



TSWCD Student Forest Monitoring

2021 Summer Season





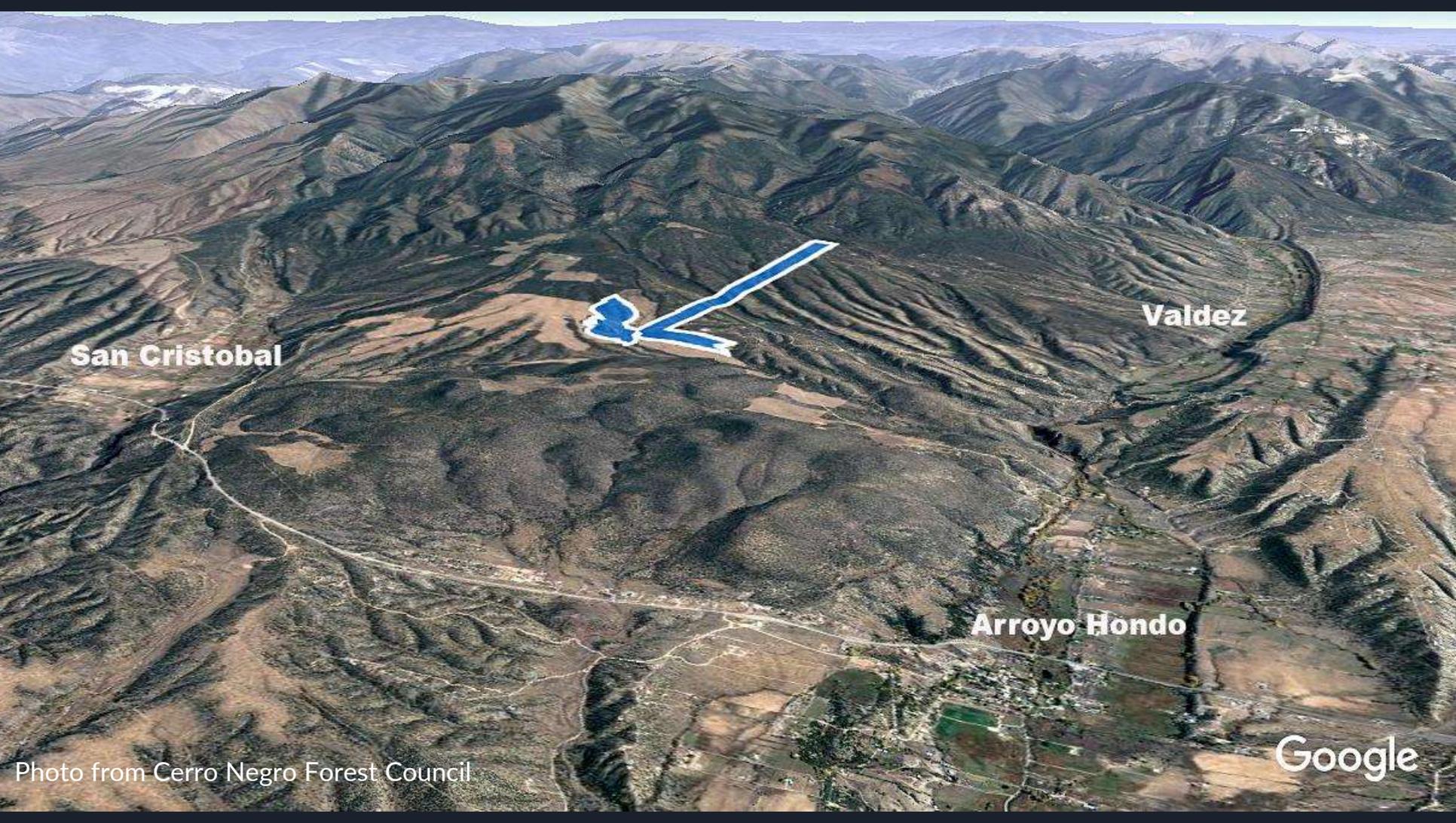
Photo by JR Logan

Pre



Post





San Cristobal

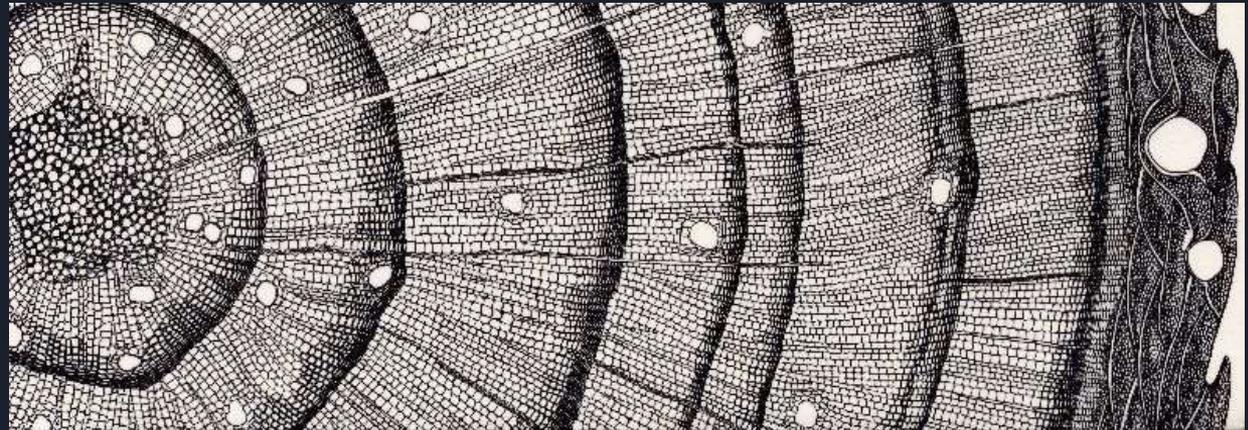
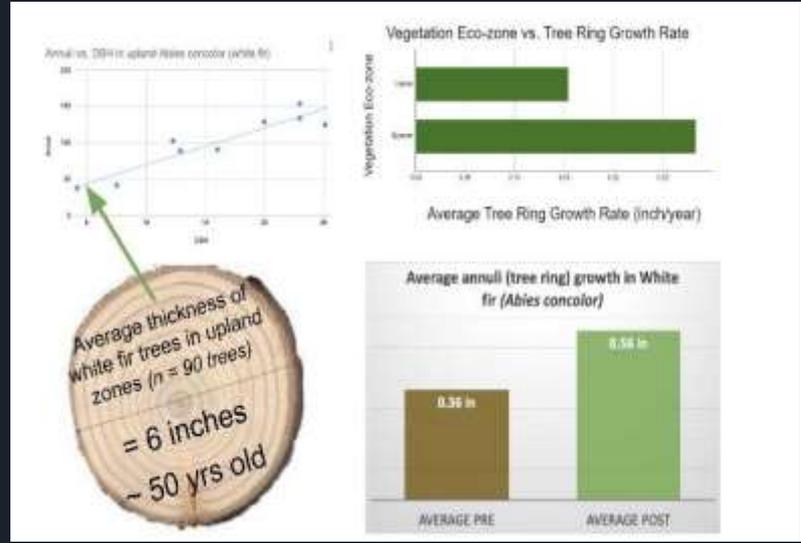
Valdez

Arroyo Hondo

Google

