



Tracking Number: ( 2021-005 )

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

### **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

- 1. Person or organization requesting the change: Alameda Creek Alliance**  
Name of primary contact person: Jeff Miller  
Address: [REDACTED]  
Telephone number: [REDACTED]  
Email address: [REDACTED]
- 2. Rulemaking Authority (Required) - Reference to the statutory or constitutional authority of the Commission to take the action requested: ~~Title 14, CCR, Section 7.50~~.**  
Sections 200, 205, 265, 270, 315 and 399, Fish and Game Code.
- 3. Overview (Required) - Summarize the proposed changes to regulations: Amend Title 14, CCR, Section 7.50 (b)(2)(B), to remove Alameda Creek tributaries upstream of San Antonio, Calaveras, and Del Valle reservoirs. Delete Title 14, CCR, Section 7.50 (b)(2)(C), removing San Antonio and Calaveras reservoirs.**
- 4. Rationale (Required) - Describe the problem and the reason for the proposed change: The landlocked trout populations in and above Calaveras and San Antonio reservoirs are the descendants of the original migratory steelhead run in Alameda Creek and represent the best native gene pool for restoring a migratory steelhead run below the dams. There has been extensive evaluation of the genetic legacy and conservation importance of these fish.**

U.S. Geological Survey studies in 1999 and 2003 analyzed fin clips from adult steelhead captured in lower Alameda Creek, resident rainbow trout populations in upper Alameda Creek and its tributaries below the major dams, and the landlocked trout in and above both SFPUC reservoirs (Nielsen and Fountain 1999; Nielsen 2003). These USGS studies demonstrated that native Alameda Creek rainbow trout and the reservoir fish are genetically related to wild steelhead trout in the federally listed Central California Coast population. Fish geneticists with NMFS conducted a much more extensive evaluation of fin clips collected over a decade in Alameda Creek, including samples from trout populations in lower and upper creek tributaries



below major dams, as well as the adfluvial trout populations above both SFPUC reservoirs (Garza et al. 2017). The trout populations above and below barriers in the Alameda Creek watershed show shared ancestry and close genetic relationships with each other, indicating a lack of introgression from non-native rainbow trout or hatchery steelhead (Garza et al. 2017). In addition to their native ancestry, above-barrier fish populations upstream of Calaveras and San Antonio reservoirs still possess adaptive genomic variation associated with anadromy (Garza et al. 2017). Garza et al. (2017) specifically highlighted the importance of these adfluvial populations for the conservation of life-history variation in this species.

As far back as 2002 the Alameda Creek Fisheries Restoration Workgroup called out the unique genetic legacy and conservation significance of the adfluvial trout in and above the SFPUC reservoirs, in a steelhead restoration plan for the watershed outlining their possible role in increasing the size and genetic diversity of the future steelhead run. The Workgroup is currently evaluating whether to use these adfluvial trout from the reservoirs to help jump-start a steelhead trout run in the ocean-accessible portions of Alameda Creek and its tributaries.

The waters in and above Calaveras and San Antonio reservoirs should be protected, given the conservation and restoration significance of the adfluvial populations.

The number of spawning adfluvial trout in each reservoir numbers in the low hundreds and both reservoir populations have existing limiting factors that need to be considered before introducing fishing pressure. The most recent population surveys by the SFPUC in 2009 estimated the population sizes of the landlocked trout as 408 adult fish in San Antonio Reservoir and 373 adult fish in Calaveras Reservoir (SFPUC 2011). The Calaveras Reservoir trout population is constrained by extremely limited spawning and rearing habitat, confined entirely to the lower mile of Arroyo Hondo Creek; a major landslide in lower Arroyo Hondo Creek prevents spawning more than one mile upstream from Calaveras Reservoir (Entrix 2003, SFPUC 2003a). The San Antonio Reservoir trout population is impacted by livestock grazing and trampling of spawning habitat, and predation by nonnative fish (SFPUC 2003b).

The Endangered Species Act listing of Central California Coast (CCC) steelhead trout as a threatened species in 1997 excluded resident rainbow trout and landlocked steelhead trout above dams. However, NMFS revisited this issue from 2004-2006. NMFS initially proposed including resident trout and some landlocked steelhead, including those in the Alameda Creek watershed, as part of the listed CCC steelhead population, based on genetic evidence that Alameda Creek's resident fish are similar to adult ocean-run steelhead (NMFS 2004). NMFS proposed a case-by-case evaluation of resident trout populations and their ESU relationships, where there is evidence showing a close genetic relationship to adjacent below-man made barrier steelhead populations or where landlocked trout exhibit continued "steelhead" behavior, as is demonstrably the case with Alameda Creek fish. NMFS noted that the Nielson (2003) genetic data regarding native trout populations above Rubber Dam 1 on Alameda Creek strongly suggested that they are part of the listed CCC steelhead ESU. Although NMFS ultimately decided not to include Alameda Creek resident and adfluvial trout in the listed CCC steelhead population (NMFS 2006), this decision was based on questions about the validity of the genetic data and analysis upon which NMFS based the proposal, and concerns that genetic similarity alone was insufficient to support the inclusion of these above-dam resident populations in the ESU. However, the 2003 genetic data and analysis has now been confirmed and bolstered by more robust analysis by Garza et al. (2017). NMFS could reconsider whether



the adfluvial reservoir and tributary trout populations that could now be subject to fishing pressure under the new state fishing regulations are deserving of protection under the Endangered Species Act as part of the federally listed CCC steelhead population.

