

Collaboration for Water Quality Protection

Integrating Watershed Management Plans with TMDL Implementation



Working to Protect and Restore the Morro Bay Estuary and Watershed for People and Wildlife



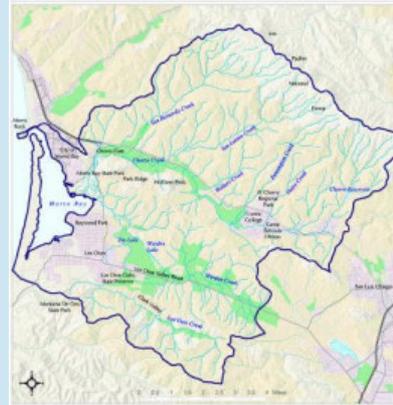
Overview

- Morro Bay Watershed
- National Estuary Program & NEP Management Plans
- History of Collaboration in Morro Bay
- Some Examples of Synergy
- Benefits & Challenges



The Morro Bay Watershed

- 48,000 acre watershed draining to Morro Bay
- Two towns: ~ 16,000 each
- Ranch land, row crops, Correction Facility, National Guard Base, U.S. Forest Service, University Property, State Park



The National Estuary Program



CWA Section 320

- assess trends in water quality, natural resources, and uses of the estuary;
- collect data to identify the causes of environmental problems;
- develop comprehensive management plan with corrective actions to restore water quality & wildlife populations in the estuary and to protect designated uses of estuary;
- develop plan for coordinated implementation by state, federal, and local agencies; &
- monitor effectiveness of actions taken

28 National Estuary Programs



Morro Bay National Estuary Program

Fiscal Oversight

Non-profit Board of Directors



Policy Oversight

Executive Committee

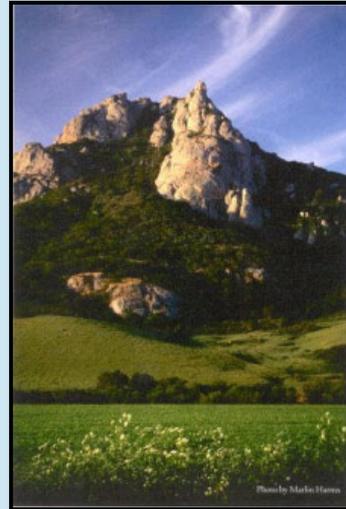
- ❖ State, federal, and local government
- ❖ Agriculture, Fishing, Science, Tourism & Recreation Interests

Implementation Committee

Various Technical Working Groups

Comprehensive Conservation and Management Plan

- Plan in Place since 2000
- Includes –
 - priority issues
 - Specific objectives and actions
 - Implementing partners
 - Finance plan
 - Monitoring program plan



Priority Issues

- Bacteria
- Nutrients
- Toxics
- Sediment
- Freshwater flow
- Steelhead loss
- Habitat loss

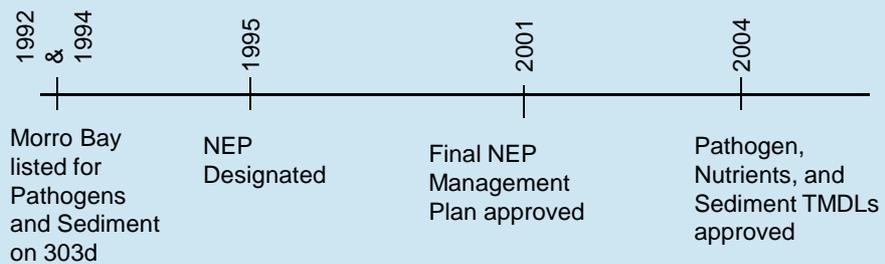


Action Plans

- Cross-cutting: Develop and Implement TMDLs for siltation, pathogens, nutrients....
- Cross-cutting: Volunteer Monitoring
- Education and Outreach actions
- Specific actions for each priority issue



History of Collaboration



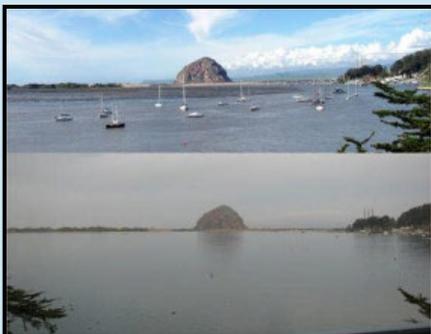
- ✓ Water Board staff involved in drafting NEP Management Plan
- ✓ Water Board staff refer to NEP Management Plan when drafting TMDL Implementation Plans

Pathogens

Activities	TMDL	CCMP
Grazing Management	Y	Y
Boat Management and Pump-outs	Y	Y
Removal of Illegal Moorings	Y	Y
Remove Derelict Boats	Y	Y
Educate public on proper boat waste management	Y	Y
Pet Waste Management	Y	Y
Septic System Maintenance and Live Aboard Management	Y	