Photo from Cerro Negro Forest Council

Dendrochronology



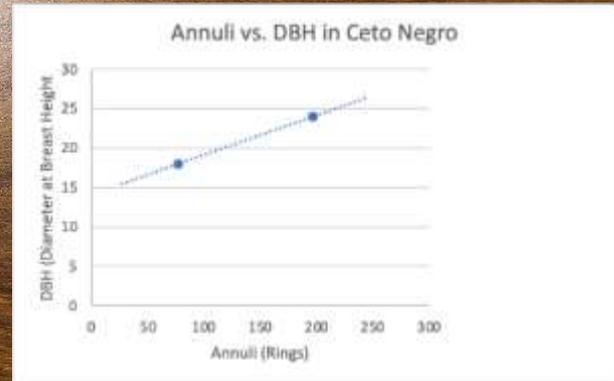
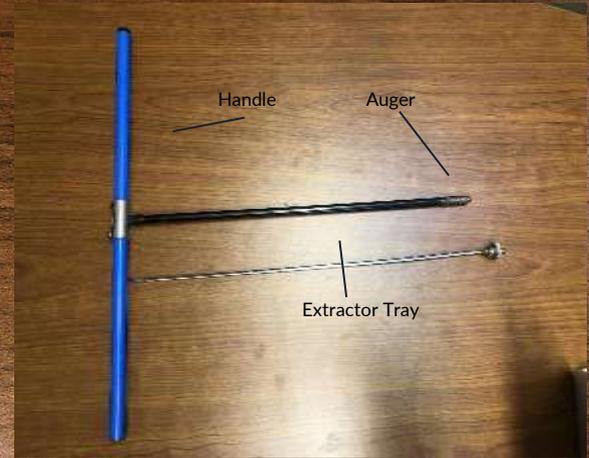


Each is one year

The Core



This Ponderosa was 197 years old.
Height = 50 ft tall, diameter was 24 inches wide.



