

2019 Mekong Research Symposium Collaborating and Innovating for the Mekong

Session 2: Cumulative Impacts and Cascade Hydropower Management

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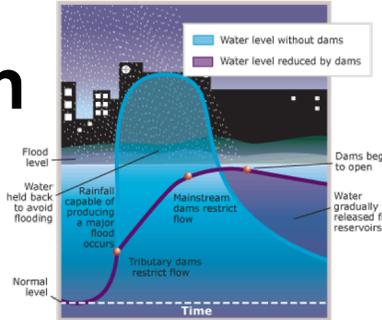
Hanoi, Vietnam

December
16-19, 2019

Cascade Hydropower Reservoirs

Water Management Operating Objectives

- Flood Damage Reduction
- Navigation
- Hydropower
- Recreation/Tourism
- Environmental Stewardship
- Irrigation
- Water Supply



Water Control Program

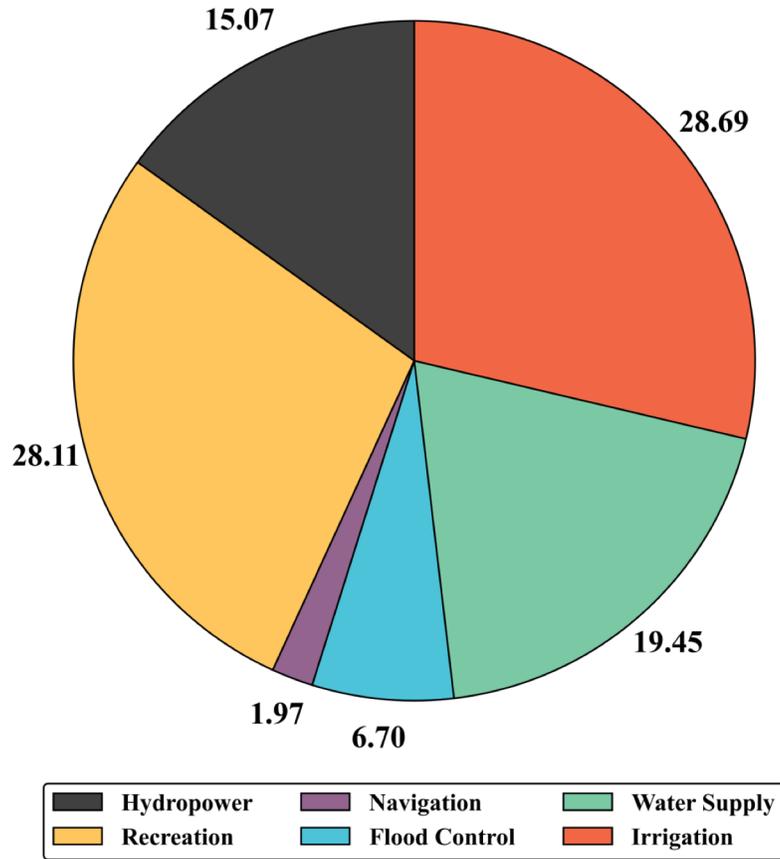
- ✓ Data Collection Program
- ✓ Hydrology, Hydraulic, and Reservoir Simulation Modeling
- ✓ Reservoir System Operations

