



Salmon Resources

CBC News. (2020, July 18). *Researcher looks at why some chinook salmon don't make it up the Whitehorse fish ladder* . <https://www.cbc.ca/news/canada/north/whitehorse-fish-ladder-chinook-research-1.5652418>.

This was written about a researcher who is studying why some salmon are using fish ladders intended to help them pass through dams and others are not. This explores the effectiveness of a conservation effort that was put in place to avoid removing the dam.

Chinook Salmon. (n.d.). National Wildlife Federation. <https://www.nwf.org/Home/Educational-Resources/Wildlife-Guide/Fish/Chinook-Salmon>

This is a great resource for general information about the life history, conservation issues, and population status of Chinook Salmon. It also includes ways people can get involved to help preserve the salmon.

Ford, J. K., Ellis, G. M., & Olesiuk, P. F. (2005). *Linking Prey and Population Dynamics: Did Food Limitation Cause Recent Declines of "resident" Killer Whales, Orcinus Orca, in British Columbia?*. Fisheries & Oceans Canada, Science, Canadian Science Advisory Secretariat.

This study provides evidence of how intertwined the resident orca and Chinook salmon populations are. It shows a correlation between orca mortality rates and changes in Chinook salmon abundance.

Ford, M. J., Hempelmann, J., Hanson, M. B., Ayres, K. L., Baird, R. W., Emmons, C. K., & Park, L. K. (2016). Estimation of a killer whale (*Orcinus orca*) population's diet using sequencing analysis of DNA from feces. *Plos one*, *11*(1), e0144956.

This is an in-depth study on the diet of killer whales. They found that their diets consist of almost 80% Chinook salmon, which explains the previous article's findings of correlation between orca mortality rates and Chinook salmon abundance.

Johnson, Rachel & Weber, Peter & Wikert, John & Workman, Michelle & Macfarlane, Robert & Grove, Marty & Schmitt, Axel. (2012). Managed Metapopulations: Do Salmon Hatchery 'Sources' Lead to In-River 'Sinks' in Conservation?. *PloS one*. 7. e28880. 10.1371/journal.pone.0028880.

Figure one in this article provides a detailed graph that illustrates changes in Chinook salmon populations 1940 to 2009, noting that the hatchery they are studying was built in 1964.

Lohan, T. (2020, July 16). *A Dam Comes Down - and Tribes, Cities, Salmon and Orcas Could All Benefit*. The Revelator. <https://therevelator.org/nooksack-dam-removal/>.

This article discusses the recent removal of the Nooksack Dam near Bellingham, Washington. It covers the history of the dam, the planning that went into removing it, and the environmental



benefits the area will likely see as a result of it. It includes a video of the detonation and maps and pictures of the area.

Macias, M. (2020, April 14). *Feds consider protections for spring-run Chinook salmon in Oregon*.

Missoula Current. <https://missoulacurrent.com/outdoors/2020/04/protections-salmon-oregon/>.

This article reports that the National Marine Fisheries Service has decided to consider listing spring-run Chinook salmon on the Endangered Species Act which would offer the species federal protections. This decision to list the species as either threatened or endangered will be made after a year long in-depth analysis of the salmon population. The article provides further explanations of the listing process.

Mapes, L. V. (2020, June 26). *HUNGER: The decline of salmon adds to the struggle of Puget Sound's orcas*. The Seattle Times. <https://www.seattletimes.com/seattle-news/environment/hunger-the-decline-of-salmon-adds-to-the-struggle-of-puget-sounds-orcas/>.

This is a very in-depth article that explains the relationship between Chinook salmon population and the Southern Resident Killer Whales. It includes great pictures and graphics that support and illustrate the points made, including graphs that illustrate declines in salmon populations and body sizes over time.

NOAA Fisheries. (2006, October). *Coastal Multispecies Recovery Plan Executive Summary*. NOAA.

file:///C:/Users/16307/Downloads/Coastal%20Multispecies%20Plan%20Exec_Summary_9_16_16_508.pdf.



This is a summary of NOAA's multi-species recovery plan for California Coastal Chinook Salmon, Northern California Steelhead, and Central California Coast Steelhead. It contains specific plans for preserving these three species.

NOAA Fisheries. (2020, July 14). *Chinook Salmon*. NOAA.

<https://www.fisheries.noaa.gov/species/chinook-salmon>

This page gives specific information about population status of Chinook salmon in different states and also explains how they are currently managed. It also includes general information about their biology and appearance.

NOAA Office of Habitat Conservation. (2019, July 31). *Chinook Salmon Habitat Restoration in*

Washington Sees Positive Results. NOAA. <https://www.fisheries.noaa.gov/feature-story/chinook-salmon-habitat-restoration-washington-sees-positive-results>.

This article explains how 3 different restoration projects in the Skagit River estuary conducted by NOAA and partners have helped the Chinook population to rebound slightly in that area. This is uplifting news and points to the fact that larger population rebounds are possible with more habitat restoration and other changes.

NOAA West Coast Regional Office. (2020, July 6). *Endangered Winter-run Chinook Salmon Increase*

with Millions of Offspring Headed to Sea. NOAA. <https://www.fisheries.noaa.gov/feature-story/endangered-winter-run-chinook-salmon-increase-millions-offspring-headed-sea>.



This article discusses how 2019 saw the most winter-run Chinook salmon offspring since 2006. It lists a conservation hatchery as one reason for this, and further explains how the Livingston Stone hatchery operates. It also contains a graph of Winter-run Chinook Salmon Returns over the years and pictures of salmon at hatcheries.

South Puget Sound Chinook Salmon Run 2019. (2019, August 29).

<https://www.youtube.com/watch?v=8StgbVQeMH0>

This video provides a visual of a salmon run, including footage of salmon using fish ladders.

US EPA. (2013, April 29). *Chinook Salmon (Canada, Puget Sound)*. <https://www.epa.gov/salish-sea/chinook-salmon>

This page explains what is happening to the Chinook salmon population, why this matters for other species, why it is happening, and what we can do to help. It includes interesting graphs that illustrate how population abundance has changed over time.

