



California Central Coast Regional Water Quality Control Board

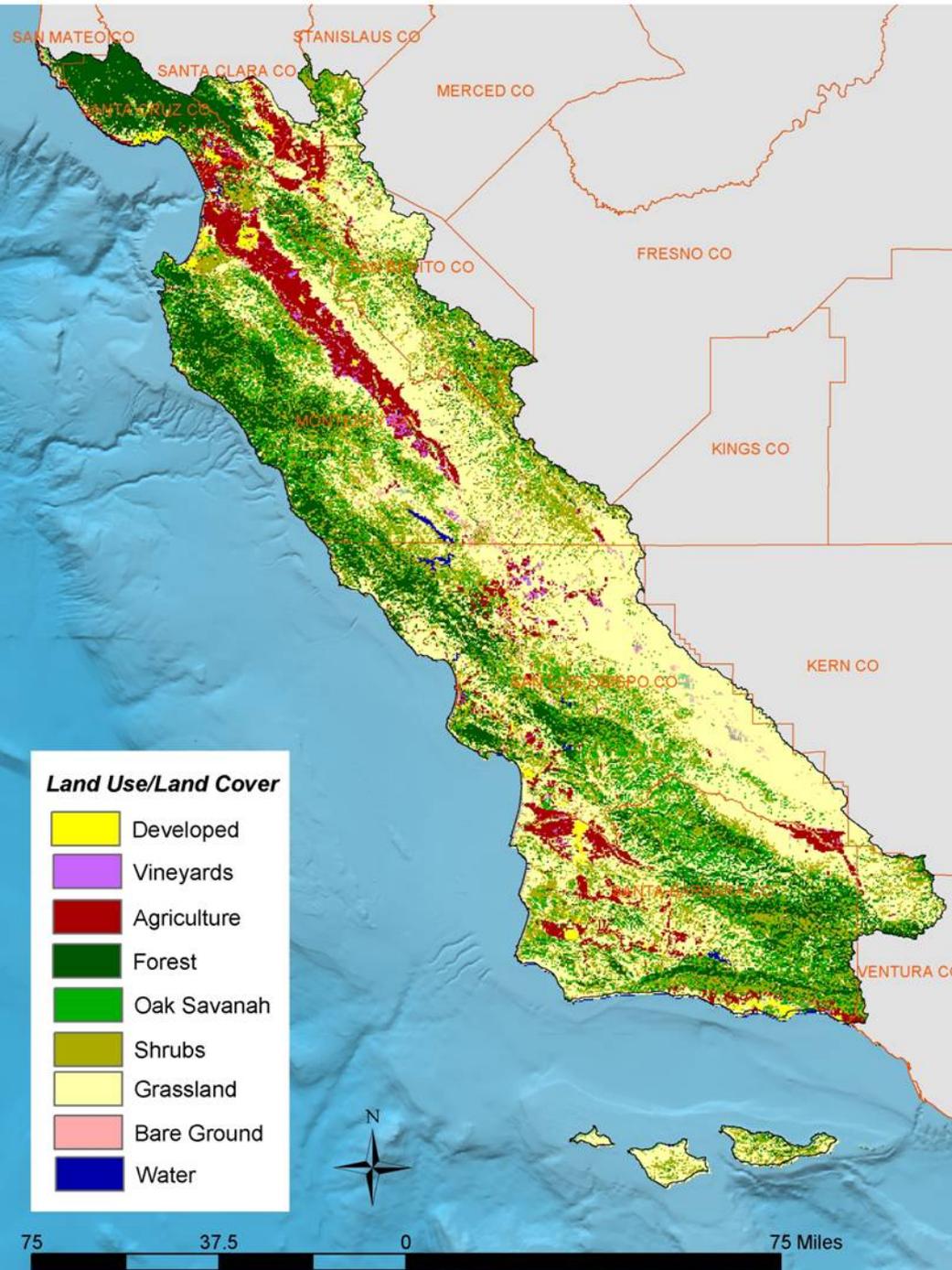
Healthy Watersheds: Tracking and Implementing Long-term Goals for Watershed Protection

