

Ongoing and New Projects

Part 2

Feedback



Assessment of Documented Needs for Climate Information in the Missouri River Basin

J. Berggren, D. Kluck, E. Gordon

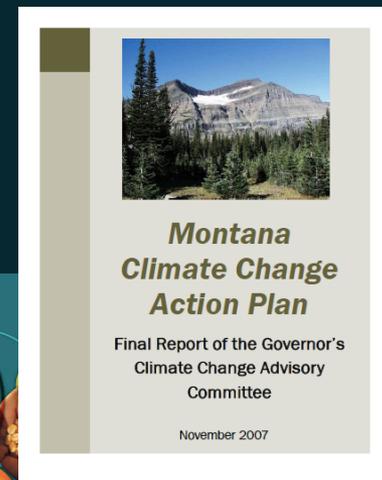
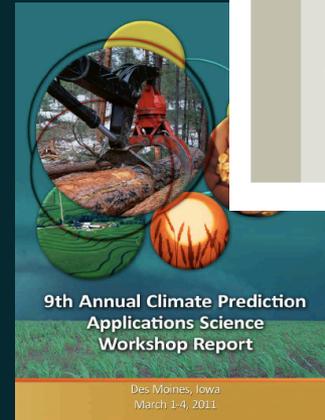


Year of Publication	
2001	1
2002	0
2003	0
2004	0
2005	3
2006	1
2007	3
2008	3
2009	7
2010	4
2011	21
2012	10
TOTAL	53

Sectors	
Agriculture	8
Drought Planning	7
Fish and Wildlife	4
Flood Control	13
Land Management	3
Multiple	10
Tribes	3
Water Management	8
TOTAL	56

Examples of prominent needs:

- **Additional plains snowpack monitoring, especially from the flood control sector.**
- **Better federal agency coordination, in addition to improved coordination with states, tribes, and local communities.**
- **Messaging and communication of climate-related information from trustworthy sources, and from multiple media avenues (television, radio, social media, etc.).**



- **USACE should give greater weight to recent variability and extreme events, in regards to reservoir planning and operations.**

Feedback



Climate Change Preparedness Among Tribal Communities in the American West

K. Cozzetto, J. Simmonds, J. Nania

Accomplishments to Date

- Native Communities and Climate Change Adaptation Database
<http://www.tribesandclimatechange.org>
- Review of Navajo Drought Contingency Plan
- Navajo Climate Change Adaptation Report
- Ute Mountain Ute Mancos River Restoration Grant



Climate Change Preparedness Among Tribal Communities in the American West

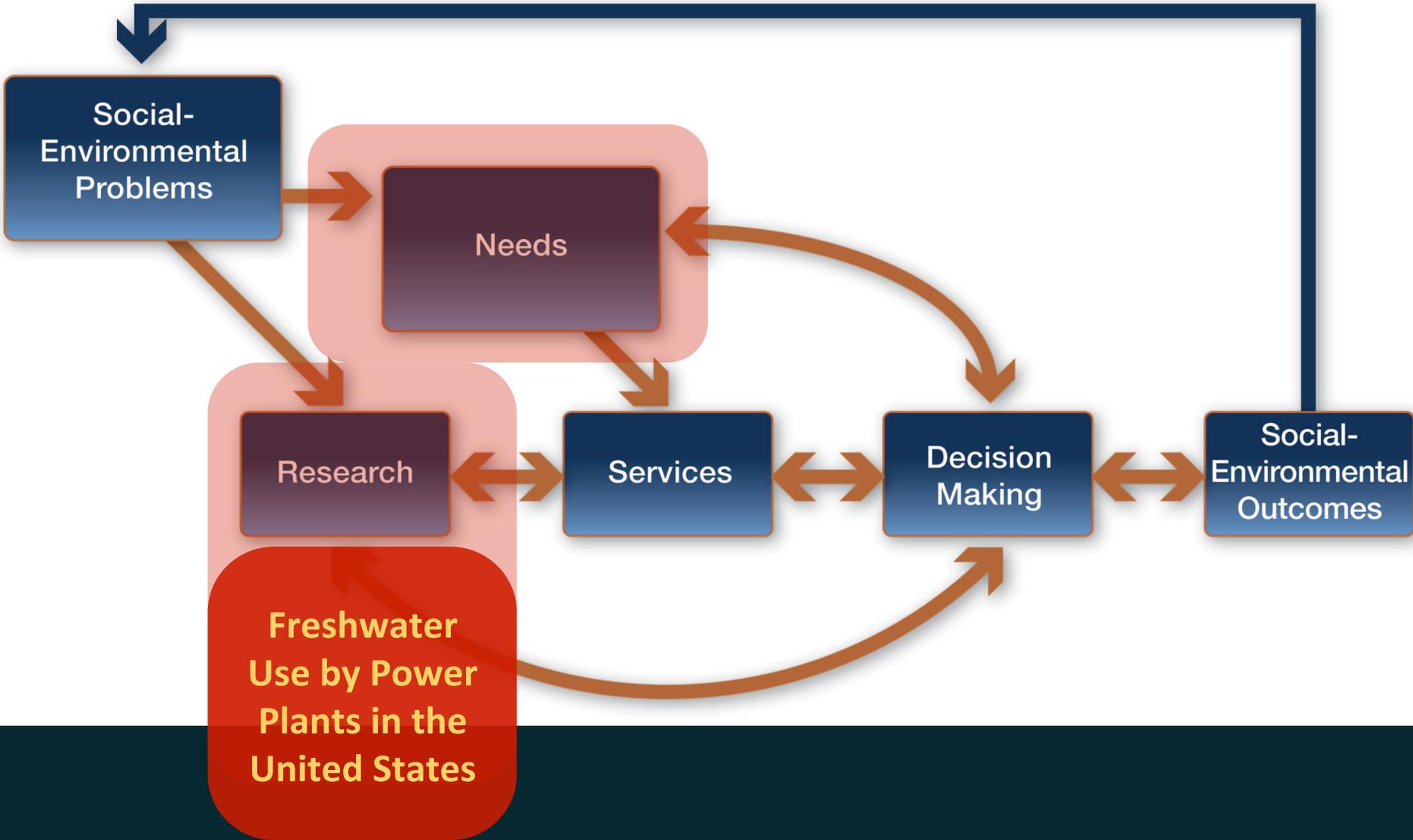
Ongoing Work

- Final Project Report
- Article for Special Issue of *Climatic Change*
- White Paper on RISAs and Tribal Climate Services



Drought on the Navajo Nation, photo courtesy CLIMAS/Univ. of Arizona.

