

Gallinas Prescribed Fire Declared Wildfire Review



Santa Fe National Forest, Southwestern Region
January 2018



Gallinas Prescribed Fire – Wildfire Outcome Review

The Gallinas Prescribed Fire was located on the Pecos/Las Vegas Ranger District, Santa Fe National Forest in New Mexico. Ignitions begun as a pile burning operation in the fall with light snow levels on the ground. The district would normally complete 400-600 acres a year of pile and broadcast burning after timber management treatments moved through the area. Limiting the operations to a small amount of acres per year was planned due to the concern with ash content flowing down drainage/downstream into the Gallinas Canyon which is the City of Las Vegas, NM municipal water supply. The Gallinas Canyon watershed provides the city with year around fresh water, and an above normal ash content in the water could degrade water quality and hurt community relations with the U.S. Forest Service.

On February 12, 2018, the Santa Fe Forest Supervisor James Melonas, requested a Facilitated Learning Analysis (FLA) associated with the Gallinas Prescribed Fire. The FLA was completed on March 2, 2018. In addition to the FLA, policy dictates that the following five elements of a declared wildfire review as specified in the Interagency Prescribed Fire Planning and Implementation Procedures Guide (PMS 484) be addressed. These elements as stated in the guide include the following:

1. An analysis of the seasonal severity, weather events, and on-site conditions leading up to the wildfire declaration.
2. An analysis of the prescribed fire plan for consistency with agency policy and guidance related to prescribed fire planning and implementation.
3. An analysis of prescribed fire implementation for consistency with the prescription, actions, and procedures in the prescribed fire plan.
4. The approving agency administrator's qualifications, experience, and involvement.
5. The qualifications and experience of key personnel involved.

These five elements are addressed below.

Element 1. An analysis of the seasonal severity, weather events, and on-site conditions leading up to the wildfire declaration.

Post analysis review of the weather and seasonal severity of the area shows that conditions were within the burn plan prescription for the days of ignition. However, long-term weather beyond what was forecasted was not going to aid holding operations. The Southwest Region would experience a winter with above normal temperatures and below normal precipitation. A La Niña weather pattern would set up and bring extremely dry and warm conditions to the region during the winter months. Snow packs across the region would be minimal to none with drought conditions setting up by spring.

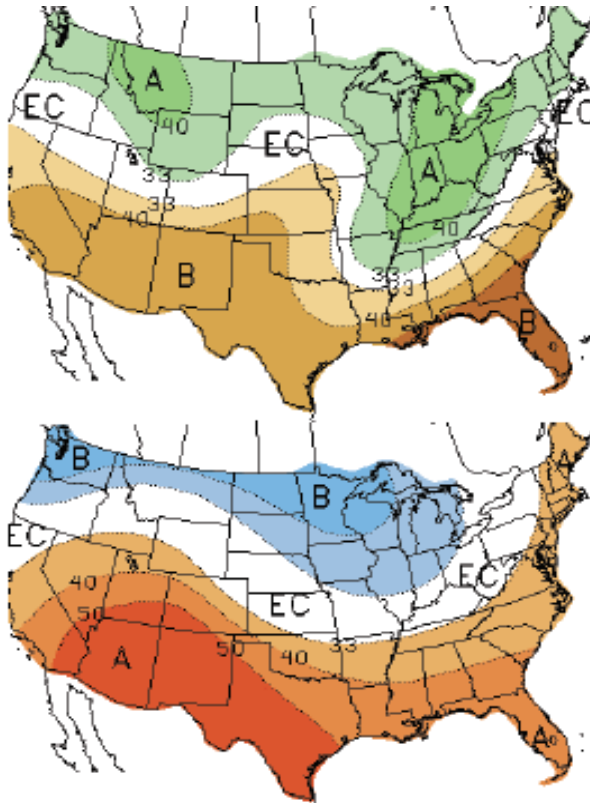


Figure 7: Three-Month Outlook - Precipitation (top) & Temperature (bottom) - Dec 21, 2017

Findings: District personnel relied upon seasonal snow storms to help eliminate creep from pile burn operations during winter months. After an early winter snow storm moved through the area leaving several inches of snow on the ground personnel decided to continue with pile burn operations. After ignitions took place the remaining snow layer quickly melted. No significant rain/snow fell over the project area until February 11, 2018 when 0.16 inches of rain fell at the nearest RAWS (PECOS). The project area was located on a north facing slope so day time temperatures stayed cool with nighttime temperatures falling below freezing.

