Tsleil-Waututh Nation Environmental Stewardship Initiatives in Burrard Inlet



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Current state of Burrard Inlet

- Burrard Inlet closed to bivalve harvesting since 1972
- Herring extirpated in 1885
- General decline in habitat type, function, connectivity and species
 populations
- Point and non-point sources of pollution
- Lack of coordinated monitoring or environmental stewardship oversight
- General lack of information and regular data collection





Tsleil-Waututh Vision and Goals

A productive, diverse and resilient ecosystem where:

✓ Healthy, wild marine foods can be harvested
 ✓ Water and sediment is safe and clean
 ✓ Important habitats are plentiful, productive, and connected
 ✓ Biodiversity and key species can persist

Recovery goal: 10% of protein from marine species in Burrard Inlet





Burrard Inlet Action Plan Overview

A science-based, First Nation-led initiative to improve the health of the Burrard Inlet ecosystem

Purpose of the Plan:

- To summarize scientific knowledge
- Identify priority issues
- Identify knowledge gaps & research needs
- Develop shared stewardship vision
- Prioritize near-term actions

Overall goal: Improve the health of the Burrard Inlet ecosystem by 2025

Burrard Inlet Action Plan

5 goals, 16 strategies, 66 actions

Key goal: Improve water quality and reduce contamination

- Actions related to stormwater
 - Expanding creek and outfall monitoring
 - Reducing pollution through source control
 - Advocate for copper brake phase out
 - Building relationships and collating data
- Review and update Water Quality Objectives for Burrard Inlet

Overall goal: Improve water quality in Burrard Inlet to restore harvesting opportunities

Water Quality Objectives

Community approach to policy

- WQOs sets limits of chemical and physical conditions to protect use
- The 1990 WQOs were provisional and are now 27 years old.
- TWN/MOE Creation of the Burrard Inlet Water Quality Roundtable and Technical Working Group
- Start from the basis of determining what is needed to protect the most sensitive uses of Burrard Inlet Ex shellfish harvesting
- Develop recommendations for monitoring and management of water quality in Burrard Inlet

TWN Cumulative Effects Monitoring

Holistic place-based approach

- Describe pre-contact baseline conditions
- Compile existing data
- Use on the ground monitoring and ecological modelling to quantify changes
- Use both ecological and cultural value components
- ID other active programs and partners

TWN Climate Change Projects

- Community based Climate Change Resiliency Plan
- Review and comment on all Federal climate change-related legislative and regulatory processes



On the Ground Data Collection

- Water sampling: chemical and physical
- Habitat mapping/assessments: eelgrass, forage fish, kelp, riparian
- Adult spawner surveys, juvenile trapping, out migrating estimates
- Shellfish health, abundance, and composition
- And much more!



