

Friends of the Arroyos

A "tributary" of the Alameda Creek Alliance



**Arroyo Mocho * Arroyo Las Positas * Arroyo Seco *
Arroyo del Valle * Arroyo de la Laguna**

Altamont Creek * Cayateno Creek * Cottonwood Creek *
Cottinger Creek * Tassajara Creek * Dry Creek *
Mission Creek * Sycamore Creek * Vallecitos Creek

MISSION

- **Restore the historical steelhead trout migration through the Arroyos via Alameda Creek to the SF Bay**
- **Promote stream restoration, cleanups, and awareness**

Steelhead Trout Background Information



- Steelhead are rainbow trout that migrate to the ocean from breeding sites in cool water streams.
- Steelhead (up to 30") have been caught in the Arroyos here up until the 1960s.
- They currently do not migrate through the Arroyos because of
 - barriers in lower Alameda Creek and the Arroyos
 - inadequate stream flows allowed by Zone 7 Water Agency.
- Biologists have determined that steelhead could spawn in the upper gorge of Arroyo Mocho where native trout already live
- Smolts (juveniles) can survive in existing deep spring-fed pools in the Mocho gorge during our hot summers
- Smolts (1-2 yrs old) migrate downstream and adults upstream to spawn and back during the high flows around storm events. Adults can travel 1 mile/hour!

Historical evidence of migration



Steelhead caught in
Alameda Creek in 1961

**Fishermen Report
Good Trout Fishing**

The fishermen who visited the trout streams in the Livermore Mountains for the beginning of the season had good luck. Game Warden H. W. Morrill, who with State Warden Earle Downing went up to patrol the streams prior to the opening of the season, returned Saturday evening. They both secured the limit. They say that the Valpe and the headwaters of the Arroyo Valle are full of fish. They brought down one trout that measured almost thirty inches in length and weighed seven and a half pounds dressed. Most of the fish caught, however, are small.

Livermore Herald: April 9, 1910
A 30" trout must be a steelhead!

How did the steelhead migrate to the Bay?



