

Midterm Paper

California's Water Challenges

Choose ONE topic for your midterm paper

Please write a six to seven page paper (double spaced, 12-point font) addressing the topic of your choice. Use material from lectures, books, and relevant news articles to support your arguments and opinions.

1) Two great threats to California irrigated farmland: drought and salt. What are the issues here? How has water development served to alleviate and/or aggravate these threats? How has the environment indirectly been affected in our pursuit to avoid them?

2) Many sectors (agricultural, industrial, resource managers, cities and nations) consider how climate change will affect business as usual policies and practices. It has a profound effect on water resources as well. Discuss the major drivers and effects of climate change. What are the implications for CA water development and management (consider farming, drinking water, land use, storage, etc.)?

3) Water, economics, and politics are inherently tied together. Identify examples that demonstrate the connection between economics, political power, and water management. Has consideration of environmental demands for water changed how economics influences water allocation and development?

4) Water supply and water quality go hand-in-hand. Discuss how different demands have different considerations and standards (agricultural, urban, and environmental). What water quality issues face California (surface water and groundwater) and how are they or might they be addressed?

5) The San Francisco Bay/Sacramento-San Joaquin River Delta is the largest estuary on the West Coast of the U.S. It is also one of the most sensitive water policy issues in California. Briefly describe the current situation in the Delta.

6) The California drought of 2012-16 resulted in massive water shortages. Discuss how this drought affected cities, small communities, farms, the environment, public policy (e.g., groundwater regulations) and the economy, and how these effects might have been different had CA not built its massive water storage and conveyance structures.

Final Paper

California's Water Strategies and Recommendations

Based on your selected topic for your midterm paper, please write an additional four to five page paper (double spaced, 12-point font) addressing some strategies and recommendations of your topic of your choice. Use material from lectures, books, and relevant news articles to support your arguments and opinions.

- *Fix any suggestions made to your midterm paper*
- *Include to your midterm paper your strategies and recommendations (Final paper including your midterm should be 12 pages max)*

Here are some prompts and ideas to guide your strategies and recommendations.

-What hope do we have? What are the promising solutions or potential possibilities to mitigate the impacts of drought and salt loading?

-What might the response by local and state agencies and even individuals be? How might we adapt our management of water resources to such changes?

-How might economics (water transfers, banking, etc.) be part of our strategies in the future to deal with water scarcity?

-How might considerations of water quality help alleviate water scarcity?

-What are the “co-equal” goals? What options have been proposed to solve the crisis in the Delta? Based on the information you find, what would you do to solve the problem?

-Suggest what future changes in the legal, policy, economic and infrastructure aspects of water are needed to make the state more resilient to the next drought.

- If you choose a career in a water-related field, you will probably be called upon to solve, or to attempt to solve, a pressing water supply or water quality problem. Write a description of your proposed solution, and a brief analysis of how and to what extent your solution will address/mitigate the problem you selected.