Feedback

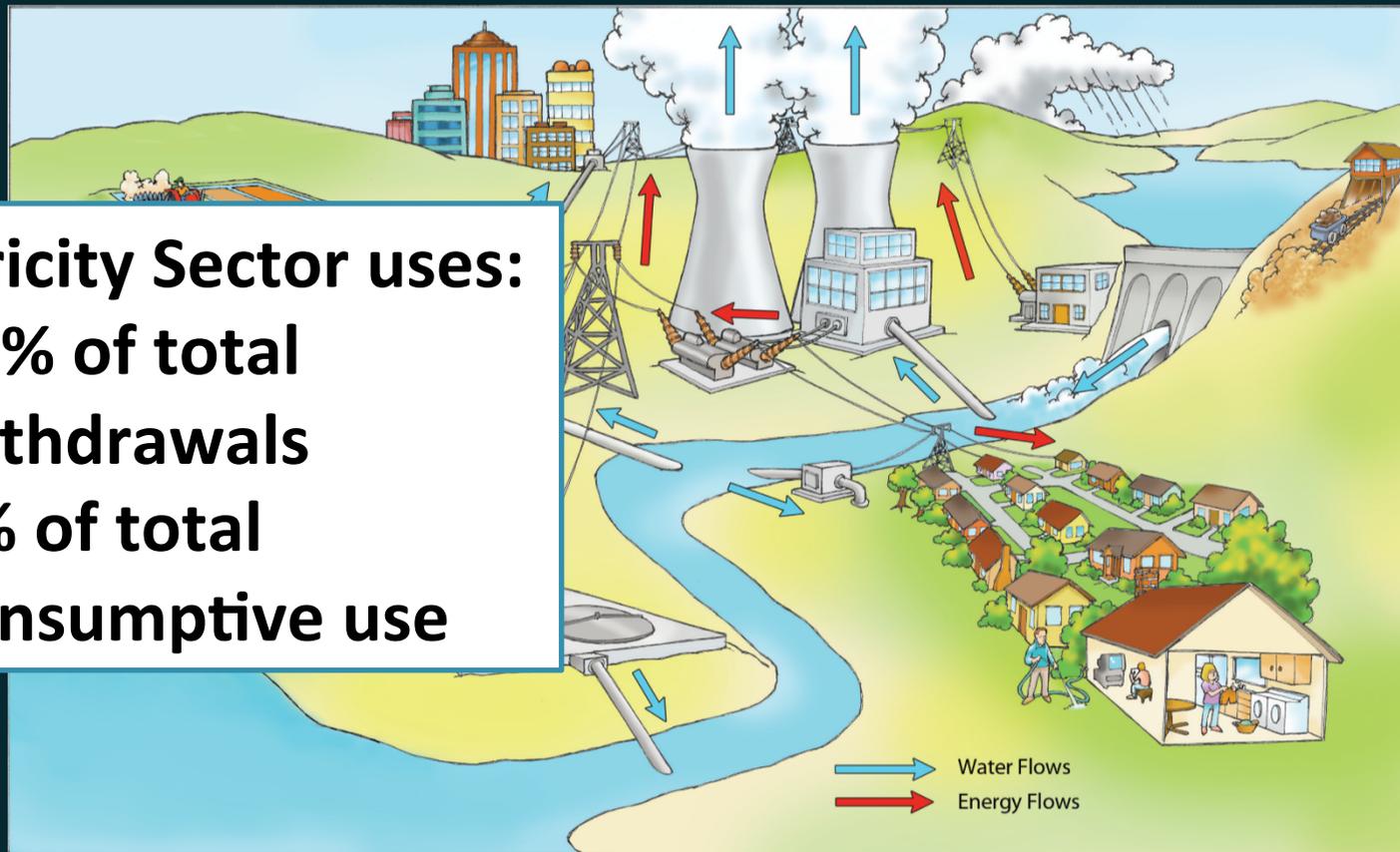


Water, Energy, and Climate Change: Freshwater Use by Power Plants in the U.S.

K. Averyt and J. Meldrum

Electricity Sector uses:

