

Natural Heritage Stewardship Program Completion Report

Project Title: River Management Plan
Unit Name: Big Sur District
Prepared By: Ken Gray, Monterey District

Fiscal Year: NHS 89/90
Date Prepared: August 15, 1994

Statement of Problem

The Big Sur River watershed was damaged by the Marble-Cone fire in 1977. Within Pfeiffer Big Sur and Andrew Molera State Parks extensive work was undertaken to increase the channel capacity and reduce erosion. The anticipated heavy flows did not occur but the streambed aggrated, the stream channel became braided in sections, and streambank erosion is occurring.

Overall Objectives and Description of Work Proposed

The funded project proposed a hydrologic study of the Big Sur River and development and implementation plan for restoring the river to a more natural state. The emphasis was to be on following a management strategy similar to that developed for Humboldt Redwoods State Park.

Methods and Materials

Associate Resource Ecologist Steve Zembsch transferred from the Northern Region where he was managing river restoration projects in Humboldt Redwoods State Park partly to work on this project. Steve prepared the attached Big Sur River Management Plan and implemented an instream river restoration project described in the attached status report.

Results, Evaluations and Conclusions

The project was successful in that the instream work succeeded in arresting a streambank erosion problem that was threatening a large oak tree and the access trail to the Andrew Molera campground. There has been some deterioration of the downstream portion of the root-wad structure but the bank is stable. Willows and other vegetation is increasingly becoming established along the shoreline, decreasing the likelihood of further damage.

We underestimated the funds required to accomplish a comprehensive hydrology study so the plan that was prepared provided a good framework for the instream project but did not fully address specific future project needs.

There was considerable public controversy associated with using heavy equipment in the river. Before any additional similar work is undertaken there should be a significant public relations effort undertaken. We also need to keep the local park staff informed regarding the project so

they can assist with public relations efforts.

The regulatory requirements related to in-stream restoration are extensive and time consuming. Needed small scale follow-up work requiring equipment in the river was not accomplished because the regulatory permits could not be obtained in time to take advantage of the available equipment. Future budgeting should include significant funds for regulatory compliance.

The in-stream work was performed in the summer of 1990, a critically dry year. When the river was moved into a temporary diversion channel the stream dried up subjecting us to public criticism. We think that the river would have stopped flowing at about the same time but since we were working in the river it didn't look good for us. We filed a water rights complaint stating our belief that the real reason the river dried up was that excessive underflow was being withdrawn to irrigate an adjacent pasture. The State Water Resource Control Board supported our complaint and the adjacent landowner is now attempting to obtain an appropriated water right; we have filed a protest on that application.

Maps and a cost breakdown are in the attached status report.

Big Sur District - 89/90 NHS - River Management Plan - \$23,700

Expenditures & Encumbrances

| | <u>FY89/90</u> | <u>FY90/91</u> | <u>FY91/92</u> | <u>Total</u> | <u>Orig. Alloc.</u> | <u>Balance</u> |
|--------|----------------|----------------|----------------|--------------|---------------------|----------------|
| SW | \$3304 | \$333 | \$0 | \$3637 | \$3,637 | \$0 |
| Travel | \$287 | \$100 | \$67 | \$454 | \$454 | \$0 |
| OH | \$359 | \$43 | \$7 | \$409 | \$409 | \$0 |
| DC | \$12,000 | \$0 | \$7,186 | \$19,186 | \$19,200 | \$14 |
| Total | \$15,950 | \$476 | \$7,274 | \$23,686 | \$23,700 | \$14 |