

## 12-404-252 - Upper Napa River Habitat Enhancement and Sediment Reduction Plan

PURPOSE: State shall provide a grant to and for the benefit of Grantee for the purpose of completing a plan for four and six tenths (4.6) miles of the Upper Napa River between Lincoln Avenue and Bale Lane, to address channel incision, a primary cause of fine sediment source identified in the Napa River Fine Sediment Total Maximum Daily Load (TMDL).

### B. PROJECT-SPECIFIC REQUIREMENTS

#### 1. Landowner Participation

- 1.1 Prepare a list and map of landowners along the Project reach and submit to the Grant Manager.
- 1.2 Invite all landowners along the Project reach to an initial landowner group meeting. Submit a summary of the meeting and a list of attendees to the Grant Manager.
- 1.3 Conduct meetings, at least twice a year, to inform landowners on plan progress and findings. Submit a summary of the meetings and a list of attendees to the Grant Manager.
- 1.4 Hold meetings with individual landowners as needed.

#### 2. Existing Information

- 2.1 Collect and review existing data and studies along the Project reach including, but not limited to, California Department of Fish and Wildlife (CDFW) habitat surveys, Napa County Resource Conservation District (NCRCD) surveys of tributary streams and the Napa River in the Project reach, Geographic Information System (GIS) layers, Northern Napa River Watershed Plan, fish barrier surveys, geologic and topographic mapping, and other resources.
- 2.2 Submit the progress of data gathering and review in the monthly Progress Reports.

#### 3. Technical Advisory Group (TAG)

- 3.1 Submit to the Grant Manager a list of members on the TAG, consisting of representatives from the Regional Water Board, National Oceanic and Atmospheric Administration (NOAA)-Fisheries, CDFW, Napa County Planning Department, Napa County Flood Control District, and other organizations as part of the Oakville/Oak Knoll plan and other watershed projects.
- 3.2 Hold a minimum of three (3) TAG meetings and submit agendas, summaries, and attendance list to the Grant Manager.
- 3.3 Present findings of the major work items to the TAG for input.

#### 4. Field Data Collection

- 4.1 Establish access agreements with landowners for field data collection and provide copies of the agreements to the Grant Manager.
- 4.2 Provide field data collection protocols to the Grant Manager for approval.
- 4.3 Complete river channel surveys according to field data collection protocols.
- 4.4 Establish reaches and a digital base map and submit to the Grant Manager.

- 4.5 Conduct a geomorphic features survey according to field data collection protocols, compile the survey into a GIS layer, and submit a copy to the Grant Manager.
- 4.6 Conduct a riparian habitat survey according to field data collection protocols, compile the survey into a GIS layer, and submit a copy to the Grant Manager.
- 4.7 Conduct a fish habitat survey according to field data collection protocols, compile the survey into a GIS layer, and submit a copy to the Grant Manager.
- 4.8 Conduct carcass and snorkel surveys according to field data collection protocols, compile the surveys into a GIS layer, and submit a copy to the Grant Manager.
5. Geographic Information System (GIS)
  - 5.1 Establish GIS information for the plan area, using existing layers for topography, elevation, streams, vegetation, roads land use, soils and geology.
  - 5.2 Add layers and databases to GIS for spatial data collected in Item 4.
  - 5.3 Incorporate input from landowner meetings to define potential restoration areas.
  - 5.4 Use GIS from Items 4, 6, and 7 to analyze data, formulate and revise alternatives.
6. Existing Conditions Analysis, Opportunities, and Constraints
  - 6.1 Review geomorphic feature survey and topographic survey to assess and synthesize existing geomorphic conditions. Submit a technical memorandum summarizing the geomorphic assessment to the Grant Manager.
  - 6.2 Analyze riparian data by reach and geomorphic feature to assess riparian conditions.
  - 6.3 Analyze salmonid habitat survey data in conjunction with geomorphic mapping.
  - 6.4 Rate the reaches and delineate existing high, medium and low quality habitat, and high, medium and low channel instability.
  - 6.5 Define opportunities and constraints for each reach using the field data analysis and incorporate them into the Project GIS.
  - 6.6 Prepare an Existing Conditions Analysis, Opportunities, and Constraints Report. Submit the Report and the Project GIS, including GIS layers, in Items 4, 5, and 6 to the Grant Manager.
  - 6.7 Present the results of the report in a presentation to the TAG and landowner group.
7. Preliminary Alternatives for Restoration
  - 7.1 Formulate one (1) or two (2) draft preliminary alternatives and submit to the Grant Manager.
  - 7.2 Review the alternatives with affected landowners and the TAG, and make revisions as needed.
  - 7.3 Prepare the final maps of preliminary alternatives, incorporate them in the Project GIS, and submit them to the Grant Manager.

8. Draft Restoration Plan (Draft Plan)

8.1 Prepare a Draft Plan to include the Existing Conditions Analysis, Opportunities, and Constraints Report with maps depicting geomorphic, riparian, and aquatic habitat features, and preliminary alternatives; restoration actions to provide water quality improvements; the role and responsibilities of the private landowners, local, state, and federal agencies in implementing the Plan; an implementation timeline and monitoring program for the Plan; and adaptive management procedures for restoration actions.

8.2 Present the Draft Plan to the TAG.

8.3 Conduct individual meetings with landowners to review the Draft Plan and proposed changes on their property.

8.4 Submit the Draft Plan to the Grant Manager for review and comments.

9. Final Restoration Plan

9.1 Prepare a Final Restoration Plan, and submit to the Grant Manager for approval.