Roger W. Briggs
Executive Officer



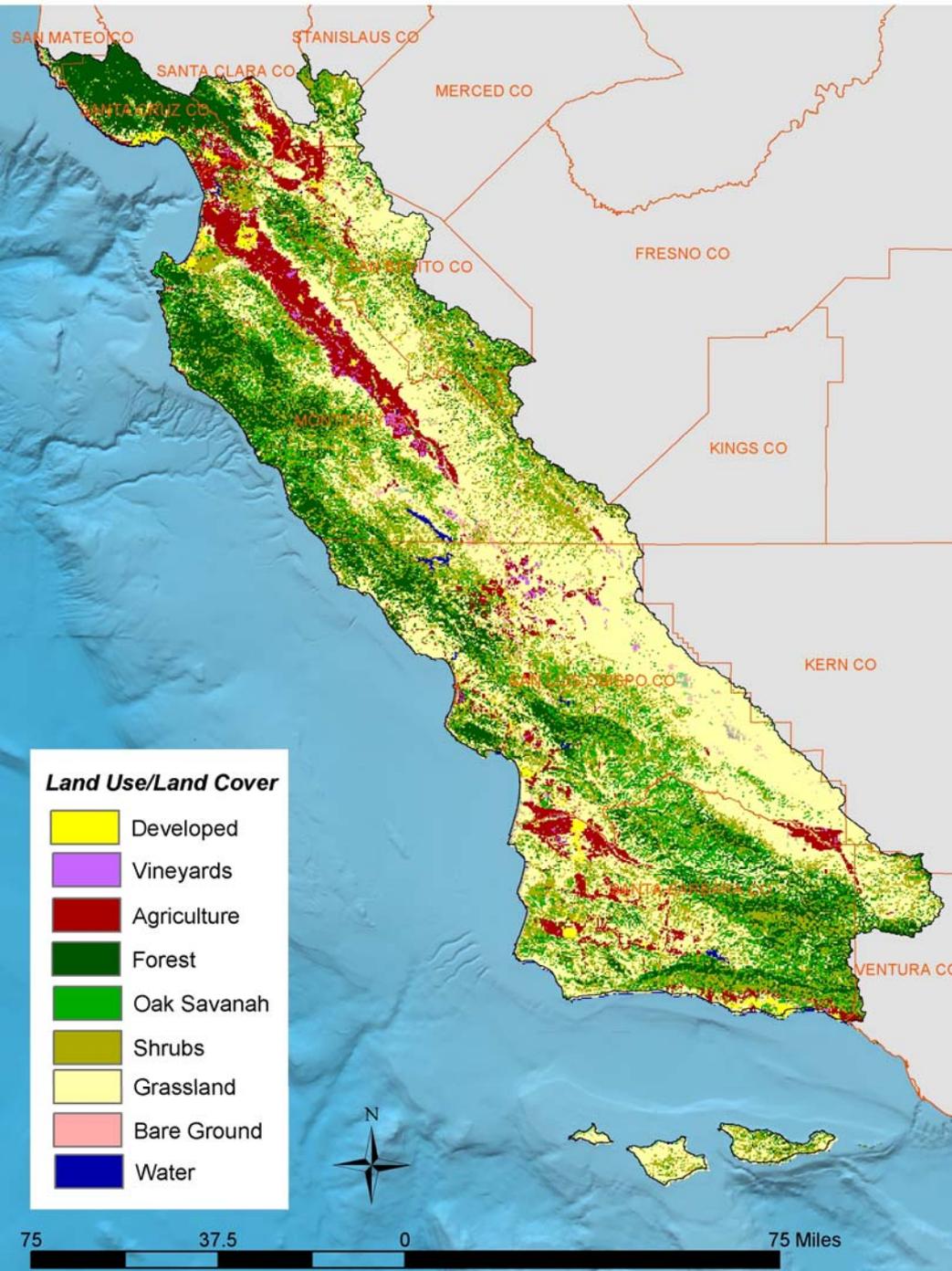
Diverse

- Ag
- Urban
- Beaches
- Oil
- Power Plants
- Timber
- Fisheries
- Otters



Core Duties

- Permits
- Enforcement
- TMDLs
- Cleanups



What will the Central Coast look like in twenty years? What physical condition will we leave behind?

Mission: Protect beneficial uses for future generations...

Are we doing this?

Vision without action is a daydream;
action without vision is a nightmare

Japanese Proverb

Healthy Watersheds



Healthy Aquatic Habitat

Sustainable Land Management

Clean Groundwater



Healthy Watersheds

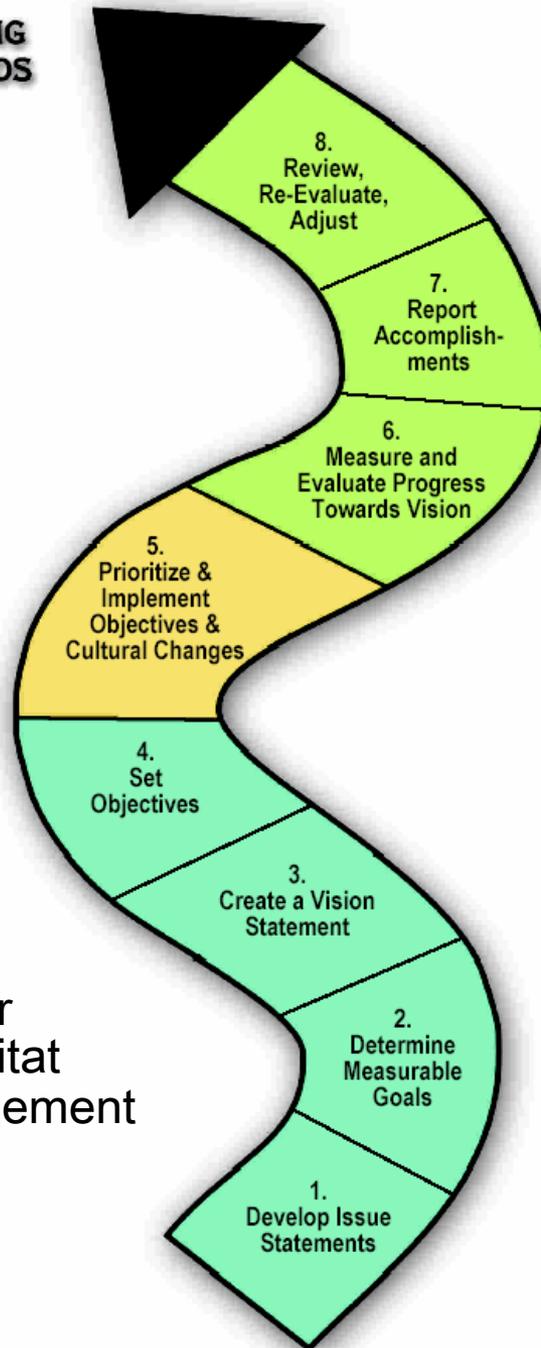
Goal 1: By 2025 80% of Aquatic Habitat is healthy, and the remaining 20% exhibits positive trends in key parameters

Goal 2: By 2025 80% of lands within any watershed will be managed to maintain proper watershed functions, and the remaining 20% will exhibit positive trends in key watershed parameters

