

Maui Water Workshops 2025



Dr. Karletta Chief (Diné)
Director of Indigenous
Resilience Center (Ires)

TÓ' ÉÍ IINÁ
WATER IS LIFE



THE UNIVERSITY OF ARIZONA
RESEARCH, INNOVATION & IMPACT

Arizona Institutes
for Resilience





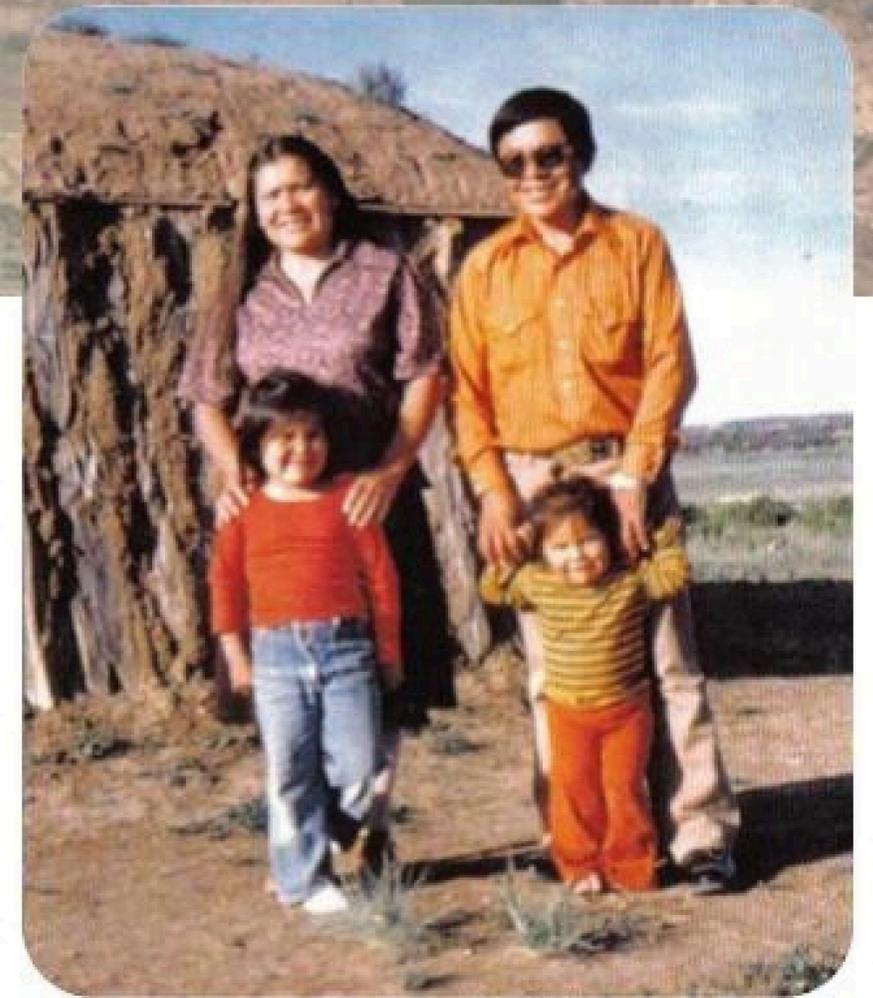
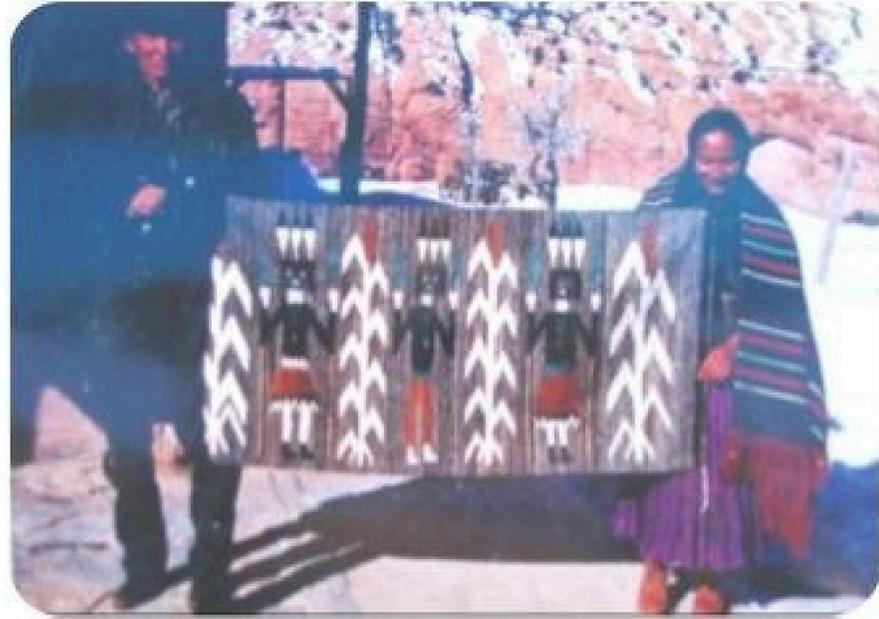
Dr. Karletta Chief (Diné)

Director & Professor
Indigenous Resilience
Center (Ires),
University of Arizona

I AM FROM THE NAVAJO NATION.



I AM BITTERWATER.



