# Protecting Your Marine Sanctuary by Protecting Your Watersheds

**Sanctuary Advisory Council Presentation** 

August 21, 2013



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**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







### **WQPP** Action Plans





**Implementing Solutions to Urban Runoff** 

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





**Marinas and Boating** 

**Agriculture and Rural Lands** 

Marine Schetuaries . America's Dream Treasures





**Beach Closures and Microbial Contamination** 



### WQPP Action Plans





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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



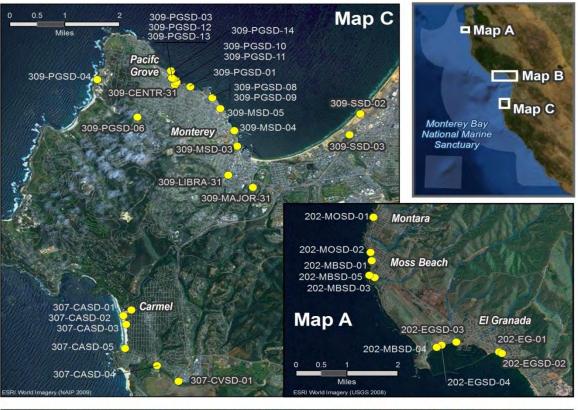


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#### First Flush Sites 2011





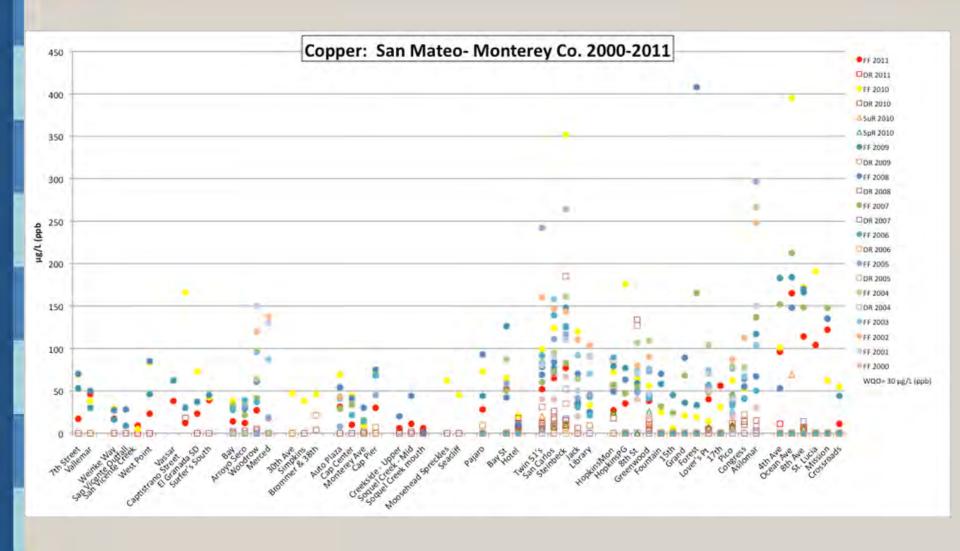






### FF Copper Results

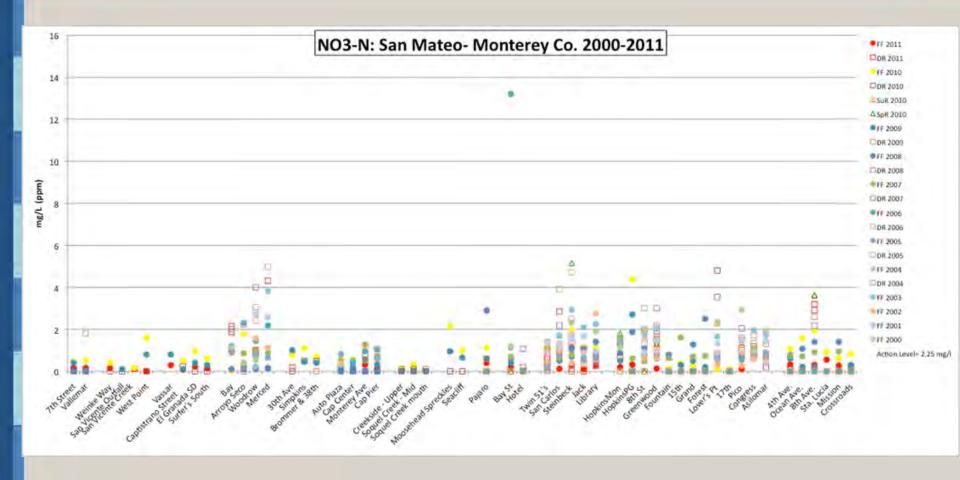






#### FF Nitrate Results







### WQPP Action Plans





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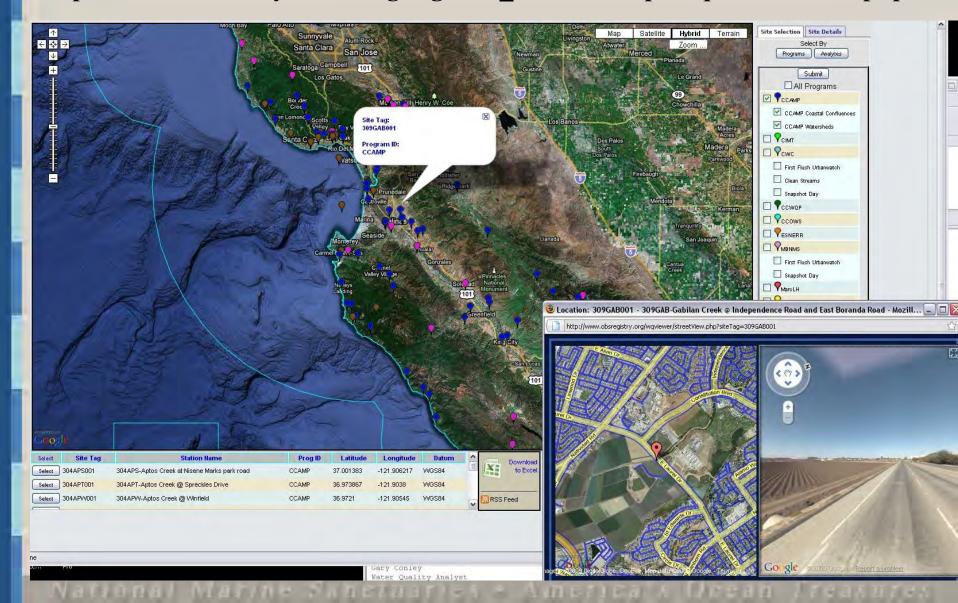
**Beach Closures and Microbial Contamination** 



# WQ Viewer



#### http://www.sanctuarysimon.org/regional\_sections/maps/wqviewer/index.php





#### Central Coast Action Tracker





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.







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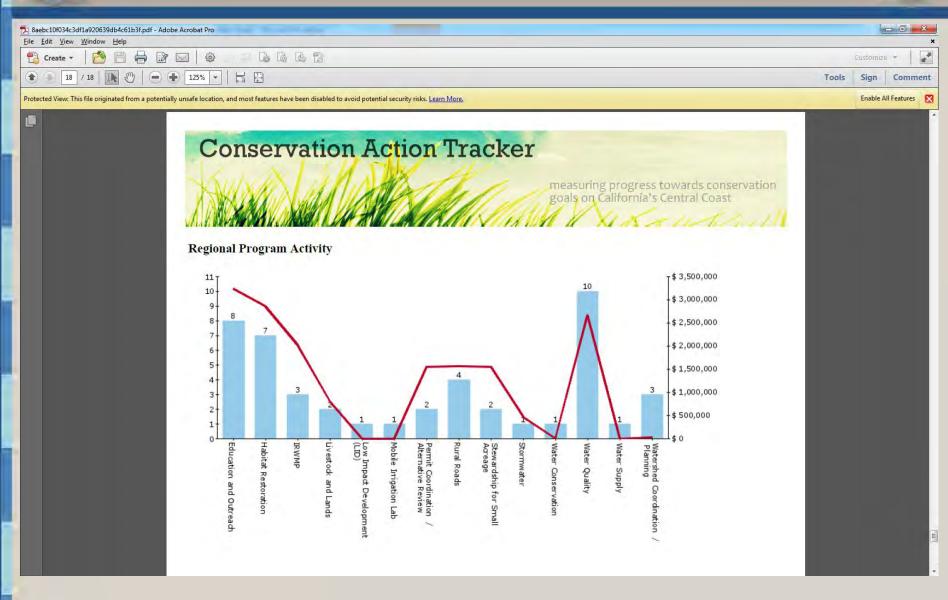




www.ccactiontracker.org







National Marine Sinctuaries - America's Dream Treasure:



