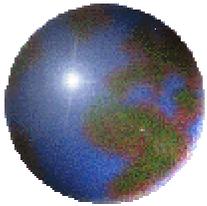




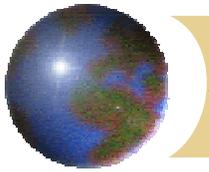
*Ventura Countywide
Stormwater Quality
Management Program*



Presentation to the RWQCB-LA

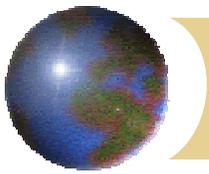
**Ventura Countywide
Program Municipal
Stormwater Program
and Draft RWQCB
Permit**





Presentation Overview

- Program Highlights and Successes
- Characteristics of Ventura County Are Unique
- Ventura County is a Leader in Watershed Based Planning
- Concerns with Current Permit Structure
 - Use of Municipal Action Levels
 - Water Quality Protection and NPDES permitting
- Conclusion



Ventura Stormwater Permit

1992 - Implementation Agreement Signed Between:

- ❖ **Watershed Protection District**
- ❖ **County of Ventura**
- ❖ **10 Cities in the County of Ventura**

Camarillo

Fillmore

Port Hueneme

Moorpark

Ojai

Oxnard

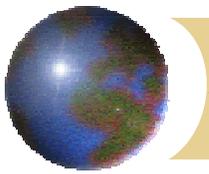
San Buenaventura

Santa Paula

Simi Valley

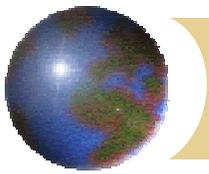
Thousand Oaks

Principal Co-Permittee: Ventura County Watershed Protection District



Ventura Program History

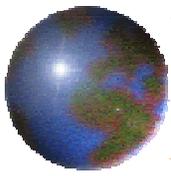
- Mature and Comprehensive Stormwater Management Program;
- Modified Over-Time to Address Local Water Quality Issues;
- Permits Issued in 1994 and 2000 Reflect Character of the Program.



Ventura Program Recognition

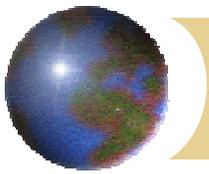
- ❖ 2003 National U.S. EPA Award for Excellence;
- ❖ Reflects Program's Commitment to Improve and Protect Water Quality in Ventura County.





Public Outreach





Public Outreach Highlights

Participation in Coastal Cleanup Day

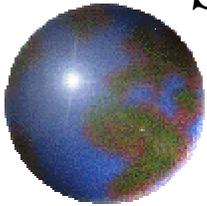
- ✦ 2,000 volunteers participate
- ✦ 47 miles of inland watersheds and coastal shorelines
- ✦ More volunteers & less trash each year

Successful Media outreach campaign

- ✦ Three 60 second TV Commercials
- ✦ 8 million impressions
- ✦ Public Service Announcement
- ✦ Advertising Artwork and Posters
- ✦ Continue to develop new Commercials and Print Material

