Group #1 Work Responsibility Sheet

The following individuals all participated and contributed to the group project on defining the water controversy. All of these individuals should be given full credit for whatever grade we receive on this project.

Cristina Gutierrez - Research
Nicole Levie - Research
Robert J. Weichart - Research
Lilia fern - Research
Gabriela Cuellar - Presenter
Micaela Cuellar - Presenter
Lynette Thomas - Presenter

Katrina Eaton - Research and Author of Presentation Paper
Dan Saldate - Presentation Slides, Research Organization
Californian Water

If you ask any Californian what the water problem in California is, he or she will probably answer, "There isn't enough of it." But if you asked him or her why that is, you'd probably have to talk to a lot of people before you came up with the same answer twice. The issue started with the formation of the state itself. It is huge and incredibly complex, as is the list of interested and governing parties.

In most states, water is allocated by the judicial system. This works best if there are clearly defined rights to water. This is not the case in California. The first California State constitution borrowed heavily from other state constitutions, many of which had adopted English common law. This included the Doctrine of Riparian Rights. The Doctrine basically says that whoever owns the bank of the water source has a right to the water.

But prior to California's induction as a state, The US, Spanish, and Mexican governments had been handing out parcels of land without giving the recipients the right to the streams that flowed through the land. Water was controlled via Appropriation rights, which basically meant, first come, first served. There were already extensive irrigation systems in place when the new state was formed, and a year later, the Californian government decided to recognize water rights acquired under the local customs before the formation of the state. These conflicting water rights effectively removed consistent water allocation from the state judicial system. When a state statute passed 20 years later defining water appropriation rights, the stage was set for a battle that still hasn't been settled 120 years later.

As the gold rush came to an end, the land rush began. California's temperate climate allowed multiple crops to be grown a year. Agriculture began
to fill the economic niche that gold left. While the state had enough water to support farming at that time, the water was not spread evenly through the state, and irrigation had to be used to move the water where it needed to be, and thus the statute was passed.

The downside to defining appropriation rights was that it allowed anyone to stake a claim to a water source. In 1887 the Wright Act was passed to make sure the water was being allocated to the farming community.

Unlike the sprawling homesteads of the Midwest, Californian farms tended to be clustered into communities. The act allowed these communities to form government subsidized water districts. The money the government provided allowed water to be moved from farther and farther away.

This meant that taxes were supporting cheap water for farmers, a fact the people liked. As the farming community prospered, so did the state economy.

In 1902 the federal government passed the Newlands Reclamation Act in an attempt to build up farming in arid western lands. The act allowed farmers of several western states to buy federally subsidized water to irrigate up to 320 acres per year.

However, until the 1980's, the federal government did not strictly regulate how much water farmers were buying, and many used more than their share.

The federal government did not get directly involved with California water problems again until the 1930's, when President Franklin Roosevelt started implementing water policies as a way to try and lift the Pacific Northwest out of the Great Depression. These policies manifested as the Central Valley Project. It consisted of 30 dams that provided cheap electricity to homes, and twenty percent of the state's water supply. All the water from these projects went into irrigation for farming. Around this time the Federal Government also began work on the Hoover Dam, which eventually is used to send water and electricity to Los
In 1959 the Burns-Porter Act established the State Water Project. The bill provided the funding to build 600 miles of dams, reservoirs, pumping plants, canals and pipelines. The California water project, composed of both the State Water Project and the Central Valley Project is the largest water relocation structure in the world. It's so big that it can be seen with the naked eye from space. (In fact, it's the ONLY man made structure that can be seen from outer space.)

One of the dams funded by the Burns-Porter Act was completed the following year. The Orvill Dam completed the damming of the Feather River, which cut off the natural flow of water into the delta of the San Francisco Bay. The effects were devastating to the wetland ecosystem, leading to many wetland species becoming endangered. The Delta fishing industry was also dealt a serious blow by the damming of the Feather River. While there was plenty of water to go around, most California denizens didn't mind giving 80% of the state's water to agriculture. But now that there obviously wasn't enough water to go around, people began to be less generous.

