

## NEW INTERACTIVE MAPPING TOOL AVAILABLE FOR MORRO BAY WATERSHED

Over two years ago the MBNEP teamed up with the CA Coastal Commission and the CA Conservation Corps to develop a wetland planning tool for the Morro Bay watershed. The result of this multi-year effort is an interactive mapping website that employs GIS technology.

The project is divided into two components, the larger Central Coast Framework and the Morro Bay Watershed pilot. The Central Coast Framework establishes goals for the larger project area, the coastal watersheds from the Marin Headlands south to Point Conception, and contains small and medium-scale data and imagery that cover the entire project area.

The Morro Bay Watershed pilot project provides wetland distribution and related geospatial data for the project area including land use, hydrology, water quality, vegetation, transportation, high resolution aerial photos, geology and historical ecology topics. New datasets for the Morro Bay watershed

developed through this project include a historical aerial photo time-series, public-private parcel data, rectified 1897 USGS quadrangles and 1883-4 US Coast Survey topographical maps, high resolution riparian and wetland delineation, and wetland related permits. The team also completed a literature search and compiled wetland complex profiles populated with information found in the available literature.

Free training sessions were held in October to introduce the website to stakeholders and help new GIS users become familiar with this exciting technology.

Applications of this tool include information distribution, project planning, permit analysis, trend analyses, and identification of wetlands for conservation projects. The project was funded by a US EPA Wetland Program Development grant.

You can access the interactive mapping website at [www.centralcoastwetlands.org/ccwgis/index.html](http://www.centralcoastwetlands.org/ccwgis/index.html). Contact the MBNEP office at 772-3834 for more information.



601 Embarcadero, Suite 11  
Morro Bay, CA 93442  
805.772.3834  
[www.mbnep.org](http://www.mbnep.org)



## CONSERVATION PLAN AMENDMENT APPROVED AS NEW ACTION PLAN ITEM

The MBNEP has adopted an amendment to its Comprehensive Conservation and Management Plan for Morro Bay (CCMP). Action Plan HAB-11 addresses the potential for estuarine water withdrawals to impact the biological productivity of the estuary.

The amendment formally recognizes the potential impacts of water withdrawals and provides a framework for MBNEP staff and partners to address these impacts.

Specific actions called for in the amendment include working with stakeholders and regulatory agencies to ensure that any water withdrawals don't harm the estuary, encouraging monitoring and research to develop a 'baseline' estuary condition and better understand the impacts of water withdrawals, participating in any mitigation or enhancement activities associated with water withdrawals to ensure their effectiveness, and continuing our efforts to reduce other

threats to subtidal estuary habitats by addressing sedimentation and pollution problems.

The amendment was developed by the MBNEP Science and Technical Working Group and staff, with review by the MBNEP Implementation Committee and Executive Committee. A public meeting was held October 28th to present the draft amendment to the community, as well as collect comments. Staff and the IC worked to incorporate these comments into the final document, which was approved by the Executive Committee on November 10th.

Copies of this document will be mailed to stakeholders. The amendment is also available for download from our website at [www.mbnep.org/plan.htm](http://www.mbnep.org/plan.htm). The MBNEP staff would like to thank everyone who provided input into this process. We look forward to its implementation.

## WALTERS CREEK GRAZING MANAGEMENT & RIPARIAN RESTORATION PROJECT

Over the last two years, a 3,000 foot stretch of Walters Creek has received a \$200,000 makeover. The project consists of controlling cattle access to the riparian area, construction of an off-stream watering system, repairing erosion sources within the riparian area, and extensive revegetation along the entire channel. The long-term benefits from this project will be reduced sedimentation in the estuary and healthy creek habitat for a variety of flora and fauna, including steelhead trout.

Walters Creek, a tributary to Chorro Creek, contains two large landowners, Cal Poly and the CA Dept. of Fish & Game (DFG). The project is located on Cal Poly grazing land, which was acquired in the mid-1980's from the U. S. Military. Pre-project conditions consisted of open rangeland, where the stream channel was the water source for the cattle, and the riparian area contained many erosion sources and was devoid of riparian vegetation.

Specific improvements that resulted from this project include (1) 6,000 feet of electric fencing to control cattle access, (2) development of off-stream water sources



*Pre-project conditions on a section of Walters Creek, shown here, include a denuded riparian corridor and active creek bank erosion. Cattle also had full access to the riparian area, that has now been fenced and revegetated.*

including a well, water tanks, troughs, and piping, (3) installation of 5 rock grade structures to control erosion of the channel bed, (4) installation of approximately 5,000 willow cuttings to protect stream banks and reestablish part of the riparian community and (5) installation of approximately 2,500 native plants.

