

Kara J. Anlauf-Dunn

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EDUCATION

Masters of Science in Fisheries Resources - University of Idaho (Moscow, ID) 2005
Thesis: *Understanding the ecology of whirling disease through modeling of the tubificid host*

Bachelors of Science in Biology - Boise State University (Boise, ID) 2001

EMPLOYMENT

Aquatic Ecologist/Program Analyst - Oregon Department of Fish and Wildlife, Conservation and Recovery Program, REDD group, Corvallis Research Lab (Corvallis, OR) 2016-Present

Aquatic Ecologist/Program Analyst - Oregon Department of Fish and Wildlife, Conservation and Recovery Program, Aquatic Inventories Project, Corvallis Research Lab (Corvallis, OR) 2012-2016

Assistant Project Leader - Oregon Department of Fish and Wildlife, Conservation and Recovery Program, Aquatic Inventories Project, Corvallis Research Lab (Corvallis, OR) 2005-2012

Research Assistant – USGS/BRD/Gap Analysis Program (Moscow, ID) 2004-2005

Graduate Research Assistant – University of Idaho, Department of Fish and Wildlife (Moscow, ID) 2003-2005

Research Assistant – University of Idaho, Center for Ecohydraulics Research (Boise, ID) 2002-2003

Fisheries Technician – USDA Forest Service, Rocky Mountain Research Station, (Boise, ID) 1998-2001

Professional Societies and Services

Climate Adaptation Committee Chair, Oregon Chapter of the American Fisheries Society 2021-Present

American Fisheries Society member 2004-Present

Society of Freshwater Science 2016-Present

Webmaster, Oregon Chapter of the American Fisheries Society 2006-2013

Peer-Reviewed Publications

Dressler, T., **Anlauf-Dunn, K.J.**, Chandler, A., and Eliason, E. In Review. Beyond Latitude: Thermal Tolerance and Vulnerability of a Broadly Distributed Salmonid Across a Habitat Temperature Gradient. *Conservation Physiology*.

Anlauf-Dunn, K.J., Clemens, B.J., Falcy, M.R. and Zambory, C., 2024. Spatio-temporal distribution of adult Pacific lamprey *Entosphenus tridentatus* relative to habitat fragmentation. *River Research and Applications*.

Benjamin, J.R., Dunham, J.B., **Anlauf-Dunn, K.J.** and Eliason, E., 2023. Climate vulnerability for a desert fish: integrating hydrologic exposures, adaptive capacity, and growth potential. *Canadian Journal of Fisheries and Aquatic Sciences*, 80(11), pp.1748-1758.

Hahlbeck, N., **Anlauf-Dunn, K.J.**, Piotrowski, S.J., Ortega, J.D., Tinniswood, W.R., Eliason, E.J., O'Malley, K.G., Sloat, M.R., Wyatt, M.A., Hereford, M.E. and Ramirez, B.S., 2023. Habitat fragmentation drives divergent survival

strategies of a cold-water fish in a warm landscape. *Ecosphere*, 14(7), p.e4622.

Hahlbeck, N., Tinniswood, W.R., Sloat, M.R., Ortega, J.D., Wyatt, M.A., Hereford, M.E., Ramirez, B.S., Crook, D.A., **Anlauf-Dunn, K.J.** and Armstrong, J.B., 2022. Contribution of warm habitat to cold-water fisheries. *Conservation Biology*, 36(3), p.e13857.

Anlauf-Dunn, K.J., Kraskura, K. and Eliason, E.J., 2022. Intraspecific variability in thermal tolerance: a case study with coastal cutthroat trout. *Conservation Physiology*, 10(1), p.coac029.

Jones, K.K., Cornwell, T.J., Bottom, D.L., Stein, S., **Anlauf-Dunn, K.J.**. 2018. Population viability improves following termination of coho salmon hatchery releases. *North American Journal of Fisheries Management*, 38:1, 39-55.

Steel, E. A., Muldoon, A., Flitcroft, R., Firman, J.C., **K.J. Anlauf-Dunn**, Burnett, K.M., Danehy, R.J.. 2017. Current landscapes and legacies of land-use past: Understanding the distribution of juvenile coho salmon (*Oncorhynchus kisutch*) and their habitats along the Oregon Coast, USA. *Canadian Journal of Fisheries and Aquatic Sciences*, 10.1139.

