

Pathways to Compliance: Southern California Perspective

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Need Clear Compliance Goals

- Complexity of addressing MS4 discharges well known
 - Regulators agree that MS4s cannot achieve compliance on Day One of permit and compliance still unachievable in 5 year term
- Current RWL language:
 - Doesn't address complexities
 - Doesn't provide MS4s, the public or the water boards an accountable means of compliance
 - Doesn't encourage beneficial reuse of stormwater

Success Story: Baby Beach



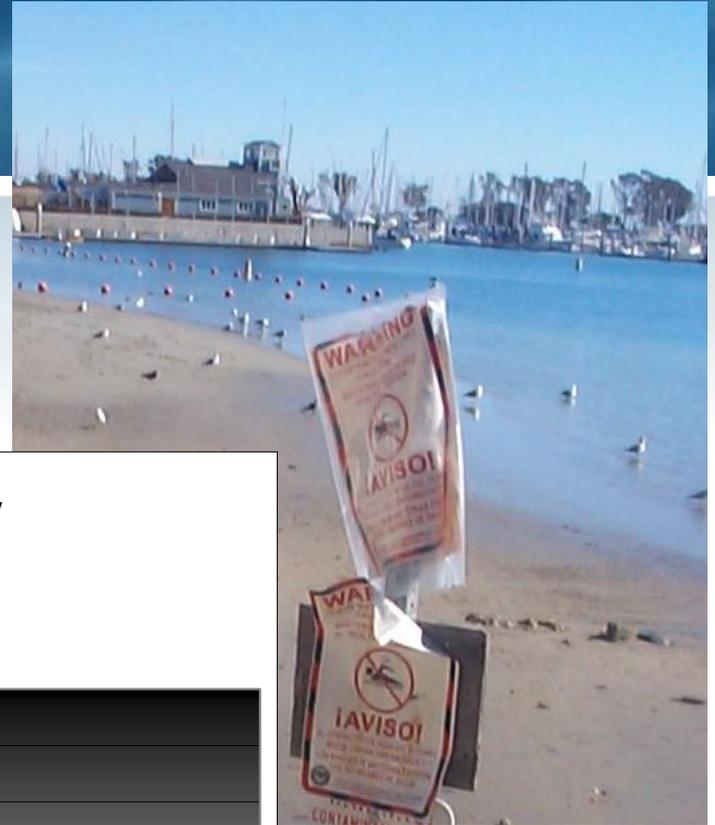
Dana Point Harbor



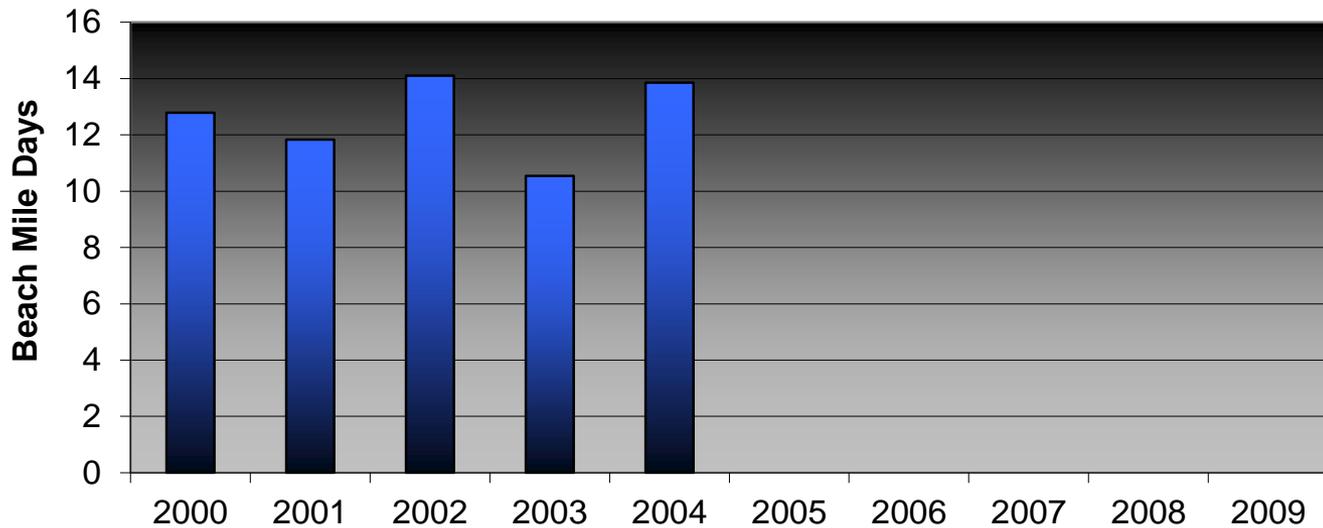
History

Shallow circulation

Persistent exceedances for bacteria



Baby Beach Annual Water Quality Advisory History
in Beach Mile Days, 2000 - 2004 (OCHCA, 2008)



Consistent
“F” on Heal
the Bay
Report Card

Studies

- Data mining - compare with tides, rainfall, birds, boating, human usage
- Circulation study impacts
- Bacteriological study - spatial & temporal, groundwater, boat impacts, microbial source tracking
- Bird study

Source Investigation Results

- Storm drains
- Bacteria resident in beach sediments
- Limited near-beach circulation
- Birds
- NOT: Boats, swimmers, groundwater, leaking pipes



Dry Weather Diversion



Wet Weather Storm Filter







Pier Netting 2.0 03/07/2006



Signage & Enforcement



**IF YOU ENJOY
SEEING PIGEONS AND
OTHER BIRDS AND WILDLIFE,
DO NOT FEED THEM!**

Feeding of Pigeons and other birds and wildlife creates artificially high populations that cannot be supported by the natural habitat. Bird and animal droppings contribute directly to high bacterial counts in bay waters, resulting in beach closures.

**DO NOT FEED
PIGEONS OR OTHER WILDLIFE.**

O.C.C.O. 2-5-28(a)