Dendrochronology

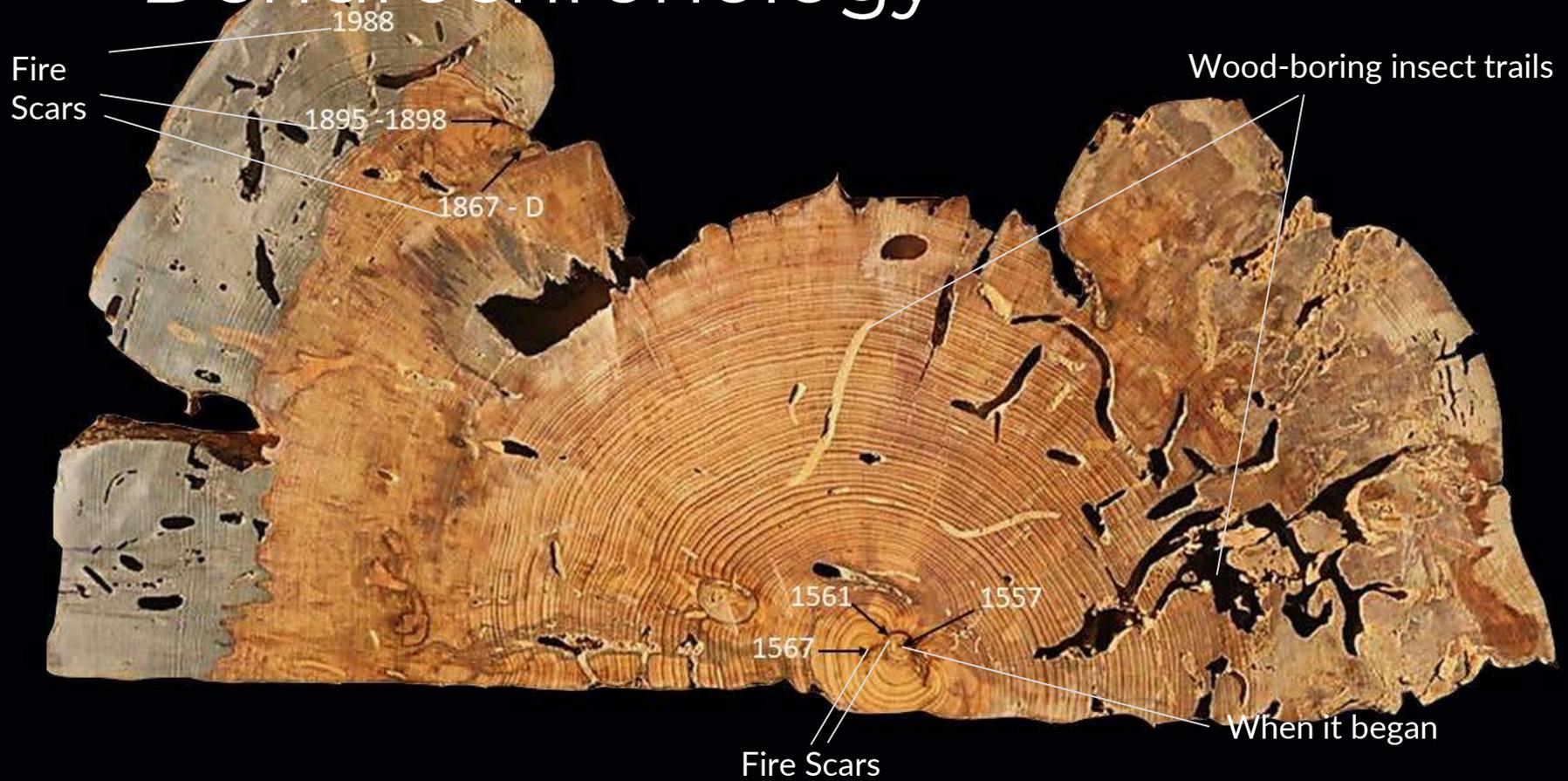
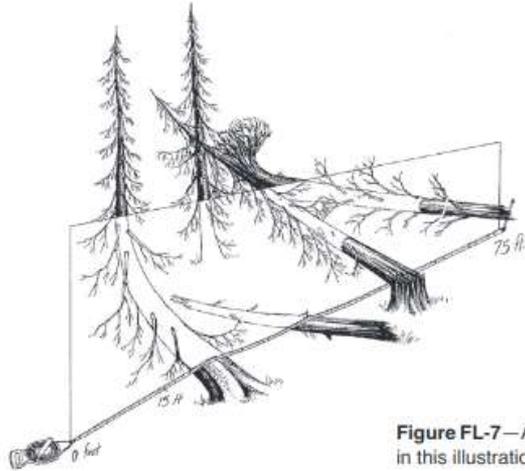