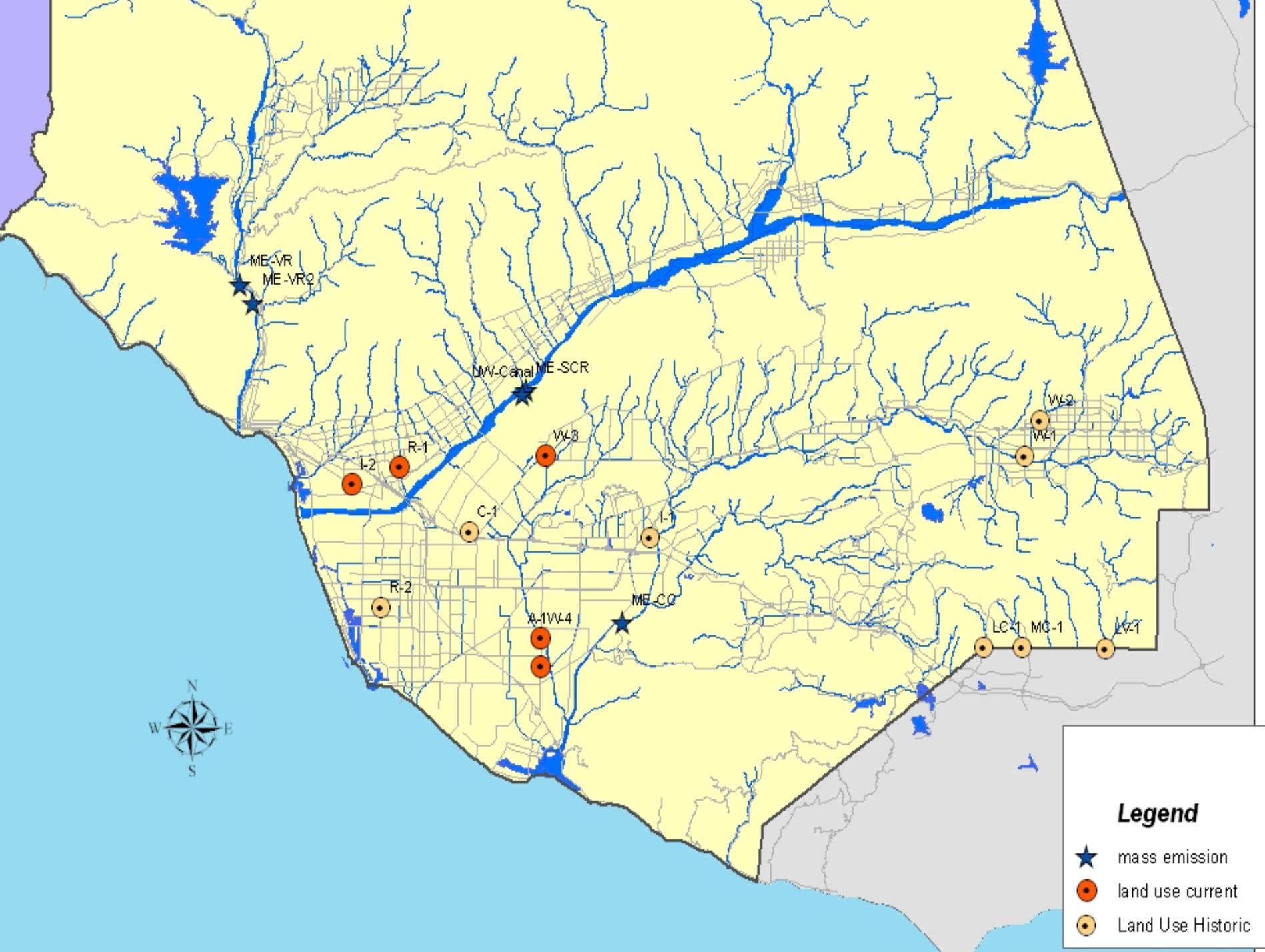


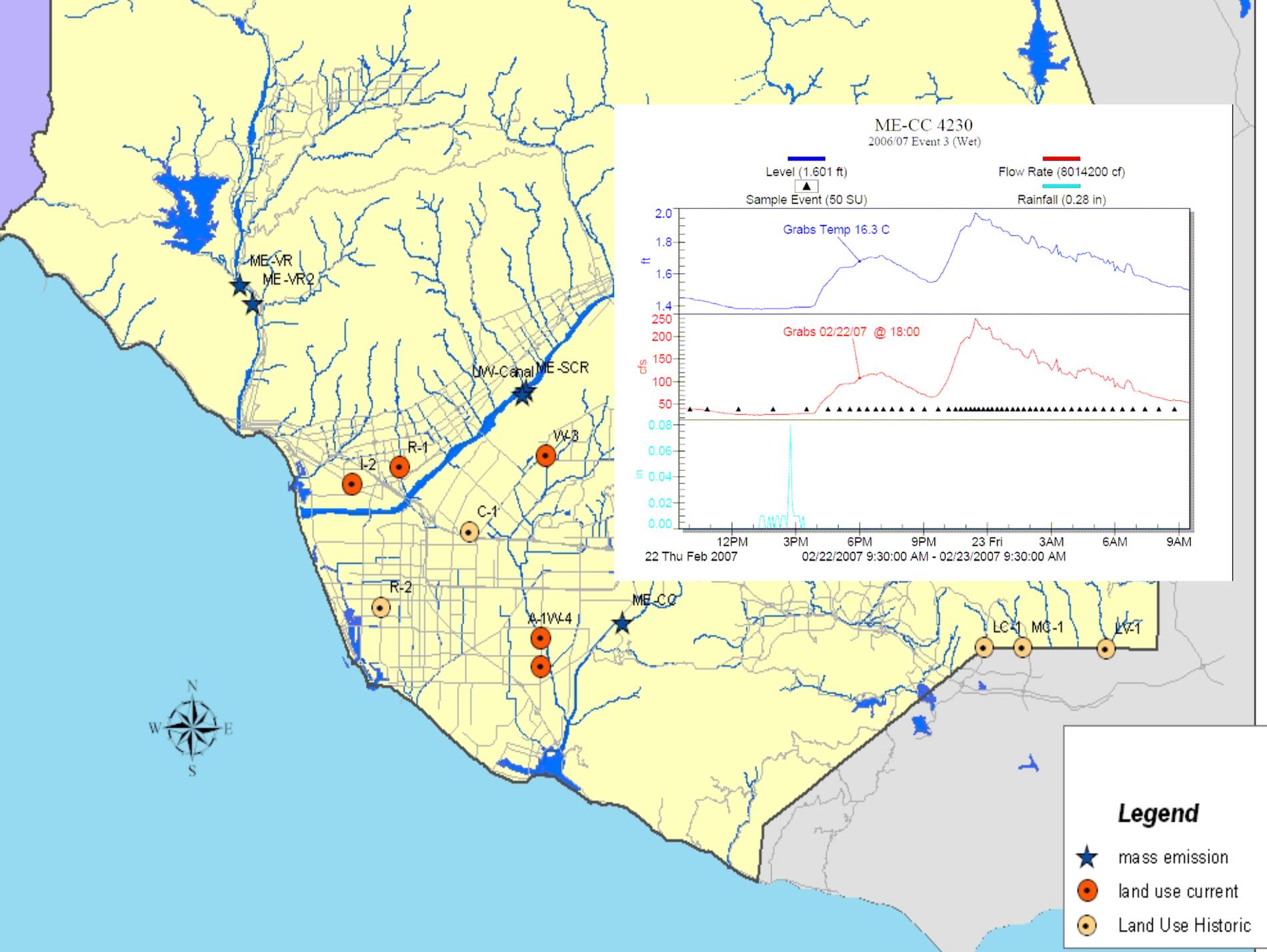
Stormwater Water Quality Monitoring



- Conduct 6 sampling events (4 wet / 2 dry weather)
- Macroinvertebrate Bioassessment Monitoring
