CARQUINEZ REGIONAL ENVIRONMENTAL EDUCATION CENTER
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Proposal submitted to:

Mr. Dennis Quilici
Water Compliance Specialist
ConocoPhillips
San Francisco Refinery
1380 San Pablo Avenue
Rodeo, CA 94572-1354

Re: Supplemental Environmental Project Proposal for ConocoPhillips

Summary

Carquinez Regional Environmental Education Center (CREEC) has been involved in environmental restoration and education in the Carquinez Strait region since 1995. As our enclosed informational brochure emphasizes, the Carquinez Strait is the only sea-level link between California's interior and is "nature's gateway to the San Francisco Bay." The uniqueness of the Strait allows it to serve as a primary pathway for large numbers of birds, fish, and insects that all depend on clean water, not only in the Strait, but also the surrounding watersheds. CREEC's efforts are centered in the protection, restoration, and improvement of the natural environment. Our work and outreach encourage the protection of the watersheds and the quality of the water entering the Strait.

CREEC provides key services that further the vision of improved water quality through the promotion of native drought-tolerant plants and herbicide and pesticide-free gardening. These education services help reach more people so that they can directly contribute to the preservation of our natural surroundings and further spread water quality preservation information.

CREEC's programs contribute to the protection of water quality. We strive to protect the beneficial uses of water through education, services, and products. We have educational programs for youth, restoration projects that restore native plants to local watersheds, provide plants that are better suited for the local ecosystem because they prevent erosion, resist drought, reduce chemical use and support the native ecosystems and habitat. We focus our programs on protecting water for beneficial use, pollution prevention, and over-allocation for the present and future health of our local watersheds and the surrounding communities.

CREEC has been invited by ConocoPhillips to submit a project proposal in the amount of $6,000 to satisfy the request by the Regional Water Quality Control Board for a

supplemental environmental project (SEP) in the Rodeo/Crockett, CA area of the Carquinez Strait. CREEC's SEP proposal is designed to fit three funding needs of the organization that will contribute to water quality education and improved water quality in local watersheds. The proposal has three components, as follows: 1.)$1,200 for an adult workshop series consisting of one class quarterly of Pesticides and Integrated Pest Management, Composting, and Native Plants; 2.) $1,100 for water quality testing and instructional material for 6th through 12th graders in the John Swett Unified School District; and 3.) $3,700 to increase the environmental education hours for the purpose of propagating additional native plants for watershed restoration work by 105 hours over the next twelve months.

Project Need and Description

The Carquinez Regional Environmental Education Center currently operates a highly successful environmental education program, which includes outreach to communities to practice water conservation gardening, to eliminate or reduce use of herbicides and pesticides, and to garden with native and drought-tolerant plants. In addition, CREEC conducts vegetation restoration projects in the local watersheds and backyard habitat gardening programs that require native plant propagation capabilities. These activities benefit water quality in local watershed and downstream into the Strait and the San Francisco Bay by reducing erosion and urban runoff pollution.

Rodeo and Crockett residents have expressed a desire for increased after school activities and vocational education employment for students in the John Swett Unified School District. Also, adult community members want increased education regarding native plant propagation and gardening, tree planting and maintenance programs, and further restoration of the degraded watersheds in the local area.

CREEC is the only organization in the Rodeo/Crockett watershed areas with a record of accomplishing these goals and the foundation necessary to continue this important natural resource education. The level of grant allocations and fundraising sources determines the availability of these valuable programs. Recent economic conditions have made fundraising a difficult and critical issue for nonprofit groups.

CREEC is presently expanding its physical capacity with the purchase of a 24' x 48' instructional greenhouse that will be located on .4 of an acre near the Carquinez Strait shoreline in Crockett. The funding for this expansion has been accomplished through a $25,000 SEP from C&H Sugar and a $55,477 grant from Crockett Community Foundation. The proposed completion date is approximately January 2004. The C&H SEP included a provision for a series of 12 workshops to be offered on a monthly basis over a period of one year (3 separate topics each quarter: Pesticides and Integrated Pest Management, Composting, and Native Plants). The classes will be open to the general adult public for no cost. While funding was included for the class materials, there were inadequate funds available in the C&H SEP to provide for a workshop instructor. Therefore, CREEC is proposing that $1,200 of this ConocoPhillips SEP will be designated to provide for workshop instruction.

In fall 2003, CREEC will be initiating a three-year riparian restoration program on Edwards Creek in Crockett, adjacent to Willow High School and Carquinez Middle School. The program is designed to utilize California Teaching Standards to provide hands-on environmental, biological, and science education for approximately 350 students. The program will include a water quality education component. CREEC proposes that this SEP

proposal provide for the necessary water testing kits and educational material. For the 6th through 9th graders, the "Just Add H20" test kits for pH, alkalinity, phosphate, and nitrate from Hach are recommended. Each kit provides for 50 tests, which will allow for one test each semester over the three year period for approximately 300 students working in groups of three at a cost of $700. For the 10th through 12th graders (approximately 40 students) more in-depth testing with the Lamott Water Quality Education Outfit is proposed for testing of dissolved oxygen, pH, nitrate-nitrogen, alkalinity, phosphate, turbidity, and temperature at a cost of $400. These prices include necessary curriculum, taxes, shipping, and handling.

