

# AGENDA: GROUNDWATER AND ECOSYSTEM SERVICES

Comparative Groundwater Law & Policy Workshop, April 8-10, 2013

Paul Brest Hall West, Munger Graduate Residences,  
 555 Salvatierra Way, Stanford University, Stanford, California, U.S.A.

*Last updated: April 3, 2013*

<b>Preliminary meeting: Monday, April 8: Field trip and dinner</b>		
Leave Hotel Keen at 8am.  We will visit the Cosumnes River Preserve, an area known for its ecological value and groundwater dependence. An overview of the ecological influences of groundwater on the river, associated management issues and local water stewardship activities will be presented. After lunch and a tour of a local winery, we will head to the historic town of Locke where the group will explore the Delta Cross Channel Gates. Maurice Hall with The Nature Conservancy will give an overview of the Delta water flow and controversy and function of the gates. The final stop will be Staten Island where Leo Winternitz of The Nature Conservancy will cover the history of the Delta, the controversy surrounding it, and how TNC manages Staten Island.		Maurice Hall (The Nature Conservancy) and colleagues to lead tour and discussion         Dinner at Nola, 535 Ramona St, Palo Alto
<b>Day One: Tuesday, April 9</b>		<b>Catalyzers</b>
<b>Part 1: Measuring and valuing groundwater ecosystem services: a review of existing capabilities</b>		
8.00 am	<b>Registration and breakfast</b>	<ul style="list-style-type: none"> <li>• Robert Hill (USSC)</li> </ul>
8.30 am	<b>Welcome, overview of workshop agenda, round-table introductions</b>	<ul style="list-style-type: none"> <li>• Buzz Thompson (Woods Inst. &amp; Law School, Stanford)</li> <li>• Rebecca Nelson (USSC/Stanford)</li> </ul>
9.20am	<b>Introduction to ecosystem services</b>	<ul style="list-style-type: none"> <li>• Buzz Thompson (Woods Inst. (Woods Inst. &amp; Law School, Stanford)</li> </ul>
9.40 am	<b>Groundwater ecosystem services (Part 1)</b>  <b>Key questions</b> <ul style="list-style-type: none"> <li>• What are key groundwater ecosystem services, conceived of as the direct and indirect benefits that people derive from groundwater, aquifers, and groundwater-dependent ecosystems?</li> <li>• How prevalent are they?</li> <li>• How important are they?</li> <li>• How robust or threatened are they?</li> </ul>	<ul style="list-style-type: none"> <li>• Becky Chaplin-Kramer (Natural Capital Project, Stanford University)</li> <li>• Moya Tomlinson (Dep't of Nat. Res. &amp; Mines, Qld.)</li> <li>• Christopher Carlson (USFS, VA)</li> </ul>
10.40 am	Morning break	
11.00 am	<b>Groundwater ecosystem services (Part 2)</b>  <b>Key questions</b> <ul style="list-style-type: none"> <li>• As above</li> </ul>	<ul style="list-style-type: none"> <li>• Neil Power (Dep't of Env't, Water &amp; Nat. Res., SA)</li> <li>• Dixon Landers (USEPA, OR)</li> <li>• Ian Houshold (Dep't of Primary Industries, Parks, Water &amp; Env't, Tas)</li> </ul>
12.00 pm	<b>Lunch</b>	

