

RECYCLED WATER RESEARCH WORKSHOP

- **State Water Board convened a 2-day workshop to develop recycled water CEC research priorities**
 - Held at SCCWRP Oct 27-28
- **~ 50 participants**
 - Wastewater treatment agencies
 - Stormwater managers
 - Water supply utilities
 - Regulators
- **Organized in partnership with three research entities**
 - Southern California Coastal Water Research Project Authority
 - National Water Research Institute
 - WaterReuse Research Foundation

ORGANIZING THEMES

- **Monitoring/assessing CECs**
 - Targeted chemical analyses
 - Cell bioassays
 - Non-targeted chemical analyses

- **Treatment processes to remove CECs**
 - Source water control
 - Optimizing use of current treatment technology
 - Developing new treatment technologies
 - Reliability and resilience

PRIORITY RESEARCH NEEDS FOR CEC MONITORING

- **Relatively equal interest among targeted, nontargeted and bioassay approaches**
 - Water utilities were more interested in improving targeted approaches
 - Regulators were more interested in developing bioassays
 - Non-targeted analysis was a runaway preference as the second priority by both groups
- **Investigate source water and transformational products as water moves through the treatment train**
 - Establish baseline and identify unexpected chemicals
- **Assess impact on humans and aquatic wildlife**
 - Need better interpretation tools for using all three lines of evidence

PRIORITY RESEARCH NEEDS FOR TREATMENT TECHNOLOGY

- **Predominant feeling was that existing technology works well for most CECs**
 - Greatest need is in ensuring that those technologies are properly deployed
 - Also to ensure a real time monitoring system that alerts operators to plant upset
- **Develop standardized operator training programs**
- **Develop better surrogate measures for CEC removal**
- **Link development of new technologies to unexpected chemicals found in treatment train studies**

NEXT STEPS

- **Formalize the research prioritization process**
 - State Board next week will be sending participants a survey of potential projects for which they can vote
 - Will use the survey to prioritize among topic areas and among projects
- **State will release a workshop report in February**
 - We are helping them write several sections of the report
- **The workshop report will inform research directions for Prop 1 funds**