

An aerial photograph of a coastal region. A large, wide river delta flows from the top right towards the bottom left, emptying into a dark blue ocean. The land is a mix of green fields, some brownish patches, and a small town with buildings and roads. The text is overlaid on the upper part of the image.

Regional Integration and Resilience Through Mobility & Transportation for the Shoalwater Bay Tribe

Solana Granados
Faculty advisor: Daniel Abramson, UW
Firm advisor: Daniel Glenn, 7 Directions

Background

The Shoalwater Bay Tribe is located on southern coast. The coast, waterways and nearby places are important to their culture.

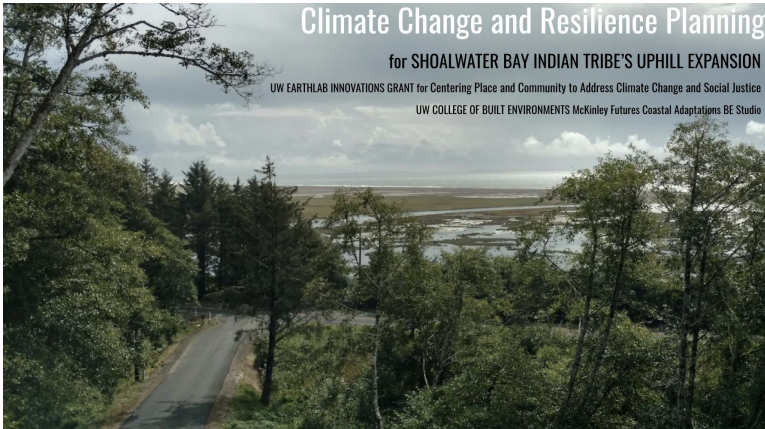
Current sea level rise, erosion, plausible earthquakes and the SWBT's extreme situation has led the Tribe to pursue relocation uphill, the 'Upland Expansion'.

Past injustices (colonization), current harms highlighted above and a high degree of uncertainty has prompted the Tribe to plan for resilience.

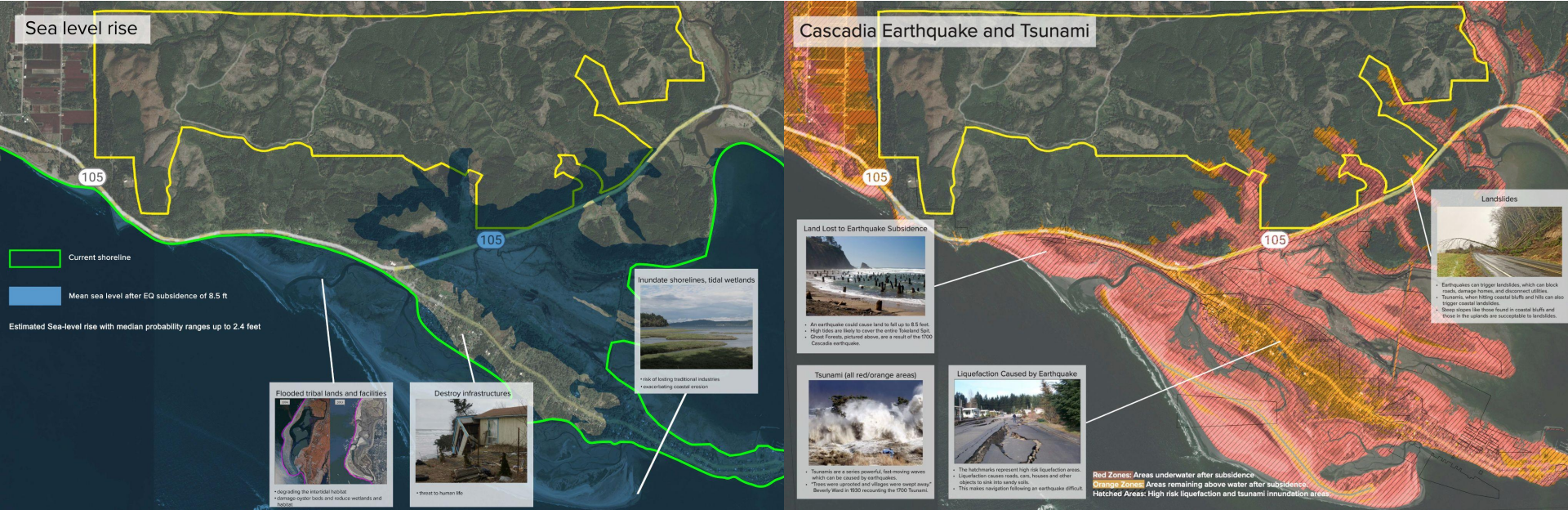


Awareness Building

- The NYT focused on the Tribe's and other Tribes relocation efforts (author/date).
- Previous, current and studios down the line focus on coastal communities



