Protecting Your Marine Sanctuary by Protecting Your Watersheds

Sanctuary Advisory Council Presentation
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Bridget Hoover, Director
Water Quality Protection Program
Monterey Bay National Marine Sanctuary
Presentation Overview

• About the Water Quality Protection Program
  – Water quality efforts in San Mateo
    • Urban
    • Regional Coordination and Monitoring
    • Agriculture
  – Other WQPP activities
    • Desalination
    • Integrated Regional Water Management programs
San Lorenzo River
Implementing Solutions to Urban Runoff

Regional Monitoring, Data Access, and Interagency Coordination (SAM)

Marinas and Boating

Agriculture and Rural Lands

Beach Closures and Microbial Contamination
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Beach Closures and Microbial Contamination
First Flush

• Began in 2000
• First major rain of the season
• ~50 storm drain outfalls in 13 cities
• Samples are analyzed in a lab for:
  – Zinc, copper, lead
  – Hardness
  – Nitrate, urea, orthophosphate
  – Total suspended solids
  – E. coli, enterococcus
  – Field measurements
Copper: San Mateo- Monterey Co. 2000-2011

[Graph showing copper levels over the years for various locations, with data points for each year from 2000 to 2011.]
NO3-N: San Mateo- Monterey Co. 2000-2011
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WQ Viewer

Welcome to the Conservation Action Tracker for California’s Central Coast. The purpose of this website is to assist project managers, conservation organizations, and the general public find and share information about conservation projects on the Central Coast. Click on the buttons below or in the above navigation bar to learn more.

**Project Locations**
Find out what is happening in your watershed

**Conservation Reports**
Find archived reports and generate new reports

**Project Managers**
Upload new projects and edit existing projects

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Conservation Action Tracker

measuring progress towards conservation goals on California's Central Coast

Regional Program Activity

- Education and Outreach
- Habitat Restoration
- SWMP
- Livestock and Lands
- Long-Term Development
- Mobile Irrigation Lab
- Permit Coordination & Analysis
- Road Bank
- Acreage
- Stormwater
- Water Conservation
- Water Quality
- Water Supply
- Watershed Coordination/Planning

Chart showing activity levels and costs for different programs.
Snapshot Day

- Since 2000
- First Saturday in May
- Monitor over 100 streams
- Parameters
  - $\text{H}_2\text{O}$ temperature
  - transparency/turbidity
  - conductivity
  - pH
  - dissolved oxygen
  - nitrate, orthophosphate
  - Eschericia coli
Regional Monitoring

- Reference site monitoring (3 events)
- Core Monitoring - 18” outfalls (one event)
- Receiving water monitoring (6 events)

Fitzgerald Prop 84 TAC

- San Mateo County PW
- Phase 1 installed variety of BMPs at Moss Beach and Montara (Fall/Winter 2011)
- Phase 2 began this summer
- Swales, filter flumes, drain inserts w/filter cartridges
- 10 monitoring sites
- Saw moderate to highly effective removal of contaminants
WQPP Action Plans

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Agriculture and Rural Lands

Beach Closures and Microbial Contamination
Agriculture & Rural Lands Action Plan

- Agricultural Diversity
- Education and Outreach
- Management and Implementation
- Monitoring & Research
A History of Conservation through Collaboration

Watersheds flowing into the Monterey Bay National Marine Sanctuary

AWQA
Agriculture Water Quality Alliance
Management Practices to Improve Water Quality

Keep it on the field: Irrigation efficiency, Erosion control

Minimize usage: Integrated Pest Management

Vegetative Treatments: Holds soil, removes nutrients
AWQA Strategy (2013)

- Goal 1: Trusted convener for problem solving
- Goal 2: Able to quantify effectiveness of improved water quality
- Goal 3: Improve communications and public relations (External, w/ partners)
- Goal 4: Sufficient technical capacity to meet grower needs
- Goal 5: Establish Sustainable Funding for AWQA
- Goal 6: Partner actions are informed by AWQA strategic planning
Irrigation Nutrient Mgmt Program

- $1.25M awarded March 1st
  - Irrigation/nutrient assessments and implementation of practices
- Western SARE grant for $39,000 awarded for enhancing training for technical service providers
  - Includes 8 RCDs, Coalition and UCCE
Desalination

- Tracking 4 projects within Monterey Bay
- Coordinating regulatory review
- May be federal NEPA lead
Other WQPP Activities

• Integrated Regional Water Management programs
  – Planning and Implementation grants
• Regional Water Quality Monitoring
• Beach WQ research and monitoring
• Volunteer programs