# CTUIR Draft Climate Adaptation Plan Overview

CTUIR General Council Meeting – July 15th 2021









## Climate Adaptation Plan Contents

#### Chapter 1:

CTUIR, First Foods, and Indigenous Foody System

Chapter 2:

Connecting Climate Science & First Foods

Chapter 3:

Adaptation Goals & Strategies

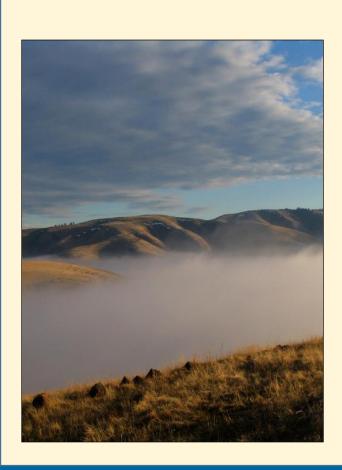
Chapter 4:

Community Engagement

Chapter 5:

Celebrating CTUIR Resilience

Glossary & Reference



## Goals and How to Use the Plan

- 1. Center indigenous knowledge and environmental justice in climate crisis planning;
- 2. Identify, develop, and support interdisciplinary strategies to mitigate impacts from short term variability and long term climatic shifts;
- 3. Celebrate existing CTUIR adaptation strategies



This plan is designed to vision into a future that will not look like the past

To provide information about the specific details about how climate change is likely to impact First Foods and their Indigenous food system for tribal departments and community to begin planning to reduce these impacts as much as possible.

## Organization of the Plan

#### Chapter One

Background on CTUIR's history, economy, governance and culture; mapping of how tribal governance functions as it is relevant to climate and food; role of food in the climate crisis.

#### Chapter Two

Overview of climate science; global patterns of change; effects we are likely to see in the Pacific Northwest; review of vulnerability assessment; and discussion of regional and international policymaking.

#### Chapter Three

Details of how these climate changes are likely to play out on the ground, and impact CTUIR's governance, wellbeing, and connection to First Foods and culture. Starts with projected climate impacts, provides generalized adaptation goals, and specific adaptation strategies that include roles, responsibilities, rough timelines, and possible project funding sources.

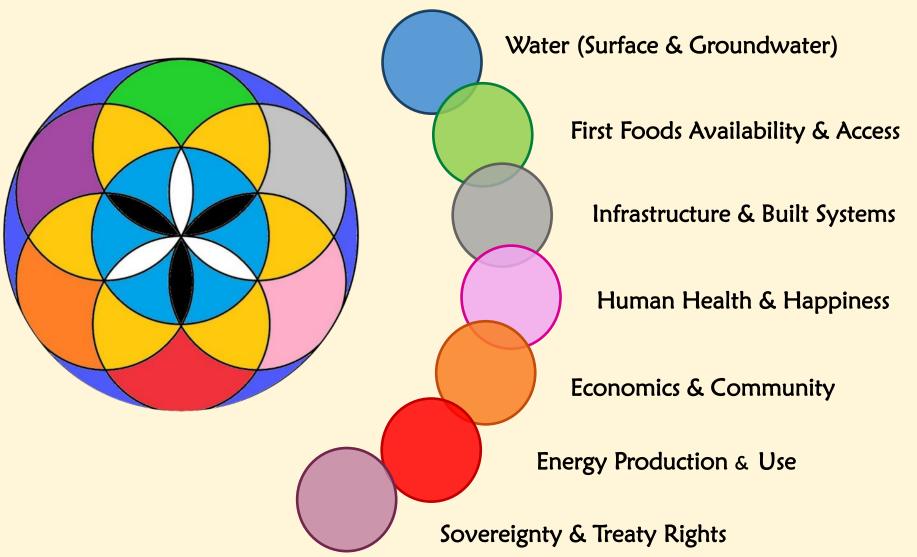
#### **Chapter Four**

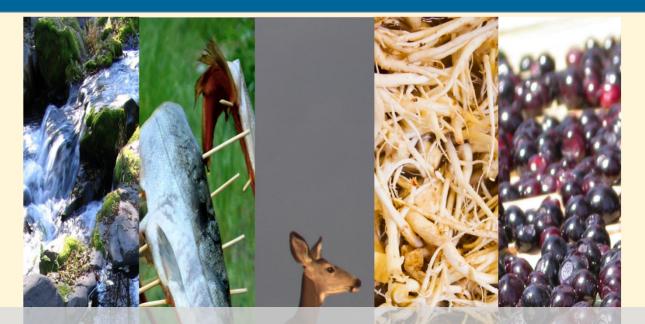
Documentation of the community engagement that helped develop this plan; reflections from First Foods Policy intern Ermia Butler; review of Climate Adaptation webinar series, as well as committee and commission engagement.

#### Chapter Five

Opportunity to highlight CTUIR initiatives that connect people with community, First Foods, financial literacy, physical and emotional wellbeing, and political/activism empowerment in the context of climate change.

