

Harper Estuary Monitoring

Surveying Harper Creek's Estuary Restoration

Final Report: Surveying Harper Estuary (Bauman 2020)

Dr. Jenise Bauman of Western Washington University's Huxley College of the Environment and her team have been busy surveying Harper's Estuary for plant community composition to detail the presence of native estuary plants and document invasive species. This work has created a tidal marsh plant guide that will be made available to the community (you can view the guide here). Also, sediment is an important component for building healthy soils, supporting native plant communities, and structuring estuary habitat. Therefore, students have been sampling sediments to document soil carbon, organic matter, and macro/micronutrients. Some micronutrients, such as metals, can build-up in estuaries and can become toxic (heavy metals). Therefore, analysis of macro and micro-nutrients will determine whether there are elemental deficiencies or heavy metal accumulation within sediments. In addition, students are also evaluating the ability of plants to bioaccumulate metals. This will help identify native plant species that are better at storing metals and provide recommendations for future restoration projects. Students are also collecting water quality data, both water chemistry and biological data in the form of macroinvertebrate surveys to be compared to Washington State's water guality standards. All the research conducted will be compared to other estuary sites in Kitsap County, reported in a technical report, and synthesized into an interpretive guide for community members.

Visit the links below for more information on Dr. Jenise Bauman and Huxley College!

- https://huxley.wwu.edu/people/baumanj4
- <u>WWU on the Peninsulas | Western Washington University</u>

Monitoring Green Crab in Puget Sound

Final Report (October 2020)

Washington Sea Grant's Crab Team is monitoring for mobile fauna in the Harper Estuary. The Crab Team is using baiting trapping and molt surveys to characterize the mobile fauna community and changes that may take place because of restoration efforts.

If you are interested in being part of the volunteer Crab Team, please contact Jeff Adams, Project Coordinator at **jaws@uw.edu**

Harper Estuary Spotlight