- 41% of total withdrawals
- 5% of total consumptive use



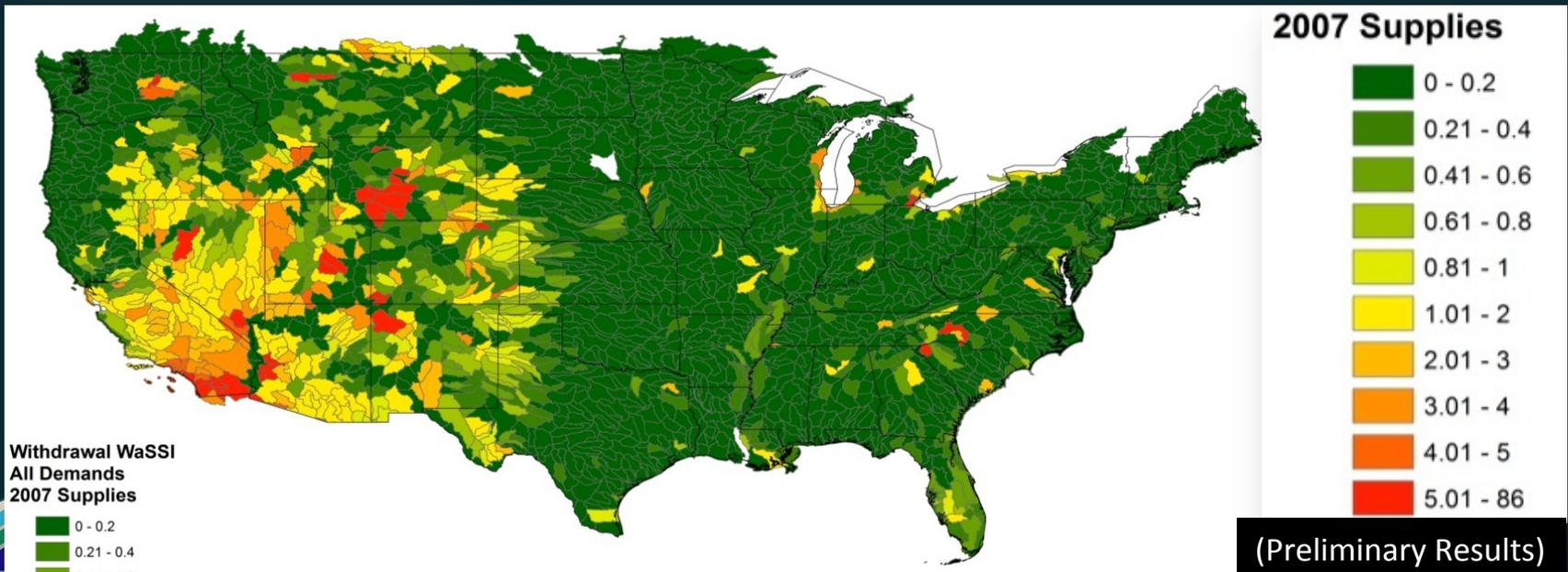
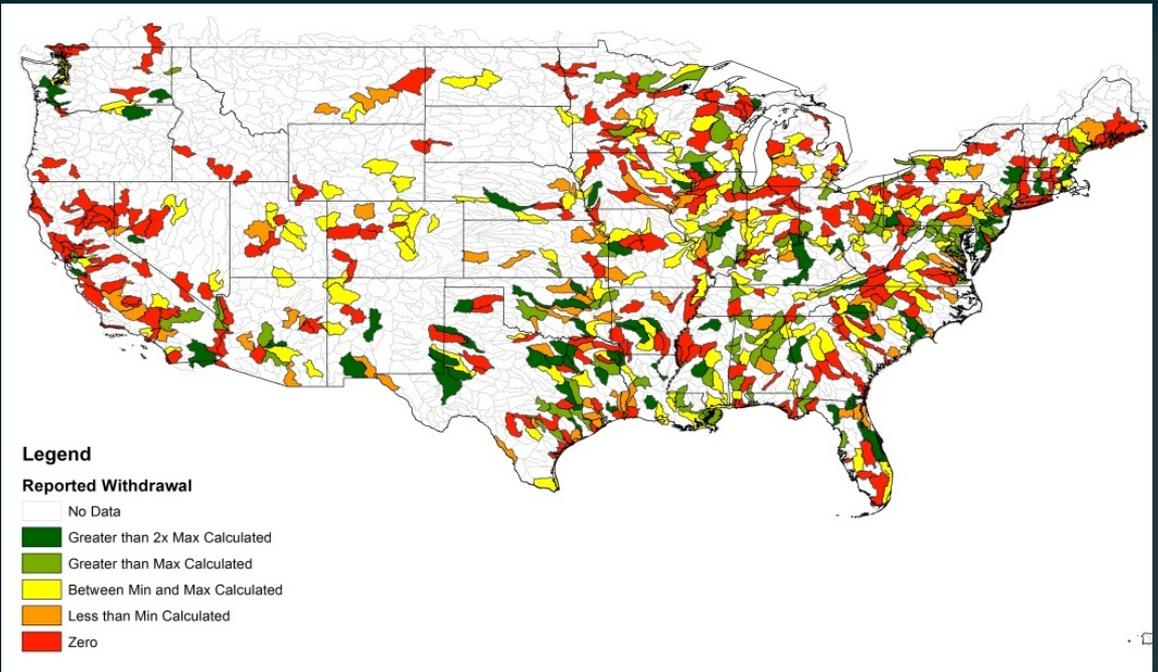
Source: DOE 2006



Freshwater Use by U.S. Power Plants

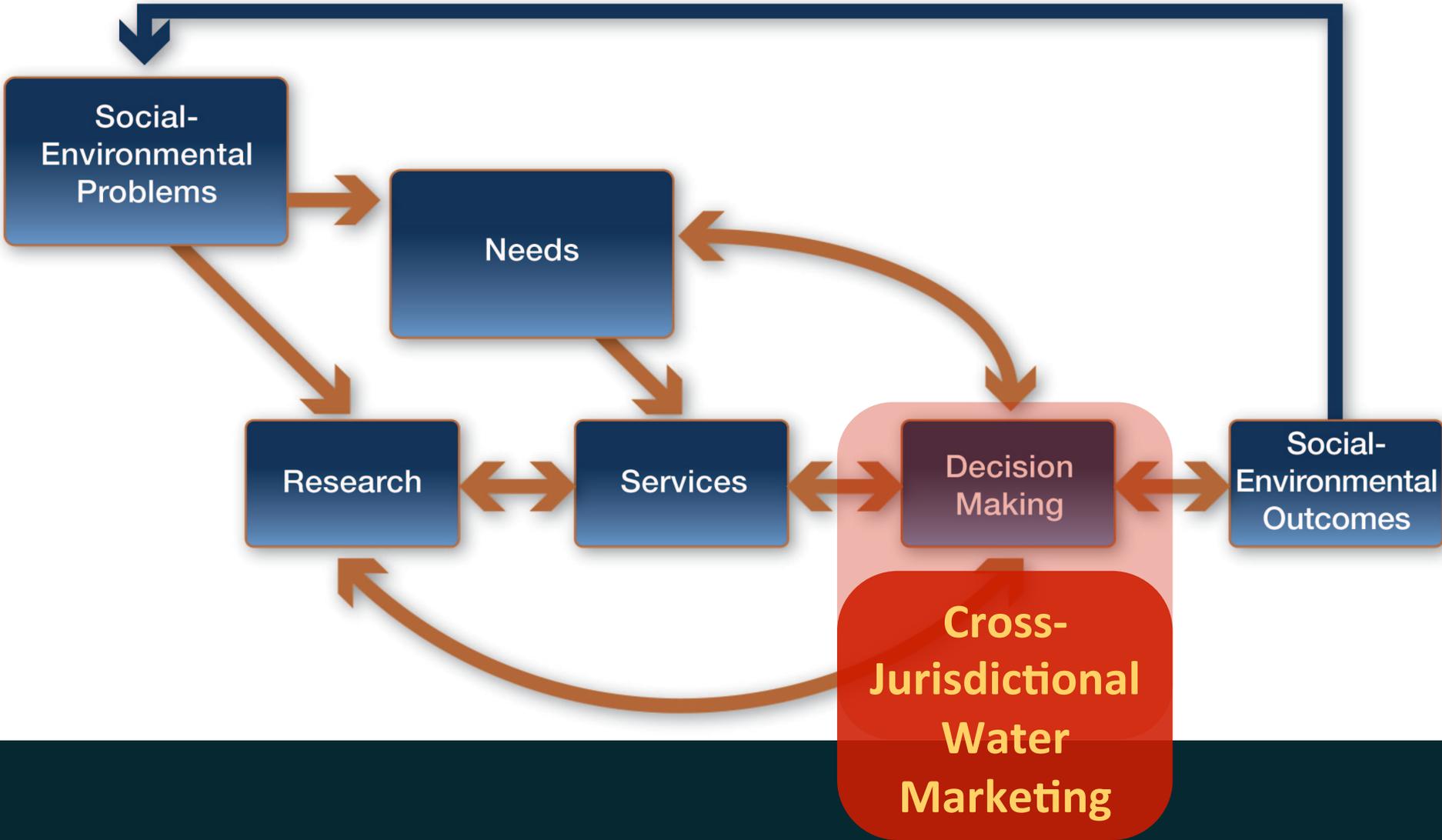
ELECTRICITY'S THIRST FOR A PRECIOUS RESOURCE

A Report of the Energy and Water in a Warming World Initiative



(Preliminary Results)