Photo and analysis courtesy U.S. Geological Survey, sample collected by J.R. Logan

Surface Fuels

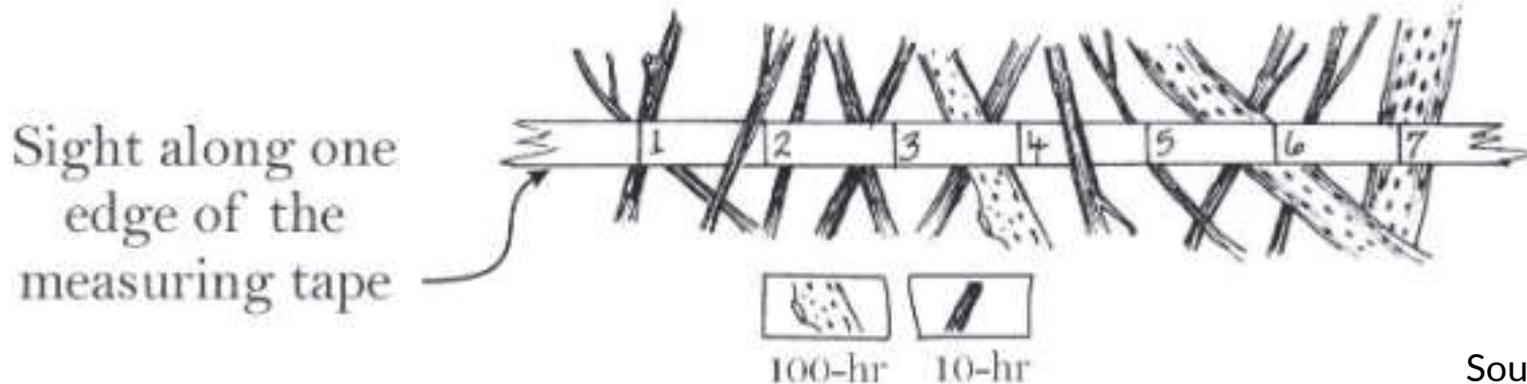


Source: USFS

Figure FL-7—All of the pieces crossing through the sampling plane in this illustration would be considered “down.”

Surface Fuels - Why and What

- We measure surface fuels to provide a forest wide “inventory” of fuels.
- Fuels are measured as 1, 10, 100, and 1000 hour fuels.
- A fuel “hour” isn’t how long it takes a fuel to