Goal 3: By 2025 80% of groundwater will be clean, and the remaining 20% will exhibit positive trends in key parameters



**HEALTHY
FUNCTIONING
WATERSHEDS**



Groundwater
Aquatic Habitat
Land Management

To accomplish these goals, we're progressing toward becoming a Performance Based Organization

- Grants Alignment**
- SEP Alignment**

- Enforcement Alignment**

- Success Stories on the Web**

- Staff Meetings: Case Studies – tangible results**

- Paperless Office**

In Progress

- Values

-Higher order training and education

-Leadership Coaching from Gene Crumley of UC Davis

-Mgmt, Supervisors, Line Staff Expectations

-Job descriptions, Interviewing Process, IDPs, and Performance Appraisals

In Progress

-Program Priorities (alignment)

**-Teams: Aquatic Habitat, Groundwater,
Sustainable Land Mgmt, Assessment
Data Management and GIS; Team
Charters with short and long term
actions**

**-Coordination w/ Key Organizations and Non
Profits to build CCAMP and an LID Center**

-LID Outreach and Grants, and Req'ts

Ag and Stormwater Program Leverage

- Evaluating Grazing Regs

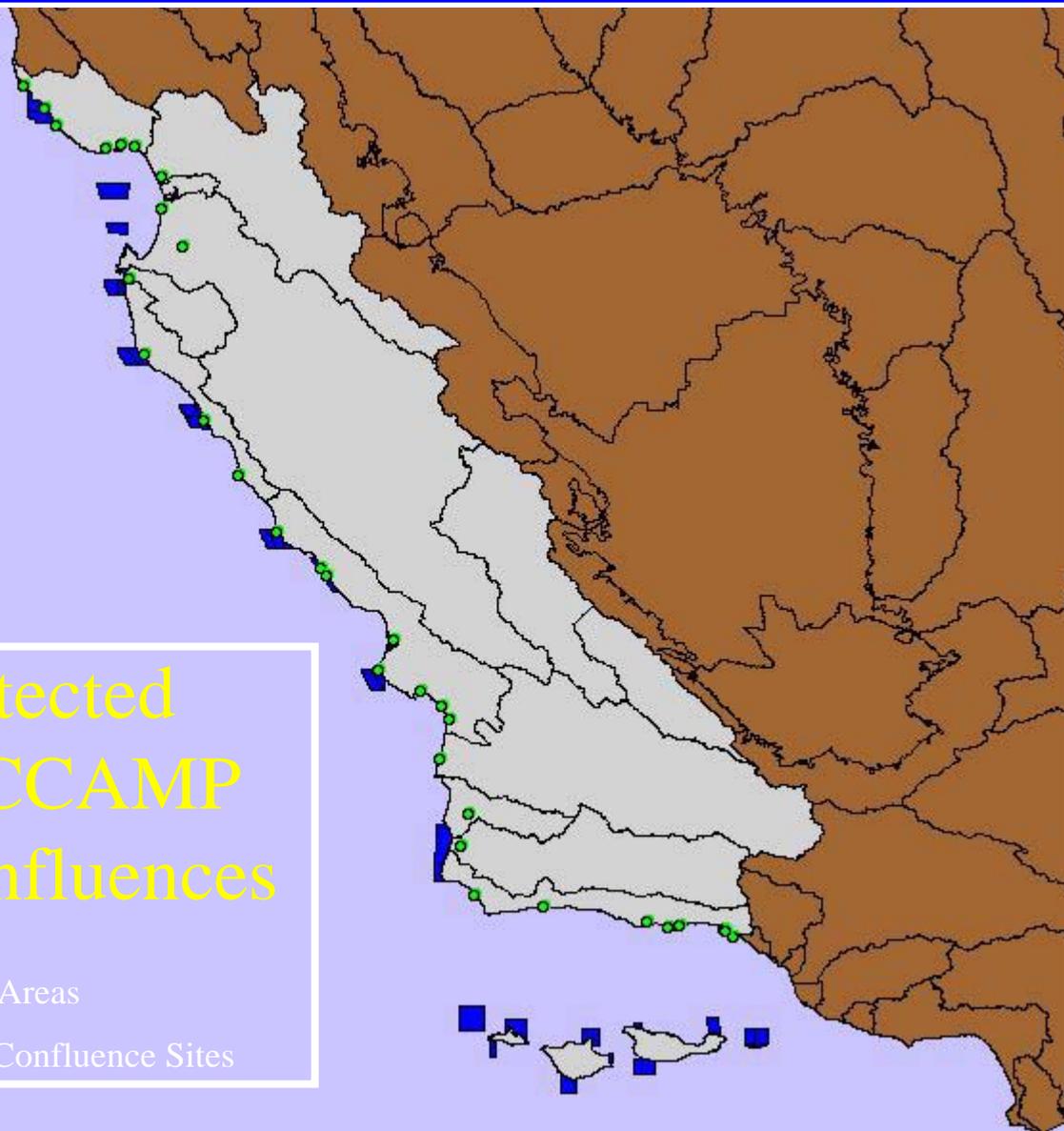
Marine Protected Areas and CCAMP Coastal Confluences



Marine Protected Areas



CCAMP Coastal Confluence Sites



Protecting Coastal Waters:

An example of an enforcement
action that has benefited our new
Channel Islands Marine Protected
Area

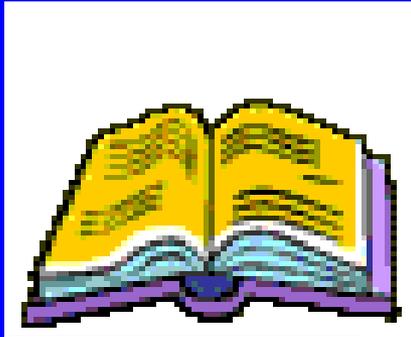
Figure 8: Old Ranch Canyon, Reach ID #9 (1995 and 2004)