Miller, S., Eldred, P., Muldoon, A., **Kara Anlauf-Dunn**, Stein, C., Hubler, S., Merrick, L., Larson, C., Rehn, A., Ode, P., Haxton, N. 2016. A large-scale, multiagency approach to defining a reference network for Pacific Northwest Streams. *Environmental Management*, doi: 10.1007/s00267-016-0739-6.

Anlauf-Dunn, K.J., Ward, E.J., Strickland, M., Jones, K.K. 2014. Habitat connectivity, complexity and quality: Predicting adult coho salmon occupancy and abundance. *Canadian Journal of Fisheries and Aquatic Sciences*, 10.1139/cjfas-2014-0162.

Jones, K.K., **K.J. Anlauf-Dunn**, Jacobsen, P.S. Strickland, M., Tennant, L., Tippery, S.E. . 2014. Effectiveness of Instream Wood Treatments to Restore Stream Complexity and Winter Rearing Habitat for Juvenile Coho Salmon, *Transactions of the American Fisheries Society*, 143:2, 334-345.

Steel, E.A., Jensen, D.W., Burnett, K.M., Christiansen, K., Firman, J.C., Feist, B.E., **Anlauf, K.J.**, Larsen, D.P. 2012. Landscape characteristics and coho salmon (*Oncorhynchus kisutch*) distributions: explaining abundance versus occupancy. *Canadian Journal of Fisheries and Aquatic Sciences*, 69(3), 457-468.

Ward, E. J., Pess, G. R., **Anlauf-Dunn, K.J.**, & Jordan, C. E. 2012. Applying time series models with spatial correlation to identify the scale of variation in habitat metrics related to threatened coho salmon (*Oncorhynchus kisutch*) in the Pacific Northwest. *Canadian Journal of Fisheries and Aquatic Sciences*, 69(11), 1773-1782.

Firman, J. C., Steel, E. A., Jensen, D. W., Burnett, K. M., Christiansen, K., Feist, B. E., **Anlauf, K.J.** 2011. Landscape models of adult coho salmon density examined at four spatial extents. *Transactions of the American Fisheries Society*, 140(2), 440-455.

Anlauf, K. J., Jensen, D. W., Burnett, K. M., Steel, E. A., Christiansen, K., Firman, J. C., Larsen, D. P. 2011. Explaining spatial variability in stream habitats using both natural and management-influenced landscape predictors. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 21(7), 704-714.

Anlauf, K.J., Gaeuman, W., & Jones, K. K. 2011. Detection of regional trends in salmonid habitat in coastal streams, Oregon. *Transactions of the American Fisheries Society*, 140(1), 52-66.

Anlauf, K.J., & Moffitt, C. M. 2010. Modelling of landscape variables at multiple extents to predict fine sediments and suitable habitat for *Tubifex tubifex* in a stream system. *Freshwater biology*, 55(4), 794-805.

Anlauf, K.J., & Moffitt, C. M. 2008. Models of stream habitat characteristics associated with tubificid populations in an intermountain watershed. *Hydrobiologia*, 603(1), 147-158.

Manuscripts in Review or in Preparation

Anlauf-Dunn, K.J., Falcy, M., Zambory, C. In prep. Defining thermal suitability for native fish species.

Technical Reports and Proceedings

Anlauf-Dunn, K.J., Cornwell, T. Thermal Tolerance of Warner Sucker (*Catostomus warnerensis*): Implications for a warm-water species in a warming climate. Information Report Number ODFW-in prep, Oregon Department of Fish and Wildlife, Salem, Oregon.

Anlauf-Dunn, K.J. and S. Tippery. Stream Habitat Conditions in the Lower Columbia, OR, 2006-2015. OPSW-ODFW-2015-X, Oregon Department of Fish and Wildlife, Salem. *In prep.*

Anlauf-Dunn, K.J. and K.K. Jones. 2012. Stream Habitat Conditions in Western Oregon, 2006-2010. OPSW-ODFW-2012-5, Oregon Department of Fish and Wildlife, Salem.

Tippery, S., K.K. Jones, **K.J. Anlauf**, C.H. Stein, M. Strickland. 2010. Effectiveness Monitoring Report for the Western Oregon Stream Restoration Program, 1999-2008. Monitoring Program Report Number OPSW-ODFW-2010-6, Oregon Department of Fish and Wildlife, Salem, Oregon.

Anlauf, K.J., K.K. Jones, C.H. Stein. 2009. The status and trend of physical habitat and rearing potential in coho bearing streams in the Oregon Coastal Coho Evolutionary Significant Unit. OPSW-ODFW-2009-5, Oregon Department of Fish and Wildlife, Salem.

