

Environmental Science and Policy Program at Michigan State University

## ESPP Research Colloquium: What's Up with Groundwater?

## 1 p.m. - 3:00 p.m. Thursday Oct. 25, 2018 273 Giltner Hall

A discussion of issues, research tools, and management options - from local, to regional, and even global perspectives.

**Abstract:** Groundwater use is widespread, constituting approximately 36%, 42% and 27% of the water used globally for domestic, agricultural, and industrial purposes, respectively. Groundwater development often does not require substantial infrastructure, either in terms of water treatment and/or water distribution, and hence its central role in irrigated agriculture and drinking supply, especially in developing nations. However, sustainable groundwater use – that which maintains long-term, generally high-quality supplies and does not negatively impact groundwater-influenced ecosystems – is a growing and relatively ubiquitous concern. In this panel discussion, we overview the diverse set of issues related to groundwater sustainability, with examples from the State of Michigan and from across the globe. We highlight novel research and decisions support tools being developed at MSU to help further understanding of systems and manage groundwater holistically.

- Organizer and Moderator: **Zachary Curtis**, Environmental Engineering and ESPP PhD Candidate, with a focus on computational hydrology and groundwater modeling. His dissertation research focuses on innovative modeling methods for evaluating sustainability of groundwater resources in Michigan.

- Dr. **Yadu Pokhrel**, Assistant Professor of Civil and Environmental Engineering, with a research focus on improving the understanding of the changes in the global/regional terrestrial water cycle in response to the combined effects of human activities and climate change.

- **Laura Young**, Outreach/Research Specialist at MSU's Institute of Water Research, with a focus on on Michigan's Water Withdrawal Assessment Process and examines how a diverse set of stakeholders perceive groundwater dynamics and water use in the state.

Light refreshments will be served.

