

Brine Disposal Expert Panel

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Research Project*

www.sccwrp.org



Presentation Topics

- **SCCWRP background**
- **Project objectives and schedule**
- **Panel composition and potential candidates**

SCCWRP Background

- **Established in 1969 as a public agency**
- **Joint Powers Authority**
 - **Unique blend of regulatory and regulated agencies**
- **Mission is to understand the impact of human activities on the environment**
 - **Communicate to decision makers**
 - **Facilitate science and promote partnerships**

SCCWRP Member Agencies

- **Sanitation Districts**
 - 4 largest coastal dischargers
- **Flood Control Agencies**
 - 4 coastal counties
- **Regulatory and Resource Agencies**
 - California Water Resources Control Board
 - 3 Regional Water Quality Control Boards
 - California Ocean Protection Council
 - US EPA

SCCWRP Often Facilitates Expert Input to Water Board

- Sediment quality objectives
- Beach water quality
- Contaminants of emerging concern
- Biological objectives

Brine Disposal Panel

- **Objective**
 - Provide Water Board with technical input and recommendations regarding brine disposal in ocean waters
 - Which disposal strategies will minimize impacts?
 - How should plume dispersion be modeled?
 - What are the potential environmental impacts?
 - How should brine discharges be monitored?
- **Composition**
 - Expertise in key disciplines
 - Knowledge of regional conditions
- **Product**
 - Summary report and presentation to Water Board

Draft Schedule of Activities

- **Select panel members and refine questions**
 - July-September
- **Briefing and initial deliberations**
 - Late Fall
 - 2-day meeting at SCCWRP
 - Input from scientists, stakeholders, public
- **Preliminary report and review**
 - Early Winter
 - Respond to report comments from public and agencies
- **Final report**
 - Winter

Panel Composition

- **Recognized experts in three disciplines**
 - **Discharge plume modeling**
 - Onshore or shallow brine discharge
 - Deep discharge combined with other effluent
 - **Physical oceanography**
 - Knowledge of regional/local conditions and factors affecting plume dispersion
 - **Ecological risk assessment**
 - Salinity, chemical, and interaction effects on marine life
- **Neutral perspective**
 - **Desire expert judgment on technical issues**
 - **Not policy or project-specific recommendations**

Potential Panel Members

- **Examples of types of individuals under consideration**
 - No invitations or selections have been made yet
 - Looking for input to refine the list
- **Plume modeling**
 - **Phil Roberts (Georgia Tech)**
 - Lab studies and models of brine dispersion and wastewater outfalls
 - **Scott Jenkins (Scripps Institute of Oceanography)**
 - Modeling of southern California brine discharges
 - **Walter Frick (Consultant, EPA retired)**
 - Developed plume models currently used to develop outfall permits in CA

Potential Panel Members

- **Physical Oceanography**
 - **Burt Jones (Univ. of Southern California)**
 - Monitoring of outfall and runoff plumes in southern California
 - **John Warrick (US Geological Survey)**
 - Pacific Coast currents and plume dispersion
 - **Marlene Noble (US Geological Survey)**
 - Near-bottom currents/resuspension; Pacific Coast currents

Potential Panel Members

- **Ecological risk assessment**
 - **Dan Schlenk (UC Riverside)**
 - Aquatic ecotoxicology, molecular toxicology
 - Chair of State Advisory Panel on contaminants of emerging concern
 - **Peter Chapman (Golder Associates)**
 - Ecological risk assessment in freshwater, estuarine, and marine systems
 - **Sabine Lattemann (University of Oldenburg, Germany)**
 - International desalination impact studies
 - Advisor to Coastal Commission in previous workshop

Looking for Your Input

- Do we have the right questions for the panel?
- Comments on potential panel members?
- Suggestions for other candidates?

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