- Completion of Trend Analysis for Pollutants of Concern
- Database



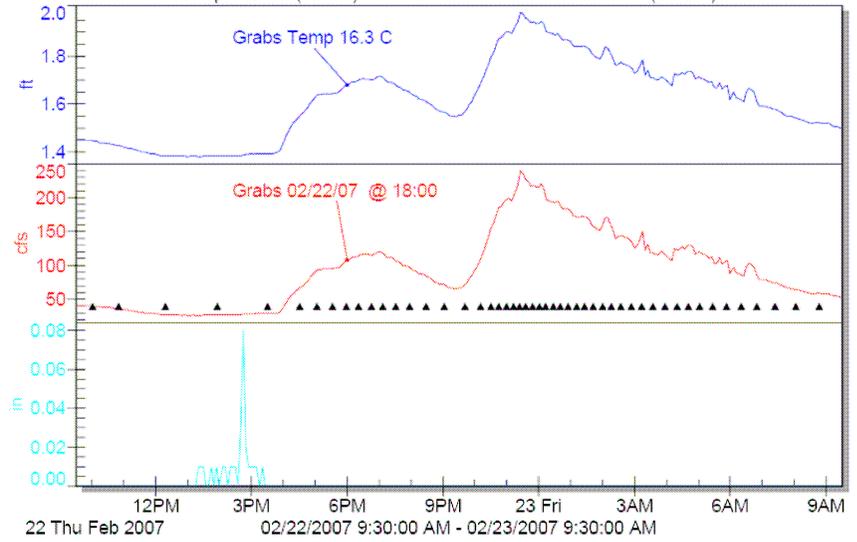




ME-CC 4230
2006/07 Event 3 (Wet)

Level (1.601 ft) █ Flow Rate (8014200 cf)

Sample Event (50 SU) █ Rainfall (0.28 in)



