

Hetch Hetchy

How do we make the best use of our natural resources?
A Recommendation to Congress



Curriculum Guide

This program is designed to engage students in decisions about the past, present, and future of California. In particular, it focuses on a moment in time—1913—as the U.S. Senate was preparing to vote on the Raker Bill, legislation that would grant San Francisco the right to dam the Hetch Hetchy Valley to provide the city with reliable sources of water and electricity. Use this curriculum guide to support the deliberation process, from immersing students in the complexities of the issues, to participating in the forum, to making connections to today.

This work will culminate with a Day of Deliberation at the Autry Museum and will include a 90-minute Deliberative Forum moderated by a museum teacher and a tour of our *California Continued* galleries.

The following pages contain a pre- and post-visit lesson plan for the Day of Deliberation. To maximize the benefits of this program, please complete the pre-visit lesson in the week before the Day of Deliberation, and the post-visit lesson in the week after the Day of Deliberation.

CALIFORNIA STATE STANDARDS

8.12.5 Examine the location and effects of urbanization, renewed immigration, and industrialization (e.g., the effects on social fabric of cities, wealth and economic opportunity, the conservation movement).

11.11.5 Trace the impact of, need for, and controversies associated with environmental conservation, expansion of the national park system, and the development of environmental protection laws, with particular attention to the interaction between environmental protection advocates and property rights advocates

11.2.9 Understand the effect of political programs and activities of the Progressives (e.g., federal regulation of railroad transport, the Children’s Bureau, the Sixteenth Amendment, Theodore Roosevelt, Hiram Johnson).

Principles of American Democracy

12.2.4 Understand the obligations of civic-mindedness, including voting, being informed on civic issues, volunteering and performing public service, and serving in the military or alternative service.

12.3.2 Explain how civil society makes it possible for people, individually or in association with others, to bring their influence to bear on government in ways other than voting and elections.

Principles of Economics

12.1.4 Evaluate the role of private property as an incentive in conserving and improving scarce resources, including renewable and nonrenewable natural resources.

CALIFORNIA COMMON CORE STANDARDS

College and Career Readiness Anchor Standards, Grades 6–12

Reading

KEY IDEAS AND DETAILS

1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

INTEGRATION OF KNOWLEDGE AND IDEAS

7. Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.*
8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

RANGE OF READING AND LEVEL OF TEXT COMPLEXITY

10. Read and comprehend complex informational texts independently and proficiently.

Speaking and Listening

COMPREHENSION AND COLLABORATION

1. Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.

2. Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
3. Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.

PRESENTATION OF KNOWLEDGE AND IDEAS

4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
6. Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate

Writing

TEXT TYPES AND PURPOSES

1. Write arguments to support claims in an analysis of substantive topics or texts using valid reasoning and relevant and sufficient evidence.

PRODUCTION AND DISTRIBUTION OF WRITING

4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

RANGE OF WRITING

10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

PRE-VISIT LESSON

A note on pacing: The following pre-visit lesson is divided thematically. There are recommendations for dividing the lesson into two class periods, however, teachers should pace and adjust the lessons according to their own class schedule and students' ability levels.

Recommended for Day 1

Part I: Introduction to Deliberation

OBJECTIVES

Define deliberation and how it helps with important decision making.

Describe how deliberation is different from a debate.

PROCEDURE

1. What is the first decision you made today? What to wear? What to eat for breakfast? How to get to school?

2. Decision making is a part of life. Some decisions are easy, like the examples mentioned above, but some decisions need more thought: What do I want to do after high school? What career do I want? Am I ready to get married?

3. How do you make good decisions? What do you do to help you make a good decision when the stakes are high? Students may free write, pair-share, or just discuss.

4. Discuss responses as a class.

5. Usually, when making difficult decisions we weigh advantages and disadvantages of all the options. The process of thoughtfully weighing options is called deliberation.

6. Deliberation on a decision involves long and careful consideration, and many times can include talking to different people to hear multiple perspectives.

7. Deliberation also includes analyzing trade-offs. A trade-off means that an option has a downside, or disadvantage. For example, if you decide to save your money to buy a new car, a trade-off might be that you would have less money to spend day-to-day.

8. Deliberation is an important skill to learn, as it can help you make informed and thoughtful decisions. Juries, for example, must use the skill of deliberation when deciding on a verdict in a court case.

9. In a few weeks, you will be deliberating about a historic decision with one another in a small group, or forum, at the Autry Museum. The goal of this deliberation is to identify common ground for action by listening to each other as you try to find the best solution.

