

12

Economics
Standard
12.1.4.



Private Property and Resource Conservation

California Education and the Environment Initiative

Approved by the California State Board of Education, 2010

The Education and the Environment Initiative Curriculum is a cooperative endeavor of the following entities:

California Environmental Protection Agency
California Natural Resources Agency
California State Board of Education
California Department of Education
Department of Resources Recycling and Recovery (CalRecycle)

Key Partners:

Special thanks to **Heal the Bay**, sponsor of the EEI law, for their partnership and participation in reviewing portions of the EEI curriculum.

Valuable assistance with maps, photos, videos and design was provided by the **National Geographic Society** under a contract with the State of California.

Office of Education and the Environment

1001 I Street • Sacramento, California 95814 • (916) 341-6769

<http://www.CaliforniaEEI.org>

© Copyright 2011 by the California Environmental Protection Agency

© 2013 Second Edition

All rights reserved.

This publication, or parts thereof, may not be used or reproduced without permission from the Office of Education and the Environment.

These materials may be reproduced by teachers for educational purposes.



Lesson 1 Rights to a Precious Resource

California Connections: Who Owns the Water? 2

Lesson 2 The Tragedy of the “Water” Commons

None required for this lesson.

Lesson 3 Applying Utilitarianism to Water Resources

Water: California’s Publicly-Owned Good 6

Proposed 1928 Amendment to the California Constitution 9

Lesson 4 Private Property and Conservation

California’s Land Trusts 10

Lesson 5 Incentives to Conserve

Incentives and Regulations for Timber Owners 12

Who Owns the Water?



Talking about the history of California is difficult without also talking about water. Irrigation has allowed people to turn California's fertile valleys into rich farmlands. Large-scale water projects have fed the state's swelling population and growing industries, transforming small towns into bustling metropolitan areas. Water itself has shaped California's diverse ecosystems.

This regional diversity—seen in vast deserts, wild and scenic rivers, and snow-clad mountains—in turn contributes to California's thriving tourism industry. Without access to clean, fresh water, California would not have the booming economy it has today.

Learning to Manage

Managing California's water resources has not been easy. One of the state's greatest problems is that fresh water is not distributed evenly throughout the state. While most of California's population is in the southern part of the state, most of the fresh water is in the northern part. Sometimes California's river systems flow sporadically, going dry for periods of time, and flooding in others. In the past, these factors led to an unpredictable water supply for most of California. The state's history tells of "wars" over water, as well as large-scale projects that transport fresh water



Merced River, Yosemite National Park, California

from its sources to areas of high demand.

European colonists in the eastern United States managed water resources through the English common law system. English “riparian law” stated that landowners were entitled to use water adjacent to their property for domestic purposes. Landowners did not actually own the water in the waterways. Instead, they “owned” the right to use it. A landowner could use as much water as he needed, provided his use did not affect another user’s rights to the water. This system worked well in England and the eastern United States, where water was abundant, but the situation was different in the western United States where water was harder to come by.

Californians and Water

The first people to inhabit California knew the value of water—availability of water largely dictated the location of California Indian settlements. Tribal regions often stretched from mountain ridge to mountain ridge, incorporating entire watersheds. In the sixteenth century, Spanish explorers arrived in California, bringing with them the idea that water could be “owned.” According to Spanish law, each person living in the Spanish communities



Gold nuggets

or “pueblos” received an equal allotment of water “rights.” The pueblo as a whole, rather than any one individual, “owned” the water. Pueblo leadership fined people who needlessly wasted or polluted the pueblo’s water supply.

When prospectors flocked to California by the thousands at the beginning of the Gold Rush in 1848, there were no water laws beyond the “pueblo laws” governing water use in the Spanish settlements. The U.S.–Mexican War had ended, and the U.S. government had not yet established control in the area. As a result, gold miners

created their own rules for water use. Fueled by the desire to make great profits, what resulted was a “first come, first served” perspective on water and waterways in the state. The first miner, or mining company, to stake a claim held “senior” rights over all the natural resources within the claim—including the waters flowing through it.

