

# Coordinating Water Quality Monitoring

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## Successful Examples Do Exist

- Collaborative receiving water monitoring programs
  - National, State, So Cal Regional
- Urban runoff specific organizations
  - Beginning to coordinate fundamental monitoring issues
- Today discuss the Southern California Stormwater Monitoring Coalition
  - Genesis, goals and objectives, opportunities for collaboration with San Diego

## Genesis Of The Stormwater Monitoring Coalition

- SCCWRP had just finished a comparison of stormwater programs for region-wide assessments
  - Comparability was limited
- RWQCB was promoting collaboration on Santa Ana River
  - Rouge River Model
- County of San Diego desired greater collaboration among county-wide stormwater projects

## Common Dilemma

- Wanted to share information, but couldn't
- Had problems interpreting monitoring data
  - Little Context
- Felt there were redundant or inefficient monitoring program elements
- Desired to conduct special studies
  - Insufficient resources and/ or expertise

## Saw Common Ground

- Many problems were not watershed specific
  - Regional issues
- Regional monitoring could help
  - Add context
  - Improve data sharing
  - Common questions
- Leverage pooled resources
  - Trade-off redundant/ inefficient monitoring elements

## Coalition Member Agencies

- Ventura County Flood Control Dist.
- Los Angeles County Dept. Public Works
- City of Long Beach
- San Bernardino Dept. of Public Works
- Riverside County Flood Control Dist.
- Orange County Public Facilities and Resources Dept.
- San Diego County Dept. of Environmental Health
- Los Angeles, Santa Ana and San Diego RWQCBs
- Southern California Coastal Water Research Project

## Formalizing the Stormwater Monitoring Coalition

- Signed a Letter of Agreement in 2001
- Stated purpose is to work collaboratively to address stormwater issues of regional importance
- Fiscally non-binding
  - Serves as a contract mechanism for voluntary participation in specific projects
- First goal is to develop a list of projects

## Establishing A Research Agenda

- 3-day research planning workshop
  - Invited local and national experts in a wide variety of scientific disciplines
- Goal was to design an array of studies that could be agreed to by the SMC
  - Multi-year Research Plan
- Developed a list of 15 projects
  - Three general categories

## Three Categories of Projects

- Developing a stormwater monitoring infrastructure
- Improving fundamental understanding of stormwater mechanisms and processes
- Identifying receiving water impacts

## Infrastructure Projects

- Review existing monitoring programs and integrate historical data
- Standardize sampling protocols
- Build a regional data infrastructure
- Measure BMP effectiveness

## Improving Fundamental Understanding

- Build a system-wide conceptual model
- Determine reference conditions
- Stratify designated beneficial uses
- Identify relative contributions of non-point sources to urban runoff loads

## Identify Receiving Water Impacts

- Identify causes of impacts in receiving waters
- Develop bioassessment indicators and protocols
- Develop improved toxicity testing procedures
- Develop rapid indicators for microbial contamination
- Improve microbial source tracking protocols
- Evaluate BMP effects on receiving water impacts
- Develop indicator of peak flow impacts

## Projects Are Not Independent

- Many of the infrastructure projects can occur first for refining future studies
- Many of the receiving water projects develop useful tools for other projects
- Several of the assessment projects could occur later

## Eventual Goal

- Have an ongoing regional monitoring program
- Design a model monitoring program
  - Define a set of common management questions and assessment tools
  - Ready access to data by agencies and public
- Develop integrated regional management scenarios

## Current Status

- SMC approved the Research Agenda and has begun three projects
- Method standardization & regional data infrastructure
  - In collaboration with SWRCB
- Improve microbial source tracking protocols
  - In collaboration with SWRCB and NWRI
- Peak flow impacts