

**City of American Canyon
Supplemental Environmental Project Preliminary Proposal
Channel Restoration & Water Quality Improvements**



Due January 2, 2007

Background

The San Francisco Regional Water Quality Control Board (SF-RWQCB) issued Mandatory Minimum Penalty (MMP) Complaint No. R2-2006-0080 (Complaint) to the City of American Canyon (City) on November 27, 2006. The Complaint, issued for violations of discharge limits at the City's wastewater reclamation plant, included penalties in the amount of \$66,000. The City was given the option of requesting a hearing before the Regional Board, paying the full penalty amount, or proposing a Supplemental Environmental Project (SEP) in the amount of \$40,500 and paying the remainder of the penalty. The City has chosen to propose a SEP, and returned the Waiver to the RB on December 26, 2006 indicating the preferred choice. The City requested an extension of the original December 26, 2006 due date for the preliminary SEP proposal, and was granted an extra week.

City Contact

The contact person for the City of American Canyon for this Preliminary SEP Proposal is Mr. Robert Weil, Director of Public Works. Mr. Weil can be reached at (707) 647-4550.

Project Location

This project is in the San Pablo Basin in the Napa River subwatershed. A vicinity map is provided in Appendix A of this proposal.

Project Description

The proposed project is located upstream of a newly restored tidal wetlands that drains to the Napa River. The project would restore, stabilize and provide water quality improvements to a segment of existing storm drain channel subject to erosion and migration. Water quality benefits are anticipated to the wetlands, the downstream marsh and to the Napa River. A second part of the project will include partnering with the Friends of the Napa River. The Friends of the Napa River have developed a public education program targeting grades 3-5.

The channel conveys local runoff and storm water drainage from residential subdivisions and the major vehicular access of American Canyon Road. Additionally, the project is located adjacent to the trailhead used for access to the tidal wetlands. The proposed project would therefore result in continuous trail restoration and beautification to the marsh access. As appropriate, educational signage would be installed to highlight trail access, present the functions and values of wetlands for water quality, flood control and habitat functions.

Relationship to CALFED Restoration Goals

The proposed project is anticipated to provide the following two specific functions:

1. Contaminant reduction as it filters and infiltrates storm water and nuisance flow runoff from the storm drain;
2. Provide restored non-tidal aquatic habitat.

Each of these functions is described and recommended in the June 1999 CALFED Bay Delta Program report, titled Ecosystem Restoration Program Plan, Suisun Marsh, North San Francisco Bay Ecological Management Zone Vision (CALFED Report).

The CALFED Report states in its introduction that stressors on the North Bay marsh fish and wildlife include, among many others, poor water quality. The Report also states that stressors to Suisun and North Bay saline emergent plant communities supporting sensitive plant and wildlife

resources include freshwater discharges that are outside of the natural variability of the seasonal runoff. The CALFED Report lists 29 distinct species that would benefit from restoration actions in the Suisun Marsh/North San Francisco Bay Ecological Management Zone.

Page 137 of the CALFED Report outlines the goal to develop “deep (3-6 ft) deep open water areas to provide resting habitat for water birds, foraging habitat for diving ducks and other water birds that feed in deep water.” It is expected that “restoring suitable resting areas for waterfowl and other wetland-dependent wildlife species will increase the overwinter survival rates of these populations. Other wildlife species will also benefit.”

Page 145 of the CALFED Report outlines the goal to “reduce the input of herbicides, pesticides, fumigants and other agents toxic to fish and wildlife in the Suisun Marsh/North San Francisco Bay Ecological Management Zone.” The rationale given in the Report states that “reducing the concentrations and loads of contaminants, including hydrocarbons, heavy metals, and other pollutants in the water and sediments of the Suisun Marsh/North San Francisco Bay Ecological Management Zone will help reduce sublethal and long-term impacts of specific contaminants...”

Project Details

The channel restoration will be based on the practice for the installation of vegetated swales. Vegetation will be selected to achieve water quality, habitat and esthetic functions and values. As appropriate, hydroseeding using local native seed mix will be considered. The City will use and follow guidance from the California Stormwater BMP Handbook.

