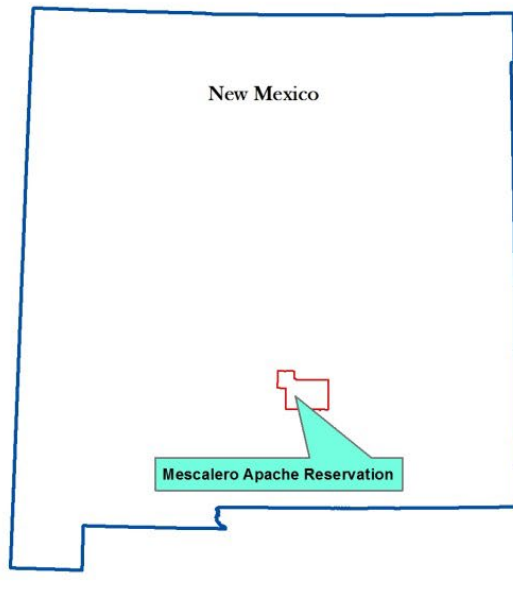




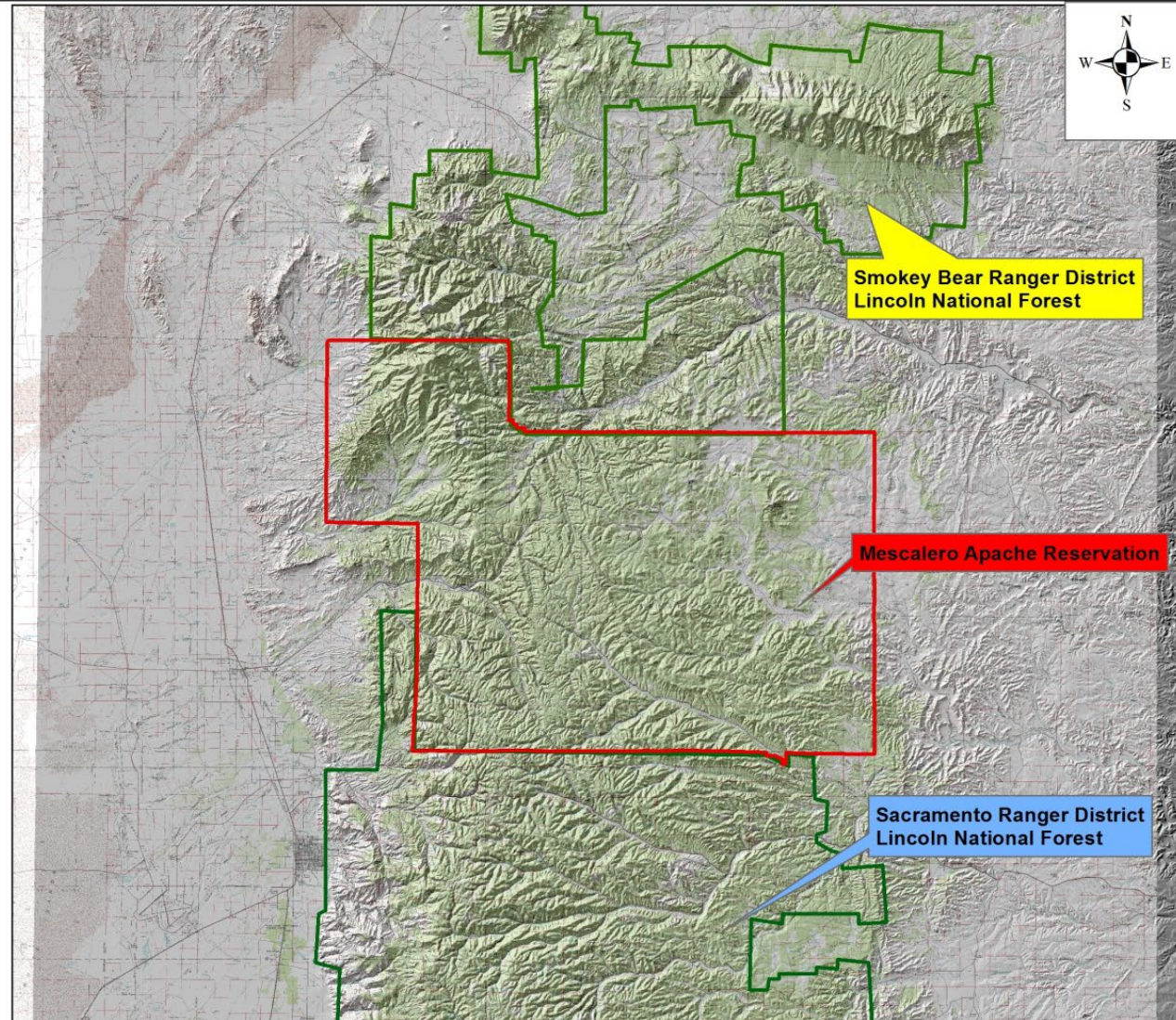
Mescalero Apache Tribe

Ways of Seeing &
Stewardship of
Tribal Lands Into
the Future

Mescalero Apache Reservation, ~460,000 Acres



**Mescalero Apache Reservation
Location Map**



Legend

- Reservation Boundary
- Lincoln National Forest



View on the Border

Mescalero Reservation

Lincoln N.F.