Hazard Scenarios

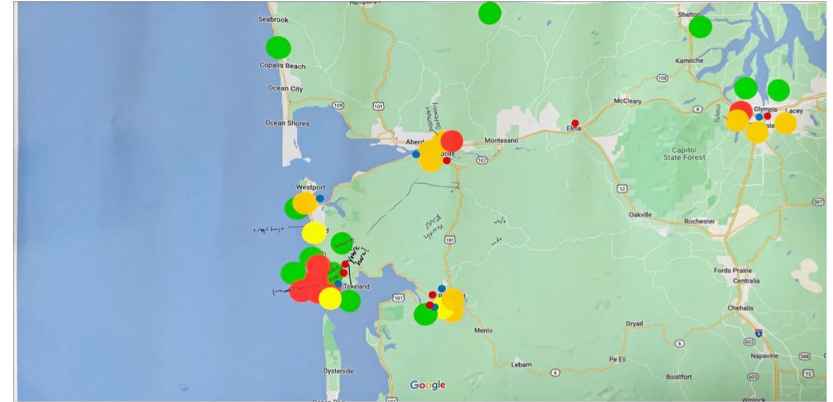


Opportunities

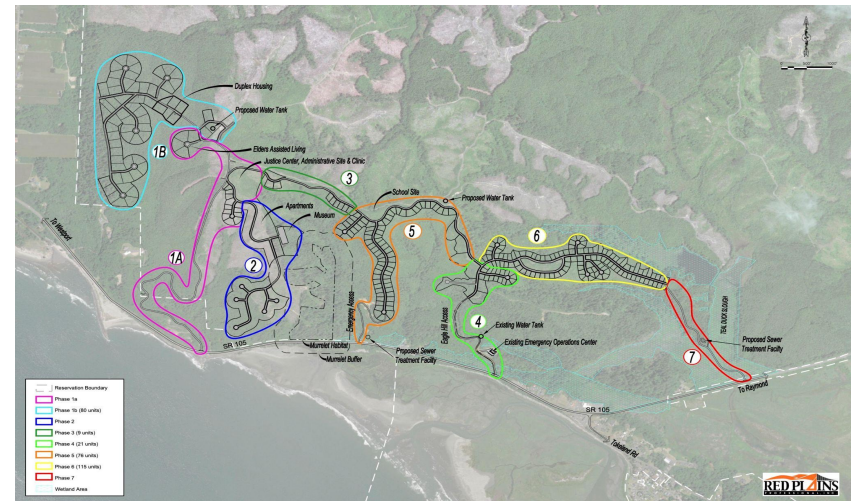


Transportation and Mobility Opportunities:

- For the uplands
- Lowlands to uplands (vise versa)
- Regionally



Where members of the community go for necessities like groceries and education.



Purpose

To address the knowledge gap on Tribal transportation and mobility challenges and opportunities especially in the context of erosion, sea level rise and other natural disaster threats. The research intends to provide recommendations for the Tribe as they continue to seek resources and funding.

Research Questions

1. In the planning for their upland expansion, how can the Shoalwater Bay Tribe enhance mobility and transportation in a **resilient** and **regionally integrated** manner, and find a balance between these two objectives (and when they conflict)?
2. What multimodal complete street-oriented designs and recommendations would be relevant to future related transportation grants grant applications ?



Complete Streets are streets designed and operated to enable safe use and support mobility for all users. Those include people of all ages and abilities, regardless of whether they are travelling as drivers, pedestrians, bicyclists, or public transportation riders (US Department of Transportation).

Literature Review on Tribal Transportation Planning

Key takeaways:

- Regional emphasis in Tribal transportation planning
- More work has been developed on a Complete Streets approach.
- Emphasis on the planning process itself, and funding and programs options.
- Overall the academic literature in research publications on this is sparse. And, the discussion of hazard and adaptation planning in relation to it is missing.

Methods

1. Case Studies (ie. Quinault Tribe or Makah Tribe)
2. Interviews with Tribal leaders and staff and professionals/expert in Tribal planning.
3. Collective studio Community Engagement (Conducted in October and December 2022; possibly more in Winter Quarter 2023)
4. Survey of Tribal members.