Trout reintroduction

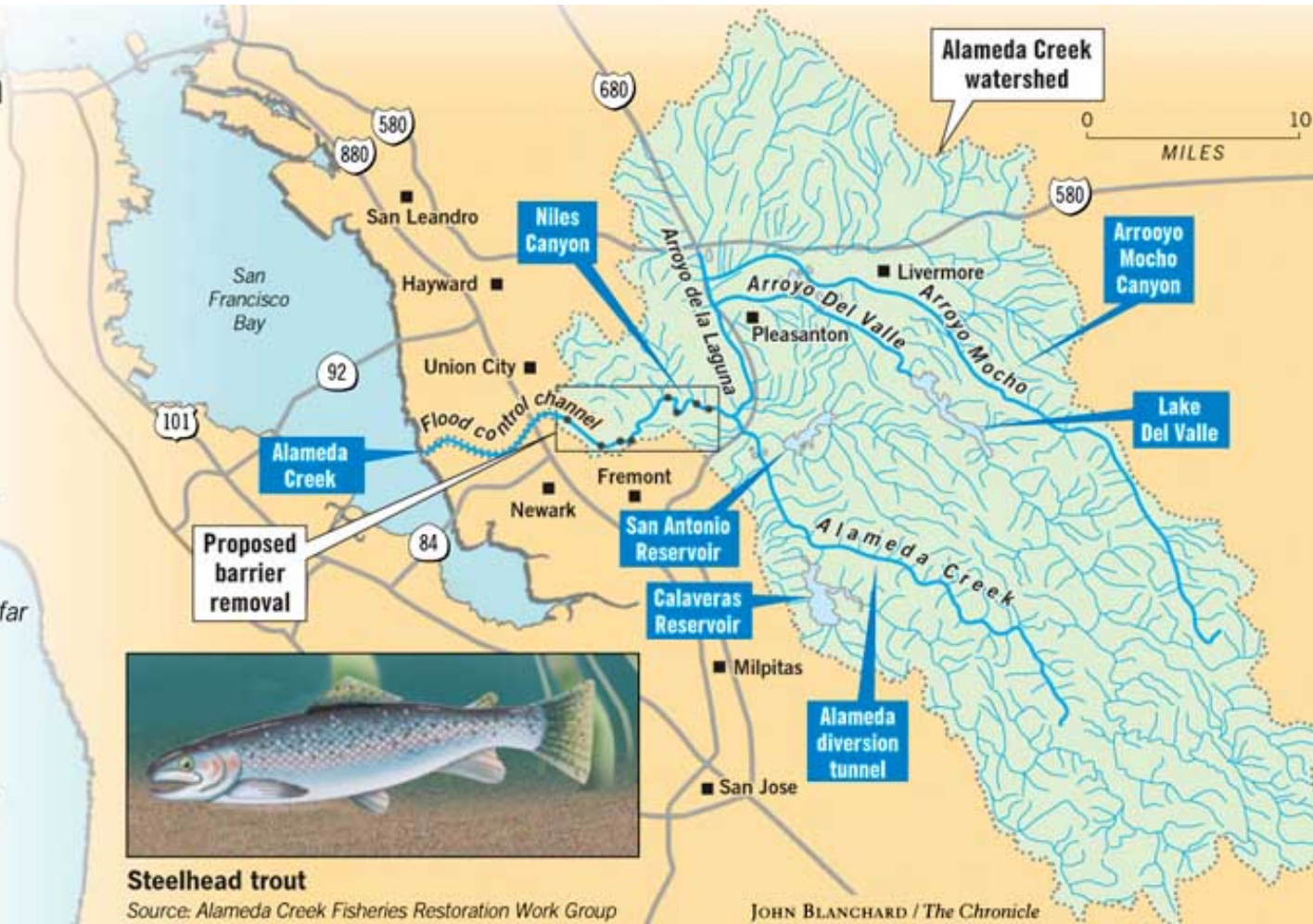
An ambitious plan to restore steelhead trout to the Alameda Creek watershed calls for fish ladders to let migrating trout get around a series of dams. At the same time, a steelhead nursery would be created by mingling steelhead with genetically identical rainbow trout from Calaveras Reservoir far upstream.

