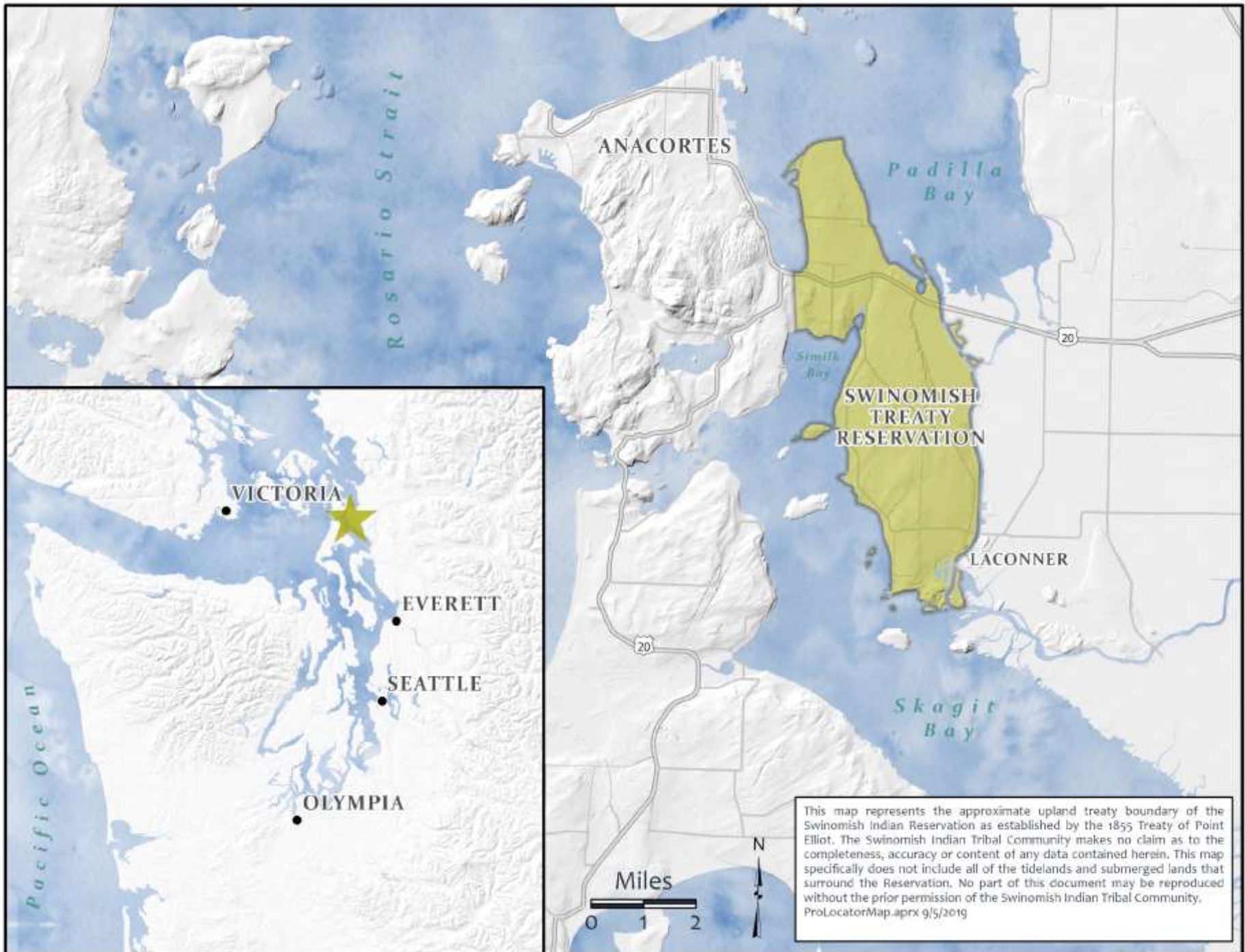


# Community-driven climate health evaluation and adaptation strategies--a Swinomish perspective

March 31, 2021





This map represents the approximate upland treaty boundary of the Swinomish Indian Reservation as established by the 1855 Treaty of Point Elliot. The Swinomish Indian Tribal Community makes no claim as to the completeness, accuracy or content of any data contained herein. This map specifically does not include all of the tidelands and submerged lands that surround the Reservation. No part of this document may be reproduced without the prior permission of the Swinomish Indian Tribal Community. ProLocatorMap.aprx 9/5/2019









