

**State of California Constituents of  
Emerging Concern  
Coastal and Marine Ecosystems  
Science Advisory Panel**

**Meeting #1**

**January 12, 2010  
Costa Mesa, CA**



# BACKGROUND

- **State of California formed an emerging contaminants scientific advisory panel for recycled water**
  - Panel first met in September
- **The State also requires a strategy for monitoring and management of emerging contaminants in discharged water**
- **Much of the expertise required for developing an ambient water strategy is similar to that for recycled waters**
- **Packard Foundation has partnered with the State to form a second panel that leverages the State's investment in the recycled panel**
  - SCCWRP has been asked to facilitate the panel

# QUESTIONS TO BE ADDRESSED

- **What are the relative contributions of contaminants of emerging concern (CECs) discharged into coastal aquatic ecosystems from wastewater and stormwater?**
- **What specific CECs, if any, are most appropriate for monitoring in discharges to coastal aquatic systems and what are the applicable monitoring methods and detection limits?**
- **How are these priority constituents affected by the chemistry, biology, and physics of treatment in wastewater systems, by discharge into and transport by coastal streams, rivers and estuaries, and as a result of mixing and dilution with receiving coastal and ocean waters?**
- **What approaches should be used to assess biological effects of CECs to sentinel species in coastal aquatic systems?**
- **What is the appropriate design (e.g. media, frequency, locations) for a CEC monitoring and biological effects assessment program, given the current state of the art?**
  - What level of effects will be detectable with such a monitoring program and how will its sensitivity vary with investment?
- **What concentrations of CECs or levels of biological effects should trigger further actions and what options should be considered for further actions?**

# EXPERT PANEL MEMBERS

- **Dr. Paul Anderson**
  - Human Health Toxicologist
  - Arcadis US
- **Dr. Adam Olivieri**
  - Risk Assessor
  - EOA Incorporated
- **Dr. Nancy Denslow**
  - Biochemist
  - University of Florida
- **Dr. Daniel Schlenk**
  - Environmental Toxicologist
  - UC Riverside
- **Dr. Jörg Drewes**
  - Civil Engineer
  - Colorado School of Mines
- **Dr. Shane Snyder**
  - Analytical Chemist
  - Total Environmental Solutions, Inc
- **Dr. Tracy Collier**
  - Marine Resources
  - NOAA

# PANEL MEMBER SELECTION

- **Started with members of the Recycled Water Panel**
  - Wanted continuity between panels
  - All panel members expressed interest in continuing
- **Panel asked if they needed additional expertise**
  - Also asked project sponsors
- **Identified two needs: marine resources and physical oceanography**
  - Determined that physical oceanography needs can be better addressed by consultation
- **Vetted four marine resources candidates through stakeholder advisory committee**

# STAKEHOLDER ADVISORS

- **Jim Colston** (Tri-TAC)
- **Mark Gold** (Heal the Bay)
- **Chris Crompton** (CA Stormwater Quality Association)
- **Linda Sheehan** (CA Coastkeeper Alliance)
- **Amber Mace** (CA Ocean Protection Council)
- **Rick Moss** (State Water Resources Control Board)

# SCHEDULE

- **Two-year project to be completed July 2011**
- **Meeting #1: Jan 2010**
  - Defining/refining the charge
  - Perspectives of interested parties
  - Identify short term data gaps
- **Meeting #2: Summer 2010**
  - Working meeting to address charge questions
- **Meeting #3: Winter 2010**
  - Present preliminary findings
  - Outline draft report
- **Meeting #4: Spring 2011**
  - Complete draft report for public comments