Feedback



Cross-Jurisdictional Water Marketing

D. Kenney

Purpose of Project

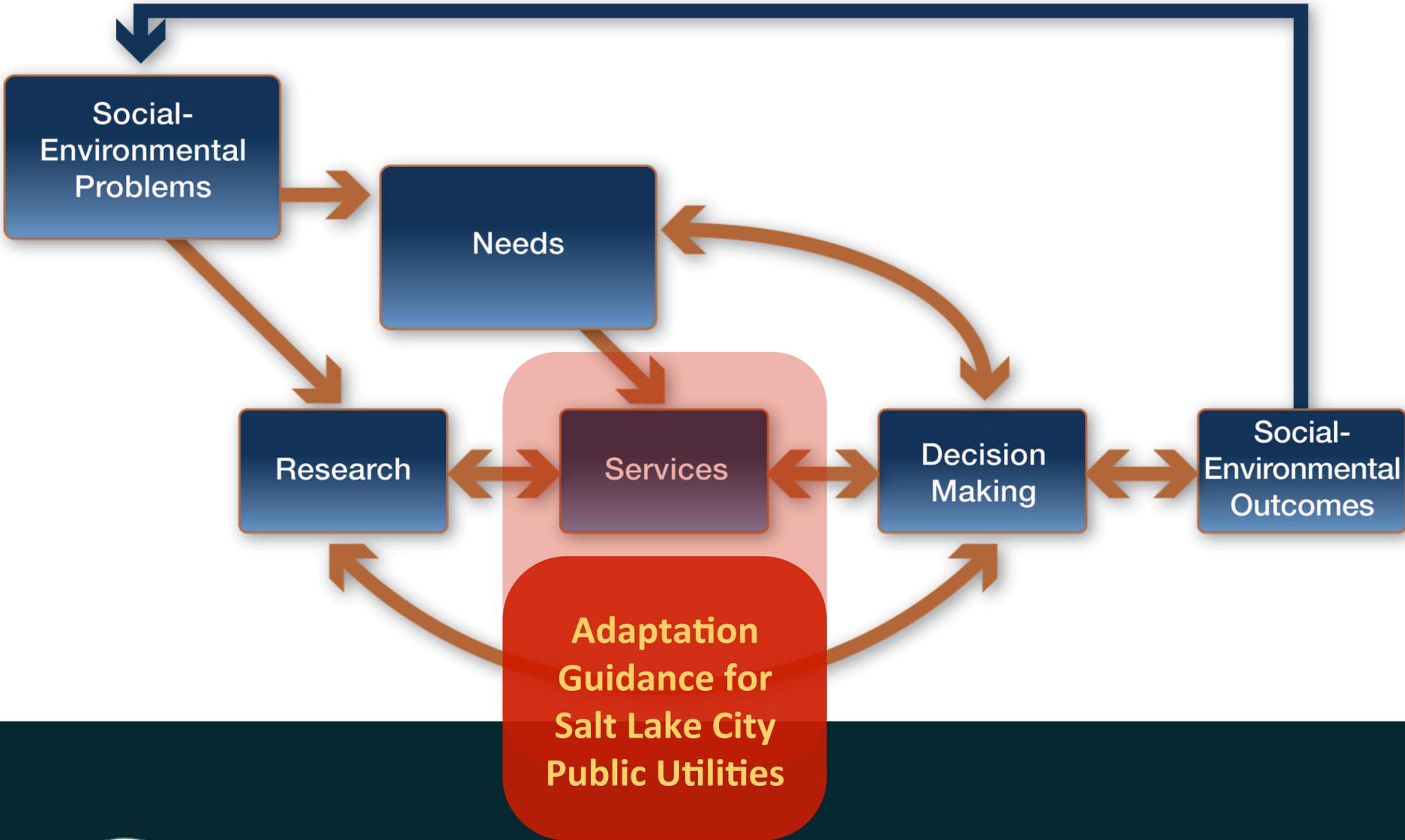
- Water markets are a proven risk management strategy
- An expansion of markets could enhance the effectiveness of this strategy
- To this point, key jurisdictional boundaries have limited this expansion
- This is an increasingly hot and polarizing topic

