# Restoring Titlow Park through Invasive and Native Plant Management

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### **Titlow Beach Park**

Titlow Beach Park is a 75 acre recreational area located on the shore of the Puget Sound in West Tacoma. The park is surrounded by coniferous forests and is home to two estuarine lagoons that are separated from the ocean by a culvert (MPT 2022).



Figure 1. Titlow Beach Park (Google Maps 2022).

The 714 m<sup>2</sup> restoration site was divided into seven polygons based on the areas hydrological features and species presence. Classifying the site in this way allowed us to develop area specific plans for managing the conditions on site.

### **Team Titlow**







## **Restoration Objectives**

- Enhance native biodiversity through planting and invasive species removal.
- Improve estuary conditions through plant management along the lagoon and stream.
- Increase community involvement by engaging the public through environmental education and work parties.
- Add aesthetic and functional value to the area through site improvements.

### Site Work









Invasive

Straw Wattle



Mulching 

Planting

### **Plant Selection**

Himalayan blackberry, English Ivy, and bittersweet nightshade reduced biodiversity and impacted ecosystem function by outcompeting native species on site. To address this issue, the species selected for this restoration were chosen with the intention to outperform invasive species and for their ability to provide other ecosystem services.

### **Trees**

- Douglas Fir
- Red Alder
- Shore Pine
- Western Red Cedar

#### Herbaceous

Western Sword Fern

#### Shrubs

- Snowberry
- Salmonberry • Red-Osier Dogwood
- Pacific Ninebark
- Nootka Rose
- Thimbleberry
- Beaked Hazelnut
- Red Huckleberry
- Osoberry

### **Community Involvement**



Our team supervised several work parties where we taught volunteers about our site, tool safety, plant installation, invasive species removal, and plant care; fostering environmental interest and teaching the importance of restoration in the community.

### Post-Installation

We successfully installed 280 native trees, shrubs, and herbaceous plants; removed 270 square feet of invasive species; and worked with over 50 volunteers.

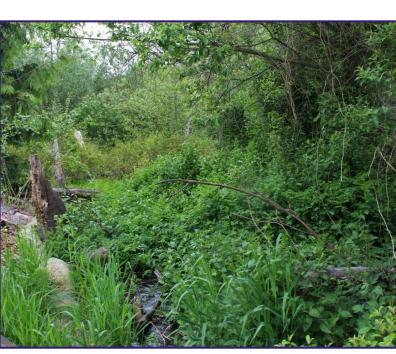




Before

After





Ecological restoration is essential to mitigate the negative impacts caused by invasive plants, climate change, and urban development. We hope to have inspired the community to value and continue restoration work, not only for the success of Titlow Beach Park, but for the prosperity of future generations.

## Acknowledgements

A special thank you to Cynthia Updegrave and Jim Fridley for teaching us the complexity and importance of ecological restoration; Yohan Min for guidance; Aubin Duncan, Rashell Wilcox, Amy Boucher, Jeffery Huebner, and our amazing volunteers for their help on site. Most importantly, I'd like to thank Team Titlow for a fulfilling experience through their initiative and support.



References









Metro Parks Tacoma (MPT). 2022. Titlow Park & Lodge. Metro Parks Tacoma. http://www.metroparkstacoma.org/place/titlow-park-lodge/.

Google Maps. c2022. Tacoma / Puget Sound [roadmap Image] (CA):
Google.https://www.google.com/maps/@47.255,-122.5401327,13.1z?hl=en Cress. 2020. Dogwood Flower Image. iStock. https://www.istockphoto.com.