For the remaining balance of $3,700 CREEC proposes that the funds be allocated to increase the hours of the environmental vocational education program by approximately 105 hours over the next year. Due to the pending restoration projects combined with the increased production capacity available, CREEC has a need for additional plant material to provide for riparian restoration projects and re-vegetation work on Elkhorn and Edwards Creek.

Work Plan and Timeline

The adult workshop series is proposed to begin in January 2004 and be completed by December 2004. The Edwards Creek water quality education program is proposed to begin in the fall semester of 2004 and will be completed in spring semester of 2007. The expansion of environmental education hours to propagate native plant material for restoration work can begin immediately and would be completed over a twelve-month period.

Budget

Item	$Amount
Instruction -12 Adult Workshops	$1,200
Water quality testing equipment	1,100
Environmental education program	3,700
Total	$6,000

The Organization

CREEC is a nonprofit organization existing under Section 501-C-3 of the U. S. Internal Revenue Code. Among its principal charitable purposes is "the preservation of land for scientific, historic, educational, recreational, and open-space opportunities." The educational goals are centered on training and educating students and community members in restoration techniques and the importance of protecting and enhancing the natural environment.

The initial education program, which started in 1995, was begun by a partnership with Union Oil Company of California, the Lindsay Wildlife Museum, John Swett Unified School District, and Diablo Valley College to work with local middle school students propagating oak seedlings to restore oak woodlands on the hills surrounding the Strait. Over time, the program has expanded and evolved to reach adults and students of all ages through workshops, community outreach, environmental education, and restoration programs. CREEC's restoration programs have been centered in the riparian areas that feed the Strait and replanting the surrounding oak woodlands that are vital for erosion control on the

hillsides. In the riparian areas and adjacent slopes, CREEC has planted thousands of native plants and grasses and conducted extensive mulching practices. These measures also contribute to erosion reduction.

Since 1998, CREEC has provided vocational education opportunities for local youth to participate in propagation and restoration work year-round after school and weekends. The unique aspect of CREEC's youth program is the opportunity for participation in a work environment that includes valuable environmental education with the added benefit of improving watersheds on the Carquinez Strait.

Restoration, Outreach and Projects

Past restoration projects include Edwards Creek in Crockett and various oak woodland and tree planting projects in the Crockett and Rodeo areas. In combination with raising trees and plants for its restoring projects, CREEC propagates and sells native plants and trees to local residents, conducts education workshops, and distributes literature promoting herbicide and pesticide free gardening, which improves overall water quality in the Strait. CREEC youth have developed a website at www.CREECyouth.org, which will be continually improved to inform the public of CREEC's activities. We participate in creek and shoreline cleaning and monitoring water quality to help ensure the survival of native plants and to help restore the shores and waters of the Strait. Through CREEC outreach, we continually earn the support of the local communities and encourage more people to make a commitment to water quality protection through these ecologically sound practices.

CREEC's efforts in restoration, environmental education, and community improvement have been widely supported by the major local community groups and organizations, including the following: Carquinez Women's Club, Crockett Arts Alliance, Crockett Boy Scouts, Crockett Chamber of Commerce, Crockett Community Center, Crockett Community Foundation, Crockett Historical and Museum Association, Crockett Improvement Association, Crockett Lions Club, Crockett Sea Scouts, and John Swett Unified School District. CREEC's supporters in Rodeo include The Rodeo M.A.C., the ConocoPhillips Community Advisory Panel, ConocoPhillips and the Bayo Vista Residence Council.

We foster leadership through our youth programs and community outreach. We are inspiring youth to become leaders in natural resource protection and water quality issues. Youth learn to recognize resource protection through conservation and pollution prevention. Our youth programs encourage advance education in plant science and water quality. Our programs aid staff and our volunteer corps by providing education and information on development as well as growth opportunities in community outreach.

Personnel

Sandra J. Dare, Educational Coordinator and Project Manager, has developed and supervised CREEC's education programs and restoration projects since 1998. She holds a M.S. in Environmental Studies and a MBA in Finance. She is a Master Gardener and sits on various community panels and boards, including the ConocoPhillips Community Advisory Panel, the Contra Costa County P-1, the John Swett Careers Academy Steering Committee, the Carquinez Strait Area Heritage Committee, and the Crockett Improvement Association.

Dean G. Kelch, Ph.D., botanist and native plant specialist, has been over-seeing and advising the native plant propagation and re-vegetation programs since 1999. He is currently performing postgraduate research at University of California Berkeley.

Cynthia Schaefer, greenhouse Manager, has managed the native plant nursery since 2000. She was previously a greenhouse manager at other Bay Area locations.

CREEC Youth include students from 14 to 18 years old from the John Swett Unified School District. Over 50 students have participated in the vocational education program since 1998. Another 200 students have participated on a volunteer basis in conjunction with scouting badges, community service projects, and hands-on science projects. CREEC has approximately 125 volunteers that participate in various aspects of its programs on an annual basis and 350 supporting contributors.

Evaluation Plan and Success Criteria

The success of the project will be determined by the completion of the above-outlined projects. Progress reports will be submitted every six months in coordination with ConocoPhillips beginning six months after SEP approval and funding.

Please contact Sandra Dare at 510/787-2265 if you have any questions regarding our proposal.