

US Freshwater Management, Hydraulic Fracturing

Hughes, Sara and Robert Wilkinson, *The Role of Governance in Shaping Freshwater Management in America: Toward Integrated Resources Planning*, Prepared for the Performance of Environmental Governance Systems: Comparing America and China, Nanjing, China, 2013.

http://www.bren.ucsb.edu/people/Faculty/documents/wilkinson_USFreshwater.pdf

Freshwater is one of the world's most precious resources, and managing it sustainably is a critically important goal. Fresh water and healthy aquatic ecosystems provide valuable services that society has come to depend on. While many factors determine the outcomes of freshwater management in the U.S., the aim of this paper is to examine the extent to which we can attribute these outcomes to the operation and evolution of governance systems. In this paper, we refer to "governance" as the steering influence of the rules, decision making processes, and incentives provided by both governmental and non-governmental actors, including the private sector and civil society.

In short, while the principles and objectives for freshwater management have changed significantly over the last 100 years, governance has remained a key factor determining freshwater management outcomes in the U.S. Governance systems have helped to distribute authority and incentives in freshwater management; they shape our responses to social and environmental change, and they determine whose voices are heard, and in what decision making venues. In turn, governance systems have created freshwater management challenges and solutions, and they will continue to do so in the future. As society's goals for freshwater

management change, our governance systems may also need to be changed. New challenges and expectations are confronting local, state and national level agencies in the U.S. that are designed to execute basic service functions in a static environment. Governance innovations – such as integrated resources planning and collaborative decision-making – have important potential to address these new challenges.

The Law and Policy of Hydraulic Fracturing: Addressing the Issues of the Natural Gas Boom, Case Western Reserve Law Review, Vol. 63, Issue 4, 2013.

<http://law.case.edu/journals/LawReview/Documents/63CaseWResLRev4.pdf>

This issue of the journal contains a series of articles on hydraulic fracturing, some of which go beyond water resource concerns. The articles include such topics as state preemption, regulatory issues, horizontal drilling, water management, clean energy, climate change, the Gulf oil spill, and others.

This article recommended by Dr. Tim Smith