This impressive project was made possible by a cooperative effort between Cal Poly, DFG, CA Conservation Corps, NOAA and the MBNEP. The Walters Creek project is the first step in a multi-step plan to improve stream function, reduce sediment sources, and improve riparian habitat conditions.

## MBNEP PARTNER HIGHLIGHT: MORRO COAST AUDUBON SOCIETY

The Morro Coast Audubon Society (MCAS) is part of one of the largest, most effective environmental organizations in the country. The National Audubon Society has over 550,000 members, 500 chapters in the U.S. and Latin America and manages over 160,000 acres of critical habitat. The local chapter encompasses most of San Luis Obispo County, has over 800 members and manages approximately 30 acres of open space.

The MCAS mission is to promote appreciation, conservation and restoration of ecosystems, focusing on the biological diversity of birds and other wildlife, as well as the health of their habitats. Working throughout the County, MCAS has played a key role in the preservation of the Carrizo Plain as a National Monument and has been a partner at the Hi Mountain fire lookout, a Condor research station.

Because Morro Bay and its watershed are magnets for over 200 species of birds, it shouldn't be surprising that MCAS has also spearheaded many projects that have led to preservation and enhancement of habitat in and around the estuary. Examples include:

**Western Snowy Plover Program:** MCAS has been a proud partner in this program assuring our beaches remain safe breeding habitat for the Western Snowy Plover. This program's particular strength is raising awareness among local school children and mobilizing teams of dedicated volunteers.

## NEW 3-D PHOTO EXHIBIT IN ESTUARY NATURE CENTER DRAWS A CROWD

The Estuary Nature Center now includes an exciting new exhibit called "Discover the Estuary in 3-D." The attention grabbing stereophotos of the estuary and watershed are the work of Abe Perlstein, a local bay-side resident.

The exhibit was developed to add an element of fun and surprise to the free Estuary Nature Center on the Embarcadero. Everyone who peers into the 3-D image viewers has been delighted. Current images on display include one of a kind aerial views of Morro Rock and the estuary, a close-up encounter with Alkali Heath (a plant that grows in the saltmarsh) and a few of our resident White Pelicans. The photos will be rotated every two months to keep the exhibit fresh.

The MBNEP would like to thank the artist, Abe Perlstein, who has donated his time and expertise, along with the Forbes family for their generous contribution that funded this special project.

**Peregrine Falcons, Morro Rock:** In 1967, early in this bird's comeback, MCAS instituted nest-monitoring operations on Morro Rock. By the 1970s, these efforts turned into a full-blown, 24-hour surveillance that continued into the early 1990s. Much of the present-day success of the Morro Rock Peregrines can be directly attributed to these efforts.

**Sweet Springs Preserve:** In 1989 MCAS was deeded the 26-acre Sweet Springs Preserve, an area slated for hotel and marina development. Volunteer restoration efforts have been ongoing and the preserve provides habitat for a variety of shorebirds and waterfowl.

**Morro Bay Heron Rookery:** MCAS was a key proponent in convincing State Parks to include the Heron Rookery in their system, arguing its critical importance.

**Christmas Bird Count:** Each year MCAS leads local participation in Audubon's national Christmas Bird Count. The event is open to naturalists of all ages and experience levels and is an excellent way to learn more about the species of birds found in our county.

To learn more about Morro Bay, a Globally Important Bird Area, consider becoming a member of MCAS or attend one of their events. Information regarding field trips and monthly lectures can be found on their website at [www.morrocoastaudubon.org](http://www.morrocoastaudubon.org).



A dedication event for the new "Discover the Estuary in 3-D" exhibit was held November 17th. Along side dozens of attendees, Abe Perlstein, project photographer, shows off the new exhibit to project funders Bert and Candi Forbes.

