

CALIFORNIA COASTAL COMMISSION

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RECORD PACKET COPY

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TO: California Coastal Commissioners and Interested Persons

FROM: Peter M. Douglas, Executive Director
Tami Grove, Deputy Director
Ross Clark, Environmental Specialist

SUBJECT: Wetlands Mapping Grant: Acceptance of a grant from Environmental Protection Agency and sign an Interagency Agreement with California Conservation Corps and a contractual agreement with the Morro Bay National Estuary Program for the development of the Central Coast Comprehensive Wetlands GIS Database.

STAFF RECOMMENDATIONS

1. *The staff recommends accepting a contract from the Environmental Protection Agency for the sum of \$312,531.00 to develop the Central Coast Comprehensive Wetland GIS Database.*
2. *The staff recommends the Commission authorize and enter into an Interagency Agreement with the California Conservation Corps for the completion of Tasks outlined in attachment 1 as a component of the CCC Wetlands GIS Database at a cost not to exceed \$83,000. Funding for the completion of these tasks will originate from the EPA Wetlands GIS Database Grant.*
3. *The staff recommends the Commission authorize and enter into a Contractual Agreement with the Morro Bay National Estuary Program for the completion of Tasks outlined in attachment 1 as a component of the CCC Wetlands GIS Database at a cost not to exceed \$103,101. Funding for the completion of these tasks will originate from the EPA Wetlands GIS Database Grant.*

BACKGROUND AND STAFF ANALYSIS

The Central Coast Comprehensive Wetland GIS Database will provide the California Coastal Commission, the California Conservation Corps, the Morro Bay National Estuary Program and the public with a web-based geographic information system (GIS) wetland inventory for the Central Coast of California. The wetlands inventory will contain a set of GIS data layers that link wetland delineation, research and monitoring information as specified in the Comprehensive Conservation and Management Plan for the Morro Bay National Estuary Program. Initial tasks will be to chronicle wetland data for the Morro Bay watershed. We anticipate expanding the Wetland Inventory throughout the central coast of California in later phases as part of the Monterey Bay National Marine Sanctuary Integrated Monitoring Network.

The California Conservation Corps has been chosen as a partner for their expertise in the collection of detailed habitat and plant distribution data. The Morro Bay National Estuary Program has extensive knowledge of the Morro Bay watershed and have already developed some important habitat assessment products. All data collected will be made available to agencies involved with watershed planning and restoration activities and to the public and local governments on the World Wide Web.

1. **Partnership to Create a Central Coast Comprehensive Wetlands GIS Database**
2. **Joint program by the California Coastal Commission and the California Conservation Corps and the Morro Bay National Estuary Program.**

Ross Clark
California Coastal Commission

Bill Winters
California Conservation Corps

Mike Multari
Morro Bay National Estuary Program

3. **Project Location: Central California from Point Conception to the Marin Headlands with emphasis on San Luis Obispo County and the Morro Bay watershed.**

Scope of Work

TASK 1: Locate, collect, and integrate available wetland and riparian related GIS data sets to form the core of the wetlands analytical tool.

TASK 1A: Survey the following agencies to identify available electronic data sets, including GIS layers, satellite data and scanned aerial photos, to create a comprehensive set of GIS base-layers of wetland resources.

TASK 1B: Support Commission / Morro Bay NEP collaboration on wetland protection efforts. Expand the coordination of Commission and MBNEP regarding regional planning issues to include products developed from the Commission's Regional Cumulative Assessment Project (ReCAP) and MBNEP Management Plan.

TASK 1C: Visit other agency staff to discern how the wetland database product could be tailored to be useful for their programs (Link to watershed field work, State Water Resources Control Board 319 Grants, Salmon Recovery Project).

TASK 1D: Work with analysts and planners to identify criteria for the interface between end-users and the data sets and analytical tools.

TASK 1E: Collect and integrate a subset of the available data sets to become the core of the Central Coast Comprehensive Wetlands GIS Database.

TASK 2: "Rubbersheet" newly acquired 2001 aerial imagery to existing orthorectified base map data, and use this data for wetland and riparian extent mapping within San Luis Obispo County and the Morro Bay Watershed.

TASK 2A: Digitize newly acquired 2001 aerial imagery of San Luis Obispo County and the Morro Bay Watershed.

TASK 2B: Using existing GIS software, rubbersheet digital aerial imagery to preexisting digital orthophoto base map source.

