Ute Mountain Ute Tribe *Climate Change and Environmental Programs Perspective*

For the 2022 Four Corners Air Quality Group



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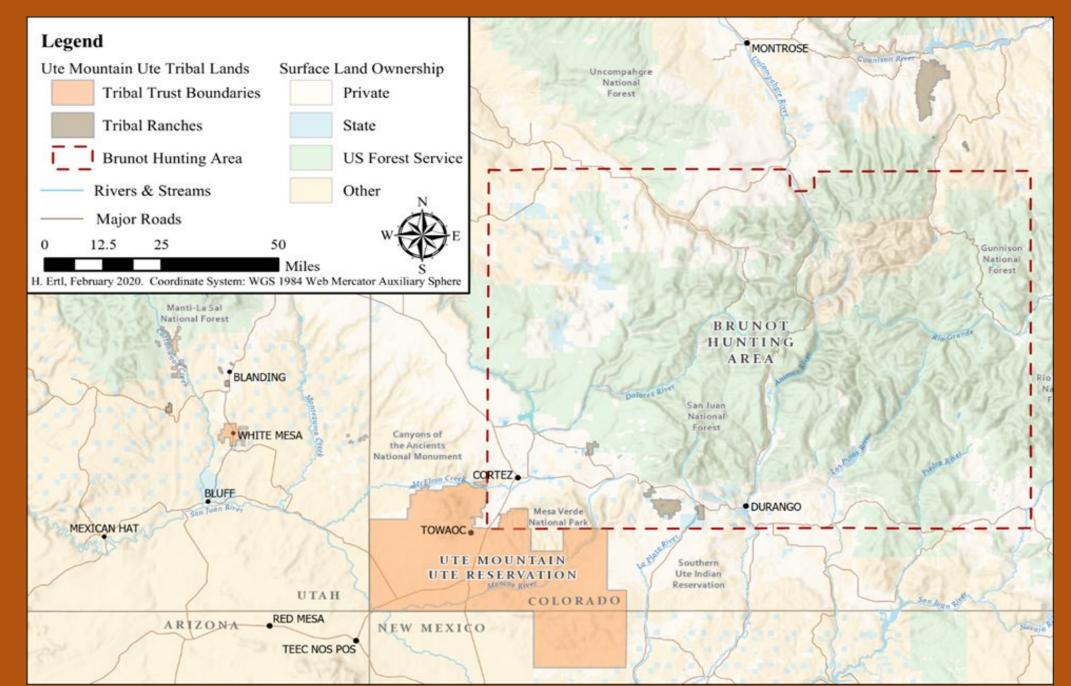
The content of presentation

• Climate Change -

Air Quality Program – general
 Environmental Justice Grant



Ute Mountain Ute Tribe Map



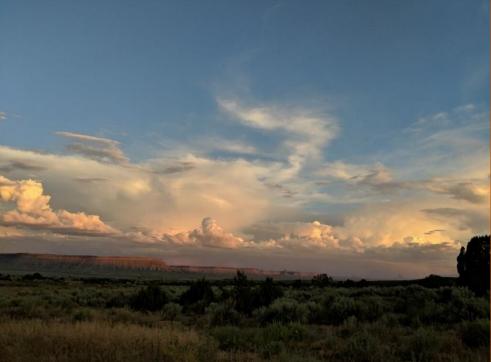
Climate Change



Reasons why the Ute Mountain Ute Tribe initiated a climate change program. Elders asked natural resource managers questions like, "What happened to winter?" "How come it doesn't snow like it used to when we were kids?"

 Community members were observing:
 Warming temperatures during all seasons
 Less precipitation
 Long-term drought conditions
 Changes in seasons
 Diminishing rangelands

and increasing invasive species



Vulnerability Assessment

Summer is now

"k'túrúchí" (too hot)!

"The old people went by the weather. The climate has really changed. You expect heat in summer; winter is cold. That's how I grew up. Winter was long back then. The snow no longer comes in October. Sometimes, we don't have snow in December. It used to snow into April. A long time ago it used to rain a lot and we played in the mud. The frogs would come out of nowhere. We don't see that rain anymore."

~Ute Mountain Ute Elder

The climate in this region has warmed 2 degrees Fahrenheit (°F) in the last century. By the middle of this century, the region is expected to warm an additional 3 to 8°F. Climate change is expected to worsen impacts and increase risks to our people and natural environment in this region. UMU people depend on natural resources to maintain our cultural practices, identity, and sovereignty as a people. These warmer temperatures have caused reduced precipitation, changes in seasonality, and exacerbated health concerns such as asthma and cardiovascular disease, among other things.

