Outreach and Engagement for the Makah Tribe's Climate Adaptation Plan

Laura Nelson
Office of Marine Affairs
Makah Tribe

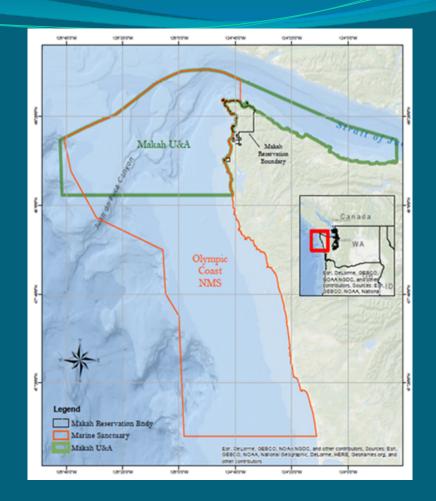


Mike Chang
Climate Adaptation Specialist
Makah Tribe



Context of the Makah Tribe

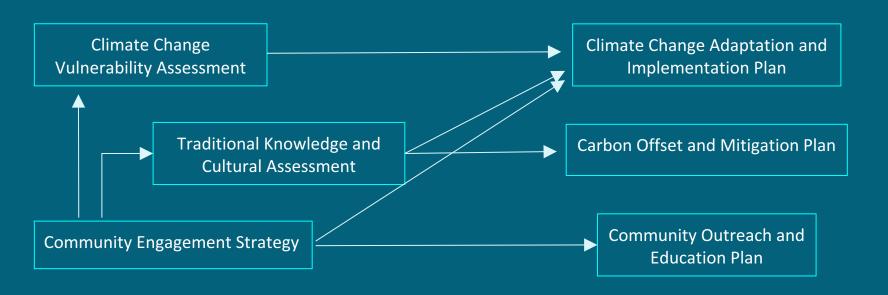
- 1855 Treaty of Neah Bay
- •Ceded 750,000 acres of land to the U.S. and reserved the rights to hunt, fish, gather, seal, and whale within surrounding Usual and Accustomed Fishing Areas
- The Makah Tribe, along with all other Northwest Tribes and Indigenous groups, have been cultivating salmon and marine resources for millennia



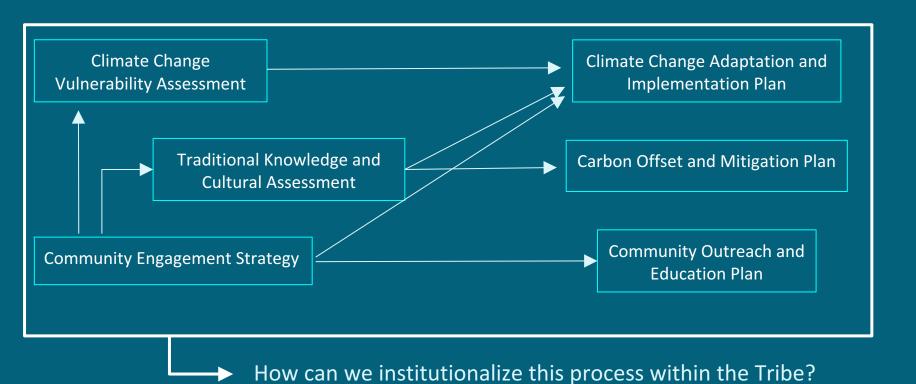
Lessons Learned from CC Assessments

- Dense, Highly Technical Review of Literature
 - Written by scientists for scientists
- Lack of Traditional and Cultural Knowledge Expressed
 - How to complement traditional knowledge with western science?
- Lack of Planning Relevancy
 - How does a vulnerability assessment translate into an adaptation plan? And how can an adaptation plan be implemented?
 - Issue of scale?

