Coastal Connections: Exploring the Biology, Ecology, and Geology of the Wild Mile's Intertidal Zone



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The Wild Mile is located on the unceded, traditional territories of the x^wmə θ k^wəy'əm (Musqueam), Skwxwú7mesh (Squamish), and səlilwətał (Tsleil-Waututh) Peoples. We aim to incorporate Indigenous Traditional Ecological Knowledge (TEK) into our work as we learn more about the local biodiversity, geology, and ecology of the Wild Mile.

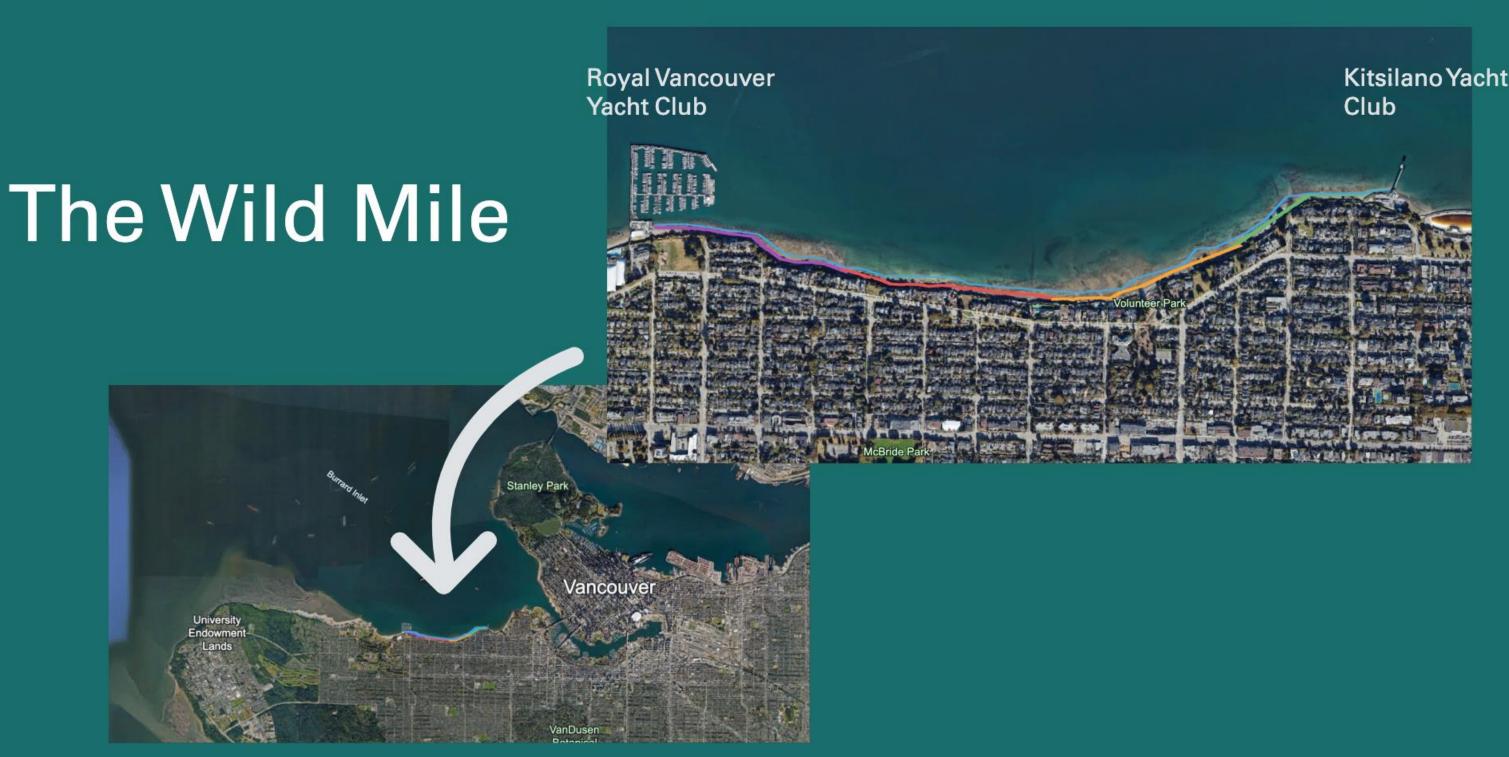
This project is part of our Environmental Science Capstone Course (EVSC 400) Final Project.

The Wild Mile is a rocky stretch of coastline in a highly developed area of English Bay. With lots of traffic in the bay and on shore, the quality of intertidal habitat here may be diminishing from anthropogenic activities.

We are working with the City of Vancouver to provide baseline data about the following for this intertidal zone:

- Biodiversity
- Intertidal habitat structure
- Role in the blue economy

We will also suggest management strategies to better manage rocky intertidal zones.



(Hippmann, 2024)

How do geological processes and biological communities shape the ecosystem dynamics of the Wild Mile's intertidal environments?







Flora and Fauna

Species abundance, distribution, diversity

Invasive species hotspots

Potential competition for resources

Habitat degradation

Grain Size Distribution



Rock type and size



Diverse microhabitats



Ecological niches and resources



Natural coastal protection



Objectives

- GIS map of grain size distribution
- Inventory of flora and fauna
- Literature review
- Policy Brief

Indigenous Traditional Ecological Knowledge (TEK)

This area is culturally significant for the nations that have lived here for generations. Native flora and fauna plays a significant cultural role in traditional practices, ceremony, and identity. For this reason, we believe that it is important to integrate TEK into our project to help decolonize our approach to research.

Results

This poster was made before we had any results, rather this focuses on methods and objectives.

However, ask us about our results! We are happy to share.

References

Hippmann, A. (2024). The Wild Mile. Google.com. https://earth.google.com/web/@49.272999,-123.17406328,0.43170738a,2681.62390493d,30y,360h,0t,0r/data=MikKJ wolCiExZlZqS0RfU25SZ1h hWklObG5HTEN2X0NkT2xpZ0wzOHcgAToDCg Ew



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