Research Project Timeline - Fall 2022 to Spring 2023

Fall 2022:

- Creation of project abstract and proposal
- Begin and complete literature review
- Identify cases to study
- Research design (Refine and finalize methodology i.e. questions and IRB)
- Conduct studio community engagement in December
- ARC Review November 17th

Winter 2023:

- Data collection which will entail case study development, conducting interviews, and GIS analysis
- ARC Review February

Spring 2023:

- Data analysis and begin developing deliverables
- Final ARC Review in June

Thank you! Questions or comments?



Deliverables

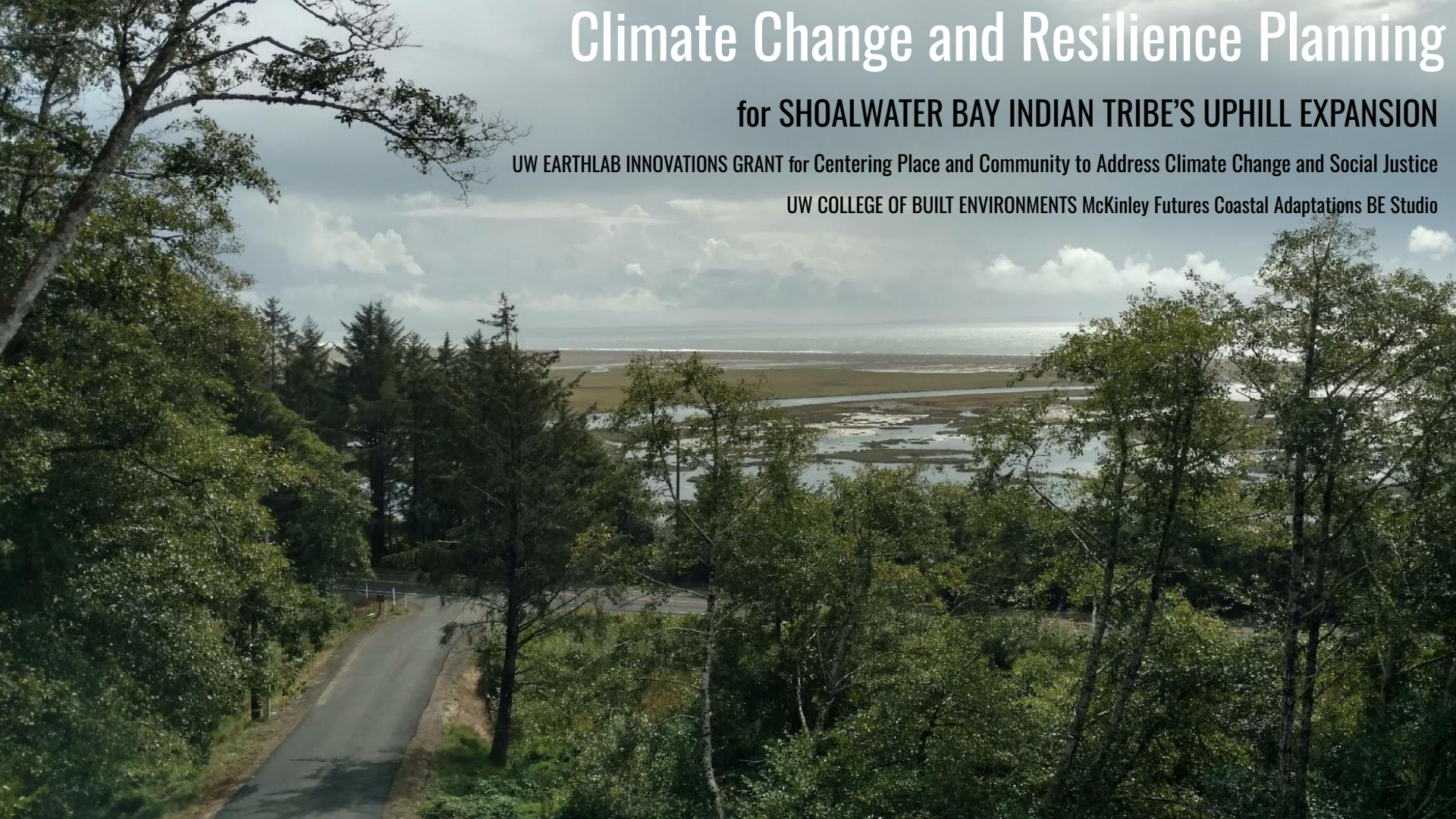
- **Final ARC presentation in June 2023**
- **Final ARC Report**
 - **Mobility Strategic Plan for the Shoalwater Bay Tribe (Professional Project Component)**
 - **Recommendations that include road easement coordination, multimodal planning & design and opportunities + strategies for implementation**

