

Leadership Wisconsin Signature Program – Group XVII
Seminar #9 – Natural Resources
Stevens Point, Wisconsin - February 21-23, 2018

Preparing for the Seminar

Seminar Overview: Seminar 9 is built around the topic of natural resources in Wisconsin, with a specific focus on water resources. Participants will be introduced to systems thinking and mapping and then apply that approach to better understand the complexities in balancing land and water use in Wisconsin's Central Sands.

Invited educators, lakeshore owners, municipal officials, producers and scientists will share their perspectives on the issues involved with water quantity and quality and highlight the challenges and opportunities for bringing together diverse stakeholders, working through difficult conversations, finding common understanding, and creating workable plans for action.

Guiding Questions:

What are the social, economic and environmental implications of regional water use now and in the future?

- Examine the role of community and personal values in shaping water use decisions.
How can social science inform natural resources/land use policy and programming?
- Explore successful models for integrating social, economic and environmental solutions for sustainable water use.

Required Seminar Pre-Work

The required seminar pre-work assignments and instructions found in this document provide seminar participants with activities required to establish baseline knowledge and context for the Natural Resources seminar.

Required pre-work includes one water use tracking activity, three readings, three videos and one webcast. A simple listing of the pre-work assignments will also be included on the seminar agenda.

A separate, optional pre-work / suggested reading / resource listing document will be provided to seminar participants. That document provides participants the ability to explore a depth and breadth of related issues and serves as a post-seminar reference. While that document does not contain required pre-work, participants wishing to enrich their seminar learning experience through additional preparation are encouraged to read more about their areas of interest.

***Questions about pre-work? Contact Linda Zillmer, Group XVII fellow
linda.zillmer@outlook.com***

Understand your connections to water

□ **1. ACTIVITY** – For one week, track your daily water usage using a simple one-page worksheet. Bring your completed worksheet to the seminar. Worksheet is available on page 5 (A.25) of the following document <https://www.epa.gov/sites/production/files/2015-08/documents/mgwc-gwa21.pdf>. It is called “Survey: How Much Water Do You Use?”.

Question: How much water do you use per week?

Question: Do the results surprise you? Why or why not?

□ **2. READING** – Read Jeremy Solin’s story: **Water Education: Cultivating Water Thinking**. Read the .pdf provided, or use the following link to the Wisconsin Academy, Waters of Wisconsin Blog <https://www.wisconsinacademy.org/blog/waters-wisconsin/water-education-cultivating-water-thinking>

Information, alone, isn’t enough to solve problems. That is where thinking comes in. Thinking is how we build meaning from information. Thinking turns information into knowledge. Mental models are knowledge. Being aware of how we think and how the world works, is systems thinking.

Think about your and your community’s connection with water and be ready to share your story over the course of the seminar

Question: What word describes your relationship with water?

Question: What is an important memory from your childhood involving water?

Question: What song comes to mind when you think about water?

Discover how ThinkWater and the Wisconsin WaterThinkers Network are applying Systems Thinking and meta mapping to build knowledge and engagement

ThinkWater is a national campaign supported by the U.S. Department of Agriculture to help people of all backgrounds and ages think and care deeply about water. It does so by applying systems thinking to existing water education and research efforts and by actively engaging people in a new way around water issues.

As the flagship state for ThinkWater implementation, Wisconsin is innovating, piloting, and researching new strategies and compiling resources and research to share with other states, regions, Tribal Nations, and territories in the United States. Primary components of ThinkWater implementation thus far include the Wisconsin ThinkWater School and the Wisconsin Water Thinkers Network, along with multiple overlapping outreach and professional development efforts engaging small and large groups and institutions throughout the state

Watch two short videos and one webcast in preparation for learning about Systems Thinking and mapping and applying these skills during the seminar.

Go to the ThinkWater website at <https://www.thinkwater.us/>

3. VIDEO (12 min.) Watch the video (shows a guitarist and a drummer drinking coffee in a coffee shop) included on the ThinkWater main page.

“A Little Film about a Big Idea: Systems Thinking”

4. VIDEO (4 min.) Watch the video found further down on the ThinkWater main page.

“Rethinking Water - USDA ThinkWater”

5. WEBCAST (1 hour) Watch the webcast found on *The Stewardship Network* website page that links to the December webcast. The webcast features Eric Olson and Jeremy Solin explaining their work and systems thinking and mapping using PowerPoint illustrations.

Exploring Local Group Capacity for Watershed Restoration: A Systems Thinking Perspective

<http://www.stewardshipnetwork.org/december-2017-webcast-exploring-local-group-capacity-watershed-restoration-systems-thinking>

Instructions: To access the webcast, you will be asked to provide your first and last name and email address. Your community is “Wisconsin”

After clicking on “submit” your access to the webcast will begin to process.

You may have to download Adobe Connect to run the archived webinar.

The ThinkWater campaign utilizes and promulgates a conceptual method that focuses on making distinctions, organizing systems, recognizing relationships and taking perspectives. It's a theory referenced by the acronym [DSRP](#), which stands for "Distinctions, Systems, Relationships and Perspectives."

"Wicked problems result from the mismatch between how real-world systems work and how we think they work," said [Derek Cabrera](#), a cognitive scientist who is the creator of the theory.

Cabrera developed DSRP to improve methods of thinking about complex systems. Using DSRP, distinctions are made between each component part of a system. In terms of a system, the components of each of its part are considered, as well as the role a given system plays in larger systems. When applied to water-related issues, DSRP helps simplify complex systems into components that can inform workable solutions.

Explore water issues in Wisconsin's Central Sands

Seminar participants will examine the role of community and personal values in shaping and balancing land and water use decisions. As context for learning about the science, perspectives and relationships evolving in the Central Sands, watch the video and read background on the history, stakeholders and issues.

6. VIDEO: (6 min.) FOX 11 Investigates: Ground water debate in central Wisconsin
July, 2014

<https://www.youtube.com/watch?v=9A4HMye9QyM>

□ **7. READING:** War Over Water in The Land of Plenty: Crops Clash with Lakes and Streams in Central Wisconsin (2016)

<https://www.jsonline.com/story/news/local/wisconsin/2016/09/03/war-over-water-land-plenty/89481060/>

* **WATCH** * “**An Historical Look at WI’s High-Capacity Well Development**” embedded in the article to see a time-lapse mapping of the growth in the number of high capacity wells across Wisconsin.

□ **8. READING:** Conflicts Thwart Reforms In State Water Policy: Wisconsin is Wrestling Over Groundwater Protections (2016)

<https://www.jsonline.com/story/news/local/wisconsin/2016/09/04/conflicts-thwart-reforms-state-water-policy/89482796/>