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**Lee, S.Y.,** Fullerton, A.H., Sun, N. and Torgersen, C.E. (2020). "Projecting Spatiotemporally Explicit Effects of Climate Change on Stream Temperature: A Model Comparison and Implications for Coldwater Fishes". *Journal of Hydrology*.  
<https://doi.org/10.1016/j.jhydrol.2020.125066>.

Steel, E.A., Marsha, A., Fullerton, A.H., Olden, J.D., Larkin, N.K., **Lee, S.Y.,** and Ferguson, A. (2018). "Thermal Landscapes in a Changing Climate: Biological Implications of Water Temperature Patterns in an Extreme Year". *Journal of Fisheries and Aquatic Science*.  
<https://doi.org/10.1139/cjfas-2018-0244>.

Fullerton, A.H., Torgersen, C.E., Lawler, J.J., Steel, E.A., Ebersole, J.L., and **Lee, S.Y.** (2018). "Longitudinal Thermal Heterogeneity in Rivers and Refugia for Coldwater Species: Effects of Scale and Climate Change". *Aquatic Sciences*, 80(3)1-15.

**Lee, S.Y.,** Hamlet, A.F., and Grossman, E. (2016). "Impacts of Climate Change on Regulated Streamflow, Flood Control, Hydropower Production, and Sediment Discharge in the Skagit River Basin." *Northwest*

Hamlet, A.F., **Lee, S.Y.**, Mickelson, K.E.B., and Elsner, M.M. (2010). "Effects of Projected Climate Change on Energy Supply and Demand in the Pacific Northwest and Washington State." *Climatic Change*, DOI:10.1007/s10584-010-9857-y.

- Fullerton, A.H., Lawler, J.J., **Lee, S.Y.**, and Torgersen, C.E. (2017). "Incorporating Spatial Heterogeneity in Temperature into Climate Vulnerability Assessments for Coastal Pacific Streams." Final Report to the North Pacific Landscape Conservation Cooperative.
- Mauger, G.S., **Lee, S.Y.**, Bandaragoda, C., Serra, Y., and Won, J.S. (2016). "Refined Estimates of Climate Change Affected Hydrology in the Chehalis basin." Report prepared for Anchor QEA, LLC. Climate Impacts Group, University of Washington, Seattle.  
DOI:10.7915/CIG53F4MH.
- Lee, S.Y.**, Mauger, G. S., and Whitely Binder, L. (2015). "Climate Change Impacts on Tacoma Power Watersheds." Final report for Tacoma Power by the Climate Impacts Group, University of Washington, Seattle, WA.

Washington's Future in a Changing Climate." The Climate Impacts Group, University of Washington, Seattle, Washington.

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### Selected Presentations

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- Lee, S.Y.**, and Ranoa, R., the meeting of Skagit Climate Science Consortium, Seattle, WA, Dec. 3<sup>rd</sup>, 2021, "Future Peak Streamflow Analytics for the Skagit River"
- Lee, S.Y.**, Fullerton, A, Steel, A., and Torgersen C., Selish Sea Ecosystem Conference, Seattle, WA, April 4<sup>th</sup> – 6<sup>th</sup>, 2018, "Space matters: incorporating mechanistically determined spatial patterns into projected impacts of climate change on stream temperature."
- Lee, S.Y.**, Fullerton, A, and Torgersen C., Northwest Indian Fisheries Commission Tribal Climate Change Forum Workshop, Ocean Shores, WA, May 25<sup>th</sup>, 2017, "Analyzing Changes in Cold Water Patches under Climate Change and It's impacts on Salmon."
- Lee, S.Y.**, Northwest Indian Fisheries Commission Tribal Climate Change Forum Workshop, Ocean Shores, WA, May 25<sup>th</sup>, 2017, "Using Data and Models to Assess Impacts and Adapt to Climate Change."
- Lee, S.Y.**, Fullerton, A, The North Sound Tribal Climate Meeting, Arlington, WA, January 26<sup>th</sup> 2017, "Options for Analyzing Changes in Cold Water Refuges under Climate Change and it's Impacts on Salmon."
- Lee, S.Y.**, Halabisky, M., Hall, S. and Rule, M., 7<sup>th</sup> Annual Northwest Climate Science Conference, Skamania, WA, November 14<sup>th</sup> – 16<sup>th</sup>, 2016, "Projecting Climate Change Impacts on Wetlands in the Columbia Plateau?"
- Lee, S.Y.**, EPA Climate Change Speaker Series: Can We Conserve Wetlands under a Changing Climate?, Seattle, WA, October 4<sup>th</sup>, 2016, "Modeling Climate Change Effects on the Water Levels of Wetlands in Washington State."
- Lee, S.Y.**, Ryan, M, Hamlet, A.F., Palen, W.J., Halabisky, M. and Lawler, J.J., 5<sup>th</sup> Annual Pacific Northwest Climate Science Conference, University of Washington, Seattle, WA, September 9<sup>th</sup> – 10<sup>th</sup>, 2014, "Evaluating Climate Change Effects on Wetlands with Field Surveys and Remote Sensing Techniques."