**climate change & health assessments as a desktop exercise**

# IHI

## INDIGENOUS HEALTH INDICATORS



**tal̥x̥cut**  
**SELF DETERMINATION**  
Healing & Restoration  
Development • Trust



**ḡac̥usadad**  
**EDUCATION**  
The Teachings  
Elders • Youth



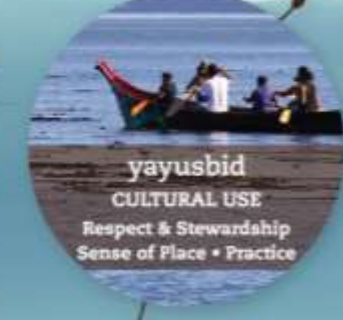
**q̥'iq̥cut**  
**RESILIENCE**  
Self-Esteem • Identity  
Sustainability



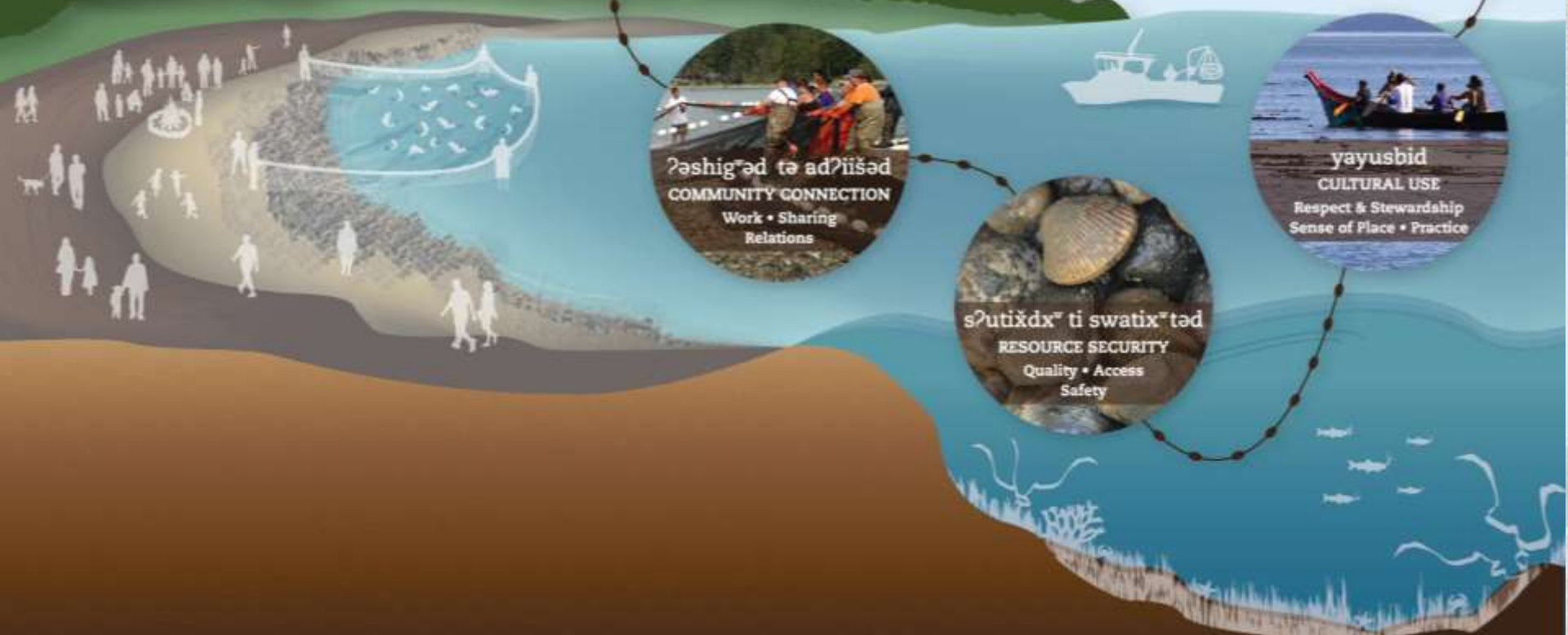
**ʔəshig̥əd tə adʔiis̥əd**  
**COMMUNITY CONNECTION**  
Work • Sharing  
Relations