Ute Mountain Ute Climate Action Plan 2020

Socio-economic Impacts were studied



Heat stress

- Elders spending less time outside
- ♦ Lack of air conditioning poses added health risk
- Impacts participation in traditional activities, ceremonies

Health

- Increase in respiratory conditions (e.g., asthma)
- ♦ Increase in allergies

Economic impacts

- ♦ Higher electric bills under extreme heat
- Higher price of produce during drought
- Impacts to Farm and Ranch enterprises and Ranching Community

Recreation impacts

- Reduced fishing and swimming opportunities
- Reduced gardening activities



 "Our mountain [Ute mountain] used to have water everywhere. Springs, everywhere. There's no water up in the mountain...we used to have lakes and ponds for the animals. And, now they're dried up on the mountain."

Reduced Water Quantity and Quality Reduced water availability
 Drivers: climate and diversions upstream
 Impacts:

 Dry streams
 Ute Mountain springs, lakes, ponds dry

Mancos River Canyon

"This used to be a big ol' lake here ...now it 's all filled with silt." -F. Ketchum, Sr., UMUT Biology Technician



Impacts to Traditional and Cultural Activities

Reduced abundance and distribution:

- Cottonwoods, willows

Changes in seasonal timing and production:

- ♦ Oak trees
- Pinyon pine nut
- Chokecherries

Community members are going outside tribal lands to collect culturally important plants.

	Number of times
Plant Type	discussed
Changes in Abundance, Distribution	45
Chokecherries	25
Fruit	20
Potatoes	16
Onion	15
Changes in Phenology	14
Pinyons	13
Cedar	5
Late freeze/frost	5
Cottonwood	4
Indian Tea	4
Squawbush berries	4
Buffaloberries	3
Carrots	3
Sage	3
Strawberries	3
Willows	3
Acorns	2
Mint (Peppermint)	2
Cabbage	1
Cattails	1
Gooseberries	1

Completed Climate Action Plan in 2020

NÚCHÍU UTE MOUNTAIN UTE TRIBE CLIMATE ACTION PLAN



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Renewable Energy:

Community and Commercial Solar Projects

- Funding Available from DOE
- Partnering with GRID Alternatives
- 2020 1 MW Community Solar Project off set community electric bills
- 2022 160 KW Community Rental Properties –Saving Housing Authority Funding
- 2022 White Mesa Government Buildings Project offsetting electrical demand for facilities
- ✤ 2022 1GW Solar Mountain Project working on NEPA process
- ✤ 2022 Beginning New Mexico Solar Project 200-400 MW



Renewable Energy:

Commercial Projects

- Planning Stages for Closed Loop Pump Storage with capacity for 600 MW of energy storage
- In the Grant process for Dan Israel Memorial Hydroelectric Project – a power generating energy dissipation structure
- Farm and Ranch Enterprise began first of ten microhydroelectric generators within water infrastructure



Air Quality Program

Monitoring Instruments



White Mesa Community and the White Mesa Mill Utah





White Mesa Community Environmental Justice Grant

White Mesa Community is 5 Miles from White Mesa Mill Tailings Pond 4 - over half is uncovered in photo on left



Photo by Tim Petersen



Environmental Justice Grant-Small Grant - \$70K Community Involvement

Grant awarded to the Environmental Programs Department (EPD) to study environmental and other effects in Community.

Working with Green Action – a small non-profit grass roots group, Grand Canyon Trust, and Albuquerque Area Southwest Tribal Epidemiological Center

Concerned Citizens of the White Mesa Community – grass roots group composed of Tribal Members for assisting with educating the rest of the community.

Photo by Tim Petersen

Spirit Walk October 22, 2022 at 11 am at White Mesa



Protecting Our Communities, Health, Environment & Indigenous Sacred Landscapes

Saturday OCt 22 2022 · 11am MDT

White Mesa Community Building

ESA CENTER

> Rally starts at 11AM MDT, followed by the spiritual and protest walk to the White Mesa uranium mill.

> DIRECTIONS: The White Mesa Community is between Bluff and Blanding. The community center is located slightly off Hwy 191, on the west side of the road, behind the gas station. Look for a large building with "White Mesa Community Center" written on the side.

SPONSORED BY White Mesa Concerned Community and the Ute Mountain Ute Tribe

CO-SPONSORS: Bears Ears Inter-Tribal Coalition, Greenaction for Health and Environmental Justice, Uranium Watch, Indigenous Environmental Network, Grand Canyon Trust, Multicultural Alliance for a Safe Environment, Southern Utah Wilderness Alliance, Living Rivers, HEAL UT, SLC Air Protectors, Utah Chapter of the Sierra Club, Great Old Broads for Wilderness, National Parks Conservation Association, PANDOS

Wear comfortable shoes and bring plenty of water!



Thank You