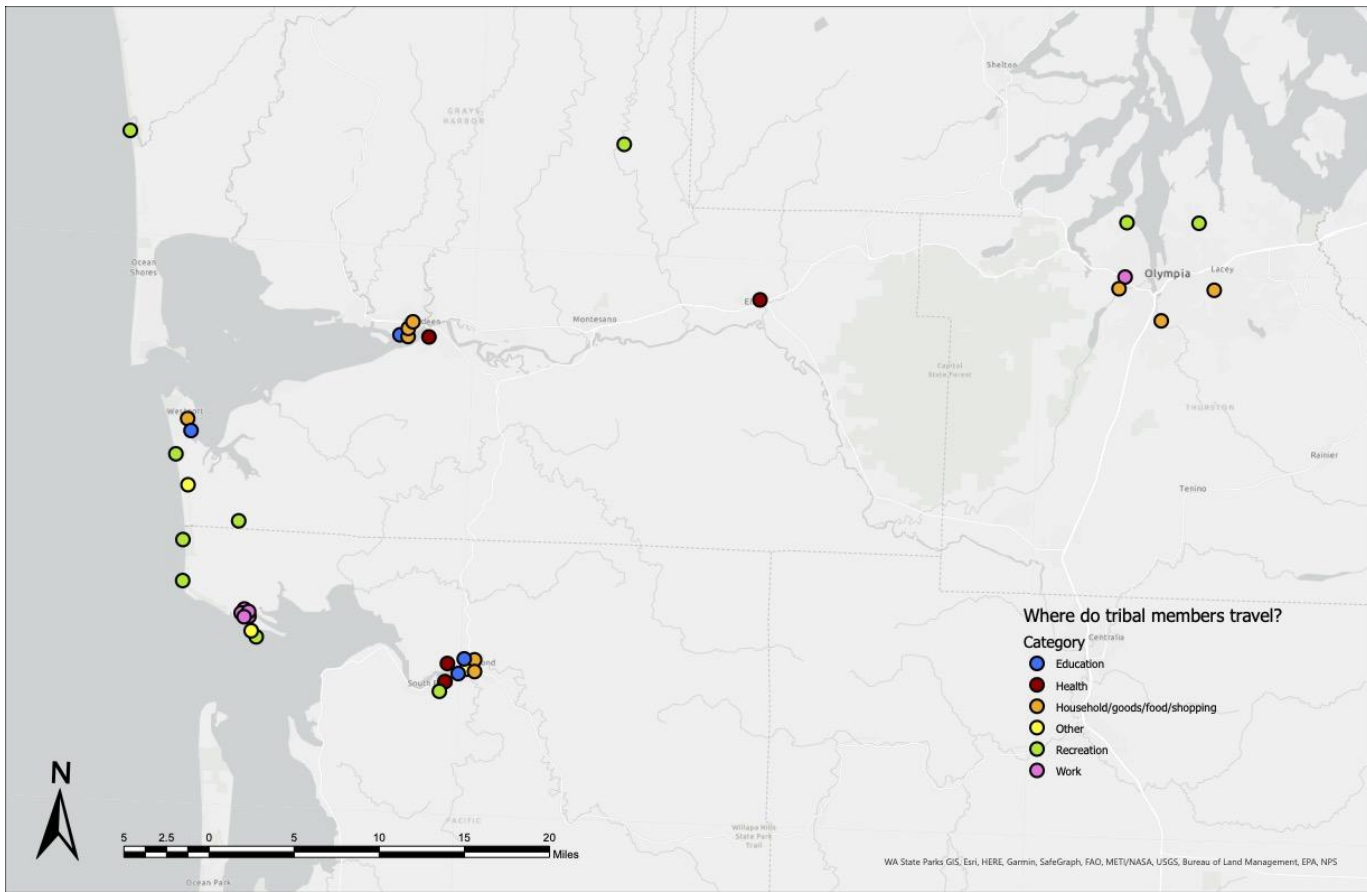
Climate Change and Resilience Planning

for SHOALWATER BAY INDIAN TRIBE'S UPHILL EXPANSION

UW EARTHLAB INNOVATIONS GRANT for Centering Place and Community to Address Climate Change and Social Justice

UW COLLEGE OF BUILT ENVIRONMENTS McKinley Futures Coastal Adaptations BE Studio





Community Engagement Regional Map Activity

Where members of the community go for necessities like groceries and education.



