

BOARD OF SUPERVISORS



## COUNTY OF SANTA CRUZ

GOVERNMENTAL CENTER

701 OCEAN STREET SANTA CRUZ, CALIFORNIA 95060-4069  
 (408) 454-2200 ATSS 564-2200 FAX (406) 454-3262 TDD (408) 454-2123

JANET K. BEAUTZ  
 FIRST DISTRICT

WALTER J. SYMONS  
 SECOND DISTRICT

MARDI WORMHOUDT  
 THIRD DISTRICT

RAY BELGARD  
 FOURTH DISTRICT

JEFF ALMQUIST  
 FIFTH DISTRICT

AGENDA: 4/28/98

April 17, 1998

BOARD OF SUPERVISORS  
 County of Santa Cruz  
 701 Ocean Street  
 Santa Cruz, CA 95060

RE: FUNDING FOR EXPANDED STEELHEAD STUDY

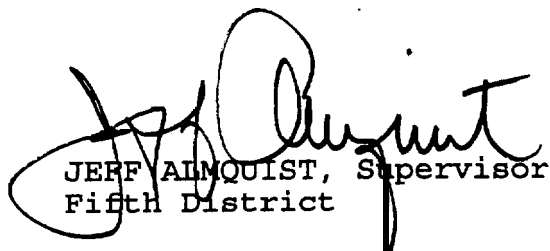
Dear Members of the Board:

Attached is a letter from the City of Santa Cruz Water Department and the San Lorenzo Valley Water District requesting \$21,000 in County financial support for a study of the steelhead population in the San Lorenzo River and its tributaries. Our understanding is that all Board members have received a copy of the completed report prepared on last year's survey and a copy of that report has been placed on file with the Clerk of the Board.


In our opinion, the letter makes a very strong case for County participation in the proposed study. Especially in light of the discussion at the April 14, 1998, Board of Supervisors meeting on the serious existing problems in water monitoring and management in various parts of the County, this study seems particularly important. Moreover, given the potential impacts on the County of the implementation of the Endangered Species Act listing of the Steelhead, the availability of good data on this species could be very cost-effective over the long run.

April 17, 1998  
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Therefore, we recommend that the Board of Supervisors direct the County Administrative Officer to include the \$21,000 request for an expanded Steelhead Study by the City of Santa Cruz Water Department and the San Lorenzo Valley Water District in the proposed 1998/99 County budget.

  
JEFF ALMQUIST, Supervisor  
Fifth District

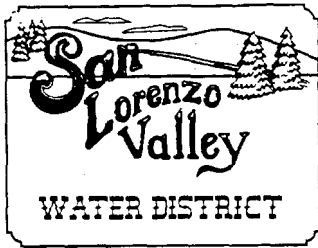
Sincerely,

  
MARDI WORMHOUDT, Supervisor  
Third District

JA:MW:lg

cc: Bill Kocher, City Water Department  
James Mueller, San Lorenzo Valley Water District  
Alvin James, Planning Director

01031H3



February 24, 1998

## SAN LORENZO VALLEY WATER DISTRICT

13060 Highway 9 • Boulder Creek, CA 95006 • (408) 338-2153

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Supervisor Mardi Wormhoudt  
SANTA CRUZ COUNTY BOARD OF SUPERVISORS  
701 Ocean Street  
Santa Cruz, CA 95060

### RE: FUNDING FOR EXPANDED STEELHEAD STUDY

Dear Supervisor Wormhoudt:

The City of Santa Cruz Water Department and the San Lorenzo Valley Water District are once again collaborating on our annual study of population levels of steelhead in the San Lorenzo River system. You may remember last year we contacted you regarding funding for an expanded study. The City and the Water District did fund an expanded study but not at the level recommended by our fishery biologist. Since the County was unable to participate last year, we were constrained as to the number of sampling locations and tributaries in the survey. A copy of the report for the 1997 season is attached for your review and information.

The City and the District have financed an annual examination of the population levels of steelhead by a professional fishery biologist for the past four years. This body of research unquestionably represents the best evidence we currently have regarding population levels of steelhead (*Oncorhynchus mykiss*) in the San Lorenzo River and tributaries. The reports were key data in convincing the National Marine Fisheries Service to list steelhead in the San Lorenzo as threatened rather than endangered as originally proposed by NMFS.

Due to the listing of both coho salmon and steelhead as threatened in this area under the Federal Endangered Species Act, our fishery biologist has recommended an expanded study this fiscal year to look at more sites, including more tributaries. This will be a key year for determining population levels given the physical effects of El Nino and the extensive erosion and sediment within the San Lorenzo Watershed from these storm events. It will be important to gauge the impacts of a severe winter on the viability of the steelhead population. We have attached a copy of the proposed scope of work for this fiscal year in the hope the County can participate in funding an expanded effort. A third of the cost of the total project is \$21,000. We are hopeful that the Board of Supervisors will recognize the merit of this study and insure that funding is appropriated in the County's fiscal 98/99 budget.

