

**Dry Lakes II, Unit 1 CFRP  
Tres Piedras  
Data Summary  
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**New Mexico Forest and Watershed Restoration Institute**

Ron Ortega

Dominic Luna

Patti Dappen

Rachel Mondragon (Urban Interface Solutions)

**Introduction:**

The NMFWRI inventory and monitoring crew sampled 22 points near Tres Piedras at Dry Lakes II, Unit 1 (Danny Kuykendahl’s Collaborative Forest Restoration Program (CFRP) site), located in the Carson National Forest (Figure 1). The crew used 1/20<sup>th</sup> acre fixed plots to estimate tree size (diameter and total height) and density for all stems > 4.5 ft. height. A nested sub-plot of 1/1000 acre was used to estimate seedling densities, bare ground, litter cover, and grass/forb cover. We also obtained forest stand examination data for our Forest Service partners at points 3, 9, 14, 17, and 20. This data was given to the Forest Service and is not summarized in this report.

The tree species found in Dry Lakes II, Unit 1 CFRP included: ponderosa pine (*Pinus ponderosa*) (PIPO); white fir (*Abies concolor*) (ABCO); gamble oak (*Quercus gambelii*) (QUGA); and oneseed juniper (*Juniperus monosperma*) (JUMO).

**Results:**

For all tree species present on the Dry Lakes II, Unit 1 CFRP there was an average of 338 trees per acre and a diameter (DBH) of 4.76 inches (Table 1). Ponderosa pine accounted for 98 trees per acre, with an average diameter of 11.47 inches (Table 2).

**Table 1. Summary of inventory data in Dry Lakes II, Unit 1 CFRP for all tree species.**

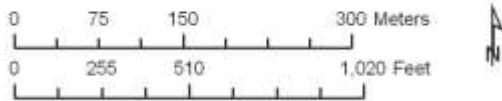
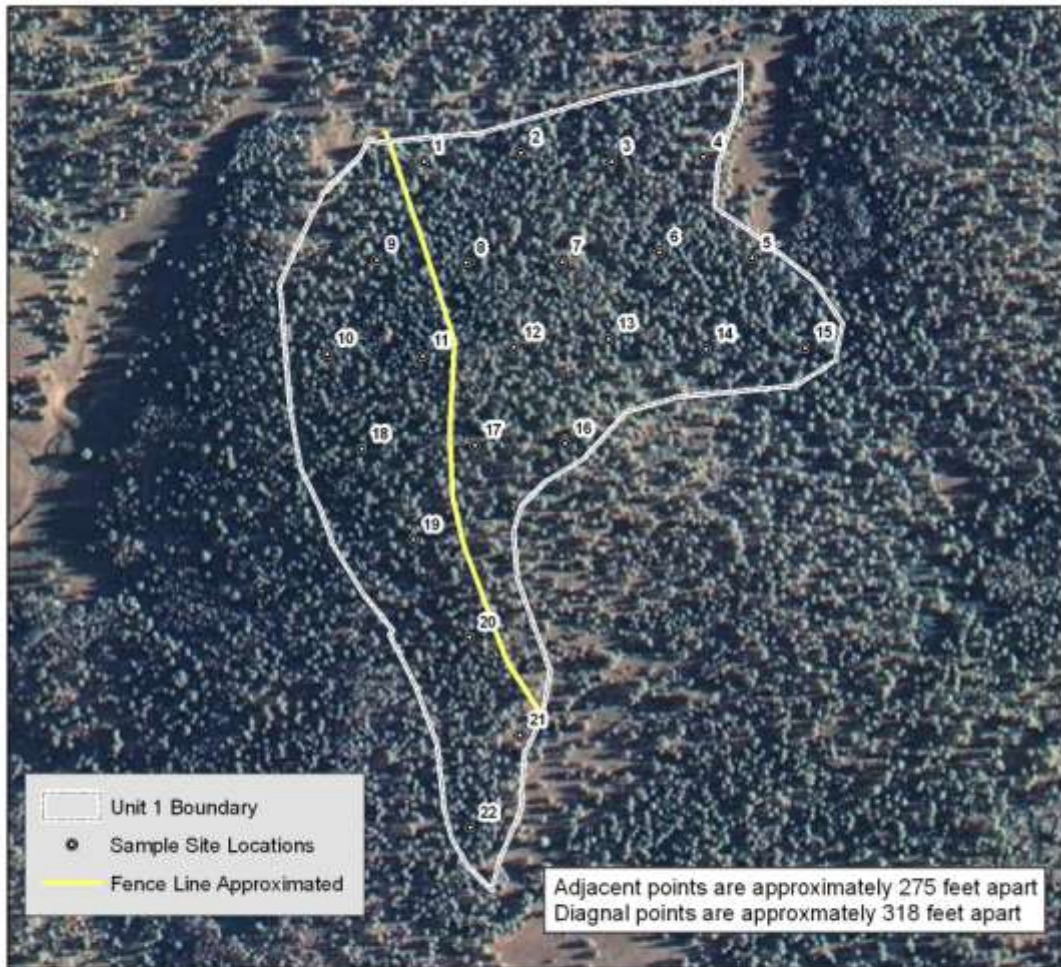
| Average Trees/Acre (>4.5 ft.) | Average Basal (ft <sup>2</sup> /acre) | Average Diameter (DBH) (in) |
|-------------------------------|---------------------------------------|-----------------------------|
| 338                           | 95.8                                  | 4.76                        |