Near-the-
Water

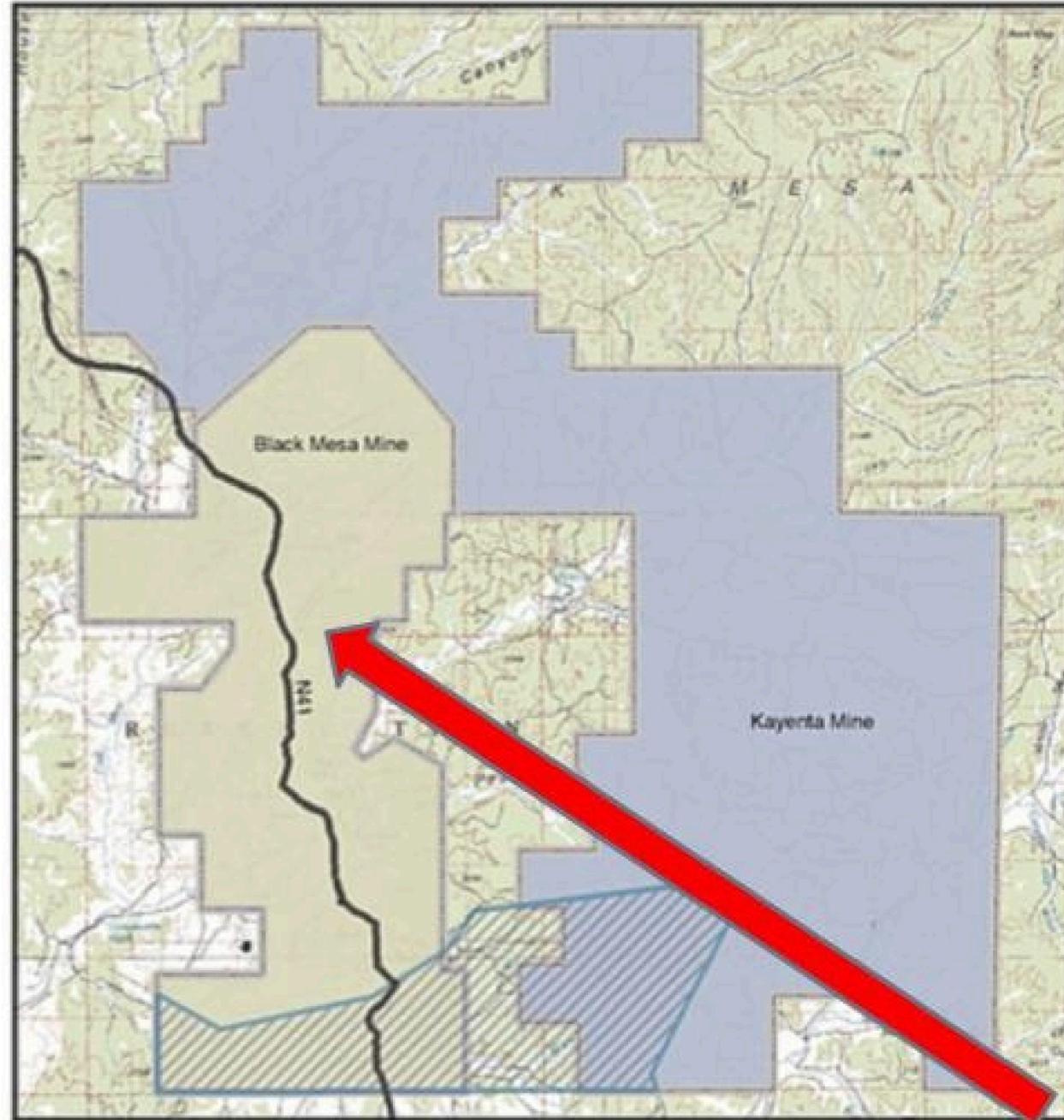


Red-Runni
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MOTHER EARTH & FATHER SKY CRIES ON BLACK MESA



LEGEND

- Leasehold Area
- Hopi Partitioned Land (HPL)

Roads

- N 41

Mine

- Kayenta
- Black Mesa



FIGURE 4. PLANNING AREA

JJ CLACS & COMPANY - DECEMBER 2005
Source: Peabody Western Coal Company

Lease Hold Area

My home

IRES VISION

Indigenous communities lead the development of environmental and social resilience solutions and collaborate through strong trust-based partnerships with the University of Arizona Indigenous Resilience Center (IRes).