As mining operations grew, competition for water and other natural resources increased. What resulted was a “use it or lose it” principle—those not making “beneficial” use of their claim and the natural resources

from it had to surrender their rights to that claim. Local officials, most of whom owned mining companies and large farms or ranches, randomly made the judgment about what was “beneficial” use and what was not. There was no limit to the amount of water they could use—any water left in a watershed was “wasted.” A miner with “senior” rights could lose an entire claim, just for letting water flow downstream. Soon, only the wealthy controlled the watersheds.



Private property sign

Laws of the Land... and Water

In 1850, California became a state, and federal law came into play. Under the federal system of government, states generally have full power to regulate water use. California officially became a state with two sets of water laws: the “riparian law” used by the federal government (from the eastern United States) and the “prior appropriation doctrine” (“first come, first served”), which had, up to statehood, managed the

water supply in favor of agriculture and industry. What resulted was an enforcement of both “laws”—although applied differently according to region. In the north, “prior appropriation” encouraged people to monopolize and exploit as much water as they could from the abundant sources. In the more arid south, where water was scarce and supply was seasonal, “riparian law” was the rule.

The growing population after statehood placed greater

demands on California’s water sources. The state became more and more interested in harnessing and protecting freshwater supplies. The Water Commission Act of 1913 called for the establishment of a permit process and the formation of a State Water Commission (later renamed the Water Rights Board) responsible for managing California’s public water supply. As one of its first acts, the

commission determined that “riparian law” took precedence over “prior appropriation” law. The government would grant a permit to use water only if an individual’s use of the water coincided with a “greater public interest.” In 1928, voters passed a state constitutional amendment prohibiting the “waste of water” and stating that California’s water supply should be “put to the most beneficial use possible,” effectively giving ownership of the state’s waters to all of its residents.

A Continuing Challenge

By the end of the 1940s, additional management of the state’s water supply became necessary. Post-war industrial development and population growth had affected the health of California’s watersheds. Water pollution spread disease and resulted in loss of aquatic life. These changes severely affected the state’s recreational areas. At the same time, the state’s metropolitan areas were increasing their demand for clean, fresh water. California created the State Water Pollution Control Board in 1949 to set standards for water quality throughout the state. In 1967, the two state regulatory agencies merged into a single agency: the State Water Resources Control Board. Two years later, the state legislature passed California’s

most powerful legislation for water protection—the Porter-Cologne Water Quality Control Act. This act gives the State Water Resources Control Board and its nine “regional boards” broad powers to preserve and enhance the water resources of California. The 1972 “Clean Water Act,” passed by the U.S. Congress, requires each state to enforce both state and federal standards for water quality.

California faces a future of continued population growth combined with increased economic development, which means the regulatory tasks of the State Water Resources Control Board are more important than ever. In order to have enough clean, fresh water to meet the state’s increasing needs, the board is taking measures to conserve, protect, and enhance California’s water supply to the greatest extent possible.



Tijuana River, San Diego, California

Water: California's Publicly-Owned Good

When American prospectors began arriving in California in 1848, they were thousands of miles from the center of the U.S. government. Thus, they came up with their own water laws. It was “first in time, first in line” on the mining frontier: the first person to claim ownership of the water owned the water. Economists call this policy “prior appropriation” doctrine. But laws in the East, based on British common law, favored “riparian rights.”

Riparian rights gave landowners the right to use the water adjacent to their property for domestic purposes. Prior appropriation allowed water owners to divert rivers (which prospectors frequently did) and based continued ownership on the owner's use of the water. Riparian rights limited the amount of water owners could use; they could not use, or divert, so much water that those downstream would be deprived.

As you might imagine, having two competing systems for deciding who owned the water caused more than its share of problems! These problems made their way into California's courtrooms in the late 1800s and early 1900s. *Lux v. Haggin*, a legal struggle that lasted from 1879 to 1886, revealed the deep schism between the state's two systems of water ownership.