Climate Adaptation Logic Model



Climate Adaptation Logic Model



Community Engagement

Developed a community survey with the following goals:

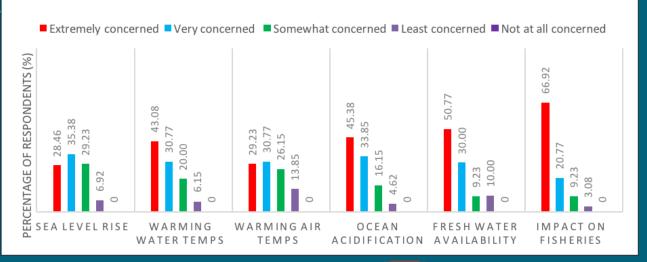
- 1. Help us to identify community concerns so that we can address those in the adaptation plan.
- 2. Learn some about the community's understanding of climate change.
- 3. Understand the level of support for climate planning efforts.
- 4. Explore the challenges natural resource managers face when trying to incorporate climate change planning into their work; are there things the CCWG can do to make this easier.

Community Dinner

- Held a dinner in Neah Bay in February 2017.
- Members of the climate change workgroup discussed ongoing and future work.
- Had a table set up for people to take the community survey.

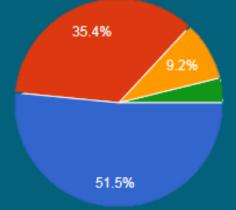


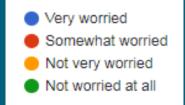
CONCERNS OF CLIMATE CHANGE IMPACTS



Ranked concerns of climate change impacts from the Makah community. Impacts to fisheries ranked the highest concern.

Community members'
level of worry about
climate change impacts to
the Makah Tribe.





Shift-click to make that word the root.

ocean

temperature

– (less fish) – Sea level fish roads wildlife

decreases in lower level food organisms for higher level fish stocks

ice melting

change extinction of whales

acidification

weather rising sea levels

early berry harvesting increase of storms impacts on traditional harvest seasons
shellfish biota pest control food security water security

feed rise in sea levels heavy weather extreme heat

for our fishes seafoods

conditions changing species w/in U&A Air quality sea level rise production resulting in a lack of prev for salmonids

acidity ocean refuse ocean and stream fossil fuel contamination education to the public

refuse ocean and stream fossil fuel contamination education to the public

and stream fossil fuel contamination education to the public

level is rising more CO2 in the air less animal life animal species going extinct less food

warming unexpected weather changes heat waves dry summer

pollution our shellfish whales our dump (old one) is full of PB and POLLUTION

rivers animals weather pollution

on the fishing in this area

life change in migration health etc WATER shortages atmospheric temperature rising

ocean temperature change extinction of whales

Shift-click to make that word the root.

.....

temperature

water ____levels
decrease in primary ocean production resulting in a lack of prey for salmonids

causing issues with ocean life change in migration health etc

radioactive fallout from Japan

and

availability skin safety
quantity quality and quantity of fish

quality air quality

shellfish red tide and other toxins

shortages effect on fishing plants and trees

trees

security

availability

levels

in summer months ocean pollution our shellfish whales our dump (old one) is full of PB and POLLUTION

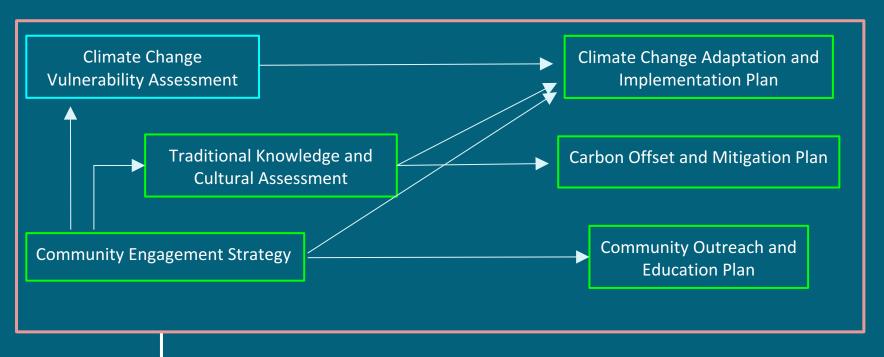
dry conditions food chain fish life bees

shortage dryer summers colder winters more rain in the winter months

water



Next Steps



How can we institutionalize this process within the Tribe?

Acknowledgments

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Thank you - Questions?

Mike Chang m.hsu.chang@gmail.com

Laura Nelson lauranels@gmail.com