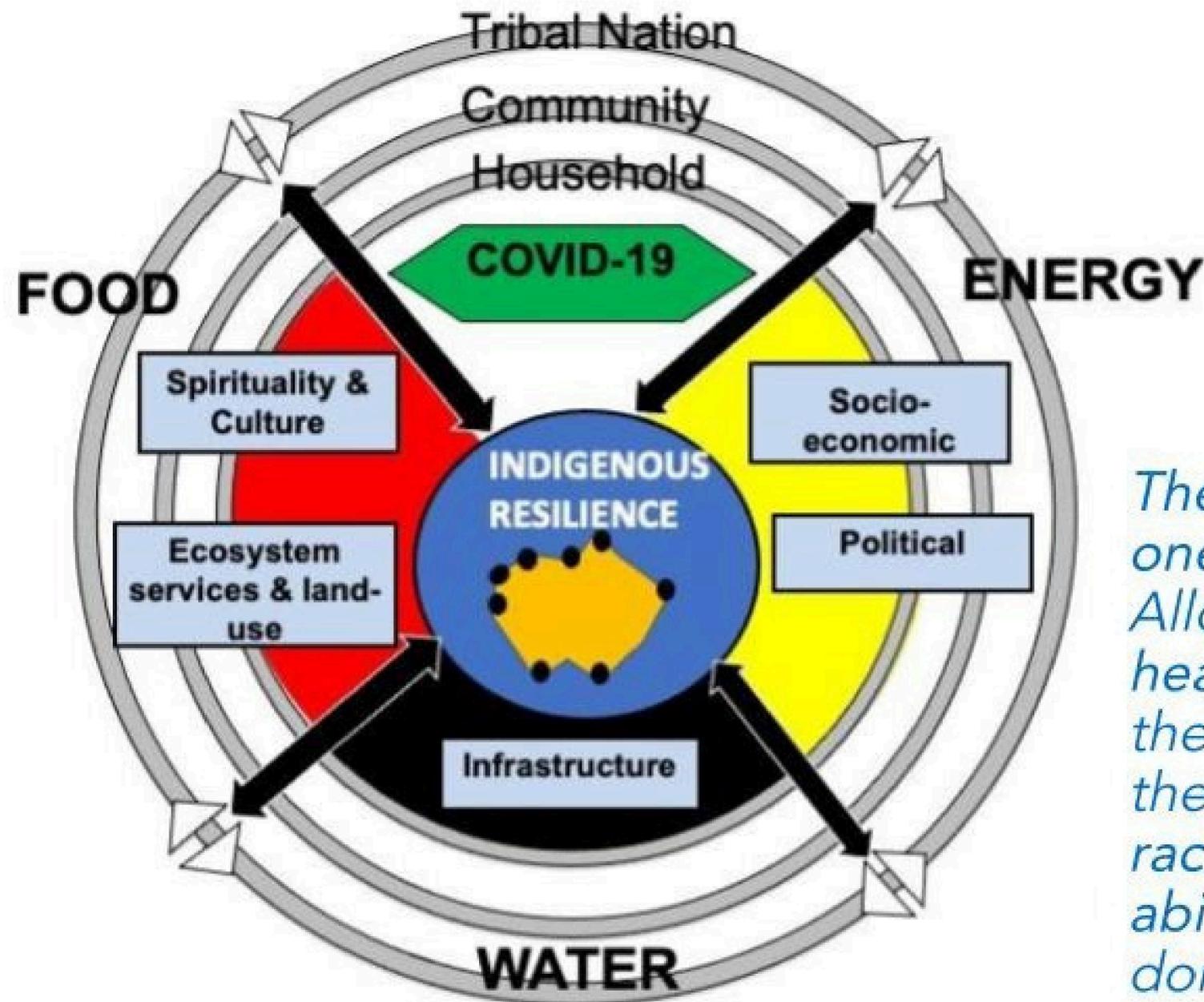
IRES MISSION

Through *Indigenized research frameworks/methodologies* and a commitment to sustained community engagement, the Indigenous Resilience Center (IRes) honors Indigenous sovereignty and self-determination and, with Indigenous guidance, *weaves Indigenous ways of knowing into co-designed environmental and social resilience solutions* and *trains the next generation* of Indigenous and non-Indigenous environmental leaders.



FRAMEWORKS FOR INDIGENOUS RESILIENCE

IMPLEMENTATION SCI



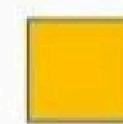
LEGEND:



Resilience Indicator



Desired structure or function

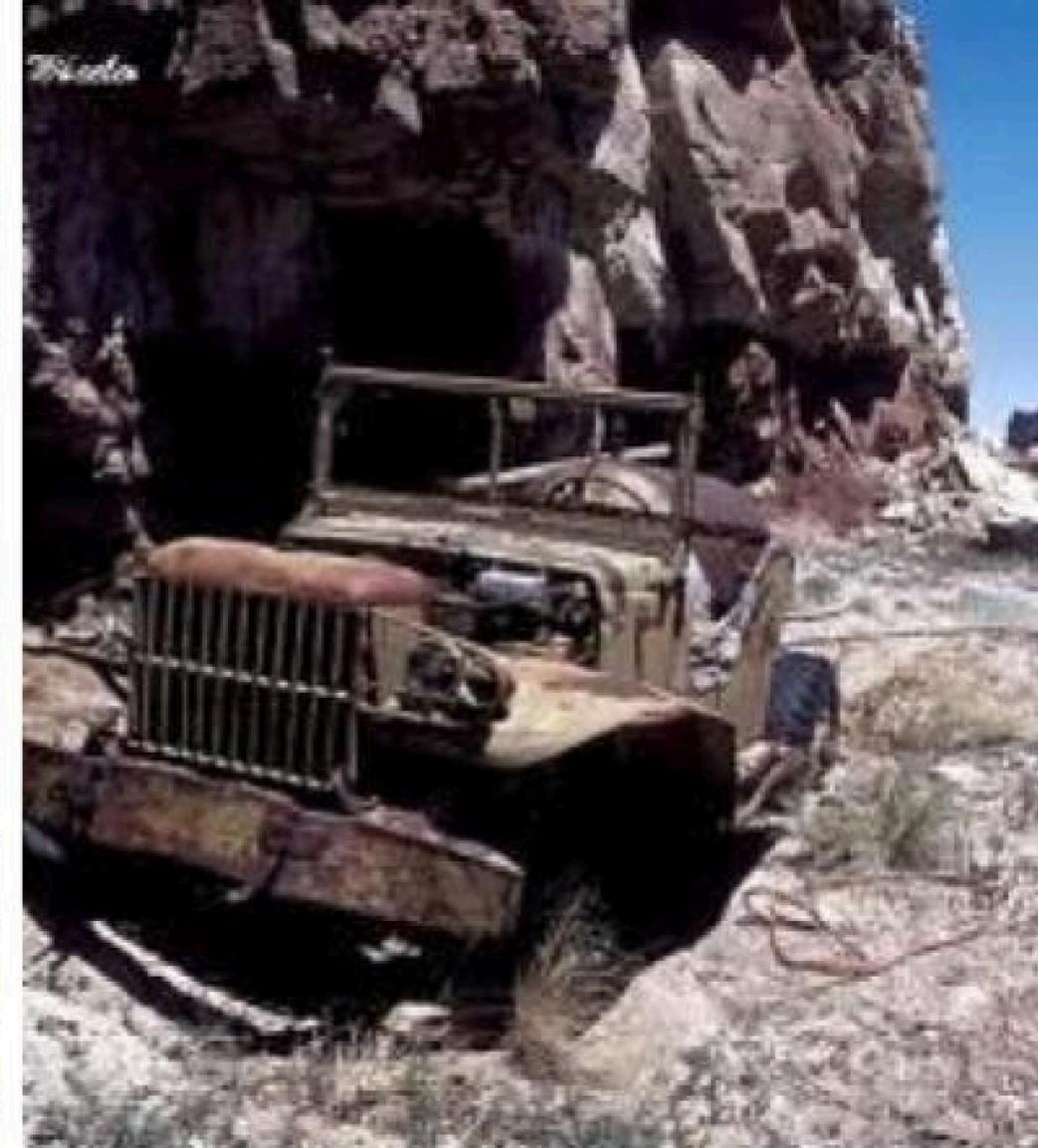


Inadequate structure or function

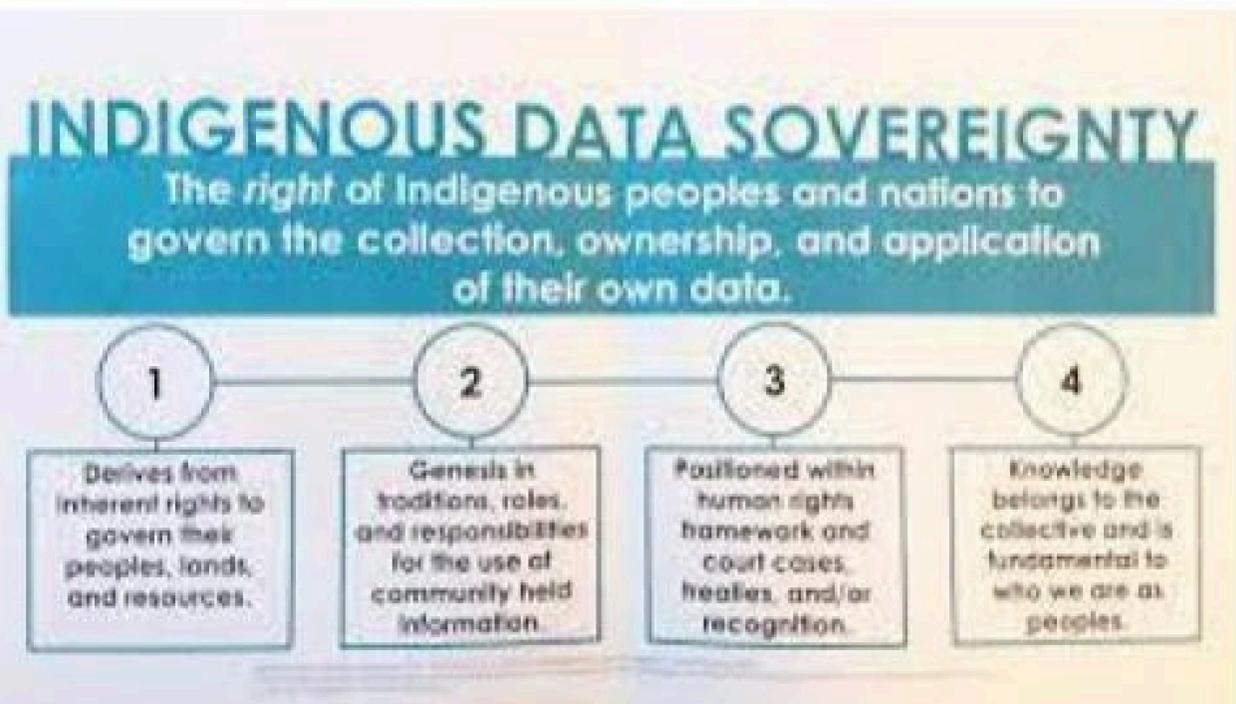
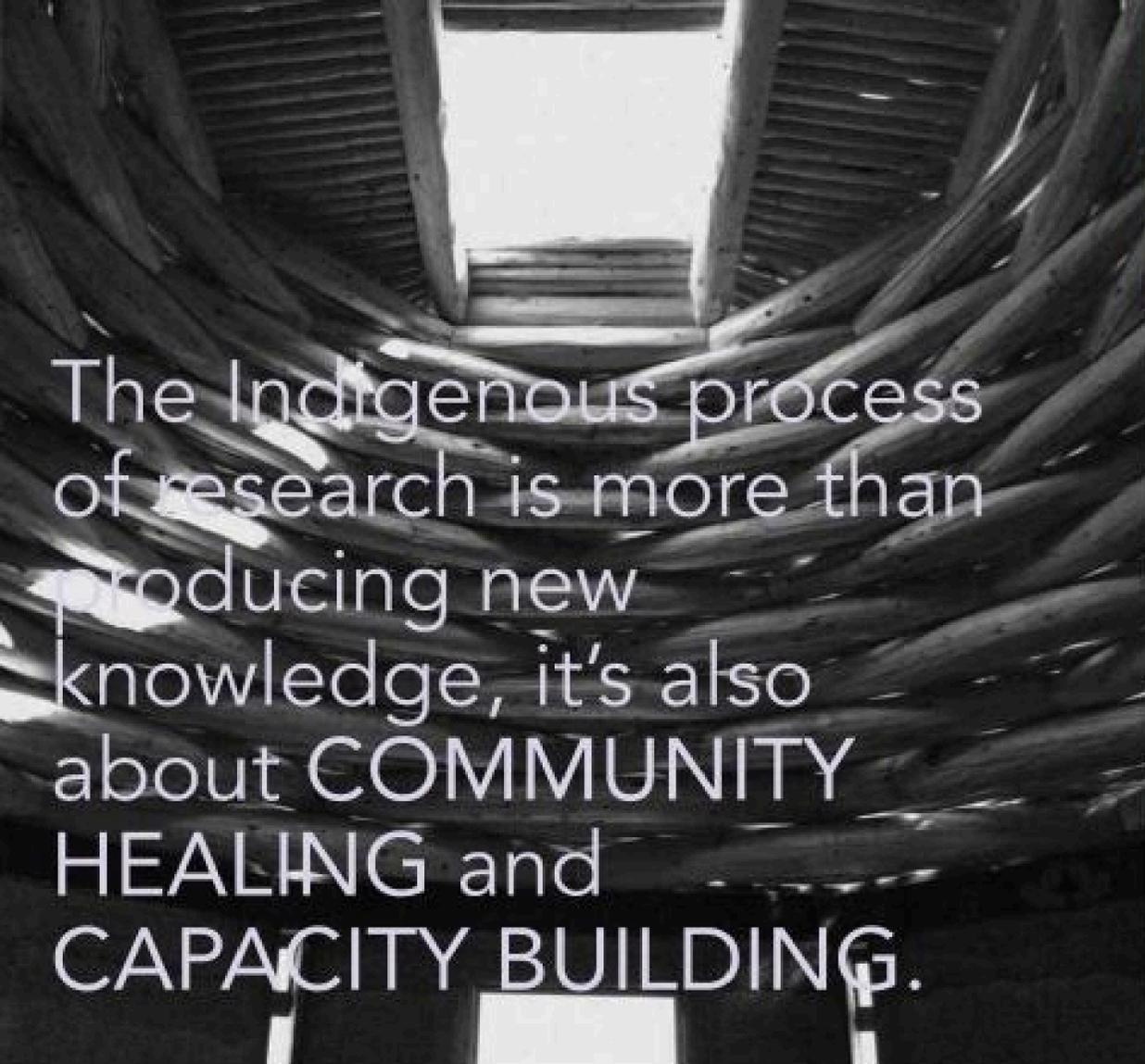
The ability to have a connection and belonging to one's land, family and culture, therefore an identity. Allowing pain and suffering caused from adversities to heal. Having a dreaming, where the past is brought to the present and the present and the past are taken into the future. A strong spirit that confronts and conquers racism and oppression, strengthening the spirit. The ability not just to survive but to thrive in today's dominant culture. Aboriginal scholar and educator Marion Kickett, 2011