Anlauf, K.J. and K.K. Jones. 2007. Stream Habitat Conditions in Western Oregon, 2005. Monitoring Program Report Number OPSW-ODFW-2007-05, Oregon Department of Fish and Wildlife, Salem, Oregon.

Jacobsen, P.S., K.K. Jones, **K.J. Anlauf**. 2007. 2002-2005 Effectiveness Monitoring for the Western Oregon Streams Restoration Program. Monitoring Program Report Number OPSW-ODFW-2007-06, Oregon Department of Fish and Wildlife, Salem, Oregon.

Anlauf, K., Jones, K., Stein, C., & Kavanagh, P. 2006. Lower Columbia River Basin coho salmon habitat assessment: Status of habitat and production potential and capacity for coho salmon. *Oregon Department of Fish and Wildlife, Corvallis, OR.*

Anlauf, K., K. Jones, C. Stein, and P. Kavanagh. 2005. Lower Columbia River Coho Assessment: Habitat status and production potential and capacity for coho salmon. Conservation and Recovery Program, Oregon Department of Fish and Wildlife, Corvallis.

Anlauf, K. J., Moffitt, C. M., Colvin, M. E., & Rieman, B. E. 2004. Understanding the Ecology of Whirling Disease through Modeling of Tubificid Habitat. In *2004 Whirling Disease Symposium Proceedings.*

Selected Presentations

Conservation physiological meets ecological, realism: thermal tolerance of native fishes 2024
EPA Climate-Wildfire-Water Webinar

Temperature conditions and thermal tolerances: a comparison across salmonids 2024
PSMFC Coastal Cutthroat Trout Symposium, Newport OR

Statewide Water Temperature Research and Monitoring 2023
Oregon Department of Fish and Wildlife Commission, McMinnville, OR

Thermally suitable or thermally stressful: physiological tolerance of summer steelhead 2023
PSMFC Steelhead Meeting

Contemporary Approaches to Water Temperature Research and Monitoring 2023
Native Fish Society, Eugene, OR

Thermal regimes and species thermal tolerance in a changing climate 2019
Society of Freshwater Science, Oregon Chapter, Newport, OR

<i>Evaluating thermal regimes in the Warner basin and thermal tolerances of the Warner sucker</i> Oregon Desert Fish Combined Working Group Meeting	2019
<i>Vulnerability and resilience: Fish conservation and management in a changing climate</i> Portland State University, School of the Environment Seminar Series	2019
<i>Vulnerability of Pacific Lamprey to changing environmental conditions</i> Oregon Chapter of The American Fisheries Society, Bend, OR	2019
<i>Rarity, Risk and Exposure of Oregon's Native Fishes</i> Oregon Chapter of The American Fisheries Society, Eugene, OR	2018
Thermal tolerance of Coastal Cutthroat trout Coastal Cutthroat Trout Symposium, Newport, OR	2018
<i>Perspectives from long-term monitoring: Evaluating status and trends in fish habitat forest ownerships in Oregon's coastal watersheds</i> National Council for Air and Stream Improvement Annual Meeting, Vancouver, WA, USA	2015
<i>Oregon Plan Habitat Monitoring: What we have learned</i> ODFW Science and Restoration Workshop	2013
<i>Relationships between landscape characteristics, coho salmon, and their channel habitat: spatial extent, spatial variability, and modeling species occupancy</i> National American Fisheries Society Annual Meeting, Seattle, WA, USA	2011
<i>Monitoring trend in coastal watersheds in Oregon, USA</i> The International Environmetrics Conference, Kelowna, Canada	2008
Western Division American Fisheries Society Annual Meeting, Portland, OR, USA	2008
<i>Understanding the ecology of whirling disease through modeling of tubificid habitat</i> Western Division of the American Fisheries Society Meeting, Salt Lake City, UT	2004
<u>Teaching Experience</u>	
Instructor – Environmental Professional Program, Portland State University	2013-2015
Riparian and Floodplain Ecology Teaching Assistant – University of Idaho	2004
<u>Awards and Scholarships</u>	
Oregon Department of Fish and Wildlife Award of Excellence	2012
Oregon Department of Fish and Wildlife Pride Award	2011
Oregon Chapter of the American Fisheries Society Award of Merit	2010
Recipient of the Mathew Clow scholarship	2003 & 2004