James Haggin and his business partner, William Carr, bought up huge amounts of farmland in the San Joaquin Valley in the 1870s. Despite



Irrigation canal on Central Valley ranch, California

being large landowners, they fashioned themselves as champions of the “small farmer” and advocates of the appropriation doctrine. On the other side of the battle were Charles Lux and his business partner, Henry

Miller. Lux and Miller owned a lot of land downstream from Haggin and Carr. When Haggin began building canals to divert his water—which prior appropriation said he could do—Lux took him to court. After two appeals, Lux

won. The landmark California Supreme Court decision declared that riparian rights were the law of the land—except when they were not! Prior appropriation would take precedence if the “appropriator” had been using water from a stream before a second person claimed rights to the water. In short, *Lux v. Haggin*, while a landmark decision, did not resolve the tension about how to decide who owned the water.

The “water wars” intensified as California’s population grew and more city dwellers, farmers, and miners competed for the state’s limited supplies. As the 20th century began, the problem of water ownership extended beyond individual owners to create tension between cities (San Francisco and Los Angeles), and between cities and rural areas. A case in point was Los Angeles’ grab for water from the Owens Valley, over 200 miles away. LA’s leaders had a vision that theirs would become California’s biggest, most important city. To do so, it would need a lot of water. Three men took the lead in securing that water—and small fortunes for themselves. William Mulholland was superintendent of the LA municipal water system. Thomas Eaton was a former LA mayor and water engineer, and Thomas Lippincott was



Owens River, California

a representative of the U.S. Reclamation Service. The three men aggressively pursued—sometimes together, sometimes against each other—the rights to the land and water in Owens Valley. By repeatedly stirring up the fear of water shortages, they got city residents to commit money to bring Owens Valley water to LA. At the same time, they quietly bought up land in the Owens Valley—land that the city would have to purchase (at a high cost) to build an aqueduct to carry water from the valley to the city.

Of course, many people also opposed the Owens Valley project. First among them were the people of the Owens Valley—who were not getting rich. Damming the river was going to flood their once-rich farmland. However, then-President Theodore Roosevelt gave the project a stamp of approval. Roosevelt was a Progressive who applied a utilitarian approach to water use (and to other natural resources as well). How could the Owens Valley water provide the greatest benefit to the greatest number of people? Of course



Aerial view of Owens River, California

the answer was obvious to him. Supporting the transport of water from the valley to Los Angeles, Roosevelt said, “It is a hundred or thousandfold more important to the State and more valuable to the people as a whole if [the water is] used by the city than if [it is] used by the people of the Owens Valley.”

With the tug-of-war for water taking place on all fronts—from individuals taking their claims to court, to cities grabbing for water from distant locales—it was clear that California had a problem: how to make decisions about who owned the water and

how to use that scarce resource. The requirement to balance the needs of city-dwellers, farmers, preservationists, and miners made solving the problem more difficult. Clearly some sort of statewide oversight was called for.

In 1913, the state passed the Water Commission Act, which created the first State Water Commission. The Commission’s charge was to decide how to appropriate water in the state that no one already owned. The act also declared that riparian law, not prior appropriation, was the law of the land. Finally, the act asserted that government

would grant water permits based on the “public good”—that is, water use was to serve the good of the people. The 1913 Act defined public good broadly. It included water for cities, for irrigation, for mining, and for power generation.

By 1928, Californians took another, more definitive step toward addressing the question of water ownership. State citizens voted to amend the state constitution. The amendment asserted that water belonged to everyone in the state, not to private individuals or to corporations. Because water was a “public good,” the state government oversaw its use on behalf of the people.

In the case of California’s water—a necessary resource that is scarce and flowed unevenly through the state—private ownership failed. While the rules of the free market might suggest that private ownership would have led owners to protect both the quality and quantity of water, that is not what happened. Private owners neither conserved the quantity nor improved the quality of California’s water. By 1928, California’s citizens had claimed the water for the good of the people and ushered in an era of government stewardship for the state’s most prized resource.

Proposed 1928 Amendment to the California Constitution

SECTION 1. The right of eminent domain is hereby declared to exist in the State to all frontages on the navigable waters of this State.