WATER CHALLENGES FACING TRIBES



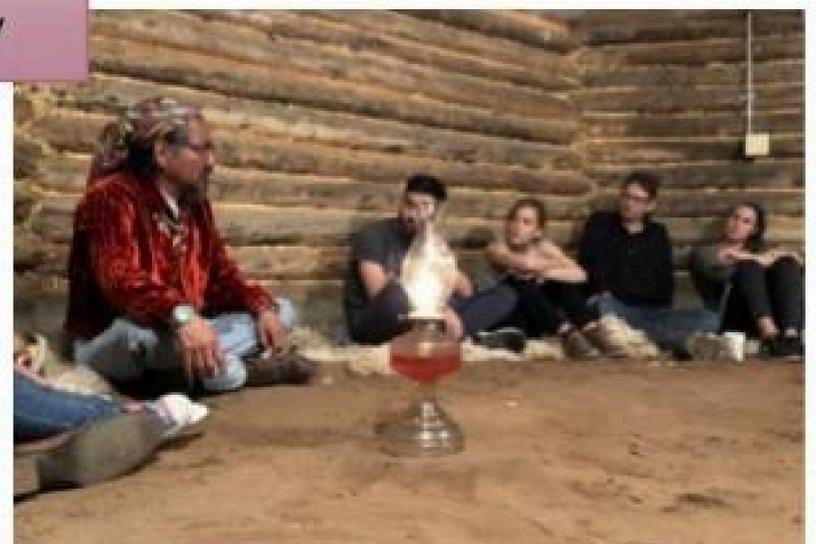


INDIGENOUS ENVIRONMENTAL INJUSTICES



INDIGENOUS FRAMEWORKS

DE-COLONIZED COMMUNITY ENGAGEMENT THROUGH A 7TH GENERATIONS MODEL



THE CARE PRINCIPLES



COLLECTIVE BENEFIT FOR INDIGENOUS GOV

C1

For inclusive development and innovation

Governments and institutions must actively support the use and reuse of data by Indigenous nations and communities by facilitating the establishment of the foundations for Indigenous innovation, value generation, and the promotion of local self-determined development processes.

C2

For improved governance and citizen engagement

Data enrich the planning, implementation, and evaluation processes that support the service and policy needs of Indigenous communities. Data also enable better engagement between citizens, institutions, and governments to improve decision-making. Ethical use of open data has the capacity to improve transparency and decision-making by providing Indigenous nations and communities with a better understanding of their peoples, territories, and resources. It similarly can provide greater insight into third-party policies and programs affecting Indigenous Peoples.

C3

For equitable outcomes

Indigenous data are grounded in community values, which extend to society at large. Any value created from Indigenous data should benefit Indigenous communities in an equitable manner and contribute to Indigenous aspirations for wellbeing.

COMMUNITY APPROVAL & DATA OVERSIGHT



May 1, 2020

Dr. Robert C. Robbins, President
University of Arizona
1401E. University Blvd.
Tucson, Arizona 85721

Re: Navajo Nation's Discussion on CARES ACT Expenditure Plans

Honorable Dr. Robbins:

I am writing to extend an invitation to you to join Resources and Development Committee membership in the meeting with the membership of the Naabik'iyati Committee of the 24th Navajo Nation Council on Friday, May 22, 2020 at 9:00 a.m. via teleconference.

As Chairman of the Resources of the Development Committee, I felt it was important for you to join the



RESOLUTION OF THE NAATSI'AAH (NAVAJO MOUNTAIN) CHAPTER OF THE NAVAJO NATION

Mark Navon
President
Marina L. Jean
Vice-President
Willa Grayson
Secretary/Treasurer
Russell Saabazayon
Governing Committee
Member
Herman Deaton
Council Delegate

RESOLUTION NO: NM09-2020-190
SUPPORTING STUDY ASSESSING NAVAJO COVID-19 RISKS AND INCREASING INDIGENOUS RESILIENCE

WHEREAS:

1. The Navajo Mountain Chapter of the Navajo Nation acts on this resolution pursuant to the authority conferred to the Chapter through Navajo Nation Code Title 26, Chapter 1, and
2. The Navajo Mountain Chapter is requested to support a project "Assessing Navajo COVID-19 Risks and Increasing Indigenous Resilience", and
3. The Navajo Mountain Chapter is committed to supporting projects oriented towards improving Navajo health messaging and education, improving pandemic response and increasing resilience through access to food, energy, and water during the COVID-19 pandemic; and



President of the Navajo Nation
Jonathan Nez

THE NAVAJO NATION THOREAU CHAPTER

P.O. Box 859 Thorman, New Mexico 87203
Office (505) 905-0139 Fax (505) 905-0140
thorau@navajochapter.org



Vice President of the Navajo Nation
Megan Linn

John Brady, PRESIDENT • Renee McInerney, VICE PRESIDENT • Judy L. Patten, SECRETARY / TREASURER

Kevin Brown, CHAIRMAN DISTRICT COUNCIL • Lisa Anderson, CHAIRMAN DISTRICT COUNCIL • Edna Siquero, CHAIRMAN • Sharon Patten, CHAIRMAN DISTRICT