**Table 2. Summary of inventory data in Dry Lakes II, Unit 1 CFRP for ponderosa pine.**

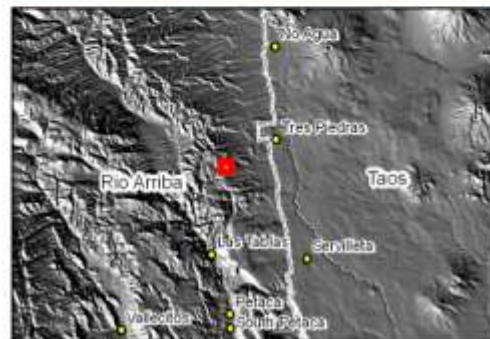
| Average Trees/Acre (>4.5 ft.) | Average Basal (ft <sup>2</sup> /acre) | Average Diameter (DBH) (in) |
|-------------------------------|---------------------------------------|-----------------------------|
| 98                            | 92                                    | 11.47                       |

# Tres Piedras - Dry Lakes II Analysis Area Unit 1

Area: 40.83 Acres



Projection UTM, NAD 83, Zone 13  
Source Data: 2006 Digital Orthophotography (DPO6)  
Map Produced by Pat Dappen 12-19-07



**Figure 1.** Inventory points for pre- and post-treatment monitoring at Dry Lakes II, Unit 1.

White fir totaled 18 trees per acre and had an average diameter (DBH) of 6.2 inches (Table 3). Gamble oak was abundant at the site with an average of 220 trees per acre while diameters of trees were low at 1.63 inches (Table 4).

**Table 3. Summary of inventory data in Dry Lakes II, Unit 1 CFRP for white fir.**

| Average Trees/Acre<br>(>4.5 ft.) | Average Basal (ft <sup>2</sup> /acre) | Average Diameter (DBH)<br>(in) |
|----------------------------------|---------------------------------------|--------------------------------|
| 18                               | 5.87                                  | 6.2                            |

**Table 4. Summary of inventory data in Dry Lakes II, Unit 1 CFRP for gamble oak.**

| Average Trees/Acre<br>(>4.5 ft.) | Average Basal (ft <sup>2</sup> /acre) | Average Diameter (DBH)<br>(in) |
|----------------------------------|---------------------------------------|--------------------------------|
| 220                              | 5.58                                  | 1.63                           |

