



Western Washington University
Western CEDAR

Salish Sea Ecosystem Conference

2018 Salish Sea Ecosystem Conference
(Seattle, Wash.)


Apr 5th, 10:00 AM - 10:15 AM

Tsleil-Waututh Nation: restoring shellfish harvest opportunities in Burrard Inlet, Canada

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Doyle, Bridget, "Tsleil-Waututh Nation: restoring shellfish harvest opportunities in Burrard Inlet, Canada" (2018). *Salish Sea Ecosystem Conference*. 121.
<https://cedar.wvu.edu/ssec/2018ssec/allsessions/121>

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Restoring Shellfish harvest opportunities in Burrard Inlet, Canada



Bridget Doyle, BSc, MSc

John Konovsky, Lindsey Ogston, Hillary Hyland

Tsleil-Waututh Nation

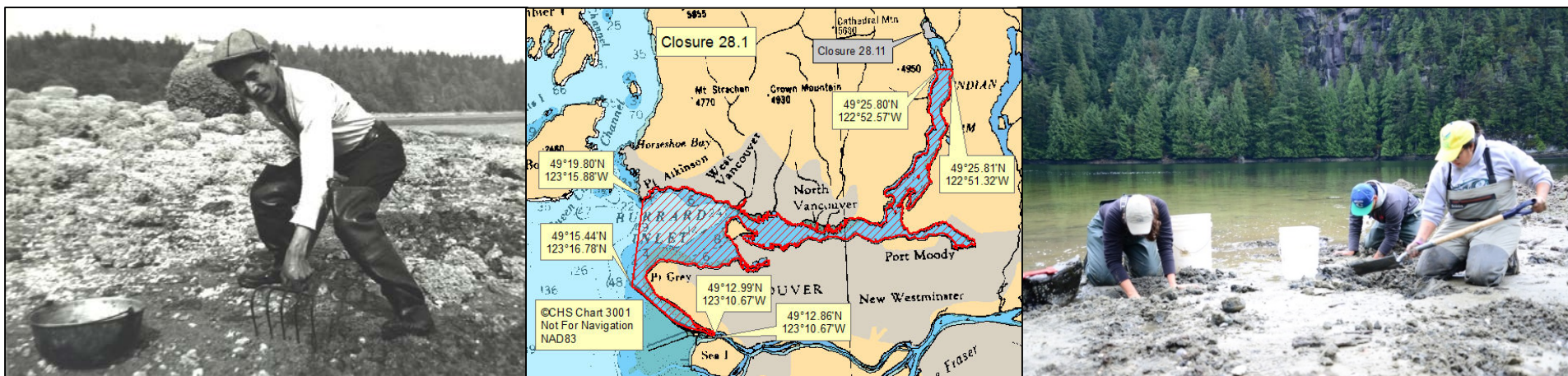
Salish Sea Ecosystem Conference, Seattle, April 2018

Current state of Burrard Inlet

- 1885: herring extirpated
- 1972–present: closed to bivalve harvesting
- Witnessed a decline in habitat type, function, connectivity, and species populations
- Contains point and non-point pollution sources
- Lacking coordinated monitoring and environmental stewardship oversight
- Lacking continuous record of land use and environmental quality



