

Environmental Indicator Workshop Literature Suggestions

Where salmon typically go in the ocean:

Weitkamp, L. (2010) Marine distributions of Chinook Salmon from the West Coast of North America determined by coded wire tag recoveries. *Transactions of the American Fisheries Society* 139:147-170.
<https://doi.org/10.1577/T08-225.1>

Tucker, S., M. Trudel, D.W. Welch, J.R. Candy, J.F.T. Morris, M.E. Thiess, C. Wallace, and T.D. Beacham (2011) Life history and seasonal stock-specific ocean migration of juvenile Chinook Salmon. *Transactions of the American Fisheries Society* 140:1101-1119.
<https://doi.org/10.1080/00028487.2011.607035>

Beacham, T.D., R.J. Beamish, J.R. Candy, C. Wallace, and S. Tucker (2014) Stock-specific migration pathways of juvenile Sockeye Salmon in British Columbia Waters and in the Gulf of Alaska. *Transactions of the American Fisheries Society* 143:1386-1403.

<https://doi.org/10.1080/00028487.2014.935476>

Sources of environmental data:

Harvey, C., N.T. Garfield, G. Williams, N. Tomlimieri, K. Andrews, et al. (2020) Ecosystem Status Report of the California Current for 2019-20: A Summary of Ecosystem Indicators Compiled by the California Current Integrated Ecosystem Assessment Team (CCIEA). Volume 160 of NOAA technical memorandum NMFS-NWFSC. US Department of Commerce, NOAA NMFS-NWFSC.

<https://repository.library.noaa.gov/view/noaa/27303>

Effects of climate change on NE Pacific Salmon populations:

Mantua, N. (2015) Shifting patterns in Pacific climate, West Coast salmon survival rates, and increased volatility in ecosystem services. *Proceedings of the National Academy of Sciences of the United States of America* 112 (35) 10823-10824.

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Herbold, B., S.M. Carlson, R. Henery, R.C. Johnson, N. Mantua, M. McClure, P. Moyle, and T. Sommer. (2018) Managing for salmon resilience in California's variable and changing climate. *San Francisco Estuary and Watershed Science* 16, Issue 2, Article 3.

<https://doi.org/10.15447/sfews.2018v16iss2art3>

The role of indigenous knowledge in fisheries management:

Reid, A.J., L.E. Eckert, J.-F. Lane, N. Young, S.G. Hinch, C.T. Darimont, S.J. Cooke, N.C. Ban, and A. Marshall (2020) "Two-Eyed Seeing": An indigenous framework to transform fisheries research and management. *Fish and Fisheries* 22:243-261.

<https://doi.org/10.1111/faf.12516>

Reference guide: http://iaglr.org/docs/LL7_2eyedSeeing_essentialReads.pdf

NOAA Salmon Stoplight Chart:

Burke, B.J., W.T. Peterson, B.R. Beckman, C. Morgan, E.A. Daly, and M. Litz (2013) Multivariate models of adult Pacific Salmon Returns. *PLoS ONE* 8(1): e54134.

<https://doi:10.1371/journal.pone.0054134>

Chasco, B., B. Burke, L. Crozier, and R. Zabel (2021) Differential impacts of freshwater and marine covariates on wild and hatchery Chinook salmon marine survival. *PLoS ONE* 16(2): e0246659.

<https://doi.org/10.1371/journal.pone.0246659>

State of Canadian Pacific Salmon:

Grant, S.C.H., B.L. MacDonald, and M. Winston (2019) State of the Canadian Pacific salmon: Responses to changing climate and habitats technical report.

<https://waves-vagues.dfo-mpo.gc.ca/Library/40807071.pdf>

Grant, S.C.H., B.C. MacDonald, K. Middleton, L. Anderson, and L. Sloan (2019) State of the Canadian Pacific salmon: Responses to changing climate and habitats.

<http://www.dfo-mpo.gc.ca/species-especes/publications/salmon-saumon/state-etat-2019/ebook/index-eng.html>

MacDonald, B.L., S.C.H. Grant, N. Wilson, D.A. Patterson, K.A. Robinson, J.L. Boldt, J. King, E. Anderson, S. Decker, B. Leaf, L. Pon, Y. Xu, B. Davis, and D.T. Selbie (2020) State of the Salmon: Informing the survival of Fraser Sockeye returning in 2020 through life cycle observations.

<https://waves-vagues.dfo-mpo.gc.ca/Library/4088546x.pdf>

Grant, S.C.H., J. Nener, B.L. MacDonald, J.L. Boldt, J. King, D.A. Patterson, K.A. Robinson, and S. Wheeler (2021) Chapter 16. Canadian Fraser River sockeye salmon: a case study 259 in Bahri, T., M. Vasconcellos, D.J. Welch, J. Johnson, R.I. Perry, X Ma, and R. Sharma (eds.) *Adaptive management of fisheries in response to climate change*. FAO Fisheries and Aquaculture Technical Paper No. 667. Rome, FAO.

<http://www.fao.org/documents/card/en/c/cb3095en>

Hypothesis-based testing of multiple indicators:

Sobocinski, K.L., C.M. Greene, and M.W. Schmidt (2018) Using a qualitative model to explore the impacts of ecosystem and anthropogenic drivers upon declining marine survival in Pacific salmon. *Ecological Conservation* 45:278-290.

<https://doi.org/10.1017/S0376892917000509>

Sobocinski, K.L., N.W. Kendall, C.M. Greene, and M.W. Schmidt (2020) Ecosystem indicators of marine survival in Puget Sound steelhead trout. *Progress in Oceanography* 188:102419.

<https://doi.org/10.1016/j.pocean.2020.102419>

Sobocinski, K.L., C.M. Greene, J.H. Anderson, N.W. Kendall, M.W. Schmidt, M.S. Zimmerman, I.M. Kemp, S. Kim, and C.P. Ruff (2021) A hypothesis-driven statistical approach for identifying ecosystem indicators of coho and Chinook salmon marine survival. *Ecological Indicators* 124:107403.

<https://doi.org/10.1016/j.ecolind.2021.107403>