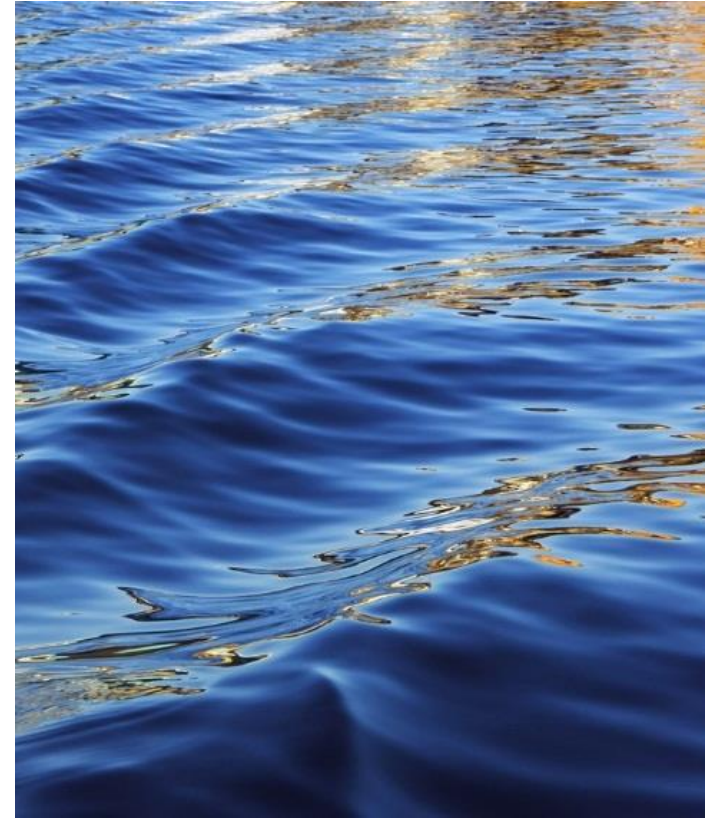




TRIBAL CLIMATE  
HEALTH PROJECT

# Vulnerability Assessments: Part 1

Tribal Climate and Health Adaptation Webinar #6



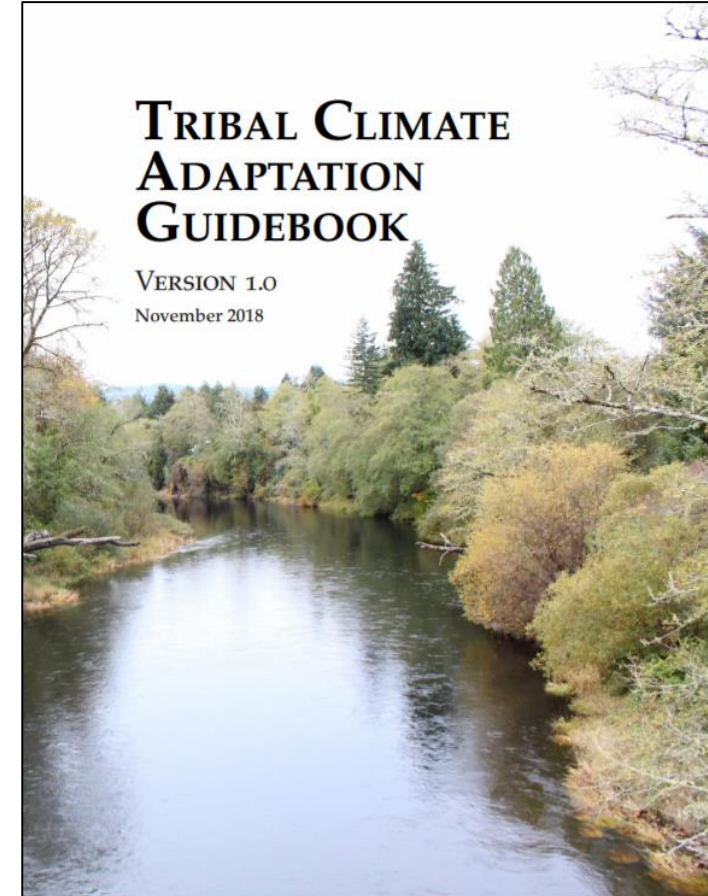
# Since Last Webinar

## Suggested Reading

- Oregon Climate Change Research Institute: [“Tribal Climate Change Guidebook”](#) Pages 36-38

### GUIDING QUESTIONS

- Who are the key groups that need to be involved for the planning effort to be successful? (See [Section 1.2](#))
- What information is needed from these groups?
- What are the best approaches for engaging with these groups?
- How much funding can be set aside for effective community engagement?<sup>41</sup>
- What stories about climate change threats and opportunities will resonate best with the target groups for outreach and engagement? Are there specific resources or ongoing initiatives that are tribal priorities and will resonate with certain segments of the community and can be used to enhance engagement? (See [Section 4.5](#) for more information about sharing stories.)