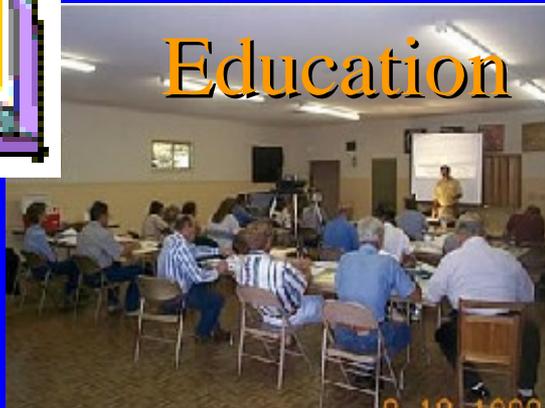
Figure 3: Lobo Canyon, ID Reach #2 (1995 and 2004)



Central Coast Irrigated Agriculture Requirements



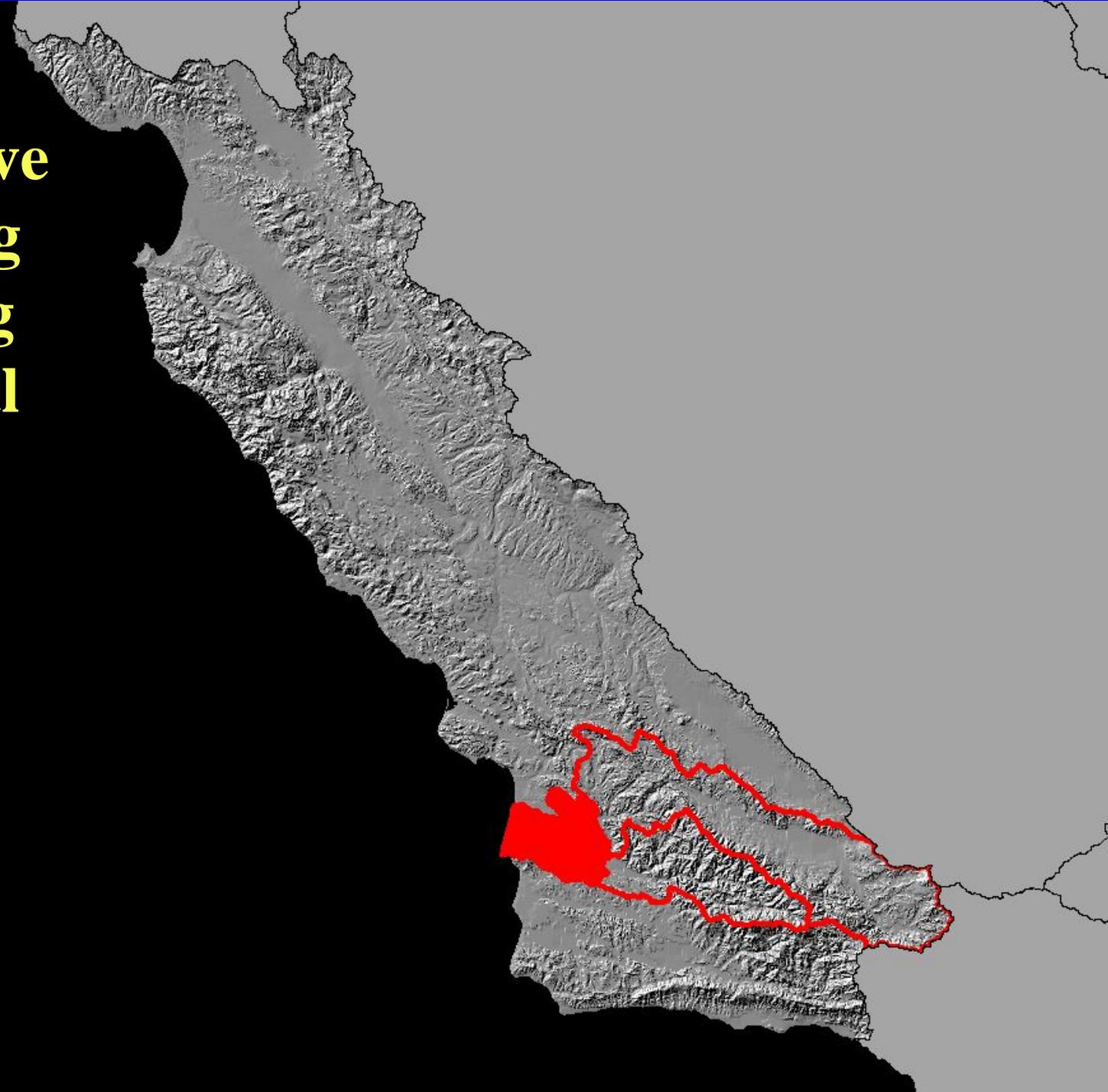
Education



Implementation of Management Practices

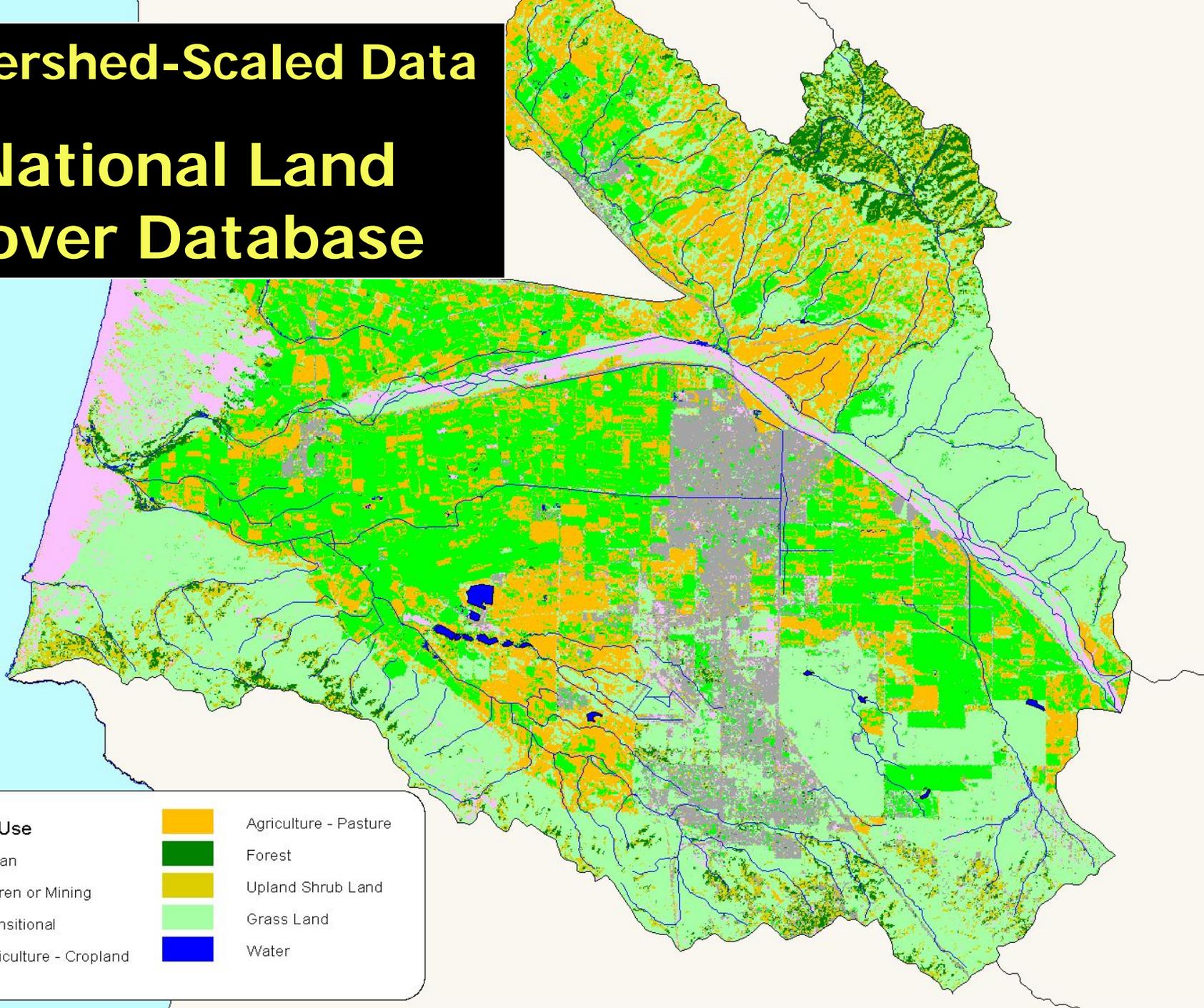


**Tools we have
for tracking
