



Knowledge Transfer from Academia

Genevieve Maricle

May 17, 2007

Demand

- Congress: "We [in Congress] are in desperate need of policy assistance. What are the ways - what are some of the things that we could do - to increase the policy relevance of scientific research on global change?"

-Member of Congress, 1989

- How soon before we get information we can use?

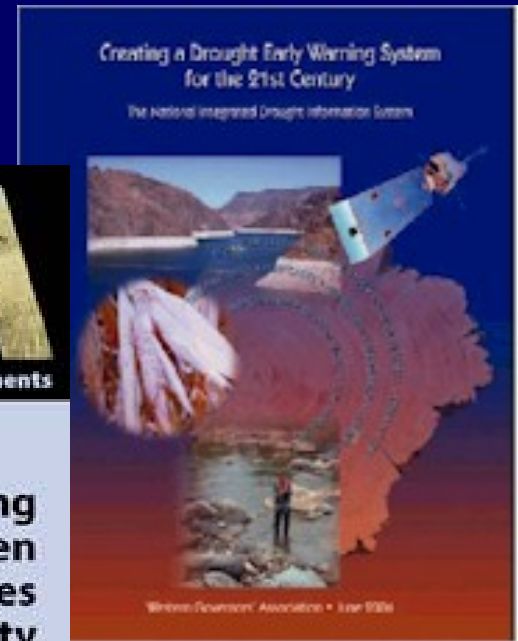
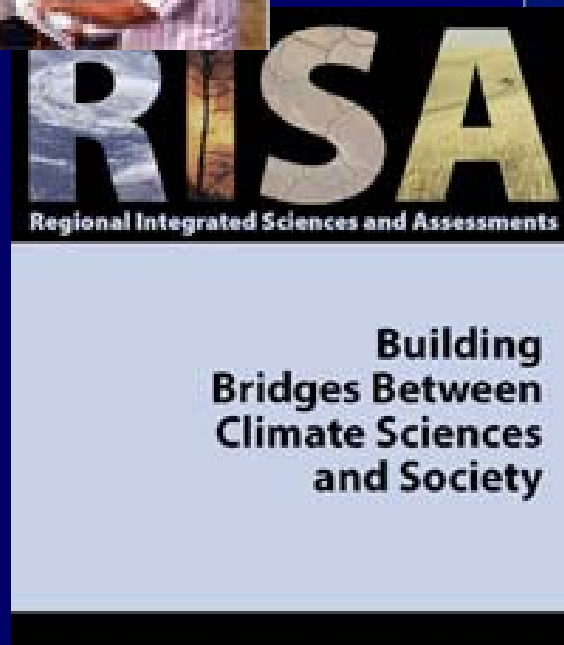
How?



Just “doing research” on a problem of societal importance says nothing directly about whether or under what conditions the research can effectively contribute to addressing **that problem** (Bozeman and Sarewitz, 2005; Sarewitz et al., 2004)

- What does an effective, relevant research require then?
 - Change in approach: from impacts to decisions
 - Change in our process

Academics on board



The Next Step



Our goal is to synthesize, articulate, and spark discussion on a **more general approach and process for setting research priorities** to create usable science.

The Approach

- Reconciling Supply and Demand
- Involves:
 - Interacting with Users and Characterizing Demand
 - Characterizing Supply
 - Figuring out overlay

Characterizing Demand


■ Questions:

- Is there a demand for this area of research? Who wants it? Why?
- What are their primary concerns? Most pressing decisions? Problems that they face? How does climate fit into those?
- Greatest concern re: vulnerability and/or climate change?
- What conversations can't they have?
- What is the problem?
- Etc.

■ Traps to avoid:

- Rhetorical vs. Substantial?
- Do priorities reflect actual decision maker needs or assumed decision maker needs?

Characterizing Supply

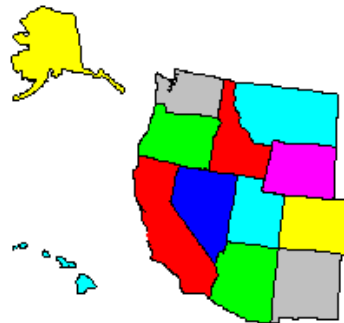

Climate Services Clearinghouse 

Overview Background Search Browse Suggest Contact

Welcome to the Climate Services Clearinghouse – your access point for any climate service you may desire. With our search functions, you can either locate a specific service, explore all services that meet a particular set of criteria (ie regional, weekly, prognostic, precipitation services), or you can browse all services through the categories listed below. To browse, select a category below: time scale, space scale, product type, climate event and or/feature, or source agency. To locate a specific service or to search by criteria, select the "Search for Services" tab above.