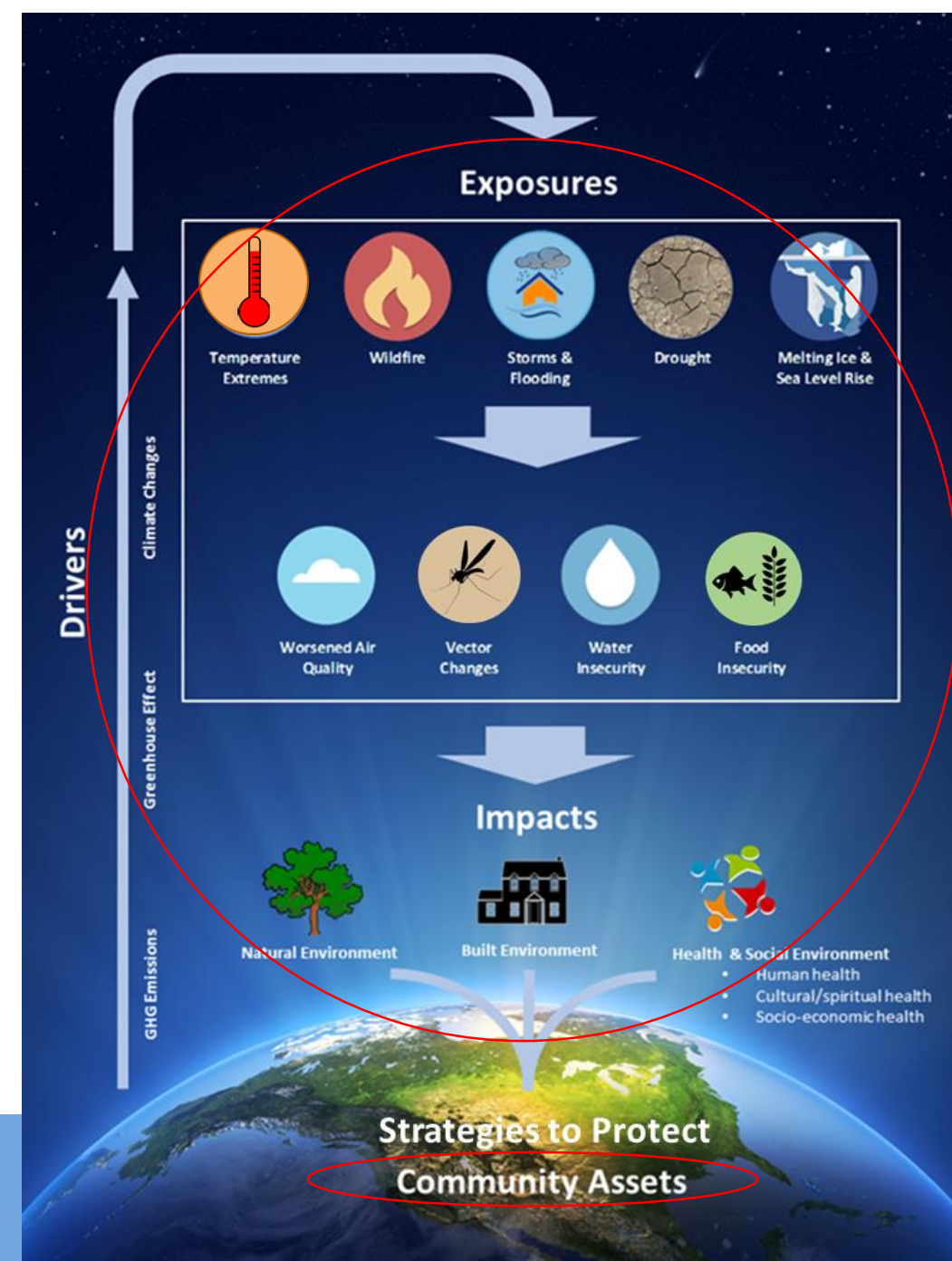


## Chat Discussion:

What did you read about that surprised you?

# TCHP Framework

- Today we cover how you can assess and prioritize the severity and likelihood of exposures and impacts for your own community
- Addressing health in this process is important and often overlooked
- Communities that begin planning now will have the best options for adapting to climate change.



## Chat Discussion:

What did you read about that surprised you?