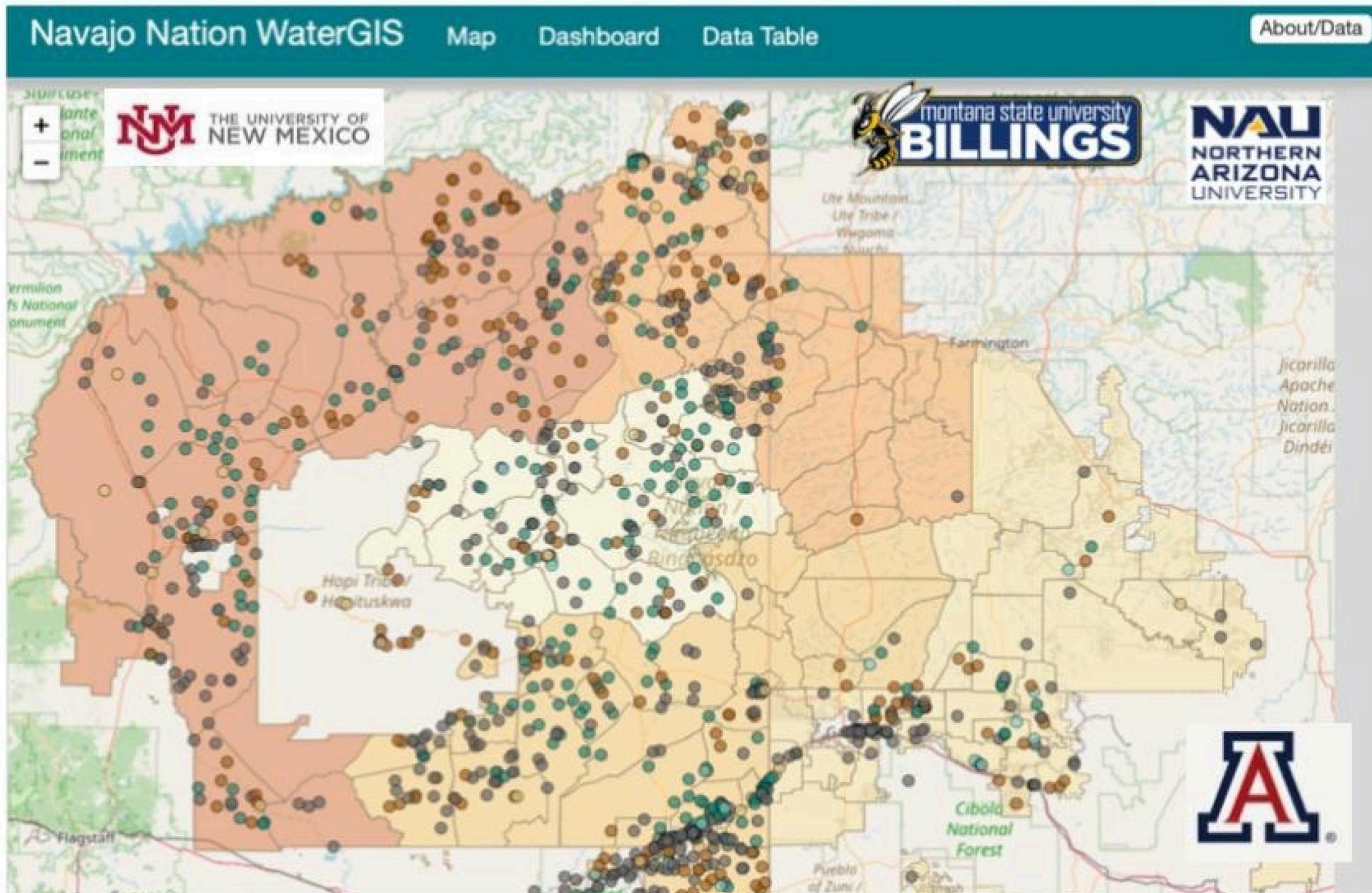
THOREAU CHAPTER RESOLUTION TCH-074-20-075

Supporting Arizona State University study assessing Navajo COVID-19 risk and increasing indigenous resilience.

ISSUED AT:

Approved by the Navajo IRB
April 2021 (after 1 yr)

NAVAJO NATION WATERGIS PORTAL



FEATURE

It Takes a Team: Tackling Water Quality Challenges and COVID-19 in the Navajo Nation

Joseph H. Hoover, Daniel Beene, and Karletta Chief



An unregulated spring, an unregulated water source on the Navajo Nation, water is collected and funneled to watering troughs downhill of a spring. Source: Hoover et al.

IN 2020 SCHOLARS FOUND THAT A LACK OF INDOOR plumbing was associated with a higher rate of COVID-19 cases in indigenous communities in the United States. Among the affected populations is the Navajo Nation, whose territory spans northeastern Arizona, northwestern New Mexico, and a small portion of Utah. To learn more about the role of water access in the spread and transmission of COVID-19, the Navajo Nation invited water experts from multiple academic institutions to join the nation's Water Access

Coordination Group (WACG). In collaboration with the Navajo Nation, researchers applied a team science approach to the issue, bringing together a group of researchers and students from a wide range of fields. Together, they not only answered important questions about water access and COVID-19 risk but also developed a valuable tool for assessing water quality more broadly—critical in a region dotted with thousands of unregulated groundwater sources.

January/February 2022

VOLUME 24 • NUMBER 1 | 5

Hoover, J., D. Beene, and K. Chief. 2022. It takes a team: Tackling water quality challenges and COVID-19 in the Navajo Nation. *In* Roehm, C. and M.E. Campana (ed.) *Water Risk in a Rapidly Changing World: Part 2*. Water Resources IMPACT Magazine 24(1):5-8.