Elevation ranges from
5,000' Three Rivers area to
12,003' Sierra Blanca peak

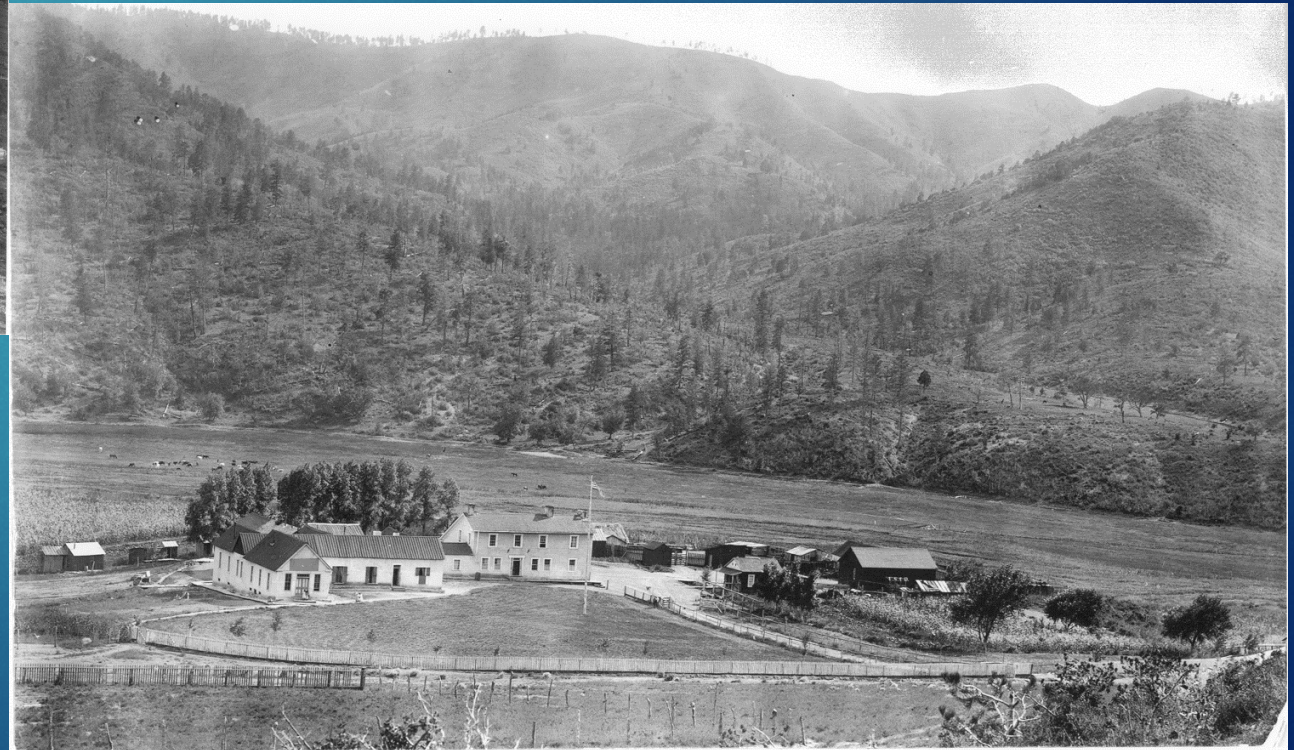


Many Changes in our Landscape...



Photos taken circa 1900, when the floodplains where the main town of Mescalero is now located were largely uninhabited.

Please take notice of the forest density on the slopes.

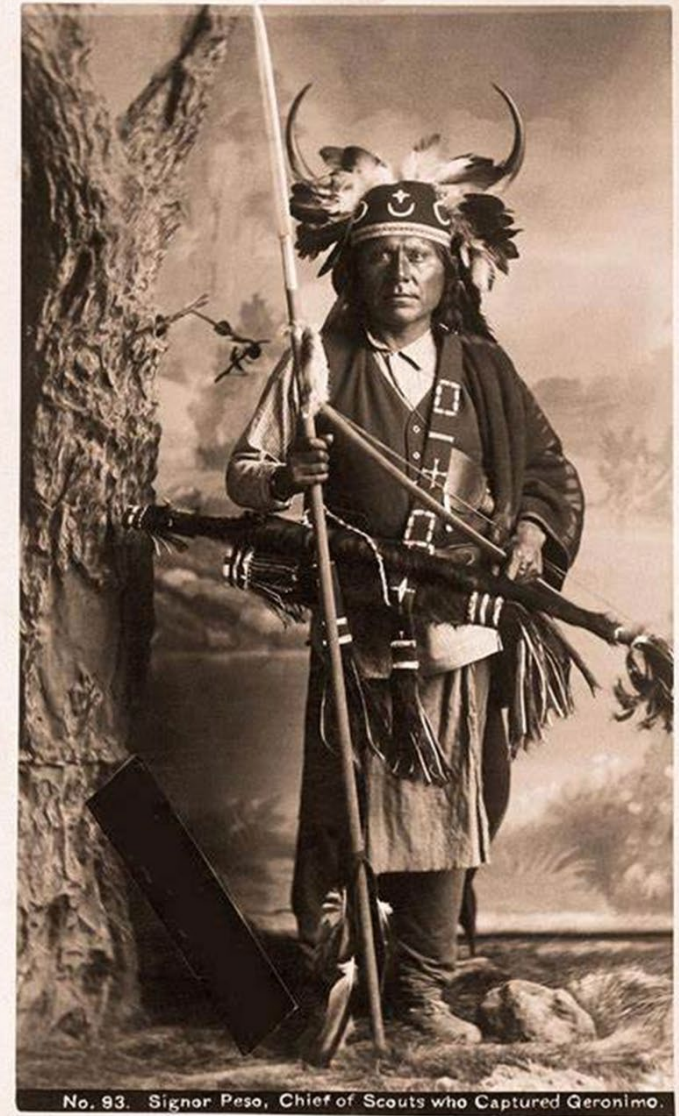


Village of Mescalero 100 Years Later

- Draining of wetlands & installation of tile drains in 1930's Civilian Conservation Corps (CCC) project
- Development into floodplains and wetlands
- Increased tree densities on slopes around Mescalero
- Introduction & proliferation of non-native species, such as Siberian Elm

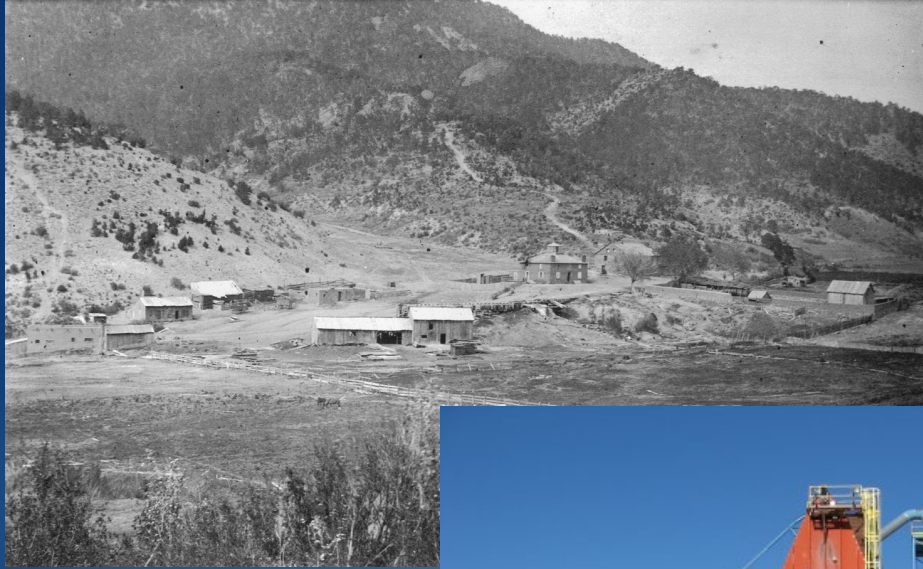


Mescalero Red Hats – Legacy of “Fire Warriors”



No. 83. Signor Peso, Chief of Scouts who Captured Geronimo.

