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**Western CEDAR**

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Salish Sea Ecosystem Conference

2018 Salish Sea Ecosystem Conference  
(Seattle, Wash.)

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Apr 6th, 8:30 AM - 8:45 AM

## What climate change means for the Salish Sea

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Vadeboncoeur, Nathan, "What climate change means for the Salish Sea" (2018). *Salish Sea Ecosystem Conference*. 436.

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# What does Climate Change Mean for the Salish S



Nathan Vadeboncoeur, PhD  
President – Smart Shores

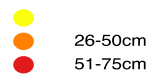
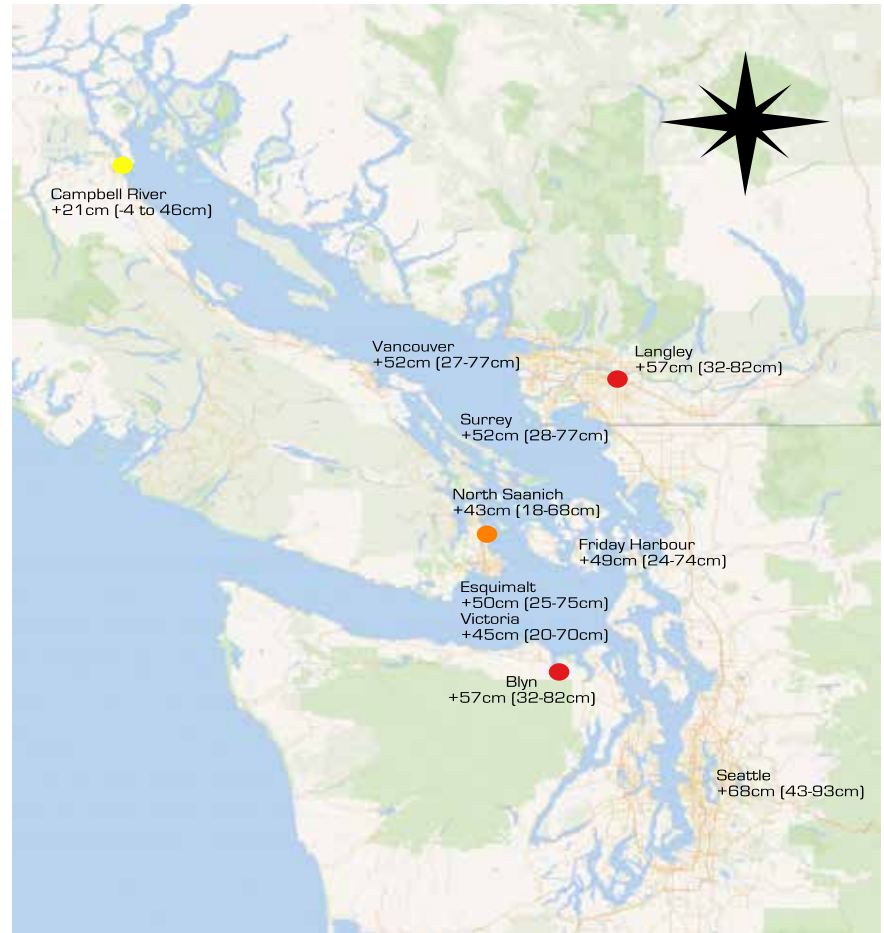
# Climate Change: State of Knowledge and Indicators



- Assessing Climate Change
  - Key Findings
    - Climate Stressors
    - Synergistic Impacts

## Sea Level Rise

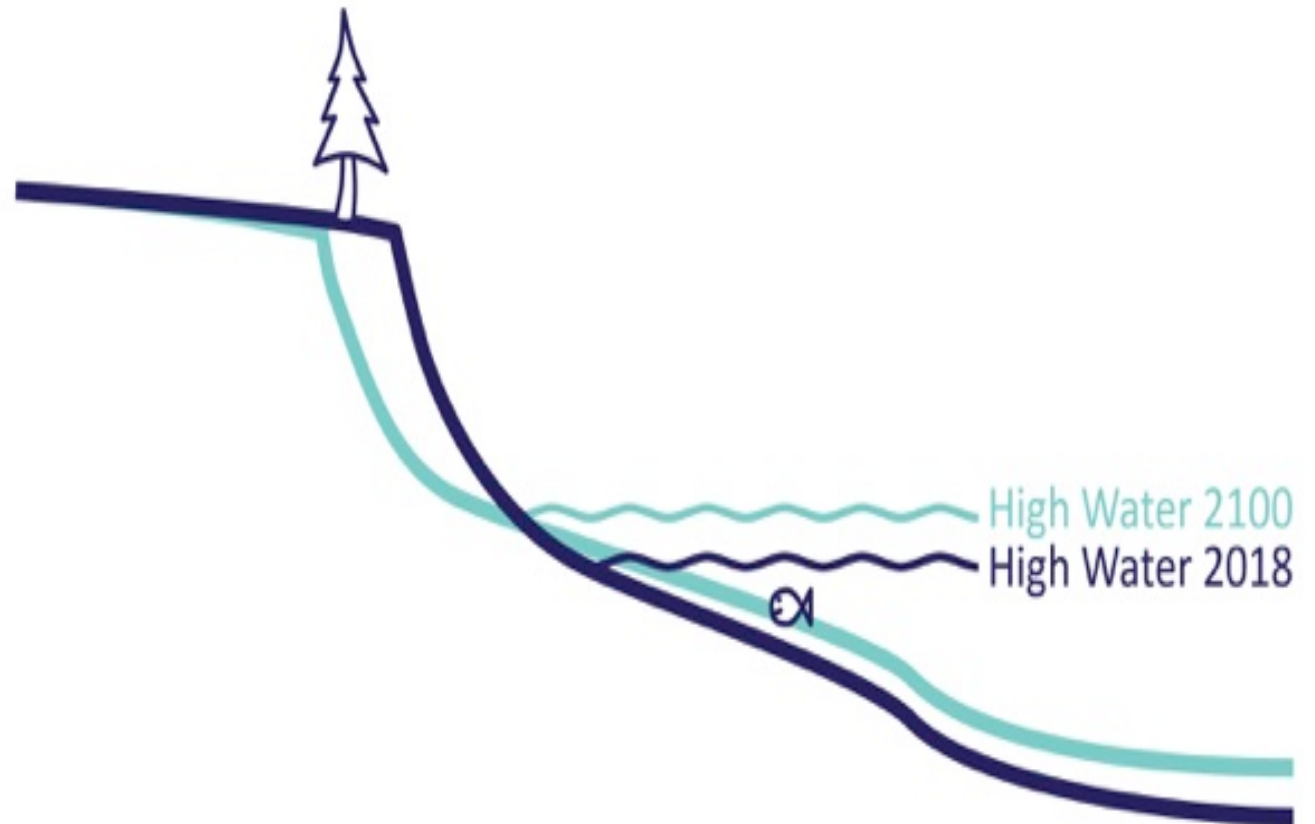
- Sea level rise varies by region
- Wave impacts present the greatest risk
- Sediment transport is a key feature