goals, using
agricultural
data as an
example**



Watershed-Scaled Data

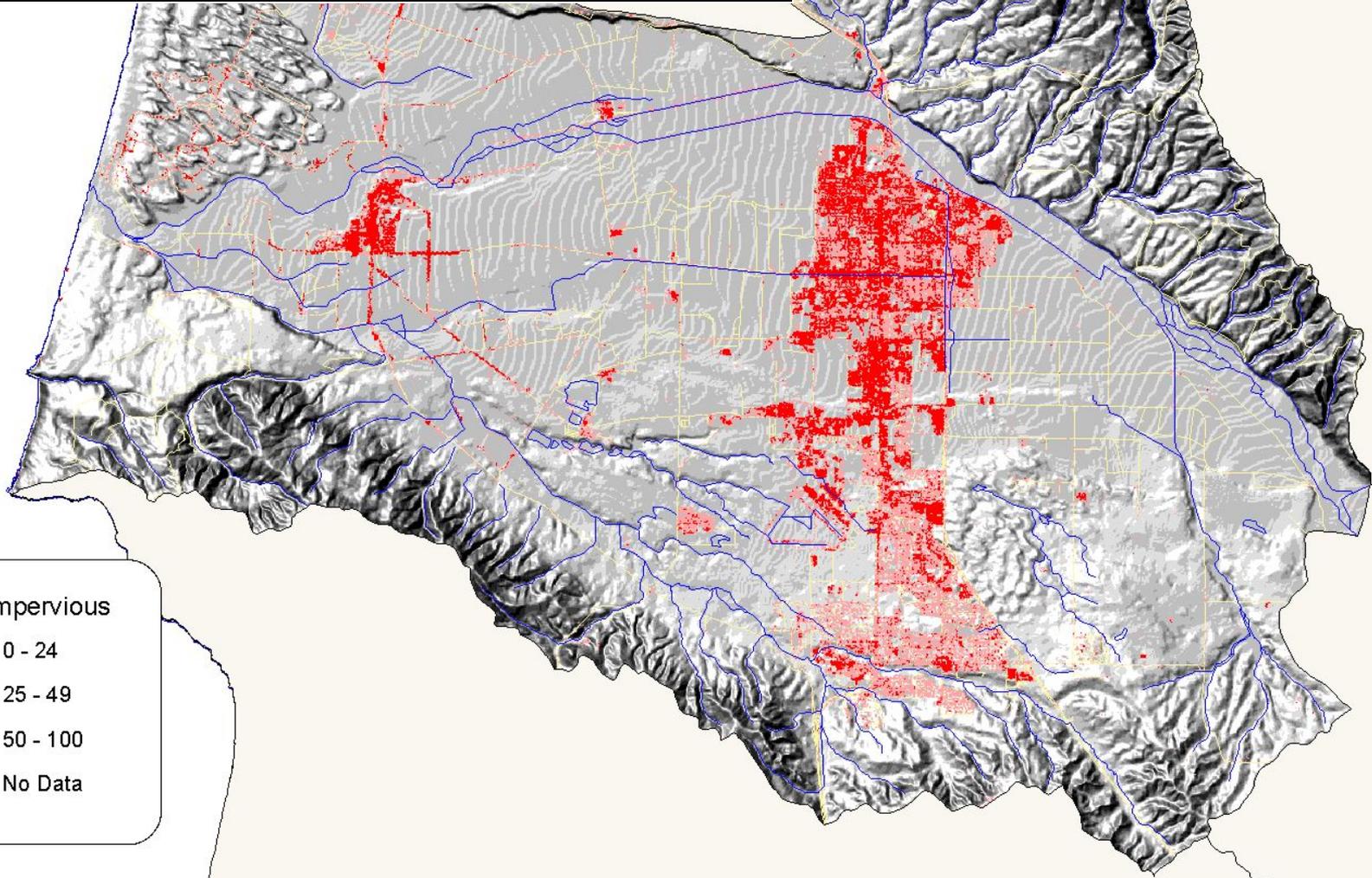
National Land Cover Database



MRLC Land Use

	Urban		Agriculture - Pasture
	Barren or Mining		Forest
	Transitional		Upland Shrub Land
	Agriculture - Cropland		Grass Land
			Water

