

SCCWRP 2013-14 Research Plan

SCCWRP Commission

June 2013

This Year's Plan Is Jam-Packed!

- **43 Projects**
- **97% have collaborators**
 - Over half bring outside expertise
- **89% have attracted external/match funding**
- **None are single year projects**

Example New Initiatives

- Ocean acidification and hypoxia
- Stormwater BMPs
- Quantitative microbial risk assessment (QMRA)
- New data technologies
- Regional monitoring
 - Bight '13

Hypoxia and Ocean Acidification

- **Scientists have identified low DO events in the Bight**
 - Historical POTW data analysis indicates this trend might be increasing
- **We are uncertain to what extent anthropogenic contributions exacerbate these effects**
- **Our goal is to understand this linkage**
 - Test new technology
 - Rate process experiments
 - Help build dynamic water quality models

Stormwater BMPs

- **Existing BMP models focus mostly on surface water**
 - Use “literature values”
- **Serious predictions require linked watershed models**
 - Hydrology-water quality
 - Mechanistic BMP effectiveness
 - Surface water-Groundwater
 - Biological response
- **Our goal is to begin creating linked watershed models**
 - Optimizing to achieve management goals

Quantitative Microbial Risk Assessment (QMRA)

- **Tremendous effort has been spent cleaning up fecal pollution at beaches**
 - Successful at removing most problematic human sources
 - Problematic non-human sources remain
- **EPA has opened the door to QMRA for setting site-specific objectives for non-human sources**
 - We are lacking good case-study examples, though
- **Our goal is to conduct the first QMRA in California**
 - Set the precedent for a technically sound QMRA

Interactions With CTAG On Our Research Plan

- **Started working with CTAG on our Research Plan in November**
 - Dedicated agenda item at 3 of 4 quarterly meetings
- **Enhanced CTAG interaction this year with a quantitative survey**
- **CTAG has endorsed our Draft Research Plan**