficient stream flow is generated by precipitation events. These flows would be bypassed by the Alameda Diversion Dam when possible to provide water in a greater stream reach – and from Calaveras Reservoir in the summer and fall to provide cold water.

Keep in mind that except for the potential 10 cfs Dec 1 – April 30 and the guaranteed 2 cfs from Calaveras year-round, the base flows are not flow releases, they are flows required to be in the creek at the junction of Alameda and Calaveras creeks. The flow schedules do not represent water the SFPUC has to release from the dams. They are instream flows that will be met by natural runoff most of the year in most water year types. The SFPUC would have to actually release very minimal amounts of water below the dams in the summer of most years and a small amount in the winter and spring during dry years. Mother nature will provide most of the base winter and spring flows in Alameda Creek in normal and wet years, but in these years the SFPUC would not be required to contribute meaningful flows from the largest sub-watershed, Calaveras Creek, which they completely impound.

The proposed stream flows when steelhead return to the upper watershed:

In dry years

Nov–Jan 11	5 cfs
Jan 12–Mar 31	20 cfs
April-Oct	7 cfs

In normal years

Nov–Jan 11	5cfs
Jan 12–Mar 31	20cfs
April-Sept 30	15 cfs
Oct	7 cfs

In wet years

Nov–Jan 11	5cfs
Jan 12–Mar 31	42cfs
April	32-18 cfs
May 1-Sept 30	15 cfs
Oct	7 cfs

The 2 cfs will be release from Calaveras Dam year-round and potentially 10 additional cfs past the Alameda Diversion Dam from December 1 to April 30 when available.

In dry years the steelhead flows would be the same as the trout flows. In normal water years the steelhead flows would be essentially the same as the trout flows plus 8 cfs from April to September. In wet years the steelhead flows would be essentially the same as the

trout flows plus 22 cfs mid-January through March, then ramped down to plus 8 cfs from April to September.

The flows are based on a 1997 agreement and were designed to create a tail-water resident rainbow trout fishery in a limited stream reach below the dam, not for migratory steelhead. The flows do not address potential chinook salmon migration or spawning. The flows do not mimic the natural hydrograph of the stream. The proposed flow schedules neglect to address: a) adequate stream flows for adult attraction and upstream passage following storms; b) periodic high flow events that maintain channel form, geometry, and other geomorphic functions; or c) adequate stream flows during and following storms for smolt out-migration.

After 10 years of monitoring and studies of the resident rainbow trout population below the dam, the SFPUC would modify the flow release schedule (to some unspecified amount) if resident trout are shown to not be doing well, a subjective trigger.

What should the stream flows be?

This is the million dollar question. An approach that would have ecological integrity would allow bypass of a percentage of the natural stream flows past the dams, based on an acceptable level of flow impairment for the stream that could still supply reasonable habitat conditions for native fish and wildlife downstream. These flows would mimic the natural hydrograph of the stream. We support giving the SFPUC the ability to provide different flow releases for wet years, normal years, and dry water years, to minimize impacts to water supply during drought.

A stakeholder group consisting of 17 public agencies and nonprofit organizations, including the Alameda Creek Alliance and the SFPUC, began flow studies in 2006 to determine how much water might be needed at critical times to support a viable steelhead population in Alameda Creek - while also considering other native fish and wildlife and minimizing potential impacts to drinking water supplies. These studies are ongoing.

The proposed flow schedules seem based on maintaining historic diversion rates (up to 86% of the upper watershed stream flows) and minimizing water “lost” downstream (which of course is gained by the stream ecosystem, and a portion of which could potentially be picked up by a downstream water agency) rather than on the life history of anadromous fish and the habitat needs of a viable steelhead population. The good news is that the project needs state and federal permits and the regulatory agencies will likely require more reasonable flows based on better science.

What is wrong with the EIR, the environmental review document?

It concludes that many significant impacts on steelhead trout and other listed species are “not significant” or mitigated to a “less than significant level” based on inadequate analysis and mitigations.