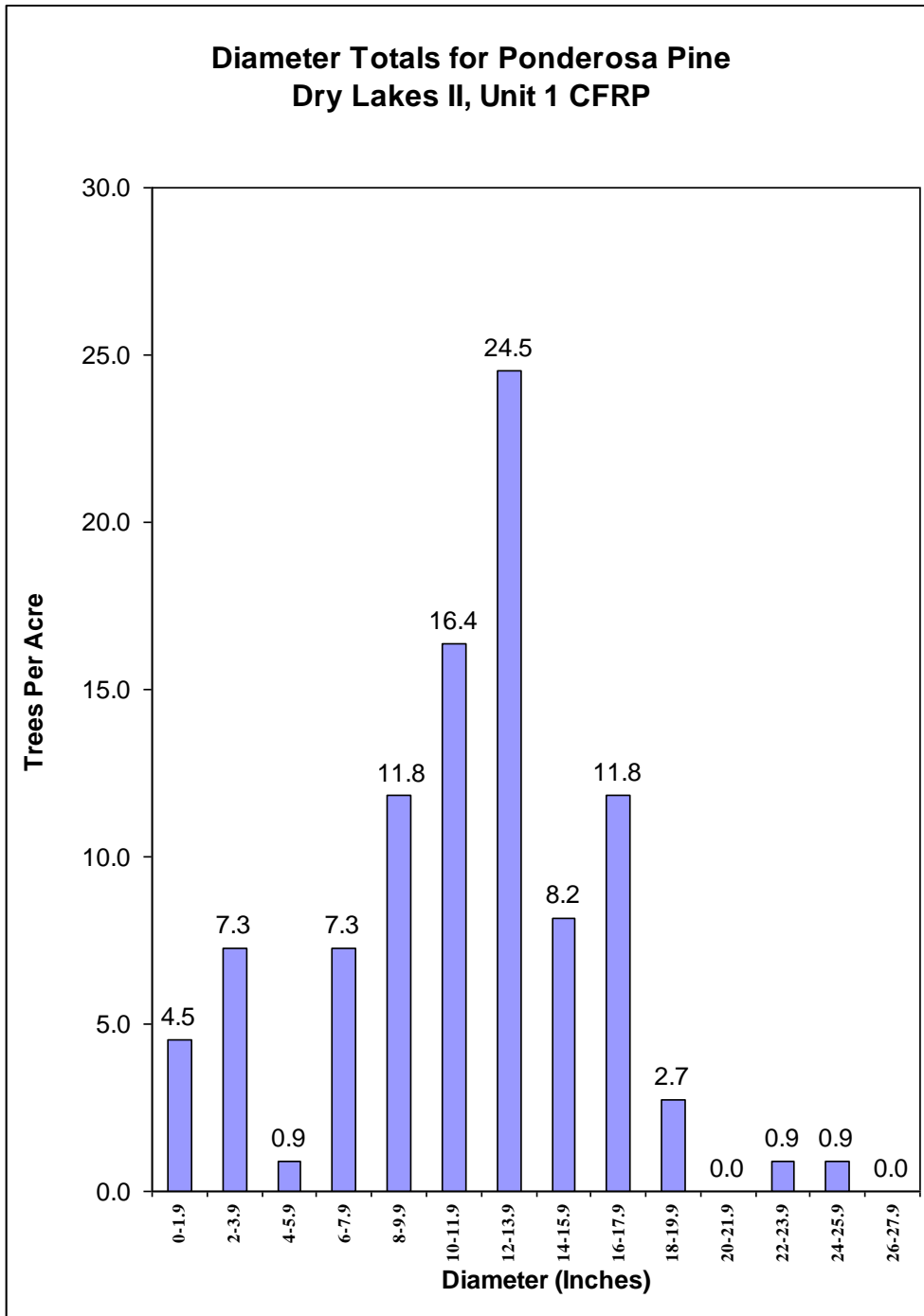
Ponderosa pine had a relatively even distribution of trees across diameter classes (Figure 2), as did white fir (Figure 3). Within the 22 sample site locations, oneseed juniper (*Juniperus monosperma*) was only found at two sample site locations (sample sites 15 and 22).

In the understory, only points 1-5 were surveyed as snow was on the ground when points 6-22 were inventoried. For points 1-5 we estimated that litter covered 99% of our nested sub-plots, bare ground was at 1%, grass/forb cover at 20%, and there were no tree seedlings/acre.