# Organization of the Plan – Chapter 3





Chapter Three Review: Overview of Impacts and Adaptations



## Surface and Groundwaters

#### Climate Impacts

- Snowfall
- Rain-on-snow events
- Shifted hydrology
- Lower summer base flow
- Changing potential for GW storage
- Depletion of GW and surface waters
- Increased potential for contamination

- Keep winter water in river systems
- Address flooding issues proactively and expand Umatilla River Vision
- Enhance floodplain reconnection and restoration
- SW/GW Water quality/quantity data monitoring
- Improve opportunities for infiltration



### Climate Impacts

- Warming surface waters
- Shifting habitat suitability
- Increased invasive species
- Increased erosion
- Disconnection in big game grazing needs
- Altered disease and pest pressure
- Seasonal flooding magnitude
- Severity of wildfire
- Poor air quality
- Development in the WUI

- Anticipate habitat shift and migration
- Invasive species management and monitoring
- Proactively address wildfire risk
- Facilitated migration mapping and implementation
- Anticipate health impacts for tribal members during harvest
- Engage in policy/agency management discussions



## Infrastructure and Built Systems

### Climate Impacts

- Severity of storms & heat events
- Vulnerability of infrastructure
- Increased demand on facility indoor air filtration systems
- Potential disruption of communication networks
- Reduced access to public transportation
- Water and air-borne pathogens
- Opportunities for waste management

- Build hazard mitigation capacity
- Upgrade tribal facilities
- Address stormwater/graywater management opportunities
- Incorporate climate change projections into building and construction
- Facilities vulnerability assessment
- Strengthen local supply chains
- Expand pathogen education
- Divert materials from landfills



# Human Health and Happiness

#### Climate Impacts

- Frequency of storms and heat
- Health complications from smoke
- Biological contamination of water
- Mold, infectious & insectvectored disease and food borne illness
- Extended pollen season
- Disconnection from First Foods
- Climate grief and solastalgia

- Expand emergency preparedness
- Education on air quality outreach
- Reduce heat burdens
- Expand GW testing/treatment and septic services
- Biohazard knowledge education
- Expand First Foods and treaty rights knowledge & education
- Support opportunities for community connection



#### Climate Impacts

- Reduced hydropower generation
- Frequent transmission interruptions
- Facilities operating costs
- Increased demand for cooling
- Energy price increases
- Energy demand reduction

- Decentralize energy generation
- Create opportunities for passive energy projects/upgrades
- Improve energy efficiency
- Expand access to energy project credit and funding





#### Climate Impacts

- Emergency and household expense
- Reduction in tourism potential
- Disruption of supply chains
- Shifting revenue generation
- Opportunities for soil carbon sequestration
- Decrease in community cohesion
- Mental and emotional strain
- Migration and inequality
- Food security and safety

- Capture more of "food dollar"
- Diversify income sources
- Diversify agriculture crops and processing options
- Support intergenerational connection
- Rapid response mobile crisis frameworks
- Food systems knowledge/training
- Emergency preparedness skills



# Sovereignty and Treaty Rights

#### Climate Impacts

- Potential for resource conflict
- Interruptions in collective continuance
- Tribes to be leaders in climate adaptation
- Risk mitigation through cultural practices
- Challenges to healthy conditions for practice
- Ongoing impacts from regional recreators

- Expand tribal sovereignty and solidarity with other Indigenous communities
- Engage with "true cost" valuing legislation and efforts
- Expand opportunities for First Foods Mission around region
- Advocate for Indigenous management at all levels
- Health risk management workshops and kits

## Outreach and Resources

- Poster series and community event booths
- Confederated Umatilla Journal articles
- Visits to Senior's Center, air quality outreach
- Presenting to committees and commissions;
  - Tribal Water Commission
  - Fish and Wildlife Commission
  - Economic and Community Development Committee
  - Land Protection and Planning Commission
  - Health Commission
  - Attempted to connect with Law and Order Committee
  - Would like to present to Culture Committee, and Science and Tech Committee
- CAP Webinar series
  - CTUIR Climate Adaptation Plan Webinar Archive
- Draft plan recorded reviews
  - CTUIR CTUIR Climate Adaptation Plan ~ DRAFTS FOR COMMENT ~



# Celebrating CTUIR Resilience

What would you like to make sure is celebrated?

This is an opportunity to show how CTUIR is already a leader in climate adaptation

- Committees and commissions as adaptive governance in action;
- First Foods Mission and natural resource management;
- Data collection and monitoring;
- Energy efficient facilities and housing;
- Financial literacy and home food production loans;
- Economic diversification and community mutual aid;
- Reviving language connection and First Foods knowledge;
- Many others, what did I miss??



## Summary Conclusions

- Land acquisition and closing the checkerboard for landscape management; build and strengthen regional partnerships
- Powerful and important role of committees and commissions in affecting change
- Education and engagement of tribal youth and community in adaptation
- Tribes and the powerful mechanisms found within sovereignty; Indigenous knowledge not just as "folksy seasonal indicators" but as a complex and reciprocal all-encompassing system of resource governance.

# Contributing Guidance to the CAP

Contact Climate Adaptation Planner Colleen Sanders

Office phone: 541.429.7247 (leave a message because I am frequently away from my desk but I will get back to you!) Email: ColleenSanders@CTUIR.org

Request a paper copy!

Listening session first week of August in the evening/weekend, details to be announced





