# **Project Summary**

The City of Santa Cruz Water Department has hired Environmental Science Associates to complete fish population surveys in the San Lorenzo River watershed. Surveys will collect data to determine the density of juvenile steelhead trout and coho salmon in the river and its tributaries.

These surveys will be completed during summer and fall months when water levels in the San Lorenzo River and its tributaries are lower and easier to navigate.

### **FOCUS SPECIES**

Steelhead Trout (Oncorhynchus mykiss) STATUS: Federally Threatened



Coho Salmon (Oncorhynchus kisutch)
STATUS: Federally and State Endangered



### **Learn More**

City of Santa Cruz
Juvenile Salmonid
Abundance Monitoring
Project:



https://www.cityofsantacruz.com/ government/city-departments/water/ habitat-conservation-plan

Environmental Science Associates:



https://esassoc.com/

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## San Lorenzo River & Tributaries

Juvenile Steelhead
Trout and Coho Salmon
Abundance Monitoring
Surveys







### **Project Details**

### When will surveys occur?

Monitoring surveys will occur between August and October in the mainstem San Lorenzo River and some tributaries. Survey crews plan to be at each location for one day.

### Where will surveys occur?

Surveys will be completed in a set of randomly selected stream "reaches" located in the mainstem San Lorenzo River and some tributaries. Each reach is approximately 100 meters, or 330 feet, in length.

Survey staff will stay within the stream channel except when entering and exiting the channel. Public access points will be used as much as possible to enter and exit the channel, however individual landowners may be contacted to inquire about accessing the channel from their property when necessary.



A surveyor completing a snorkel survey while wearing a drysuit.

### How are surveys completed?

Monitoring will consist of snorkeling or electrofishing surveys. The goal is to count the total number of fish in the survey area.

Survey activities will be overseen by a qualified biologist to ensure minimal harm is caused to wildlife in the survey area.

During surveys you may observe:

- nets across the channel
- crews in fishing waders, wetsuits, or drysuits
- crews carrying large backpacks, hand nets, and buckets of water
- equipment such as small tables, chairs, and buckets
- crews collecting fish in buckets and measuring stream areas with measuring tape

All work is fully permitted by the National Marine Fisheries Service and California Department of Fish and Wildlife.



A juvenile steelhead trout on a measuring board to record body length.

#### What data will be collected?

Surveys will collect information including the total number of steelhead trout and coho salmon observed and stream characteristics, such as stream channel width and water depth.

This information will tell us what areas fish are using in the San Lorenzo River watershed. Final results of the monitoring surveys can be provided to landowners by request.



A temporary net spanning the stream channel to block the movement of fish during surveys.



Survey crew conducting electrofishing surveys.