SEC. 2. It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare. The right to water or to the use or flow of water in or from any natural stream or water course in this State is and shall be limited to such water as shall be reasonably required for the beneficial use to be served, and such right does not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water. Riparian rights in a stream or water course attach to, but to no more than so much of the flow thereof as may be required or used consistently with this section, for the purposes for which such lands are, or may be made adaptable, in view of such reasonable and beneficial uses; provided, however, that nothing herein contained shall be construed as depriving any riparian owner of the reasonable use of water of the stream to which the owner's land is riparian under reasonable methods of diversion and use, or as depriving any appropriator of water to which the appropriator is lawfully entitled. This section shall be self-executing, and the Legislature may also enact laws in the furtherance of the policy in this section contained.

SEC. 3. All tidelands within two miles of any incorporated city, city and county, or town in this State, and fronting on the water of any harbor, estuary, bay, or inlet used for the purposes of navigation, shall be withheld from grant or sale to private persons, partnerships, or corporations; provided, however, that any such tidelands, reserved to the State solely for street purposes, which the Legislature finds and declares are not used for navigation purposes and are not necessary for such purposes may be sold to any town, city, county, city and county, municipal corporations, private persons, partnerships or corporations...

SEC. 4. No individual, partnership, or corporation, claiming or possessing the frontage or tidal lands of a harbor, bay, inlet, estuary, or other navigable water in this State, shall be permitted to exclude the right of way to such water whenever it is required for any public purpose, nor to destroy or obstruct the free navigation of such water...

SEC. 5. The use of all water now appropriated, or that may hereafter be appropriated, for sale, rental, or distribution, is hereby declared to be a public use, and subject to the regulation and control of the State, in the manner to be prescribed by law...

