

Tribal Resilience Scoping Climate Adaptation Efforts

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Adaptation International
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Adaptation International believes in the power of communities to look to the future, respond to the challenges of a changing climate, and thrive in the 21st century and beyond.



Custom Adaptation Strategies / Actions



Adaptation / Resilience Planning



Community Engagement



Workshop Development

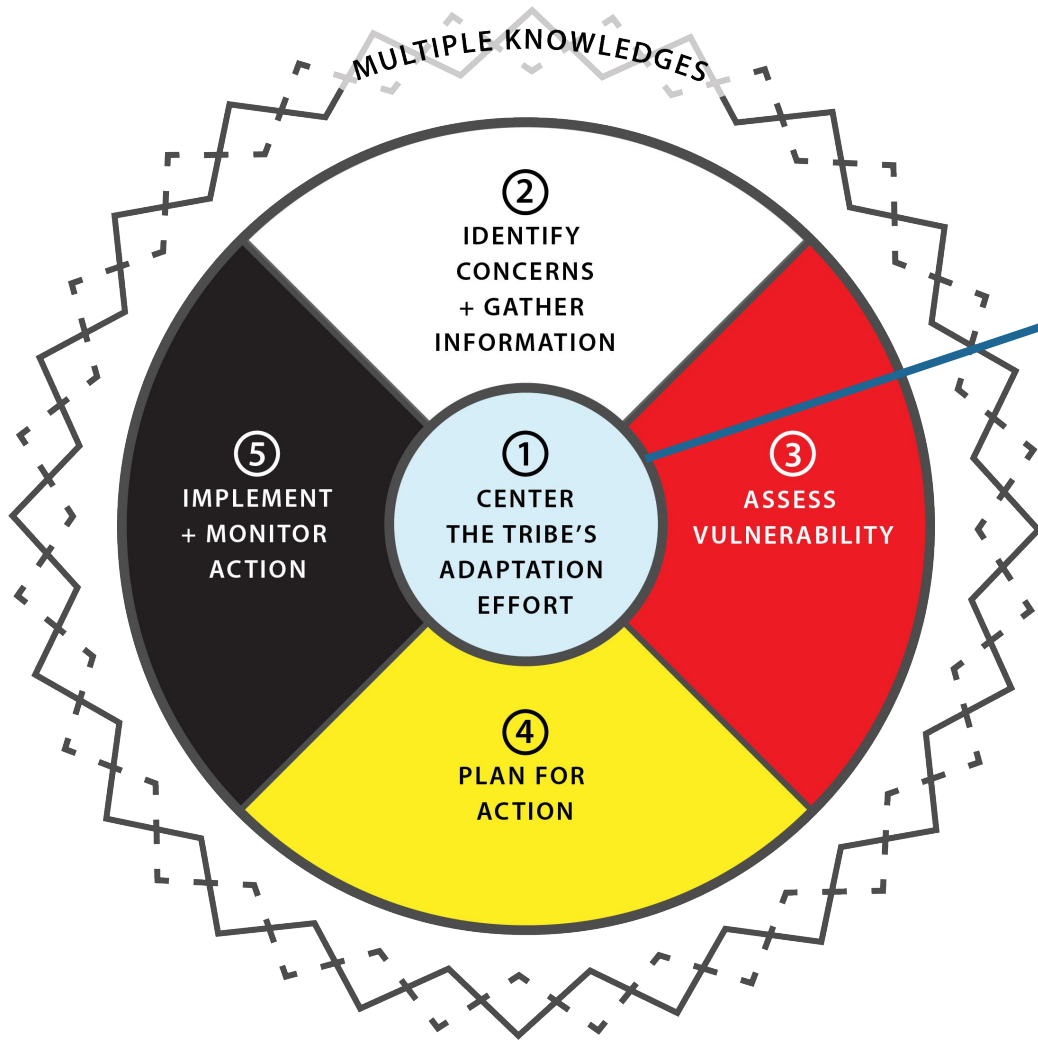


Implementation Support



Mapping & Analysis





“Our Tribes are strong and resilient people. We have lived on these lands for countless generations, from time immemorial. We will continue to flourish on our homelands for countless generations to come.”