Cross-Jurisdictional Water Marketing

Research Plan

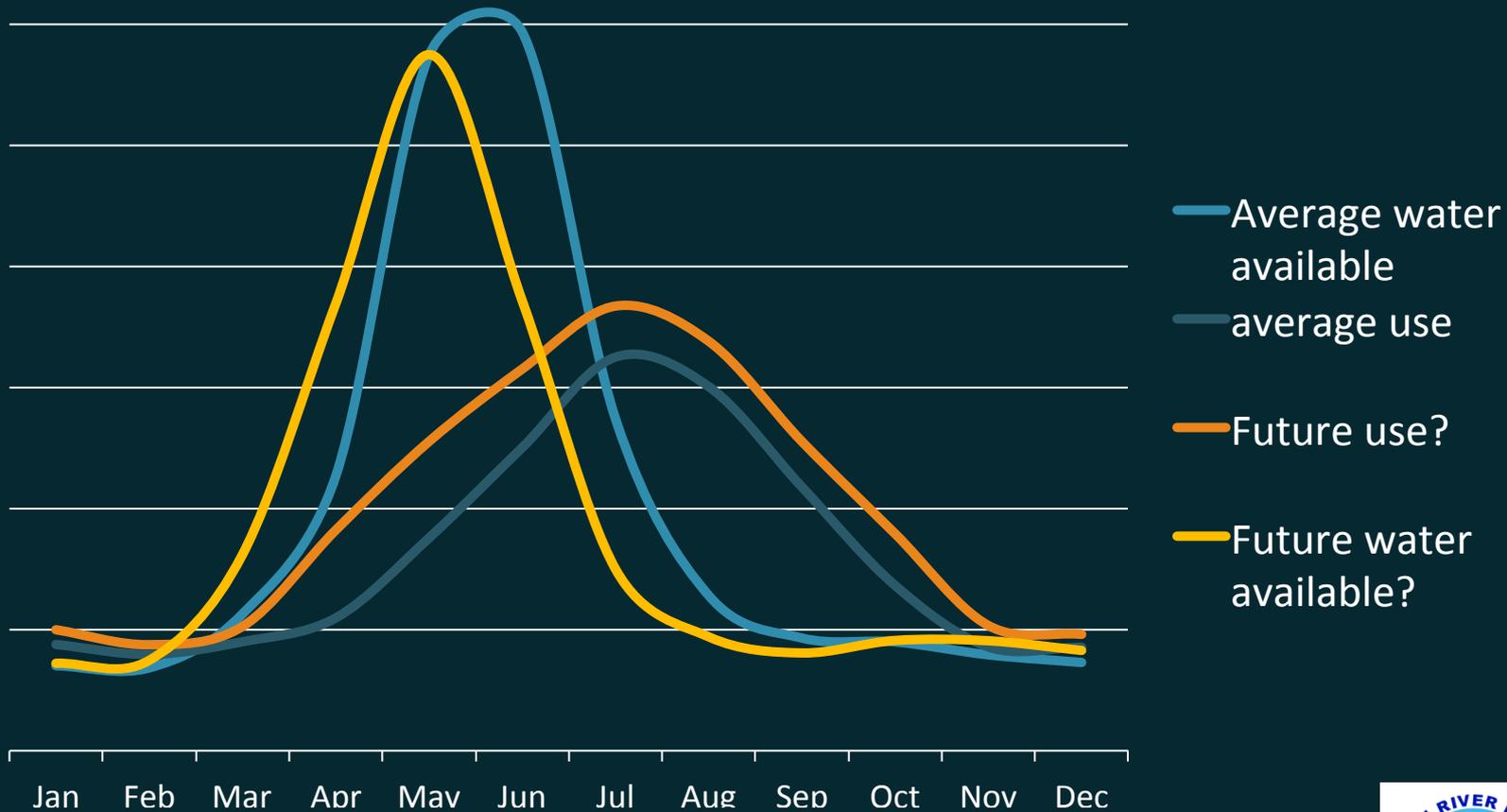
- Inventory and review past and present examples of interstate marketing proposals, identifying key issues, trends, and lessons;
- Inventory and review proposed (but not implemented) interstate proposals, identifying key issues, opportunities, and constraints;
- Coordinate and integrate, where applicable, the findings from the interstate marketing investigation to ongoing NRLC work focused specifically on the role of tribes and tribal water rights in a potential new era of water marketing in the basin.

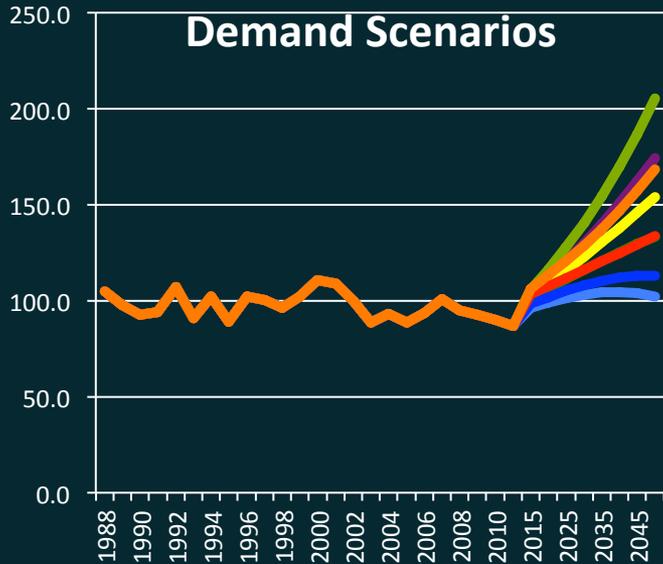
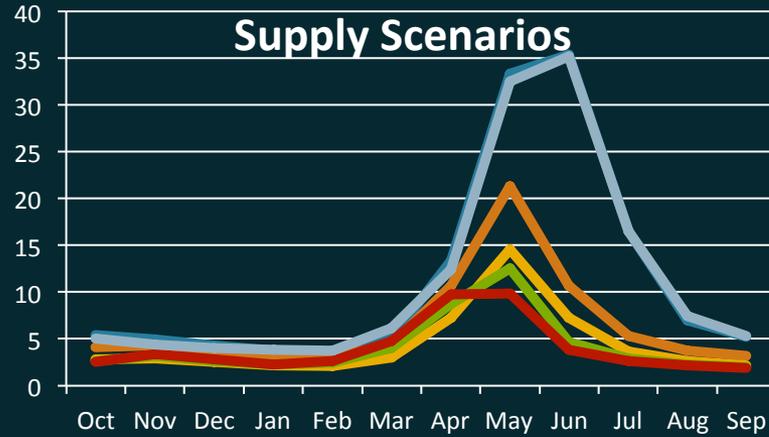
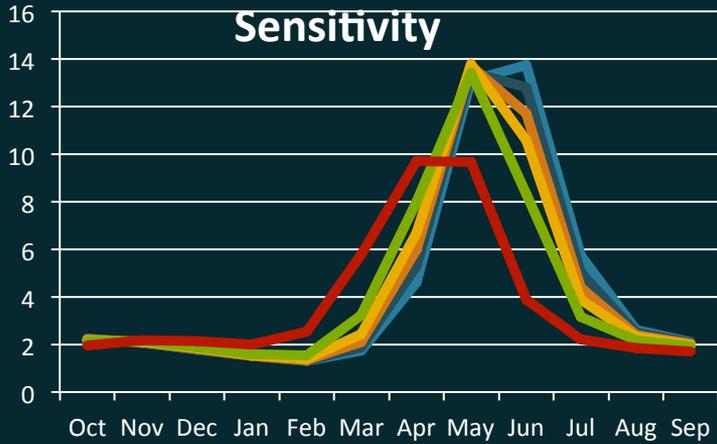
Feedback