Figure above: Taken from the Climate Assessment for the Southwest website

Element 2. An analysis of the prescribed fire plan for consistency with agency policy and guidance related to prescribed fire planning and implementation.

The Prescribed Fire Plan was current and followed policy and guidance given in the Interagency Prescribed Fire Planning and Implementation Procedures Guide (PMS 484) and the Prescribed Fire Complexity Rating System (PMS 424).

Findings: The Prescribed Fire Plan was a programmatic burn plan that covered 7,815 acres in the Gallinas Canyon Watershed. The plan covered both broadcast and pile burn operations; with a smaller organization built into the plan to cover pile burn operations with snow on the ground. Individual treatment sites were based upon previous timber management activities. Even though this is stated in the burn plan, treatment sites did not align with ideal prescribed fire holding lines/locations.

Element 3. An analysis of prescribed fire implementation for consistency with the prescription, actions, and procedures in the prescribed fire plan.

The prescribed fire was implemented following the procedures outlined in the prescribed fire burn plan. Adequate resources were on-site for pile burn operations. The burn was within prescription and all actions taken by firefighting personnel were consistent with the plan and the pre-operational briefing. A spot weather forecast was requested each day of the burn.

Findings: Burning with the seasonal weather was normal for district personnel. When snow was on the ground there was no need to have control lines in place because of the limited to no growth potential. This practice worked in previous years when the winter precipitation was normal to above normal for the area. Firefighters expected similar conditions to continue even though a La Niña weather pattern was setting up. Prior to the pile burn operation that led to a conversion to a wildfire previous treatment (Calf Creek Pile Burn) in the same watershed showed resistance to control once the snow layer melted. This led to small spot fires on private property adjacent to the treatment area.

Element 4. The approving agency administrator’s qualifications, experience, and involvement.

The District Ranger was the approving Agency Administrator (AA) for the prescribed fire plan. He signed the prescribed fire burn plan on January 14, 2015, and had reviewed the plan annually per Forest Service policy with yearly signatures.

The AA signed the *Agency Administrator Ignition Authorization* prior to ignitions taking place. The authorization given to the Burn Boss was from November 1 – December 1, 2017.

Findings: The AA was engaged throughout the prescribed fire and wildfire operations. The AA’s participation in the prescribed and wildfire operations involved attending daily briefings, receiving nightly updates, and field visits during suppression activities. Per the Incident Qualification and Certification System (IQCS) the AA qualification is current and on the individual’s Redcard. The AA is qualified to sign and approve prescribed fire burn plans at the moderate level of complexity.

Element 5. The qualifications and experience of key personnel involved.

According to the current IQCS records, the qualifications and experience of key personnel at time of ignition are as follows:

- Burn Boss – qualified and current in IQCS
- Firing Boss – qualified and current in IQCS
- Holding Boss – qualified and current in IQCS

Each functional area of the burn organization was staffed with qualified and experienced individuals. All individuals identified above were from the local ranger district, and had several years of experience in their assigned roles.

The prescribed fire plan was technically reviewed by the Santa Fe National Forest Deputy Forest Fire Management Officer on September, 18, 2015. In IQCS the individual was qualified to conduct the review and all signatures were valid and complete.

Findings – The prescribed burn operations went well initially, but the lack of seasonal weather conditions led to a much longer duration than was planned. Due to this situation, Burn Bosses were switched at various times to give personnel days off and to meet work/rest guidelines. Each new change in the command structure brought a new Burn Boss. These individuals were from the district and were qualified to fill the role as an RXB2. However, this did lead to confusion among off-district resources on who exactly was in charge on any given day.