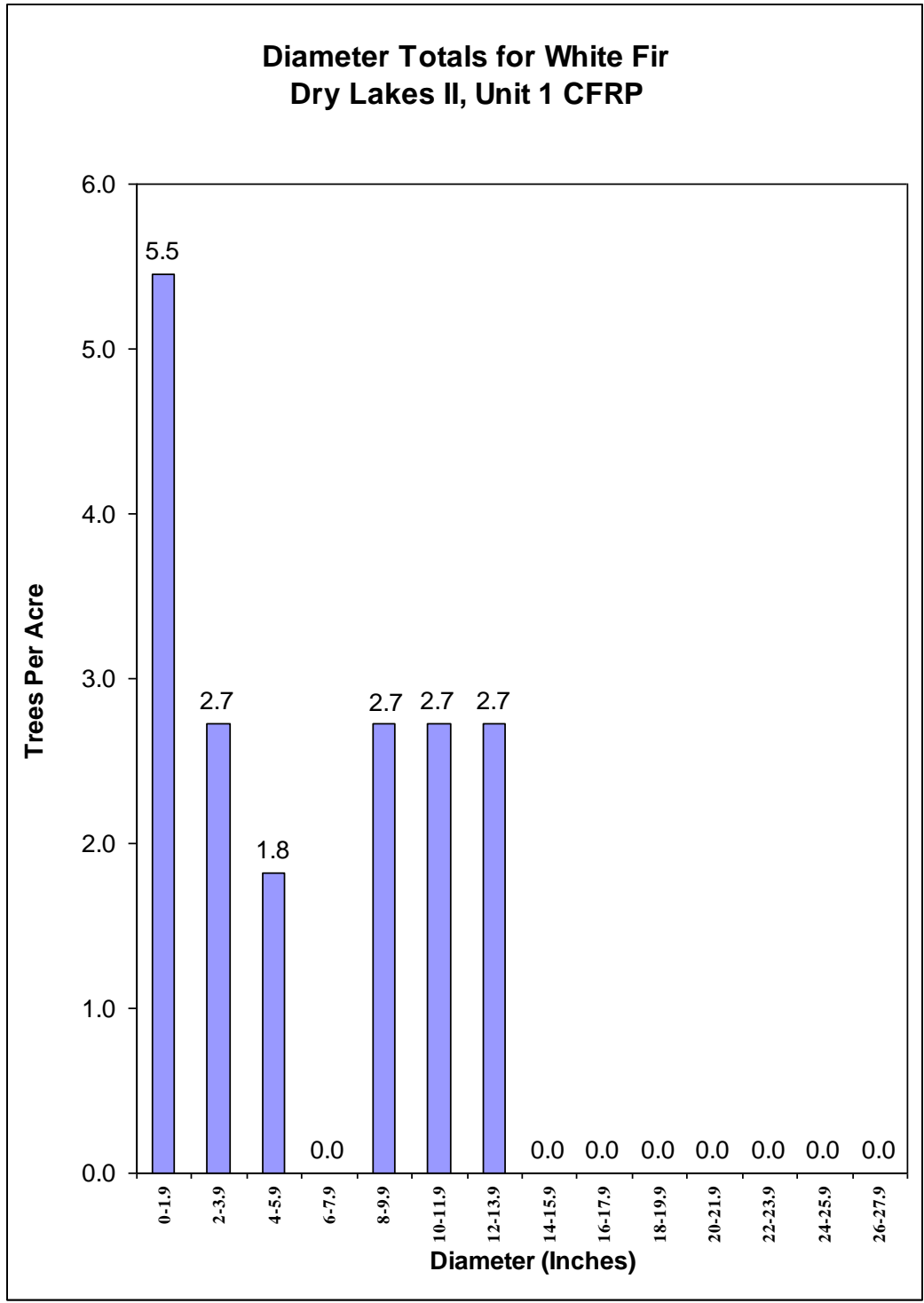
At each plot, understory light levels were measured with an EXTECH foot candle/lux meter at plot center. Light readings were taken on November 14, 15 and 20, 2007. Using the slow response time, the stand average was 1,565 candles. Full sunlight is 10,000 foot candles. It should be noted that at this time of year, light levels will be lower compared to measurements taken during the summer.

Pre-treatment wildlife monitoring was conducted for turkey, deer, and elk according to the Parsons and Savage CFRP protocols. Four transects were established. For elk, pellet groups found in all four transects. The first transect had 4 pellet groups for elk and one for deer. The second had 8 pellet groups for elk and no deer. The third transect had 6 pellet groups for elk and one for deer. The last transect had 2 pellet groups for elk and no deer. There was no sign of turkey in any transect. The wildlife monitoring was completed on November 20, 2007. These transects will be re-examined after the stand is treated.

Photographs were taken on December 6, 2007 at sample points 3, 9, 14, 17, and 20 (Figure 4). They were taken by walking one chain north of the plot center (marked with a plastic stake) and having the photographer look due south back at the plot. A crew member is standing exactly at plot center. Original photographs are on file at the NMFWR office.



**Figure 2.** Diameter distributions for ponderosa pine at the Dry Lakes II, Unit 1 CFRP.



**Figure 3.** Diameter distributions for white fir at the Dry Lakes II, Unit 1 CFRP.



**Figure 4.** Photographs taken on December 6, 2007 of plots 3, 9, 14, 17, and 20 at Dry Lakes II, Unit 1 CFRP. Originals are on file at the NMFWRRI office.