Climate Adaptation Guidance For Salt Lake City Public Utilities

T. Bardsley and Collaborators

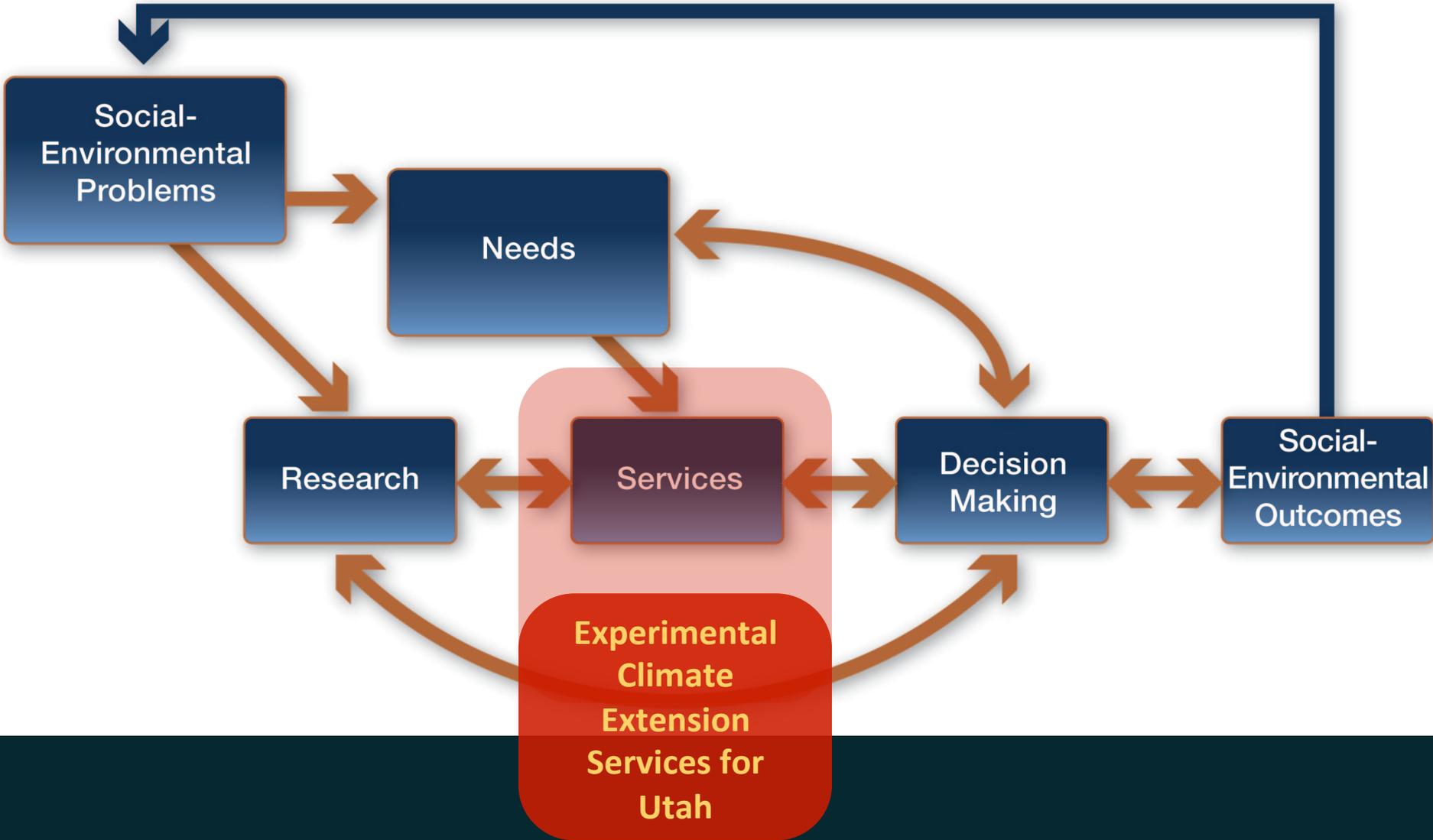




Leveraged Work:

- Systems Modeling: U. of Utah
- Regional Climate Scenarios: U. of Utah
- Operational optimization modeling: U. of Mass & RFC
- Adaptive Strategies

Feedback



Experimental Climate Extension Services for Utah

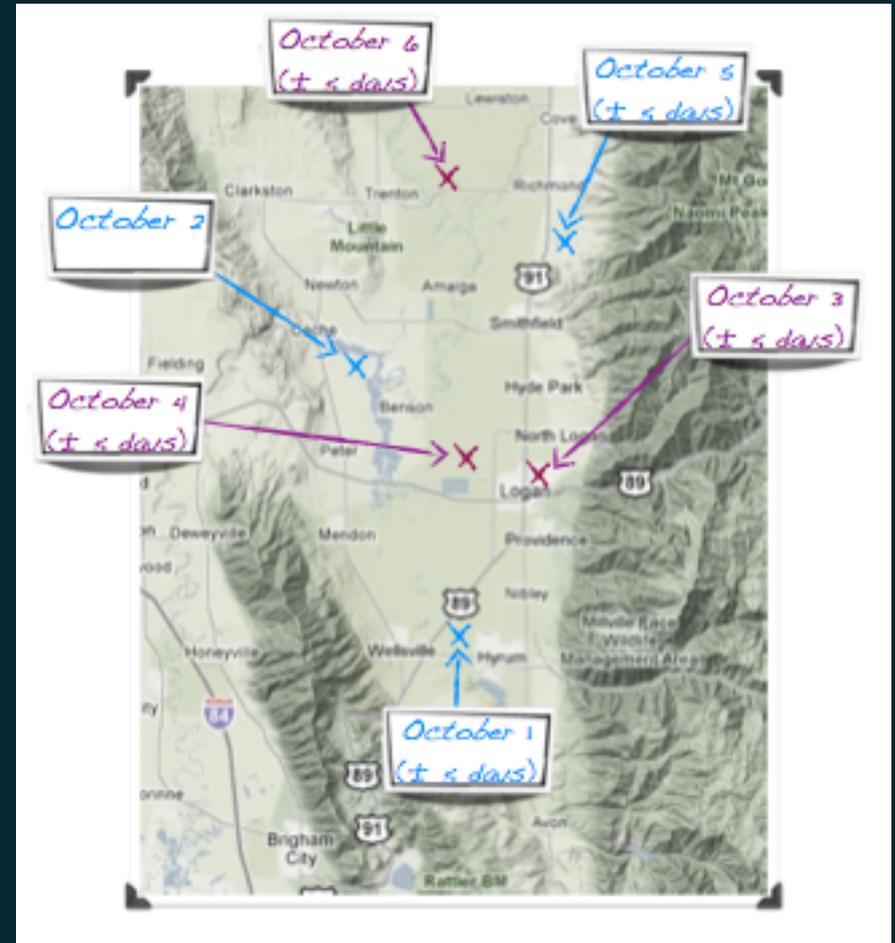
R. Gillies, R. Davies

- Work with USU Climate Center on potential development of climate extension position
- Develop experimental climate services intended to build stakeholder network and identify opportunities for continued work