Legend

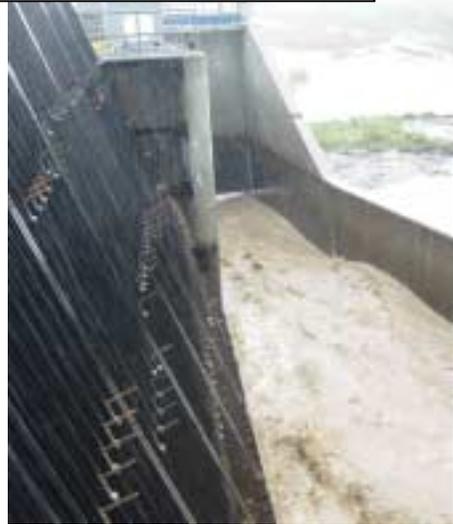
- ★ mass emission
- land use current
- Land Use Historic



Calleguas Creek (ME-CC)

Mass Emission Sites

Ventura River (ME-VR)



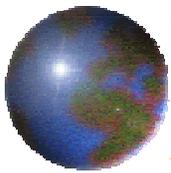
Santa Clara River (ME-SCR)



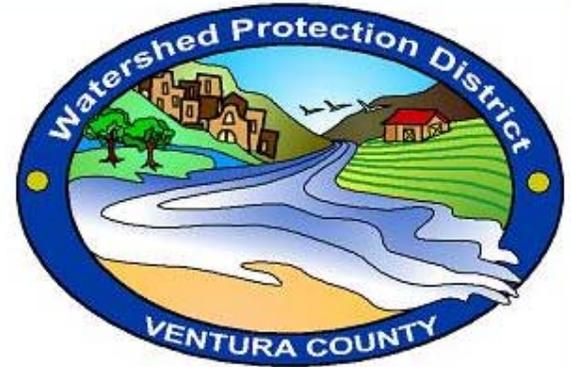
Sample Collection







Ventura Countywide Stormwater Quality Management Program



Enter New Data

Select to enter new data into the database

Confirm New Data

Select to view, edit, and confirm newly entered data

Evaluate and Qualify New Data

Select to evaluate and qualify newly entered data

Query Data

Select to query the database

Edit Historic Data

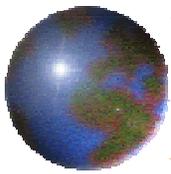
Select to edit historic data

Exit Application

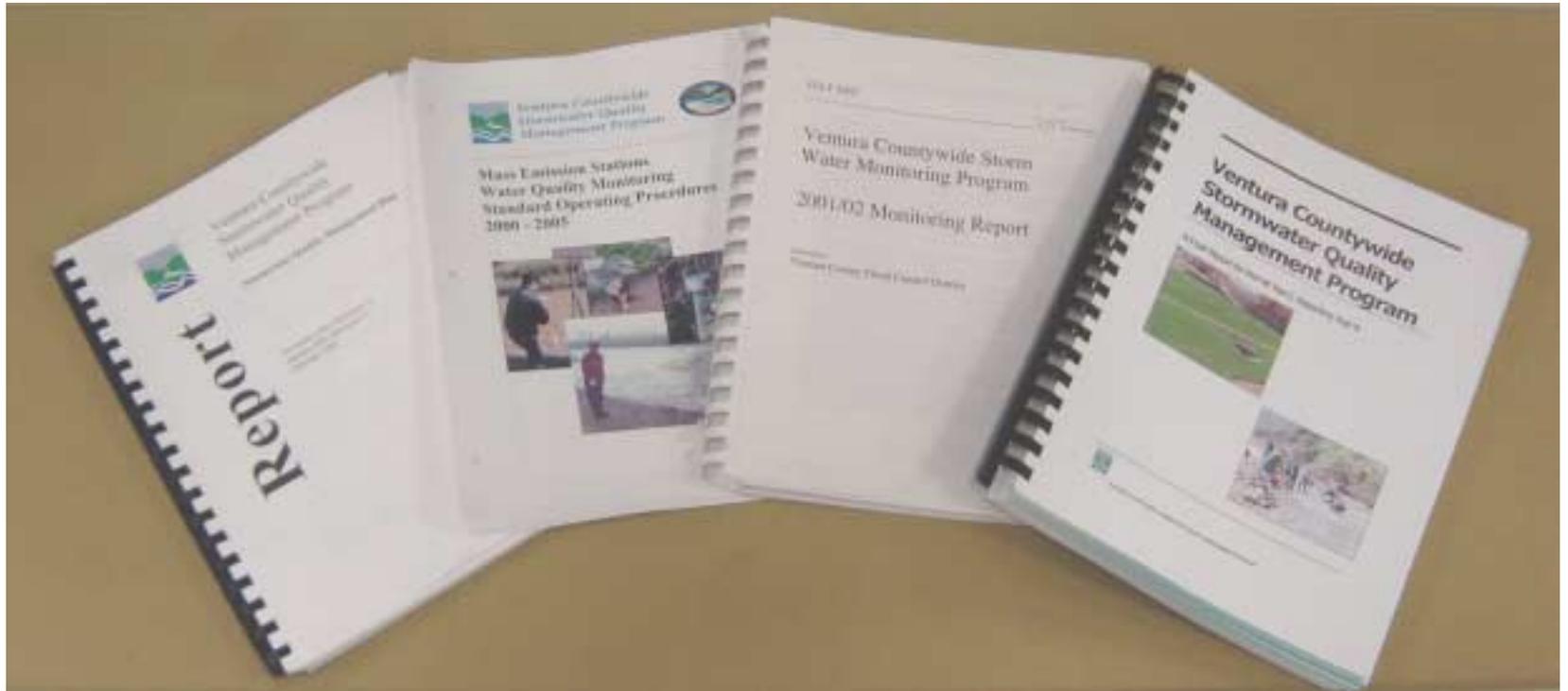
Select to exit the database application

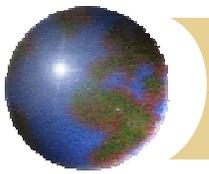
Compact and Repair Database

Run database's compact and repair utility



Program Evaluation





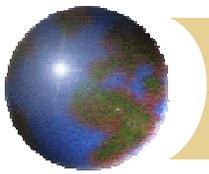
Characteristics of Ventura County Are Unique

- ✦ Significant Open Space;
- ✦ Rural Character;
- ✦ Valuable Agricultural Land;
- ✦ Total Population of the entire County is 817,346 persons (2006)