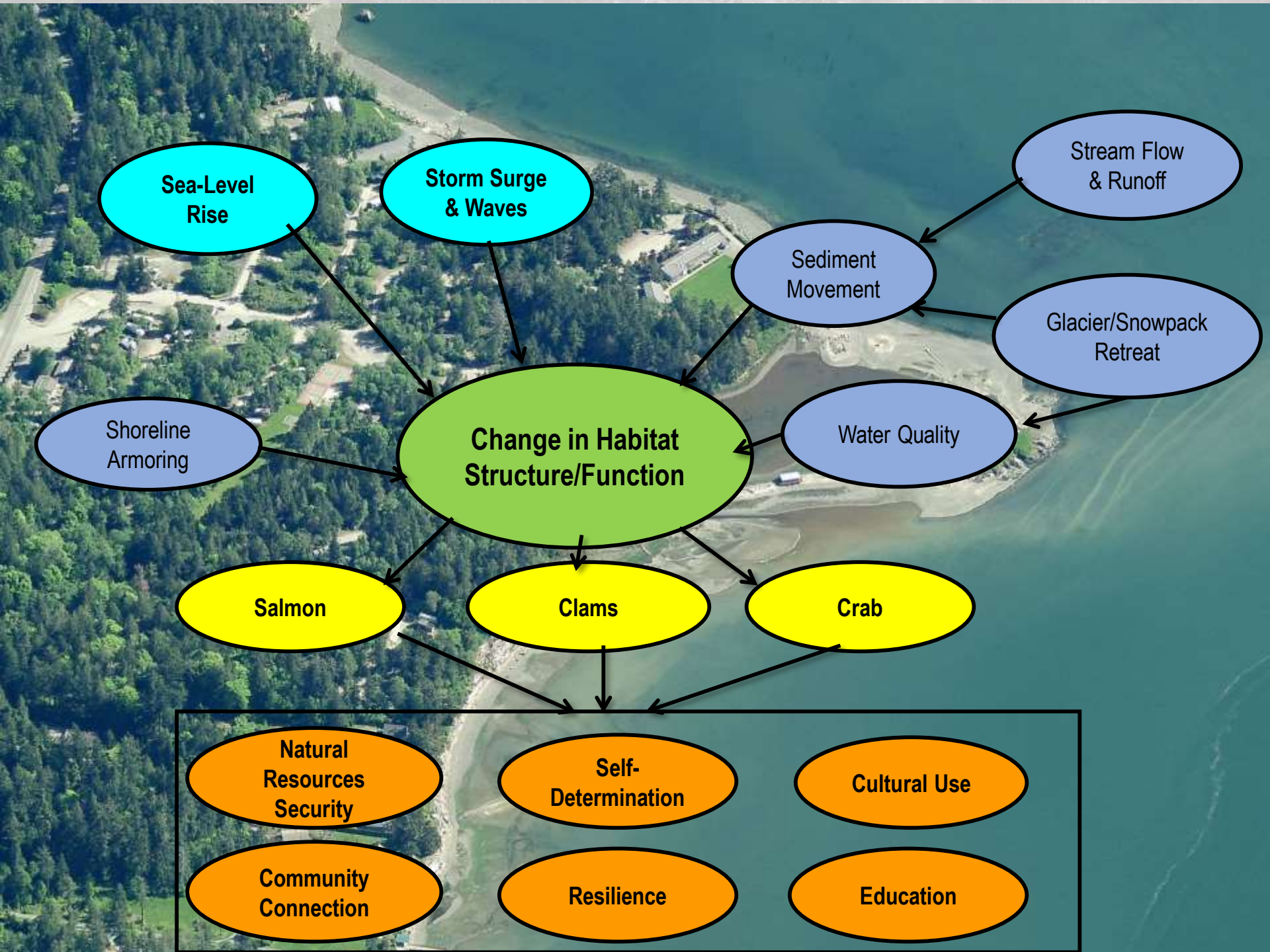
**sʔuti̥dx̥ ti swatix̥ təd**  
**RESOURCE SECURITY**  
Quality • Access  
Safety



**yayusbid**  
**CULTURAL USE**  
Respect & Stewardship  
Sense of Place • Practice







**Sea-Level Rise**

**Storm Surge & Waves**

**Stream Flow & Runoff**

**Sediment Movement**

**Glacier/Snowpack Retreat**

**Shoreline Armoring**

**Change in Habitat Structure/Function**

**Water Quality**

**Salmon**

**Clams**

**Crab**

**Natural Resources Security**

**Self-Determination**

**Cultural Use**

**Community Connection**

**Resilience**

**Education**



# Lone Tree

Clams

Salmon

Crab

Salmon

Crab

Clams

0 0.05 0.1 0.15 0.2 km

FIRST FOOD	Lone Tree Lagoon	Risk Key
Salmon	H	HIGH
Crabs	MH	MEDIUM HIGH
Clams	MH	MEDIUM
		MEDIUM LOW
		LOW