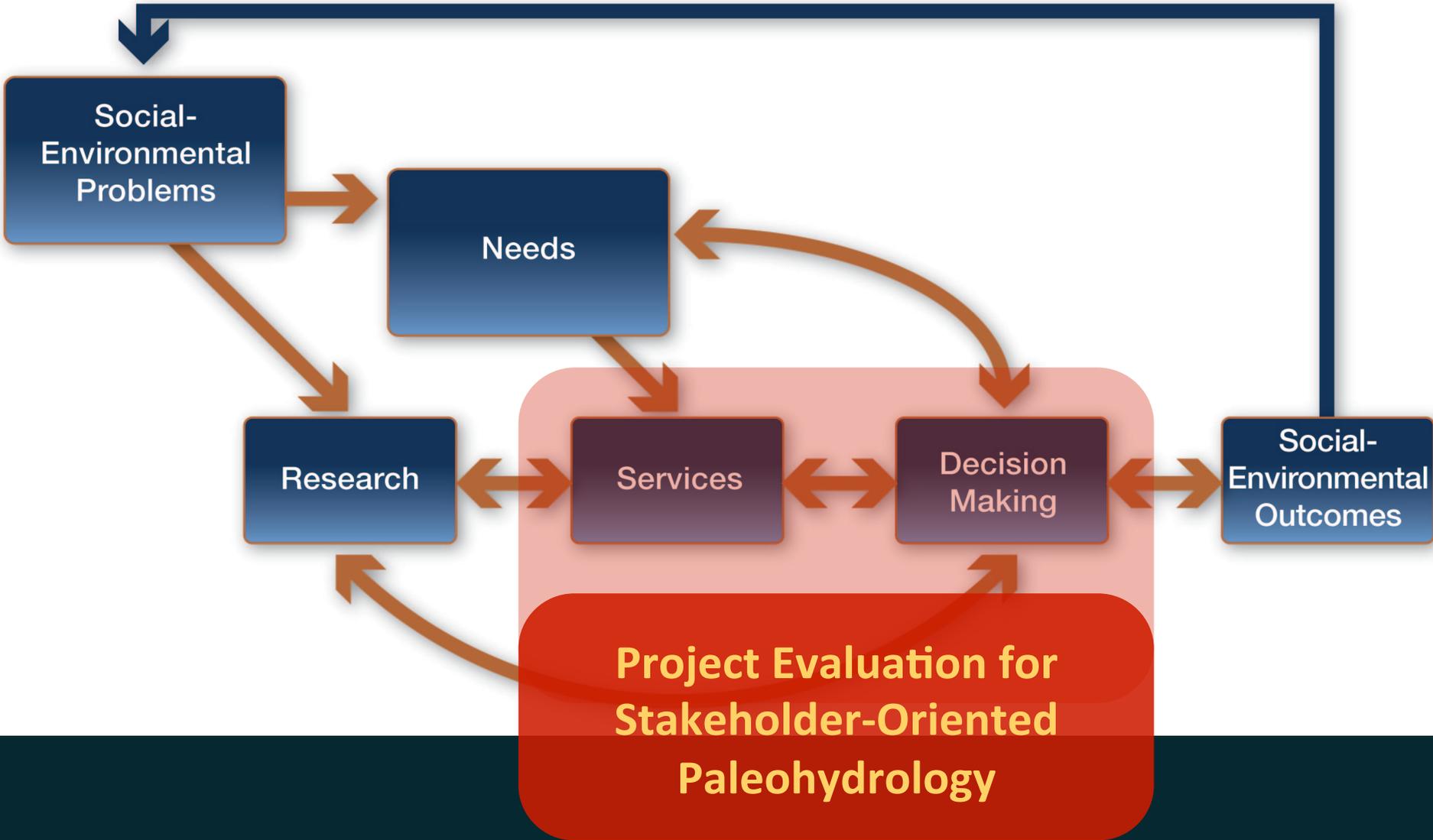


First Freeze Forecasts

- Request from Utah Agricultural Experiment Station
- Analysis of historical data and NOAA Climate Forecast System (rather than weather)
- Ag Station saved \$64,000 by leaving fruit longer



Feedback



Project Evaluation for Stakeholder-Oriented Paleohydrology

T. Bardsley

Overview

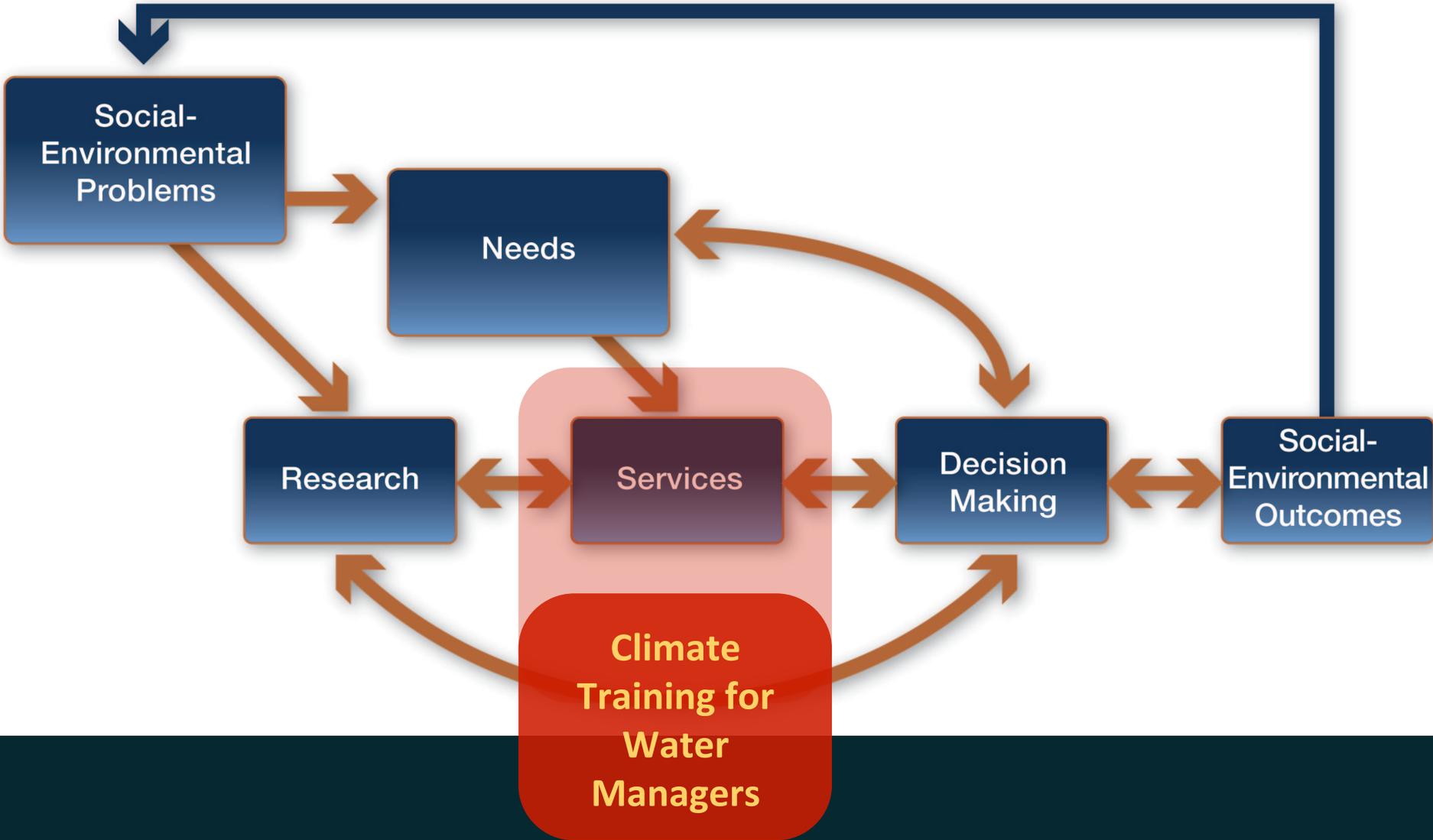
Documenting and interactively improving delivery and utility of paleohydrology data from USU/BYU project for Wasatch Front water Management