Long History of Commercial Harvesting

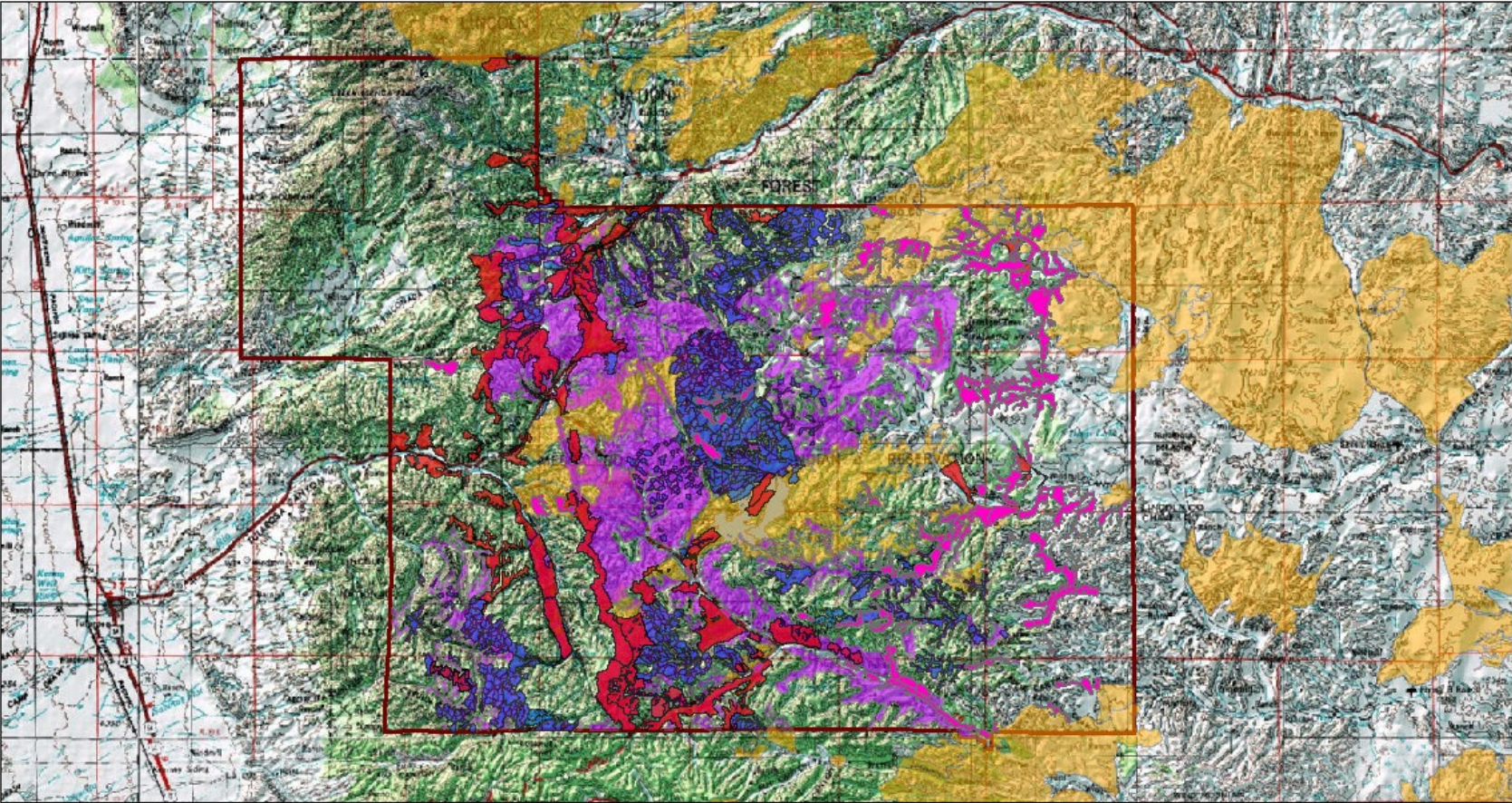


Mescalero Forest Products

An Enterprise of the Mescalero Apache Tribe

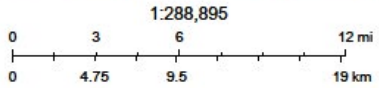
More Recent History of Forest Restoration Work

Forest History



11/7/2019, 2:26:47 PM

- NRCS_EQIP_2011
- WUI Treatments
- Post-1995 Logged and Thinned
- Logging History
- Fire History
- Pre-1995 Logging and Plantation Thinning
- Reservation Boundary



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Commercial Harvest as First Line Management Tool



