Thank you for your interest in the *Declaration on Relationships and the Wise Use and Applications of Technologies for Climate Actions for Everyone*. We welcome your feedback on the *Declaration*; please share your thoughts/feedback through this form:
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Declaration on Relationships and the Wise Use and Applications of Technologies for Climate Actions for Everyone

I.   Background context

The Rising Voices Center for Indigenous and Earth Sciences, based out of the National Center for Atmospheric Research (NCAR), facilitates intercultural, relational-based approaches for understanding and adapting to extreme weather and climate events, climate variability, and climate change. This includes envisioning collaborative research that brings together Indigenous knowledges and science with Earth sciences in a respectful and inclusive manner to achieve culturally relevant and scientifically robust climate and weather solutions. In doing so, Rising Voices seeks to advance science, remove the boundaries between science and society, and create innovative partnerships among collaborators with diverse disciplinary and cultural backgrounds to support adaptive and resilient communities.

II.   Purpose

Participants of the 11th annual Rising Voices workshop, held in Spring 2023, on the theme of *Understanding the Relationships: People, Place, Technology, the Environment, and Climate Change*, have prepared this *Declaration* to guide the use and applications of technologies to heal relationships between people, place, technology, and the environment for future generations. It is a response to concerns about over-reliance on modern technological solutions to the climate crisis and the impacts of modern technologies on our relationships.
This *Declaration* sets forth principles for technology design, development, use, application, and decision-making processes under rapid global change.

III.   Adoption

The *Declaration's* core principles and content emerged from the stories, wisdom, knowledge, insights, and reflections participants shared at the workshop. It was drafted by the Rising Voices workshop planning team, shared with workshop participants for input, and is being revised by the planning team, with review by workshop participants and the Rising Voices Council and Steering Committee.

IV.   Core values and principles

The following core principles with commitments are articulated to translate the shared values into actions for the wise use and applications of technologies for climate actions for everyone:
1. Center relationships among peoples, places, technologies, and impacts of climate change at all scales
2. Prioritize and embed shared values in technologies, including natural technologies, with intergenerational knowledge and wisdom sharing
3. Technologies should support community actions and decision-making and sovereignty for all relations
4. Harness the wise use and applications of technologies for climate actions for everyone

V.   Center relationships among peoples, places, technologies, and impacts of climate change at all scales

We will learn from and build upon existing examples of using and applying technologies for climate actions that reconnect and rebuild human-nature relationships. We commit:

1. To focus on nature-based actions such as backfilling canals dredged through wetlands, creating living shorelines, re-engaging with agroforestry, and removing dams to promote the health and well-being of our relatives. This includes facilitating a voice of our relatives, such as fighting for the rights of a river.

2. To reconnect with our ancestral technology of multiple literacies (e.g., spoken, written, sensory, arts expressions) and the necessity to think of all of our relations when we act and do so with intention. For example, reestablish Indigenous language place-names that re-engage people with their culture and lands.

3. To reimplement the technology of healing through relationships, with the applications that technologies provide for peacemaking, healing, and reconciliation. Technology for healing includes ecological restoration and the reversal of damaging impacts of resource extraction and industrialized agriculture on soil.

4. To understand technology as kin to us. If using technologies such as drones, give it the responsibilities of what it's a kin to, like an eagle seeing over the environment.

5. To connect our younger generations, who are becoming more dependent on modern electronic technologies, with nature.

6. To think about technology as a tree; teach youth about technology and have them explain it to you, growing another root in the tree.

7. To flip the power of education as a technology that has been used to destroy some cultures to a culture-based approach that rebuilds our relationships with nature.

VI. **Prioritize and embed shared values in technologies, including natural technologies, with intergenerational knowledge and wisdom sharing**

We will engage with traditional technologies to learn from the past and inform the future. We commit:

1. To connect ways that knowledge was traditionally passed down, such as learning through song and stories, with the current technology that we have, recognizing the means of storytelling evolves with technology.

2. To use multiple literacies as a technology to understand each other better and what it means to be a good relative. Technology is not just machines, it's also natural technology. It's our knowledge and wisdom that has been passed on from our elders and relationships with our human, plant, animal, and element relatives.

3. What language we use in the context of technology and how we use it matters.
   a. To have an inclusive definition of technology, including natural technology, multiple literacies, and intergenerational knowledge and wisdom sharing.
   b. To expand and redefine what technology is to include natural, biological, and native technologies, intelligence, and observations; e.g., our ancestors could navigate the ocean by reading the technologies of the sky, tell the time of day by when the rain would fall, or predict cycles and patterns by observing the clouds.
   c. To focus on language that uplifts, empowers, and emphasizes connections. For example, instead of using artificial intelligence as a blanket term, use the names of specific technologies such as generative transformers; instead of using greenwashing terminology such as net-zero, focus on reducing energy use, consumption, and material. This includes working towards decolonizing the framework of a colonial language (such as this document being in English).