There were other side effects to the loss of the wetlands as well. Healthy wetlands can help filter contaminants out of the water. As the wetlands began to shrink and filter less effectively, the quality of the water began to go down. California's manufacturing industries dump millions of gallons of contaminated water a year. The chemical runoff (pesticides, herbicides, and chemical fertilizers) from all the agriculture is another major pollutant. Leaking septic tanks continued to befoul the ground water supply, as does air pollution. As the wetlands began to disappear, people began to notice the difference in water quality. In 1967 the State Water Resources Control Board was established to
monitor the state's water quality.

In the late 70's agrarian reformers asked that the Newlands Reclamation Act be more strictly enforced. Congress responded by passing a reformed version of the bill in 1982 saying that farmers could buy subsidized water to irrigate 960 acres, and beyond that they would have to pay a much higher price. While this forced Californian farmers to be careful about taking more than their fair share of out-of-state water, it made them even more dependent on the in-state water supply.

At the same time, urban development was beginning to suffer from the lack of available water. Earlier in California's history, developers would simply build a community expecting the water to be made available. California's farmers became even more dependent on the state water supply, yet the state population continued to grow and need water as well. While the Northern half of the state had most of the state water supply, the Southern half was using most of the state's water for agriculture and urban areas. The wetlands, located in Northern California, continued to shrink, and the quality of the water continued to go down.

In 1987 The Federal Clean Water Act forced California to do more than just monitor the water quality. When the state drinking water doesn't meet the set guidelines, the state must clean up its water supply. While the Act improves the quality of the state drinking water, it doesn't change the fact that California's population continues to grow, but the state water supply does not. In response to this, the state passed the Miller Bradley Bill in 1992. It reformed the Central Valley project by allowing farmers to sell their excess water to urban water districts. This not only provided water to urban areas, but also allowed farmers to develop an income that was not dependent on crops.

This act did nothing to help save neither the wetlands nor the endangered
species that lived within. In 1994 the Bay Delta Accord was signed into law with the intended purpose of saving the estuaries, as well as providing more water to both farmers and urban areas. This is done via the Bay Delta Advisory Council which is comprised of State and Federal water agencies. The council works with environmental groups (such as the Environmental Water Caucus) as well as agricultural and urban interest groups to try and find solutions to the water problem. It is the current attempt to solve a long-standing problem.
Bibliography


Defining the Issue: Water In California

In the West Whiskey for Drinking, Water is For Fighting
--Mark Twain

Key Terms:

*Riparian Rights- a landowner adjacent to a stream has the right to water in that stream.

* Appropriation Rights- Rights to water are acquired when water is diverted from its natural course for beneficial use. The right that is acquired first has priority from those acquired later.

*Land Subsidence- Term used to describe the sinking of land due to too much groundwater being pumped out and the water table being lower.

*Irrigation Districts- Organized agencies that control water usage in a given area both for irrigation and household consumption. Examples: Turlock Irrigation District (T.I.D,) Modesto Irrigation District (M.I.D.)

*Delta- Area where saltwater from the Pacific and freshwater from the inland streams mix providing a valuable habitat and trade routes.

Why Does California Have a Water Controversy?

Environmental Causes

* Factors that contribute to poor air quality also contribute to poor water quality.

* California's manufacturing industries dump millions of gallons of contaminated wastewater into the water supply.

* California's soil absorbs millions of gallons of pesticides and chemical fertilizers each year. This leads to problems between farmers and environmentalists.

* California has lost 80% of its wetlands that help filter out contaminants when healthy. California is one of seven states with this rate of habitat loss.

* Sewage is the single largest pollutant of drinking water, mostly from septic tank leaks.

