

II. EXECUTIVE SUMMARY

A. PROJECT TITLE/APPLICANT NAME

Butte Creek Riparian Restoration Demonstration

B. PROJECT DESCRIPTION/PRIMARY BIOLOGICAL AND ECOLOGICAL OBJECTIVES

This project would eliminate unauthorized vehicle access to the California Department of Fish and Game (CDFG) Virgin Valley Ecological Preserve (VVU) and develop a educational and recreational area that will restore and protect this valuable riparian corridor area. Vehicles have contributed to the loss of vegetation which was exacerbated by the 1997 flood. Local CDFG wardens have issued numerous citations for illegal fishing activities, parking and littering in this area. The loss of shaded riverine aquatic habitat (SRA), both near shore cottonwood riparian and up bank valley oak riparian, has left the area with unstable banks and bedload in the floodplain, degrading instream fish habitat and increasing solar radiational heating of the creek.

C. APPROACH/TASKS/SCHEDULES

An electric gate would be installed so that only authorized vehicles are allowed access. Recreational users could walk to the creek which would eliminate vehicles and most of the camping and littering problems. Approximately 6000 feet of trails will be designed and maintained by Parks and Preserves (PNP) with oversight from the Butte Trails Council (BTC). Physically disabled visitors would also be accommodated by developing at least one trail with a hard surface for wheel chair access. All areas damaged by mining or vehicles will be restored. The vegetation restoration would be done by the Parks and Preserves Foundation and volunteers from other groups with purchased plant materials from the California State University, Chico (CSU Chico) Farm. Volunteer efforts will be coordinated with the Butte Creek Education Project (BCEP). BCEP will develop materials for educational signs for the VVU trails, and a brochure would be made available at a kiosk near the entrance. Project signs will be placed on both sides of the Hwy. 99 bridge over Butte Creek to demonstrate the partnerships working to protect, restore and enhance the watershed. Portable restrooms and trash receptacles would be made available. An ongoing maintenance program will be managed by volunteer help under the direction of PNP, BTC and CSU Chico, Butte Creek Watershed Conservancy and others.

Task 1

- 1a. Install electric gate, trash receptacle and portable restrooms.
- 2a. Map existing conditions, survey existing biological resources and plan future condition
- 3a. Develop educational signs and project sign

Task 2

- 2a. Establish riparian restoration and trails
- 3a. Educational and project sign placement

Task 3

- 3a. Maintain site in perpetuity
- 3b. Monitor revegetation, water quality, wildlife populations

Schedule

The project will begin immediately upon contract signing expected in the Spring of 1999. The electric gate will be installed immediately. Plant materials will be purchased and volunteer planting days will be arranged. Signs will be produced and installed before the summer recreation season. Trail development and restoration planting will be started as soon as weather

soil conditions permit. Completion of the restoration planting and trails will take approximately six months from the initiation of the project. Monitoring and replacement will continue for one year. Total project timeline is eighteen months from contract signing provided work can begin before summer 1999.

D. Justification for Project and Funding by CALFED

The project is in the Butte Basin Ecological Zone along Butte Creek. The property is owned by CDFG but funds for restoration or maintenance are not available from that agency. This approximately one mile section of creek is a valuable migration, holding, and spawning area for Spring and Fall-run Chinook salmon and Steelhead. It is an area that has been degraded by historic mining, recreational users, and flooding. This project would provide an excellent opportunity to demonstrate state of the art stream habitat restoration that would be highly visible in the Northern Sacramento Valley. Recreational users would have the opportunity to explore the restoration project and learn about the value of these resources to the stream, the fish, and, ultimately, ourselves.

E. Budget Costs and Third Party Impacts

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| New Gate | \$ 8,000 |
| Revegetation and Trails | 30,000 |
| Educational signs and materials | 4,000 |
| Mapping and consultants | 10,000 |
| Project management (salaries and benefits) | 19,805 |
| Operating expenses and travel | 2,600 |
| Indirect (42% S&W/18.5% S&W) | 4,717 |
| Stewardship endowment | 100,000 |
| Total Cost | 179,121 |

Owners of adjacent properties, Baldwin Construction Company, and Durham Mutual Irrigation District, have agreed to participate in this project. No negative third party impacts would be realized from this project.

F. Applicant Qualifications

The Research Foundation at CSU, Chico has been involved with watershed management and riparian restoration through the Colleges of Natural Sciences, Behavioral and Social Sciences, and Agriculture for many years. Students work on various aspects of these types of projects under the supervision of faculty. Parks and Preserves Foundation has been involved in management of conservation lands and restoration projects for eight years. Responsibilities for the project will be shared by CSU Chico and PnP.

G. Monitoring and Data Evaluation

Monitoring and evaluation for the proposed project includes:

- Annual analysis of the revegetation to gauge success and benefit
- Semi-annual bioassessment monitoring of the benthic invertebrate of the creek
- Regular water quality monitoring to be conducted by the BCEP
- Semi-annual wildlife inventories to be conducted by CSUC
- Data will be shared with CDFG and made available via the internet

H. Local Support/Coordination with other Programs/Compatibility with CALFED objectives

This project has been widely supported by local groups and educational institutions. Community volunteers will complete much of the work. It will be coordinated with other restoration programs occurring both upstream and downstream of the site.