Watershed-Scaled Data Impervious Surfaces NLCD



Percent Impervious



0 - 24



25 - 49

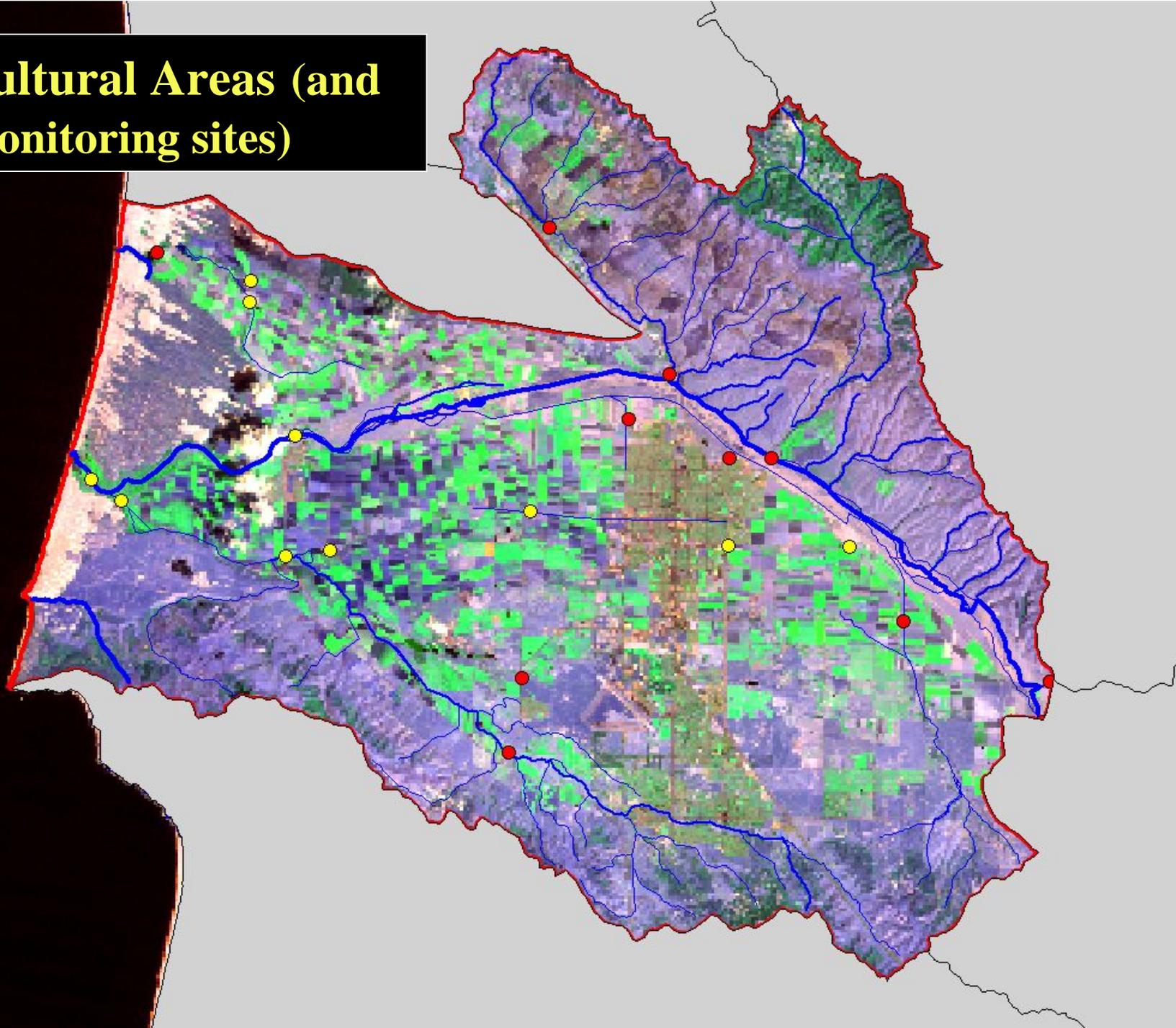


