

WATERSHED SCIENCE

A Unified Framework for Sustainable Living

A Three-Day Participatory Workshop

Connectivity is the primary reason why aquatic resources need to be managed at the watershed level. Connectivity refers to the physical connection between hillslopes and stream channels, between surface water and groundwater, and between wetlands and these water sources. Because water moves downstream, any activity that affects water quality, quantity, or the rate of movement at one location can change watershed characteristics at locations downstream.

Watersheds also connect human dwellers in intricate social-ecological relationships. Both factors - the biophysical attributes and the policy and institutional environments - shape people's livelihoods and interactions within the watershed. A watershed is healthy when it is capable of maintaining its self-organizing complexity and diversity through time. Managing for healthy watersheds requires active participation of resource users and other interested groups to collaborate in generating information to guide management planning and action.

This workshop introduces general concepts and practical applications of watershed science, an interdisciplinary field of inquiry concerned with drivers, processes and controls that regulated change in linked social-ecological systems at the watershed level. The workshop aims to create lasting relationships between human and natural communities, on a strategic and conceptual level as well as on a personal one. If you think your community, organization or school could benefit from this workshop, please contact us at vlopes@txstate.edu.

Topics explored:

- A paradigm that embraces the complexities of existence and promotes social change
- Ecological principles that foster responsibility and reverence for life in all its diversity
- Dynamical processes that maintain (or disrupt) the ability of social-ecological systems to renew or reorganize themselves in the presence of disturbances
- Evolving, self-organizing and creative practices that can be applied in your own watershed leading us to more just and ecologically-conscious communities

Who should attend?

Community leaders, activists, students and environmentally-minded professionals in all realms: business, government, international development, education, NGO's and non-profits.

Instructors:

Vince Lopes is a professor at Texas State University. He has written and lectured extensively on the application of watershed approaches to environmental problems. He currently leads a research study on integrated watershed management in central Texas.

Adrian Vogl is a Ph. D. candidate at Texas State University. Her work aims to develop tools and social instruments for participatory community planning to promote sustainable and healthy communities.