























# NWS Tribal & Indigenous Engagement

June 21, 2024 Briefing to IAEM's Tribal Caucus Wendy Marie Thomas, NOAA/NWS, Tribal & Indigenous Team Lead

















# NWS' Tribal & Indigenous Engagement



### Quick Overview of Tribal Nations & Indigenous Territories:

- 574 federally recognized sovereign tribal nations (CONUS)
- 229 federally recognized Indian Tribes in Alaska
- Pacific Region represents many Polynesian cultural communities, and The Native Hawaiian Community has a government-to-sovereign relationship with the USG
- Uniqueness of our Tribal/Indigenous Partners:
  - They have **Homelands** *within* **the Mainland** and territorial domains of the U.S., yet they are not "local" by any standard, but are rather *nation-to-nation* or *nation-to-government* partners though outside of Dept of State (DOS) level definition of "international"
  - They are "international" in the context of our differing customs, laws, and scientific approaches to comprehending our shared Earth.
  - In light of this, they are a highly special and unique Core Partner



### 遊











## **NWS** has many Tribal & Indigenous Accomplishments in All Regions...

The following slides highlight successes by Region... each success is **built from** vears decades of persistent relationship building





We conclude with our persistent challenges, along with our viewpoints on potential opportunities to remedy them

O le ala i le pule o le tautau – (Samoan) for "The path to leadership is service"

### ž

# **Successes in Pacific Region**



IDSS for Moananuiākea voyage which is of profound cultural significance to all Pacific cultures – unifying them to their ancestral connection with the Earth/Sea, and educating the next generation of youth on their "lost" cultural nautical miles the during 47-month circumnavigation of the Pacific traditional Polynesian bv voyaging canoes Hōkūle'a and Hikianalia. It will cover 36 and countries archipelagoes, nearly 100 indigenous territories and 345 ports.

Supporting the Pacific Islands Regional Collaboration Network Pilot Project, Keaʻahuli O Panaʻewa. NOAA and the community are working ogether to co-produce a polyforestry dashboard. Working with the community to determine the type of weather and climate data/products/services they would need in this "dashboard". **These tools**will help the community build food security and resilience as the climate in changing.

PR (WSO Pago, Pago) working with USGS



Translation of Samoa language to enhance NWS' services, partnerships and outreach in the South Pacific









K^>









## **Successes in Western Region**

WFO - Flagstaff deployed to the Navajo Nation EOC in January 2023 in support of record snow.



WFO - Flagstaff briefed Navajo Nation President Nez weekly during the 2021 monsoon season. Weekly IDSS emails are sent to the Navajo Nation EM, who forwards it to 110 chapter houses.







WRH has funded attendance to several key conferences



WFO -Spokane supports
"Tribal Coalition
Meetings" & Engages in
tribal health















# **Successes in Eastern Region**



The Tribe purchased additional water gauges that they will own and operate. GSP Senior Service Hydrologist **Joshua Palmer** was contacted to support the tribe in identifying locations for these gauges so that they can be of best use for flash flood operations for WFO GSP. They also discussed the importance of rain gauges upstream in the Smokies accurate precipitation get measurements.





## Education +

Outreach: The EMs are aware of the standing offer for WFO GSP to support outreach and talk "science" with tribal youth. Trisha also explained that NWS meteorologists often do curriculum-geared weather and safety school talks, and that WFO GSP would be thrilled to add Cherokee Central School to the list of school outreach activities.

Eastern band of the Cherokee Indiana ER (WR + SR)



















# **Successes in Central Region**





WFO ABR was instrumental in having a "hail swaths/rotation" tracks algorithm developed to specifically benefit tribal partners



Wind River Reservation is home to the Shoshone and northern Arapaho Former WCM Tim Troutman worked for decades. The Reservation became StormReady and Weather-Ready Nation Ambassadors



Tri-Ute Tribe (Utah, CO) – Climate Resiliency Workshop with NWS Grand Junction (2023)



### IDSS highlights:

- Long-term recovery (winter)
- TCU IDSS for closures
- Mock Wx exercises with Tribal EMs

### Outreach highlights:

- Several K-12 tribal schools
- Standing Rock Sioux Tribe (Skywarn/Spotter/WRNA)
- Sitting Bull College engagement
- Fort Berthold Reservation is a COOP observer

K^>

# **Successes in Southern Region**



Presented on behalf of NOAA at a water-centric workshop, gaining a lot of wisdom on how to increase NWS' hydro services

NWS' participation in this meeting led to the creation of a NWS subcabinet of operational hydrology.

Important to note: Weather and climate are largely where we "engage" with tribal and indigenous partners, however, in water we have more potential for "costewardship" which has a higher bar for agency tracking, observation and reporting.

In both we may gain Indigenous Knowledge, which needs to be protected.



Long-term engagement and adaptation of established NWS programs with and for the Isleta Pueblo. Recently conducted environmental preparedness event in which we used our flood model to reach 100s of residents of the pueblo with flood preparedness information



### Outreach:



Southwest Indian Polytechnic Institute (a TCU) visited the WFO to learn more about what meteorologists do and careers in the weather enterprise



WaterAware is NWS Field-driven creation for NWS hydrologists and meteorologists to leverage in connecting with potential "future hydrologists", especially in tribal and indigenous communities.