# Snapshot Day



- Since 2000
- First Saturday in May
- Monitor over 100 streams
- Parameters
  - H<sub>2</sub>0 temperature
  - transparency/turbidity
  - conductivity
  - pH
  - dissolved oxygen
  - nitrate, orthophosphate
  - Eschericia coli





### Areas of Special Biological Significance



# Regional Monitoring (ASBS)

- 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

America s Ocean Treasures



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# Magriculture & Rural Lands Action Plan



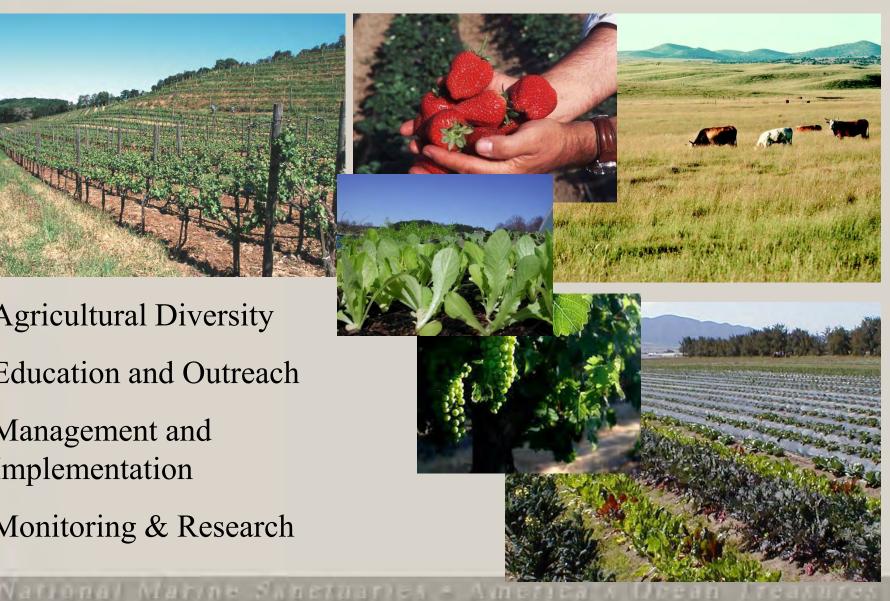


Agricultural Diversity

**Education and Outreach** 

Management and Implementation

Monitoring & Research





### A History of Conservation through

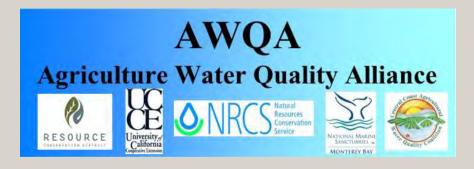


#### Collaboration

Watersheds flowing into the Monterey Bay National Marine Sanctuary









### 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



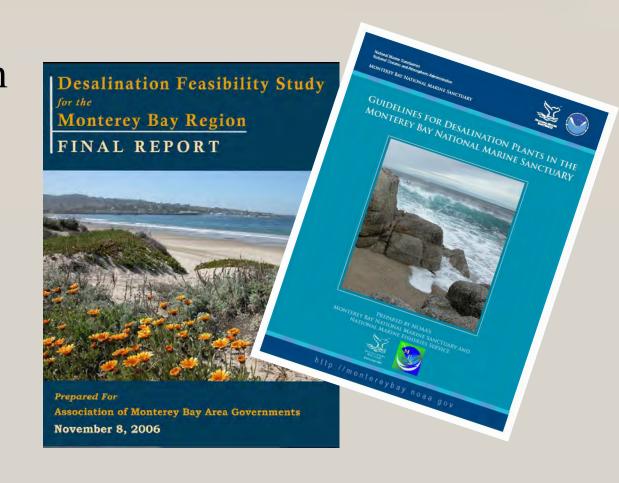
- \$1.25M awarded March 1st
  - Irrigation/nutrient assessments and implementation of practices
- Western SARE grant for \$39,000 awarded for enhancing training for technical service providers
  - Includes 8 RCDs, Coalition and UCCE



#### 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



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