50 - 100

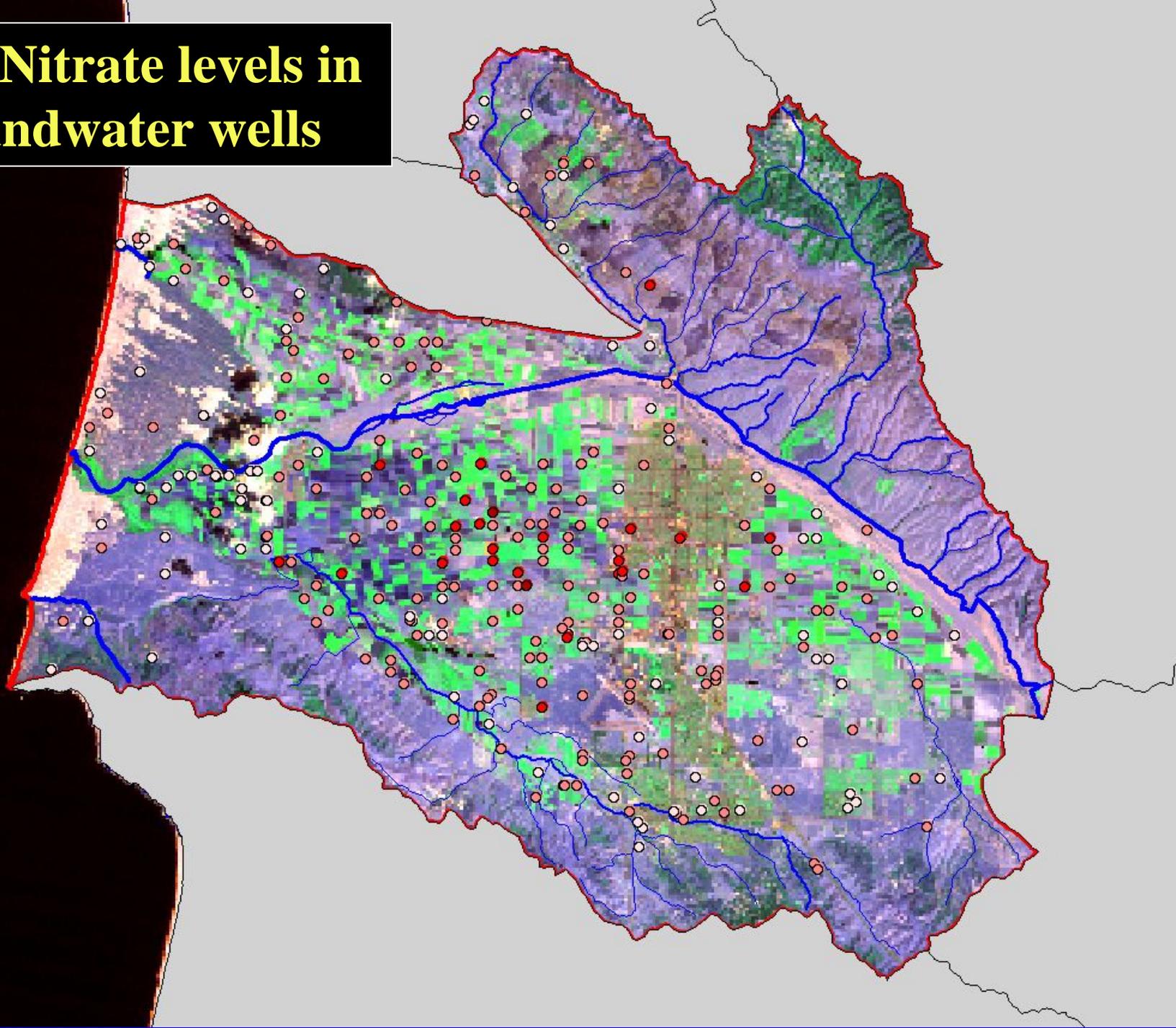


No Data

Agricultural Areas (and monitoring sites)