Source: USFS

Pre

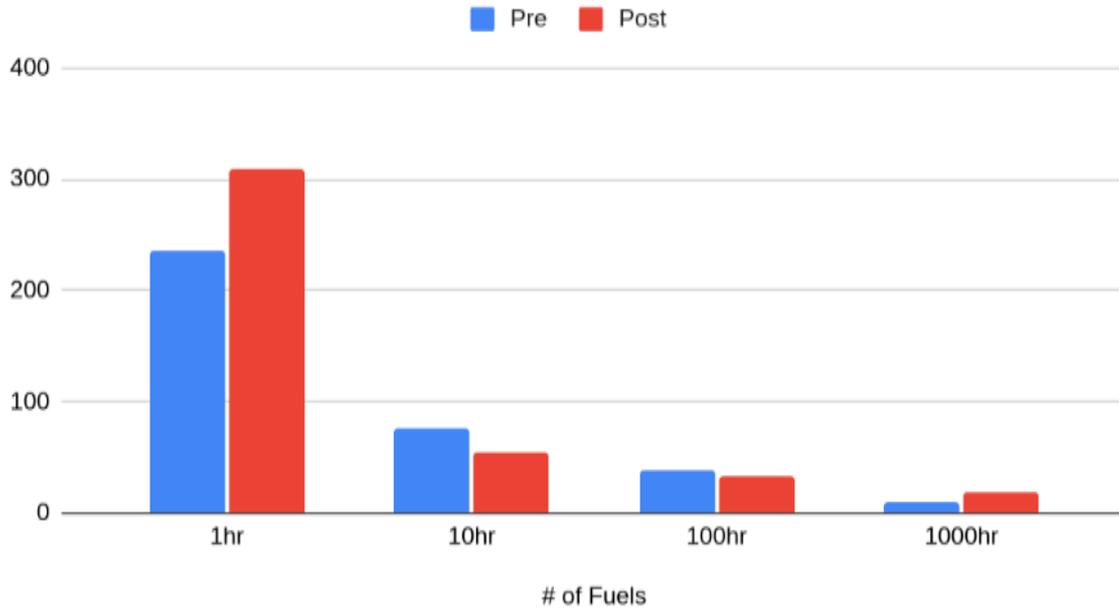


Post



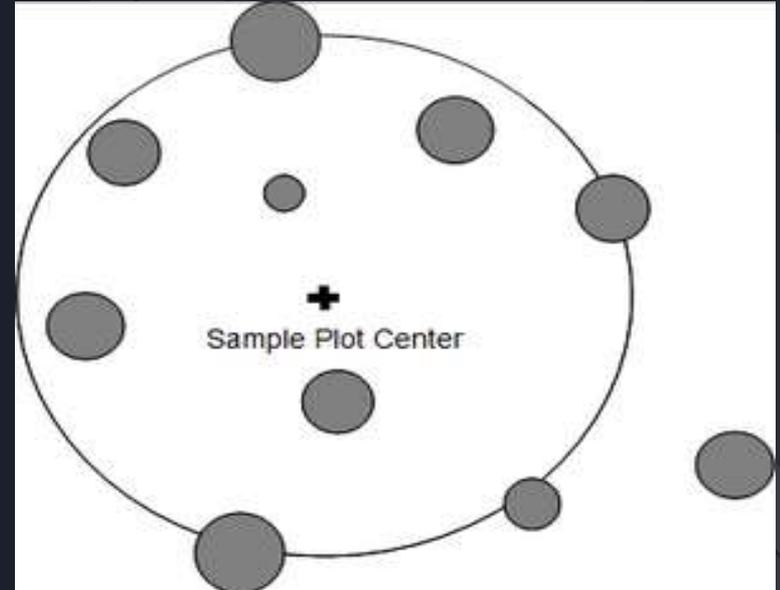
Wait, did surface fuels go up?

ESM01-03 Surface Fuels



- Yes, the amount of surface fuels increase after thinning.
- This can be caused by a lack of mastication or chipping.

