

GEOG 647
Water Resources
Spring 2008

Nancy Wilkinson <nancyw@sfsu.edu>
Office: HSS 279 x81439
MWF 12:10-1, Tues 1-2 or by appt

Atmospheric, surface and subsurface water resources. Human development, use and abuse of water resources in local, regional and global contexts. Topics include basic hydrology; urban and agricultural water supply; legal, political, social, economic, biological, perceptual and environmental issues in water supply development; changing goals/strategies for sustainable resource management.

Method of Instruction: Lecture, discussion, field trip.
Grading: Two exams (35% each = 70% total)
Country cameo (due April 14; 10%)
Original term paper or book review (due April 30; 10%)
Attendance & thoughtful participation: class and field trip (10%)

Texts: David Carle, *Introduction to Water in California*. University of California, 2004.
Robin Clarke and Jannet King, *The Water Atlas: A Unique Visual Analysis of the World's Most Critical Resource*. The New Press, 2004.
Blaine Harden, *A River Lost: The Life & Death of the Columbia*. WW Norton, 1996.
Other readings to be posted on iLearn.

Schedule and Readings

Jan 25 Introduction: Water as a Resource

Jan 28-31 The Water Cycle: Water Availability & Precipitation
Read Carle pp. 1-33
Video: *National Geographic: Water*

Feb 4-8 Runoff, Rivers & Floods; Groundwater
Read Carle pp. 36-83; Clarke & King pp. 9-27

Feb 11--15 Consumptive and Nonconsumptive Use; Water Pollution & Treatment
Read Carle pp. 86-131; Clarke & King pp. 29-45

Feb 18-22 California Water History; Water Rights/Water Law
Read Carle pp. 134-177

Feb 25-29 Urban Water: San Francisco, Los Angeles & Southern California
Read Carle pp. 180-223, 225-234

Mar 3-7 The Central Valley Project and State Water Project
(Review in Carle)

Mar 10-14 SF Bay Delta and San Joaquin Valley water issues
Video: *Cadillac Desert: The Mercy of Nature*

Mar 17-21 Catch-up and Review; ***FIRST EXAM***

- Mar 24-28 Spring Break
- Mar 31 Chavez Day (no classes)
- Apr 2-4 The Colorado River
Video: *Cadillac Desert: An American Nile*
Read Harden Intro through Ch. 4
- Apr 7-11 The Columbia River, the Pacific Northwest and Salmon
Read Harden Chs. 5 through Epilogue
- April 14-18 *****Country Cameo Due Monday, April 14*****
Cameo presentations: April 14, 16 (AAG)
Video
- Apr 21-25 Hard Paths, Soft Paths : NAWAPA & Other Western Water Imaginaries
Read Clarke & King pp. 59-73, 83-91
Hard Paths Diffuse: Aswan Dam and The Nile
Read Clarke & King pp. 47-57, 75-81 + tba
- Apr 28-30 The Narmada River Project
Read tba
*****Book review or term paper due Wednesday, April 30*****
- May 2 (Friday) through May 4 (Sunday): **REQUIRED FIELD TRIP**
We'll visit water resource sites in Northern California to understand how rivers and hydropower systems work, and examine consequences and controversies relating to human intervention in hydrologic systems. Stops include Yuba County Water Agency, Oroville dams and fish hatchery, the Sacramento River, Whiskeytown Reservoir, Shasta Dam and other points of interest. Two nights of camping. Participant release forms, itinerary and packing list will be posted on iLearn.
- May 5 Field trip debriefing
- May 7-9 Three Gorges Dam and World Water futures
Read tba
- May 12-14 Catch-up, review and course evaluation
- May 19 (Monday) Second Exam 10:45 am – 1:15 pm**