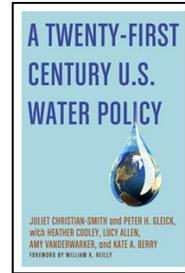


Lesson Plan for Chapter 2: *Legal and Institutional Framework of Water*



A resource from the Pacific Institute to be used with *A Twenty-First Century U.S. Water Policy*



(1) Learning objectives

At the end of this lesson, students should be able to answer to describe:

- How water is regulated in the United States
- The difference between authority and administration
- How the states treat water differently
- Ways the federal government has engaged in sustainable water management

(2) Lesson introduction

Questions to gauge students' knowledge of the subject:

- Q: Where does your drinking water come from?
 - A: Many different acceptable answers
- Q: Who/what laws make sure that your drinking water is safe?
 - A: Environmental Protection Agency administers the Clean Water Act and Safe Drinking Water Act. The Clean Water Act requires anyone who discharges a pollutant into a stream or river to get a permit to do so (NPDES permit). The Safe Drinking Water Act sets water quality standards, such as the maximum level of arsenic in drinking water; however, there are still many violations of the drinking water quality standards, particularly for small systems.
- Q: Which federal agency has authority over groundwater – or is tasked with the responsibility of ensuring that pollution does not enter into groundwater and that there is enough for future generations?
 - A: None
 - Link to video showing communities reliant on nitrate-contaminated groundwater for their drinking water in California's Central Valley: http://www.youtube.com/watch?v=U_rbYaU8PLQ&list=UUEpcYhM9lRpIJVLA5a4rQbw&index=7&feature=plcp

(3) Key concepts

- Review the concept of federalism in the context of the U.S.
 - States and federal government have distinct but sometimes overlapping spheres of influence and authority
- Federal authority over water resources
 - Derives from Commerce Clause and the Property Clause
 - Accumulated over time
 - Lead to a fragmented system – more than 30 different federal agencies with water-related responsibilities
 - Limited funding – all of the federal government’s water-related responsibilities only make up around 1% of total federal budget authority
- Authority vs. Administration
 - Federal agencies may have authorities that they do not act upon for political or financial reasons
- States Water Rights
 - States allocate water based on different legal frameworks, e.g., riparian rights and prior appropriation
 - Surface water and groundwater are often regulated differently

(4) Learning activity

- **Federal Water Management Soup** (see following pages for a template for this activity)
 - Students divide into teams and try to match the responsibilities and authorities of different federal agencies and of different pieces of federal legislation to their names

(5) Wrapping up

- Review the main responsibilities of the federal government and gaps (e.g., groundwater)
- Review the major water-related federal agencies
- Pass out the **Federal Water Management Handout** (see following pages for a template for this handout)

This agency develops and maintains the nation's waters through the construction and operation of infrastructure, including dams and levees.



U.S. ACE
(U.S. Army Corps
of Engineers)

This agency is responsible for the protection and management of the nation's natural resources, including water, and the protection of tribal treaty rights.



DOI

(U.S. Department
of the Interior)

This agency protects tribal treaty rights, which sometimes include water and fish harvesting rights.



BIA

(Bureau of Indian
Affairs)

This agency built and operates dams in the Western U.S., primarily to provide irrigation water to farmers and hydroelectric power for Western cities.



BoR

(Bureau of
Reclamation)



This agency is responsible for protection and enhancement of fish, wildlife and plants, and their habitats. It carries out and enforces the Endangered Species Act for non-marine species.



FWS

(U.S. Fish & Wildlife Service)

This agency manages public lands. It expands conservation and outdoor recreation opportunities, including collaborating with local agencies and to revitalize waterfronts.



NPS

(National Park
Service)

This agency develops drinking water standards, gives and enforces permits allowing some water pollution, and promotes voluntary programs to reduce water pollution.



EPA

(Environmental
Protection
Agency)

This agency supports the preparation for, and response to, emergencies, such as floods and other water-related emergencies.



FEMA

(Federal
Emergency
Management
Agency)

This agency is responsible for protecting the public health, in part by assuring the safety of our nation's food supply, including bottled water and commercially-sold fish.



FDA

(Food and Drug Administration)

This agency gives licenses allowing construction and operation of private, municipal, and state hydroelectric dams and conducts safety inspections of these dams.



FERC

(Federal Energy
Regulatory
Commission)

This agency protects and manages living marine resources (e.g. fish and marine mammals). It carries out and enforces the Endangered Species Act for marine species.



NMFS

(National Marine
Fisheries Service)

This law creates broad federal authority to clean up hazardous waste sites and to compel responsible parties to perform cleanups, including cleanup of water contamination.



CERCLA

(Comprehensive
Environmental
Response,
Compensation, and
Liability Act)

This law regulates pollution of water, requires that a certain water quality level be maintained for each water body, and provides low-interest loans for states to comply.



CWA

(Clean Water Act)

This law requires that drinking water standards be developed, and that all water systems serving the public comply with these standards. It provides low-interest loans to states to comply.



SDWA

(Safe Drinking
Water Act)

This law protects species determined by the government to be in danger of extinction, and protects the habitat essential to these species' continued survival.



ESA

(Endangered
Species Act)

This law establishes crop subsidies and other agricultural programs, such as funds for rural development, water conservation and irrigation programs.



Farm Bill

This law requires that when the actions of a federal agency may negatively impact the environment, a study is first done to understand what the impacts will be.



NEPA

(National
Environmental
Policy Act)