Pilot Tested Circulation Devices



Beach Sweeping



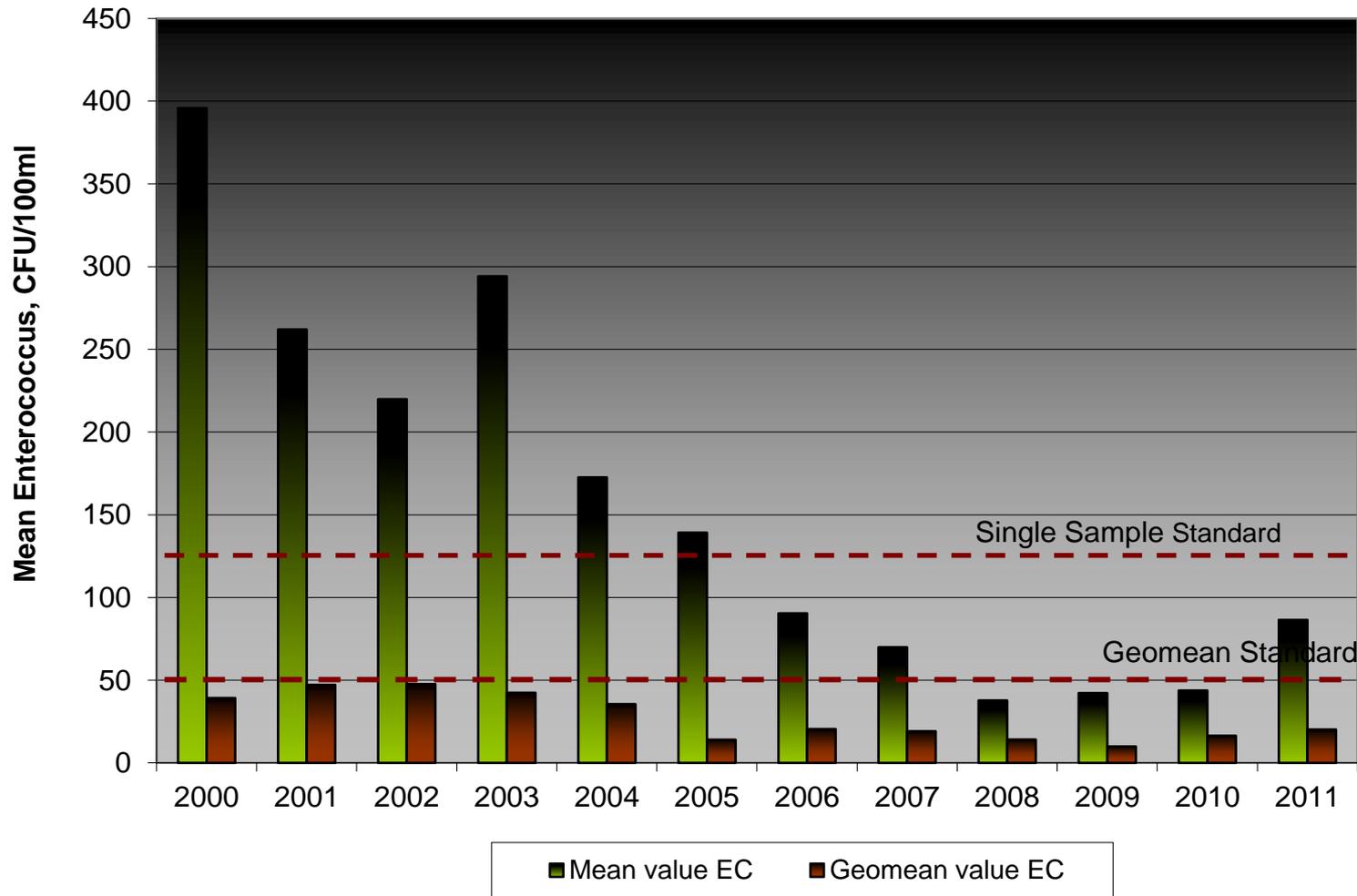


Bacteria in Beach Sediments

Baby Beach BMP Implementation History

- Source investigations, 2000 – 2002
- Shorebird disincentive BMPs, 2001-2005
- Clean Beaches Initiative Grant, 2002
- Headlands urban runoff BMP, 2005
- Beach sweeping program, 2007
- Sand removal & replacement, fall 2008

Baby Beach Enterococcus by Calendar Year 2000-2011 (non-standardized)



