



Masters of the Environment
University of Colorado **Boulder**

Supporting Public Use of Hetch Hetchy Valley in Yosemite National Park

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Project Purpose

Restore Hetch Hetchy (RHH) is advocating for improved recreation access at the Hetch Hetchy Reservoir in Yosemite National Park to foster greater visitor connections with the Valley.

Our team conducted research to provide RHH with a **portfolio of evidence and key recommendations** for future advocacy for changing recreation management at Hetch Hetchy. We believe our recommendations will help RHH reach its goal of improving visitor access at Hetch Hetchy.



Background



Hetch Hetchy Reservoir is located in Yosemite National Park and is part of the Tuolumne River watershed, which provides San Francisco with **85% of its water supplies**.

The Raker Act of 1913 authorized the damming of Hetch Hetchy

Valley, which was opposed by John Muir and other environmentalists.

The San Francisco Public Utilities Commission (SFPUC) treats its water, but holds a **filtration exemption** from the U.S. Environmental Protection Agency for water from the Tuolumne River system due to the watershed's high quality. This results in water quality protections, including limited recreation access. Currently, Hetch Hetchy has several trails and few amenities, but is the least visited part of Yosemite National Park.

Methods

1 Literature review and research

We reviewed existing literature and policies, and tracked sources in a Zotero library to identify our research questions.

2 Quantitative research

Our team identified key variables and researched 41 reservoirs for our matrix analysis. We calculated summary statistics and visualized our data to identify any patterns.

3 Qualitative research

We met with many water quality and recreation experts, and conducted stakeholder interviews and thematic content analysis. This process informed our key findings.

Project Deliverables

Water Taste Test

San Francisco claims that its water has superior taste. To challenge these claims, we developed a double-blind taste test to see if **Bay Area residents prefer San Francisco's water more than other local sources.**



Among the 22 participants in our test, people prefer water from Marin Municipal Water District first, East Bay Municipal Utility District second, and **San Francisco Regional Water System third.**

We did not collect enough data for our findings to be significant, but we provided RHH with a **repeatable methodology for future taste testing.**

Reservoir Matrix Dataset

To compare recreation opportunities at Hetch Hetchy to other reservoirs, we researched reservoirs across the Western U.S. and **compiled information into a matrix** in an Excel spreadsheet. We found that:

78%

of reservoirs provide at least one type of recreation access.

97%

of reservoirs with recreation access provide filtered water.

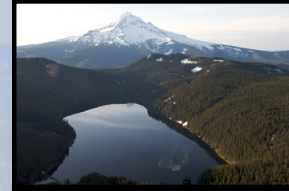
Fishing

is the most common recreation type.

- **Hetch Hetchy is the only reservoir** with recreation access that provides unfiltered water.
- The **SFPUC prohibits recreation** on all of its other reservoirs.
- **Policies and laws** shape water quality and recreation management at each reservoir.

Case Studies

We selected **three reservoirs from our matrix dataset for our case studies.** For each, we conducted background research and interviewed stakeholders to learn more about how water quality and recreation are managed.



Bull Run Watershed, Oregon



Gross Reservoir, Colorado



Lake Mead, Nevada

Our case studies highlighted the importance of **inter-agency collaboration, prioritizing recreation** in reservoir management, and **resiliency** in the managing utility's water system.

Final Recommendations

Based on our findings from our matrix analysis and case studies, we recommend RHH consider the following to improve recreation access at Hetch Hetchy Reservoir:



- 1 The importance of inter-agency collaboration** - RHH should take steps to better understand the relationship between the SFPUC and the National Park Service.
- 2 Filtration for future planning and resiliency** - RHH should advocate for the SFPUC to improve its system resiliency by filtering its water supply.
- 3 Public education and engagement** - RHH should promote public education to demonstrate that recreation can be compatible with protecting drinking water quality.

Acknowledgements

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