Multifunction Operational Optimization

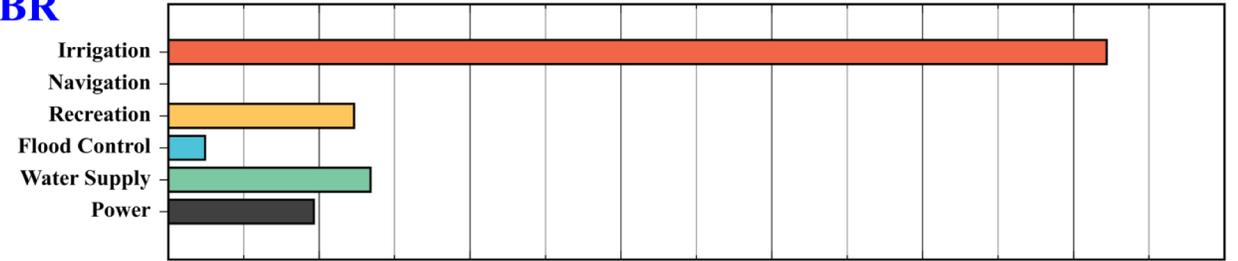


Multipurpose Benefits - US Government Hydropower Reservoirs

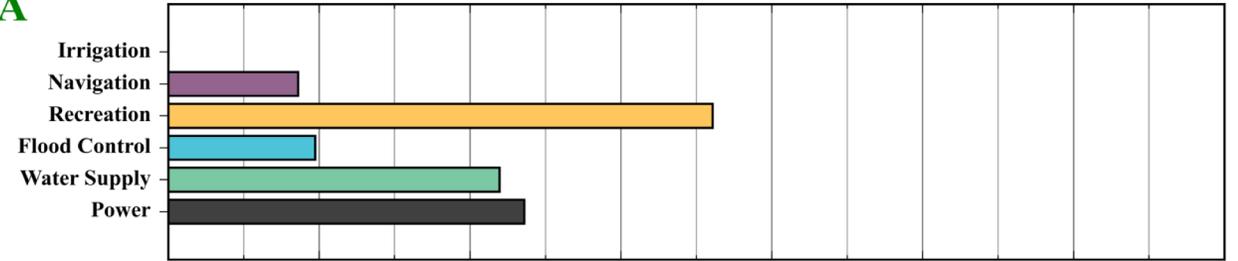
Total Economic Benefits of Federal Multipurpose Reservoirs



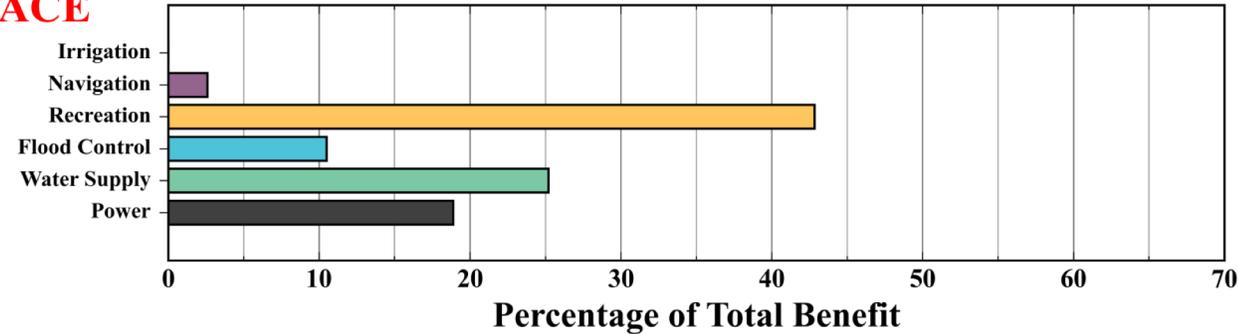
USBR



TVA



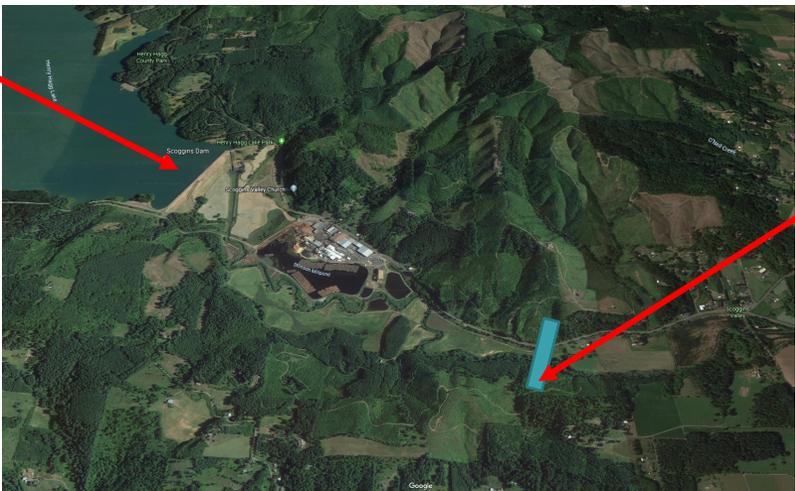
USACE



Recognize the value proposition of multipurpose reservoirs by identifying and quantifying both energy & non-energy benefits