TASK 2C: Overlay existing wetland and riparian data with rubbersheeted imagery in an effort to identify errors, omissions, and gaps in wetland and riparian area delineation.

TASK 2D Using the Coastal Commission definition of wetlands and riparian resource areas, fill in gaps and correct errors in wetland and riparian delineation using rubbersheeted imagery as data source.

TASK 3: Digitize new base layers using geographic information accumulated in Task 1 and through implementation of NEP Management Plan.

Create 8-10 new GIS wetland layers from previous habitat assessments and additional field surveys. Priority new layers are outlined in the Morro Bay Conservation Plan and will be integrated with the 3-5 base layers to be made available to interested users.

TASK 4: Ground truth all base layers for accuracy regarding geographic extent and biological classification.

The Corps Watershed Crew will conduct field surveys to ground-truth digital images and GIS habitat information layers. An experienced biologist or wetland scientist will accompany the crew during certain field surveys where special expertise above that provided in the training course is required.

TASK 5: Link present wetland resource database information to GIS map layers.

Research and compile existing habitat data and reference catalog information for inclusion in the wetland database. Link regional database information to GIS Data layers and create a uniform database field structure to provide quick citation of all reports and references associated with a geographically specific wetland resources

TASK 6: Develop a metadata catalog for all wetland data layers.

TASK 6A: Create a Quality Assurance Program Plan that outlines the appropriate procedures necessary to properly document the quality of GIS data layers and for field survey procedures and habitat classification protocols developed by this project.

TASK 6B: Catalog the datasets to be used in the Comprehensive Wetlands GIS Database according to Federal Geographic Data Committee-consistent metadata standards established by the Joint Data Committee under the Association of Monterey Bay Area Government's (AMBAG's) Memorandum of Agreement For Data Transfer.

TASK 7: Train Corps Watershed Crew and collect needed biological habitat information.

TASK 7A: The Corps Watershed Crew will conduct field surveys to collect necessary GIS habitat information layers. Data will be collected as outlined in their training manual or as specially directed by the MBNEP.

TASK 7B: The Corps Watershed Crew will conduct field surveys to collect necessary GIS habitat information layers. Data will be collected as outlined in their training manual or as specially directed by the MBNEP.

TASK 8: Inter-agency workshop.

Organize and host a one-day inter-agency workshop on using the Comprehensive wetland GIS database to manage wetland protection and restoration. Survey participants on GIS product regarding ease of use and usefulness for their programs.

TASK 9: Develop user interface for internet access to Wetland Inventory.

Develop the user-interface that will allow analysts, planners, educators and members of the public to access, query, browse, and perform basic GIS functions on Wetland Inventory integrated datasets via Internet connection.

TASK 10: Contract Management

Complete all quarterly reports, contract invoices, draft-final and final report and submit a set of final products.

Partner Responsibilities

Task	Coastal Commission		Morro Bay NEP		Conservation Corps.		
	PY	Hours	PY	Hours	PY	Hours	
1 A	Locate, collect, and integrate available wetland and riparian related GIS data sets to form the core of the wetlands analytical tool.	0.1	180	0.15	270	0.01	18
B		0.1	180	0.1	180	na	na
C		0.05	90	na	na	na	na
D		0.05	90	0.1	180	na	na
E		0.2	360	0.1	180	0.01	18
2 A	"Rubbersheet" newly acquired 2001 aerial imagery within San Luis Obispo County and the Morro Bay Watershed.	0.1	180	na	na	na	na
B		0.5	900	na	na	na	na
C		0.3	540	0.15	270	na	na
D		0.1	180	0.05	90	na	na
3	Digitize new base layers	0.1	180	0.4	720	na	na
4	Ground truth all base layers for accuracy	na	na	0.25	450	0.47	852
5	Link present wetland resource database information to GIS map layers	0.25	450	0.4	720	na	na
6 A	Provide Quality Assurance for all wetland data layers	0.15	270	0.15	270	0.1	180
B		0.05	90	0.05	90	na	na
7 A	Staff, equip and train a field crew	na	na	na	na	0.47	852
B		na	na	na	na	0.78	1404
8	Inter-agency workshop	0.1	180	0.1	180	0.03	54
9	Develop user interface for internet access to Wetland Inventory	0.1	180	0.15	270	na	na
10	Contract Management	0.25	450	0.25	450	0.01	18
Total		2.5	4500	2.4	4320	1.88	3396