Riverside County Stormwater Program

Partners in protecting water resources

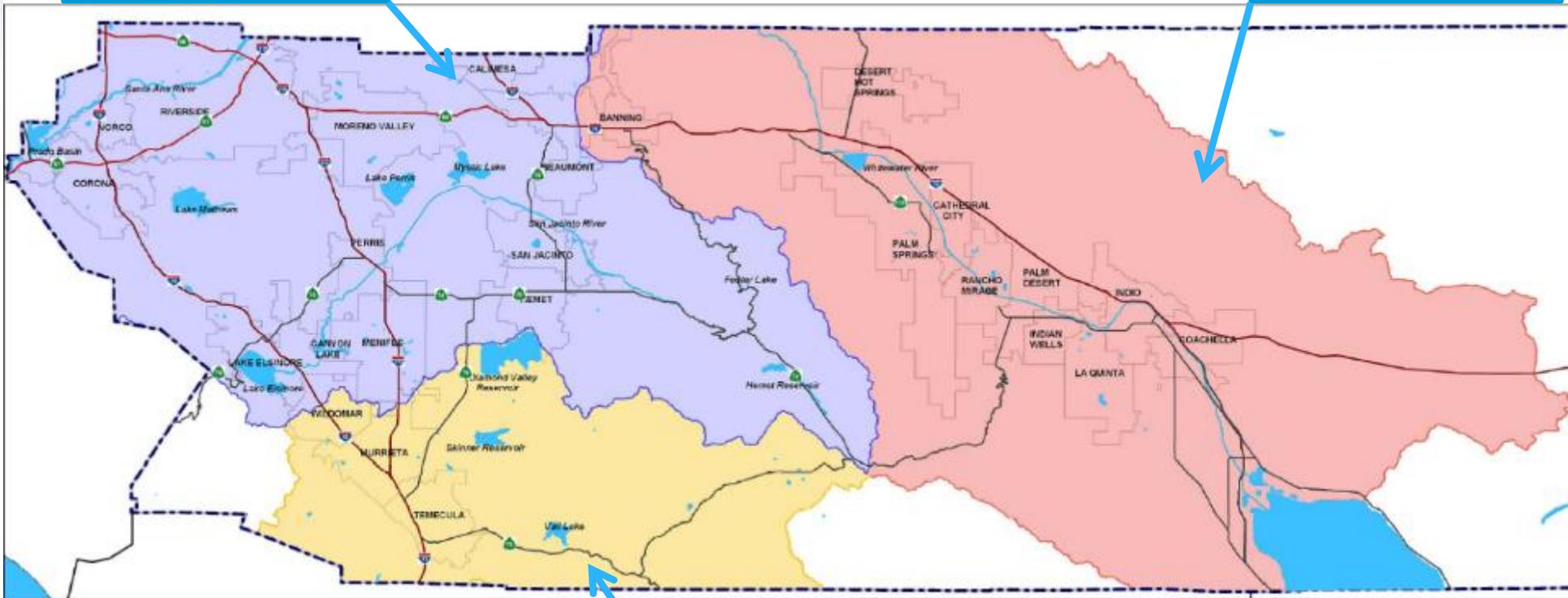


- Habitat Conservation
- Water Conservation
- Water Quality
- Flood Hazard Reduction

Riverside County Regions

Santa Ana RWQCB
Rainfall: 12"/year

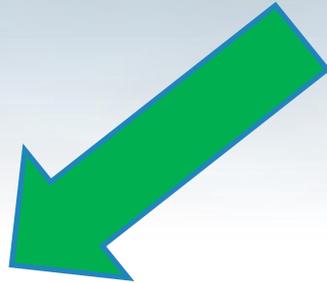
Colorado RWQCB
Rainfall: 3"/year



San Diego RWQCB
Rainfall: 16"/year

Bacterial Indicators TMDLs

2 Different Solutions for 2 Different Watersheds



Whitewater

- 3" annual rainfall
 - 3 outfalls
 - Limited drainage area
 - Developments with infiltration control
 - MS4 limited to storm flow conveyance
-

