

NATALIE FURNESS

GIS Specialist
College of the Environment
Western Washington University

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EDUCATION

MA, Environmental Studies & Geography, Western Washington University - 2023

Thesis Title: *Against the Grain: A Mixed-Methods Analysis of the Effects of Climatic and Cultural Changes on Grain Agriculture in Northwest Washington.*

BA, Magna Cum Laude, Geography, Western Washington University - 2021

Thesis Title: *Historical and Modern Climate Envelopes for Cereal Grain Growth in Washington with a Discussion of Reintroduction of Wheat Agriculture in Western WA.*

PROFESSIONAL EMPLOYMENT

GIS Specialist & Research Associate, Western Washington University, 2024-present

GIS Coordinator, City of Snohomish, WA, 2023-2024

Teaching Assistant, Western Washington University, 2021-2023

Urban Forest GIS Analyst Intern, Seattle City Light, Summer 2022

GIS & Data Analyst Intern, Center for Economic & Business Research, 2020-2021

TEACHING

Western Washington University:

GIS I: Introduction to GIS

GIS II: Cartography

Bellingham Technical College:

Intermediate GIS

PROFESSIONAL SERVICE

2022 - 2023. **Graduate Student Co-Chair** - Association of Pacific Coast Geographers
Women's Network.

PUBLICATIONS

Peer-reviewed journal articles

Furness, N. & Flower, A. *In review*. The Effects of Climatic and Cultural Changes on Grain Agriculture in Northwest Washington. Submitted to Yearbook of the Association of Pacific Coast Geographers in 2024.

Professional and technical reports

Eidem, B., **Furness, N.**, Kreinbring, T., Chulsky, L., Heaton, N., & Thomas, H. (2023).

City of Snohomish Urban Forestry Plan. City of Snohomish.

<https://www.snohomishwa.gov/DocumentCenter/View/8674/Urban-Forestry-Plan?bidId=>.

Barber, A., Berkson, B., **Furness, N.**, & Thorsteinson, S. (2021). *WSDOT Equity Study*. Center for Economic and Business Research.

<https://www.washingtonpolicy.org/library/docLib/P008841-WSDOT-Equity-Study.pdf>.

Published maps and datasets

Furness, N. and Schillinger-Brokaw, K. (2023). The Nooksack River Watershed: Major Rivers and Transborder Floodplains. In R. Jefferies and K. Hager, *Learning from the Past: Governing Transboundary Nooksack River Flooding*, Border Policy Research Institute Publications, Western Washington University.

Furness, N. (2023). *City of Snohomish Neighborhood Equity Index*. City of Snohomish.

In-progress articles and technical reports

Flower, A., Wang, X., **Furness, N.**, & Bradford, E. (2024). Emerging Issues in Climate Change in the Salish Sea Bioregion.

Flower, A., **Furness, N.**, & Bradford, E. (2024). Alternative Grading Methods in Geospatial Information Science Courses. *To be submitted for peer review*.

GRANTS AND CONTRACTS

Furness, N (PI). 2024. *Upper Skagit Watershed Digital Atlas*. Skagit Environmental Endowment Commission. \$22,650.

Furness, N (PI). 2024. *East Kitsap Riparian Assessment*. dxwsəq'wəb Suquamish Tribe. \$39,993.

Furness, N (PI) and Flower, A. 2024. *Active Channel Mapping for the Puget Sound*. Puget Sound Partnership. \$538,280.

Furness, N. 2023. *Dean J. Alan Ross Travel Fund Award*. Travel to American Association of Geographers 2023 Conference. \$500.

Furness, N. 2023. *WWU Office of Research and Sponsored Programs Dean & Sandy Blinn Travel Fund*. Travel and attendance for the American Association of Geographers 2023 Conference. \$450.

Furness, N. 2022. *WWU College of the Environment Small Grant*. Materials and travel for thesis research. \$866.

CONFERENCE PRESENTATIONS

Furness, N. 2025. Creating ESRI StoryMaps: Workshop. Sound Waters University. Freeland, Washington. **[invited]**

Furness, N. 2024. The Nooksack River Watershed: Major Rivers and Transborder Floodplains. ESRI User Conference. San Diego, California.

Furness, N. 2023. Exploring the Changing Relationship between Grains and Community in Northwest Washington. American Association of Geographers Conference. Denver, Colorado.

Furness, N. 2022. Examining the Effect of Temperature on Winter Wheat in Small, Grain-Growing Regions of Western Washington. Association of Pacific Coast Geographers 84th Annual Meeting. Bellingham, Washington.