

## Session 21

---

**Course Title: Floodplain Management**

**Module 5:** Policy History: Rivers as a Legal Battleground

**Session 21:** Public Policy in the American Federal System – An Overview

**Author:** Elliott Mittler, Ph.D.

**Time: 75 minutes**

---

### Objectives:

At the end of this session, students should be able to:

- 21.1 Explain the division of public policy decisions in the American federal system.
- 21.2 Explain the use of mandates and their effect on water management.
- 21.3 Compare water laws east and west of the Mississippi River.
- 21.4 Identify how physical and biological systems have affected public policy.

### (PP21.1)

---

### Scope:

During this session, the instructor will explain how decisions are divided or shared between the federal government, states, counties, cities, special districts (levee, stormwater, irrigation, or flood districts), and land owners.

Following this explanation of how federalism works, the students should be given the opportunity to discuss the issues. Several discussion questions are provided and the instructor is encouraged to develop others. To continue the homework assignment the instructor should break students into small groups. The assignment is to develop a list of government agencies that have a stake in local floodplain management (or in areas specified by the professor) and the issues that concern these agencies. Time should be allocated in a later session (five to ten minutes for each group) to make presentations and compare understandings.

---

### Readings:

#### *Student Required Reading:*

Bollens, John C. 1957. *Special Districts Governments in the United States*. Chapters 1 and 5. University of California Press.

Castle, Anne J. 1999. [profs.lp.findlaw.com/water/index.html](http://profs.lp.findlaw.com/water/index.html). (Check copyright)

Delaware Department of Natural Resources and Environmental Control, Revision #4, November 29, 1999. *Delaware Nonpoint Source Management Plan*.  
[www.dnrec.state.de.us/dnrec/LIBRARY/NPS/NPSPlan.pdf](http://www.dnrec.state.de.us/dnrec/LIBRARY/NPS/NPSPlan.pdf)

Dinan, Terry. September 1995. "The Safe Drinking Water Act: A Case Study of an Unfunded Federal Mandate." Congressional Budget Office (US Congress), Washington, DC.

Hill, Kim Quaile and Kenneth R. Mladenka. 1992. *Democratic Governance in American Cities and States*. Chapter 3. Brooks/Cole Publishing Company, Pacific Grove, California.  
[www.cbo.gov/ftpdoc.cfm?index=4804&type=1](http://www.cbo.gov/ftpdoc.cfm?index=4804&type=1) (Need hard copy?)

Mittler, Elliott. 1997. *An Assessment of Floodplain Management in Georgia's Flint River Basin*. Chapter 3. Institute of Behavior Science, University of Colorado.

*Instructor Reading:*

Bollens, John C. 1957. *Special Districts Governments in the United States*. Chapters 1 and 5. University of California Press. ( the entire book)

Ridgeway, Martin E. 1971. *Interstate Compacts: A Question of Federalism*. Southern Illinois University Press

**General Requirements:**

None. See individual objectives.

---

**Objective 21.1. Explain the division of public policy decisions in the American federal system.**

**Requirements:**

The content should be presented by lecture with time allocated for discussion as necessary.

**Remarks:**

Why is an understanding of policy important to understanding floodplains? Floodplains are flat, have offered premiere places for human activities, and have been the battleground for a multitude of mandates, regulations, guidelines, and ownership patterns. Understanding these policy tools can help us support, sound floodplain management practices.

**I. Current state.**

- A. The federal system, or the division of powers among the federal, state, and local governments, is based on the **Tenth Amendment** to the United States Constitution. **(PP21.2)**
1. The tenth amendment provides that “The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.”
- B. The powers among the federal, state, and local governments have and will continue to change, mainly in response to the desire of the federal government to increase its powers. In many cases, the courts have had to decide whether changes are constitutional.
1. Mittler (chapter 3) provides a description of the growing federal role in the floodplain since 1900, when Congress began to believe it had a responsibility to protect citizens from floods.
- C. How states regulate the floodplain and which government forms (state, county, municipal, drainage district, and/or other) exist in a state are typically unique to the individual state. No two states treat the floodplain identically. Unfortunately, there is no single source that describes how each individual state regulates the floodplain.
1. For students to understand how states operate or how rivers and floodplains are regulated in a particular state, they should consult the state constitution and state codes.
  2. In chapter 3, Mittler discusses the laws of Georgia, especially in light of federal laws, and how the state of Georgia has divided responsibilities between the state and local governments.