3 regional infiltration BMPs to pick off remaining low flow



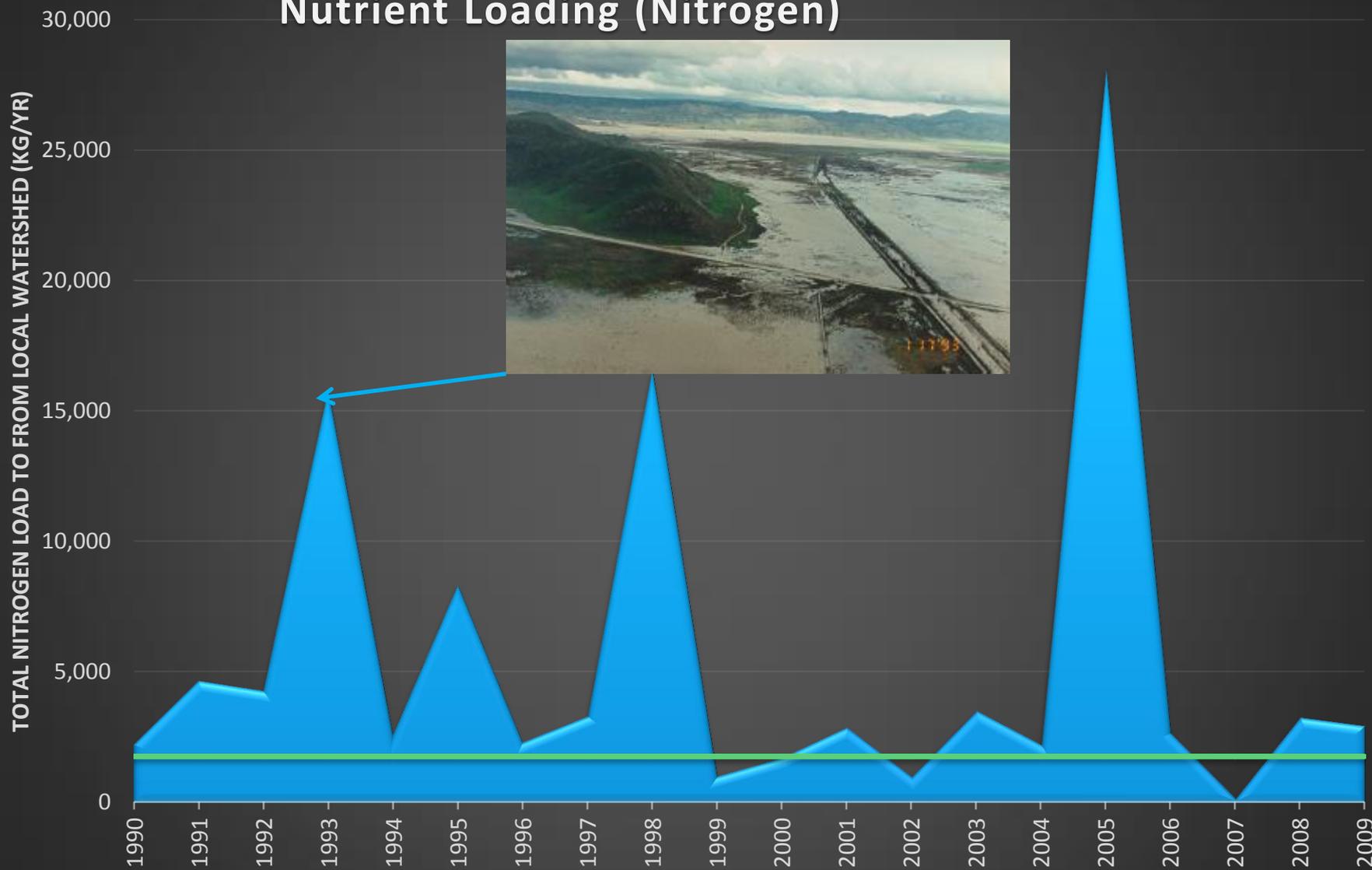
Santa Ana

- 12" annual rainfall
 - 17 outfalls
 - Significant drainage area
