

**NATIONAL MARINE FISHERIES SERVICE REPORT
FISHERIES SCIENCE CENTER ACTIVITIES**

Salmon Science publications, 2023-2024

Northwest-Southwest collaborations

Buckner, Jack H., William H. Satterthwaite, Benjamin W. Nelson, and Eric J. Ward. 2023. Interactions between life history and the environment on changing growth rates of Chinook salmon. Canadian Journal of Fisheries and Aquatic Sciences 80(4):648-662.

Gomes, Dylan G.E., James J. Ruzicka, Lisa G. Crozier, David D. Huff, Elizabeth M Phillips, Pierre-Yves Hernvann, Cheryl A. Morgan, Richard D. Brodeur, Jen E. Zamon, Elizabeth A. Daly, Joseph J. Bizzarro, Jennifer L. Fisher, and Toby D. Auth. 2024. An updated end-to-end ecosystem model of the Northern California Current reflecting ecosystem changes due to recent marine heatwaves. PLoS ONE 19(1):e0280366 (42 p.).

Henderson, M. J., C. M. Loomis, C. J. Michel, J. M. Smith, I. S. Iglesias, B. M. Lehman, N. J. Demetras, and D. D. Huff. Estimates of Predator Densities Using Mobile DIDSON Surveys: Implications for Survival of Central Valley Chinook Salmon. North American Journal of Fisheries Management 0:1-18. DOI: 10.1002/nafm.

Jensen, A.J., Kelly, R.P., Satterthwaite, W.H., Ward, E.J., Moran, P. and Shelton, A.O., 2023. Modeling ocean distributions and abundances of natural-and hatchery-origin Chinook salmon stocks with integrated genetic and tagging data. PeerJ, 11, p.e16487.

Mantua, Nate J., Lisa G. Crozier, and Laurie A. Weitkamp. 2023. Recent trends in marine and terrestrial environments and their likely influence on Pacific salmonids in California and Southern Oregon. In: Southwest Fisheries Science Center, Viability assessment for Pacific salmon and steelhead listed under the Endangered Species Act: Southwest, p. 9-24. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-SWFSC-686.

McClure MM, Haltuch MA, Willis-Norton E, Huff DD, Hazen EL, Crozier LG, Jacox MG, Nelson MW, Andrews KS, Barnett LAK, Berger AM, Beyer S, Bizzarro J, Boughton D, Cope JM, Carr M, Dewar H, Dick E, Dorval E, Dunham J, Gertseva V, Greene CM, Gustafson RG, Hamel OS, Harvey CJ, Henderson MJ, Jordan CE, Kaplan IC, Lindley ST, Mantua NJ, ... (2023) Vulnerability to climate change of managed stocks in the California Current large marine ecosystem. Front. Mar. Sci. 10:1103767. (doi: 10.3389/fmars.2023.1103767)

Perng, Lansing Y., John Walden, Kirsten M. Leong, Geret S. DePiper, Cameron Speir, Suzana Black, Karma Norman, Stephen Kasperski, Mariska Weijerman, and Kirsten L.L. Oleson. 2023. Identifying social thresholds and measuring social achievement in social-ecological systems: A cross-regional comparison of fisheries in the United States. Marine Policy 152:105595 (17 p.).

Satterthwaite, William H., and Andrew Olaf Shelton. 2023. Methods for assessing and responding to bias and uncertainty in U.S. West Coast salmon abundance forecasts. Fisheries Research 257:106502 (14 p.).

Siegel JE, Fullerton AH, FitzGerald AM, Holzer D, Jordan CE (2023) Daily stream temperature predictions for free-flowing streams in the Pacific Northwest, USA. PLOS Water 2(8): e0000119.

<https://doi.org/10.1371/journal.pwat.0000119>

- Speir, Cameron, Amanda Phillips, Aaron Mamula, and Karma Norman. 2023. A measure of port-level resilience to shocks in commercial fisheries. *Marine Policy* 151:105575 (12 p.).
- Vasbinder, Kelly, Jerome Fiechter, Jarrod A. Santora, James J. Anderson, Nate Mantua, Steve T. Lindley, David D. Huff, and Brian K. Wells. 2024. Size-selective predation effects on juvenile Chinook salmon cohort survival off Central California evaluated with an individual-based model. *Fisheries Oceanography* 33(1):e12654 (15 p.).
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- Beechie, T. J., O. Stefankiv, and B. Timpane-Padgham. 2023. Puget Sound Habitat Status and Trends 2023 Update: Delta Habitats and Overwater Structures. U.S. Department of Commerce, NOAA Contract Report NMFS-NWFSC-CR-2023-06. (<https://doi.org/10.25923/m767-tw97>)
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