Ventura County by Land Use

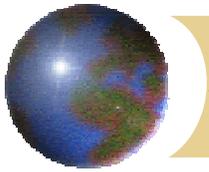


- Open Space (Including Federal Land) - 79%
- Urban Area (subject to NPDES SW permit) - 12%
- Agriculture - 8%
- Rural - .008%
- Military - .006%
- Harbor(s) - .0003%



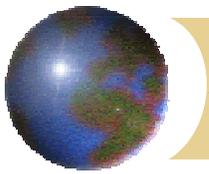
Characteristics of Ventura County Are Unique

- SOAR - From 1995-2002, the residents of Ventura County adopted "Save Open-Space and Agricultural Resources",
- Greenbelt agreements;
- Thus, the urban areas of Ventura County are unlikely to expand significantly.



Ventura County is a Leader in Watershed Based Planning

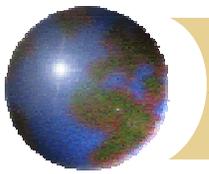
- Watershed Based Planning Since the 1970s;
- Numerous Water Quality, Wetland Restoration & Reclamation Projects;
- Numerous Individuals and Agencies Involved.



Ventura County is a Leader in Watershed Based Planning

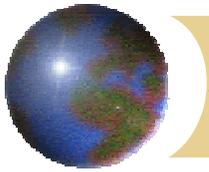
- Watersheds Coalition of Ventura County (WCVC) formed in 2006;
- WCVC adoption IRWMP;
- WCVC received \$25 million grant;
- Other Watershed Groups:
 - Calleguas Creek Watershed Management Plan Steering Committee;
 - Santa Clara River Watershed Committee and;
 - Ventura River Watershed Council.