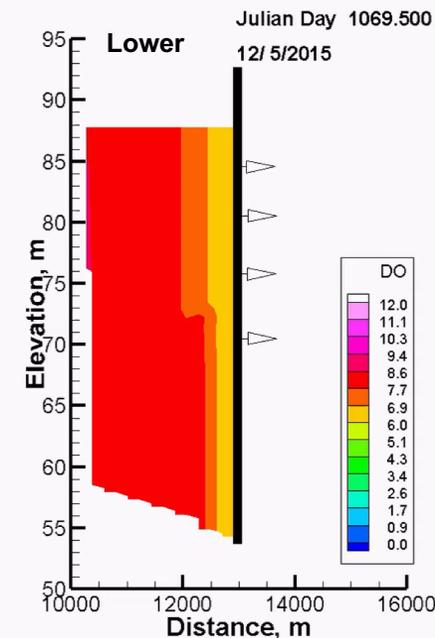
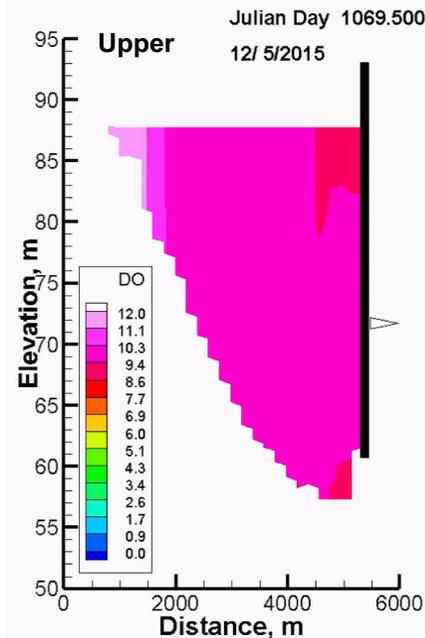
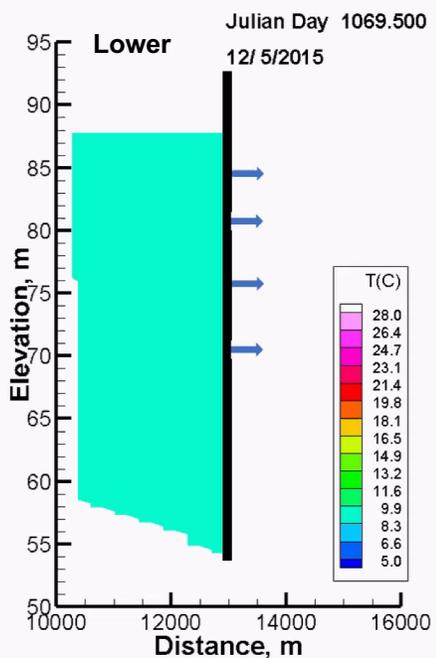
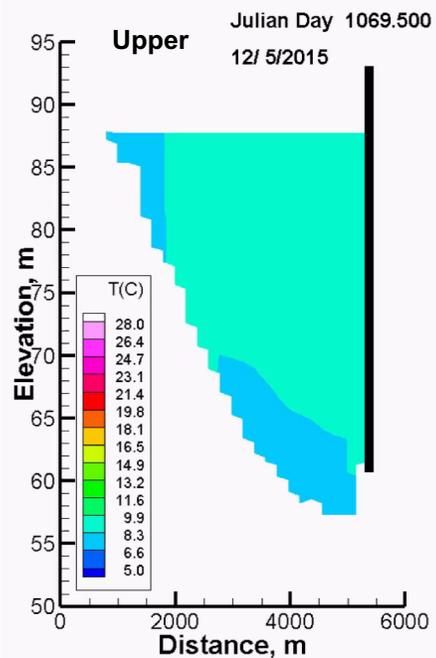
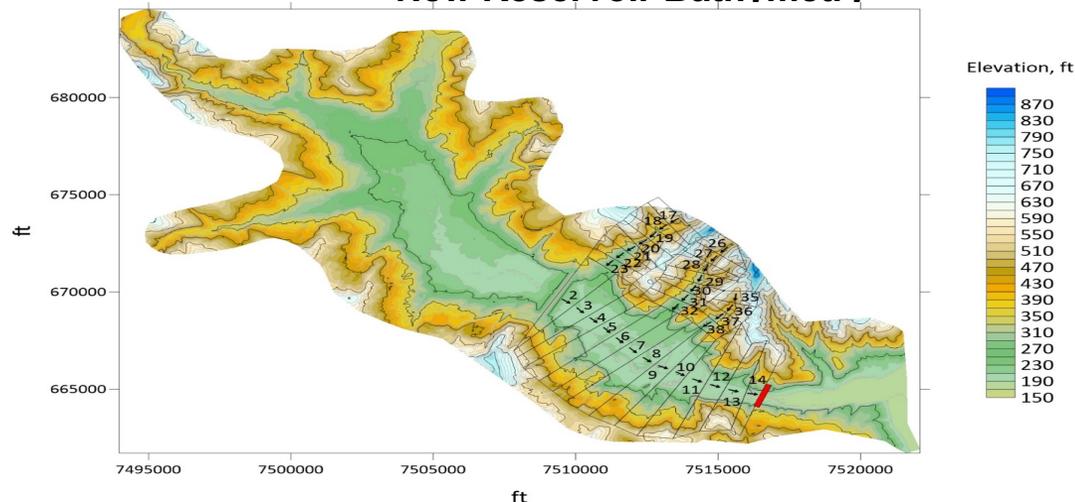
New Hydropower Dam Cumulative Impact Assessment

Upper Dam



New Reservoir Lower

New Reservoir Bathymetry



Session 2: Questions

- 1. Who are key stakeholders affected by cascade hydropower management?**
- 2. What are their needs – in what ways do they rely on the river and its cascade hydropower?**
- 3. How are those needs met, and how are they not currently met?**
- 4. Rank key stakeholders: who is most severely affected by cascade hydro?**
- 5. How important is cumulative impact by cascade hydropower reservoirs, and what tools are needed to assess it?**

Thank You for your attention

Please feel free to contact me at :

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