1.00 pm	<p><b>What are our existing capabilities for measuring and valuing groundwater ecosystem services? What further tools are needed?</b></p> <p><b>Key questions</b></p> <ul style="list-style-type: none"> <li>• What lessons have you learned, and/or what approaches can you share in relation to using ecological, economic, hydrogeological or special-purpose ecosystem services models for ecosystem services?</li> <li>• What challenges have you experienced in measuring, modeling and/or valuing water ecosystem services?</li> <li>• What data is currently available for groundwater ecosystem services? What data is not available, but is needed?</li> <li>• What steps should we be taking to improve measurement and valuation of groundwater ecosystem services?</li> </ul>	<ul style="list-style-type: none"> <li>• Kate Brauman (Univ. of MN, MN)</li> <li>• Glenn Harrington (CSIRO, ACT)</li> <li>• Perrine Hamel (Natural Capital Project, Stanford University)</li> <li>• Chris McAuley (Dep't of Sustainability &amp; Env't, Vic)</li> </ul>
3.00 pm	Afternoon break	
<b>Part 2: Using ecosystem services concepts in groundwater law, policy, and management</b>		
3.20 pm	<p><b>Using ecosystem services in the law, policy and management of natural resources generally</b></p> <p><b>Key questions</b></p> <ul style="list-style-type: none"> <li>• What benefits does the concept of ecosystem services offer to law, policy, and management of natural resources?</li> <li>• What are the goals of managing ecosystem services?</li> <li>• What general approaches has the public sector used to protect or improve ecosystem services, or achieve other goals?</li> <li>• What general approaches has the private sector used to protect or improve ecosystem services, or achieve other goals?</li> </ul>	<ul style="list-style-type: none"> <li>• Buzz Thompson (Stanford Univ.)</li> <li>• Simone Maynard (South-East Qld Catchments, Qld)</li> <li>• Bonnie Keeler (Natural Capital Project, Univ. of MN)</li> </ul>
5.00 pm	Break	
6.15 pm	<p><b>Reception, dinner and dinner speaker</b> (at Munger workshop venue)</p>	Dixon Landers (USEPA, OR)
<b>Day Two: Wednesday, April 10</b>		
8.00 am	<b>Breakfast</b>	
8.30 am	<p><b>What steps have the public and private sectors taken to value, protect and enhance water ecosystem services?</b> (Part 1)</p> <p><b>Key questions</b></p> <ul style="list-style-type: none"> <li>• What tools (e.g. decision-making considerations, incentive payments) can the public and private sectors use to protect and increase water ecosystem services?</li> <li>• How have ecosystem services concepts been used in law or policy or decision-making dealing with water?</li> <li>• In your experience, what successes and challenges have arisen?</li> <li>• What existing or planned policies and projects examine links between <i>groundwater</i> and ecosystem services?</li> <li>• Is there potential to extend existing projects that consider water ecosystem services, to groundwater?</li> </ul>	<ul style="list-style-type: none"> <li>• Bob Humphries (Water Corporation, West. Austl., by videolink)</li> <li>• Mark Hamstead (Hamstead Consulting, NSW)</li> <li>• Neville Crossman (CSIRO, SA)</li> <li>• Jay Jasperse (Sonoma County Water Agency, CA)</li> </ul>

9.50am	Short break	
10.00 am	<p><b>What steps have the public and private sectors taken to value, protect and enhance water ecosystem services? (Part 2)</b></p> <p><b>Key questions</b></p> <ul style="list-style-type: none"> <li>• as for previous session</li> </ul>	<ul style="list-style-type: none"> <li>• Simone Maynard (South-East Qld Catchments, Qld)</li> <li>• Abdul Khan (Dep't of Water Resources, CA)</li> <li>• Gená Leathers (Dow, TX)</li> <li>• Neil Power (Dep't of Env't, Water &amp; Nat. Res., SA)</li> </ul>
11.20 am	Morning break	
11.40 am	<p><b>What steps have the public and private sectors taken to value, protect and enhance water ecosystem services? (Part 3)</b></p> <p><b>Key questions</b></p> <ul style="list-style-type: none"> <li>• as for previous session</li> </ul>	<ul style="list-style-type: none"> <li>• Allison Aldous (The Nature Conservancy, OR)</li> <li>• Lynn Scarlett (Resources for the Future, Wash., D.C.)</li> <li>• Cameron Wearing (South-East Queensland Water, Qld)</li> <li>• Pete Swallow (Alcoa, PA)</li> </ul>
1.00 pm	Lunch	
<b>Part 3: Looking forward: synthesizing lessons and charting a way forward</b>		
2.00 pm	<p><b>Roundtable discussion 1: Where is there potential to expand the use of groundwater ecosystem services concepts in the public and private sectors? How can this be encouraged?</b></p>	
3.20 pm	Afternoon tea break	
3.40 pm	<p><b>Roundtable discussion 2: What barriers are there to incorporating groundwater ecosystem services concepts in existing policies and business practices? To creating new ones? How can these barriers be addressed?</b></p>	
5.00 pm	<p><b>Adjourn: wind-down, cocktails, canapés, and informal discussion</b></p>	