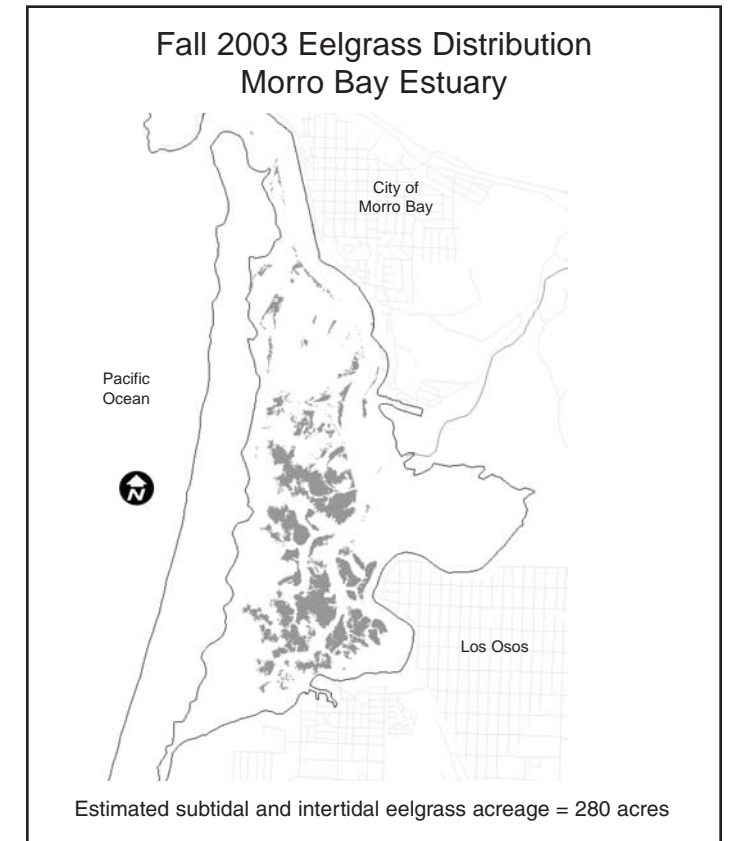
## MORRO BAY ESTUARY FALL 2003 INTERTIDAL EELGRASS DISTRIBUTION

For those of you who get out paddling on Morro Bay, you know that eelgrass is a common site. Eelgrass, which is neither a grass nor a seaweed, is actually a flowering plant that can live for many years. Healthy eelgrass meadows provide habitat for a variety of creatures including sea anemones, marine worms, snails, limpets, crabs, fish and birds. Brant geese use eelgrass as their primary food source and fly thousands of miles to graze on it in protected bays and estuaries. Eelgrass also contributes to the productivity of coastal waters by stabilizing bottom sediments, filtering nutrients and particles out of the water, and providing sheltered nursery areas for young fish and shellfish. Dead eelgrass decomposes into detrital "chowder" that is an essential part of the marine food web.

The Morro Bay eelgrass meadows are recognized as the largest and least impacted in Southern California. To aid efforts to restore and protect this unique habitat, the MBNEP creates annual eelgrass maps to define the extent and acreage of intertidal eelgrass in the bay.

The map was created by conducting an aerial flight of the estuary at a negative tide during the fall, the time of peak eelgrass production. Field teams went out to established transects and used a global positioning system to document eelgrass presence and densities. Using the imagery and the field data, a map was developed showing the locations of intertidal eelgrass during the fall of 2003.

The 2003 map identifies approximately 280 acres of eelgrass. It is estimated that our coastlines have lost



over 50% of their eelgrass in the past century. Nutrient loading and direct damage from dredging, boating, fishing and land use activities all can damage eelgrass. The MBNEP will continue to monitor this valuable habitat, and efforts are already underway to develop the 2004 map. For more information on the monitoring effort, contact MBNEP staff at 772-3834 or [annk@mbnep.org](mailto:annk@mbnep.org).

## RESTORATION AND MANAGEMENT PLAN DEVELOPMENT UNDERWAY FOR THE 580-ACRE CHORRO CREEK ECOLOGICAL RESERVE

Over a year ago the MBNEP worked with dozens of partners to purchase Hollister Ranch and create the 580-acre Chorro Creek Ecological Reserve, now under the ownership of CA Dept. of Fish & Game (DFG). The site includes approximately 1.5 miles of the main stem of Chorro Creek, portions of San Luisito Creek, intermittent drainages and springs, floodplain, oak woodland, and grasslands.

Developing a Restoration and Management Plan for the property is the next step for this project. The goals of the Restoration Plan are to enhance the riparian corridors and associated wetlands on the property; enhance habitat for the Southern steelhead trout, the California red-legged frog, and other important wildlife

and plant species; and to restore the historic floodplain. Removal of the long-standing levees will allow storm waters to overflow the creek banks and slow enough to drop their loads of sediment that would otherwise end up in the Morro Bay Estuary.

DFG and the MBNEP have a cooperative agreement for interim management and restoration planning on the property. A request for qualifications (RFQ) was recently released and a search for qualified consultants to assist with restoration plan development is underway. Implementation of a long-term plan is expected to begin in 2006.