Objectives:

- Track stakeholder engagement and interactions from preliminary stakeholder meetings to data delivery and application.
- Understand the current use of climate data to inform water resource planning on the Wasatch Front, and the broader context for that planning.
- Explore institutional and other barriers to incorporation of new information such as tree-ring paleohydrology in planning and policy.
- Facilitate adjustments to science delivery and stakeholder engagement during an ongoing research project, rather than after completion.
- Advance understanding of research-to-operations processes.

Feedback



Climate Training for Water Managers

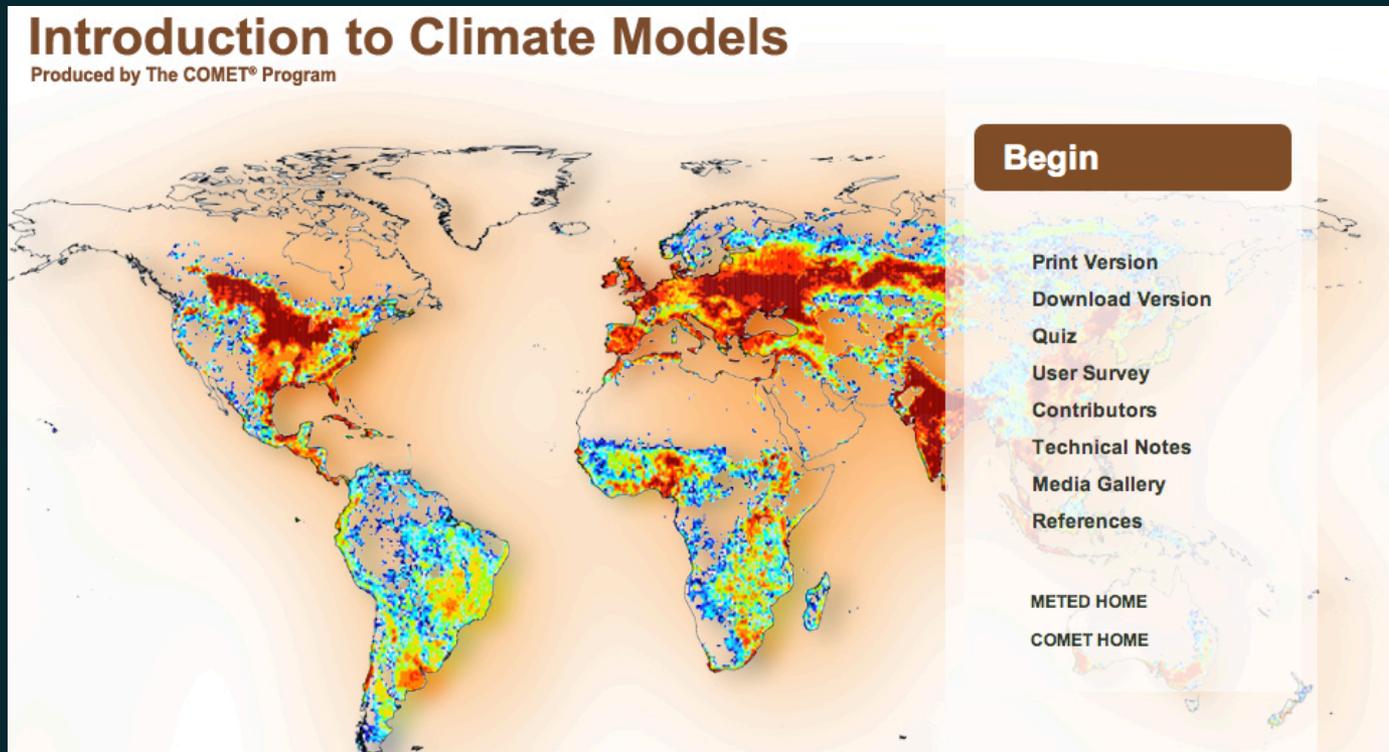
L. Brekke, M. Kelsch, S. Gangopadhyay, E. Gordon

- Pilot effort to develop training curriculum for water managers to incorporate climate change information



Climate Training for Water Managers

- Two online learning modules nearly finished
- In person-training sessions set for spring 2013



Introduction to Climate Models
Produced by The COMET® Program

Begin

- Print Version
- Download Version
- Quiz
- User Survey
- Contributors
- Technical Notes
- Media Gallery
- References

METED HOME
COMET HOME

The screenshot shows a world map with a color-coded overlay representing climate data. The map is divided into regions, with colors ranging from blue (cooler) to red (warmer). The overlay is most prominent over North America and Europe. The interface includes a navigation menu on the right side with a 'Begin' button at the top, followed by links for 'Print Version', 'Download Version', 'Quiz', 'User Survey', 'Contributors', 'Technical Notes', 'Media Gallery', and 'References'. At the bottom of the menu are links for 'METED HOME' and 'COMET HOME'.

Final Discussion