* All of these factors lead to various interest groups seeking to
protect the environment. These groups are opposed by farmers and urban water projects that seek to balance need for water with environmental consciousness.

* The State Water Resources Control Board is established in 1967 to monitor the state's water quality

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Why Does California Have a Water Controversy?

Geographic Causes

* 80% of California's water is used for agriculture.

* Northern California receives 66% of the State's water supply from rainfall and snow run off.

* Southern California due to its large population has a need for 80% of the State's water resources. This water is used to satisfy both Urban and agricultural needs. Southern California does not receive enough water to satisfy its overwhelming need.

* Most of the farmland of the central valley receives its irrigation water from sources further north. In order to maintain viable crops in this area the water must be transported to the area.

* Part of the controversy arises when northern farmers believe too much of the state's water is being diverted to the south and they will not be able to effectively irrigate their fields during drought periods.

* Southern California receives water from areas outside the state, specifically from the Colorado River.

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Key Developments and Organizations

* 1887- California passes the first irrigation act (Wright Act) to deal with water issues. This act effectively taxes and distributes water to farmers. Turlock Irrigation District is the first such district in California (gains rights to the Tuolumne River).

* 1902- Newlands Reclamation Act- This act tried to build up farming in the arid West by selling federally subsidized water from its dams and canals. The act allowed farmers the right to buy enough water to irrigate 320 acres. (This law is never strictly enforced and farmers use more than their share)
* 1930- The Federal government (U.S. Bureau of Reclamation) dams the Sacramento River with the construction of the Shasta Dam. This is the beginning of the Central Valley Project (CVP). The project will eventually consist of thirty dams that supply 20% of California's water needs (mostly to farmers in the San Joaquin and Sacramento Valleys.

* Federal Government also funds the construction of Hoover Dam, which effectively dams the Colorado River, providing power and electricity to the Los Angeles Area.

* 1959- Burns-Porter Act establishes the State Water Project. This bill effectively approves 600 miles of dams, reservoirs, pumping plants, canals, and pipelines designed to bring water from Northern California to Southern California. (The State Water Project along with the CVP make up the world's largest water project. (Could be seen by NASA astronauts in orbit).

**Key Developments and Organizations Continued**

* 1960- Oroville Dam completed effectively damming the Feather River. The completion of this dam marks the end of the natural flow of rivers into the Delta of San Francisco Bay. This leads to serious environmental consequences, as fresh water is needed to keep the ecosystems of waterfowl, fish and other wetland animals viable. The damming of the Feather River leads to several species of these animals becoming endangered.

* 1987- Federal Clean Water Act establishes rules all state's must abide by concerning water and pollution

* 1994- The Bay-Delta Accord signed into law with the intended purpose of saving the estuary lands while at the same time guaranteeing water supplies to farms and cities. This accord was agreed to by the State and Federal water agencies known as CalFed. The accord was also signed by the Bay-Delta Advisory Council, which is made up of environmental groups such as the Environmental Water Caucus and the California Urban Water Agency that represents agricultural and urban interest groups.

* 1992- Miller-Bradley Bill reforms the Central Valley Project. In effect, this bill allows farmers to sell their excess water rights to urban water districts in order to achieve two results. First, to provide more water for urban use through conservation of irrigation water. Second, to provide farmers with financial benefits aside from their agricultural subsidies.
Viewpoints

California's supply of water is fixed by nature but the state's population continues to increase. Consequently, the supply of California's water can be considered as decreasing in terms in comparison to the state's continued rise in population. This problem must be addressed or shortages of water similar to those we experienced in power may be inevitable.

Presentations to follow:
Other Groups will further explain the water controversy in more detail in the following categories.
1. California’s Constitution and basic water legislation
2. The role of the Federal government
3. Attitudes of the people
4. Role of the Media
5. Interest Groups
6. California’s political parties and water
7. Role of the California legislature
8. Role of the Governor
9. The California bureaucracy and water
10. The California courts and water
11. Who has the right to water?