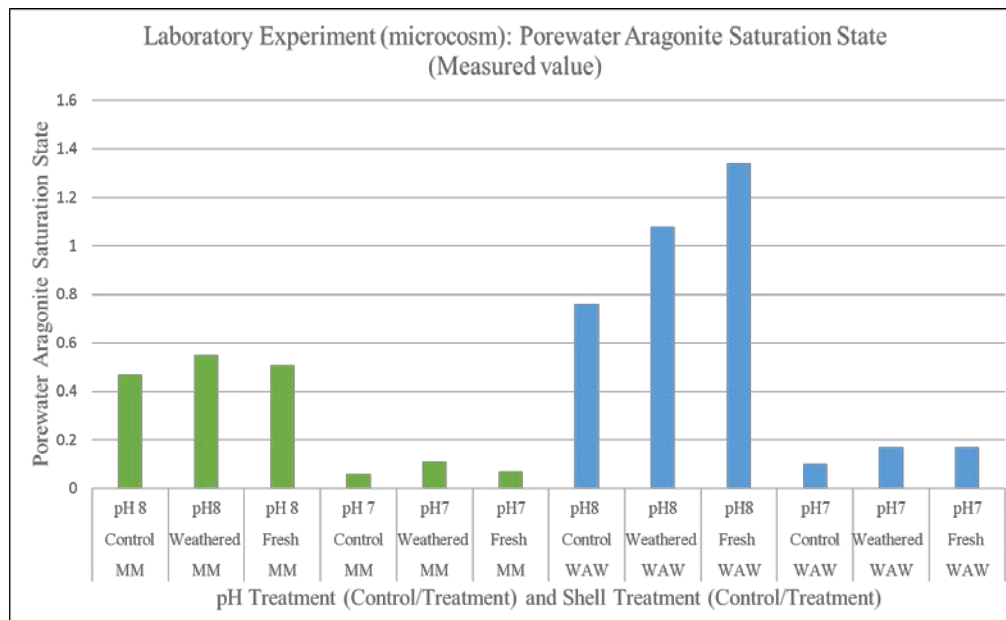
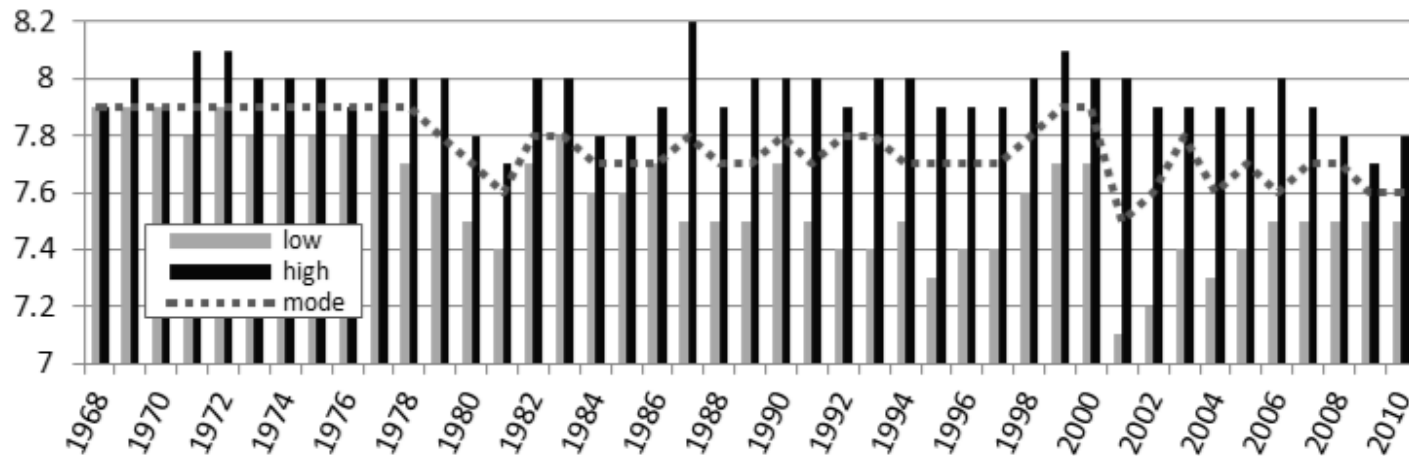
Site reclassification process



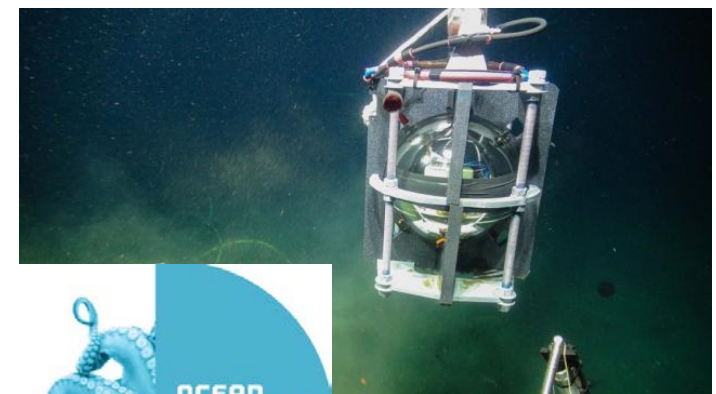
Year Initiated	2005-2010	2010-2015	2015-2020
Activity	<ol style="list-style-type: none"> 1. Water quality sampling 2. Point source pollution inventory 	<ol style="list-style-type: none"> 1. Viral dilution model 2. Marine biotoxin monitoring 3. Community Harvest Management Plan and Area classification 	<ol style="list-style-type: none"> 1. PRISC reclassification 2. First TWN harvest 3. Create conditions to expand opportunities....

TWN science related to shellfish program

Seawater pH at Vancouver Aquarium (Marliave, 2011)



(Doyle, M.Sc. Thesis, Royal Roads Univ., 2016)



(ONC, 2017)

Site restoration priorities



Burrard Inlet Action Plan – 6 Priority Actions



**UPDATE
WATER
QUALITY
OBJECTIVES**

**INSTALL
SCIENTIFIC
MONITORING
STATIONS**

**ADDRESS
STORM
WATER
POLLUTION**

**FORAGE
FISH
SPAWNING
BEACHES**

**NEARSHORE
HABITAT
COMPLEXES**

**RECOVER
SHELLFISH
BEDS**

MST* Cumulative Effects Monitoring Framework



*MST = Musqueam, Squamish, and Tsleil-Waututh Nation

hay' ce:p q'a

Thanking all of
you

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