— [Climate Adaptation Plan for the Territories of the Yakama Nation](#)

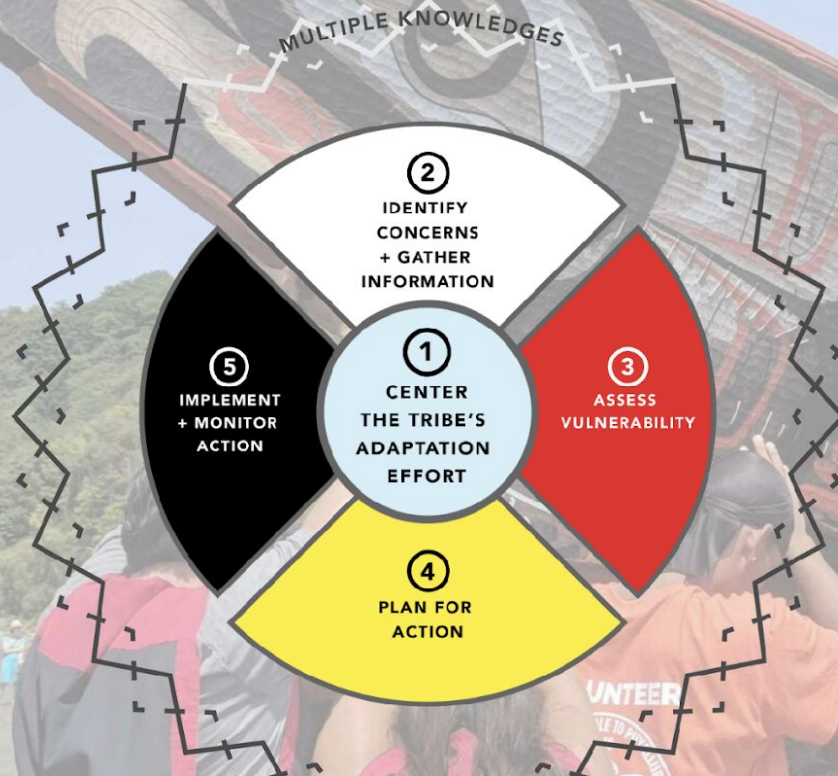
“We’ve always been good at adaptation. You look at the 500 years that the western civilizations have been here... And the Tribes are probably one of the best adapters of being able to survive right along next to the western cultures.”
—Swinomish Indian Tribal Community member, [Swinomish Climate Change Initiative Climate Adaptation Action Plan](#)

“Our lands and resources are the basis for our spiritual life. That’s been our way since time began. By preparing for further environmental change, we can mitigate threats to our way of life.” -- Joe Durglo, Chairman of the Confederated Salish and Kootenai Tribes

“Adaptation has long been part and parcel of indigenous communities; indeed their very survival and continuity as peoples depended on successful response to change.”
—Gary S. Morishima, [Climate Change and Indigenous Peoples: A Primer](#)



Tribal Climate Adaptation Guidebook



About

Tribes across North America are leading the way on climate change adaptation. The Tribal Climate Adaptation Guidebook highlights exemplary Tribal efforts in a comprehensive climate adaptation framework that recognizes the distinct circumstances of Tribal governments, cultures, and knowledge systems.

[Learn More](#)



Step 1. Activity 1
Approach

Step 1. Activity 2
Team

Step 1. Activity 3
Vision & Goals

Step 1. Activity 4
Traditional Knowledges

Step 1. Activity 5
Leadership

Step 1. Activity 6
Engagement

Step 1. Activity 7
Funding

Step 1. Activity 8
Partners

Step 1: Center the Tribe's Adaptation Efforts

Initiate and embed the climate adaptation planning process within the Tribe's community vision and goals.



Guiding Questions

Helpful questions to consider during this activity.

[Read More](#)



Traditional Knowledges

Considerations for integrating and protecting Traditional Knowledges during this activity.

[Read More](#)

Community Engagement Checkpoint

Consider talking with other staff members, Elders, and members of Tribal leadership to identify and build support for the best place to begin the adaptation planning process.