Examples – Derelict Boat Removal

- 35 vessels removed
- 17 Demolished
- Illegal Moorings Removed

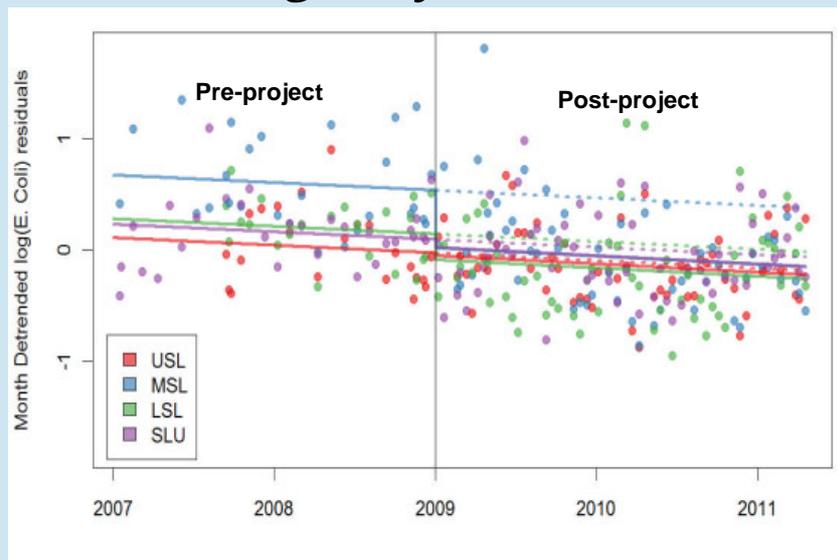


Examples – San Luisito Creek Fencing

- 84% Exceedance of Standard
- Feet of creek protected: 10,609 ft
- Off creek water troughs, cisterns, with solar pumps



Monitoring Project Effectiveness



Sediment

CCMP specifically called out in TMDL Plan

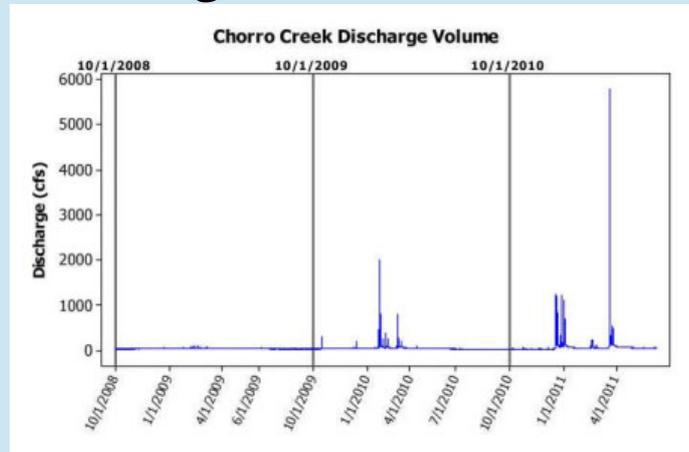
Activities	TMDL	CCMP
Land Acquisition		Y
Fire Management Plan	Y	Y
Incentives to Landowners to Implement BMPs	Y	Y
Road Management Measures	Y	Y
Creek Restoration and Re-establishment of Floodplains	Y	Y
Mine Remediation	Y	Y

Examples – Sediment Control

- Land Acquisition to protect and restore riparian areas
- Stream Restoration and Bank Stabilization
- Riparian Fencing
- Ranch Road Repairs, including stream crossing improvements
- Funding to RCD to plan & install Ag BMPs



Monitoring – Sediment Loading



CHORRO CREEK DISCHARGE VOLUME, SEDIMENT LOAD
 †Partial water year, Oct.1, 2010 - Jun.8, 2011 with sediment load outlier excluded.

Water Year	2008-2009	2009-2010	2010-2011†
Chorro Creek Annual Discharge (acre-feet/year)	20,220	29,796	38,357
Chorro Creek Sediment Load, Short Tons	146	8,604	136,043

Benefits of Linkage Between NEP and TMDL Implementation

The NEP...

- ✓ Implements comprehensive approach
- ✓ Leverages multiple resources
- ✓ Facilitates involvement from diverse interests
- ✓ Brings continuity of effort to improve WQ
- ✓ Has monitoring capacity to show improvement at project and watershed level
- ✓ Conducts broad education and outreach

Challenges

- Adaptive management
 - Changes to CCMP relatively easy
 - Changes to TMDL Plan burdensome
 - Plans Diverge overtime
- NEP not regulatory authority & CCMP not a regulatory document



Thank you

www.mbnep.org