

Climate Action Resilience Plan (CARP) Framework

Identify Staff to lead effort

Identify key staff who will be responsible for completing or coordinating staff and/or consultants to complete research, administer surveys, facilitate community meetings, hire support, coordinate training for support staff, integrate, author and edit text, and then conduct meetings with other staff and/or departments to align actions.

I. Understand Exposure & Community Concerns

Goal: Understand exposures, hazards, impacts, and vulnerabilities¹ within your traditional territories.

1. Community Participatory Research

- a. **Survey** - Conduct Staff, Leadership and Community Surveys online, in person or in meetings. Tools: Fish Consumption, cultural resource use surveys, and NCTCC Surveys:

- [COMMUNITY SURVEY](#)
- [STAFF AND COUNCIL SURVEY](#)
- [CLIMATE CHANGE RATED CONCERN SURVEY](#)

NCTCC survey tools:

- [CLIMATE SURVEY TRACKER](#)
- [SURVEY DEFINITION SHEET](#)
- [VISUAL REFERENCE SPREADSHEET](#)

- b. **Gather Sources** - Cultural ethnography, historical data and research, language and Tribal place names, 1-on-1 conversations, and group discussions, oral history, cultural storytelling, maps of region etc.
- c. **Mapping** - Gather maps for your traditional territory including historical maps whether or not they are geospatially stretched, visit the [NCTCC Climate Resource Library](#) for a list for key mapping layers. You may also consider the [NCA Interactive Atlas](#) for mapping resources.

¹ Adapted in part from the U.S. Climate Resilience Toolkit

2. Analyze, Interpret & Receive Feedback

a. Analyze data

Use digital survey platform analytics by entertaining in any handwritten surveys and exporting charts and outputs, or manually create initial Interpretations to answer the following questions:

1. Describe impact- How is (or will) your traditional territory be affected by changes in climate?
2. Geographical area- How will the impacts/exposures/vulnerabilities be restricted to specific parts of your traditional territory, or impact different areas differently?
3. Timeline of Impact- Estimate a timeframe of when the impact can or will occur?
4. Probability of Impact- How likely is it that this impact will happen?(i.e. low, medium, high)
5. Describe Consequences- What are the social, cultural, economic, legal, etc. consequences that can occur because of impact? ²

b. Identify Assets and Hazards

Using the above results, assess what assets (i.e. your community members, buildings, roadways, waterways, cultural resources etc.) that can be exposed to potential climate hazards (i.e. landslides, unplanned fire, extreme heat, flooding, etc.).

	Assets	Hazards
1	Residents	Extreme Heat
2	Roadways	Landslides, Flooding
3	Winter Recreation Revenue	Warming (early snowmelt)
4	Commercial Properties	Floodplain Inundation
5	Residential Properties	Floodplain Inundation, Wildfires, Landslides
6	Parks	Floodplain Inundation, Water Shortage

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² Subsections adapted in part from ITEP's "Climate Change Adaptation Planning Worksheet"

³ U.S. Climate Resilience Toolkit, uses the term "asset" although resources, blessing or other term could be used.

⁴ Example from U.S. Climate Resilience Toolkit

c. Pair Assets and Hazards

Pair assets and hazards - Facilitate conversations around climate resiliency. (i.e. fire-community members, mudslide- plant nursery, etc.).

Asset-Hazard Pairs	
1	Residents & Extreme Heat
2	Roadways & Landslides
3	Roadways & Flooding
4	Winter Recreation Revenue & Warming
5	Commercial Properties & Floodplain Inundation
6	Residential Properties & Floodplain Inundation
7	Residential Properties & Wildfires
8	Residential Properties & Landslides
9	Parks & Floodplain Inundation
10	Parks & Water Shortage

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d. Create Risk Matrix

For each pairing, identify probability (i.e. low, medium, high) and in narrative explain choice.

CONSEQUENCES	PROBABILITY		
	HIGH	MEDIUM	LOW
HIGH	HIGH	MEDIUM-HIGH	MEDIUM
MEDIUM	MEDIUM-HIGH	MEDIUM	MEDIUM-LOW
LOW	MEDIUM	MEDIUM-LOW	LOW

II. Draft Vulnerability Assessment

Goal: Provide direction of Climate Resiliency Plan development

- a. **Review Peer Vulnerability Assessments:** Completed by other Tribes or communities. Consider using Vulnerability Assessments or Climate Plans created by other Tribes and communities as templates or to identify other issue areas that you may want to consider.

