Socio-environmental synthesis for water governance?

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Sustainability of water systems?
Water overuse effect on river basins

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Source: Smakhtin, Revenga and Döll 2004.
Effects of Climate Change on Water Scarcity

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.
Increasing water scarcity
1600 liters for a 100g burger
“The water crisis is a problem of hungry people more than thirsty ones”
(Paolo D’Odorico personal communication)

“795 million people in the world do not have enough food to lead a health active life”
(WFP 2015)
19 October 2015: Water War in Cerasia
TRIDENT JUNCTURE

36,000 Personnel Participating
30+ Nations
12+ Organizations
230+ Units
60+ Ships
140+ Aircraft

Trident Juncture 2015
Worried Sicilian farmer Domenico with his baffled donkey Arturo
...Same kind of “thinking”
The case of the Flint Water Crisis

• Flint water crisis AKA socio-hydrological symptoms of a science crisis?
3 questions

• What is socio-environmental synthesis?
• What is actionable science?
• How socio-environmental synthesis relates to water governance?
Governance for water security

(Pahl-Wostl, Palemer & Richards 2013)

• 1. governance arrangements need to support evidence-based decision making, and the application of good governance principles to assess trade-offs between different water security dimensions;
Governance for water security

(Pahl-Wostl, Palemer & Richards 2013)

• 2. more attention needs to be devoted to incompatible framings between different governance domains and how a lack of communication and integration can be overcome;
Governance for water security

(Pahl-Wostl, Palemer & Richards 2013)

• 3. more experimentation with, and comparative analyses of, combinations of governance modes are needed; and of methods and tools associated with those modes that may be transferred to other water security contexts;
Governance for water security

(Pahl-Wostl, Palemer & Richards 2013)

• 4. development is needed of indicators of the trade-offs between different water security dimensions to enable assessment of multi-criteria policy goals, to provide guidance for adaptive management approaches in their implementation in practice.
Thanks for the attention!

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