**Objective 21.2 Explain the use of mandates and their effect on water management.**

**Requirements:**

None.

**Remarks:**

**I. Federal mandates**

- A. When enacting legislation, the federal government can suggest how state and local governments can meet the objectives of laws or they can specify by mandate what state and local governments must do to meet the objectives.
1. Prior to 1960, the federal laws most often made suggestions to the states but left them with the responsibility for carrying out policies.
  2. However, since 1960, the federal government has often taken over policies once controlled by the states. When the federal government establishes

goals that the states and municipalities must meet, they engage in what Hill and Mdlinka term “**cooptive federalism.**”

- B. According to Hill and Mdlinka, cooptive federalism became prominent between 1960 and 1980. One of the areas that the federal government appropriated from the states was water pollution control. The federal government slowly, through a series of incremental actions, took lead responsibility for dealing with water pollution that had traditionally belonged to the states. (PP21.3)
1. See Table 21-1 for a list of federal water pollution control laws enacted between 1948 and 1977 and their main provisions. A review of the provisions demonstrates the incremental take over.

Table 21-1: The Nationalization of Water Pollution Policy (1948 – 1977) (Taken in abridged form from Hill and Mladenka (1992: 61))

Date	Title	Important Provisions
1948	Water Pollution Control Act, PL 80-845	Gave the federal government authority for investigations, research, and surveys. Left primary responsibility for pollution control to the states.
1956	Water Pollution Control Act Amendments, PL 84-660	Established federal pollution policy for 1956-1960 period. Provided (1) federal grants for construction of municipal water treatments plants, (2) complex procedure for federal enforcement actions against individual dischargers.
1961	Federal Water Pollution Control Act Amendments, PL 87-88	Strengthened federal enforcement procedure.
1965	Water Quality Act, PL 89-234	Created Federal Water Pollution Control Administration
1966	Clean Water Restoration Act, PL 89-753	Increased grant authorizations.
1970	Water Quality Improvement Act, PL 91-224	Established liability for owners of vessels that spill oil and created new rules regarding thermal pollution.
1972	Federal Water Pollution Control Act Amendments, PL 92-500	Set federal policy that provided for (1) federal establishment of effluent limits for individual sources of pollution, (2) issuance of discharge permits, (3) large increase in authorized grant funds for municipal waste treatment plants.
1974	Safe Drinking Water Act, PL 93-523	Directed the EPA to set standards, applicable to all public water systems, to protect human health from organic, inorganic, and microbiological contaminants and for turbidity in drinking water.
1977	Federal Water Pollution Control Act Amendments, PL 95-217	Relaxation of some standards under the 1972 amendments, such as industrial antipollution standards on suspended solids, fecal bacteria, and oxygen demand of discharge if it can be shown that the cost of equipment exceeds benefits.

- C. Federal mandates can be accompanied by full funding that goes to the communities to meet the legal objectives, be underfunded, or be unfunded. The latter two situations force the state or local government to find the means to pay

for what is required. From the time that cooptive federalism began around 1960 until Congress enacted PL 104-4, the Unfunded Mandates Reform Act of 1995 ([www.sba.gov/advo/laws/unfund.pdf](http://www.sba.gov/advo/laws/unfund.pdf)), unfunded mandates became the norm.

1. Examples of unfunded mandates are the Clean Water Act and the National Environmental Policy Act of 1969 (NEPA).
2. Under these laws, the federal government established national standards that must be met by all state and municipal jurisdictions but provided insufficient funds for achieving the goals.
3. Since 1995, unfunded mandates have been virtually eliminated. However, PL 104-4 was not retroactive and preexisting unfunded mandates remained in force until the laws were reauthorized. The majority of water laws fall in this category.

D. Typical effects of unfunded mandates on local government are:

1. Diverting funds from programs which the government has some discretion.
2. Forcing program priorities on the community.
3. Impacting the quality and scope of all community programs, some of which may be improvements and some of which may be degradations.

