sure survival of aquatic species.

Steelhead trout and coho salmon are now listed as threatened under the Federal Endangered Species Act (ESA). Coho salmon are also listed as endangered under the California ESA. Endangered Species Act listings promote preservation and restoration of watershed health as the preferred means to as-

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steelhead trout



erosion, sedimentation and water use).

The San Lorenzo River watershed is habitat for the threatened steelhead trout and also coho salmon. Steelhead trout and also coho salmon are thought not to be present in the watershed but coho salmon are thought not to be suggest that steelhead trout and coho salmon were once plentiful in the watershed, and the San Lorenzo River was once described as one of the largest steelhead-producing rivers south of the Russian River. As recently as the mid-1970s fishermen used to line up three deep along the banks of the lagoon on the opening day of fishing season. Steelhead trout and coho salmon abundance began to decline in the 1960s. The decline has been abundance began to decline in the 1960s. The decline has been abundance began to adverse effects of human activities (including attributed to adverse effects of human activities (including

San Lorenzo River Watershed

For more information on the lagoon, the San Lorenzo Urban River Plan, or the Lower San Lorenzo River & Lagoon Management Plan contact the City of Santa Cruz at (831) 420-5132.

juvenile steelhead under natural conditions based on comparisons with Pescadero, San Gregorio and Scott Creek lagoons north of the San Lorenzo River. Due to impacts that are occurring in the upper watershed of the San Lorenzo, estimates of juveniles utilizing the lagoon, under natural conditions, are difficult to predict. Despite this, the potential still exists for a healthy population of juvenile steelhead in the San Lorenzo River lagoon.

A deep, properly functioning, freshwater lagoon is important to steelhead as it provides an area where steelhead can make the transition from freshwater to saltwater. Adequate food resources allow fish to grow quickly, and maintained refuge habitat provides escape from predators during this transition.

It has been suggested that the lagoon could support numerous



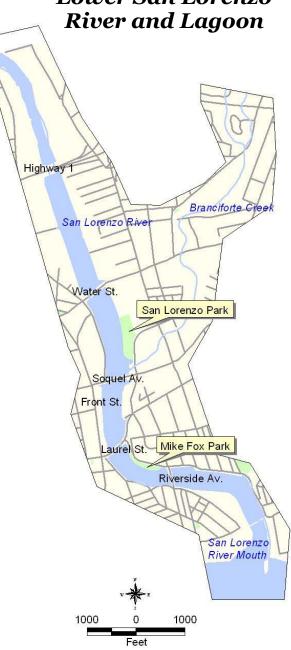
Prior to 1995, the City of Santa Cruz intermittingly conducted sandbar management at the San the mouth of the San Lorenzo. The activities have since ceased following issues with public safety and natural resource management.

conditions allow.

The sandbar across the mouth of the river forms naturally through wave action in the late spring and summer. The sandbar closes the mouth of the river and forms a seasonal summer lagoon, which can convert to freshwater over time through inflow from the river, if

The San Lorenzo River Lagoon

Map of Lower San Lorenzo River and Lagoon



Informational Resources

Santa Cruz County RCD (831) 464-2950 www.sccrcd.org

City of Santa Cruz City Manager's Office (831) 420-5132

www.ci.santa-cruz.ca.us

City of Santa Cruz Public Works Dept. (831) 420-5559 Soneill@ci.santa-cruz.ca.us

City of Santa Cruz Water Resources Program (831) 420-5483 www.ci.santa-cruz.ca.us

County of Santa Cruz Environmental Health (831) 454-2022

www.co.santa-cruz.ca.us

California State Coastal Conservancy www.coastalconservancy.ca.gov

US Army Corps of Engineers www.usace.army.mil

CA Dept of Fish and Game (831) 649-2870 www.dfg.ca.gov

National Marine Fisheries Service www.nmfs.noaa.gov

This brochure has been produced by the Santa Cruz County Resource Conservation District with California Coastal Salmon Recovery Program funds administered by the California Department of Fish and Game.

The Lower San Lorenzo River and Lagoon



Helping people protect, conserve, and restore natural resources

A collaboration of the Santa Cruz County Resource Conservation District and the City of Santa Cruz.

