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Strategies for Managing the Colorado River in an Uncertain Future

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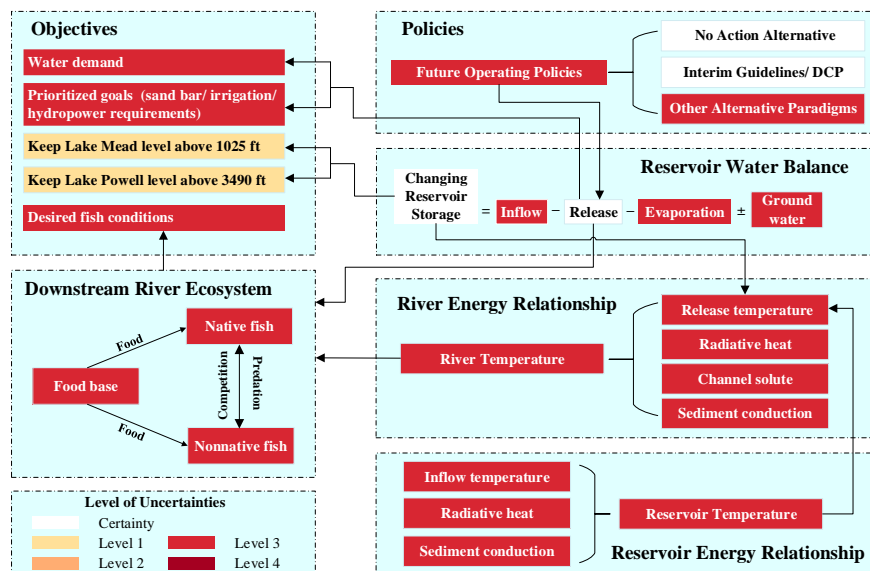
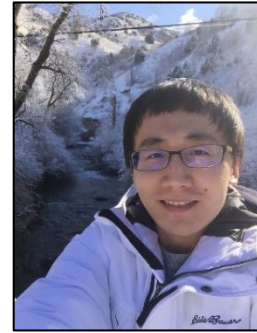
Strategies for Managing the Colorado River in an Uncertain Future

Jian Wang
Utah State University

October 28, 2020 – 10:30 AM Mountain Time

By Zoom:

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



Abstract: Colorado River managers face a deeply uncertain future. Projections of declining watershed runoff are likely to necessitate restructuring of the present interpretation of the Law of the River that allocates water supply among Mexico and the seven states of the Basin. Additionally, the magnitude and distribution of consumptive uses of water will change. Outcomes for river and reservoir ecosystems are poorly predicted. How should we make better decisions given these uncertain factors? To help answer this question and expand conversation about the Colorado River management issues, we (1) classify different levels of uncertainty to guide decisions about which modeling tools and public policies to use; (2) review advantages of existing tools that will contribute to future operation and management; (3) develop an easy to use exploratory model that adequately represents the water system to empower a broader range of river stakeholders to adaptively manage the river and its reservoirs. The presentation will conclude with a discussion of promising future management paradigms and open research questions in the area of planning under uncertainty.

Bio: Jian is a Post-Doctoral Fellow at Utah Water Research Laboratory. Jian’s research aims to develop alternative management paradigms that not only meet water supply objectives but also increase the potential for recovery of endangered species and for river ecosystem rehabilitation. His research involves identifying critical uncertainties in the Colorado River system, exploring available methodologies and tools to deal with deep uncertainty and designing the combined long-term and short-term policies that allow the system to be adaptive to future changes.

Series Schedule

Date / Time (Mountain)	Person	Title
Oct. 28, 10:30 AM	Dr. Jian Wang (USU)	Strategies for Managing the Colorado River in an Uncertain Future
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
Nov. 9, 10:30 AM	Dr. Sarah Fletcher – Stanford University	Water Supply Infrastructure Planning: Decision-Making Framework to Classify Multiple Uncertainties and Evaluate Flexible Design
Nov. 11, 1:00 PM	Dr. Marjolijn Haasnoot – Deltares, Netherlands	Dynamic Adaptive Policy Pathways
Nov. 13, 10:30 AM	Dr. Patrick Ray – University of Cincinnati	TBD

All presentations and discussions via Zoom. Will be recorded.

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Co-convened with CEE 5410/6410 Systems Analysis in the Age of Uncertainty