It downplays and misstates the impacts of SFPUC dam operations on water flow, habitat suitability and fish passage further downstream.

It asserts that diverting all winter and spring flows from upper Alameda Creek under 650 cfs will somehow be good for fish because it will provide a “a more predictable and stable flow.”

It uses circular logic in conditioning provision of flows purported to support steelhead only if steelhead occur in the absence of such flows.

It uses the years since 2002 as the environmental baseline – a time during which conditions for fish were abysmal - Calaveras Reservoir was operated at 40% of capacity, reducing reservoir habitat for fish and restricting flow releases from the reservoir, and we were in the beginning of a drought. It then concludes modest improvements in flow conditions are adequate to determine “no impact” or “less than significant” or “beneficial” impacts. Yet in other places in the EIR where that baseline is inconvenient for the SFPUC, it uses a different baseline.

It does not analyze the impacts of Calaveras and Alameda Diversion dams regarding blockage of spawning and rearing habitat for steelhead, impairment of flows in Alameda Creek, or fully assess changes to downstream channel morphology and habitat.

It does not ensure that future operating plans are consistent with steelhead recovery.

Will fisheries flows impact the San Francisco water supply?

Not to any meaningful degree. Far more water will be lost from Calaveras Reservoir each year due to evaporation than will be released by the SFPUC for fish.

The SFPUC approved the water system upgrades without an aggressive program of water conservation and recycling, especially regarding its wholesale customers that it supplies water to. Numerous conservation, recycling, and groundwater projects could be implemented that would easily make up the water needed for healthy fisheries in Alameda Creek, the Tuolumne River, and the Peninsula watersheds managed by the SFPUC.

San Francisco is required under state Fish and Game Codes to provide bypass flows to keep native fish downstream of their dams in good condition, and will be required under the Endangered Species Act to provide sufficient water for steelhead. Providing flows for native fish and wildlife are part of doing business as a water agency with major dams.

Are fisheries issues to blame for delay of the project?

No. Any delay of the project falls squarely on the SFPUC. The SFPUC has had 14 years to work on the fisheries and stream flows issues, since steelhead trout were listed under the Endangered Species Act and the Alameda Creek Alliance began raising these issues.

The ACA and state and federal regulators raised numerous fisheries issues in 2005 during scoping comments on the Calaveras Dam project that the SFPUC has still failed to adequately address. The SFPUC providing a reasonable flow schedule for fish and proposing adequate mitigations will expedite approval and implementation of this project. Issues with potential naturally-occurring asbestos at the site and the complexity of the project have contributed to delays.

Is the SFPUC doing anything else to address fish flows?

The SFPUC is participating in the ongoing flows studies by the Alameda Creek Fisheries Restoration Workgroup.

The SFPUC has begun developing a Habitat Conservation Plan for their future projects, maintenance, and operations in the upper Alameda Creek watershed. This will be a long-term conservation plan for land use and biological planning on SFPUC lands. The HCP will result in a permit under the Endangered Species Act allowing the SFPUC to legally "take" or harm endangered species, in exchange for conservation measures intended to protect the species and their habitats.

The plan will be completed long after the environmental review for the Calaveras Dam project has ended. SFPUC is saying "trust us" to ensure more complete fish protections and stream flows through the HCP. Yet in recent years the SFPUC lobbied to eliminate Endangered Species Act protections for unique resident rainbow trout populations in Alameda Creek; tried unsuccessfully to get federal regulators to make a determination of "no effect" on steelhead trout and issue a permit for the Calaveras Dam project without a formal consultation under the Endangered Species Act; and dismissed consideration of the impacts on steelhead trout in Alameda Creek when certifying the programmatic environmental impact report for their Water System Improvement Program in the fall of 2008. For these reasons we are insisting the Calaveras EIR address steelhead issues.

The Calaveras Dam project will need a federal permit from the Army Corps of Engineers, which is required to enter into formal consultation under the Endangered Species Act with the National Marine Fisheries Service. NMFS can require additional stream flows and mitigation measures for the project, to avoid jeopardy to listed steelhead.