

The sediments of Puget Sound and the invertebrates that live on and within them, known as the benthos, are a vital component of the Puget Sound ecosystem. Benthos plays a key role in these biogeochemical processes, changing sediment properties as they move through, feed, and respire within the sands and muds of Puget Sound. They are also a vital food web component, serving as prey for bottom-feeding fish, larger epibenthic invertebrates, birds, marine mammals, and humans. Microplastics has the potential to cause harm to bottom-dwelling invertebrates and fish as well as other organisms of the food web.

This project looked for microplastics in bed sediments from Puget Sound, Washington. The research involved counting the number of microplastics given within a sediment sample. After processing the data, it can be used to find the concentration of the microplastic within the sample site range. The process of microplastic quantification requires density separation of sediment samples using lithium metaphosphate, as well hydrogen peroxide; afterwards, microscopy was used in order to count the number of samples.