Supervisor Mardi Wormhoudt  
 SANTA CRUZ COUNTY BOARD OF SUPERVISORS  
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We note most recently in a draft County report not yet released, An Evaluation of Water Resources Monitoring Efforts in Santa Cruz County, County staff recommends support of our program; "water purveyors have been financing annual studies in critical water supply streams since 1994. Because of the importance of salmon and steelhead to future water resources management, it is critical that monitoring of fish habitat and populations be maintained and expanded if possible."

Both the City and the San Lorenzo Valley Water District would appreciate the opportunity to discuss this research with you and its importance to furthering the County's interest in responding to ESA issues and developing a collaborative recovery plan. State and Federal resource agencies will be looking for this kind of monitoring data to demonstrate an effective recovery plan.

Further, we invite you and County staff to review both the proposed scope of work and the 1997 population survey report and comment on both. Thank you for your valuable time and interest in this important issue.

Sincerely,



Bill Kocher  
 Water Director  
 City of Santa Cruz Water Dept.



James A. Mueller  
 District Manager  
 San Lorenzo Valley Water District

JAM:dc  
 Enclosure

Project g e t

FIELDWORK

The following budgetary breakdown is based on completing 2 sampling sites per 12-hour day for mainstem-sized sites and 2.0 sampling sites per 12-hr day for tributary-sized sites.. One sampling site in the Ban Lorenzo Gorge will require 8 hours due to poor access. The hourly rate for field work will be \$163/hour labor for 6 mainstem-sized sites (\$65/hr for Alley, \$38/hr for Mori and \$30/hr for each of two other field personnel), \$193/hour labor for 3 mainstem-sized sites (\$65/hr for Alley, \$38/hr for Hori and \$30/hr for each of three other field personnel) and \$135/hour labor for tributary-sized sites (\$65/hour for Alley, \$38/hr for Hori and \$30/hr for an additional field personnel) and \$64/day mileage (200 miles/day at \$0.32/mile).

Fish Sampling and Habitat Evaluation

Mainstem-sized Sites/ COST	Tributary-sized Sites/ COST	TOTAL COST per Watershed
6/ \$5,868	24/ \$19,440	\$30,256
2/ \$2,316		
1/ \$1,544		

Travel: 17 days x \$64/day = \$1,088

Habitat Typing to Determine Habitat Proportions

An estimated 3, half-mile segments per 12-hour day for the lower 9 mainstem segments.

9 half-mile segments = 3.0 days = 36 hours @ \$65.00/hr = \$2,340

An estimated 2 half-mile segments per 12-hr day for the remaining tributary sized sites.

24 half-mile segments = 12.0 days = 144 hours @ \$65.00/hr = \$9,360

Survey of Bean Creek and Lockhart Gulch for Sediment Sources

An estimated 3 miles surveyed per 10-hour day.

9 miles = 3 days = 30 hours @ \$65.00/hr = \$1,950

DATA ANALYSIS

Fish Data Analyzed to Estimate Steelhead Densities and Habitat Conditions:

An estimated 2.5 hours per site will be required for fish data.

33 sites = 82.5 hours @ \$65/hr = \$5,362.50

An estimated 1 hour per site will be required for habitat data.

33 sites = 33 hours @ \$65/hr = \$2,145.00

Habitatting:

An estimated 2.0 hours per 1/2-mile segment to determine and summarize habitat proportioning.

33 segments = 66 hours @ \$65/hr = 4,290.00

REPORT WRITING

Erosion Survey of Bean Creek:

Summarize Findings and Produce Map = 20 hours @ \$65/hr = \$1,300.00  
 10 hours @ \$50/hr = \$500.00

An estimated 8, 8-hour days for a draft report for peer and client review.

64 hours at \$65/hr = \$4,160.00

An estimated 10 hours will be required to finish a final report.

10 hours at \$65/hr = 650.00

Report Production

4 bound Draft copies at \$20/copy = \$ 80.00

6 bound Final copies at \$20/copy = 120.00

4 unbound Final copies at \$17/copy = 68.00

Photo-documentation: 200.00

Graphics: 200.00

Total Cost Breakdown

Watershed	cost of Fieldwork	Cost of Data Analysis	Cost of Report Writing & Production	TOTAL
San Lorenzo River	\$43,906	\$11,798	\$7,278	\$62,982

NOT-TO-EXCEED BUDGET ESTIMATE: **\$62,982.00**