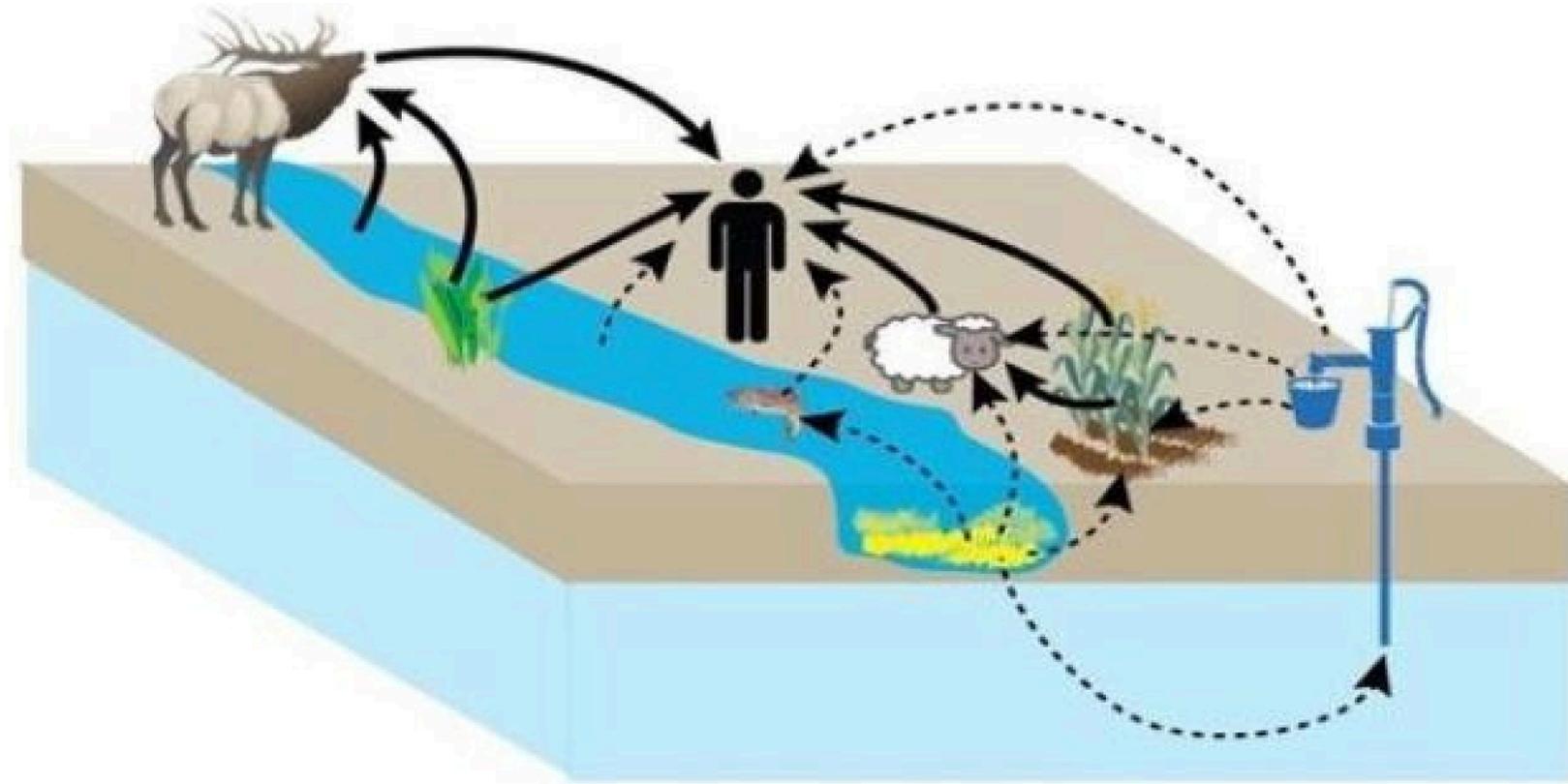
<https://unmcop.unm.edu/metals/>

INDIGENOUS USES OF WATER

Perception

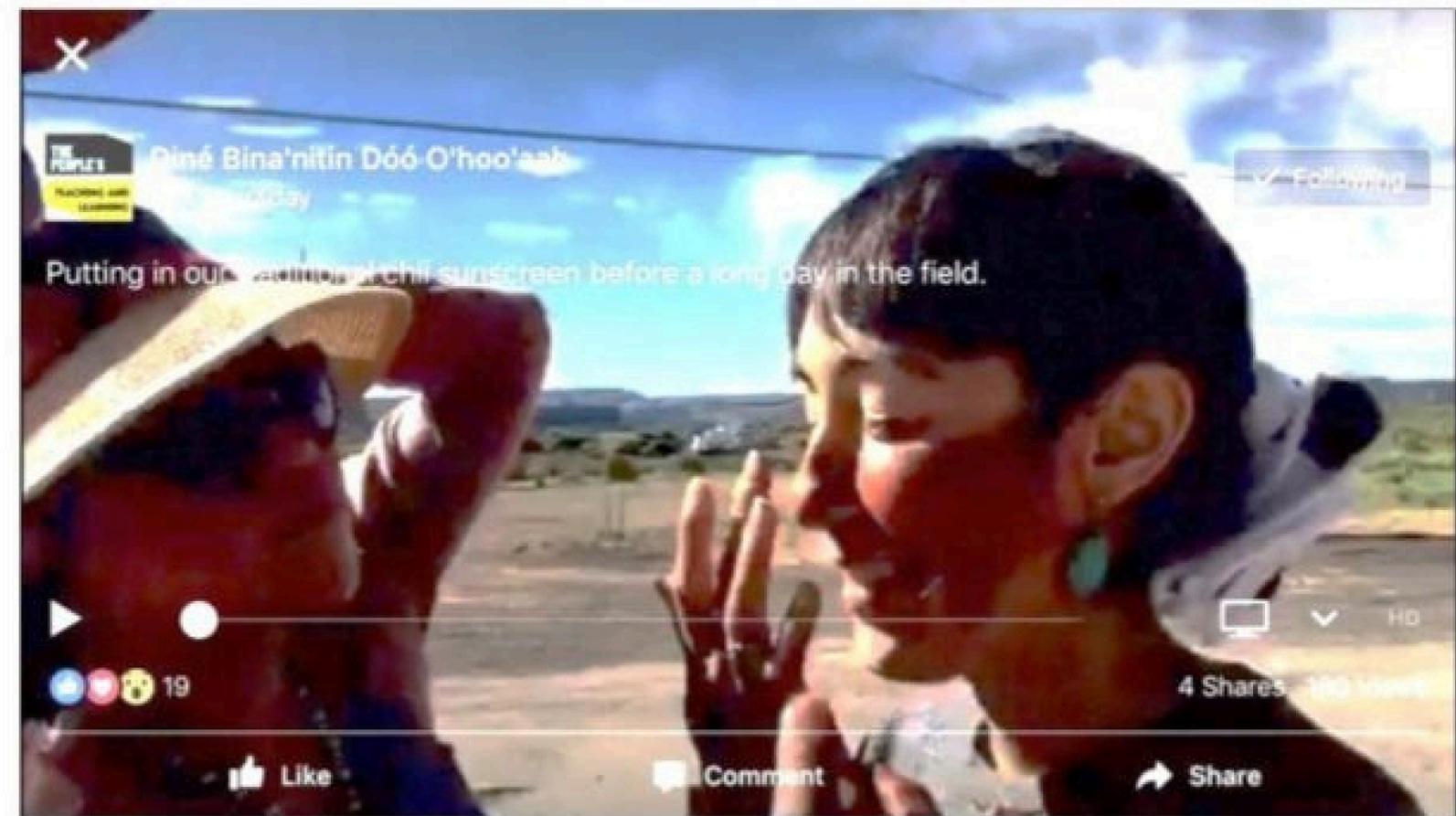


Diné Reality



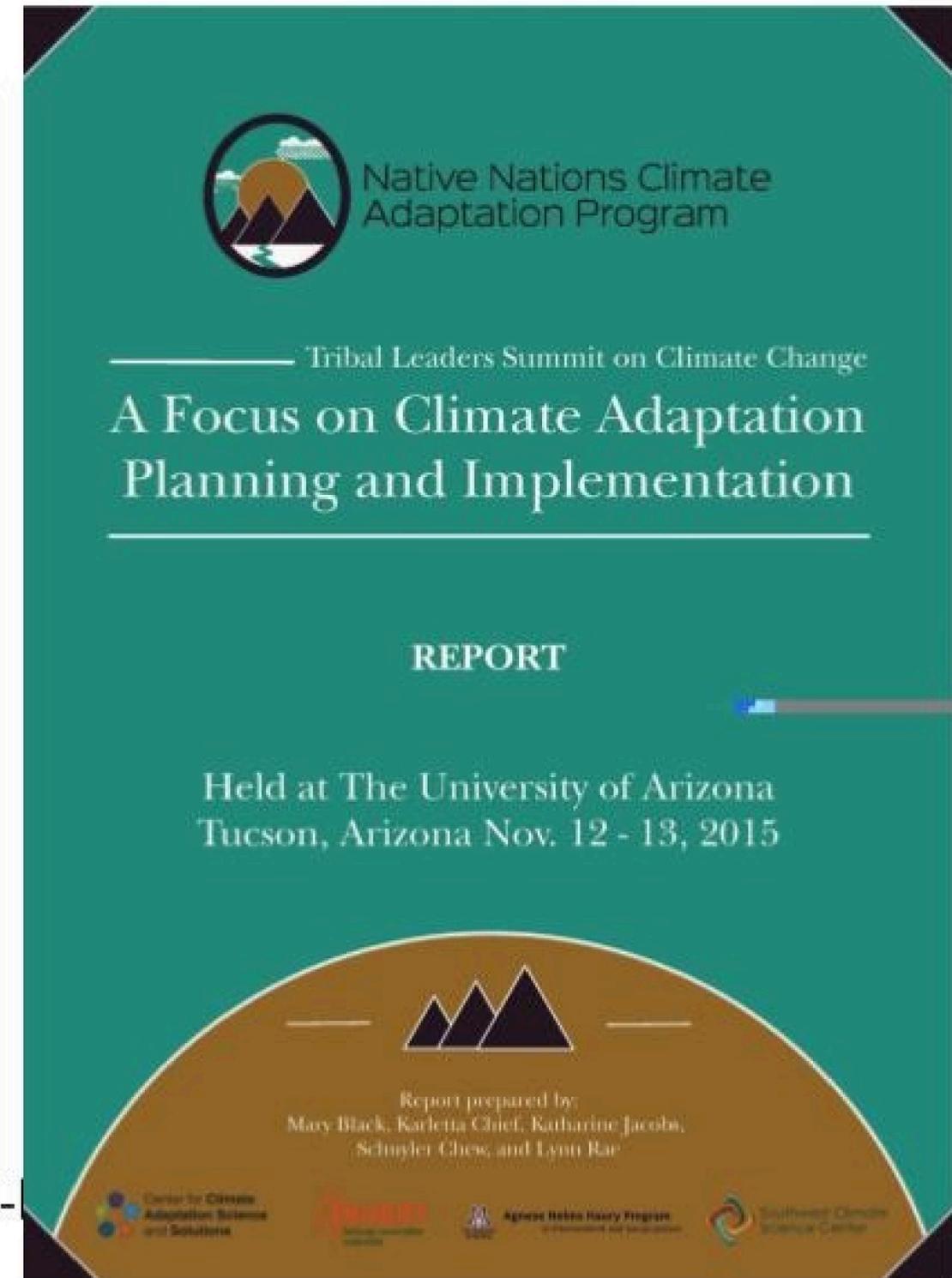
RIVER ACTIVITIES

Activity Categories	Number
Cultural & Spiritual	14
Recreational	12
Livelihood	9
Arts & Crafts	7
Total	42



TRIBAL ENVIRONMENTAL PLANS

1. Confederated Salish and Kootenai Tribe
2. Jamestown S'Klallum Tribe
3. Navajo Nation
4. Nez Perce Tribe
5. Oglala Lakota Nation
6. Red Lake Band of Chippewa Indians
7. Shinnecock Indian Nation
8. St. Regis Mohawk Tribe
9. Swinomish Tribe