2020-Present Water Resources II (CEEGR 4720)

2020-Present Introduction to Geographic Information System (EVST 3500)

2020-Present Environmental Field

2017 Workshop: *Can We Conserve Wetlands Under a Changing Climate? Scientist-Practitioner Workshop 2: Identifying Climate Change Adaptation Strategies*, Ellensburg

- 2014 *Professional Development Workshop 2014* hosted by Korean-American Scientist and Engineers Association, March 15<sup>th</sup>-16<sup>th</sup>, 2014, Hilton Rosemont Hotel, Chicago, IL.
- 2013 *Writing Retreat* hosted by Landscape Ecology and Conservation, February 20<sup>th</sup>-22<sup>nd</sup>, 2013, Waterfront Activities Center, University of Washington, Seattle, WA.
- 2011 *University of Washington Future Faculty Fellow Program: Annual Postdoctoral Workshop and Teaching Apprenticeship Program*, August 25<sup>th</sup>-26<sup>th</sup>, 2011, Hitchcock Hall, University of Washington, Seattle, WA.

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## GRANTS/FUNDS

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- 2024 Seattle City Light (\$19,500): Effects of Vegetation Change on Streamflow. PI.
- 2022 Seattle University (\$12,000): Using Environmental Sensors to Evaluate Salmonid Passage Through Beaver Dams. PI with J. W. Lauer for 2022 Summer Undergraduate Research Program.
- 2021 Snoqualmie Valley Watershed Improvement district (\$15,000): The Impacts of Pond Levelers on Beaver Dam Overtopping and Fish Passage. PI with J. W. Lauer for the capstone project for ENSC senior students for academic year 2021-2022.
- 2021 Seattle City Light (\$16,109): Future Peak Streamflow Analytics for the Skagit River. PI.
- 2020 U.S. Forest Service (\$25,000): Joint Venture Agreement, Integrating Infrastructure and Ecosystem Service to Improve Aquatic Habitat. PI with J. W. Lauer.
- 2018 BIA Tribal Resilience Program's Grant (\$148,998): Building resilience for the Suquamish Tribe: Integrating changes in streamflow and water temperatures into a vulnerability assessment for salmonids in the Chico Creek Watershed. PI with A. Fullerton.
- 2018 BIA Tribal Resilience Program's Grant (\$149,256): Assess impacts of climate change on coldwater habitat, and implications for native salmonid populations of the Snoqualmie River to support Snoqualmie Tribal resilience and coastal management planning. PI with G. Mauger.
- 2017 Yakama Nation (\$58,246.30): Climate Vulnerability Assessment for Meadows. PI with J. Casola, M. Halabisky, and S. Hall.
- 2017 Northwest Climate Adaptation Science Center (\$129,542.03): Using Data and Models to Assess Impacts and Adapt to Climate Change: Handbook for Current and Future Stream Temperature. Co-PI with J. Casola, C. Torgersen and A. Fullerton.
- 2016 King County (\$390,000): Impacts of Climate Change on Flooding in King County Rivers. Co-PI with G. Mauger.
- 2015 Sauk-Suiattle Indian Tribe (\$190,000): Climate Change Vulnerability Assessment of the Sauk Watershed. Co-PI with E. Istanbuluoglu, A. Hamlet, and C. Bandaragoda.

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Stella Modeling & Simulation software (ColSim and SkagitSim), RiverWare,  
GoldSim