

**Title:** Environmental Flows: How can we assess tradeoffs between hydropower dam proliferation and provisioning, regulating and cultural ecosystem services from water flows?

**Host:** Gregory Poe (in collaboration with Alex Flecker, Carla Gomes, and Todd Walter)

**Date:** October 27, 2015, 11:45-12:45 pm

**Abstract:** In recent decades the science of sustainable river management has moved toward the concept of environmental flows – i.e., the quantity, timing and quality of water flows required to sustain freshwater ecosystems and their services. Central to this framework is the notion of implementing sustainability boundaries that constrain the extent to which water withdrawals and discharges and water infrastructure operations can alter natural variability in water flows and water chemistry, thereby sustaining the ecosystem services and biodiversity of freshwater ecosystems. The objective of this lunch meeting is to have a discussion of how this approach might be extended and applied to provisioning (fisheries, floodplain agriculture), regulating/supporting (biodiversity, sediment delivery), and cultural (indigenous rights) sustainability boundaries as constraints into an ex-ante eco-hydrological model of planned dams in the Andes-Amazon, accounting for eco-hydrological routing and connectivity. At present, there are 150 additional dams planned for this region over the next 20 years.

I really hope that you can attend. If you are able to come, please **RSVP to Paula Euvrard** ([pge3@cornell.edu](mailto:pge3@cornell.edu)) by **Friday, October 23**. Also, given that a number of Cornell faculty have expertise on identity and an interest in environmental and sustainability engagement, please feel free to forward this invitation to colleagues who are not on the list.