Appendix A: Project Description

Channel Reconstruction Downstream of Bridge #3

The Vasona Creek Channel Stabilization Project downstream of Bridge #3 includes reconstruction of 450 linear feet of eroding channel with a boulder weir/step pools channel and 2 acres of riparian vegetation plantings. The purpose of the project is to eliminate channel incision and bank erosion in the project reach that has undermined the roots of several large oaks, which could result in their loss within the next few years; if these and other oaks are lost to erosion, the important overstory cover and shade they provide will be at risk. In addition, channel reconstruction will raise groundwater levels and enhance native vegetation. Non-native vegetation along the reconstructed channel and adjacent floodplain areas will be removed and replaced with native plants.

Task 1.0: Project Management, Administration and Meetings

The WVC staff will meet at least once a month with staff, consultants and contractors to coordinate activities, track progress and create action items. Any issues related to the project would be addressed through team meetings.

This task also includes time for WVC administrative staff to track budgets and prepare and track invoices and pay vendors associated with the project. The task also includes reporting to SCVWD and agencies as required and preparation of the final invoices and documentation needed to complete the project grant requirements.

Task 2.0: Final Project Design

Subtask 2.1: Complete Geotechnical Survey
A geotechnical survey will be initiated upon successful funding. The geotechnical investigation will provide design information for engineering, confirm utility locations, and assess the unlikely occurrence of any soil contamination require special handling.

Subtask 2.2: Complete 100% Engineering Plans and Specifications
The final plans and specifications will be prepared for the channel reconstruction project in suitable format for preparing a competitive bid package for the construction contract. WVC will contract engineering design services to complete this task. The 100% plans and specifications will be presented in draft form to resource agencies at the initiation of the permit process then drafted into final form following receipt of comments from agencies. A final Storm Water Pollution Prevention Plan will be developed as part of the final plans and specifications.
Subtask 2.3: Complete CEQA Review and Permitting
The project team will complete a biological survey report to support permit applications and CEQA Initial Study of the project. It is anticipated that WVC will prepare a mitigated negative declaration for CEQA certification, and will submit and obtain permits from the US Army Corps of Engineers, California Department of Fish and Game and a 401 Water Quality Certification for the Regional Water Quality Control Board.

Task 3.0: Construct Project

Subtask 3.1: Prepare Bid package, advertise and select contractor
WVC will oversee preparation of the final bid package and send it out for competitive bidding to private construction firms. A successful bidder will be chosen, partially based upon pre-qualification for stream restoration experience, and the construction contract will be executed.

Subtask 3.2: Construct Project
The project construction would begin as soon as practical after contractor selection and contracting. It is anticipated that construction will require a total of 45 workdays between July 1 and October 1, 2013. It is anticipated that the creek will be dry during construction and that no dewatering or flow diversion will be necessary. The contractor will be responsible for monitoring weather and preparing the site for any rainfall and runoff events during construction and for final installation of erosion control measures before winter rainy season. WVC engineering staff will be responsible for construction inspection and meeting permitting requirements. The engineering contractor and stream restoration specialist would provide construction supervision in order to ensure proper construction and installation. Upon completion of construction, an as-built survey and map will be prepared in order to document baseline conditions for future monitoring.

Subtask 3.3: Non-Native Vegetation Removal and Native Revegetation
Native vegetation plantings within the construction footprint along the reconstructed channel would be completed as a final phase of construction. The bounding floodplain and terrace areas will be cleared of non native plant species and planted with native annual grasses and mulched for winter erosion control; other measures will likely involve installation of silt fences, temporary drainage and other devices to minimize soil erosion and sediment transport into the stream. The floodplain terrace areas will be inspected for any regrowth of non native species during the next summer season (2014) and additional removal will be conducted as necessary; it is planned to ensure that non natives are under control before planting permanent native replacements. If significant non-native growth is observed in 2014, the areas may be planted again to annual native grasses and re-monitored the following year. The decision to plant native plants will be made when it is concluded that controlling non natives will not have to
occur on a scale that could disturb or disrupt new native plants and that natives will be able to out-compete non natives over the long term with minimal maintenance.

**Task 4.0: Monitoring and Maintenance Plan**

With project completion, WVC staff will carry out the monitoring and maintenance plan with initial assistance from the project biologist and geomorphologist. The proposed monitoring and project performance plan will be finalized during the permitting process in order to incorporate agency inputs.
APPENDIX B
PROJECT SCHEDULE
Appendix B: Project Schedule

Channel Reconstruction below Bridge #3


Task 3: Construct Project: March 2013 through November 2013

Task 4: Monitoring and Maintenance: November 2013 through December 2016.