# Clam Diggers

**Engaging community in climate change & health discussions**





**Elders**

**Engaging community in climate change & health discussions**

# Most important to protect from climate impacts

Indicator Score and Rank – All Participants Averaged (n=68)

	Community Connection	Natural Resources Security	Cultural Use and Practices	Education	Self-determination	Resilience
Score (average rank)	3.04	2.56	2.78	2.26	3.50	4.32
Rank	4	2	3	1	5	6



winter

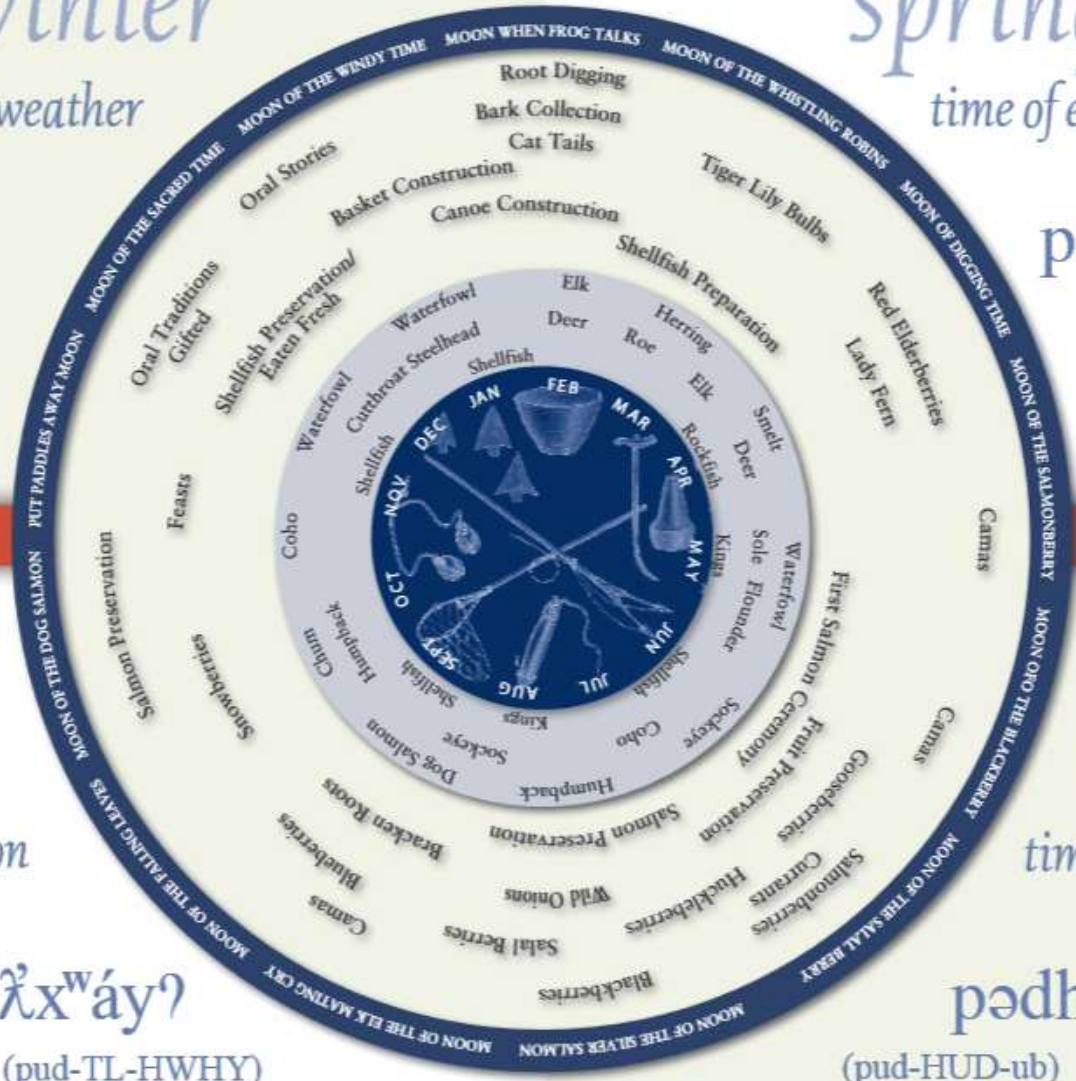
time of cold weather

pədtós  
(pud-TUS)

spring

time of emergence

pədlʔqʷúlil  
(pud-TL-KOO-leel)