10. A deliberation is not a debate. In debates, people argue the option they think best by proving the other side wrong. In a deliberation, all sides have merit and emphasis is placed on the best way to include all these sides in the decision-making process.

11. Let's talk about the decision you will be deliberating.

12. Pass out Hetch Hetchy Guide to students.

Part II: Preparing to Advise Congress

OBJECTIVES

Describe your role as a Congressional advisor and what you will be deciding.

Describe the three options listed in the guide and their trade-offs.

Analyze multiple stakeholders and their perspectives on Hetch Hetchy.

PROCEDURE

Set the Scene

1. The decision you will be deliberating on will focus on a historic decision from 1913. For this reason, we will be stepping back in time to consider what to do.
2. Open the guide to page 3 and read the Overview titled, “How would you advise Congress?”
3. Once students have read the Overview, ask them the following questions:
 - ? **What is your role in this deliberation?**
 - » Advise Congress on the future of the Hetch Hetchy Valley.
 - ? **Where is Hetch Hetchy?**
 - » Hetch Hetchy is a valley in Yosemite National Park in Northern California. (Yosemite became a National Park in 1890.)
 - ? **What is the issue at stake, and what makes it controversial?**
 - » The issue is about how to use the valley of Hetch Hetchy. There are many viewpoints about how to use the valley. Students should describe the viewpoints they read about in the overview.
 - ? **What questions will you need to consider during your deliberation?**
 - ? **What is the best use of our natural resources? How do we reconcile the competing claims of diverse populations? Whose needs should take precedence?**
4. Clarify any information as necessary.

Identifying the Options

1. As a Congressional advisor during the deliberation, you will be weighing the trade-offs of the three options before making your final recommendation. This means you need to know what the options are. Remember, the main question you will be answering in your recommendation to Congress is, What is the best use of our natural resources in the Hetch Hetchy Valley?
2. Divide the class into thirds. One third of the class will read option 1 on pages 10–12, one third will read option 2 on pages 14–16, and one third will read option 3 on pages 18–20. Students who need more support in understanding the options, actions, and trade-offs may use the summaries on pages 22–25.
3. Students may annotate the text and write notes or questions in the margins as they read. They are reading to answer the questions below:
 - ? **What does this option recommend?**
 - ? **What steps, or actions, would we have to take to make this option possible?**
 - ? **What is the positive impact of this option?**
 - ? **What are the trade-offs of this option? Remember, a trade-off is a downside or disadvantage.**
5. After 10 minutes (or however long your students need), lead a discussion by calling on students from each group to share their responses to the questions above about the option they read. Optional: Record student answers on poster paper, whiteboard, or with a document camera to use for the next lesson.
6. Checking for understanding: Have students complete an exit ticket describing each option and one trade-off from that option.

Recommended for Day 2

Hearing From Stakeholders

1. Review with students their role as Congressional advisors, and the issue they will be deliberating.
2. Emphasize that the main question to consider is, what is the best use of our natural resources in the Hetch Hetchy Valley?
3. There are three options to consider, each with their own actions and trade-offs that affect people differently. Review the options and trade-offs discussed in the previous lesson.
4. Today you will hear from seven different people, or stakeholders, who are affected by the issue over Hetch Hetchy. Their testimony will provide you with more evidence to help you deliberate.
5. What is a stakeholder? A stakeholder is someone who is involved in or affected by a course of action. Why do you think it is important to hear from multiple stakeholders when making your decision?
6. Divide students into seven groups. Each group will read a stakeholder profile found on pages 26–30. Their task is to read the profile and answer the following questions about the person:
 - ? **What do you think is important to this person?**
 - ? **Which of the three options does this person favor and why?**
7. Students will use the issue guide to figure out which option the person might favor.
8. The seven stakeholders:
 - **Widow from the 1906 earthquake**
 - **Member of the newly formed Sierra Club**
 - **Politician from San Francisco**
 - **San Joaquin Valley farmer**
 - **United States Senator from the East Coast**
 - **Rancher from the Hetch Hetchy Valley**
 - **Paiute woman who uses the valley to hunt and gather food**
9. Point out that some of these stakeholders, like the Paiute woman and the farmer, would probably not have been involved in these discussions in 1913, but they were still affected by the issue. This guide allows us to bring them to the table to consider their values.
10. After students have had time to discuss their profile, approximately 10 minutes, return as a class to share findings.
11. Each group should present on the following questions:
 - ? **Who is your stakeholder?**
 - ? **What do you think is important to this person?**
 - ? **Which of the three options does this person favor and why?**
12. Students listening to groups present should take notes on each stakeholder (Handout A).
13. After hearing from all the stakeholders, ask students, which stakeholders might agree with one another? Disagree? Why?
14. Have students reflect on the following questions about the deliberation:
 - ? **What do you see as some possible challenges that may arise in the upcoming deliberation?**
 - ? **How do you think we should handle those challenges?**
 - ? **Do you feel like this will be a difficult deliberation? Why or why not?**
 - ? **What issues can you think of today that might have similar challenges in arriving at a solution? Why?**

POST-VISIT LESSON

OBJECTIVES

Reflect on the deliberation experience.