4. When developing and creating modern technologies:
   a. To follow a moral compass for creating technology, in line with the values of Indigenous Knowledges.
   b. To emphasize Indigenous sovereignty, including Indigenous data sovereignty, and having a shared individual, collective, and direct responsibility.
   c. To focus technological designs on prioritizing values over measurement, long-term benefits over efficiency, ethics over information and data, and accountability over accounting.
   d. To consider who the technology benefits, who is harmed, who makes the decisions, what is being taught, and what the values and intention are behind it and the power structures associated with it.

VII. Technologies should support community actions and decision-making and sovereignty for all relations

All beings have inherent rights, responsibilities, and are in active relationship, including humans, plants, animals, rocks, water, and air. To support these relationships and the wise use and application of technologies, we commit:

1. To advocate for implementing the United Nations Declaration on the Rights of Indigenous Peoples, as well as the Rights of Mother Earth.

2. To look to the four directions (north, south, east, west) for the creation and growth of new technology, how technology builds connections, and the application of these connections; reflect on whether technology is hindering or growing connections, and reimagine what the technology needs to grow connections.

3. To move away from resource commodification of nature, including water, air, and land, and towards respect and reciprocity, especially considering that often the resources needed to build technology come from Indigenous lands.

4. To use technology to support harmony between peoples, the Earth, the Earth's well-being, and help to demonstrate the value of stewardship in protecting ecosystems and social systems, as opposed to control, dominance, and extraction paradigms.

5. To apply technology as place-based and implemented at appropriate scales. Community-scale efforts should be community-centered, with the community as part of the entire process from conception to financing to implementation, and a focus on long-term problem solving rather than "solutions".

6. To focus on community-led processes for new technological tools, with the development, use, and decisions about the tools in the hands of the community.

7. To engage local communities in designing technology to help align the intention behind the use and the actual impact.

8. To use definitions, metrics, and baselines that are defined by the communities, and uplift the metrics of environmental impacts of developing technologies.

9. To address the equity gaps in how technology is used for social vulnerability analyses.

10. To incorporate restorative justice in decision making so that technologies can be implemented by and for the original inhabitants of that land.

11. To employ data tools that support community agency, power, leadership, self-determination, and communal benefit.

12. To meet communities and places where they are and support what already exists to thrive into the future; many communities likely already have the technology that is necessary for their well-being.

13. To focus on local technological initiatives. For example, modern food systems often disconnect and commodify food, water, and culture. A justice-centered food system focuses on food sovereignty or mutual aid in disaster contexts.

14. To reach those with varying accessibility and enhance accessibility through open source and open access software, which also includes transparency in development, use, impacts, and where the technologies come from.

15. To adopt an equitable, distributism approach that enables technologies to reach those who need it the most. For example, establishing community solar panels so residents can charge electronic devices and contact family, disaster agencies, and mutual aid support during a severe storm with power outages or for everyday life.

16. To shift from an overreliance on technology to technology serving communities for data and observation collections and risk communication. For example, documenting phenological observations to inform the timing and conditions for hunting and subsistence needs or observations on ice break up during the spring to inform about flooding risk and using technological tools to quickly communicate that risk.

17. To transform to alternative energy, decarbonization, and sustainability in a way that doesn't replicate the fossil fuel industry's harms and linearity (use and throw away), but rather replicates natural systems in a circular manner (renewable).

VIII. Harness the wise use and applications of technologies for climate actions for everyone

We commit to the following uses and applications of technologies as tools:

1. To grow relationships.

2. To cultivate learning that emphasizes relationality to the people and place over efficiency or over policies, communication, or other mainstream goals.

3. To create a relational space to share observations, strategies, actions, and having a connection to each other and with nature to achieve environmental, social, and racial justice.

4. To focus on community science as a starting point for conversations and relationships; e.g., using an app on your phone to identify plants and document that place in regards to climate changes, while upholding Indigenous data sovereignty and rights.

5. To bring awareness to important events, actions, and issues, while continuing to use traditional technologies, being in ceremony, weaving a basket, interacting together face-to-face, and honoring our ancestors.

6. To document and record the stories of our Elders, with permission and safeguarding sensitive information and intellectual rights, for the future generations to know their roots and to learn from and communicate the past knowledge and practices in dealing with climate extremes.

7. To empower individuals and make spaces and knowledge more accessible, in sciences, communications, and education, and to share successful actions in one place to help inform actions in another.

8. To distribute and make information more accessible to local populations post-disaster; e.g., development of an app for early warning systems for climate-related events to reach rural and less populated areas or informing of access to a health-related facility or health-related concerns during a disaster.

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Core Values & Principles

Center relationships among peoples, places, technologies, and impacts of climate change at all scales

Prioritize and embed shared values in technologies, including natural technologies, with intergenerational knowledge and wisdom sharing

Technologies should support community actions and decision-making and sovereignty for all relations

Harness the wise use and applications of technologies for climate actions for everyone

https://risingvoices.ucar.edu/