

# NATALIE FURNESS

GIS Specialist  
College of the Environment  
Western Washington University

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<https://natfurness.github.io/portfolio/#>

## EDUCATION

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### **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

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**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

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### **Western Washington University:**

GIS I: Introduction to GIS

GIS II: Cartography

### **Bellingham Technical College:**

Intermediate GIS

## PROFESSIONAL SERVICE

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

## PUBLICATIONS

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### ***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

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**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

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**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.