Review the 1913 Congressional decision on Hetch Hetchy and trace environmental movements that evolved from this decision.

Consider current and future water use in the Hetch Hetchy Valley.

PROCEDURE

Review the Deliberation

1. Ask students to describe their deliberation experience:

- ? **What did you learn from your deliberation experience?**
- ? **What questions do you still have?**
- ? **Did you enjoy deliberation? Why or why not?**

2. Students may write or discuss their answers.

Historical Outcomes

1. Assign students to closely read the *San Francisco Examiner* article from December 19, 2013 (Handout B).

2. Have them answer the following questions, using textual evidence to support their answers:

- ? **Did the Raker Bill Pass? How do you know? Cite textual evidence from the article.**
- ? **Which option from the deliberation guide do you think the *San Francisco Examiner* favored in 1913? Why?**
- ? **How did the passing of the Raker Bill influence future environmental legislation?**
- ? **Which stakeholders might disagree with the idea of a National Park System? Why?**
- ? **Why does the author say this “California water war” has been “raging for more than a century”? What has happened since the signing of the bill in 1913?**
- ? **What does the article say the Hetch Hetchy Reservoir currently provides for residents of the Bay area?**
- ? **In hindsight, did Congress choose wisely in passing the Raker Bill?**

3. Review article and questions with students while viewing corresponding images (Powerpoint).

Writing Activity: What's Next?

The Future of Hetch Hetchy

The year is 2040. On the ballot this year is Proposition 99, the Water Sustainability and Environmental Restoration Act. This proposition would require the city of San Francisco to prepare a plan to drain the Hetch Hetchy Reservoir and identify replacement water and power sources.

As a Congressional advisor on the original bill to dam Hetch Hetchy, the *San Francisco Examiner* has asked you to write an editorial advising voters on this issue.

What would you recommend to California voters on Proposition 99? Explain your recommendation using your knowledge of the issue.

SUPPLEMENTAL DOCUMENTS

Congressional testimony from James Phelan, Gifford Pinchot, and a letter to Congress from Robert Underwood Johnson

— <http://historymatters.gmu.edu/d/5721/>

Except from John Muir's 1912 book *Yosemite*

— <http://historymatters.gmu.edu/d/5720/>

Congressional Records from the National Archives

— <https://www.archives.gov/legislative/features/hetch-hetchy>

New York Times editorials opposing the dam

— http://vault.sierraclub.org/ca/hetchhetchy/ny_times_1913_editorials.html

Organic Act establishing the National Park System

— https://www.nps.gov/parkhistory/online_books/anps/anps_1i.htm

Hearings and Testimony on the Raker Bill

— <http://www.sfmuseum.org/hetch/hetchy.html>

Hetch Hetchy Dam and Water Rights Today

— <http://www.sfchronicle.com/bayarea/article/Who-owns-California-s-water-Gold-Rush-era-laws-6498621.php>

Movements to Restore the Valley

— <https://ww2.kqed.org/news/2015/04/27/new-lawsuit-seeks-to-force-city-to-drain-restore-hetch-hetchy/>

— http://www.slate.com/articles/health_and_science/science/2012/10/hetch_hetchy_reservoir_vote_san_francisco_could_restore_valley_in_yosemite.html

— [https://ballotpedia.org/San_Francisco_Hetch_Hetchy_Reservoir_Initiative,_Proposition_F_\(November_2012\)](https://ballotpedia.org/San_Francisco_Hetch_Hetchy_Reservoir_Initiative,_Proposition_F_(November_2012))

Autry Educational Programs

The Autry Museum of the American West is dedicated to enriching the experience of all visitors through thoughtful, entertaining, and engaging classes, programs, and activities.

Education staff and volunteers connect with more than 400,000 visitors every year. Outreach programs are an important part of education initiatives at the

Autry. Our museum educators work hand-in-hand with teachers and students in local schools, bringing together students, teachers, and museum professionals to learn about history in fun and engaging ways.

We invite you learn more about school tours, outreach programs, and resources for teachers on our website: www.theautry.org.



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