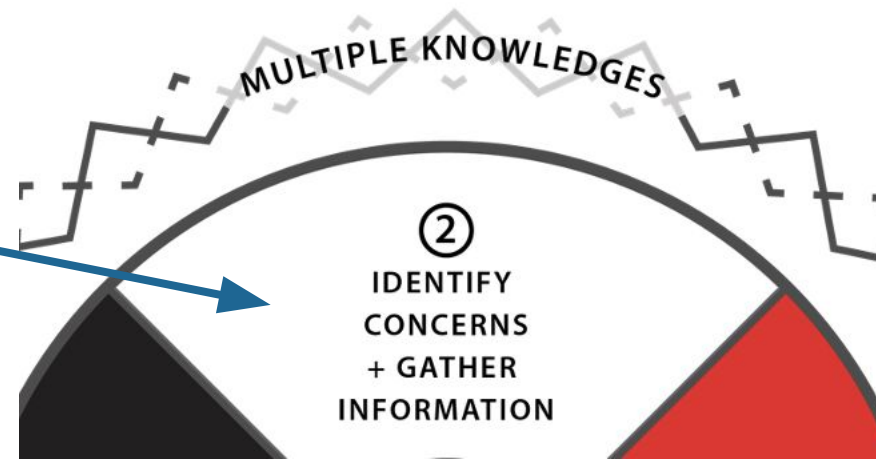
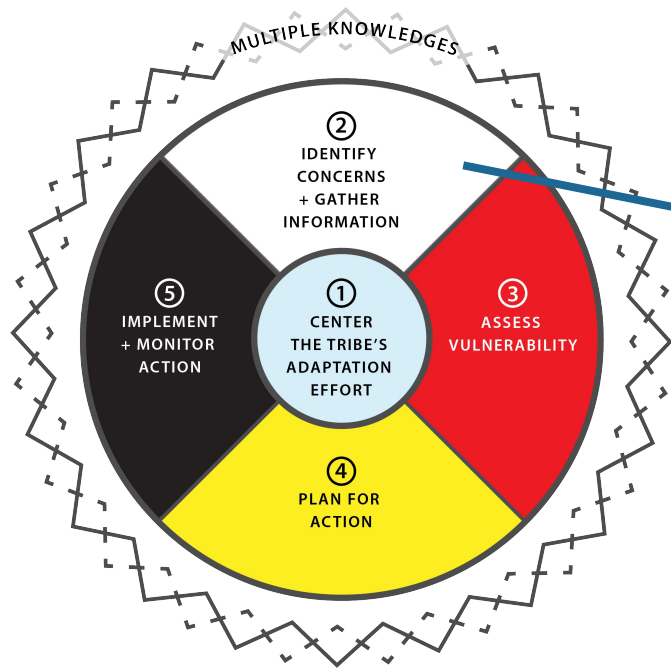
[Read More](#)

Community First



Tribal Emergency Planning Committee

Lac du Flambeau Tribal Emergency Planning Committee Members						
Last Name	First Name	Position/Department	Sub-committee #1: Community Safety and Security	Sub-committee #2: Natural Resources	Sub-committee #3: Community and Public Health	Sub-committee #4: Extreme Weather Events and Infrastructure
Able	Lauren	Historic Preservation		X		
Allen	Dee	Natural Resources (Water Resources)			X	X
Chapman	Eric	Tribal Council, Emergency Management Coordinator, and Natural Resources	X	X	X	X
Coy	Emerson	Planning				
De Vries	Jason	Roads				X
Ford	Shawnee	Land Management				
Gauthier	Brian	Planning/UW Extension				
Gauthier	Ryan	Conservation Law				
Giebudowski	Mark	Tribal Police	X			
Graveen	Jason	Facilities				
Graveen	Joe	Wild Rice Program		X		
Green	Bill	Housing Authority Modernization				X
Hanson	Kristen	Brownfields/Environmental Response				
Hraban	Cheryl	Purchasing				X
Hawking	Celeste	Natural Resources		X		
Johnson	Greg	Ojibwe Language Program		X		
LaBarge	Jerry	Cultural Activities Coordinator		X		
Mayo	Zoya	Land Management				X
Melzer	John	Housing Authority Maintenance				X
Peterson	Sandy	Water and Sewer				
Poupart	David	Public Health			X	
Rising Sun	Elliot	Head Conservation Warden		X		
Sennet	Ethan	Forestry		X		X
Soulier	Jackie	Housing Authority Executive Director				
Stiles	Cythida	Historic Preservation				
Stone	Stacey	State of Emergency Mgmt Coord.	X			
Supinski	Sandra	Public Health			X	X
Thompson	George	Tribal Roads/Tribal Council				X
Valier	Lee Ann	GLITC			X	
Valliere	Scott	Water and Sewer				X
Virden	Andre	Natural Resources		X		
Wawronowicz	Lary	Natural Resources Director		X		X
Wilke	Mark	Safety Manager	X		X	X
Wolfe	Sue	School	X			
Wolfe	Wayne	Wildlife		X		
Zimmerman	Mike	Fire Dept				X