Uneven Aged Management is the Preferred Treatment



Even-aged Management Used to Treat Dwarf Mistletoe Infection



Follow Up With Tribal Thinning Crew

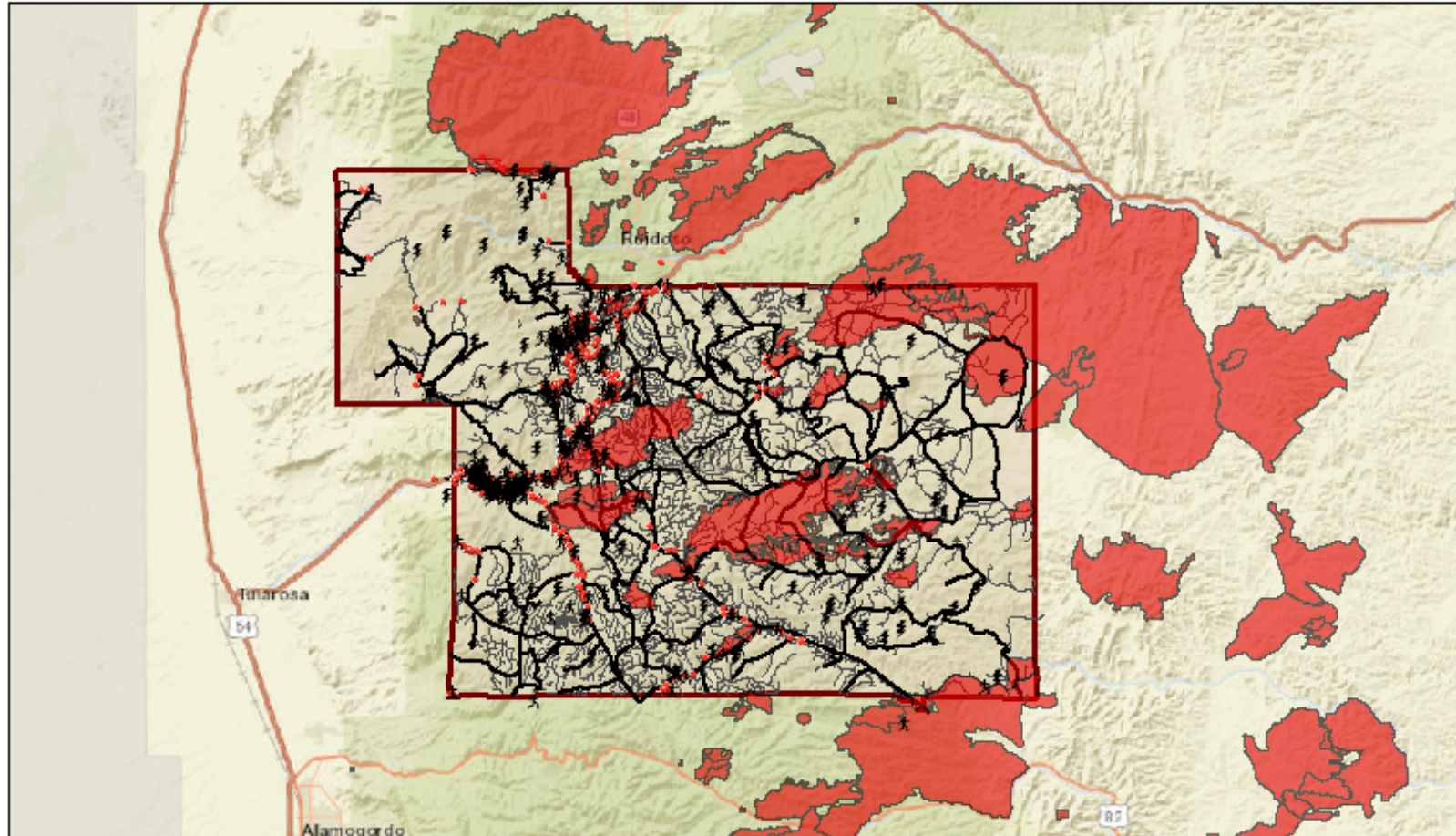


And Prescribed Burning



We Have Our Share of Wildfires

Fire Start History



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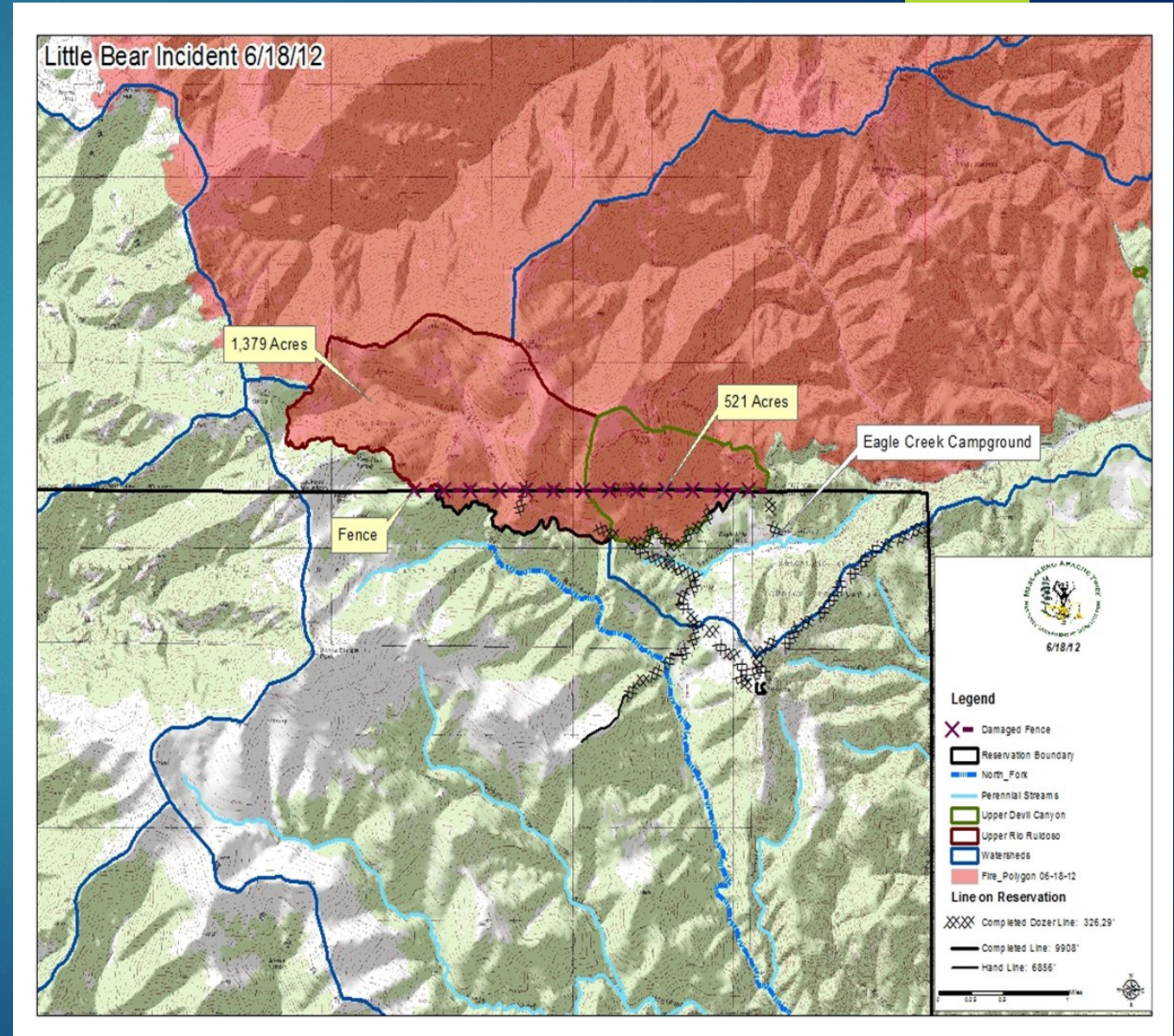
- Fire Starts 2016
- Fire History
- Secondary Roads
- Human
- Structure
- Reservation Boundary
- Natural
- MAR Roads

1:513,593
0 3.75 7.5 15 mi
0 5 10 20 km
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

2012 Little Bear Fire, Occurred Along the Boundary with Lincoln Natl Forest



Total Fire Size - 44,330 acres,
Only 357 acres on MAT lands



When the fire reached Tribal lands it dropped to the ground.