10. Village of Newtok
11. Yurok Tribe <http://www.nncap.arizona.edu/projects/tribal-leaders-summit>

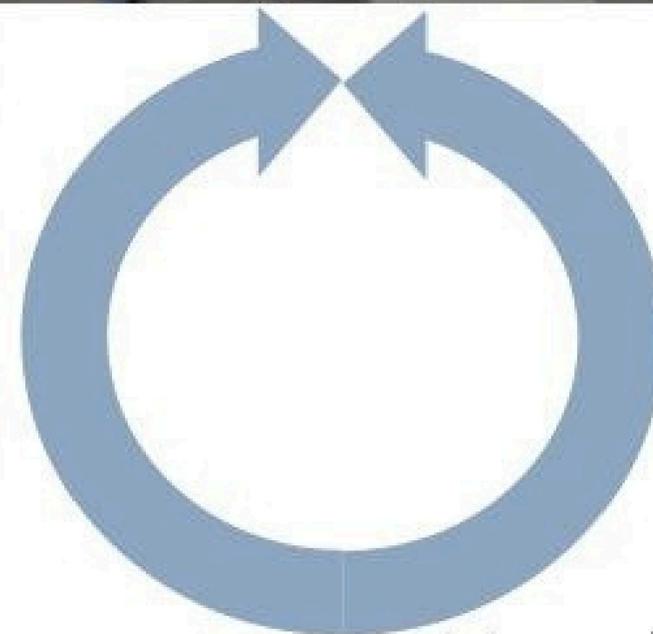


COLLABORATIVE ADAPTIVE WATER MANAGEMENT STRATEGIES

Together develop future management plans



Understand local water resources and systems



Use climate change projections, develop future scenarios



Source: "Lifeline - Squilxw Resilience" was raised at Highway 3 and Cawston Avenue on July 1, 2019. (submitted).
<https://www.pentictonwesternnews.com/news/indigenous-mural-raised-on-in-the-okanagan-on-canada-day-were-still-here/>



Ahé'hee! Gracias! Arigatōgozaimashita

