

National Marine Fisheries Service Report – Fisheries Science Center Activities

Salmon-related publications of the Northwest and Southwest Fisheries Science Center in 2019-present:

Abadia-Cardoso, A., A. Brodsky, B. Cavallo, M. Arciniega, J.C. Garza, J. Hannon, and D.E. Pearse. 2019. Anadromy redux? Genetic analysis to inform development of an indigenous American River steelhead broodstock. *Journal of Fish and Wildlife Management* 10(1):137-147. <https://doi.org/10.3996/072018-JFWM-063>

Adelfio, L.A., S.M. Wondzell, N.J. Mantua, and G.H. Reeves. 2019. Warm winters reduce landscape-scale variability in the duration of egg incubation for coho salmon (*Oncorhynchus kisutch*) on the Copper River Delta, Alaska. *Canadian Journal of Fisheries and Aquatic Sciences* 76(8):1362-1375. <https://doi.org/10.1139/cjfas-2018-0152>

Anderson, K., J. A. Luckenbach, Y. Yamamoto, A. Elizur. 2019. Impacts of Fsh, Igf, and high temperature on the expression of genes involved in steroidogenesis, cell communication, and apoptosis in isolated coho salmon ovarian follicles. *Aquaculture*, 506:60-69. <https://doi.org/10.1016/j.aquaculture.2019.03.025>

Bellmore, R., G. R. Pess, J. J. Duda, J. O'Connor, A. E. East, M. M. Foley, A. Wilcox, J. Major, P. Shafroth, C. Magirl, C. Anderson, J. Evans, C. Torgersen, L. Craig, and S. A. Morley. 2019. Conceptualizing ecological responses to dam removal: If you remove it, what's to come? *Bioscience* 69: 29-36. <https://doi.org/10.1093/biosci/biy152>

Bond, M. H., T. G. Nodine, T. J. Beechie, and R. W. Zabel. 2019. Estimating the benefits of widespread floodplain reconnection for Columbia River Chinook salmon. *Canadian Journal of Fisheries and Aquatic Sciences* 76(7):1212-1226. <https://doi.org/10.1139/cjfas-2018-0108>

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Campbell, M.A., M.C. Hale, G.J. McKinney, K.M. Nichols, and D.E. Pearse. 2019. Long-term conservation of Ohnologs through partial tetrasomy following whole-genome duplication in Salmonidae. *G3: Genes, Genomics, Genetics* 9(6):2017-2028. <https://doi.org/10.1534/g3.119.400070>

Chow, M. I., J. I. Lundin, C. J. Mitchell, J. W. Davis, G. Young, N. L. Scholz, J. McIntyre. 2019. An urban runoff mortality syndrome in juvenile coho salmon. *Aquatic Toxicology*. 214 (2019): 105231. <https://doi.org/10.1016/j.aquatox.2019.105231>

Cordoleani, Flora, Jeremy Notch, Alex S. McHuron, Cyril J. Michel, and Arnold J. Ammann. 2019. Movement and survival rates of Butte Creek spring-run Chinook salmon smolts from the Sutter Bypass to the Golden Gate Bridge in 2015, 2016, and 2017. NOAA Technical Memorandum NMFS-SWFSC-618. 47 p. <https://doi.org/10.25923/cwry-bx03>

Crozier, L. G., M. M. McClure, T. J. Beechie, S. J. Bograd, D. A. Boughton, M. I. Carr, T. D. Cooney, J. B. Dunham, C. M. Greene, et al. 2019. Climate vulnerability assessment for Pacific salmon and steelhead in the California Current Large Marine Ecosystem. *PLoS ONE* 14(7): e0217711. <https://doi.org/10.1371/journal.pone.0217711>

Deacy, W. W., W. B. Leacock, E. J. Ward, J. B. Armstrong. 2019. Aerial surveys cause high magnitude but ephemeral decreases in bear presence at salmon streams in Kodiak, Alaska. *PLoS ONE*. 14(9): e0222085. <https://doi.org/10.1371/journal.pone.0222085>

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Dudley, P.N. 2019. S4: A spatially continuous, individual-based model of salmonid redd superimposition. *Transactions of the American Fisheries Society* 148(2):352-372. <https://doi.org/10.1002/tafs.10139>

Dudley, P.N. 2019. Insights from an individual based model of a fish population on a large regulated river. *Environmental Biology of Fishes* 102(8):1069-1095. <https://doi.org/10.1007/s10641-019-00891-6>

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Haltuch, M.A., E.N. Brooks, J. Brodziak, J.A. Devine, K.F. Johnson, N. Klibansky, R.D.M. Nash, M.R. Payne, K.W. Shertzer, S. Subbey, and B.K. Wells. 2019. Unraveling the recruitment problem: A review of environmentally-informed forecasting and management strategy evaluation. *Fisheries Research* 217: 198-216. <https://doi.org/10.1016/j.fishres.2018.12.016>

Harrison, L.R., E. Bray, B. Overstreet, C.J. Legleiter, R.A. Brown, J.E. Merz, R.M. Bond, C.L. Nicol, and T. Dunne. 2019. Physical controls on salmon redd site selection in restored reaches of a regulated, gravel-bed river. *Water Resources Research* 55(11):8942-8966. <https://doi.org/10.1029/2018WR024428>

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