Step 2. Activity 1
Application of TK

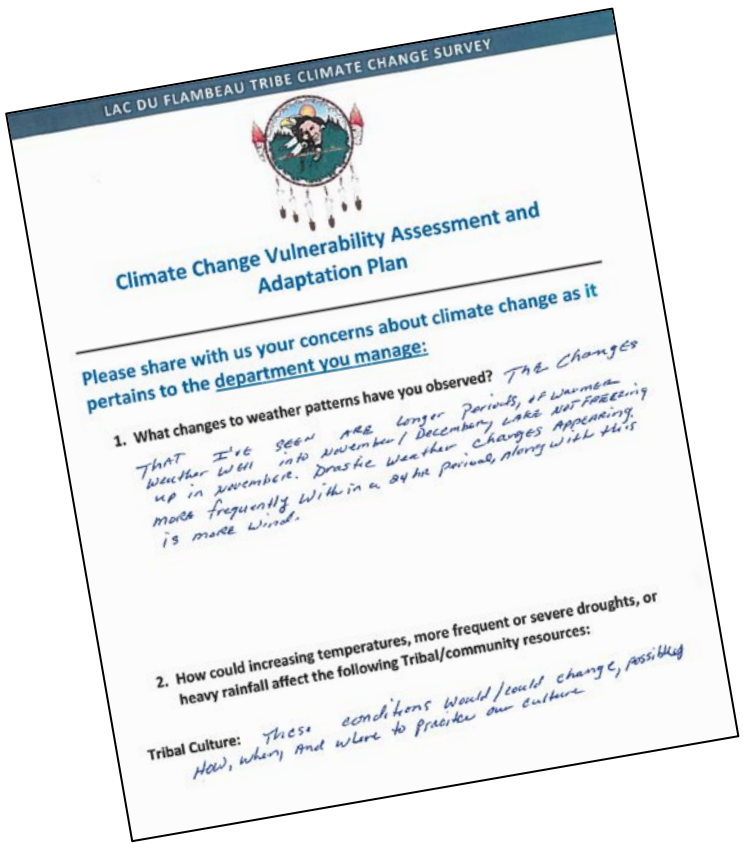
Step 2. Activity 2
Key Concerns

Step 2. Activity 3
Observed Changes

Step 2. Activity 4
Climate Projections

Step 2. Identify Concerns & Gather Information

Identify the Tribe's climate-related concerns and gather information from multiple perspectives to better understand the challenges and set the stage for assessing vulnerability and planning for action.



Gaagige Bimaadiziwin

Gaawin geyaabi naniizanasinoon

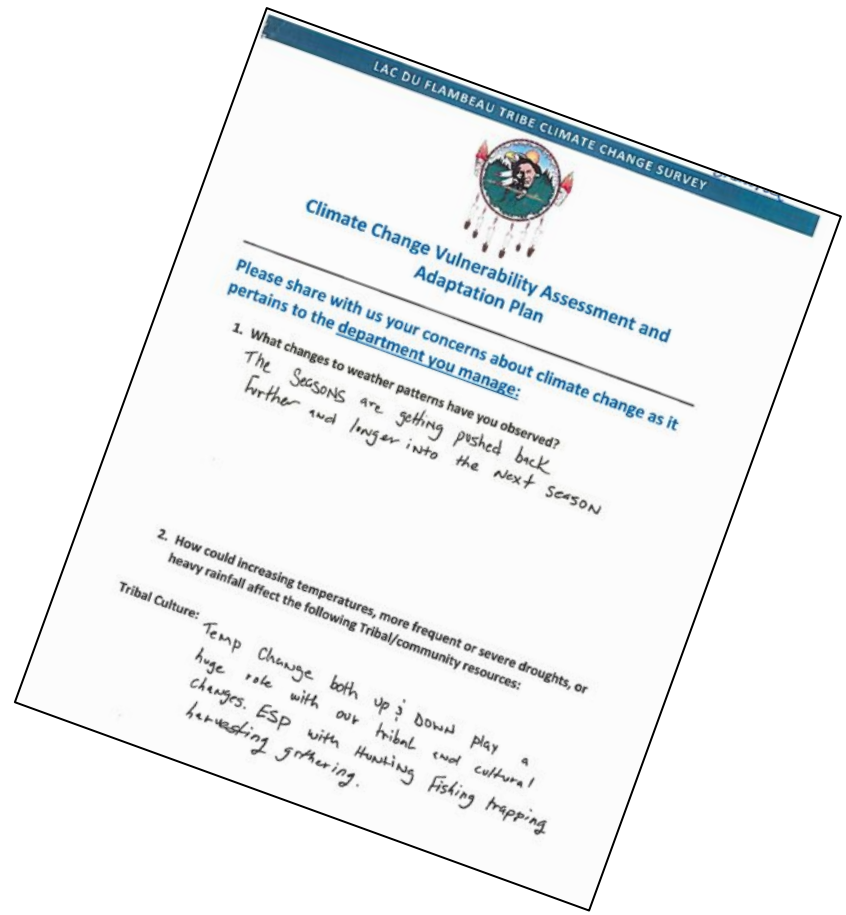
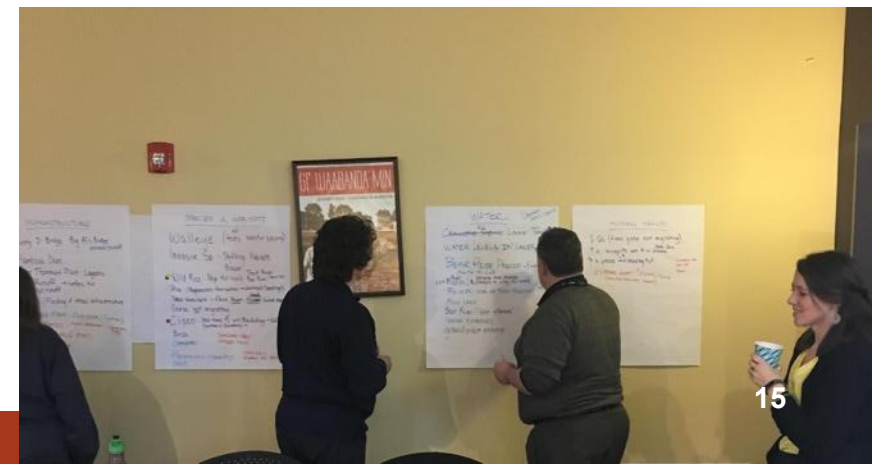