autumn

time of dog salmon

summer

time when it gets warm

# Swinomish 13 Moons curriculum



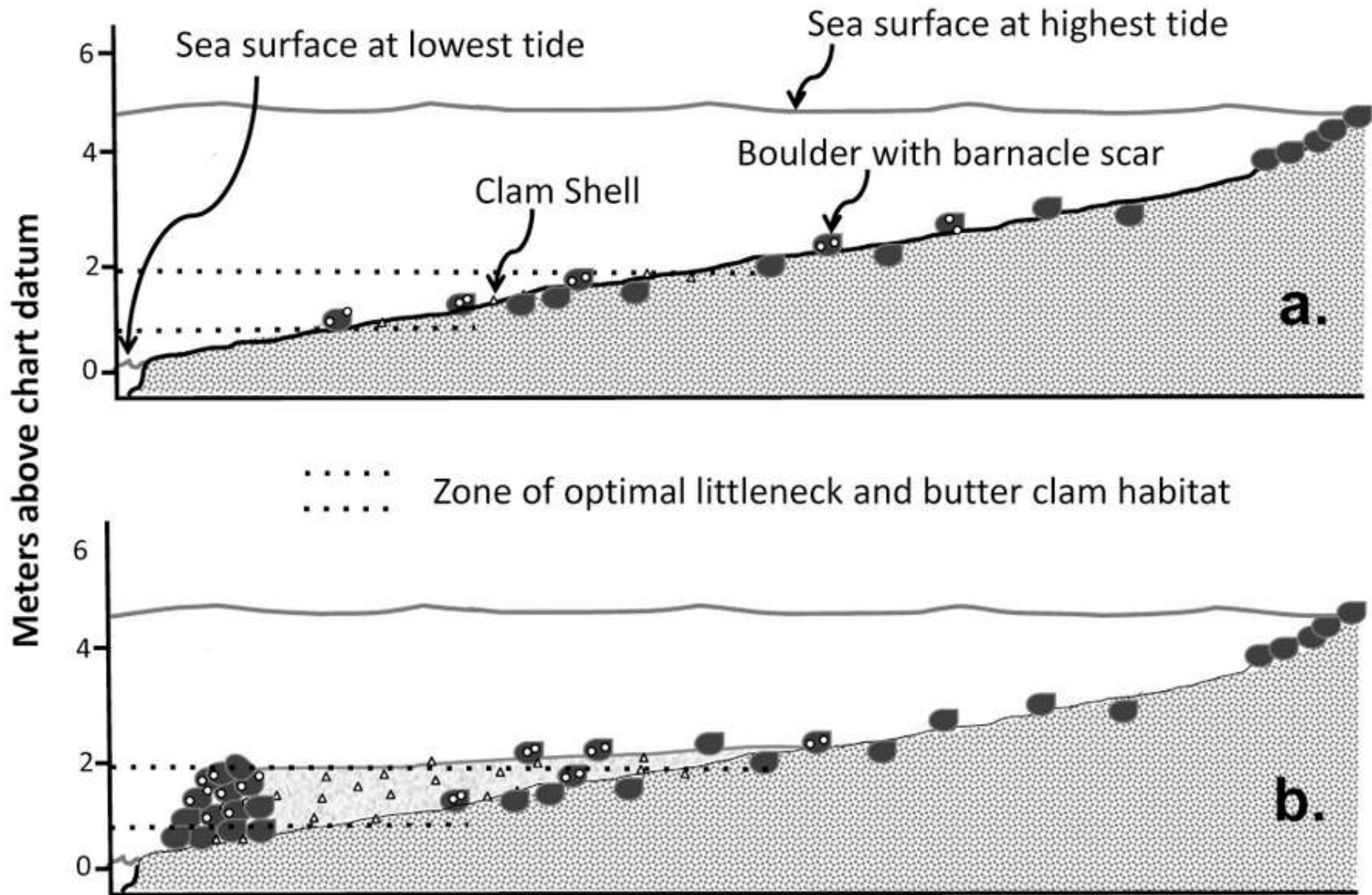


# Clam gardens



*Photo: Dana Lepofsky.*





Sequence of clam garden construction, (a) Naturally sloped, unmodified beach. (b) Infilled clam garden terrace.



tíg<sup>w</sup>icid thank you



**Beach seining at Lone Tree.—*Photo by: Tyler Long***

Project funded in part by: National Indian Health Board, EPA STAR grant #83559501, NSF AISL #1516742, Robert Wood Johnson Foundation's Climate Health Solutions