Bucket fills at Eagle Lakes.



Ski Apache – Removal of Burned/Hazard Trees From Little Bear Fire

Ponsse Bear 8-wheeled Harvester on 65% slope



Soldier Canyon
Fire, June 2018,
Approximately
1,500 Acres Burned
Within Main
Community of
Mescalero



Problems With Post-Fire Flooding



And Communities Located In Floodplain



Whitetail Fire March 2016, Cool Surface Fire



Ultimately,
we want to
restore historic
fire regimes.

NAU research conducted in 2015:

- Mean fire interval 2-17 years
- Fire scars found in winter season 28% (Winter fire scars suggest human set fires; lightning in SW occurs primarily in the monsoon season.)

Does fire regime in Native American lands match non-tribal lands?

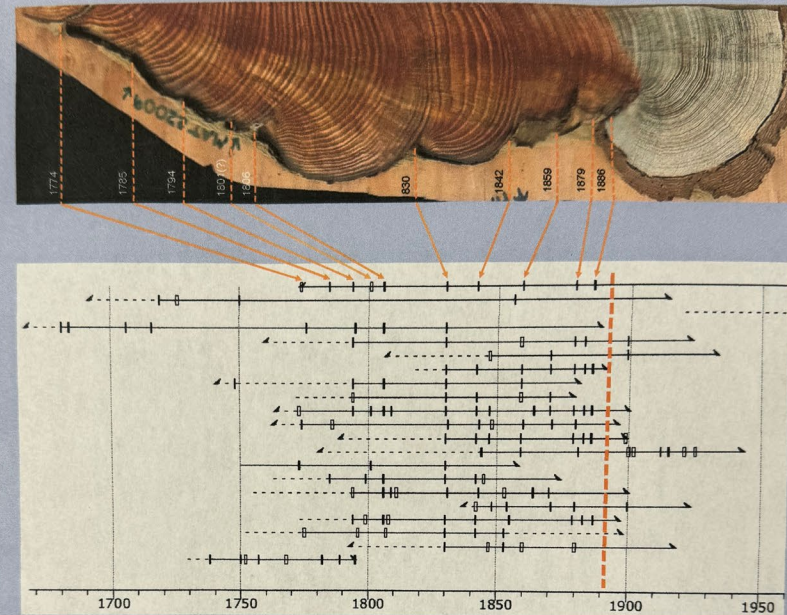


Fig. 2 Fire years (vertical lines) recorded by fire scarred trees in ponderosa pine and mixed-conifer sites at Mescalero Apache Indian Reservation

Methods

In the summer of 2015 we collected 164 fire-scarred tree samples from 7 sites at Mescalero Apache Reservation.

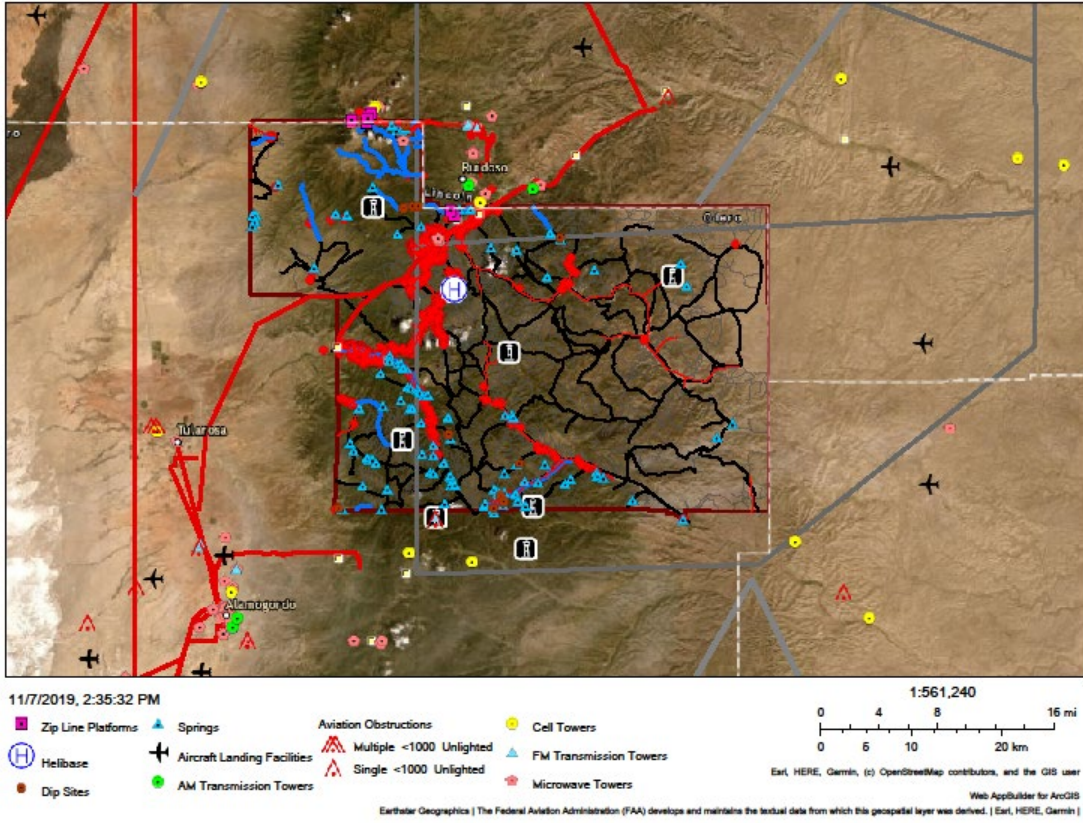
Preliminary Results

From the crossdated samples, we found:

- The oldest sample dated from 1405 – 1905
- The mean fire interval is 2-17 years
- Fire scars found in winter season 28 % *
- The declining of fire events in the early 1890 is consistent with US fire suppression policy established in 1885.