The San Lorenzo Urban River Plan

- The San Lorenzo Urban River Plan articulates a community vision for the corridor encompassing the lower San Lorenzo River, Branciforte Creek, and Jessie Street Marsh as both a wildlife area, and a community recreation and public open space amenity.
- In 1999, the Santa Cruz City Council requested that the plans for the San Lorenzo River be updated due to:
 - the initiation of the U.S. Army Corps of Engineers flood control improvement project beginning in 1999; and
 - the listing of the steelhead trout and Coho salmon as federally threatened species, and the federal designation of the San Lorenzo River as critical habitat for these species.

The City Council appointed a citizen task force, the San Lorenzo Urban River Task Force, to complete the plan update emphasizing community involvement as the foundation for plan development. The City Council requested that the San Lorenzo Urban River Plan Task Force update restoration and design plans for the River as well as address Branciforte Creek in the planning update process.

The Goals and Benefits of the Plan are to:

- enhance and restore biotic values of the River, Creek and Marsh as habitat for fish and wildlife;
- maintain flood control capacity of the San Lorenzo River and Branciforte Creek;
- improve the scenic and recreational value of the Riverfront;
- improve the urban and neighborhood interface with the San Lorenzo River, Branciforte Creek, and Jessie Street Marsh;
- improve public access and pedestrian/bicycle movement to and along the River; and to
- incorporate the San Lorenzo River, Branciforte Creek, and Jessie Street Marsh into the surrounding urban fabric of downtown Santa Cruz and neighborhoods.

The New Riverway Park

Recreational access along the San Lorenzo River provides opportunities for public interaction with the river corridor for enjoyment, education, and continued stewardship. A multitude of recreational opportunities exist along the 5 linear miles of Riverway parkland: hiking, picnicking, bicycling, jogging, skating, bird-watching and wildlife viewing.

Park Rules

- Park hours: Sunrise to Sunset
- Bicycles and pedestrians on recreational paths
- Limited access to habitat areas of the river to protect wildlife
- No littering

What is to come?



Anticipated Improvements include:

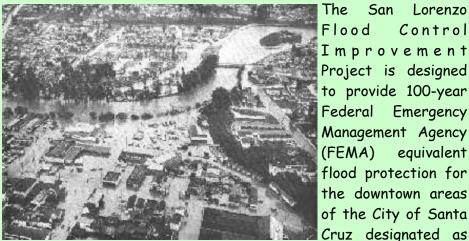
- Installing lighting and call boxes for public safety
- Developing interpretive signage about the river's habitats
 - Developing community events such as a river festival
 - Involving schools in river restoration

Flood Control Confines

While restoring aquatic habitat is one of the City of Santa Cruz's goals for the San Lorenzo River, the reality that Santa Cruz is largely built upon the San Lorenzo River's floodplain must be considered.

As Santa Cruz has become more and more developed over the years, the San Lorenzo River floodplain has been encroached upon and flooding has occurred on several occasions. Eighteen flood events occurred from 1862-1958. Some of these floods were minor events but others were quite severe and caused extensive damage.

Following the December 22, 1955 flood, the costliest, deadliest, and most well-known flood, the lower 2.5 miles of San Lorenzo River and Branciforte Creek was channelized into a flood control structure in 1957-1959 in a cooperative project of the City of Santa Cruz and the U.S. Army Corps of Engineers (Corps).



Flood Control Improvement Project is designed to provide 100-year Federal Emergency Management Agency (FEMA) equivalent flood protection for the downtown areas of the City of Santa Cruz designated as

floodway or floodplain. Any restoration plans proposed for the lower reach of the river must be compatible with the authorized project purpose of flood control. Proposed restoration work cannot adversely affect the flow conveyance capacity of the flood protection level. Any restoration or management work must also be compatible with maintenance operations and inspections during flood events.

Next Steps

Water Quality Improvement

Recent studies have identified excess bacteria levels in the lagoon. The bacteria is coming mainly from stormdrains and birds.

The City of Santa Cruz has received funding from the State Clean Beach Initiative Program to reduce storm drain inputs to the San Lorenzo River.

Learning More About the San Lorenzo River Lagoon

In efforts to learn more about the San Lorenzo River Lagoon and the habitat it offers to migrating fish, the City will participate in the Comparative Lagoon Ecological Assessment Project (CLEAP) as part of the Integrated Watershed Restoration Program for Santa Cruz County.

The CLEAP will examine local lagoon systems with regards to the biological, physical, and chemical characteristics for fisheries productivity and water quality.

CLEAP will compile a team of technical advisors, scientific consultants, and local lagoon management agencies to examine identified impacts to lagoon stability and potential management options for enhancing these sensitive habitats.

For more information on CLEAP contact the City of Santa Cruz at (831) 420-5132

