

CONSTITUENTS OF EMERGING CONCERN IN CALIFORNIA'S AQUATIC ECOSYSTEMS SCIENCE ADVISORY PANEL

- **The meeting will begin at 8:00**
- **Please contact Paul Smith (pauls@sccwrp.org) if you are having connection difficulties**
- **Attendees will be muted until the public question period**
 - Please use the Q&A box to communicate with the host if you have questions
- **Webinar series will be recorded and placed on the SCCWRP web site**

BACKGROUND

- **The State of California formed a scientific advisory panel for emerging contaminants in ambient waters approximately ten years ago**
 - The Panel produced a 2012 report
- **That Panel provided a number of advances**
 - Offered a risk assessment framework to prioritize which chemicals should be monitored
 - Applied the framework to identify specific chemicals that should be monitored
 - Though that effort was hampered by a paucity of data about CEC prevalence in the environment
 - Presented an holistic approach that leveraged recent advances in cell-line assays and non-targeted chemistry
- **The field has expanded greatly over the last decade**
 - There is much more data on prevalence and fate for the ambient chemistry for CECs
 - Cell-line assay and non-targeted analysis science has advanced considerably

PANEL MEMBERS

- **Dr. Jörg Drewes**

- Civil Engineer, Technical University of Munich



- **Dr. Paul Anderson**

- Toxicologist, Arcadis



- **Dr. Daniel Schlenk**

- Ecotoxicologist, UC Riverside



- **Dr. Adam Olivieri**

- Risk Assessor, EOA Incorporated



- **Dr. Nancy Denslow**

- Biochemist, University of Florida



- **Dr. Shane Snyder**

- Analytical Chemist, Nanyang Technological University Singapore



- **Dr. Derek Muir**

- Environmental Chemist, Environment and Climate Change Canada



PANEL SCHEDULE

- **Panel to produce a final report by December 2021**
- **Meeting #1 (Today through Thursday)**
 - Hear perspectives from a variety of interested parties
 - Review the charge questions
 - Working sessions to develop their approach to answering those questions
- **Meeting #2: Summer 2021**
 - Working meetings to address charge questions
 - Present preliminary findings at the end of the meeting series
- **Meeting #3: November 2021**
 - Receive public comments on a draft report
 - Draft report will be made available about a month before the meeting series

THIS WEEK'S SCHEDULE

- **Four sessions from 8-10:30 starting today**
 - The same participation link will work on all days
- **Today: Intended use of Panel products**
 - State agency leaders will describe their information needs and intended use of Panel products
- **Tuesday: Experiences following the Panel's 2012 Recommendations**
 - State and Regional Water Boards will describe what they learned during implementation
- **Wednesday: Scientific advances in the field**
 - Leading scientists will describe how the emerging contaminant field has evolved
- **Thursday: Stakeholder perspectives**
 - Stakeholder groups will share perspectives and issues they would like the Panel to address

TODAY'S SPEAKERS

- **Jonathon Bishop - State Water Board**
- **Dr. Mark Gold - California Ocean Protection Council**
- **Dr. Jennifer Teerlink - Department of Pesticide Regulation**
- **Dr. Simona Balan - Department of Toxics Substances Control**
- **Claire Waggoner - State Water Board**

QUESTIONS FOR OUR SPEAKERS

- **There will be time for questions after each speaker**
 - First opportunity for questions will go to the Panel members
 - We will take audience questions to the extent there is time
- **Time is allocated at the end of each day for audience questions**
 - We will bring all speakers back onscreen for this part of the webinar
- **Type your questions into the Q&A box**
 - Please enter the nature of your question/comment so we can group them appropriately
 - Please indicate if you would like to verbalize the comment yourself, or have it read for you

CHARGE QUESTIONS

- 1. Which classes of CECs, including those with data gaps, have the potential to adversely impact marine, estuarine and freshwater wildlife, ecosystems, and beneficial uses in marine, estuarine and freshwater environments?**
 - Who are the leaders in the academic field for each of these classes of CECs?
 - What are the applicable monitoring methods and reporting limits for these classes of CECs?
- 2. Update the risk prioritization framework developed in the 2012 report to address classes of chemicals, structurally-related chemicals (that may not be within the same class), and data-poor chemical classes (e.g., where there is either no monitoring trigger level or environmental concentration or predicted no-effect concentration)**
- 3. What are the sources, pathways, and rate of inputs leading to the presence of classes of CECs in the marine, estuarine and freshwater ecosystems?**

CHARGE QUESTIONS

4. **Considering the physical, chemical, and biological processes that affect the transport and fate of classes of CECs, what matrices (i.e. tissue, sediment, ambient water, and wastewater) should be screened in each of the three following ecosystems: marine, estuarine and freshwater?**
5. **What are the most important known and unknown biological effects for specific or classes of CECs and what approaches should be used to assess biological effects of classes of CECs to sentinel species in marine, estuarine and freshwater ecosystems?**
6. **How can state management agencies better address classes of CECs in the environment through implementation of the risk prioritization framework Specifically, how can the State Water Board better address CECs?**

ON WHICH CONSTITUENTS SHOULD YOU FOCUS?

- **Toxic chemicals of human origin**
 - This is your prime focus
- **Microplastics**
 - This is not part of your agenda
 - The State has other vehicles for addressing this
- **Antibiotic resistant microbes**
 - Also not on your agenda
- **Algal bloom toxins**
 - Probably on your agenda
 - The State Agency Advisory Group is still contemplating this category