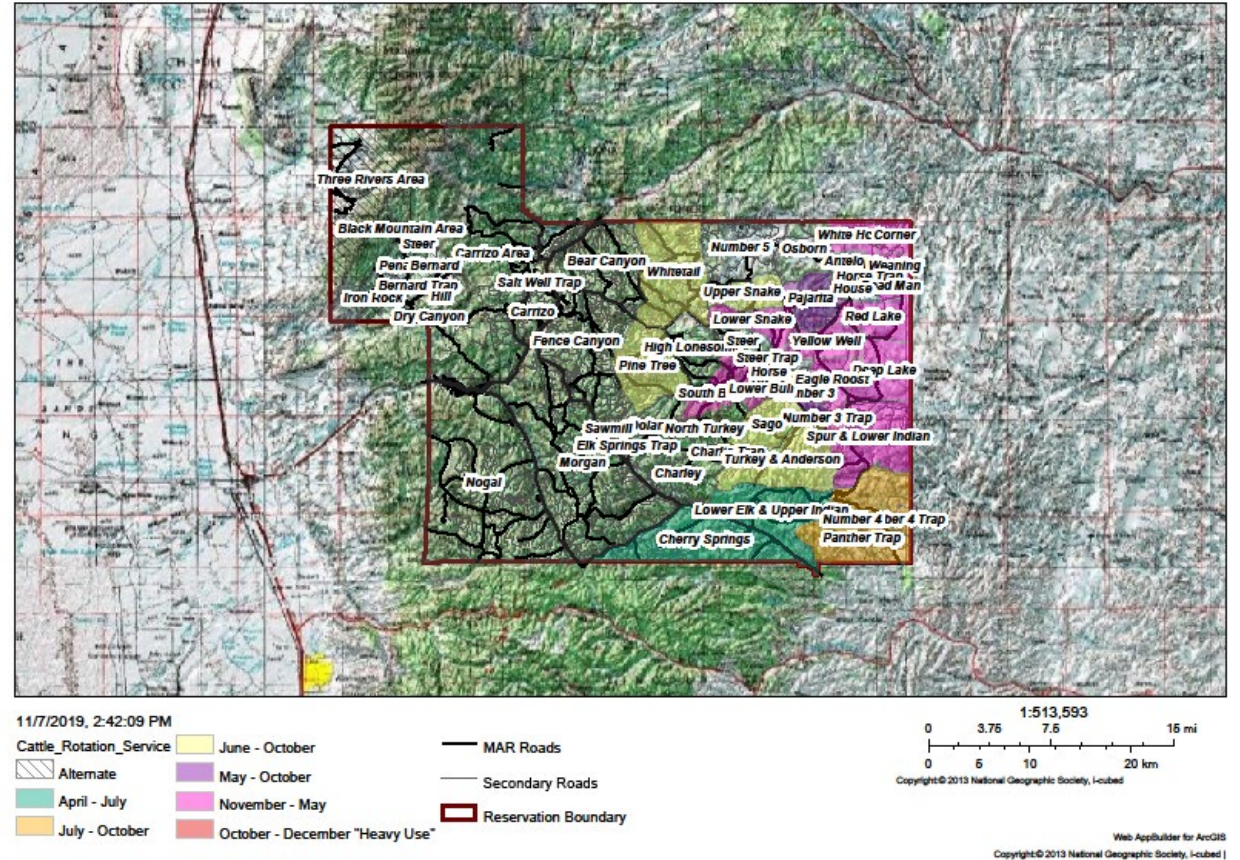
*Winter fire scars suggest human set fires; lightning in the Southwest occurs primarily in the monsoon season.