 - Older developments without infiltration
 - MS4 used for water resource management
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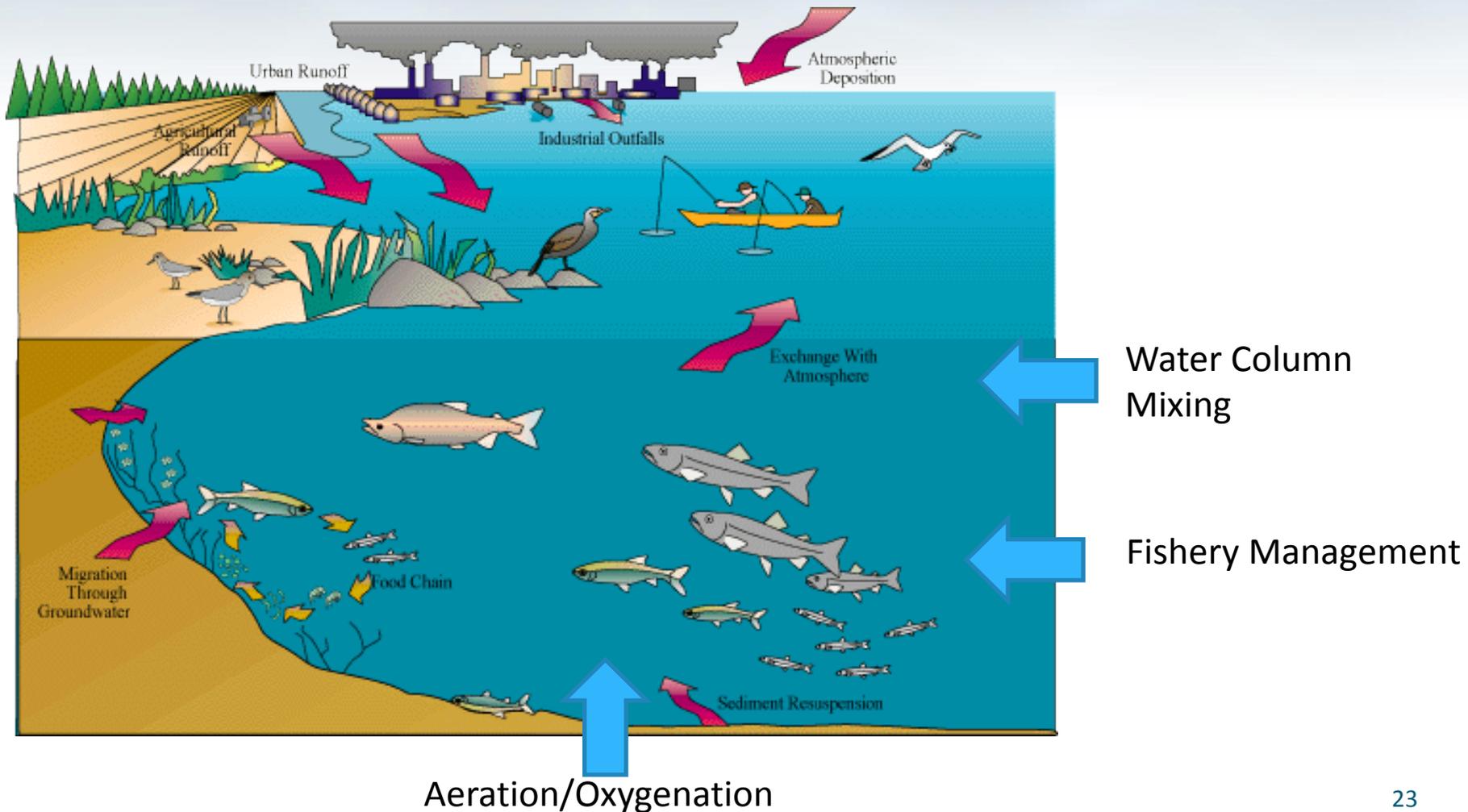
