

Deryn Bagley, Sophie Monterola, and Hannah Tucker
Todd Gray and the Tulalip Tribes Natural Resources Department

FISH460 AB
University of Washington, Marine Biology

4/14/2026

To:

Program Officers: José Guzmán, PhD, Megan Ewing, Sarah Tanja, Andy Nutzhorn
Funding Organization: International Society of Crustacean Ecophysiology
Program Title: *Applied Comparative Ecophysiology of Hemigrapsus oregonensis and Carcinus maenas: Linking Mechanisms to Management in a Changing Coastal Environment*

Subject: Letter of Intent to Submit a Proposal – *Applied Comparative Ecophysiology of Hemigrapsus oregonensis and Carcinus maenas*

Dear José Guzman, Megan Ewing, Sarah Tanja, and Andy Nutzhorn,

I am writing to formally express my intent to submit a proposal in response to the RFP titled “*Applied Comparative Ecophysiology of Hemigrapsus oregonensis and Carcinus maenas: Linking Mechanisms to Management in a Changing Coastal Environment.*”

Our proposed project, tentatively titled “**stress response by native *H. oregonensis* in “crab slab” vs mesh pots**”, will address the following thematic area(s) of the RFP:

- Influence of invasive species removal efforts on native species
- Applied stress Physiology of native crabs

This project will investigate the physiological stress responses of *H. oregonensis* under pot type variations and conditions. We are interested in testing if “crab slab” pots, which are designed to target *C. maenas* specifically, produce a different stress response in *H. oregonensis* compared to the typical baited mesh pot. These experimental ways of removing *C. maenas* can also cause native *H. oregonensis* bycatch. By focusing on which traps affect native populations the least this can inform which traps are better for *C. maenas* removal while also decreasing stress of native crab populations.

The anticipated Principal Investigators will be Deryn Bagley, Sophie Monterola, and Hannah Tucker. Our research approach emphasizes ecologically meaningful physiological endpoints with direct application to coastal resource management and climate adaptation.

We appreciate this opportunity to contribute to applied coastal science and would be happy to provide any additional information if needed prior to full proposal submission.

Sincerely,
Deryn Bagley, Sophie Monterola, and Hannah Tucker