Pacific Ocean



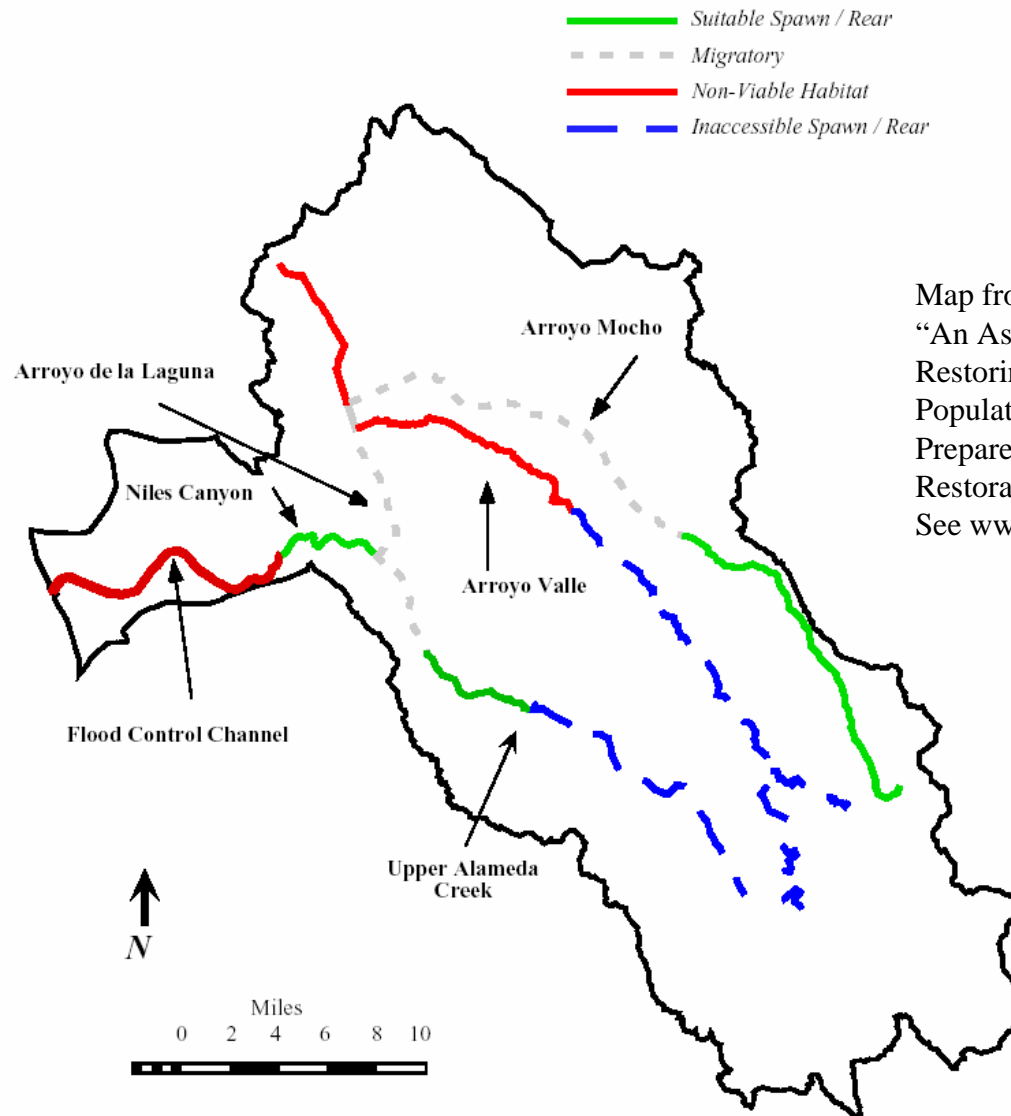
Steelhead trout

Source: Alameda Creek Fisheries Restoration Work Group



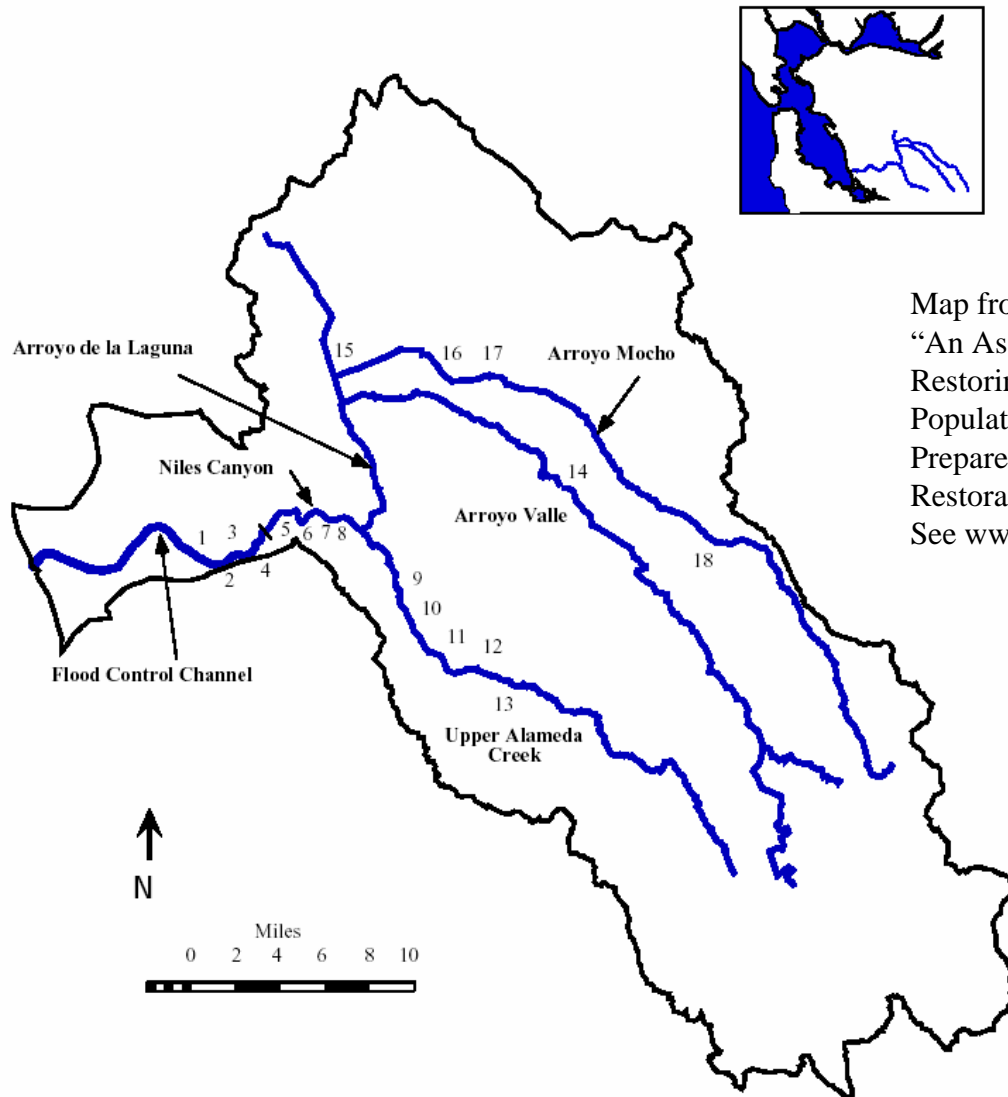
JOHN BLANCHARD / The Chronicle

Spawning Habitat in Arroyo Mocho Gorge



Map from pg. 24 of
“An Assessment of the Potential for
Restoring a Viable Steelhead Trout
Population in the Alameda Creek Watershed”
Prepared for the Alameda Creek Fisheries
Restoration Workgroup, Feb. 7, 2000.
See www.cemar.org/alamedacreek/index.html

Barriers to Migration



Map from pg. 9 of
“An Assessment of the Potential for
Restoring a Viable Steelhead Trout
Population in the Alameda Creek Watershed”
Prepared for the Alameda Creek Fisheries
Restoration Workgroup, Feb. 7, 2000.
See www.cemar.org/alamedacreek/index.html

Permanent Barriers to Migration



Dams at Calaveras and San Antonio Reservoirs

- Steelhead currently spawn above Calaveras and San Antonio reservoirs (protected by the SF PUC).
- These are land-locked steelhead and cannot migrate to the ocean to feed
- This year fish traps have been installed and volunteers from ACA and FOTA assist the biologist in daily monitoring of the migration above Calaveras and San Antonio Reservoirs between Feb. and May
- No steelhead are currently observed migrating above Del Valle reservoir (fished-out?)

Plans to Remove Barriers to Migration



Rubber dams, BART weir, PG&E pipeline in lower Alameda Creek