Appreciation of Board Staff's Intent

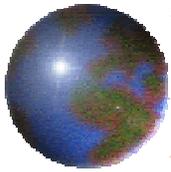
- Importance of Water Resource Protection
- Enhancement of Current Program
- Performance-based Measurement Criteria
- LID Preferred Method (Smart Growth)
- Cost-effective Methods to Improve Water Quality



Primary Concern w/ Draft Permit

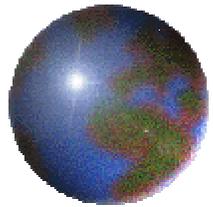
Compliance Structure

- ✚ Use of Municipal Action Levels (MALs)
- ✚ Consistency with TMDL Program

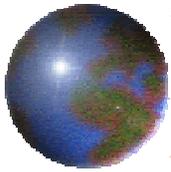


Use of Municipal Action Levels

- Policy Concerns
- Technical Concerns

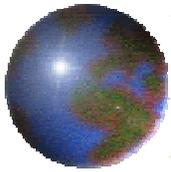


Policy Concerns w/ MALs



Municipal Stormwater Compliance Standard

- ❖ Municipal stormwater program is required to reduce pollutants in its discharges to the maximum extent practicable (MEP).
 - ❖ *Clean Water Act, Section 402(p)*
 - ❖ *Draft Permit Provision A.2*

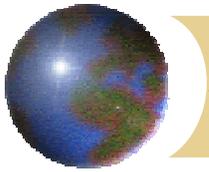


Definition of MEP

Broadly defined to be a highly flexible concept that balances numerous factors Including

- Technical feasibility*
- Cost*
- Public Acceptance*
- Regulatory Compliance*
- Effectiveness*

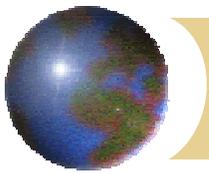
(BIA of San Diego County v. SWRCB (2004) 124 Cal.App.4th 866, 889.)



Draft Permit Uses MALs to define MEP

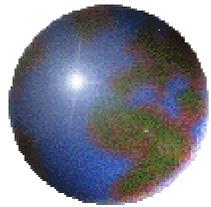
- MALs expressed as Water Concentration Levels
- MALs used to define MEP (Finding F.11 and Permit Part II)
- Stormwater must meet MALs at “end-of-pipe”
- Two exceedances presumed to be a violation of the MEP standard

MALs = Numeric Effluent Limits Used to Define MEP

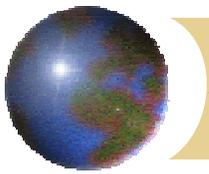


Numeric Limits Contrary to EPA Policy

“In regulating stormwater permits the EPA has repeatedly expressed a preference for doing so by way of BMPs, rather than by way of imposing technology based or water quality based numerical limitations.” (Divers’ v. SWRCB (2006) 145 Cal.App.4th 246, 256.)



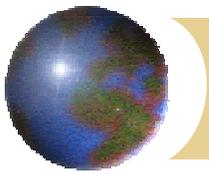
Technical Concerns w/ MALs



MALs Contrary to Blue Ribbon Panel

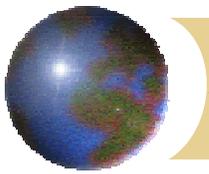
“It is not feasible at this time to set enforceable numeric effluent criteria for municipal BMPs and in particular urban discharges.....

For catchments not treated by a structural or treatment BMP, setting a numeric effluent limit is basically not possible.”



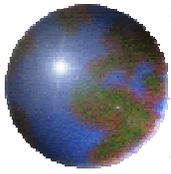
Blue Ribbon Panel Use of MALs v. Draft Permit Use of MALs

<i>Panel Use of MALs</i>	<i>Draft Permit Use of MALs</i>
Use to Identify need for follow-up action	Defines MEP
Not to be used as enforceable limit	Enforceable numeric limit
Develop using local data, if available	Developed using national database

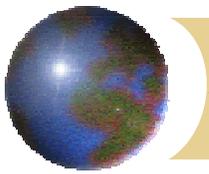


Cadmium – MAL vs. CTR Criteria vs. Runoff Concentrations

<i>Cadmium</i>	<i>Value, ug/L (dissolved)</i>
Acute Water Quality Objective (avg. hardness)	7.1
Acute Water Quality Objective (95% hardness)	3.2
Ventura County rivers and creeks (54 of 55 samples)	<2.5
Ventura Urban Runoff (average)	0.8
MAL	0.55