- b. **Integrate and Draft Vulnerability Assessment:** Using above information compile assessment document. Can be completed simultaneously as you move through the above steps. Can also follow the order of survey(s) or that of another template of your choosing.
- c. **Community Truth-Check Meetings:** Review data gathered and confirm data gathered fits with stated areas of concerns before Vulnerability Assessment can be completed. Hold community meetings, roundtable discussions and/or personal conversations to confirm if data and interpretations reflect community's core concerns.

III. Investigate Options for Climate Resiliency Plan

Goal: Identify options for prioritizations and Tribal leadership and community approval.

- a. **Review Solutions:** Review solution options through resources in the NCTCC Resource List
- b. **Align with Existing Plans:** Identify additional plans including Emergency Response, housing, roads, city and county plans etc.
- c. **Prioritize Areas of Interest:** Based on the results of the previous steps, please prioritize areas of interest for the development of actionable adaptation strategies.
- d. **Interviews and Focus Group Planning:** In one-to-one meetings, in focus groups consult with elders, leaders, staff and community members to create a menu of actionable adaptation strategies for each priority area of interest. Review actionable strategies, identify synergies and potential conflicts, and to identify what shared actions require agreement(s). Encourage the community to stay in process into solutions development and implementation.
- e. **Identify Resources and Capacity:** Identify what resources (can be found within [CLIMATE RESOURCE LIBRARY](#) Species Database, GIS training, links to other region plans etc.) and capacities are needed to implement each action, estimated timeframe within which the action needs to happen, and potential partners and funding sources.
- f. **Review Peer Climate Plans:** Review Climate Resiliency Plans or Climate Adaptation Plans completed by other Tribes or communities that you may want to use as templates and/or for other considerations.

IV. Prioritize and Develop Climate Resiliency Plan

- a. **Develop Adaptation Goals and Actions:** For each high-priority hazard⁵ (and if choose, medium-priority area) develop adaptation goals and actions. Note these may be revised as new information about impacts and vulnerabilities are available.
- b. **Write Climate Actionable Resiliency Plan:** Assessment outcomes and folding in Asset Pairs, into Climate Change Adaptation Strategies from to solutions.
- a. **Leadership, Staff and Community Review:** Share Vulnerability Assessment, and share initial ideas, brainstorm and gain feedback before final version completed..

V. Implement Action

- a. **Create Timelines for Actions:** Review adaptation strategies and develop timeline(s) from inception to full implementation process
- b. **Create Plan for Updates:** Creating a plan for periodic updates will allow for adaptation. Given that climate change will continue over time and the nature of the challenge will change as will the capacity to prepare and respond.
- c. **Community and Allies Strategic Action Planning Meeting:** Convene a meeting with Staff, and Regional Allies - to review actionable strategies, identify synergies and potential conflicts, and to identify shared actions require agreement(s) and initiate them.
- d. **Fund Implementation:** Apply for funding for proposed actionable adaptation strategies early in advance of the implementation phase.

⁵ Adapted from ITEP's "Tribal Climate Change Adaptation Planning Guide"

Bibliography

- U.S. Climate Resilience Toolkit. (2021, April 1). *Coastal Erosion*. Coasts. Retrieved March 21, 2023, from <https://toolkit.climate.gov/topics/coastal-flood-risk/coastal-erosion>
- “Climate Change Adaptation Planning Worksheet” The Northern Arizona University Institute for Tribal Environmental Professionals (ITEP). Retrieved March 21, 2023, from <https://toolkit.climate.gov/tool/tribal-climate-change-adaptation-planning-toolkit>
- ITEP’s “Tribal Climate Change Adaptation Planning Guide”The Northern Arizona University Institute for Tribal Environmental Professionals (ITEP). Retrieved March 21, 2023, from <https://toolkit.climate.gov/tool/tribal-climate-change-adaptation-planning-toolkit>