Stanford | Water in the West

Stanford Law School | Martin Daniel Gould Center for Conflict Resolution Programs

GEOPHYSICS IN THE SGMA CONTEXT:
Geophysical Methods for Sustainable Groundwater Management

October 13, 2016

WORKSHOP GOALS

This is the final workshop in a four-part series focusing on the technical and data challenges local and state agencies are likely to face during implementation of the Sustainable Groundwater Management Act (SGMA). Based on learning from the first three data workshops and a groundwater data survey conducted by Water in the West and the Gould Center for Conflict Resolution, it is clear that many groundwater basins across the state lack basic data or information to make effective management decisions. Some specific areas of data uncertainty include locating groundwater recharge areas and estimating recharge potential; characterizing groundwater-surface water interactions; estimating groundwater extractions; and characterization of groundwater quality. The improvements in geophysical methods for groundwater characterization that have occurred in the past decade present a significant opportunity for meeting SGMA information needs.

Using case studies, this workshop will provide examples of areas where geophysical methods have been used to address management actions required under SGMA that have critical data needs.

Workshop participants will actively participate in plenary discussion to:

1. Identify opportunities or barriers for the use of geophysical methods under SGMA.
2. Develop ideas for best management practices for the use of geophysical methods under SGMA.
3. Shape meeting outputs.

MEETING DETAILS

When: Oct. 13, 2016 8:30 am - 4:45 pm
Where: Frances C. Arrillaga Alumni Center, 326 Galvez St., Stanford CA 94305
Hotel: Stanford Guest House, 2575 Sand Hill Road, Menlo Park, CA 94025

Meeting Contact: Tara Moran, 650-721-2421, tamoran@stanford.edu
Logistics Contact: Athena Serapio, 650-724-7609, athena3@stanford.edu

AGENDA

8:30am **Breakfast**

9:00am **Welcome, Meeting Overview and Introductions (15 mins)**
Speakers: Leon Szeptycki, Stanford University and David Ceppos, Center for Collaborative Policy

9:15am **SGMA Overview and Workshop Goals (10 mins)**
Speaker: Tara Moran, Stanford University

9:25am **Introduction to Geophysical Case Studies (5 mins)**
Speaker: Rosemary Knight, Stanford University

9:30am **Session 1**: **Improved Conceptual Models (90 mins)**
Moderator: Paul Gosselin, Butte County Department of Water and Resource Conservation

- Speaker 1: Claudia Faunt, U.S. Geological Survey (12 mins)
- Speaker 2: Rosemary Knight, Stanford University (12 mins)
- Speaker 3: David Walsh, Vista Clara Inc. (12 mins)

Plenary Discussion (45 mins)

11:00am **Break (15 mins)**

11:15am **Session 2**: **Planning, Mapping and Monitoring Groundwater Recharge (90 mins)**
Moderator: Brian Lockwood, Pajaro Valley Water Management Agency

- Speaker 1: Rosemary Knight, Stanford University (12 mins)
- Speaker 2: Allen Christensen, U.S. Geological Survey (12 mins)
- Speaker 3: Gregory Newman, Lawrence Berkeley National Laboratory (12 mins)

Plenary Discussion (45 mins)

12:45pm **Lunch (60 mins)**

1:45pm **Session 3: Water Quality and GW-SW Interaction (90 mins)**
Moderator: Thomas Harter, UC Davis

- Speaker 1: Roy Herndon, Orange County Water District (12 mins)
- Speaker 2: Till Angermann, Luhdorff & Scalmanini Consulting Engineers (12 mins)
- Speaker 3: Fred Day-Lewis, U.S. Geological Survey (12 mins)

Plenary Discussion (45 mins)

3:15pm **Break (15 mins)**

3:30pm **Session 4: BMPs for Geophysical Methods under SGMA (65 mins)**
Moderator: Tim Parker, Parker Groundwater and Groundwater Resources Association of California

Plenary Discussion (60 mins)

4:35pm **Meeting Synthesis: Opportunities, Next Steps, Feedback (10 mins)**
Speaker: Janet Martinez, Stanford University

4:45pm **Adjourn** for a light reception