E. In a speech (excerpted from *Congressional Record*, Proceedings and Debates of the 104th Congress, 1st Session, House of Representatives, January 19, 1995, vol. 141, No. 11, H355) delivered in the U.S. House of Representatives, Rep. George Miller from the state of California spoke of the consequences of both having federal mandates and negative aspects of unfunded ones. He said,

1. “What happens along the Mississippi River in Indiana or Minnesota if they choose, or in Ohio, if they choose not to clean up the municipal sewage because the Federal Government will not pay 100 percent? That means the people in Mississippi and Louisiana have to inherit that sewage. An unfunded mandate upstream is untreated sewage downstream. What does that mean to the fishermen, to the commercial enterprises, and to the tourist industry in those states? It means they suffer. That is why we have national laws.
2. When I was a young man you could smell San Francisco Bay before you could see it, but now we require all of the cities, not just the town that I live in, not just the oil industry, not just the chemical industry, but the cities upstream and downstream [to clean up]. Some of them, we had to take them to court to tell them to clean it up. Today San Francisco Bay is a tourist attraction. Commercial fishing is back. People can use it for recreation.”

- F. In recent years, especially since the passage of the Unfunded Mandates Reform Act of 1995, state and local governments have spoken out against still existing unfunded mandates and forced the federal government to pay a greater share of the cost to implement the mandates.
  - 1. The burden on local communities has been somewhat reduced, but the demands of the programs still take their toll on the time allocated by personnel to meet the legal requirements.

**Objective 21.3. Compare water laws east and west of the Mississippi River. (PP21.4)**

**Requirements:**

None.

**Remarks:**

**I. Water Rights**

- A. Water rights are one of the primary determinants that influence floodplain management. Water laws refer to the rights of those people, communities, and businesses that wish to withdraw water from flowing streams or under ground for their use. **(PP21.5)**
  - 1. In those areas, typically east of the Mississippi River, where rainfall, and thus water, is relatively abundant, **riparian water rights** are generally in force.
  - 2. In those areas where rainfall is relatively scarce, typically west of the Mississippi River, the **doctrine of prior appropriation** generally rules.

**II. Riparian Water Rights**

- A. A **riparian** system of water rights associates the right to use water with the ownership of land beside or within which water flows. **(PP21.6)**
  - 1. A riparian owner is permitted to use all the water it needs for its “proper purposes,” returning to the stream all that is not consumed, without liability to downstream riparian owners.
  - 2. Individual states, especially courts, have defined what constitute “proper purposes,” and statutes in each state must be consulted for specifics. Usually, what is proper consists of uses for individual households, farms, municipalities, and businesses.
  - 3. The policy behind the law of riparian rights is to accommodate as many reasonable uses of a water resource as possible or, in other terms, to use the water resource as efficiently as possible. In most years, there will be sufficient water to accommodate all users.

- a. However, in the event that the demand for water exceeds the supply (as during a drought), all users are expected to reduce their demand proportionately unless a reduction causes irreparable harm to a specific consumer, for example, if a person would be put out of business if denied sufficient water.
- B. According to Castle (1999), “the scarcity of water in the Rocky Mountain and Southwestern states has led to the development of a system of water allocation very different from that which exists in regions graced with more abundant rainfall.”
1. In arid regions, the demand for water exceeds the supply so water rights must be established to determine allocations. The use of water in the western United States is governed by the doctrine of prior appropriation, also known as the “Colorado Doctrine” of water law.
  2. Under the doctrine of prior appropriation, water rights are established by actual use of the water and maintained by continued use and need. “Water rights are treated similarly to rights to real property, can be conveyed, mortgaged, and encumbered in the same manner, all independently of the land on which the water originates, or on which it is used” Castle (1999).

### III. **Doctrine of Prior Appropriation**

- A. The doctrine of prior appropriation determines the allocation of water for beneficial purposes, usually defined as “irrigation, mining and industrial application, stock watering, domestic and municipal use, and other non-wasteful economic activities” Castle (1999). (PP21.7)
1. In essence, the allocation rests upon the fundamental maxim, “first in time, first in right” Castle (1999). “The first person to use water (called a ‘senior appropriator’) acquires a right (called a ‘priority’) to its future use as against later users (called ‘junior appropriators’).” Castle (1999).
  2. Because of scarcity, the number of junior appropriators is limited to that number for which water will be available after those senior have taken their allocations. Again, each state has developed, generally through the courts and legislation, unique determinations of water use and allocation, and the statutes should be consulted for specifics.
  3. Water rights may be forfeited if an appropriator does not divert water for a specified period of time, usually a period of years.