Table 2. Potential Approaches for Climate Change Planning. This table outlines approaches Tribes can take to begin planning for climate change. Some advantages and disadvantages are given for each approach along with examples of Tribes that have taken each approach.

Approach	Advantages	Disadvantages	Examples
<p>Sector Focus (e.g., water resource management, or transportation)</p>	<ul style="list-style-type: none"> • Ability to focus limited resources on a specific topic or topics • Use of existing management framework 	<ul style="list-style-type: none"> • Potential to miss co-benefits or negative impacts across sectors 	<p>Tohono O’odham Nation Climate Change Adaptation Plan—Focused planning efforts on three sectors: Water Resources, Human Health, and Emergency Management.</p> <p>Mitigwaki idash Nibi: (Our Forests and Water) A Climate Adaptation Plan for the Red Lake Band of Chippewa Indians— Focused planning efforts on water and forest resources.</p>
<p>Species/Habitat Focus (e.g., salmon, cedar, the nearshore environment, or sagebrush steppe)</p>	<ul style="list-style-type: none"> • Targeted efforts around a single species • Use of existing management framework • Community support for protection of key resources • Some funding for implementation of adaptation actions 	<ul style="list-style-type: none"> • Potential to miss co-benefits or negative impacts across sectors • Potential difficulty involving a broad set of the community 	<p>Shoshone-Bannock Tribes Climate Change Assessment and Adaptation Plan —Conducted a climate change vulnerability assessment for 34 plant and animal species.</p> <p>Stillaguamish Tribe Natural Resources Climate Change Vulnerability Assessment — Identified 57 individual species and 10 habitat types for a vulnerability assessment.</p>

- **Sector Focus** (e.g., water resource management, or transportation)
- **Species/Habitat Focus** (e.g., salmon, cedar, the nearshore environment, or sagebrush steppe)
- **Community Group** (e.g., fishermen, subsistence gatherers, elders, or youth)
- **Recent Extreme Climate-related Event** (e.g., major drought, flood, or heat wave)
- **Comprehensive** (e.g., consideration of multiple climate impacts affecting multiple sectors, habitats, or community groups)



Species Selected for Assessment

Animal Species

Great Blue Heron (*Crane*)

Common Loon (*Loon*)

Walleye (*Fish*)

Sturgeon (*Fish*)

Cisco (*Fish*)

Black Bear (*Bear*)

Marten (*Marten*)

White-tailed Deer (*Deer*)

Bald Eagle (*Bird*)