Regrading of the channel will be accomplished to facilitate the installation of erosion control materials. Figure 1 is a recent photograph of a segment of the channel that would be restored by the proposed project.

Work below the elevation of the Ordinary High Water will be minimized to facilitate permitting coordination with the US Army Corps of Engineers. Coordination with the California Department of Fish and Game will be completed to ensure compliance with their jurisdictional requirements. Coordination with SF-RWQCB for 401 Certification will be completed.

The proposed project will investigate the need for sizing and location of sediment and trash removal facilities. If appropriate, these facilities would be included in project construction.

This project would represent an extension of the North Slough Marsh Restoration Project, which was studied and planned by the City of American Canyon in 2000. That project was funded by a CALFED grant under its Ecosystem Restoration Program Plan. Eventually, 70% of the newly restored project area will be granted to the California Department of Fish and Game (CDFG). The CEQA analysis, planning and approval have been done for the overall project, so additional planning and permitting for this project will not need to be done.

Pollutants treated include sediment, nutrients, trash, metals, bacteria, oil and grease, and organics. The restored vegetated swale is expected to remove pollutants through settling, although some pollutant uptake by the plants also occurs, especially for nutrients. The Napa River, which is the receiving water for this system, is on the 303(d) list for sediment, nutrients, and pathogens.

Public Education

The Friends of the Napa River have developed a Watershed Education Curriculum targeting grades 3-5. The curriculum includes the concept of the water cycle, watershed and river ecology,

with materials that include slides, handouts and displays of macro-invertebrates. The curriculum has the California State Standards already incorporated into them with the help of a former teacher and presenter, Kent Ruppert.

The Proposed Project will include the developed Watershed Education Program as well as the Non-Point Source Pollution diorama program the City already has in place. The program will be expanded upon with the collaborative effort from the City of American Canyon, the Friends of the Napa River and the Audubon Society. The expanded program will have a curriculum that targets each grade individually so that the lessons aren't repeats from the previous school year.

The expanded curriculum will include a field trip to the Wetlands Viewing Area and to the channel restoration site. These sites are approximately 1.5 miles apart and will have walking path adjoining them. This will allow the students to "see" where the rain goes and the effects that the wetlands have on water quality. If budgeting allows, the project would include a transportation reimbursement.

The proposed project will be a permanent program that will be included in the Environmental Education Guide published by the Environmental Education Coalition of Napa County.

Friends of the Napa River have estimated the yearly cost for their program to be \$12,000. With program expansion and the option of transportation reimbursement, there could be an added \$5,000 for a total of \$17,000 for the first year operating cost. The City will fund the first year operating cost plus \$8,000 of the second year operating cost.

Project Budget

The SEP amount for this project is \$40,500. It is anticipated that construction will be completed by City crews from the Department of Public Works. The City Public Works Director would manage the project. The City may use all or a portion of the engineering budget to contract with a consulting engineering firm. That budget outline for the project is presented in Table 1.

Table 1 Proposed Project Budget	
Amount	Use
\$2,500	Third party oversight. The Association of Bay Area Governments (ABAG). The cost represent approximately 6% of the total SEP amount, as required by the San Francisco RB's guidance.
\$5,000*	Planning and engineering.
\$1,000 - \$8,000*	Construction, vegetation installation, depending on vegetation methods used.
\$25,000	Public School Education partnership with Friends of the Napa River.
*Costs shown are budgetary, but are in the correct range for the project as it is described in this proposal.	

Project Schedule Milestones

Table 2 presents the major milestones from the proposed project schedule.

Table 2 Project Schedule Milestones	
Milestone	Schedule
Approval from RB Executive Officer	One month from submittal to RB
Planning and Engineering	Two months from submittal to RB
Construction	Three to six months from submittal to RB (Construction would benefit from waiting until the end of the rainy season and reduction of spring flows from snowmelt).



Figure 1 Proposed Channel Restoration Site

Appendix A

Vicinity Map