Adaptive Management Plan including Basin Plan Revision

Lake Elsinore : Waste Load Allocations Technologically Infeasible

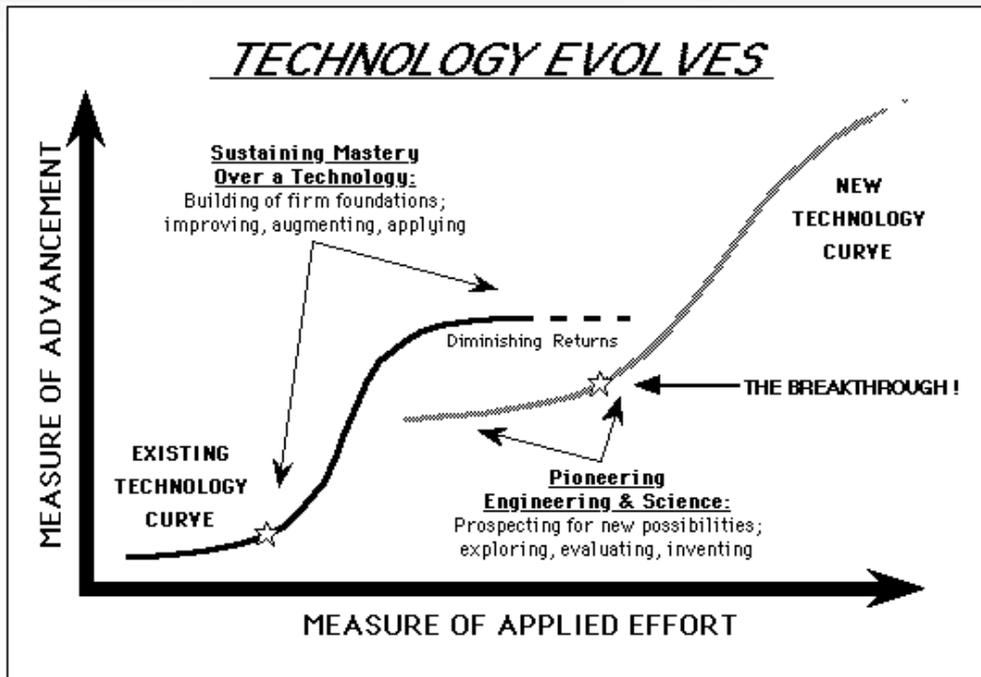
Nutrient Loading (Nitrogen)