Muskrat

Snowshoe Hare

Honey Bees

Little Brown Bat

Spring Peepers Frog

Plant Species

Wild Rice

Sugar Maple

White Birch

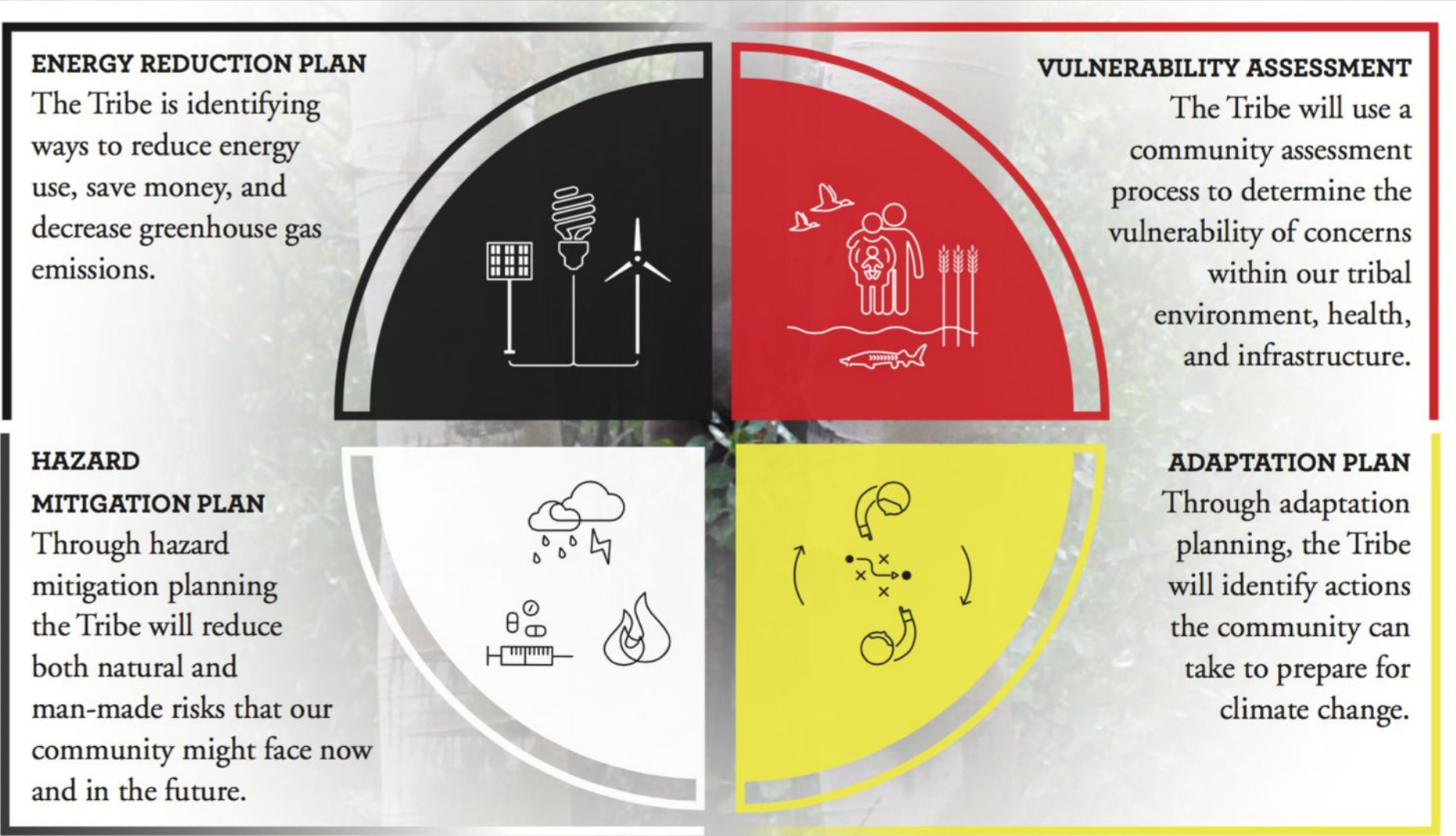
White Cedar

Wild Strawberries

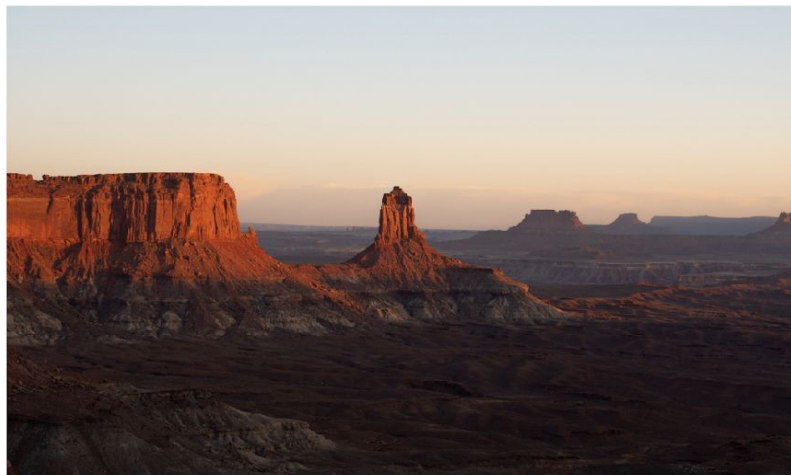
Highbush Cranberries



Lac Du Flambeau Climate Change Resilience Initiative



The *Guidelines for Considering Traditional Knowledges (TKs) in Climate Change Initiatives* is a set of guiding principles and suggested actions for both Tribes and non-Tribal partners in order to minimize the risks involved with sharing TKs with non-Tribal partners in climate change initiatives. The Climate and Traditional Knowledges Workgroup (CTKW), consisting of Indigenous scholars and other experts working with issues of TKs, recognizes that knowledge sharing in this context is an ethical issue and developed the *Guidelines* in 2014 “to raise awareness of potential risks to Indigenous peoples and potential options for best practices.” The *Guidelines* rest on two principles for engagement: Cause No Harm and Free, Prior, and Informed Consent (FPIC). The executive summary of the *Guidelines* is reproduced with permission below. The full pdf of the *Guidelines* can be downloaded from the [CTKW’s website](#). Each activity in the *Tribal Climate Adaptation Guidebook* includes considerations for integrating and protecting TKs throughout the adaptation planning process that rely on these *Guidelines for Considering Traditional Knowledges (TKs) in Climate Change Initiatives*.



Guidelines for Considering Traditional Knowledges

These guidelines are intended to provide specific measures that federal agencies, researchers, Tribes and TK holders can follow in conceptualizing, developing, and implementing climate change initiatives involving TKs. The actions in these guidelines are not comprehensive, and are not in any way intended to supersede the obligation of federal agencies to consult Tribes and TK holders with whom they are collaborating or amend or modify any agreements that may exist between Tribal governments and federal entities. These guidelines are intended to promote the use of TKs in climate change initiatives in such a way as to benefit Indigenous peoples, promote greater collaboration between federal agencies and Tribes, and increase Tribal representation in federal climate initiatives. These guidelines are a work in progress.

