**The Salmon, They are My Brothers**

**Teaching Notes**

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**Learning Objectives:**

* Learn about the history of and current situation of salmon runs in the Lower Snake River in Washington State.
* Appreciate the role of dams in creating avenues for economic development, promoting agriculture, and bringing prosperity to white settlers in eastern Washington.
* Understand arguments for and potential reasons against removal of the Lower Snake River Dams to allow for free-flowing water and unimpeded salmon passage.
* Explore other cases in which dams, salmon, and tribal rights have conflicted with desires for irrigation, recreation, and hydropower. Who were the key players in those cases? What was the outcome and what factors led to that decision? Whose voices were heard or not heard?
* Suggest a path forward for salmon and the Lower Snake River Dams.

**Audience:**

Suitable for high school and college students--undergraduate through graduate studies. This case is especially useful for study in environmental studies, environmental and energy policy, sustainable water rights, fish biology, American Indian culture, land appropriation, environmental justice, law, political science, and history.

Themes:

Climate change, activism, environmental justice, environmental restoration, federal and state relations and policy, sacred sites, salmon, leadership, intergovernmental relations, cultural preservation, economic development

**Implementation:**

This case would best be taught as an interrupted case study.

For the first session, students should have read and be prepared to discuss Part I: The Backdrop. At the end of that session, students divide into small groups and read Part II: Deciding on a Plan of Action. Each group should select one other dam project to research—the removal of the Elwha Dams, the Klamath River Restoration project, the Skagit River dam controversy, for example. Within each group, students must decide who will focus on which of the questions posed by the narrator and how they will compile the information.

At the start of the second session, students should be given a bit of time to organize what they have discovered and be ready to present the highlights to the class. At the end of the presentations, the class should discuss what they consider to be the realistic options for Lower Snake River salmon recovery.

What do action(s) do they recommend for the narrator?

**Some Resources to get people started:**

**Klamath River:**

B. “Toastie” Oaster (27 August 2021) Klamath River Issues Explained, *High Country News*, Accessed 6 March 2023 at

<https://www.hcn.org/articles/klamath-basin-confused-about-whats-happening-on-the-klamath-heres-a-rundown>

Hank Sims (8 October 2009) The Klamath Settlement, Accessed 6 March 2023 at

<https://www.northcoastjournal.com/humboldt/the-klamath-settlement/Content?oid=2130234>

James C. Ish (2020) A Road Map to Restoring Rivers: How the Klamath Basin Restoration Agreement Might Influence Future Dam Removal and River Restoration Projects, 60 *Nat. Resources J. 263*.

Available at: <https://digitalrepository.unm.edu/nrj/vol60/iss2/6>

NOAA (7 December 2022) As Dam Removals Move Forward, NOAA Explores Next Steps for Habitat Restoration in Klamath Watershed, Accessed 6 March 2023 at

<https://www.fisheries.noaa.gov/feature-story/dam-removals-move-forward-noaa-explores-next-steps-habitat-restoration-klamath>

 and addition links to story maps on that page

Sustainable Northwest (n.d.) Klamath Basin Dam Removal 2001 - 2024

<https://www.sustainablenorthwest.org/klamath-basin-dam-removal-history>

Water Education Foundation (2023) Klamath River Basin Chronology, Accessed 6 March 2023 at

<https://www.watereducation.org/aquapedia/klamath-river-basin-chronology>

**Elwha Dam Removal:**

Elizabeth Castillo (2 August 2022) Elwha River transformed 10 years after dam removal, Accessed 6 March 2023 at

<https://www.opb.org/article/2022/08/02/elwha-river-transformed-10-years-after-dam-removal/>

Elwha Klallam Tribe (2022) River Restoration, Accessed 6 March 2023 at <https://www.elwha.org/departments/natural-resources/river-restoration/>

Jeffrey J. Duda et al. (9 December 2021) Reconnecting the Elwha River: Spatial Patterns of Fish Response to Dam Removal, *Frontiers in Ecology and Evolution*, Vol. 9. Available at: <https://doi.org/10.3389/fevo.2021.765488>

NOAA Fisheries (1 April 2021) Dam Removals on the Elwha River, Accessed 6 March 2023 at

<https://www.fisheries.noaa.gov/west-coast/dam-removals-elwha-river>

 and additional links on that page

Philip A. Meyer (Lower Elwhat S’Klallam Tribe), Richard Lichtkoppler (National Park Service), et al. (1995) *Elwha River Restoration Project: Economic Analysis, Final Technical Report*, Accessed 6 March 2023 at

<http://npshistory.com/publications/olym/elwha-river/economic-analysis.pdf>

**Skagit River Dams:**

John J. Brueggeman et al. (March 1988*) Study of Skagit Dams Original Impact on Wildlife and Fish Habitat and Populations*, Bellevue, WA: envirosphere Company, Accessed 6 March 2023 at

[https://www.seattle.gov/light/skagit/relicensing/cs/groups/secure/@scl.skagit.team/documents/document/cm9k/mdcx/~edisp/prod071555.pdf](https://www.seattle.gov/light/skagit/relicensing/cs/groups/secure/%40scl.skagit.team/documents/document/cm9k/mdcx/~edisp/prod071555.pdf)

Lester Black (27 July 2021) Seattle’s River of the Damned, Accessed 6 March 2023 from

<https://hakaimagazine.com/features/seattles-river-of-the-damned/>

Maria Cantwell, United States Senator for Washington (14 December 2022) WA gets $39.8 Million to Remove Fish Barriers, Restore Salmon Habitat, Accessed 6 March 2023 from <https://www.cantwell.senate.gov/news/press-releases/wa-gets-398-million-to-remove-fish-barriers-restore-salmon-habitat>

Richard Arlin Walker (3 August 2021) Battle Over Skagit River Dam Heads to Court, *Indian Country News*, Accessed 6 March 2023 from <https://ictnews.org/news/battle-over-skagit-river-dam-heads-to-court>

Rico Moore (16 July 2021) Upper Skagit Indian Tribe Calls on Seattle to Remove the Gorge Dam, *High Country News*, Accessed 6 March 2023 at

<https://www.hcn.org/issues/53.8/indigenous-affairs-dams-the-upper-skagit-indian-tribe-calls-on-seattle-to-remove-the-gorge-dam>

Seattle City Light (n.d.) Relicensing the Skagit Hydroelectric Project, Accessed 6 March 2023 at

<https://www.seattle.gov/city-light/in-the-community/current-projects/skagit-relicensing>

 and additional links