



(www.pelicanetwork.net/morrobay.htm)

Publication No. WI-2006-07

The Watershed Institute

Division of Science and Environmental
Policy
California State University Monterey Bay
<http://watershed.csUMB.edu>

100 Campus Center, Seaside, CA, 93955-8001
831 582 4452 / 4431

*Central
Coast
Watershed
Studies*

CCoWS

Wetland Tracker Data Collection Central Coast (Morro Bay Region)

Matthew Michie
Fred Watson
Joel Casagrande

All authors reside at:
Watershed Institute, California State University
Monterey Bay

Project leader contact details:
fred_watson@csUMB.edu

Acknowledgements

Funded by San Francisco Estuary Institute (SFEI)

Assistance was provided by the following agencies:

California Coastal Commission

- Ross Clark

Central Coast Regional Water Quality Control Board

- Dominic Roques

Land Conservancy of San Luis Obispo County

- Brian Stark

San Francisco Estuary Institute

- Michael May
- Max Delaney

California Department of Fish and Game

- Dave Highland

Morro Bay National Estuary Program

- Dan Berman
- Mark Taylor
- Ann Gillespie

1. Project Overview

The goal of this project was to gather information on wetland restoration projects in the Moro Bay, California, region. Data provided to the San Francisco Estuary Institute (SFEI) will be used to enhance a web-based, public access database, the Bay Area Wetland Project Tracker. Wetland Tracker provides information on the location, size, sponsors, habitats, contact persons, and status of included projects. Its website provides an interactive map of planned and completed wetland projects (<http://www.wetlandtracker.org>).

2. Scope of Work

2.1. Data Collection

Six state and federal agencies were contacted for information on wetland restoration, mitigation, acquisition, and enhancement projects. Three agencies (Central Coast Regional Water Quality Control Board, Land Conservancy of San Luis Obispo County, and Moro Bay National Estuary Program) agreed to contribute data to the project. Data were provided in both hard and electronic formats with varying degrees of detail. One agency required onsite retrieval of data.

2.2. Data Entry

All data collected were entered using a template provided by the SFEI. Data were stored in a Microsoft Access database. Information on 14 projects was entered in the database. This included type of plants used, area, agencies involved, contact information, permits required, and project summaries.

2.3. Spatial Data

Photocopies were made of maps and sketches submitted with 401 permit applications or supplied by cooperating agencies of the project area. Digital orthophoto quadrangles covering the project areas were downloaded from the California Spatial Library¹ and imported to an ESRI ArcGIS project. Because the project maps provided were of varying quality, the photocopied maps were visually compared to the digital orthophoto quadrangles. Polygons of project sites were outlined manually in the geographic information system (GIS). Please see Figure 1 below for an example. Polygons were validated by comparing area recorded in the project summaries and polygon area in ArcGIS. A shapefile of the polygons was created using the SFEI-specified coordinate system and projection (UTM, NAD 83, Zone 10 north).

¹State of California. 2000. Department of Conservation Digital Orthophoto Quadrangles. Available via the Internet: <http://gis.ca.gov/data.epl>. Accessed 30 June 2006.



Figure 1: Example of Site Outline

3. Recommendations

3.1. Future Data Needs

CCRWQCB states project records prior to 1999 have been purged. This highlights a need for historical data. Additional data sources (private consulting firms, etc.) may be an important source of historical data in future efforts. Digital maps were not available for all of the projects. GPS “ground-truthing” of Wetland Tracker sites is recommended for improving the accuracy of the created digital spatial information.

3.2. Project Suggestions

In the Access template provided by SFEI, there appears to be a formatting error in the “project_tracker” form. Text entered in the “Planning List” field is duplicated in the “describe” field directly above. This should be corrected prior to expanding the project.

The Guadalupe Dunes area in northern Santa Barbara County and southern San Luis Obispo County has had numerous past and wetland current restoration projects. The scope of these projects is large compared to that covered by those included in this summary. Guadalupe Dunes would be an important area to include in future work. In the Monterey Bay area, the Elkhorn Slough Foundation, Moss Landing Marine Laboratories, and the Central Coast Regional Water Quality Control Board would be appropriate places to begin the data collection process.