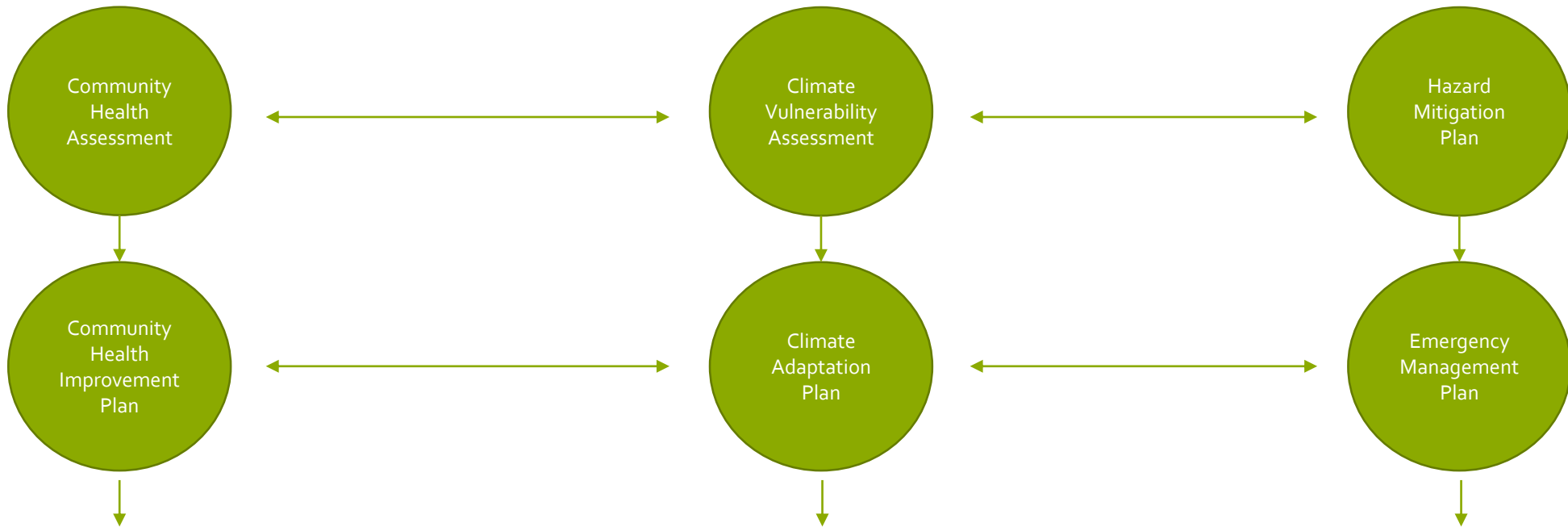
# Assessing Health Vulnerability

No one right way

Public Health Planning Approach

Climate Adaptation Planning Approach

Emergency Management Approach



Initiates more plans, policies, and actions that can be complementary

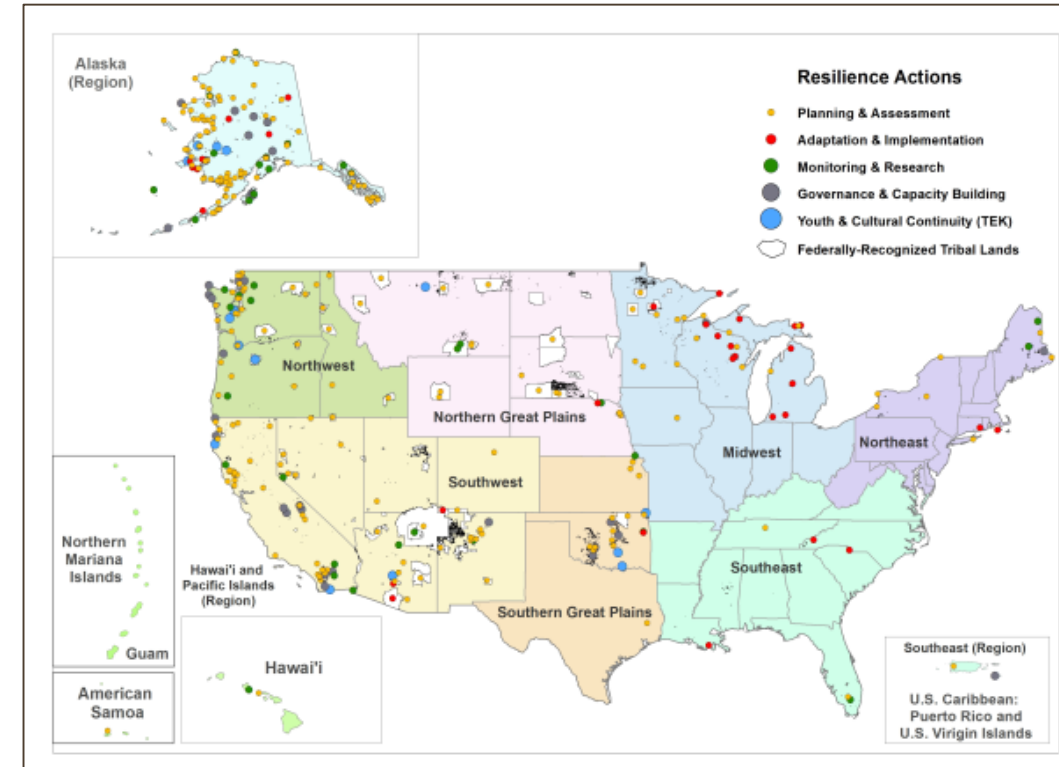


# Adaptation Planning Process Overview

## Purpose of adaptation planning

- Climate change is expected to affect many if not all aspects of tribal community from wildlife to community health, economies and tribal culture and sovereignty
- Projections show that these changes will become more extreme in the next decades
- Adaptation plans move communities towards a state of preparedness and resilience
- Your tribe can make clearer decisions if it better understands the magnitude, likelihood, frequency and timing of threats imposed by climate change
- Tribes all over the country are preparing by conducting vulnerability assessments and adaptation plans

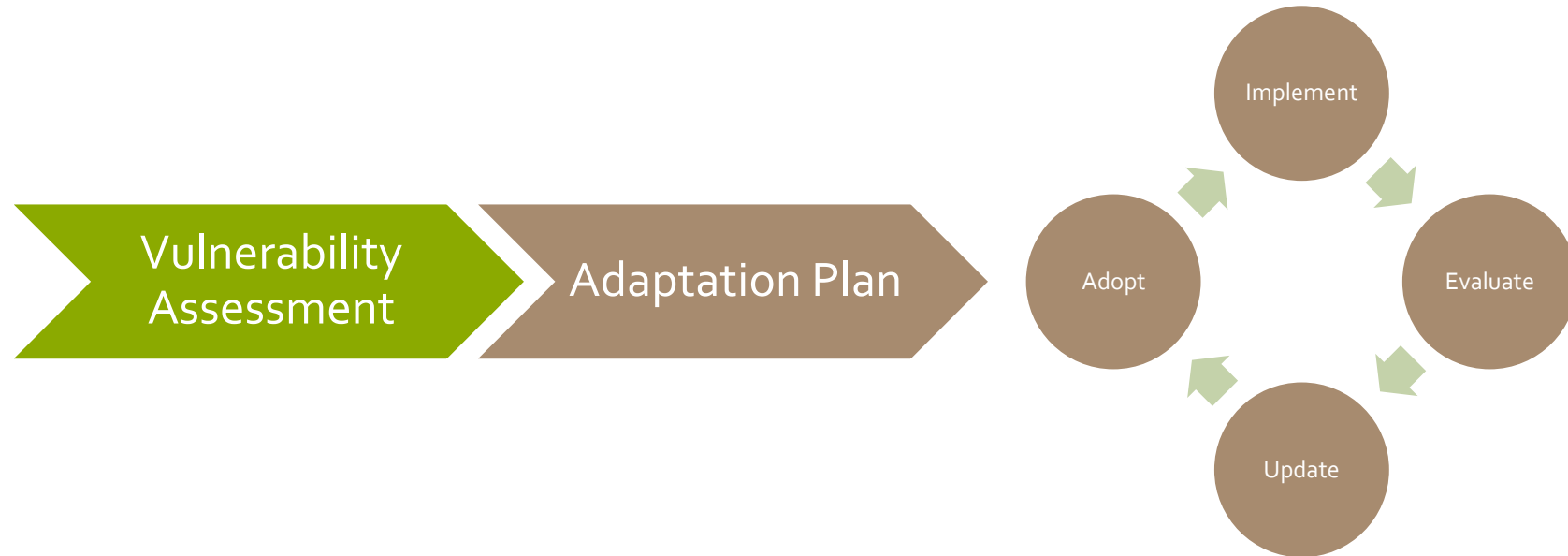
## Indigenous Peoples Resilience Actions ([BIA](#))



*"If adaptation is to be our future, we at Swinomish have already proved ourselves equal to the challenge. In the spirit and knowledge of our long history, I urge those within our community to embrace this challenge, and to meet it with every confidence of success. That is the true essence of Swinomish."—M. Brian Cladoosby, Chairman, Swinomish Indian Senate*

# Adaptation Planning Process Overview – Assessing Health Vulnerability

To prepare to address the impacts of climate change on your tribe, it is critical to **first** understand your tribe's unique and most significant vulnerabilities, including health



# Assessing Health Vulnerability

Vulnerability assessments catalogue and synthesize information on biophysical conditions, community assets and other locally relevant characteristics that are likely to be most strongly effected by projected climate changes

$$\begin{aligned} \text{VULNERABILITY} = & \\ & \text{EXPOSURE RISK} + \\ & \text{IMPACT RISK (TO VALUED ASSETS)} + \\ & \text{POPULATION SENSITIVITY} - \\ & \text{ADAPTIVE CAPACITY} \end{aligned}$$

- Are health-focused vulnerability assessment different?
- What if I've already done a vulnerability assessment but it didn't include health?

# Assessing Health Vulnerabilities

## Approaches: No Single Right Way

- Top down vs bottom up
- Comprehensive or focused on specific:
  - Topics
  - Assets
  - Locations
- Information source type
  - Indigenous vs western vs braided
- Individual or collaborative
- Weaknesses or strengths
- Process

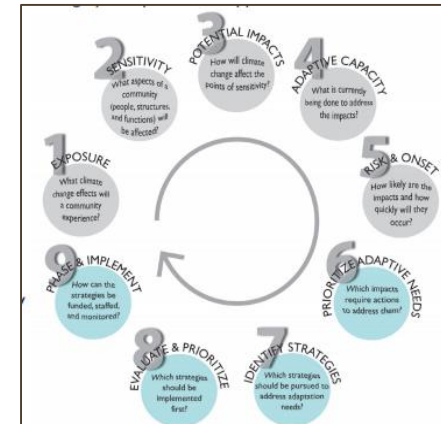
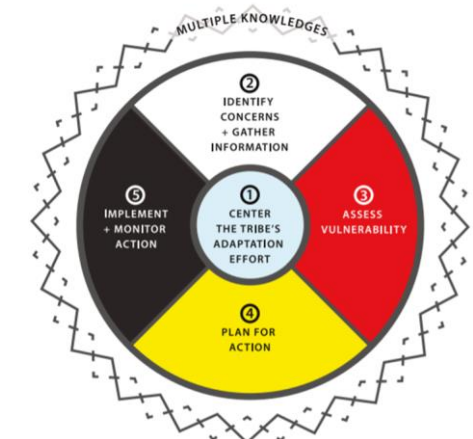
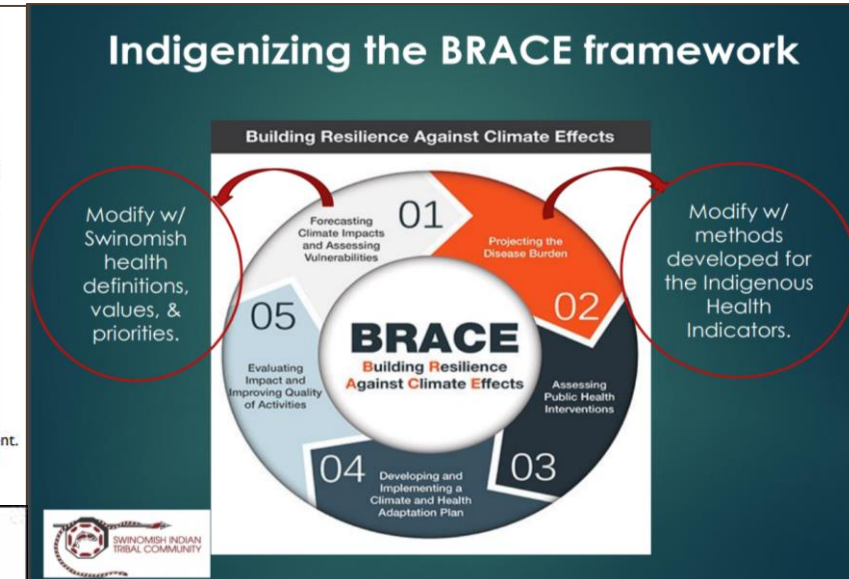
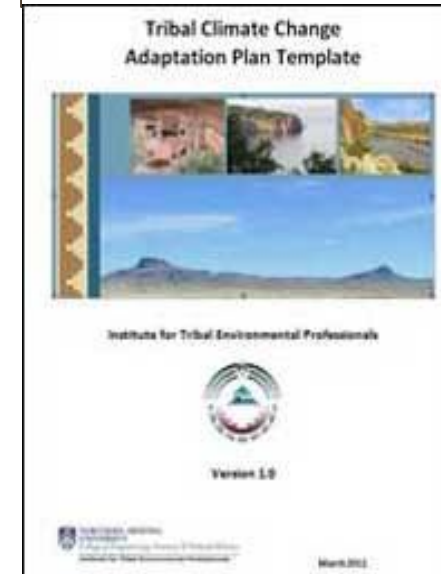
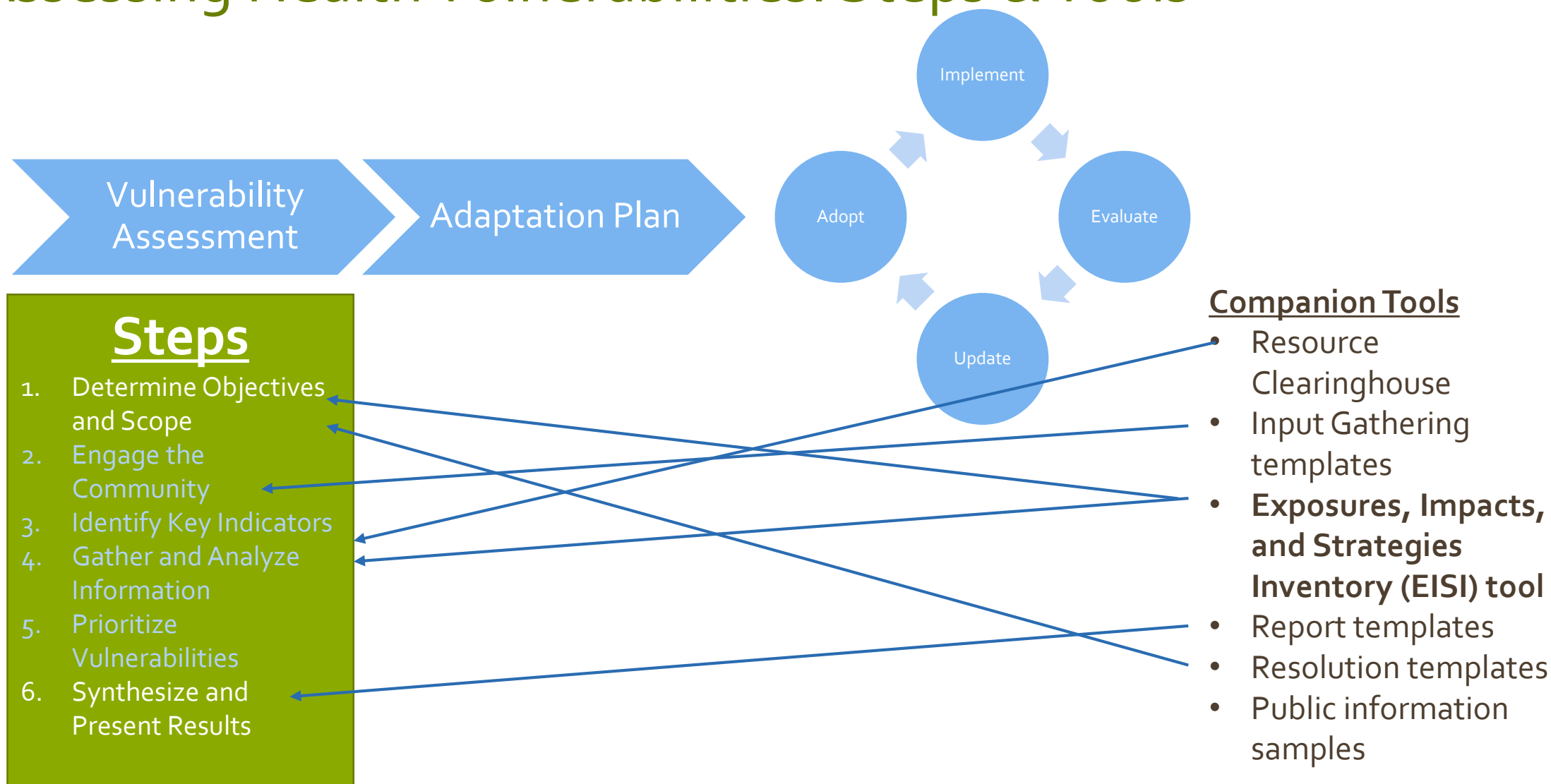


Figure ES-1. The nine steps in adaptation planning development. The gray steps are part of vulnerability assessment (steps 1-5) and the blue steps are adaptation strategy development (steps 6-9).





# Assessing Health Vulnerabilities: Steps & Tools



# Assessing Health Vulnerabilities

## Steps

1. Determine Objectives and Scope
2. Engage the Community
3. Identify Key Indicators
4. Gather and Analyze Information
5. Prioritize Vulnerabilities
6. Synthesize and Present Results

### Step 1. Determine Objectives and Scope

- Did specific direction come from a Council? Consider a resolution.

ITEP provides a template →

<p><b>[Tribe]</b> <b>RESOLUTION</b> <b>TO ESTABLISH A CLIMATE CHANGE ADAPTATION INITIATIVE</b></p> <p><b>WHEREAS</b>, the <b>[Tribe]</b> is a federally recognized tribe, recognized by the United States Government and all of its Governing bodies and agencies; and</p> <p><b>WHEREAS</b>, the <b>[Climate Change Adaptation Initiative]</b> will be included in the <b>[Code under which the initiative will be housed]</b>; and</p> <p><b>WHEREAS</b>, there is overwhelming scientific evidence of climate change driven in part by the release of greenhouse gases into the atmosphere, the effects of which may significantly affect the <b>[Tribe]</b> through <b>[local climate change impacts]</b>, and other associated effects on the local environment, natural resources, and infrastructure on which the <b>[Tribe]</b> has traditionally relied; and</p> <p><b>WHEREAS</b>, inaction in the present may yield negative social, environmental, cultural, and economic consequences in the near future; and</p> <p><b>WHEREAS</b>, <b>[Department]</b> will oversee and coordinate the <b>[Climate Change Adaptation Initiative]</b>; and</p> <p><b>WHEREAS</b>, <b>[Department]</b> will <b>[implement proposed actions]</b>; and</p> <p><b>WHEREAS</b>, the <b>[Department]</b> will seek funding to support the <b>[Climate Change Adaptation Initiative]</b>; and</p> <p><b>WHEREAS</b>, the <b>[Climate Change Adaptation Initiative]</b> will create a more resilient community, able to cope with the impacts of climate change on the tribe's social, environmental, cultural, and economic welfare; and</p> <p><b>WHEREAS</b>, the <b>[Climate Change Adaptation Initiative]</b> will remain in effect indefinitely because the <b>[Tribe]</b> will need to continuously adapt to climate change and its impacts;</p> <p><b>NOW THEREFORE BE IT RESOLVED</b> that the <b>[TRIBAL COUNCIL]</b> supports the <b>[Tribe's] [Climate Change Adaptation Initiative]</b>:</p> <p>To undertake efforts to determine the potential local effects of climate change on the <b>[Tribe]</b>; and</p> <p>To develop policies and strategies for addressing the potential effects of climate change on the <b>[Tribe]</b>, including <b>[policies and strategies]</b>; and</p> <p>To communicate and coordinate with other Indigenous Peoples and government entities and jurisdictions to address potential climate change impacts; and</p> <p>To communicate to and with the local community about issues and concerns regarding the potential local impacts of climate change; and</p>
--



## Climate Summit in Spokane (July 30, 2019)

- **Full Trainings**

- [Two-day Tribal Climate Change and Health Adaptation Workshop at Pala \(June 5-6, 2019\)](#)
- [IN PROGRESS: Tribal Climate Change and Health Adaptation Webinar Series \(to start August 2019\)](#)

Tool – [Exposures, Impacts, and Strategies Inventory \(EISI\) tool](#) (Updated October 2, 2019 BETA VERSION). This is a draft of a customizable companion tool that can support communities that are conducting adaptation planning. Information and data sources are compiled and organized to present information needed at several decision-making steps to help your community prepare to take the most effective actions. We are continuing to build functionality and improve information. The latest update includes more indicators and data sources (national and California specific). Please send questions or comments to [ahacker@prospersustainably.com](mailto:ahacker@prospersustainably.com).

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Sample Reports – [Pala Band of Mission Indians Climate Change Vulnerability Assessment](#) and [Climate Change Adaptation Plan](#). These reports incorporate health impacts and strategies. This Word version allows others to modify for their own community.

### Other Relevant Training Materials not Produced by the Tribal Climate Health Project

[Tribal Resolution Template –ITEP's Tribal Climate Change Resolution Template](#)

Playlist – Check out [Tribal Climate Health's Youtube playlist](#) of climate and health videos produced by other agencies

# Assessing Health Vulnerabilities

## Steps

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### Step 1. Determine Objectives and Scope

- Designate lead staff
  - Authority and relationships matter
- Assess resources, capacity and limitations
  - Grant requirements?



## Chat Discussion:

How have you successfully obtained dollars to conduct climate planning work? Were there limitations or stipulations?

# Assessing Health Vulnerabilities

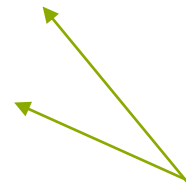
There are different processes, but they generally follow these six steps

## Steps

1. Determine Objectives and Scope
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### Step 1. Determine Objectives and Scope

- Set parameters of assessment
  - Timeframe
  - Boundaries
  - Exposures of concern
  - Impacts types of concern (health/social, natural, built environment)
  - Key assets
- Select approach



TCHP's Exposures, Impacts, and Strategies Inventory (EISI) tool can help (DEMO)





- Brief presentation on Climate & Health Tools for Tribal and Frontline Communities at the Council of State and Territorial Epidemiologists (CSTE) 2019 Climate and Respiratory Health Summit (May 8, 2019)
- Workshop on Collaborative Climate Adaptation for Tribal Community Wellbeing at the National Tribal Public Health Summit (May 13, 2019)
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 Ideas  
 Ideas

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
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Instructions 1. Evaluate Exposures 2 & 4. Evaluate & Track Impacts 2.B Pop Sens Adapt Cap 3. Evaluate Strategi ...

## 1. Determine Objectives and Scope

- ## Step 1. Determine Objectives and Scope

- ## Collaborations are vital:

- Increase the implementation viability of adaptation plans
- Leverage knowledge and resources from multiple agencies
- Develop solutions that are grounded in shared values and understanding

# Assessing Health Vulnerabilities

## Steps

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## Step 2. Engage the Community to

- Gather knowledge, oral histories/stories, observations and data
- Learn about concerns and existing resilience and preparedness activities
- Determine what community assets are most valued and important to protect
- Coordinate regionally to make technical analysis more cost-effective
- Review findings and drafts



*GRIC Community Members participate in a workshop to guide the GRIC climate change adaptation process.*

"THE SUMMERS ARE EXTREMELY HOT, WHICH IS A CONCERN FOR OUR ELDERS. EVEN OUR NATURAL FLOWERS ARE BLOOMING LATE IN THE YEAR."

Pala Tribal Member Survey Respondent

## Group Discussion:

What methods works best to get meaningful input from your community?

# Assessing Health Vulnerabilities

## Steps

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## Ways to Engage:

- **Planning team**
  - Consider trusted outside advisors
    - E.g. University or Regional Climate Centers
  - Engage health!
    - Internal community health staff
    - Local clinic staff
    - Tribal Epidemiology Centers
    - County Epidemiologists

- **Community members**
  - Active engagement
  - Passive engagement

- **Youth**

TCHP's Survey can help (DEMO)

A web and social media page can help

## Climate Vulnerability Experiences and Priorities Survey

The <insert tribe name> is working on evaluating its vulnerability to the impacts of climate change within the Reservation. Community members and stakeholders are asked to complete the following survey to help us better understand the community's experiences and priorities by <insert date>. Your responses may be quoted in the Vulnerability Assessment Report.

\* Required

Email address \*

Cannot pre-fill email address.







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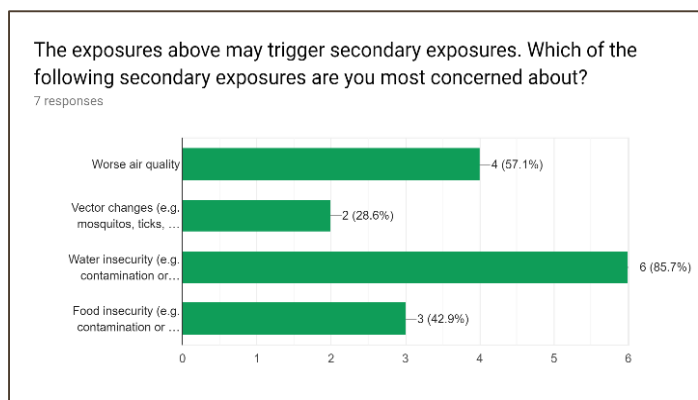
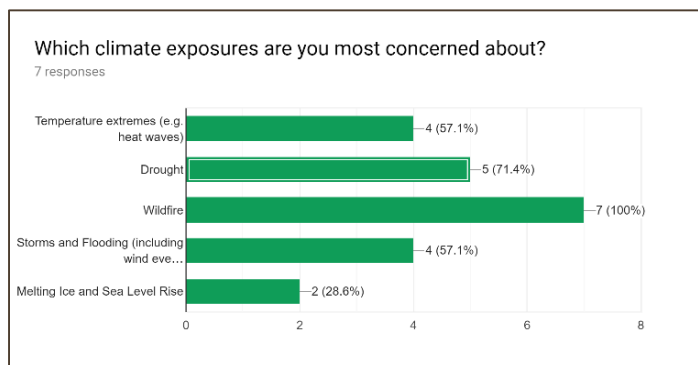
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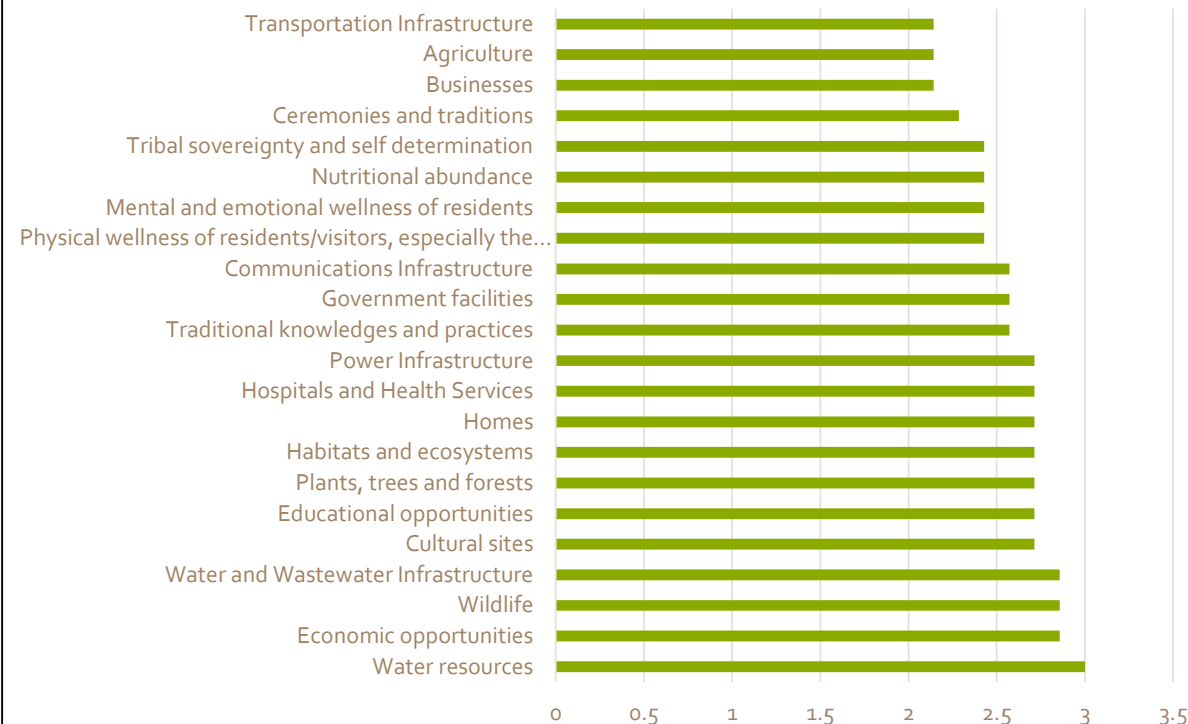
## Steps

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## Survey findings:



## Community Asset Priority Ranking



**"I'm worried about fires in our area. The dry brush on our reservation is extreme."**  
- Survey Respondent

# Assessing Health Vulnerabilities

## Steps

1. Determine Objectives and Scope
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## Tribal Community Engagement Examples:

- Makah Tribe
- Shoshone-Bannock Tribe
- Swinomish



### CASE STUDIES

#### MAKAH TRIBE

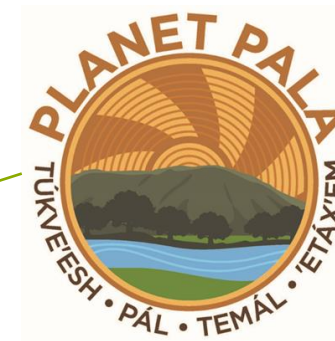
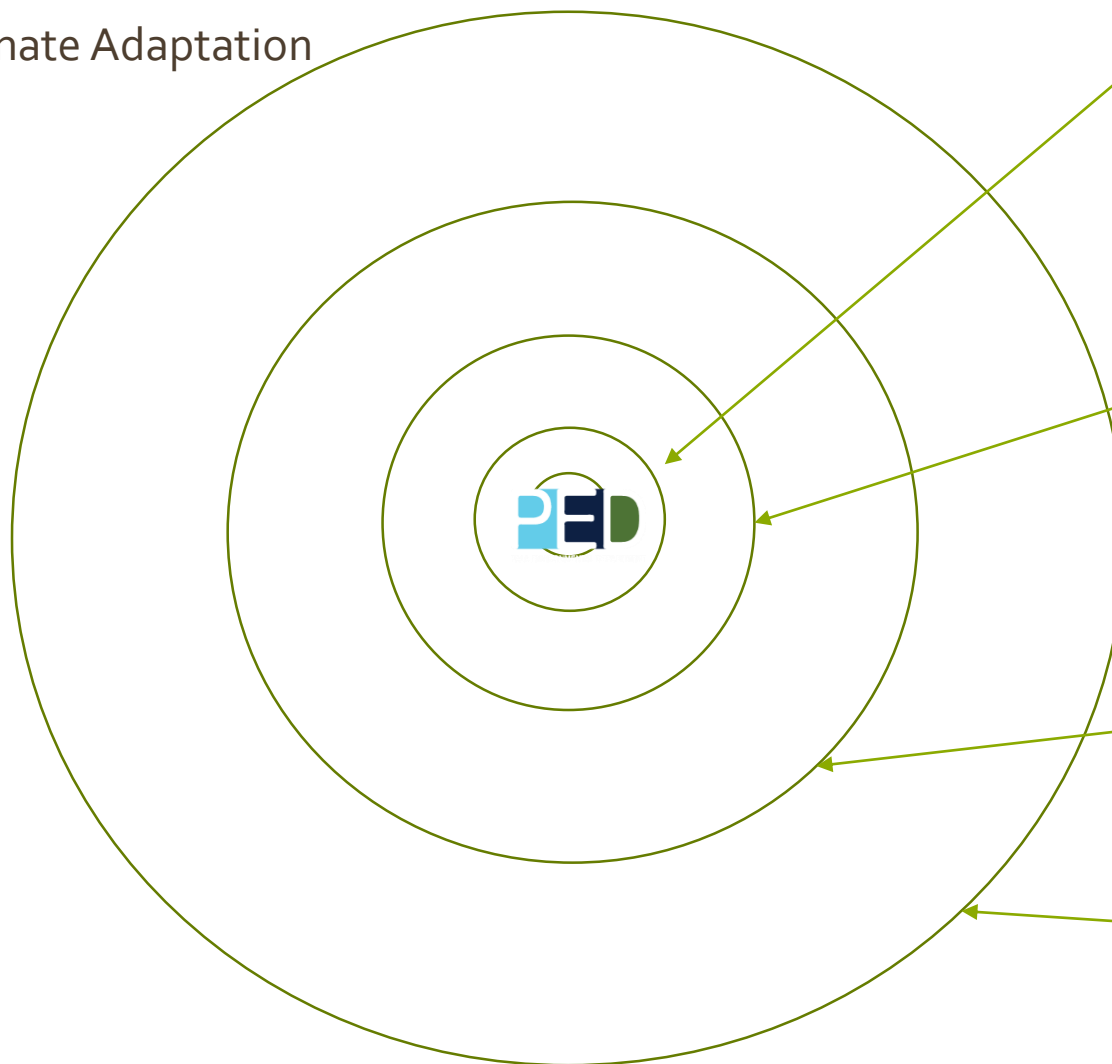
The Makah Tribe developed a [community engagement process](#) to inform and create the foundation for the Tribe's full climate change adaptation planning process. The Tribe used a mixed set of methods, including developing and sharing a community survey and hosting a community dinner to share information and gather input on key community concerns.<sup>42</sup>

# Assessing Health Vulnerabilities

Collaborative Climate Adaptation

## Steps

1. Determine Objectives and Scope
2. Engage the Community
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Regional Intertribal  
Work Group



# Assessing Health Vulnerabilities

## Steps

1. Determine Objectives and Scope
2. **Engage the Community**
3. Identify Key Indicators
4. Gather and Analyze Information
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**Tribal Community Engagement**

**Trainee Examples**



# Wrapping Up

Thank you for being part of our training community!

Will be at the EPA Region 9 Tribal Conference on October 24 (Maricopa, AZ): *"Tribal Climate and Health Adaptation Tools and Resources for Efficient Fact-Finding"*

**Suggested reading** (complete before next webinar)

Scan one:

- [Pala Band of Mission Indians Climate Change Vulnerability Assessment](#)
- [Blackfeet Climate Change Adaptation Plan](#)
- [Climate Change in Kiana, Alaska: Strategies for Community Health](#)

Next webinar:

**November 5, 2019 (9AM PST / Noon EST)**

**Vulnerability Assessments Part 2 (Module 3)**

Questions?