map by Nathan Vadeboncoeur.

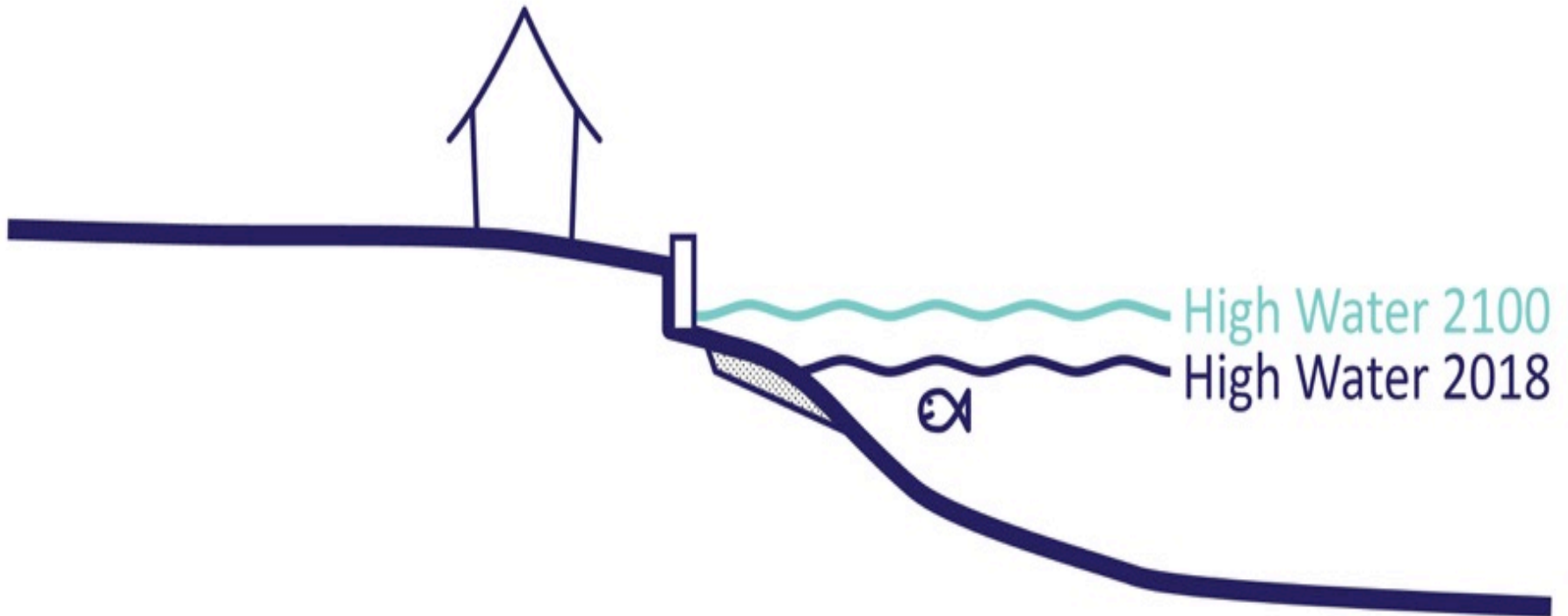
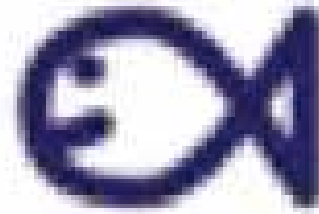
## Physical Coastal Processes

- Sediment Transport
- Shoreline Armouring
- Habitat Impacts



## Fisheries

- Forage fish and juvenile salmon habitat
- Phenological Mismatch
- Water temperature
- Riparian Zones
- Predation



## Birds

- Pacific Flyway
- Potential intertidal impacts mediated by Agriculture
- Phenological Mismatch



# Key Messages



- Municipalities play a key role in determining climate impacts
- Changes to atmospheric and water temperatures can affect the marine food web
- Climate impacts are the result of synergistic effects and have cascading consequences