

Drought, Tree Rings, and Water Resource Management: Assessing Scientific Outreach of the Western Water Assessment (WWA)

Project Team Members:

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Project Goals

In 2002, gaged flows were so low that a number of Front Range water managers became interested in exploring how tree-ring data could be used to answer questions such as, “How often have flows been this low?” and “Is the 1950s drought an adequate baseline for drought planning?” We (first Jeff, Connie, and Robin Webb, and later Brad Udall) started to work collaboratively with many of you on issues related to drought, tree rings, and water resources about that time.

We learned an enormous amount about the challenges of water management, while you learned enough about tree-ring reconstructions of streamflow to begin using this information in water resource planning and management. Our collaborations with you and your applications of

tree-ring data have become a model for other water managers considering the use of tree-ring data, and under the auspices of the Western Water Assessment, we’ve held a series of technical workshops to provide information and application examples to a broad range of resource managers.

We are now conducting an evaluation of these collaborative efforts to better understand how tree-ring data have been incorporated into operations, hydrological models for water supply, and/or decision-making processes of your organization. We are also interested in learning more about what additional tree-ring or climate information might be useful to water managers, utilities, and engineers.

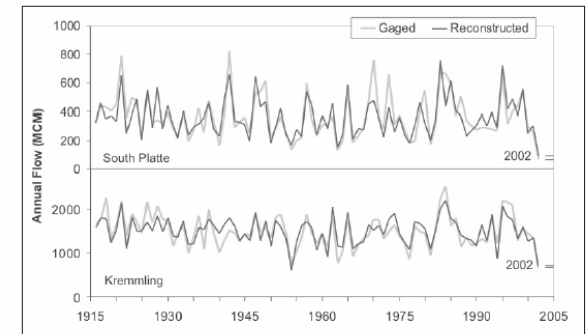
As part of this evaluation project, we are conducting interviews and surveys with past collaborators and workshop participants. In the process, we hope to learn how collaborators and workshop participants have used tree-ring information, the degree to which paleoclimatic data have been assimilated into decision-making about water resources, and any challenges that have been encountered in the process.

The information from this project will be used internally within the WWA to improve future workshops and climate information delivery, as well as in publications related to the application of scientific information for public use. All information shared during the interviews and surveys will be kept confidential and not associated with specific names or organizations.

Sample Interview Questions/Topics

As part of the interviews and surveys we will be asking you to share information about how you have

used (or not used) the tree-ring data and reconstructions. We welcome any and all information you see as relevant to our goal of making these data as useful and applicable as possible. We also welcome “hands on” demonstrations of how you are using tree-ring data.



Sample questions/topics include:

- How do you use tree-ring reconstructions of streamflow in your operations or planning? What, if anything, has this changed about your planning processes or procedures?
- Who in your organization uses or considers tree-ring data in planning, modeling, etc.? Have you shared the information from the workshops with other individuals in your organization?
- What opportunities and challenges does the use of tree-ring information present for you and the mandates of your organization? What other information would you like to see in future workshops?

We look forward to working with you on this evaluation project. Please contact Jennifer Rice with any questions: jlrice@email.arizona.edu