Alternate Path: Focus on TMDL response targets



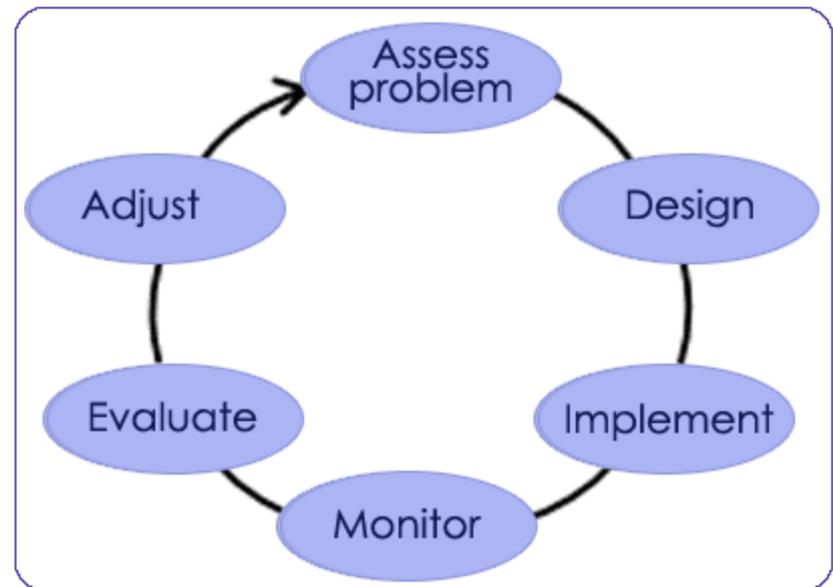
Both Plans recognized scientific uncertainty, technological limitations



- Adaptive
- Strategic
- Synergistic

Success Is Motivating!

- Success stories in OC, Riverside, and stories told here today demonstrate that these adaptive management efforts are how the iterative process was intended to work



LA Permit **Promotes Progress** Toward Achieving WQS

- Addresses prioritization in watersheds
- Allows synergy with other government programs including stormwater use.
- Allows compliance during the planning process
- Requires accountability
- Encourages MS4s to undertake significant compliance efforts in a strategic manner

Lack of Compliance Pathway

Hinders Progress

- Example: No compliance option in San Diego regional permit
- Incentivizes risk management, not watershed management
- Discourages prioritization of problem watersheds/pollutants
- Easier to build support and funding for programs if municipalities have clear pathways

What Do Our Counties Need?

1. Precedential order requiring compliance pathways but flexible enough to account for regional differences
2. Clarity that MS4 is in compliance with RWL, interim and final TMDL limits, and discharge prohibitions
3. BMP-centered approach for compliance with all discharge limits

What Do Our Counties Need?

4. Ability to adjust watershed management plans when timelines and/or BMPs become infeasible
5. Allowance for source controls
6. Design storm for infiltration and treatment
7. Appropriate alternatives to Reasonable Assurance Analyses (RAA)