

January 18, 2007

AAAS Meeting, 2007

Overview of Symposium Participants and Presentations

Collaboration for Water Governance: From Local to Global

Moderated by Bob Wilkinson

Water Policy Program, Bren School, University of California, Santa Barbara

www.bren.ucsb.edu/people/usernew.asp?user=wilkinson

In Order:

Sara Hughes

Bren School of Environmental Science and Management, University of California, Santa Barbara

Presentation Title:

Why Collaboration? Exploring dynamic water governance and the need for connections

Abstract:

As a resource, water presents particular challenges to those who govern its use, receive the benefits of its use, and have a vested interest in the sustainability of its use. Water can simultaneously act as a commodity and a human right; a primary input to agricultural, urban, and natural systems; and a vital component of the foundation of human life and livelihood, as it continually renews us and itself. As a dynamic, multi-faceted resource it seems appropriate to strive for dynamic, multi-faceted governance of its use. Historically, however, this has not been the case. How can collaborative decision making help move water governance forward? Some lessons can be learned from recent groundwater policy making at the state level in Michigan. Despite a wide diversity of interests represented in the politically appointed Groundwater Conservation Advisory Council, the network of policy and science leaders in Michigan were able to formulate useful policy recommendations. The legislation that resulted links groundwater withdrawals to the effects on the surface water systems it supports, specifically coldwater trout populations, through a state-administered permitting system. The success of the Council resulted in the state developing additional tasks for them in the future; however, the consequences of the policy for the environment and economy in Michigan are yet to be seen. The goal of our work here, and in the future, is to highlight these and many other links that must be made when working toward collaborative and sustainable water governance; links that will allow a fuller integration of the values of and for water.

Dave Huitema

Institute for Environmental Studies, Vrije Universiteit Amsterdam

www.ivm.falw.vu.nl/People/index.cfm/home_file.cfm/fileid/8636EF18-A610-4503-8BD68F873A59B1CC/subsectionid/8A881162-ACB3-4B58-BEE32E694820B2EA

Presentation Title:

Adaptive water governance: Assessing adaptive management from a governance perspective

Abstract:

This article assesses the idea of adaptive water management from the perspective of the literature on governance. First we answer the question which ideas on institutions are embedded in the adaptive management literature. Secondly, we analyze what the (environmental) governance literature tells us about the potential feasibility and effectiveness of adaptive management in water management. Finally we focus on the issue of what we can do to make adaptive management in water management more feasible and effective. Our analysis points out that adaptive management is assuming collaboration in a polycentric governance system, active stakeholder participation, an experimental approach to resource management governance, and an approach at the bioregional scale. These ideas are largely consistent with the evolving thinking in the governance literature, although the governance literature predicts various problems with elements of adaptive management. Particularly, attention is called to the complexities

associated with collaboration, the difficulty of experimenting in a real world setting, and the politicized nature of discussion on governance at the bioregional scale. Some of these problems are fundamental, while others may be remedied. There is a distinct need for knowledge on the creation and maintenance of collaboration and boundary work to make adaptive management a more feasible approach in reality.

Joan Rose

Center for Advancing Microbial Risk Assessment, Michigan State University
www.fw.msu.edu/people/RoseJoan/index.htm

Presentation Title: *Moving the Political Will: The Role of Environmental Monitoring for Linking Science and Policy*

Abstract:

The reef was dying. The high nutrient loads that were detected were the likely cause, but there were no likely solutions. While the unique aquatic environment brought scores of tourists and their money to the small patch of lands positioned strategically and precariously in the US southeast coastal ecosystem, more people, more sewage and the billion dollar price tag for improving the wastewater system loomed as a seemingly insurmountable challenge. Initial probes revealed additional hazards: human enteric viruses, hepatitis A virus, and noroviruses were detected in almost 80% of the locations. These viruses were flushed down nearby toilets and were able to reach the waters within 4 to 24 hours. For the affected citizens, the identification of these human health risks made the price tag to begin to "fix" the water quality and sewage treatment system to begin to be seen as not only reasonable but necessary. The river turned red. Concerned citizens soon brought out the news media and the police. One county blamed another, yet the watershed knew no political boundaries: rain, community sewage outfalls, farms and wildlife all shared the blame and the risks. This type of political battle is not uncommon within watershed- and water quality-management. While solutions may eventually be found, the political, social, and environmental damage which occur in the process may be irreparable. What is the solution? With an early warning system in place, strategies for fixing the worst first and identifying key hot spots, before serious damage is done, would move communities forward and help minimize the threshold of environmental damage it takes to move the political will. This paper proposes such a model and evaluates criteria for success.

Jennifer McKay

Centre for Comparative Water Policies and Laws, University of South Australia
www.unisanet.unisa.edu.au/staff/Homepage.asp?Name=Jennifer.McKay

Presentation Title: *A proposed virtual water trading council: Building institutional frameworks at the international level to reduce poverty*

Abstract:

Water availability has multiple ethical dimensions and the management of real water and virtual water (water converted into food and electricity) are both relevant when addressing the issues. The two need to be considered as a whole with the notion of importing some food replacing growing of it and the saved water being used to improve sanitation and to decrease mortality rates.

This paper proposes a Virtual Water Trading Council to be the mediator between nation states in their quests to provide their citizens with safe clean water and sanitation and lift the burden of poverty.

There are many indirect sources of support for this body in international law and under treaties and it needs to be within the extensive multi lateral trading framework of the WTO.

The charter of it would require bilateral agreements between neighbours to co operate in real water management and food production, tradeoffs so that water uses are transparent, to apply the Helsinki rules and equitable utilisation and have a human rights based approach. Any countries seeking the concessions to not grow some food would need to have a plan on how they will apply the saved water to redress sanitation problems.

Discussant:

Oran Young

Governance for Sustainable Development program, Bren School, UC Santa Barbara
www.bren.ucsb.edu/people/usernew.asp?user=young