

Julia Stephens

### **Statement of Purpose - Master of Environmental Studies**

As an environmentally conscious individual, I am passionate about aquatic ecosystems and their impact on wildlife, habitat, and human health and activities. This passion has reflected and guided me through my academic and professional pursuits, leading me to seek a Master's in Environmental Science. With this academic pursuit, I hope to gain knowledge and have a lasting impact on the relationships between human activities and the environment.

During this climate crisis, human-environmental interactions in aquatic environments are more important than ever in understanding our impact on wildlife, habitats, and human health and activities. My fascination with aquatic ecosystems, especially nearshore ecology, stems from the complex relationships between human activities and coastal and aquatic habitats. I am particularly drawn to studying the influence of human activities on trophic levels within aquatic systems and the challenges and outcomes associated with addressing these impacts. With a Master's in Environmental Science, I aim to contribute and make a lasting impact on the efforts towards environmental stewardship and aid in establishing and maintaining balance within the environment. I aspire to contribute to the conservation and sustainable management of aquatic systems, especially within Puget Sound, and to use my knowledge and experience to address critical issues such as aquatic pollution and contamination, habitat degradation, loss of biodiversity, invasive species, and climate change.

My pursuit of knowledge of aquatic environments is reflected in my undergraduate degree in Zoology, including undergraduate research in microplastic detection in Chinook salmon and alewife in Lake Ontario. This research project impacted my interest in human-environmental interactions in aquatic systems and the effects pollutants can cause on trophic levels within aquatic and marine environments. I further developed myself academically and professionally as a research assistant for SUNY Oswego's Biological Sciences Department, aiding in the sampling of amphibian populations for fungal and viral diseases in wetland habitats, and Earthwatch Institute in Craig, Alaska, assisting in sampling and surveying of sea otter, sea grass, invertebrates, and fish species in nearshore environments. Surveying and sampling in Alaska ignited my passion for relocating to the Pacific Northwest, where my proximity to the Puget Sound and Pacific Ocean allows me to pursue my passion in nearshore ecology. My academic experience in microplastic detection in aquatic species and sea otter and seagrass relationship volunteer work has solidified my interest in trophic cascades within marine environments.

Professionally, positions I have held that sustain my interest in aquatic systems include my time as a Fish and Wildlife Technician 1 for the New York State Department of Environmental Conservation - Fish Disease Control Center and Boat Launch Steward for the Nature Conservancy. While employed with the NYS-DEC, I assisted state aquatic pathologists and biologists in detecting and controlling disease within NYS fisheries and maintaining broodstock of disease-resistant salmonids. This position solidified my goals of wildlife management,

especially in aquatic systems. While employed by The Nature Conservancy, I was independently responsible for detecting, identifying, and reporting invasive species at New York State boat launches. The impact of invasive species globally is detrimental, and with Puget Sound being a central international shipping lane while also acting as a rich and diverse habitat environmentally, culturally, and economically, the threat of invasive species is especially acute. The influence of human activities on complex aquatic ecosystems is a complex and profound topic that guides my interests and passion for environmental science.

I am especially drawn to the opportunity to pursue my Master's in Environmental Science from Evergreen State College because of its renowned interdisciplinary approach to education that promotes independence and critical thinking. I am deeply committed to concentrating my academic opportunities on becoming an innovative and impactful environmental scientist. I am confident that my educational and professional background, genuine enthusiasm, and dedication to this field make me a strong candidate for your program. Thank you for considering my application.