

Utah State University

DigitalCommons@USU

All ECSTATIC Materials

ECSTATIC Repository

11-13-2020

Water Resources International Development: What On Earth Are We Doing?

Patrick Ray
University of Cincinnati

Follow this and additional works at: https://digitalcommons.usu.edu/ecstatic_all

 Part of the [Civil Engineering Commons](#)

Recommended Citation

Ray, Patrick, "Water Resources International Development: What On Earth Are We Doing?" (2020). *All ECSTATIC Materials*. Paper 93.

https://digitalcommons.usu.edu/ecstatic_all/93

This Video is brought to you for free and open access by the ECSTATIC Repository at DigitalCommons@USU. It has been accepted for inclusion in All ECSTATIC Materials by an authorized administrator of DigitalCommons@USU. For more information, please contact digitalcommons@usu.edu.



Water Resources International Development: What On Earth Are We Doing?

Dr. Patrick Ray
University of Cincinnati

November 13, 10:30 am Mountain Time

By Zoom:



<https://usu-edu.zoom.us/j/84342900372?pwd=SW5CNU5rdWVWVK3ZlYW9iWlo2Wm0zQT09>

Large agencies such as the World Bank, the Millennium Challenge Corporation, the United Nations, regional development banks (such as the Asian Development Bank), and philanthropic organizations (such as the Rockefeller Foundation) are actively engaged in water resources development in low-income countries. Why? And what metrics do they use to decide if the investments of hundreds of millions or billions of dollars in water infrastructure projects are justified? And what accommodations do they tend to make for risks such as climate change? And what attention do they tend to give to questions of equity? I probably have no idea. But I've worked with many of these agencies for a decade or so, and I'll give you what I know, and raise questions for discussion. I'll plan to use two examples, primarily: Mexico City rural-urban water transfers, and hydropower development in Nepal.

Bio -- Patrick is an Assistant Professor of Environmental Engineering at the University of Cincinnati. He is a specialist in the development and application of numerical models of the integrated hydro-economic system for risk management under the uncertainty of climate (and other) change. He was the lead author of the World Bank's 2015 Decision Tree for Confronting Climate Uncertainty in Water Resources Planning and Project Design, and a primary scientific contributor to the International Hydropower Association's 2019 Climate Resilience Guide, the California Department of Water Resources' 2019 Climate Change Vulnerability Assessment, and UNESCO's 2018 Collaborative Risk Informed Decision Analysis. He is a past chair of the Environmental and Water Resources Systems (EWRS) Committee of the American Society of Civil Engineers, and was named the 2018 A. Ivan Johnson Outstanding Young Professional of the American Water Resources Association. His PhD is from Tufts University, and

his postdoctoral work was conducted at the University of Massachusetts, Amherst, in the Hydrosystems Research Group.

Managing Infrastructure with Deep Uncertainty: A discussion series **Oct. 28 to Nov. 13**

Series Schedule

Date / Time (Mountain)	Person	Title	Video
Oct. 28, 10:30 AM	Dr. Jian Wang (USU)	Strategies for Managing the Colorado River in an Uncertain Future	Link
Nov. 4, 10:30 AM	Dr. Jon Herman – University of California, Davis	Adaptive policy design in water resources systems under uncertain climate and human stressors	Link
Nov. 9, 10:30 AM	Dr. Sarah Fletcher – Stanford University	Adaptive Water Infrastructure Planning for a Changing World	Link (start at 1:03:00)
Nov. 11, 1:00 PM	Dr. Marjolijn Haasnoot – Deltares, Netherlands	Dynamic Adaptive Policy Pathways	Link
Nov. 13, 10:30 AM	Dr. Patrick Ray – University of Cincinnati	Water Resources International Development: What On Earth Are We Doing?	