

13-505-251 - HISTORICAL ECOLOGY FOR GUIDING TOTAL MAXIMUM DAILY LOAD (TMDL) IMPLEMENTATION IN THE LAGUNA DE SANTA ROSA WATERSHED

PURPOSE: State shall provide a grant to and for the benefit of Grantee for the purpose of identifying suitable sites within the sub drainage area for restoring the assimilative capacity of key segments in the Laguna de Santa Rosa watershed with direct drainage connectivity to major nutrient sources.

B. PROJECT-SPECIFIC REQUIREMENTS

1. Management Team, Advisory Team and Stakeholders

- 1.1 Establish a Management Team and an Advisory Team and submit a list of team members to the Grant Manager for approval. As needed, invite additional members and submit to the Grant Manager.
- 1.2 Compile a list of Project stakeholders and submit to the Advisory Team and Grant Manager. Add stakeholders to the list as needed during the Project and submit revisions to the Grant Manager.
- 1.3. Conduct a meeting to include all Management and Advisory Team members, establish the roles and responsibilities of each team, and develop a schedule for future team meetings. Submit the sign-in sheets, agendas, meeting minutes, and schedule for future meetings to the Grant Manager.
- 1.4 Conduct Management Team Meetings twice annually and Advisory Team meetings as needed. Submit the agendas and meeting minutes to the Grant Manager.

2. Workplan

- 2.1 Prepare a detailed workplan for the Project and submit to the Advisory Team and Grant Manager for review and comment.
- 2.2 Finalize the workplan and submit to the Advisory Team and Grant Manager.

3. Data Collection and Compilation

- 3.1 Identify, recover, and review existing historical data and information in county records, museums, libraries, and private archives, TMDL memos and previous reports, to determine the extent and distribution of aquatic resources and related riparian areas, prior to major landscape conversions. Submit a summary of the data collection results including a list of archives visited and a summary of collected materials to the Grant Manager.
- 3.2 Convert raw historical data sources into scanned, gee-rectified Geographic Information Systems (GIS) data layers, formatted to be compatible with Regional Water Board GIS capabilities and submit a list of available data layers to the Grant Manager.
- 3.3 Compile corroborating sources of data and information identified in Item 3.1 to be used in determining levels of certainty in Item 4.2.
- 3.4 Prepare a technical memo describing the linkages between GIS data layers in Item 3.2 and data compiled in Item 3.3 and submit to the Grant Manager.

4. GIS Assessment

- 4.1 Combine and assess individual GIS layers to estimate the historic geographic extent, location, and distribution of wetlands and riparian areas, and assign certainty scores to all landscape features of interest.
- 4.2 Prepare a detailed map of pre-modification extent using combined data layers from Item 4.1 and distribution of wetlands and riparian areas and submit to the Grant Manager.
- 4.3 Prepare a technical memo summarizing the results of the GIS Assessment in Items 4.1 and 4.2 and submit to the Grant Manager.

5. Data Interpretation, Analysis, and Reporting

- 5.1 Prepare GIS layers comparing past and current wetland and riparian area distribution, abundance, diversity, and condition and submit to the Grant Manager.
- 5.2 Develop a conceptual model of potential assimilative capacities and other ecological services of restoration and enhancement areas based on available literature, available current wetland and riparian area condition scores, feasible management scenarios, and current constraints. Include a report on the conceptual model in the draft assessment report in Item 5.3.
- 5.3 Prepare a draft assessment report comparing current and historic levels of drainage connectivity, as well as relevant land cover and land use information, and submit to the Advisory Team and the Grant Manager for review and comment.
- 5.4 Prioritize potential restoration areas capable of performing lost or degraded ecosystem functions based on their drainage connectivity and proximity to dairies and/or other sources of nutrients and include restoration feasibility for a minimum of 200 acres. Submit a map, narrative description of prioritized areas, and discussion regarding restoration feasibility to the Grant Manager for review and comment.
- 5.5 Finalize the assessment report, incorporating comments received from the Grant Manager, Management Team, Advisory Team, and stakeholders, and submit to the Grant Manager.

6. Outreach

- 6.1 Conduct at least one (1) workshop with stakeholders to solicit comments on the draft assessment report, draft map and narrative description of prioritized areas. Submit a copy of the sign-in sheet, agenda, meeting minutes, and workshop materials to the Grant Manager.
- 6.2 Conduct a workshop with stakeholders to present and discuss the Final assessment report, draft map and narrative description of prioritized areas. Submit a copy of the sign-in sheet, agenda, meeting minutes, and workshop materials to the Grant Manager.