### References

Center for Ecosystem Management and Restoration (CEMAR). 2002. Draft Steelhead Restoration Action Plan for the Alameda Creek Watershed. Prepared for the Alameda Creek Fisheries Restoration Workgroup, March 11, 2002. <http://www.alamedacreek.org/reports-educational/pdf/CEMAR%202002.pdf>

Entrix, Inc. 2002. Preliminary Report on Alameda Creek Watershed Fish Trapping, 2002. Unpublished report prepared for the San Francisco Public Utilities Commission, April 10, 2002. Entrix, Inc., Sacramento, California.

Garza, J.C., M. Leitwein, and D.E. Pearse. 2017. Ancestry and Adaptive Evolution of Anadromous, Resident, and Adfluvial Rainbow Trout (*Oncorhynchus mykiss*) in the San Francisco Bay Area: Application of Adaptive Genomic Variation to Conservation in a Highly Impacted Landscape. *Evolutionary Applications* 2017; 10: 56–67.  
[http://www.alamedacreek.org/reports-educational/pdf/Leitwein et al-2016.pdf](http://www.alamedacreek.org/reports-educational/pdf/Leitwein_et_al-2016.pdf)

National Marine Fisheries Service (NMFS). 2004. Proposed Listing Determinations for 27 ESUs of West Coast Salmonids; Proposed Rule. *Federal Register* Vol. 69, No. 113, June 14, 2004.

National Marine Fisheries Service (NMFS). 2006. Final Listing Determinations for 10 Distinct Population Segments of West Coast Steelhead. *Federal Register* Vol. 71, No. 3, January 5, 2006.

Nielsen, J.L. 2003. Population Genetic Structure of Alameda Creek Rainbow/Steelhead Trout - 2002. U.S. Geological Survey, Alaska Science Center, Anchorage, Alaska.  
<http://www.alamedacreek.org/reports-educational/pdf/USGS%202003.pdf>

Nielsen, J.L. and M. Fountain. 1999. Microsatellite Analyses of Alameda Creek Rainbow/Steelhead Trout. <http://www.alamedacreek.org/reports-educational/pdf/USGS%201999.pdf>

San Francisco Public Utilities Commission (SFPUC). 2003a. Fish Trapping Study Data Summary for San Antonio Creek, Indian Creek, and Arroyo Hondo 2002-2003. Prepared by San Francisco Public Utilities Commission Water Quality Bureau, Sunol, CA. November 2003.

San Francisco Public Utilities Commission (SFPUC). 2003b. Predation of Rainbow Trout by Largemouth Bass in San Antonio Reservoir. Pilot Study Summary. Prepared by San Francisco Public Utilities Commission Water Quality Bureau, Sunol, CA. September 2003.

San Francisco Public Utilities Commission (SFPUC). 2011. 2009 Population Size Estimates for Adult Rainbow Trout (*Oncorhynchus mykiss*) in San Antonio and Calaveras Reservoirs. Water Enterprise Natural Resources and Lands Management Division, Fisheries and Wildlife Section.  
<http://www.alamedacreek.org/reports->



[educational/pdf/Population%20Size%20Estimates%20for%20Adult%20Rainbow%20Trout%20in%20San%20Antonio%20and%20Calaveras%20Reservoirs%202009.pdf](#) Click here to enter text.

## SECTION II: Optional Information

5. **Date of Petition:** April 12, 2021.
6. **Category of Proposed Change**
  - Sport Fishing
  - Commercial Fishing
  - Hunting
  - Other, please specify: [Click here to enter text.](#)
7. **The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*
  - Amend Title 14 Section(s): Section 7.50 (b)(2)(B)
  - Add New Title 14 Section(s): [Click here to enter text.](#)
  - Repeal Title 14 Section(s): Section 7.50 (b)(2)(C)
8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition** [Click here to enter text.](#)  
Or  Not applicable.
9. **Effective date:** If applicable, identify the desired effective date of the regulation.  
If the proposed change requires immediate implementation, explain the nature of the emergency: Immediately. The regulations need to be implemented before any fishing impacts are allowed to occur for a genetically unique adfluvial steelhead trout population that has regional conservation significance. The new freshwater sport fishing regulations for 2021-2022 that opened up catch-and-release fishing of landlocked steelhead trout populations in San Antonio and Calaveras Reservoirs were implemented with absolutely no notification or engagement of the multiple stakeholders that have been working for 22 years to restore steelhead trout in the Alameda Creek watershed. The regulations were implemented without coordination or concurrence from the landowner of the reservoirs. These regulations were implemented without evaluating their potential impacts on the most genetically valuable populations of steelhead/rainbow trout in the Alameda Creek watershed and steelhead populations with regional restoration significance for the entire Bay Area.
10. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents: Supporting information is linked in references.
11. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing: None.



**12. Forms:** If applicable, list any forms to be created, amended or repealed:

[Click here to enter text.](#)

**SECTION 3: FGC Staff Only**

Date received: [Click here to enter text.](#)

FGC staff action:

- Accept - complete
- Reject - incomplete
- Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_

Meeting date for FGC consideration: \_\_\_\_\_

FGC action:

- Denied by FGC
- Denied - same as petition \_\_\_\_\_
- Granted for consideration of regulation change

Tracking Number