We are in constant pursuit of a more complete site as we are fully aware that some climate services and products are missing from our clearinghouse. Please contact us with suggestions and additions at any time. Contact us by selecting the "Suggest a Service" tab above or by clicking here.

- [Temporal](#)
- [Spatial](#)
- [Organizational](#)
- [Type of Product](#)
- [By Climate Trend or Characteristic](#)



Western Regional Climate Center

Characterizing Supply: Questions

- What knowledge already exists?
- Is it being used? If not, why not?
- Will additional knowledge make a difference to decision making? How?

RSD Framework - Missed Opportunity Matrix

		Demand: Can user benefit from research?	
		Yes	No
Supply: Information being produced?	Yes	Sophisticated users taking advantage of well-deployed research	Unsophisticated users, institutional constraints, or other obstacles prevent information use
	No	Opportunity to shape research agenda to meet needs	Non-user

Questions

- Is there a demand for this area of research? Who wants it? Why?
- What are their primary concerns? Most pressing decisions? Problems that they face? How does climate fit into those?
- Greatest concern re: vulnerability and/or climate change?
- What conversations can't they have?
- What is the problem?
- What knowledge already exists?
- Is it being used? If not, why not?
- Will additional knowledge make a difference to decision making? How?

Questions

- What is the problem?
- How do scholars and decision makers view this?
- What will the interface between scholars and decision makers look like?
- Who will manage it?
- Can it be sustained and iterative?

Practical Challenges

- Little monetary support for this type of sustained interaction
- Little substantial (as opposed to rhetorical) support for this approach
 - Agency Culture
 - Academic Culture
 - Culture

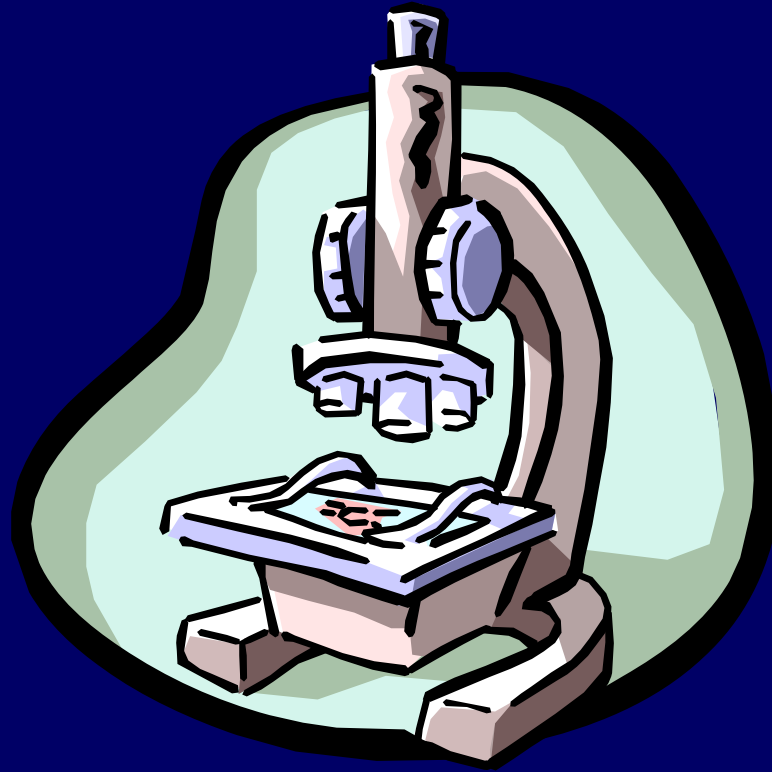
Agency Culture

- “No, We don’t interact with social science program managers or social scientists.” - NSF natural science PM
- “Social scientists don’t take this [the climate problem] seriously.” -NOAA natural science PM
- “Every natural scientist thinks ‘human dimensions’ is tremendously important, as long as it’s separate and doesn’t influence the course of climate science.”

Academic Culture

- In recent years when I took a look at what I actually did on a day-to-day basis, I saw myself writing grants, publishing papers, and generally acting exactly like those established researchers concerned about the quality of their science and autonomy and thus preserving the status quo. In short, it seemed to me that if there was indeed a revolution going on towards a more socially-responsive science, it had yet to have much influence" on our own field (Pielke, 2005).

Culture



Conclusions for practice

- Begin forming research question with dialogue - with needs and problems.
 - Impacts might not be an appropriate proxy for needs.
- Problem focus can lead to better integration
- This might just involve sacrifice and certainly a change of mode.

Questions?