### IV. **Types of Water Rights**

There are two types of water rights associated with the doctrine of prior appropriation; **direct flow** and **storage**. (PP21.8)

- A. According to Castle (1999), **A direct flow right** is generally measured in terms of a rate of flow, not a total volume of water.
  - 1. For example, a direct flow right for 1 cubic foot of water per second (c.f.s.) means the appropriator is entitled to divert water from a stream or a well at a rate of not more than one cubic foot per second. The appropriator may continue to take water at this rate for as long as it is physically available in priority and he needs the water for beneficial use, such as irrigating a field.
- B. According to Castle (1999), a **storage right** is measured in terms of volume.
  - 1. For example, the owner of a reservoir may have the right to store up to 1,000 acre feet of water each year, to be used at some later time for a beneficial use.
  - 2. Often, a limit is placed on the rate at which water can be stored so as not to deplete the water source. Storage rights are usually for only one filling of the storage vessel per year.
- C. **Ground Water (PP21.9)**
  - 1. Rights from underground water differ from surface flow and vary dramatically in states. Some states, according to Castle, 1999, treat **tributary ground water**—water that is hydrologically connected to surface flow—in the same manner as described above for surface water.
  - 2. **Non-tributary ground water**—water that comes from an underground aquifer that has no connection to a natural surface stream—may be used at the discretion of the owner of the land overlaying the water. However, most states have developed unique definitions of use brought about by case law and current statutes should be consulted for specifics.

## V. Administration of Water Rights

- A. Each state has an agency or official charged with the administration of water rights within its boundaries. Usually, that person or agency is within the department of water or natural resources. (PP21.10)
  - 1. For water rights on specific rivers, like the Colorado, there may also be a “water commissioner” to administer the water rights on these particular rivers or streams.
  - 2. The administrator or commissioner enforces the priority rule, ensuring those persons with the oldest priority dates (senior water rights) have the opportunity to divert water for their uses.
  - 3. In times of water shortage, senior appropriators can require that junior appropriators who are upstream stop taking water. This type of demand is

known as a “call,” and water users may be shut off in inverse order of priority by order of the state administrator.

## **VI. Irrigation**

- A. Because of the scarcity of water in states west of the Mississippi River, one of the uses of water is irrigation of farmland. This makes the Department of Interior a prominent player in river use policy. **(PP21.11)**
  - 1. On significant rivers such as the Columbia, Colorado, and Missouri, the Bureau of Reclamation can construct dams that increase the supply of water to help farmers irrigate.
  - 2. The dams may also provide hydroelectric power, municipal drinking water, and storage used for recreation. (Reference needed from *New Strategies for America’s Watershed, Permission needed*)

**Objective 21.4 Identify how physical and biological systems have affected public policy.**

### **Requirements:**

This section will be developed at a later date with the other course developers to coordinate previous assignments.

### **Remarks:**

This section is intended to be both a review of previous sessions and a simple look at public policy. Use the in-class discussion as a starting point for the homework assignment.

---

### **Notes**

The following are notes for the in class discussion and the student homework assignment.

#### **I. In Class Discussion (PP21.12)**

- A. With about 30 minutes remaining at the end of this session, divide the students into at least 4 groups of 3 to 5.
- B. To prepare students for the homework assignment, use the following discussion question for a short give and take. The purpose of this exercise is to generate questions for the homework research. Give each team several minutes to discuss and come up with a “team” answer they can present in this session.
  - 1. What are possible conflicts or areas of overlapping jurisdiction between local government, regional government, and the federal government in setting water policy? What are the important questions or issues that arise?

## II. Student Homework Assignment (PP21.13)

- A. Assign each group a state, some in different regions of the country. If there is time, have students begin to organize their work team responsibilities in class.
- B. Each group is to research how responsibilities for water use, pollution, and floodplain management have been divided between the state, counties, municipalities, and special districts.
  - 1. The information will usually come from the state constitution and state codes, both of which can be found on the Internet.
  - 2. However, many states and communities have placed their floodplain, stormwater, and/or water pollution control plans that contain descriptions of federal, state, and local responsibilities on the Internet. These plans, while comprehensive, are limited, and all sources should be exhausted to find the many ways each state has confronted its water issues.
- C. In session 23, have each team make a presentation of its findings and lead a discussion on similarities and differences to demonstrate why students must be familiar with local conditions at the start of their investigations of floodplains.

---

Reference Section to be added: