



EcoAdapt Webinar: The Importance of
Traditional Ecological Knowledge in
Adaptation Planning
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Considering Traditional Knowledges in Climate Change Initiatives

Climate and Traditional Knowledges Workgroup

<https://climatetkw.wordpress.com/>

History: Why Were the Guidelines Developed?

- ▶ Growing interest in and evidence of collaborations involving traditional knowledges in climate change initiatives



Image is from Tolowa Dunes State Park / Tolowa Dee-ni' Nation 2012 NPLCC Project.
Caption: *Left to Right: Pacific Ocean, Lake Talawa, Lake Earl, North View. Photo © F.L. Hiser Jr..*

History: Who supported the development of the Guidelines?

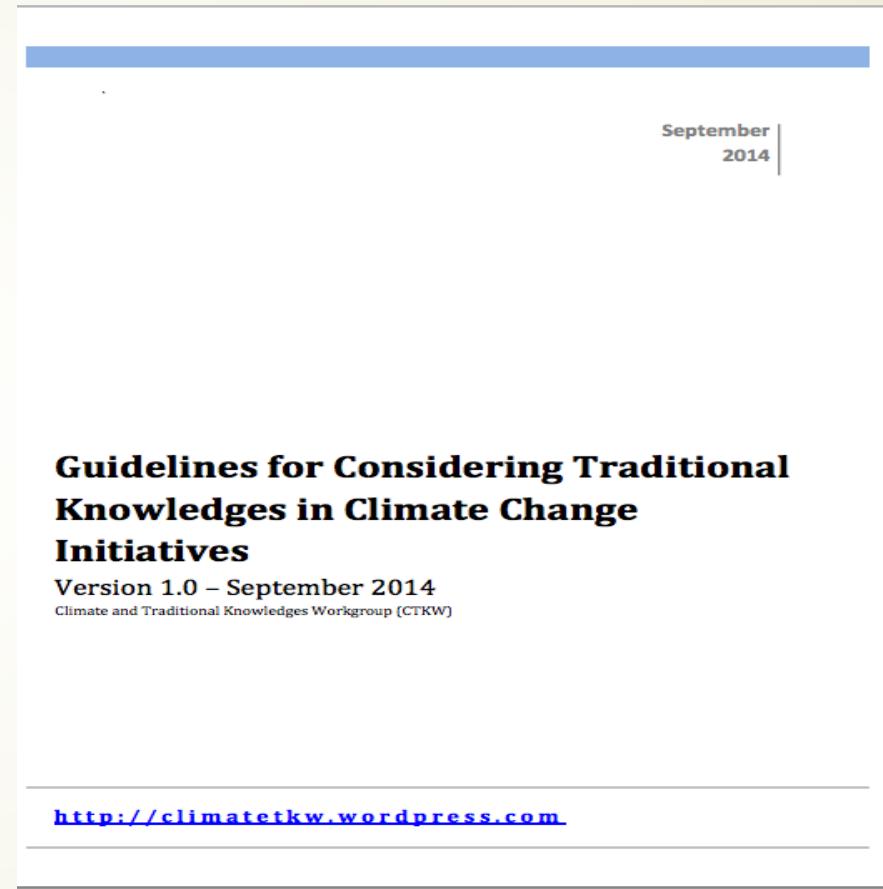
- ▶ Interest from the Department of Interior Advisory Committee on Climate Change and Natural Resource Science (ACCCNRS)
- ▶ Partnerships and support from tribes, scholars, and agencies
- ▶ About the Climate and Traditional Knowledges Workgroup



North Pacific Landscape Conservation Cooperative Steering Committee

Goals of the Guidelines

- Informational resource for tribes, agencies, and organizations
- Foster opportunities to bring together traditional knowledges in climate change initiatives in a way that ensures the Free, Prior and Informed Consent of Indigenous peoples



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Purpose of the Guidelines

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1. Increase understanding of the role of and protections for TKs in climate initiatives.
 2. Provide provisional guidance to those engaging in efforts that encompass TKs.
 3. Increase mutually beneficial and ethical interactions between tribes and non-tribal partners.

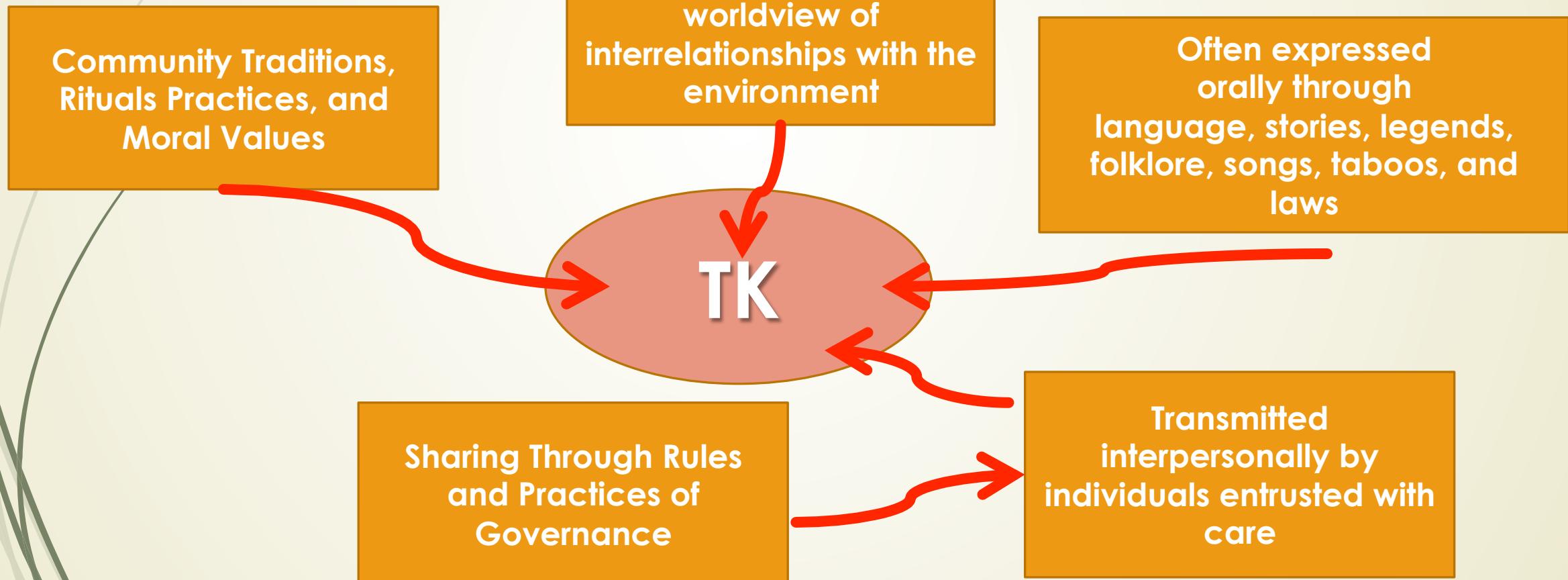
What Is Traditional Knowledge?

- ▶ No universal definition exists
- ▶ Commonly used terms:
 - Traditional Ecological Knowledge
 - Indigenous Knowledge
 - Indigenous Environmental Knowledge

Williams, Terry, and Preston Hardison. 2013. Culture, Law, Risk and Governance: Contexts of Traditional Knowledge in Climate Change Adaptation. *Climatic Change* 120 (3):531-544.

What are Traditional Knowledges?

- Knowledge or Knowledges?
- Knowledge Systems



Distinctions that are hard to defend

1. TKs are primarily data to scientists.
2. TKs and science are completely separate.
3. TKs and science are one and the same.

Whyte, K.P. 2013. On the Role of Traditional Ecological Knowledge as a Collaborative Concept: A Philosophical Study. *Ecological Processes* 2 (1):1-12.

Protocols

“There are no strong reasons we can identify as to why approaching the world with humility, respect for the diversity of knowledges of humans and non-humans, and a responsibility to honor other beings, entities and collective as animate, is any less conducive to engaging in dialog with a range of forms of empirical inquiry, including those forms of empirical inquiry in sustainability science.”

Whyte, K.P., Brewer, J.P. & Johnson, J.T. 2016. Weaving Indigenous Science, Protocols and Sustainability Science. *Sustainability Science* 11 (1): 25-32.

Governance Value

Supplemental Value versus Governance Value

Whyte, Kyle Powys. What do Indigenous Knowledges do for Indigenous Peoples? Forthcoming in Keepers of the Green World: Traditional Ecological Knowledge and Sustainability, edited by Melissa K. Nelson and Dan Shilling. Available: <https://www.academia.edu/11293856/>
What do Indigenous Knowledges do for Indigenous Peoples

Climate and Traditional Knowledges Workgroup. 2015. The Ethics of Traditional Knowledge Exchange in Climate Change Initiatives. *Earthzine*. July 31st. <http://earthzine.org/2015/07/31/the-ethics-of-traditional-knowledge-exchange-in-climate-change-initiatives/>



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Preston Hardison

Traditional Knowledges

- ▶ Not information, though informative
- ▶ Linked to spiritual beliefs, cultural practices, ways of life
- ▶ Western accounts emphasize trial and error learning over many generations
- ▶ Holders often emphasize TKs as a gift from the Creator, the Ancestors and the spirit world

Ecosystem Services

- Regulating, provisioning, supporting and cultural
- Ratio of cultural ecosystem services to all publications 1/116
- economic value of ecosystem services 105,000
- intangible ecosystem services 97
- social value of ecosystem services 55
- cultural value of ecosystem services 29
- spiritual value of ecosystem services 4
- nonuse value of ecosystem services 2
- non-economic value of ecosystem services 0

Kinds of Traditional Knowledges: Fire

biomass fuels	burning ecology	burning practices	burning technologies
bushfires	cultural resources promoted by fires	cultural values of fires	dung as a fuel
ecological succession	fire abatement	fire behavior	fire control
fire disturbance	fire ecology	fire hazard reduction	fire histories
fire impacts on cultural resources	fire impacts on cultural values	fire impacts on biocultural resilience	fire impacts on ecosystem functions
fire impacts on resource abundance	fire impacts on resource quality	fire intensity	fire management
fire recurrence intervals	fire regimes	fire resilience	fire responses
fire risk management	fire risk reduction	fire technologies	fire usage
fire-prone areas	fire-prone conditions	fire-resilient agricultural practices	fire-resilient crops
fire-resilient forest practices	fire-resilient seeds	fire-resilient trees	fire-resilient vegetation
firewood	forest fires	forest fire behavior	forest fire management
forest fuels	forest fuel loads	forest fuel types	fuel loads
fuel management	fuel types	fuels from animal waste	fuels from crop waste
fuels from house waste	grassland fuels	historic fire regimes	impacts of high-intensity fires
past status of fire	place-based fire management	place-based fuel management	plant species used for fuel
powers of fire	properties of fire	resilience to fire	status of fire
traditional fire regimes	trends in dry woodfuel availability	trends in fire frequency	trends in fire intensity
trends in fire locations	wetland burning	wildfire	wildfire management
wildland fire	wildlife responses to fire	wood fuels	



Risks of Sharing Traditional Knowledges

- ▶ TK can and often do conflict with the agendas of government, industry and academia.
- ▶ When TK are co-opted by non-aboriginal researchers and their institutions, their knowledge, information, insights, messages and values are lost.

Principles for Engagement

- ▶ Cause No Harm
- ▶ Recognize Tribal Sovereignty
- ▶ Free, Prior, and Informed Consent (FPIC)
 - ▶ Free: un-coerced, unbiased, Freedom of Tribes to set procedures for consent.
 - ▶ Prior: Indigenous people should be involved from beginning in process to obtain consent before it's accessed or changed.
 - ▶ Informed: Ensures substantive fairness in negotiations and emphasizes the need to address costs and benefits, risks and opportunities.
 - ▶ Consent: Give or withhold consent. Right to say "No"
 - ▶ Explain in terms that TK holders can understand. Explain risks and opportunities



Guidelines for Considering Traditional Knowledges in Climate Change Initiatives

1. Understand TK
2. Right NOT to participate
3. Understand and communicate risks
4. Establish an institutional interface
5. Training for federal agency
6. Provide specific directions to uphold TK protections
7. Recognize multiple knowledge systems
8. Develop guidelines for review of grant proposals

Guideline 1: Understand key concepts and definitions related to TKs

1. What are Traditional Knowledges?
2. Who are the holders of TKs?
3. How are TKs relevant to Climate Change?



Photo from Local Environmental Observer (LEO) Network, of hanging caribou meat along the Kobuk River, north of Kiana, Alaska, in September 2010. Borrowed from BIA Climate Resilience Toolkit.



Guideline 2: Recognize that Indigenous peoples and holders of TKs have a right NOT to participate in federal interactions around TKs.

► **Right to protect TKs**

- Right not to participate
- Right to withdraw at any time
- Rights for Individuals and Tribal government



Guideline 3: Understand and Communicate Risks for Indigenous peoples and holders of TKs.

There are few protections for Indigenous people who share TKs with federal partners to ensure that TKs will remain the right and property of the people. Risks include misappropriation and misuse of TKs impacting cultural resources.

Risks to spiritual values, sacred sites and sacred cultural resources
Indigenous intellectual property / lack of legal protection

Offensive / culturally inappropriate uses

Lack / loss of benefit sharing

Cultural security - overexploitation of scarce cultural resources



Guideline 4: Establish an institutional interface between Indigenous peoples, TK Holders, and Government for clear, transparent, and culturally appropriate terms of reference.

Indigenous peoples must have clear and transparent communication with federal agencies, researchers

- ▶ Articulate conditions prior to the start of the research, and methods for fairly resolving conflicts are identified once the research has started.
- ▶ Collaborate with project partners to develop pre-determined methods for each step of bringing TK into climate change initiatives.

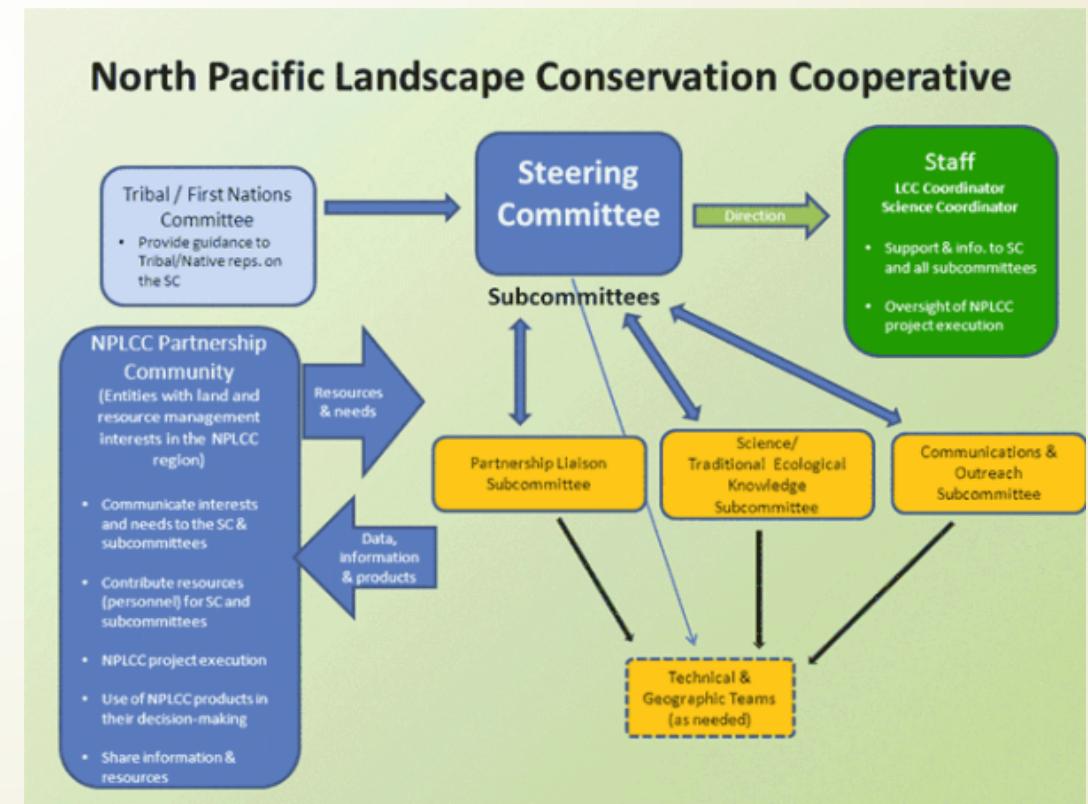


Guideline 5: Provide training for federal agency staff working with indigenous peoples on initiatives involving TKs

Ensure that federal staff working with Tribes are not putting TKs and associated cultural resources at risk during federal-Tribal collaborations.

Guideline 6: Provide directions to agency staff, researchers, and non-indigenous entities to ensure that protections for TKs requested by tribes and knowledge holders are upheld.

If the indigenous government or knowledge holder requests protection for TKs that may be shared, agency staff should not acquire, receive, write down or electronically record confidential or sensitive information.



Guideline 7: Recognize the role of multiple knowledge systems.



Swinomish Indian Tribal Community Potluck. Used with Permission from Jamie Donatuto.

Recognize the sovereign rights of indigenous peoples to control access to, and the use of, their traditional knowledge and the right to give or deny access to it based on their right to FPIC according to their own traditions, laws and processes.



Guideline 8: Develop guidelines for review of grant proposals that recognize the value of TKs, while ensuring protections for TKs, indigenous peoples, and holders of TKs.

Federal Agencies and Granting Process should:

- ▶ Not require that all data collected during the grant period be presumed to be under the ownership of the federal government.
- ▶ Recognize the sovereign rights of indigenous peoples to control access to, and the use of, their traditional knowledge and the right to give or deny access to it based on their right to FPIC according to their own traditions and processes.
- ▶ Reference to a human subjects protocol and approval from the Institutional Review Board.
- ▶ Follow the indigenous research protocols established by individual tribes to guide research involving tribes or knowledge holders.



For more information: Visit the Climate and Traditional Knowledges Workgroup website:
<http://climatetkw.wordpress.com>

To obtain your copies

- PRIMER:

<http://www4.nau.edu/itep/docs/CC-Primer.pdf>

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- TK GUIDELINES:

https://climatetkw.files.wordpress.com/2014/09/tks_guidelines_v1.docx

The Primer, TK Guidelines, FAQs, and comment forms are available at: <https://climatetkw.wordpress.com/>.