

**ATS/CIRA Colloquium**

**Pat Keys**

**Visiting ATS from CSU's School of Global Environmental Sustainability**

**Approaching Human-Environment Problems  
Using Interdisciplinary Tools**

**Hosted by Jeff Collett**

**Friday, Sept. 14, 2018**

**ATS room 101**

**Discussion will begin at 11:15 a.m.**

**Refreshments will be served at 10:45 a.m. in the weather lab**

Solving problems related to human-environment interactions, such as water security challenges or ocean fisheries collapse, often requires interdisciplinary approaches. In this seminar, I will highlight two novel approaches for addressing complex human-environment problems.

Water security is a current buzzword, often closely linked to how humans use surface water resources. However, anthropogenic interactions with the atmospheric branch of the water cycle have important implications for water security as well. I will highlight some new ways for thinking about how humans can modify and interact with the atmospheric water cycle using the lens of the *precipitationshed* – sometimes referred to as “a watershed of the sky.” Particularly, I will explore how this lens can connect important insights related to the atmospheric water cycle to new domains including urban water security, ecosystem services, and transboundary governance.

Looking to the future, projecting how complex human-environment problems may evolve over the century requires additional and innovative tools. I will introduce a novel method for exploring scenarios of human-environment interactions, entitled “*Science Fiction Prototyping*.” This method can serve both as a process for exploring nonlinear interactions of technological change within human societies, as well as a platform for interdisciplinary research.

Link to colloquia page: <https://www.atmos.colostate.edu/colloquia/>