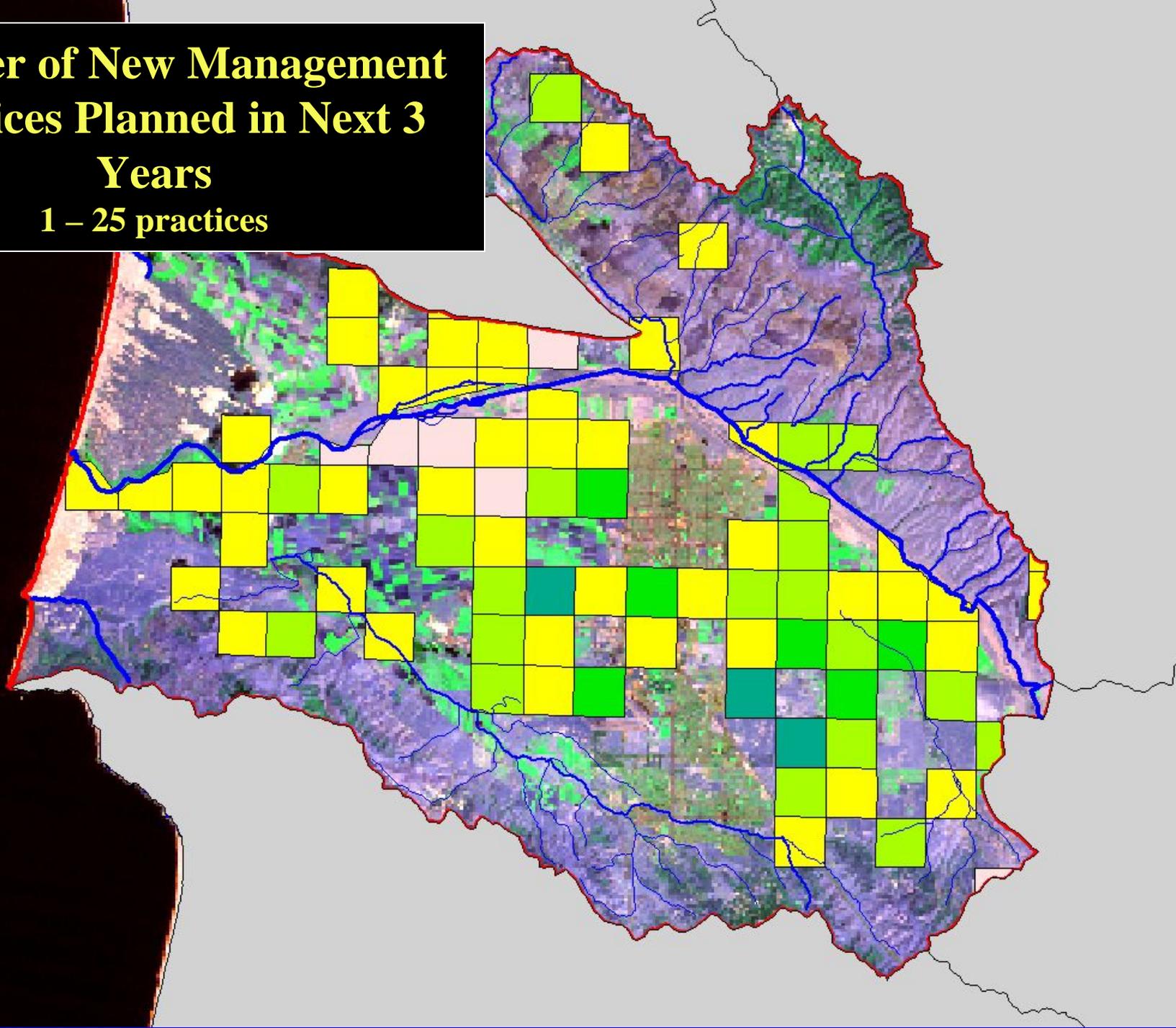


Mean Nitrate levels in groundwater wells



Number of New Management Practices Planned in Next 3 Years

1 – 25 practices



Healthy Watersheds

¹ Healthy Watersheds function well ecologically and are sustainable; support healthy, diverse aquatic habitat; have healthy riparian areas and corridors; and have near natural levels of sediment transport and near natural levels and quality of groundwater. A Healthy Watershed sustains these characteristics through measures that ensure the dynamics that provide these healthy factors and functions are protected. Healthy sustainable watersheds have more vegetative cover and canopy, less energy use for imported water, fewer greenhouse gas emissions, and a lesser carbon footprint than unhealthy watersheds. Our goal of Healthy Watersheds is compatible, supportive, and in coordination with the larger issue (beyond water quality) of Sustainability and the State's Global Warming Solutions Act

BANCCC Sustainability

- Broader sustainability issues in concert with Governor's Exec Order on climate change (a three region pilot effort with EPA and many others).
- **Bay Area, North Coast, Central Coast Regions**
- Recycle
- Conserve
- Alternative Energy
- Seal
- LID

Conclusion

- We can do our core job - issue permits, enforce them
- Watch our watersheds deteriorate, stop functioning, continue on a non sustainable path or...
- We can act to maintain and attain Healthy Sustainable Watersheds
- We Can Make a Difference

Healthy Functioning Watersheds

Goal 1: By 2025 80% of Aquatic Habitat is healthy, and the remaining 20% exhibits positive trends in key parameters

- Riparian Habitat
 - ✓Physical index
 - ✓Chemical index
 - ✓Biological index
- Wetlands Habitat
 - ✓Physical index
 - ✓Chemical index
 - ✓Biological index
- ✓Marine Habitat
 - ✓Physical index
 - ✓Chemical index
 - ✓Biological index

Healthy Functioning Watersheds

Goal 2: By 2025 80% of lands within any watershed will be managed to maintain proper watershed functions, and the remaining 20% will exhibit positive trends in key watershed parameters

- Urban

- ✓Percentage of new projects using LID design standards
- ✓Percentage of impervious surface in a watershed
- ✓Buffer zones for aquatic habitat

- Agriculture

- ✓Relative percentage of land with adequate BMPs
- ✓Efficiency of pesticide and fertilizer application
- ✓Toxicity of runoff
- ✓Buffer zones for aquatic habitat

Healthy Functioning Watersheds

Goal 3: By 2025 80% of groundwater will be clean, and the remaining 20% will exhibit positive trends in key parameters

- ✓ **Nitrates**
- ✓ **Salts**
- ✓ **Cleanup Case Closures**
- ✓ **New Cases**

Healthy Functioning Watersheds

Goal 1: Healthy Aquatic Habitat



Key Parameters:

- Chemical index
- Physical index
- Biological index



Goal 2: Proper Land Management

Key Parameters:

- Percentage LID
- Percentage of impervious surface
- Buffer zones for aquatic habitat
- Ag BMPs
- Toxicity of runoff



Goal 3: Clean Groundwater

Key Parameters:

- Nitrates
- Salts
- Case closures
- New cases

Channel Islands Marine Protected Areas

Miposk by
California Department of Fish & Game
Marine Region GIS Lab
G. Wade
January 22, 2004

Scale 1: 550,000