Guideline 1. Understand key concepts and definitions related to TKs.

Terms such as Traditional Knowledge are coined in non-Indigenous academic and policy circles, and often do not fully reflect the ways in which Indigenous communities refer to, or think of, their knowledge and lifeways. However, these terms may be helpful in providing agencies and researchers with greater understanding of issues that Tribal people are facing regarding their own knowledge systems, climate impacts, and impacts to TKs resulting from climate



Tribal Examples

Confederated Tribes of the Umatilla Indian Reservation
TRIBAL EXAMPLE
 Confederated Tribes of the Umatilla Indian Reservation | Northwest | Step 1

[READ MORE](#)

Ojibwa Lakota Nation
TRIBAL EXAMPLE
 Northern Great Plains | Ojibwa Lakota Nation | Step 1

[READ MORE](#)

Tahono O'odham Nation
TRIBAL EXAMPLE
 Southwest | Step 1 | Step 3 | Step 4 | Tahono O'odham Nation

[READ MORE](#)

Marshall Islands
TRIBAL EXAMPLE
 Hawaii and Pacific Islands | Marshall Islands | Step 5

[READ MORE](#)

Yurok Tribe
TRIBAL EXAMPLE
 Southwest | Step 1 | Step 2 | Step 4 | Yurok Tribe

[READ MORE](#)

Suquamish Tribe
TRIBAL EXAMPLE
 Northwest | Step 5 | Suquamish Tribe

[READ MORE](#)

Yakama Nation
TRIBAL EXAMPLE
 Northwest | Step 1 | Step 2 | Step 4 | Yakama Nation

[READ MORE](#)

Swinomish Indian Tribal Community
TRIBAL EXAMPLE
 Northwest | Step 1 | Step 3 | Step 4 | Step 5 | Swinomish Indian Tribal Community

[READ MORE](#)

Upper Snake River Tribes Foundation
TRIBAL EXAMPLE
 Burns Paiute Tribe | Fort McDermitt Paiute, Shoshone Tribe | Northwest | Shoshone-Bannock Tribes | Shoshone-Paiute Tribes | Step 2 | Step 4 | Upper Snake River Tribes

[READ MORE](#)

Tulalip Tribes
TRIBAL EXAMPLE
 Northwest | Step 5 | Tulalip Tribes

[READ MORE](#)

Samish Indian Nation
TRIBAL EXAMPLE
 Northwest | Samish Indian Nation | Step 4

[READ MORE](#)

Stilleaguamish Tribe of Indians
TRIBAL EXAMPLE
 Northwest | Step 1 | Stilleaguamish Tribe of Indians

[READ MORE](#)

Saint Regis Mohawk Tribe
TRIBAL EXAMPLE
 Northeast | Saint Regis Mohawk Tribe | Step 1 | Step 2 | Step 3 | Step 4

[READ MORE](#)

Red Lake Band of the Lake Superior Chippewa Indians
TRIBAL EXAMPLE
 Midwest | Red Lake Band of the Lake Superior Chippewa Indians | Step 1 | Step 3 | Step 4

[READ MORE](#)