California's Land Trusts

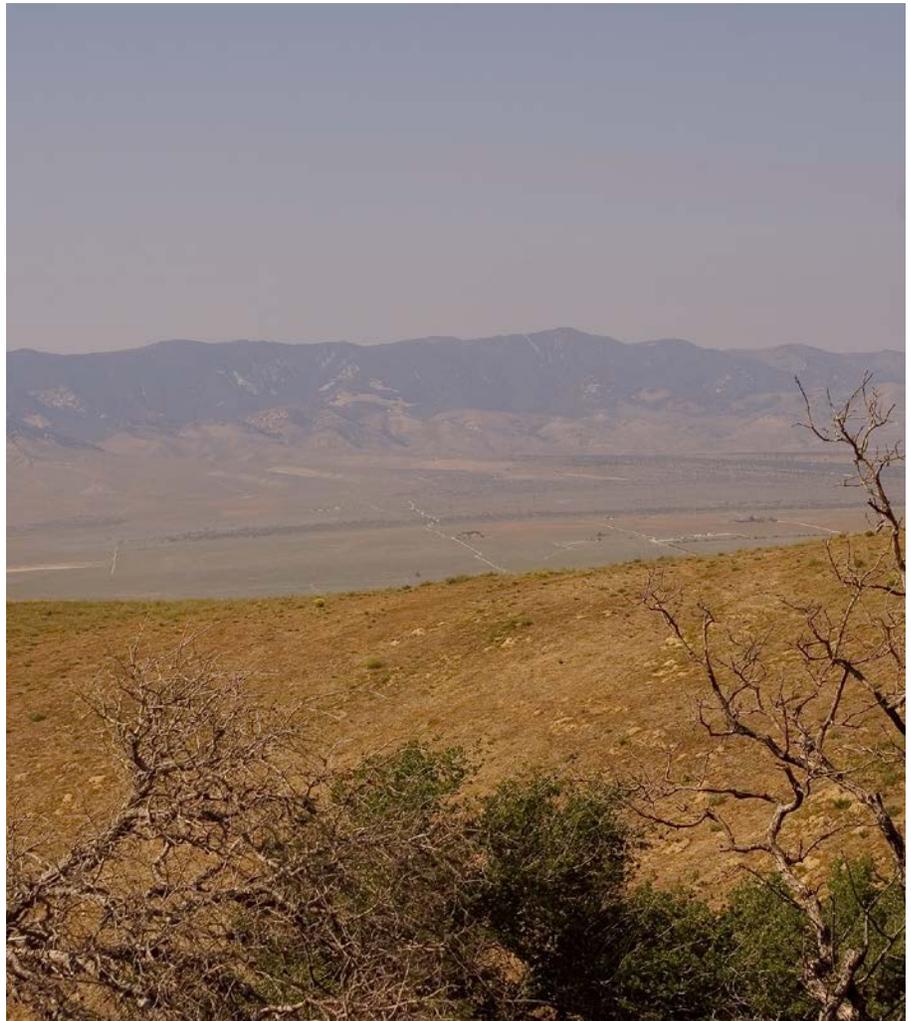
Background

Government efforts to conserve natural resources abound. The National Park Service, U.S. Forest Service, and U.S. Fish and Wildlife Service are government agencies that manage land owned by the U.S. government. One of the purposes of government ownership of the land is conservation. But private individuals and companies own a great deal of American land. How can landowners be encouraged to foster conservation efforts on their land? How can they protect the ecosystems on their property?

Land trusts are one answer. Land trusts are private, voluntary organizations that identify, protect, and steward conservation lands.

The tool of land trusts is the “conservation easement.” A conservation easement is a legal agreement between a landowner and a land trust. The easement restricts development on a tract of land in order to conserve that land. Under land trust agreements, property owners continue to own their land, but at the same time, they agree to certain limitations.

For example, a property owner might maintain her right to live on her land and grow crops, along with giving up the right to sell off parcels of the land for development or to develop the



Tejon Ranch, California

land for her own use. Land trusts help make it possible for private property owners to conserve their land and the wildlife that lives on it, rather than developing it in ways that damage natural ecosystems.

Participating in a conservation easement can be financially rewarding for landowners. They can sell easements on their property to land trusts. In doing so, they make money by conserving the resources on their land. At the same time, they retain many of the rights of private property ownership, like living on and using the land.

Government policies, like tax breaks, can also make conservation easements more attractive for landowners.

The Tejon Ranch Company Agreement

In May 2008, the Tejon Ranch Company agreed to set aside for conservation, 90% of its vast land holdings north of Los Angeles. Of its 270,000 acres, Tejon has set aside 178,000 acres. The government will have the option to buy another 62,000 acres in the future.

In exchange for agreeing to conservation easements on the land, Tejon gained assurances from a coalition of environmentalist groups that they will not interfere with the company's plans to develop the remaining 10% of its holdings. The groups—the Natural Resources Defense Council, the Sierra Club, Audubon California, and others—could have held up Tejon's development plans for years in court battles.

Like many conservation easements, this one allows certain existing uses of the land to continue. The owners can still use portions of the land for cattle grazing, gravel mining, oil and gas removal, and movie making.

Who Favors the Agreement?

Governor Arnold Schwarzenegger praised the agreement, saying, "We can protect California's environment at the same time we pump up our economy... When forward-thinking people are willing to sit down and make something positive happen, those old battle lines can be terminated."

The coalition of environmental groups heralded the agreement because it will ensure conservation of a large, contiguous piece of land. By reaching an agreement now, environmental groups avoid a situation in which the company

could have developed small parcels over many years. In that case, if environmental groups objected to the development, they would have had to fight each development separately, likely with mixed results. "While a win-some-lose-some record might be OK in baseball," two environmental leaders wrote, "it's not always good for the environment."

Tejon Ranch Company also had a lot to gain by agreeing to the easements. In part, company owners can feel good that they are doing something for the common good. Robert A. Stine, president and CEO of Tejon Ranch Company, said, "Owning so much land, there's certainly a duty. To whom much is given, much is expected." In addition, agreeing to the easements works to the company's financial advantage. They can still develop 10% of the land, and they can go forward with development with no fear of hindrance by lawsuits. They are eligible to receive tax deductions, including estate and property tax relief.