K^>

on reinstating service to

subsistence, and resilience

regain those who need

AKTV back for safety,

## **Successes in Alaska Region**



First Tsunami Ready Tribal Nation in Alaska (September 2023) – Seldovia Village Tribe and the City of Seldovia became TsunamiReady in Alaska.

Partnered to co learn "Working with Alaska Natives"

AR























# 1. Showing up culturally-appropriate is personally costly to NWS staff

**Context:** NWS is one of the most on-the-ground federal agencies on tribal & indigenous lands. As such "we are often the face of the US Government," which has a documented history of atrocities and violated treaties.

In order to make inroads, NWS staff go above the norm to make "peace" and to gain trust of their tribal and indigenous partners by allocating personal funds (~\$1,000-\$3,000, especially in PR and AR) in order to provide culturally appropriate gifts as a means of national atonement and peace-making.

**Opportunity:** We are working on many fronts with NWS and external partners to support alignment with service duties and charting a better path forward.























### 2. Imbalanced CWA:Tribal Nation/Indigenous Community Ratios

**Context:** On average there may be 1-2 tribal nations or indigenous communities per County Warning Area (CWA), yet there are significant disproportions which are most evident in Southern Region (WFO Norman has 22 tribes, and WFO ABQ has 19 Pueblos, and also all of Alakska Region).

**Opportunity:** We have internally advanced ideas to rebalance the NWS office with Tribal nations, which includes novel ways to recruit a "Tribal Liaison" to support NWS during times of Tribal Council or Tribal EM turnover.













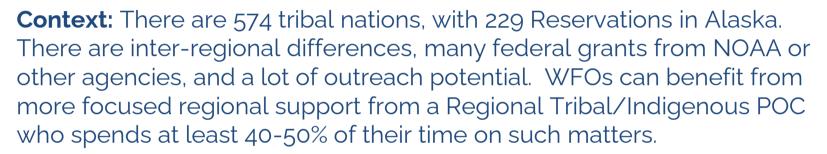








## 3. Regional Differences and Nuances



Challenges & Opportunities in Operations

Opportunity: We advanced recommendations to have a "Tribal Liaison" who may reside on or closer to the Tribe than our offices. Such a person could be a "NOAA Affiliate"

























### 4. Inclusion of people from tribal and indigenous lands into the NOAA/NWS workforce (especially in locations near their "homeland")

**Context:** Many TCU's lack a curriculum that makes it possible for their graduates to be hired as meteorologists and hydrologists. This is a significant barrier. Many NOAA and NWS assets are needed to discuss and to resolve this, else we will hit a "bottle neck" in hiring "local" for tribal and indigenous locations.

**Opportunity:** We continue to work on education and outreach, and identify paths to support TCU graduates in having a hiring-path into federal service, namely at NOAA/NWS.

























### 5. Sparse Radar coverage due to complex terrain and sovereign rights

**Context:** As tribal nations have gained NWS' trust, there is an increase in our "science and service". Many tribal nations are located in complex terrains or highly remote locations which lack federal radars. With private sector radars, there may be some tribal lands that gain more coverage, but gaps will remain.

**Opportunity:** We advanced considerations for placing radars in several locations in the CONUS and Alaska.

























### 6. Inclusion & Protection of Indigenous Knowledge

**Context:** Indigenous Knowledge is "sacred" wisdom about the earth. It is given optionally from an Elder to those whom have earned their trust. The NWS is earning that by virtue of long-standing partnerships, even prior to current executive requests for more tribal engagement. However, Congress recently denied protection of Indigenous Knowledge from FOIA, and this is a vast concern for NWS, especially as we move to a centralized database (NWS Connect) to record such information for local and mutual aid benefits.

**Opportunity:** We are working internally to protect this knowledge on our IT systems.

















# Key NWS Tribal & Indigenous Resources

**NWS' First ever ArcGIS map** for all Operational Units to use for digestible, comprehensive history of "ceded lands" and the location of their K-12/Tribal Colleges and Universities within CWAs (<u>CONUS</u>, <u>AR</u>, PR is in development)

<u>Tribal/Indigenous StormReady/TsunamiReady</u> sites (soon to be included is

Alaska's 1st TR community)

NWS Tribal & Indigenous Team intra-net site

**NOAA Tribal Resources** 





## **NWS' Tribal & Indigenous Teammates**



(alpha order by first name)



### **Alaska Region**



Aviva Braun (WCM, Anchorage) Michael Mercer (ESSD Chief)



### **Central Region**



John Paul (JP) Martin (WCM-Bismark)







### **Eastern Region**



Trisha Palmer (WCM, Greenville-Spartanburg)



### **Pacific Region**



Elinor Lutu-McMoore (MIC/WCM, WSO Pago Pago)











### **Southern Region**

Amanda Roberts (SR Hydrologist, Lower Mississippi RFC and SR Tribal Lead)

Chris McKinnev (Regional WCM)

Rick Smith (WCM, Norman)

Scott Overpeck (WCM, ABQ)

### **Western Region**

Andv Brown (WCM, Spokane)

Bianca Feldkircher (IDSS Program Specialist)

Tony Merriman (WCM, Flagstaff)

### Headquarters

Becky Lizama - NOAA Senior Tribal Liaison

Wendy Marie Thomas - NWS lead

Chris Maier - NWS co-lead

John Sokich – NWS Congressional guidance

Pat Brown – leads Diversity Council on Tribal affairs with Regional POCs Sabrina Johnson – educational outreach & connection to Tribal Colleges

and Universities (TCUs)