## **Title: From Open Data to Open Indicators**

California is developing open and federated web-based systems for water (and other) data, under AB 1755 and with coordination among state agencies. These data will be critical to understanding ecosystem, economic, and equity aspects of water use, impacts, and sustainability. One of the ways that water data can be used is to populate condition and management indicators useful in decision-making and education. I will describe a web-based system for using California's online water data resources to inform an automated indicator evaluation of California water-bodies. The system automatically retrieves web-accessible data, calculates equivalent indicator scores (based on Tribe and state goals) and provides dynamically updated map and chart-based visualization of results. This Environmental Protection Agency, Exchange Network-sponsored project has been a collaboration between UC Davis and Tribes, with input from California DWR staff and scientists, as well as others in the California Water Quality Monitoring Council.

## Presenter: Fraser Shilling, University of California, Davis

Fraser Shilling has spent the last 20 years at UC Davis investigating ways to bring environmental data to bear in management and policy decisions, including the first watershedbased, web-informatics system. He devises systems to collect, analyze and visualize transportation, land, and water-related data to understand how we can become more sustainable.