- Alameda Creek Alliance formed in 1997 when steelhead listed as a threatened species
- ACA started the Alameda Creek Fisheries Restoration Workgroup (12 local, state and federal agencies) to look at how to remove or improve barriers
- East Bay Regional Parks District has already removed 2 barriers
- PG&E fish passage at pipeline crossing in Sunol Valley
- Niles Canyon dams removed by the SF PUC in 2004
- Army Corp. plans to install fish ladders and screens around the BART weir for \$6.7 million to be completed in 2005

A Dam Removal Party!



Steelhead and salmon are trying to return!



Steelhead and salmon rescue at the BART weir



Fish are weighed, measured, tagged and released upstream of barrier

Barriers along the Mocho to the Gorge



By 2005, Steelhead could be headed up Arroyo Mocho!



4' drop near Stanley under abandoned RR tracks



Gradient structures just before and after Isabel overcrossing

What can you do to help?



- Sign the petition and write to Zone 7 asking them to remove the barriers and control the water flow to support migration during storms events

Board of Directors

Zone 7 Water Agency

5997 Parkside Dr

Pleasanton CA 94588

- Join Friends of the Arroyos (we meet monthly)
and/or Alameda Creek Alliance (see form to mail-in)
 - to write to agencies regarding these issues
 - to become aware of environmental issues
- Sign up to AAA - ADOPT AN ARROYO!
 - agree to keep your section litter-free for a year
 - observe and report on wildlife