**Human Impacts on the Environment: The Salmon Population in Oregon**

**Overview:**

Native American people have lived in the area now known as Oregon since time immemorial. During the era of colonialism (beginning in the 1600s)-and even into the 21st century-non-Native people often portrayed the North American continent as a vast wilderness that was virtually unpopulated when they arrived. This could not be farther from the truth. In Oregon alone there were dozens of tribes, each with its own ancestral territory and rich cultural history. There was not a single region of Oregon that did not have an Indigenous tribe or band living within it. Nothing was discovered or “untapped”, but instead well managed as Indigenous stewards of the land.

Over time, the environment has been impacted by changes such as an increase in human population, and over consumption of natural resources (freshwater, minerals and energy). This lesson focuses on the impact of dams on the salmon population of Oregon.

The activity in this lesson will give students an essential understanding of why salmon are essential to the traditional lifeways of Native Americans in Oregon. It will also highlight the important contributions tribes are making to salmon restoration efforts in Oregon.

**Background for teachers:**

When undertaking the study of the Native American people of Oregon, it is important to begin with their long history on the land. Indigenous people have lived in Oregon for thousands of years, in established communities, with established social structures, languages, and cultures. They were-and remain-deeply and inextricably connected to the land. Oral traditions of tribes include teachings that Indigenous people were created here and have existed here since time immemorial. From the Coast Range to the interior valleys to the Columbia Plateau and the Great Basin, tribal peoples maintain continuous and balanced relationships with the natural and physical environments in which they live. Oregon was-and is-Native American Country.

The ancestral territory of the nine federally recognized tribes in Oregon included all land in Oregon and, in the case of some tribes, extended into other current states bordering Oregon. Often, tribes had permanent or semi-permanent villages or settlements located in or near a core home territory, usually centered around a stable or predictable food source. From these “home bases,” family groups or bands would range out to other parts of their territories to hunt and forage for food and trade with neighboring bands and tribes during different seasons of the year. The unique landforms, climate, and ecology of each tribe’s ancestral territory profoundly shaped its lifeways and culture.

Despite overwhelming efforts to eradicate their people and culture, Oregon’s Indigenous people persisted through a spirit of survivance and self-determination, holding on to their identity and heritage while foraging a path into the future and refusing to be defined by the scars of past injustices. Today, Oregon has nine federally recognized Native American tribes. These tribes are sovereign nations and are recognized as such by both the U.S. government and the state of Oregon. Several of these tribes are confederations of multiple tribes that were removed to the same reservation. Retaining stewardship over remnants of their ancestral homelands is key to the tribes’ identity history, and future. The Native people in Oregon were and are stewards of the land, air and water and have always felt a responsibility to care for it.

**Learning Outcomes:**

• Show understanding of why salmon are essential to the traditional lifeways of Native Americans in Oregon.

• Identify the human impact on the environment, specifically the impact of dams on the salmon population in Oregon.

• Identify important contributions tribes are making to salmon restoration efforts in Oregon.

**Standards:**

**Oregon Science Standards**

MS-ESS3-3 Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment. (Clarification Statement: Examples of the design process include examining human environmental impacts, assessing the kinds of solutions that are feasible, and designing and evaluating solutions that could reduce that impact. Examples of human impacts can include water usage (such as the withdrawal of water from streams and aquifers or the construction of dams and levees), land usage (such as urban development, agriculture, or the removal of wetlands), and pollution (such as of the air, water, or land).

MS-ESS3-4 Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth’s systems.

**Resources:**

* [Northwest Power and Conservation Council: Indian Fishing](https://www.nwcouncil.org/reports/columbia-river-history/indianfishing)
* [Warm Springs Fishery](https://warmsprings-nsn.gov/program/fisheries-department/)
* [Oregon Public Broadcasting: First Salmon Ceremony](https://watch.opb.org/video/oregon-field-guide-first-salmon-ceremony/)
* [Oregon Public Broadcasting: Tribal Fishing Tradition Runs Deep](https://www.youtube.com/watch?v=yEKF8e0ndRU)
* [Columbia River Intertribal Fish Commission](https://www.critfc.org/)
* [Klamath River Dam Removal](https://waterkeeper.org/magazines/volume-13-issue-1/klamath-river-dam-removal/)
* [Restoring the Klamath: What we are learning from the largest dam removal project in history](https://www.internationalrivers.org/news/restoring-the-klamath-what-were-learning-from-the-largest-d)