

Tidal marsh restoration and climate adaptation in Boundary Bay and Sturgeon Bank



Field Trip Summary

The Fraser River Delta contains the largest estuary meeting the west coast of Canada, and has been extensively modified by industrialization, urbanization, and agriculture since European colonization began in the 1820s. In recent decades, tidal marshes have declined throughout the estuary, and both tidal marshes and low-lying communities throughout the delta are threatened by sea-level rise. This field trip will visit three innovative projects attempting to support both ecological resilience and coastal flood adaptation. The Boundary Bay Living Dike project led by the City of Surrey, recently completed construction in 2023 and aims to implement a “living dike” to experiment with nature-based approaches to coastal flood protection in Boundary Bay. The Sturgeon Bank Sediment Enhancement Pilot Project is a novel sediment augmentation project led by Ducks Unlimited Canada that attempts to re-use dredge sediment to restore tidal marsh and support coastal flood protection for the City of Richmond. The Grauer Lands Habitat Enhancement Works were completed by the City of Richmond and Ducks Unlimited Canada, and aims to restore tidal marsh resilience by removing large rafts of beached logs and repurposing them into a habitat berm to provide coastal flood protection.

To take the most advantage of low tide, this field trip must depart the Pan Pacific at 7:00 a.m. Morning snacks and water will be provided. Please bring your own water bottle. The bus will arrive back at the hotel by 1:00 p.m. Lunch will not be provided.