Tree Diversity and Density

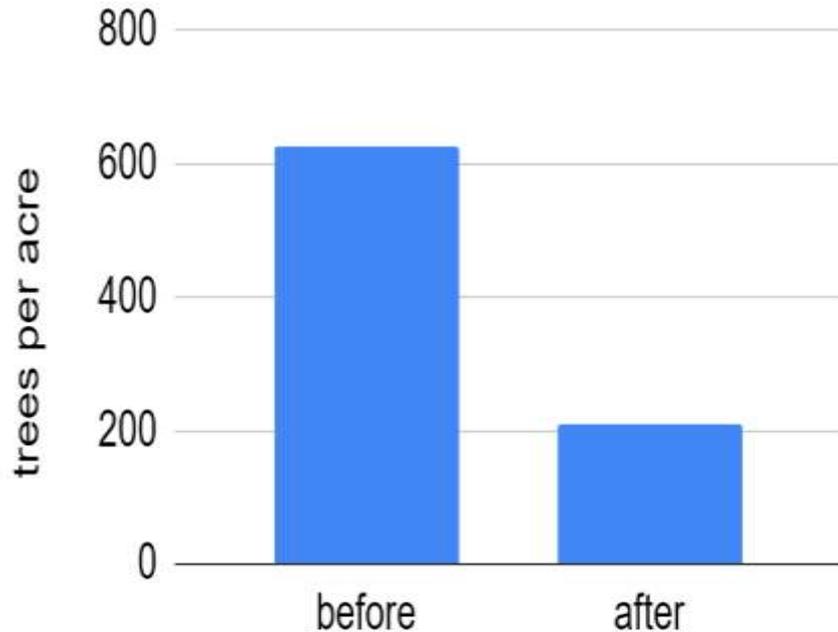


Trees per acre

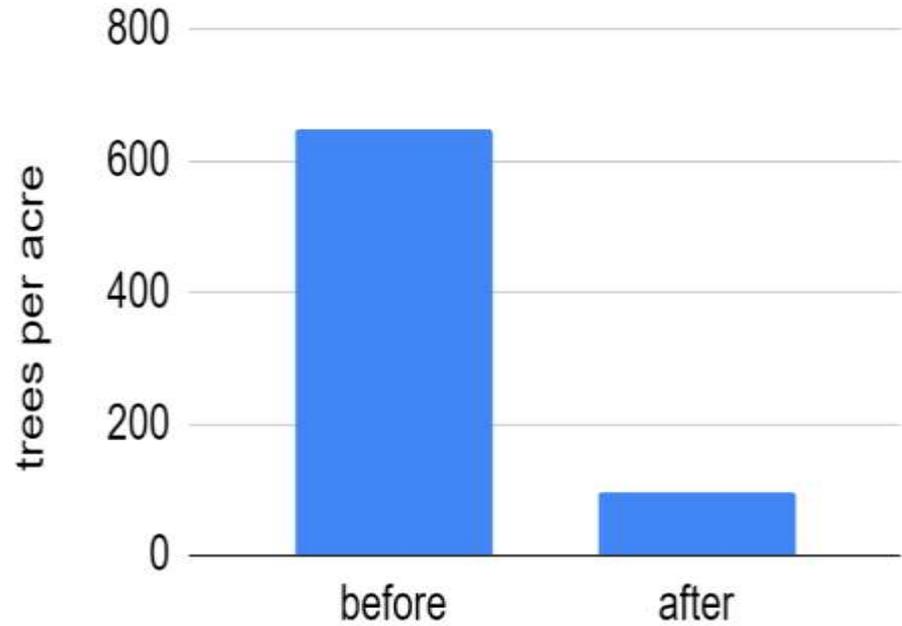
El Salto

Cerro Negro

El Salto thinning project



Cerro Negro thinning area



Tree and shrub diversity

Cerro Negro Project Area		El Salto Project Area	
Scientific name	Common Name	Scientific name	Common Name
<i>Juniperus monosperma</i>	One-seed Juniper	<i>Abies concolor</i>	white fir
<i>Mahonia repens</i>	Creeping mahonia	<i>Acer glabrum</i>	Rocky Mountain maple
<i>Opuntia phaeacantaha</i>	Prickly-pear cactus	<i>Alnus incana</i>	mountain alder
<i>Pinus edulis</i>	Piñon Pine	<i>Arctostaphylos pungens</i>	Pointleaf Manzanita
<i>Pinus ponderosa</i>	Ponderosa Pine	<i>Cercocarpus montanus</i>	mountain mahogany
<i>Juniperus scopulorum</i>	Rocky mountain juniper	<i>Cornus Sericea</i>	Red-Osier Dogwood
<i>Pseudotsga menziesii</i>	Douglas Fir	<i>Jamesia americana</i>	Cliff Jamesia
<i>Quercus gambelii</i>	Gambel oak	<i>Juniperus communis</i>	common juniper
<i>Rosa woodsii</i>	Woods rose	<i>Juniperus scopulorum</i>	Rocky mountain juniper
		<i>Juniperus monosperma</i>	One-seed Juniper
		<i>Mahonia repens</i>	Creeping mahonia
		<i>Opuntia phaeacantaha</i>	Tulip Prickly-pear
		<i>Pachistima myrsinites</i>	Myrtle pachistima
		<i>Pinus edulis</i>	Piñon Pine
		<i>Pinus flexilis</i>	Limber Pine
		<i>Pinus ponderosa</i>	Ponderosa Pine
		<i>Pinus pungens</i>	Blue spruce
		<i>Populus angustifolia</i>	Narrowleaf cottonwood
		<i>Populus tremuloides</i>	Quaking Aspen
		<i>Prunus virginiana</i>	Chokecherry
		<i>Pseudotsga menziesii</i>	Douglas Fir
		<i>Quercus gambelii</i>	Gambel oak
		<i>Rosa woodsii</i>	Woods rose
		<i>Salix spp.</i>	Smooth willow

Benefits- Watershed & Fire Mitigation



Catastrophic Fire/High Intensity Fire
Photo Credits: Taos News- Hondo Fire



Prescribed Burn/Low Intensity Fire
Photo Credit: NM Fire Info

Benefits- Watershed



Benefits- Wildlife &



Photos Taken in El Salto

Our Next Steps...

Creating a Proposal with Cerro Negro Forest Council

- Video
- Brochure
- Leñero Interviews