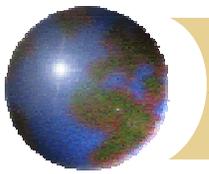


TMDL Program Consistency



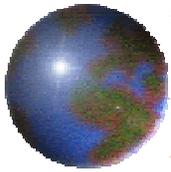
TMDL Program

- Clean Water Act program for ensuring compliance with water quality standards
- Based on sound science and stakeholder involvement
- Considers all point and nonpoint sources of impairment
- Establishes waste load allocations and load allocations
- Includes implementation program
- NPDES permits are required to be consistent with approved TMDLs



Draft Permit Inconsistent w/ TMDLs

- ❖ MALs misdirect focus and resources of the Countywide Program
- ❖ MALs are inconsistent with TMDL approved Targets and Waste Load Allocations
- ❖ Prescriptive Permit is inconsistent with TMDL implementation program for municipal stormwater

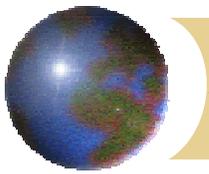


MALs vs. TMDL targets

Constituent	Municipal Action Levels ¹	TMDL Target Limits²
Copper (dissolved, ppb)	12.8	26.3-41.6
Zinc (dissolved, ppb)	104	90-324

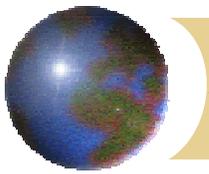
1 Attachment C to Draft Ventura Stormwater Order.

2 Attachment A to Resolution No. R4-2006-012.



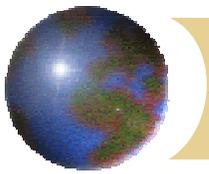
Draft Permit vs. TMDL Implementation

Prescriptive Draft Permit	TMDLs
Retrofit <u>all</u> catch basins w/ excluders	No adopted trash TMDLs Small % of water bodies listed
Prescriptive BMP measures for street sweeping, inspections, outreach, etc.	Requires achievement of targets; not method of compliance
Time Schedule – 6 months for majority of BMPs	Time schedule – 2 to 20 years for achievement of targets



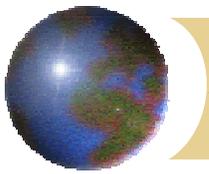
Need to Focus on Local Issues of Concern

Constituent	Draft Permit MALs	Ventura County Developed POCs	TMDL
TSS	X		
Siltation			X
COD	X		
Metals (Cu, Pb, Zn)	X	X	X
Metals (Cd, Cr)	X		
Bacteria		X	X
Mercury			X
Selenium			X
Organics (PCBs)			X
Pesticides (OC)		X	X
Pesticides (OP)		X	X
Nutrients		X	X
Toxicity			X
Salts			X



Cost Implications of Prescriptive Permit and MALs

Program	Annual Cost \$/Household			
	Current Effort	Draft Order Baseline	Baseline + Trash Excluders	Baseline + Excluders + MAL Compliance
Statewide Study				
Range	\$18-46	--	--	--
Mean	\$29	--	--	--
Ventura County				
Range	\$18-44	--	--	--
Mean	\$35	\$60	\$87	\$213



Other Issues of Concern

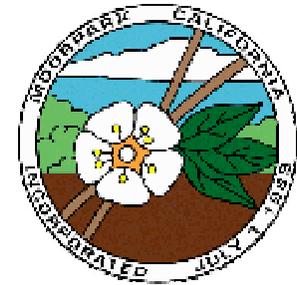
- ✚ Expands Geographic Area of Coverage
- ✚ Ecological Restoration Planning and Implementation
- ✚ Land Development Requirements
- ✚ Time Frames
- ✚ Monitoring Program

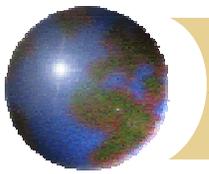


Ventura Countywide Stormwater Quality Management Program



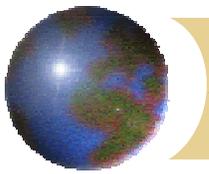
Any Questions?





Summary of Primary Concerns

- Municipal Action Levels as MEP
 - Inconsistent with EPA policy and Court decisions
- Municipal Actions Levels as Compliance End Points
 - Contrary to Blue Ribbon Panel recommendations
 - Disconnect between local water quality issues



Summary of Primary Concerns

- ❖ Inconsistent with TMDL Program
 - ❖ Focus of the program
 - ❖ MALs vs. TMDL Target
 - ❖ Prescriptive implementation requirements vs. flexible strategies