









Tools and Methods for Assessing Groundwater-Surface Water Connectivity under SGMA

Stanford University March 12, 2018

Water in the West, the University of Victoria, Foundry Spatial, The Nature Conservancy, and the Environmental Defense Fund are co-hosting a workshop entitled, "Tools for Assessing Groundwater-Surface Water Connectivity under SGMA". The full-day workshop will take place on **March 12, 2018** from **8:30** am to 5 pm at Stanford University.

This workshop seeks to:

- 1. Engage with individuals and entities working on groundwater and surface water connectivity and groundwater dependent ecosystems under SGMA;
- 2. Examine recent research and tool development to assess research gaps and areas to coordinate or collaborate research effort to help address surface water depletions under SGMA; and
- 3. Where new research or tools are necessary, identify their potential role in water management decisions, the data needs, essential functionality, and potential users, locations and partners for pilot studies.

Meeting Details

When: March 12, 2018 (1 day)

Where: Room 299, Y2E2 Building, 473 Via Ortega, Stanford

Hotel: Stanford Guest House

Dinner Details

When: March 12, 2018, 5:00 pm

Where: Tea Room, Shriram Building, 443 Via Ortega

AGENDA

Monday, March 12, 2018

8:15 – 9:00 Light Breakfast and Registration

9:00 – 9:20 Welcome and Introductions

Leon Szeptycki, Water in the West Tara Moran, Water in the West Tom Gleeson, University of Victoria

9:20 – 10:25 **Session 1: Why are we here? (65 mins)**

What are groundwater hydrologists, groundwater managers, the state and others most worried about with respect to groundwater-surface water requirements under SGMA?

Moderator: Leon Szeptycki, Water in the West

Presentations:

- Groundwater-surface water connectivity in hydrologic science: Tom Gleeson, University of Victoria (15 mins)
- Legal and regulatory requirements of interconnected surface water under SGMA: Jessica Bean, California State Water Resources Control Board (15 mins)
- Navigating Groundwater-Surface Water Interactions under the Sustainable Groundwater Management Act: Michael Kiparksy, UC Water (15 mins)

Discussion (20mins)

10:25 – 10:35 Time to fill out Session 1 questions

10:35 – 12:00 Session 2: Can we go with the flow, people? (85 mins)

What are the concerns in considering multiple beneficial uses of interconnected surface waters under SGMA? How can these approaches address these concerns? Where is additional work needed?

Moderator: Tara Moran, Water in the West

Presentations:

- A Framework for Unimpaired Minimum Streamflow Requirements: Daren Carlisle, United States Geological Survey (15 mins)
- EDF's Proposed Approach for Compliance with Surface Water Depletion Requirements in SGMA: Christina Babbitt, Environmental Defense Fund (15 mins)
- California's Groundwater Dependent Ecosystems: Jeanette Howard, The Nature Conservancy (15 mins)

Discussion (40 mins)

12:00 – 12:10 Time to fill out Session 2 questions

12:10 – 1:00 Lunch (50 mins)

1:00 – 2:40 **Session 3: Tools of the trade (100 mins)**

How can we leverage existing data and knowledge to improve water literacy? Is there a role for screening level tools, to support decision making and identification of where more complex field investigations and numerical modeling is needed?

Moderator: Mary Hill, The University of Kansas

Presentations:

- B.C. Water Tool: Ben Kerr, Foundry Spatial (30 mins)
- The Michigan Tool: Howard Reeves, United States Geological Survey (30 mins)

Discussion (40 mins)

- 2:40 2:50 Time to fill out Session 3 questions
- 2:50 3:10 **Break (20 minutes)**
- 3:10 4:20 **Session 4: To model or not to model? (70 mins)**

What level of model complexity is necessary and useful for groundwater management decisions in different hydrologic and institutional environments?

Moderator: Laura Foglia, University of California, Davis

Presentations:

- Comparison of Analytical and Numerical Models: Tom Gleeson, University of Victoria (15 mins)
- Lessons Learned from Groundwater Modeling in California and Beyond: Graham Fogg, University of California, Davis (15 mins)

Discussion (40 mins)

4:20 – 4:30 Time to fill out Session 3 questions

4:30 – 4:50 Summarize key findings and next steps (20 mins)

Leon Szeptycki, Water in the West Tom Gleeson, University of Victoria

4:50 – 4:55 Wrap-up, next steps

4:55 – 5:00 Time to fill out wrap up questions

5:00 Reception and Dinner