

Water Sustainability in the Western U.S.
GES 180A4

3 Credits

TuTh 11:00-12:15 Clark A 204

CRN: 80884

Instructor and Course Coordinator

Howard Ramsdell, Ph.D.

Associate Professor, Toxicology Section

Department of Environmental and Radiological Health Sciences

College of Veterinary Medicine and Biomedical Sciences

ramsdel@colostate.edu

This is a multi-disciplinary introduction to the issues surrounding the most important challenge to the sustainability of life in the western U.S.

The role that water plays in supporting human populations, agriculture and wildlife

The history of water development in the West

The processes that govern the allocation of water

How water infrastructure allows it to be moved and used

Challenges to the sustainability of water resources:

population growth, climate change, impacts on water quality

Learning Objectives

Students successfully completing the course will be able to

1. Describe the history of water development in the western U.S.
2. Explain how water is managed and used in the western U.S.
3. Describe the characteristics of water that are related to its suitability for different uses
4. Explain how the climate and landscape of the West affects water availability and use
5. Describe the basic elements of water related laws that govern its administration and quality
6. Explain how public attitudes and values affect water management and use in the West
7. Identify current CSU water-related programs, research and outreach activities.

Course Requirements

Quizzes	Reinforcement of class topics	10%
Reflection Papers	Thoughtful responses to class presentations	15%
Water in the News	Short synopsis of recent news reports related to water issues from the general circulation media	10%
Analysis and Opinion Paper	Critical analysis of an issue related to water sustainability in the western United States	20%
Book Review	A review of a book selected from a list provided	15%
Homework	Analysis and interpretation of water issues	15%
Final Exam		15%

Reading Materials

Cadillac Desert, Marc Reisner, Revised Edition, 1993, Penguin Books

A Citizen's Guide to Colorado Water Law, 4th Ed., 2015*

The Colorado Water Plan, 2015*

Other readings will be provided on Canvas

*Available online without charge. Links will be provided on Canvas