

SOSC 300 Fall 2009

Professor Dunn

Topic: Water in the West

Memo to the Student: During the semester, you will learn your role to play in a simulation on water allocation in the West. Below are some topics to consider that may have relevance to your role. These ideas and questions were generated by the students in your class.

Economics

Using Lake Powell

- How much water can we use?
- How much will it cost with the distribution and draining?
- What kinds of jobs will it create, or how many jobs will be lost?
- How will it effect the environment? Animals? Plants?

Converting salt water to fresh water

- What will happen to the ocean? Wildlife?
- A new industry will be expensive.
- Price of water will fluctuate
- Taxes on water
- How are the funds going to be raised and for how long?
- How would it affect the other countries, will it help, or become a war?
- How much debt will it produce?
- How will it affect the crops, will they die or thrive?
- How will it affect farmers and the distribution of food?
- How will it affect to health of people? Hospitals? Healthcare?
- How much water needs to be filtered to accommodate the population?
- Could use community service and jail workers to lower cost of labor.

Denver Water Company

- Why are farmers paying fines for stealing water, water should be easily accessible.
- The money that is takes to distribute that water is increasing.
- Conserving water by using irrigation and gray water.
-

- States buy the water
- Percentages of water use to the states
- Population vs. size of the states for water consumption
- Agricultural need?
- Profit : how much profit do different sectors bring in
- Is the water being used effectively

- Cost to recycle water?
- How much does it cost to move the water?
- Usage compared to cost?
- Maintaining dams and diversions cost?
- Price of water increase
- Cost of water to a percent of farmers budget: prices go up or usage goes down
- Residential cost of water vs. farmers cost
- Which areas are growing the fastest?
- Co-ops of water= power
- People stealing water- cost to state?
- Cost to deliver water
- Food is cheap in the US, when water prices increase, the prices increase or people leave farming
- Cost of food
- Water efficiency on farms
- Cost to desalinate the water
- Fines to water wasters?
- Value of water
- Long term vs. short term costs

History

Has the confrontations about water always been around or have they recently increased significantly?

When did California begin to take a portion of the Colorado water supply?

When did the Colorado River begin to be split between other states?

How has water issues developed and changed throughout the years?

How did the increase of population and beginning of sharing water affect each other?

What major events, technologies or changes affected the water supply in the West most significantly?

What laws, regulations, and/or rules have been passed in the West dealing with water?

When did the longest/ most severe droughts take place in the West?

What attempts have been made to conserve water through the years? What attempts were the most successful?

Is the amount/size of farms decreasing?

- How have water laws changed from the past?
- Which laws should be kept alive and which should be terminated?
- What have been conflicts over water in the past?
- How has population and water usage changed?
- Which cities are growing fast and how fast?
- Why are people going to those cities?
- Are these cities going to continue to grow?
- How have past weather trends changed?
- How has geography changed the water supply?
- Who built the dams and how have they changed the water usage?
- What increases in urban land have changed water supply?
- What are the historical prices of water in the past and how have they changed?
- Who has wasted water in the past?
- Why was water wasted in the past?
- Who were the key decision makers in the making of these laws?
- Who has kept water from others?
- How did immigration to the west affect the water supply?
- What is the Prior Allocation Law and how does it help or not help water supply?
- In 1945, there was a Treaty made for the U.S. and Mexico—what does it do to help the water supply?
- Seven states are involved in the 1922 river compact, including Mexico, what does it do to help water supply?
- Who have pinned each other in the past over water?
- When in the past has water supply fights made it to the supreme court?
- How have food prices increased in the past?
- What is the amount of land under cultivation by state?
- Is farming disappearing?
- Who has used the most water?
- How has that changed the efficiency of water usage?
- Where have we gotten water in the past?
- When was water starting to be conserved and by who?

Political Science/Civics

- People in political office should have expectations to spearhead the issue and see that changes are made and needs are met
 - Water restrictions both state and city wide---> maybe they mayors office?
- State to state relations in way we share and transport the water

- Making sure one state is not receiving more than another
- Equality between states, cities, and regions
- Quality of water going to different places
 - What is going in and coming out of the water?
- People in office need to make the public aware of the issues and how they are going to be met and fixed
 - Campaigning and adds
- Water Law- Prior Allocation
 - Who has priority over the water?
- Competition between states/regions within states and that everyone has an equal chance
- Preventing companies from having monopolies over water and water law
- The Federal governments agenda verse state government agenda
- Making laws and policies about using clean water/non-clean water

Geography

- Interested parties-
 - Farmers
 - Ranchers
 - Government's local/regional
 - Water business companies
- Which state does the water come from? Where in the state?
- What are some of the current major water infrastructures? Where/where not
- What is the current water consumption per state?
- How does water infrastructure affect the landscape?
- How much precipitation is in these areas?
- What are the crops and how much water is needed per each type of crop?
- Can the east be broken into sections and if so can they work together?
- Is there more water coming naturally or by infrastructure?
- What is the difference between the dry and wet areas?
- What are the different methods of transportation of water per state?
- What is the seasonal difference in water consumption/precipitation?
- What are the growing seasons in each state/ what is the difference?
- Is the water used for lawns, crops or other things and what are the others?
- Who manages the amount of water used per district?
- What are the current major water laws in each area/state?
- What would be the effect of a lack of water?
- How has the 'go green' movement affected water?
- What technologies could help with the creation of more water?
- What effects would the melting of the ice caps have on our water supply?

- Are farms disappearing over time?
- Where does water go when it is wasted?
- What happens to grey/black water?

1. Are farms or the overall farming acreage in Colorado disappearing/shrinking?
2. Who is consuming the most water?
3. What is the evaporation rate in a lake/reservoir, stream/river, as opposed to storing water underground or piping it to a location?
4. Where does waste water go?
5. What are the risks involved with using grey water vs. raw water.
6. What is the replenishing rate for the state of Colorado over a year?
7. Do reservoirs create new issues because the citizens think they have an unlimited supply of water?
8. Which areas of the US have a deficit and which have a surplus?
9. Should it be mandatory to have water efficient appliances?
10. Should some of the areas that border the oceans start to desalinize the sea water to meet their water demands?
11. Should there be water restrictions in place and should a person's yard be regulated as to what kind of vegetation or plants they can grow in their front yard?
12. Should we tap into the aquifers in the local area and find ways to purify others that are seen as unfit for consumption?
13. Who does the Colorado River serve at this point in time?
14. Should there be tax break for people that use water saving devices and grow vegetation/plants that are more natural for the water availability in the area.
15. Should we outlaw certain kinds of businesses: Golf courses, Outdoor pools, and other businesses that take too much water away from the farmers and are not natural to the area?