Who Opposes the Agreement?

Not everyone supports the Tejon Ranch agreement. The Center for Biological Diversity did not sign on because it did not believe the agreement would sufficiently protect the habitat of the endangered California condor. Some private property advocates also oppose land trust agreements. They believe that the collaboration between private property owners and government agencies undercuts private property rights. As an example, the Tejon Ranch agreement includes a provision that would allow the state of California to buy 49,000 acres for a state park.

Incentives and Regulations for Timber Owners

Background

Forests account for 40% of California’s land. Of the 40 million acres of forestland in the state, 3 million are timberland—that is, managed for harvesting. Since the Gold Rush, timber has been an important economic resource in California. For more than a century, the state and federal governments have regulated timber use. Currently, in addition to regulations, incentives encourage timberland owners to conserve.

Some Timber Conservation Regulations in California

Numerous state and federal regulations govern the harvesting of timber in California. Three state regulations are described below:

1. California Environmental Quality Act (CEQA) requires timber owners to submit timber harvesting plans to the California Department of Fish and Game (DFG). The DFG and other agencies, for example Regional Water Control Boards, the California Geological Survey, and the Department of Parks and Recreation, recommend changes to the plans that could protect wildlife, plants, and water quality. The California Department of Forestry and Fire Protection ultimately reviews the plans and makes decisions based on the recommendations of the reviewing agencies.
2. California Forest Practices Act requires that logging is done in a manner that will protect fish, wildlife, and streams, as well as the integrity of forests.



Redwood National and State Parks, California

3. California Endangered Species Act (CESA) prohibits any person from “taking” endangered or threatened bird, mammal, fish, amphibian, reptile, or plant species (or subspecies) native to California. In the case of timber harvesting, CESA allows the DFG to authorize takings in some circumstances.

Some Incentives for Timber Conservation in California

Regulations are one way to govern timber harvesting. Incentives are another. Three incentive programs—three state and one federal—are described below:

1. Forest Improvement Program (California) encourages private and public investment in, and improved management of, California forest lands and resources. The goal is to ensure adequate, high quality timber supplies, related employment and other economic benefits, and the protection, maintenance, and enhancement of a productive and stable forest resource system for the

benefit of present and future generations. The program provides technical assistance, financial assistance for management planning, site preparation, tree purchase and planting, timber stand improvement, fish and wildlife habitat improvement, and land conservation practices for privately owned forest land.

2. Conservation Banking (U.S. Fish and Wildlife Service) offers landowners incentives to protect habitats of endangered or threatened species. Landowners can sell habitat or species credits to developers. By buying credits at a conservation bank, landowners compensate for environmental damage they might cause. Conservation “bankers” get to keep their land, generate income, get tax breaks, and preserve open space. Private, tribal, state, and local lands are eligible. Although this is a federal program, most of the country’s conservation banks are located in California.



Logs

3. Natural Community Conservation Planning Programs (NCCPP) develop conservation plans at the ecosystem level—rather than focusing on endangered species on a case-by-case basis—while allowing for compatible development. Under NCCPP, the state government may enter into agreements with private parties to prepare habitat conservation plans. NCCPP provides developers with a streamlined process for dealing with state and federal regulations and assures them that they will not face new conservation requirements, even if additional species or habitats are listed as endangered in the future.

4. The California Department of Conservation’s Watershed Program offers grants to special districts, nonprofit groups, and local governments to promote watershed management and local watershed improvements. The grant program supports watershed coordinator positions that facilitate collaborative efforts to improve and sustain the health of California’s watersheds. It also includes a Statewide Watershed Public Advisory Committee, which is responsible for guiding an extensive public outreach process to engage and receive advice from local people and communities on the construct of this new state program. There are two committee members representing each of California’s ten hydrologic regions and four “at-large” members who have a particular emphasis on tribal, environmental justice and regional geographic focus.

Numerous other incentive programs provide technical and financial assistance to private property owners to encourage protection of wildlife habitats and endangered species.



California STATE BOARD OF
EDUCATION

California Education and the Environment Initiative