Aerial Hazard Map



Coordination of Efforts

Cattle Rotation





Surveys for
T&E Species,
MSO &
Sacramento
Mountain
Salamander



Involving Youth Programs in Restoration



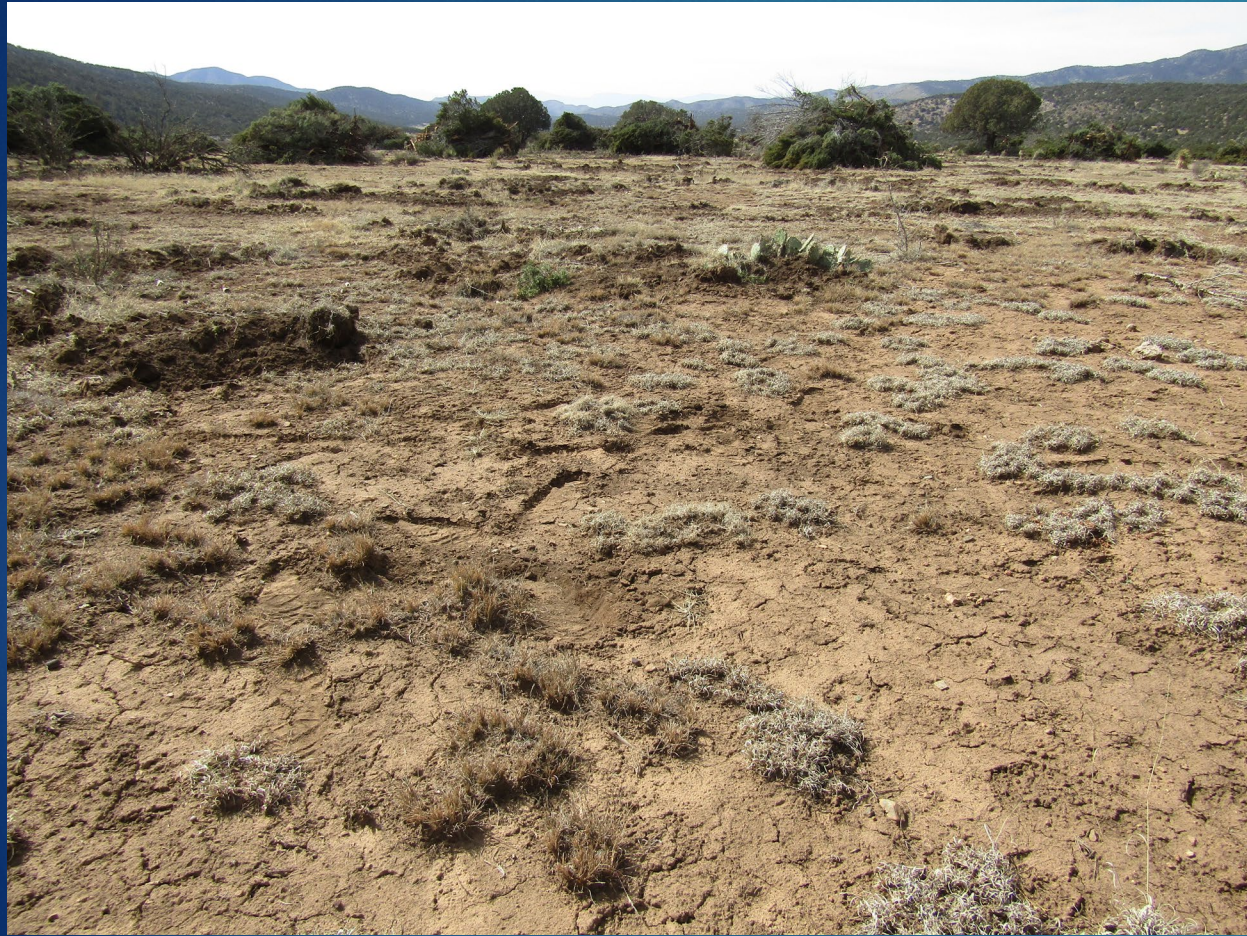
Growing Our Future



Rangeland Brush Management Opening Up Historic Grasslands



Range Seeding After Treatments



Developing Rangeland Water Resources



One Rock Dams & Zuni Bowls



Feral Horse Management



Nonpoint Source Pollution Mgt Plan to Monitor and Protect Surface Waters

Table 4, South Fork, Rio Ruidoso

Reference Reach Field form

Stream Channel Classification Level 11

Stream Type B3

Stream Name: Rio Ruidoso Drainage Area: 5,731 acres Basin Name: Riudoso Watershed
 Observers: Jackie Blaylock, Anna Kanseah, Janice Curliiss Date: 6-20-11
 Location: South Fork Last Camp Site Bankfull Cross Sec. Area: 29.5 sq ft.

Bankfull WIDTH: 27.33ft Bankfull MAX Depth: 2.16 ft Channel SLOPE: 9%
 Bankfull Mean DEPTH: 2.16 ft Flood Prone Area WIDTH: 34 ft Valley SLOPE: 9%
 WIDTH/DEPTH Ratio: 12.6 ENTRENCHMENT Ratio: 1.6 SINUOSITY: 1.0
 D50: 96 mm D84: 230 mm Pfankuch Evaluation: Fair (channel stability)

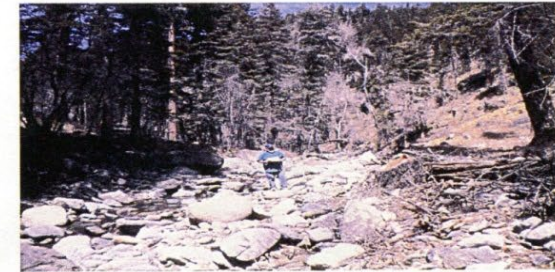
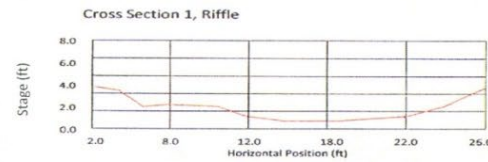


Table 4, South Fork Rio Ruidoso

Reference Reach field form

Stream Channel Classification **Level II**

Stream Type B3

Stream Name: Rio Ruidoso Drainage Area: 5,731 acres Basin Name: Ruidoso Watershed
 Observers: Neils Kaydahzinee/ Kevin J. Buckley Date: March 3, 1999
 Location: South Fork At Last Campsite Bankfull Cross Sec. Area: 45 square feet

Bankfull WIDTH: 22.5 feet Bankfull MAX Depth: 2.5 feet Channel SLOPE: 3%
 Bankfull Mean DEPTH: 2 Feet Flood Prone Area WIDTH: 42 feet Valley SLOPE: 8%
 WIDTH/ DEPTH Ratio: 11.3 ENTRENCHMENT Ratio: 1.8 SINUOSITY: 1.14
 D50: 69.8 mm D84: 287.7 mm Pfankuch Evaluation: Good (channel stability)

Cross Section 1, Riffle

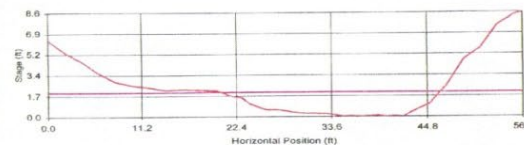
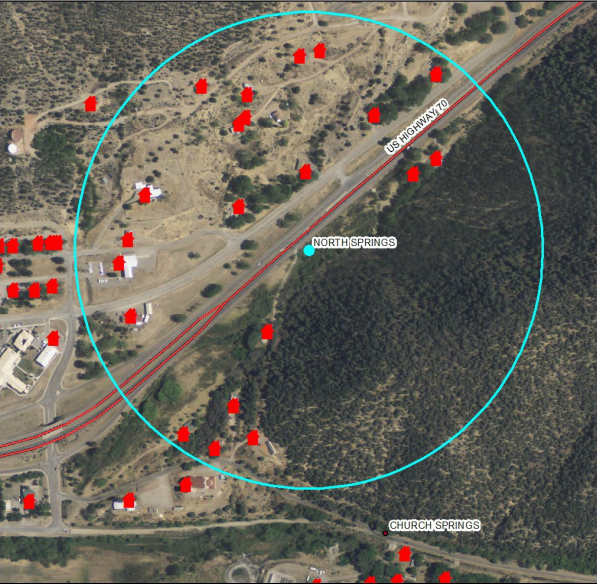


Photo of Cross Section looking upstream.