Shoshone-Bannock Tribes
TRIBAL EXAMPLE
 Northwest | Shoshone-Bannock Tribes | Step 1 | Step 2 | Step 3 | Step 4 | Upper Snake River Tribes

[READ MORE](#)

North Olympic Development Council
TRIBAL EXAMPLE
 Jamestown S'Kallam Tribe | Makah Indian Tribe | North Olympic Development Council | Northwest | Step 4 | Step 5

Quinalt Indian Nation
TRIBAL EXAMPLE
 Northwest | Quinalt Indian Nation | Step 1

Nez Perce Tribe
TRIBAL EXAMPLE
 Nez Perce Tribe | Northwest | Step 1 | Step 4 | Step 5

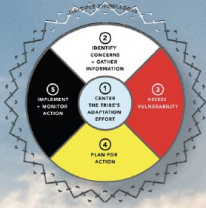
Native Villages of St. Mary's & Pitka's Point
TRIBAL EXAMPLE

Puyallup Tribe
TRIBAL EXAMPLE
 Northwest | Puyallup Tribe | Step 2 | Step 4

Search Site

Tribal Example

- 1854 Treaty Authority, Alaska
- Alaska Native Tribal Health Consortium, Alaska
- Confederated Tribes of the Umatilla Indian Reservation, Northwest
- Fond du Lac Band of the Lake Superior Chippewa, Midwest
- Fort McDermitt Paiute-Shoshone Tribe, Northwest
- Jamestown S'Kallam Tribe, Northwest
- Makah Indian Tribe, Northwest
- Menominee Indian Tribe, Midwest
- Native Village of Neuvos, Northwest
- Native Village of St. Mary's, Northwest
- Native Village of Pitka's Point, Northwest
- Northwest Great Plains
- North Olympic Development Council, Northwest
- Ojibwa Lakota Nation, Northwest
- Puyallup Tribe, Northwest
- Red Lake Band of the Lake Superior Chippewa Indians, Midwest
- Saint Regis Mohawk Tribe, Northeast
- Shoshone-Bannock Tribes, Northwest
- Southern Great Plains, Northwest
- Step 1
- Step 2
- Step 3
- Step 4
- Step 5
- Stilleaguamish Tribe of Indians, Northwest
- Suquamish Tribe, Northwest
- Upper Snake River Tribes, Northwest
- Yakama Nation, Northwest
- Yurok Tribe, Northwest

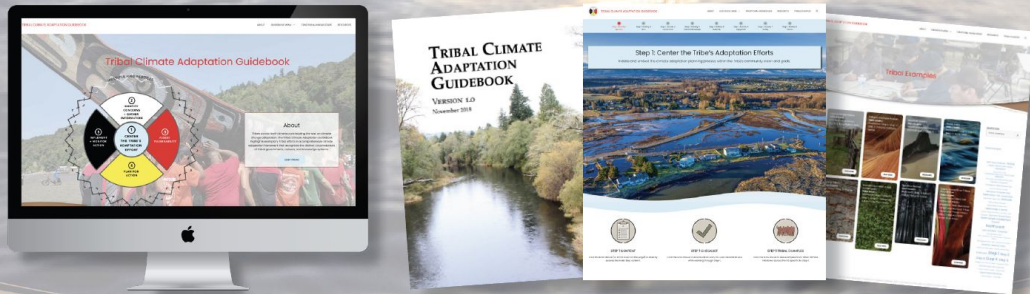


THE TRIBAL CLIMATE ADAPTATION GUIDEBOOK

www.tribalclimateadaptationguidebook.org

In August 2022, Adaptation International and the Oregon Climate Change Research Institute (OCCRI) developed an online version of a nationally-focused Tribal Climate Change Adaptation Guidebook designed to support Tribal adaptation professionals in their climate resilience planning work. This Guidebook builds on the foundation of ongoing climate-related work already happening in Tribal communities, provides a framework for climate change adaptation planning in the context of existing tribal priorities, and directly considers the unique issues facing Indigenous communities. It directs readers to existing resources, case studies, and stories of tribal adaptation work happening across the US. It also identifies opportunities for braiding together Local and Traditional Knowledges and Western Science in the adaptation planning process. The Guidebook is designed to support Tribes' efforts to proactively adapt to climate change and thrive for generations to come!

www.tribalclimateadaptationguidebook.org



“What we are seeing on the Owyhee is probably due to less water, but what else? Hot days. It has gotten very hot. Let’s not leave it there...

What do we DO about it?”

- *Beverly Crum, Shoshone-Paiute Elder, [Upper Snake River Tribes Foundation Climate Change Vulnerability Assessment](#)*

Thank You!

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