

1,4,4

35K-I-063

**Project Title**

San Joaquin River Education

**Applicant**

California Save our Streams Council  
616 West Lamona  
Fresno, CA 93728  
Tele # 209-497-0736

**Contact** Lloyd Carter

**Project Description & Primary Biological Objectives**

Provide educational materials to School Districts throughout the state which describe importance of the San Joaquin River and its relationship to the Delta.

The project involves the development of materials to foster educational endeavors that promote the study, support the assessment and encourage the preservation of the San Joaquin River, its relationship to the Delta Region and, to better understand the important role this riverine habitat plays locally and within the state.

The objective is to provide curriculum for focused studies and conservation efforts on the flora and fauna of the San Joaquin River. The intent is to promote an awareness of the importance of California's river systems and their direct impact on the Central Delta Region. We hope to provide brochures describing the rivers biological diversity and impacts of neighboring land uses. In excess of 50,000 students will have the opportunity to learn about the water ways importance to general livelihood and the states resources.

**Approach/Tasks/Schedule**

The council will develop a 12 member committee of Fresno County Educators that specialize in environmental studies. Included on the task force will be representatives from DF&G, USF&WL, AWWA, Fresno State University and The San Joaquin River Conservancy.

The committee will develop curriculum which addresses water quality & quantity issues, aquatic life, riparian zones, watersheds and general impacts to the river system. It is anticipated that rough draft materials can be developed during 1998 and materials suitable for distribution will occur during the spring of 1999. The grade level for the materials will be 6-12. These age groups would benefit most from our efforts.

**Justification for Project and Funding by CALFED**

Habitats impacted by this project include Instream aquatic habitat and Shaded riverine aquatic habitat. Priority species include San Joaquin and East-side Delta tributaries fall-run Chinook salmon, Winter-run Chinook salmon and striped bass/migratory birds.

The noted stressors include Alteration of flows and other effects of water management, Channel form changes, Water quality, water temperature, Undesirable species interactions, Population management, Land use, Human disturbance and Wildfire.

General environmental educational materials exist but nothing specific to the San Joaquin River as it relates to the Delta and its association with the states river systems.

### **Budget Costs and Third Party Impacts**

Total approximate costs would be \$35,000.

Impacts to other parties of the resultant materials will be positive as these educational materials will promote the significance of healthy riparian and related river corridors for improved fisheries, water quality and wildlife.

Other parties involved include; City of Fresno, County of Fresno, U.S Army Corp of Engineers as well as agencies mentioned above.

### **Applicant Qualifications**

The council will utilize the services of Wade and Associates which has in excess of twenty (20) years in environmental planning, National Grant Services with twenty-eight (28) years of environmental planning and development and the organizations mentioned above which have invaluable expertise in the environmental field.

### **Monitoring and Data Evaluation**

A variety of University staff and biology students, in concert with Fresno County School staff, will analyze results of the curriculum through hands-on workshops and river field trips where students will partake in studying elements of the river system.

Annual assessment meetings will take place to determine effectiveness of the materials and their application by teachers and students throughout the system. The results will aid in future material dissemination and become guidelines to follow.

### **Local Support/Coordination with other Programs/Compatibility with CALFED objectives**

Support comes from the above mentioned agencies and all work for the materials and flyers will be in conjunction with Fresno County School, Environmental Studies.

According to the CALFED Bay-Delta Program objectives, the resultant work of the this project will assist in determining factors that 1) will provide good water quality, 2) assess aquatic and terrestrial habitats in and along streams which influence delta flows and 3) assist in determining factors that will aid in reducing risk to the delta system.