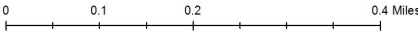
Refer to Source Water Protection Plan to Help Protect Drinking Water Sources

North Springs
Wellhead Buffer Zone

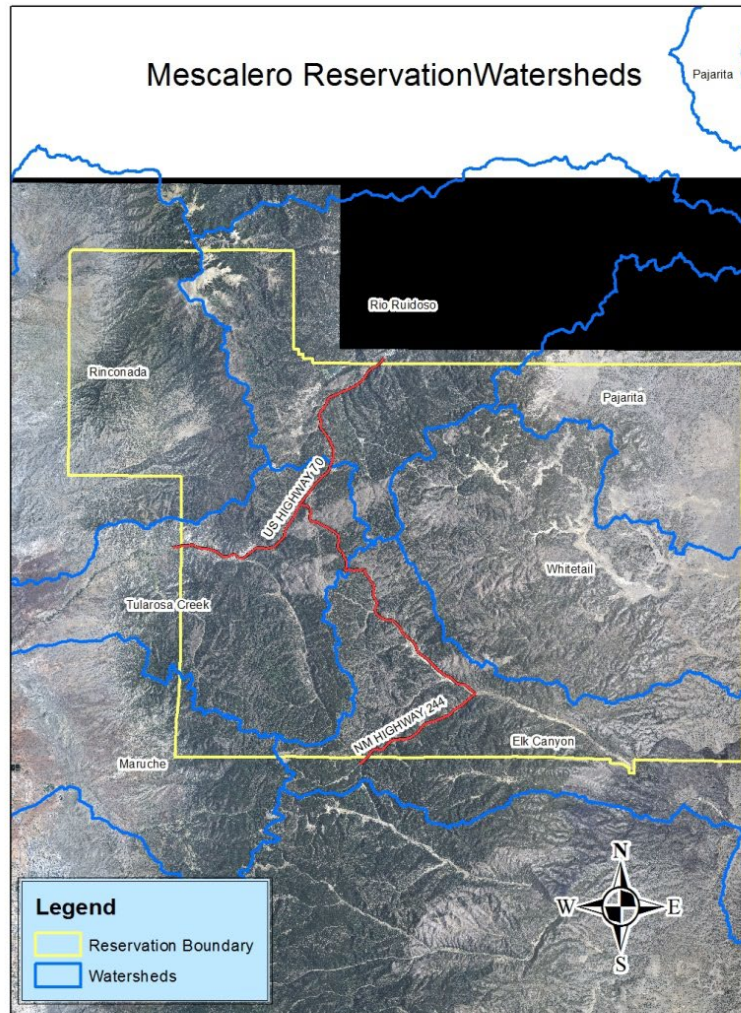


Legend

- Structures
- Springs selection
- buffers
- US 70



Tribal Water Quality Standards Approved in 2012



MESCALERO APACHE TRIBE MESCALERO, NM

ORDINANCE NO. 12-05

WHEREAS, the Mescalero Apache Tribe, an Indian Tribe organized under the Indian Reorganization Act of June 18, 1934 (25 U.S.C. 476) and under its Revised Constitution of January 12, 1965 has full power to act for the Tribe; and

WHEREAS, the Mescalero Apache Tribal Council has the power to act for the Tribe and to represent the Tribe in all matters under powers vested in it by Article XI, Section 1 (i) of the Revised Constitution; and

WHEREAS, the Mescalero Apache Tribal Council has the power to protect and preserve the property and natural resources of the Tribe, and to regulate activities on the Reservation pursuant to the Article XI, Section 1 (c) of the Revised Constitution; and

WHEREAS, the Mescalero Apache Tribal Council has the power to manage or provide for the management of Tribal lands, pursuant to Article XI, Section 1 (b) of the Revised Constitution, and

WHEREAS, the Mescalero Apache Tribal Council has determined that there is a need to protect the Tribe's surface water sources from contamination; and

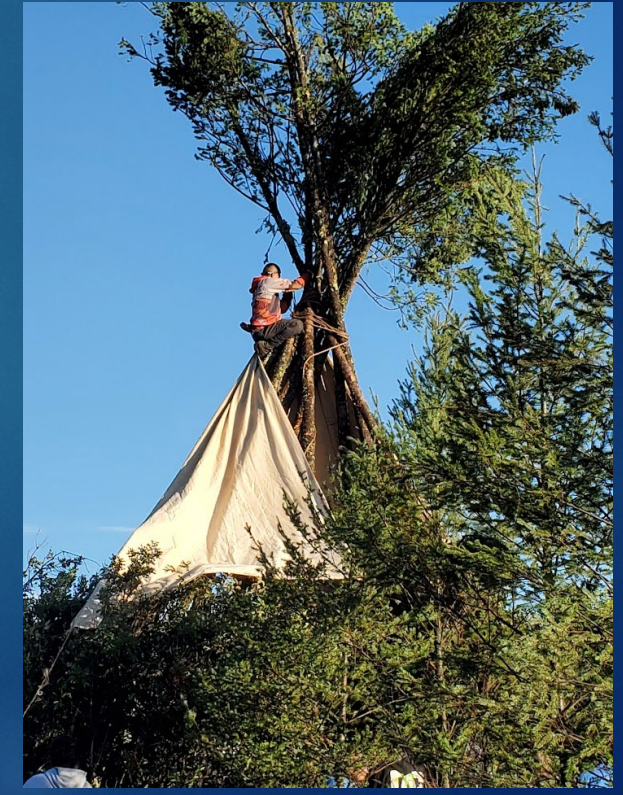
WHEREAS, the Mescalero Apache Tribal Council has determined that the best way to protect the surface water resources of the Tribe is by the enactment of water quality standards; and

WHEREAS, the Mescalero Apache Tribal Council has reviewed the Water Quality Standards, attached hereto as Exhibit "A," and finds that it is in the best interests of the Mescalero Apache people to adopt such Standards.

NOW, THEREFORE, BE IT ORDAINED that the Mescalero Apache Tribe Water Quality Standards, attached hereto as Exhibit "A," are hereby adopted.

BE IT FINALLY ORDAINED, that any and all contrary provisions of the Tribal Code are hereby repealed.

So...What Do We Do or See Differently? Prayers for Mother Earth, NOT Dominion Over Nature.



We Are a Matriarchal Society

Mescalero Puberty Rite Ceremony





All cultures have a story about being gifted FIRE. This is what makes us human. We should respect fire, not fear it.

“I cannot think we are useless or Usen would not have created us. He created all tribes of men and certainly had a righteous purpose in creating each.

Once I moved about like the wind. Now I surrender to you and that is all.”

Geronimo



No. 176—Council between General Crook and Geronimo, arranging terms of surrender in the Sierra Madre Mountains of Mexico.

Capt. Robert Geronimo Nana Lieut. Maus Three Interpreters Capt. Bourke Gen. Crook



For more information, contact:

**Thora Padilla, President
Mescalero Apache Tribe**

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Mescalero, New Mexico 88340

575-464-4494

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