Forest Restoration: Multi-forest Burn Preparation in the Carson, Cibola, and Santa Fe National Forests

Background information

- Forests in the Southwest evolved with frequent, low-intensity wildfires
- Decades of wildfire suppression have led to overstocked forests and increased the threat of catastrophic, stand-replacing wildfire
- Fire is the best way to restore forests health and resilience, but forest managers must treat units before burning
- Burn units are delineated through thinning, fuel breaks, handlines, dozer lines, and burn piles, creating strongholds from which prescribed broadcast burn can be implemented or wildfire may be managed.

Proposed management actions

- Continue to contribute funding towards burn preparation work
- May occur on the Carson, Cibola, and/or Santa Fe National Forests
  Budget estimate: $500,000
  Estimated split: $200,000 Carson, $200,000 Cibola, $100,000 Santa Fe

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Forest Restoration: Multi-forest Prescribed Burning in the Carson, Cibola, and Santa Fe National Forests

Background information

- Forests in the Southwest evolved with frequent, low-intensity wildfires
- Decades of wildfire suppression have led to overstocked forests and increased the threat of catastrophic, stand-replacing wildfire
- Fire is the best way to restore forests health and resilience, but forest managers must treat units before burning
- Flexibility of the multi-forest approach facilitates timely support to be utilized in units where conditions are right and fuel prep thinning is complete

Proposed management actions

- Support USFS efforts in prescribed fire implementation
- May occur on the Carson, Cibola, and/or Santa Fe National Forests
  Budget estimate: $ 250,000
  Estimated split ~ $ 100,000 Carson, $ 100,000 Santa Fe, $ 50,000 Cibola

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Multi-forest Burn Preparation

U. S. Forest Service

Thinnings and fuel breaks to prevent catastrophic wildfire and restore a fire regime

Photo: Caitlin Ruhl

Multi-forest Burn Preparation

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Multi-forest Burn Preparation

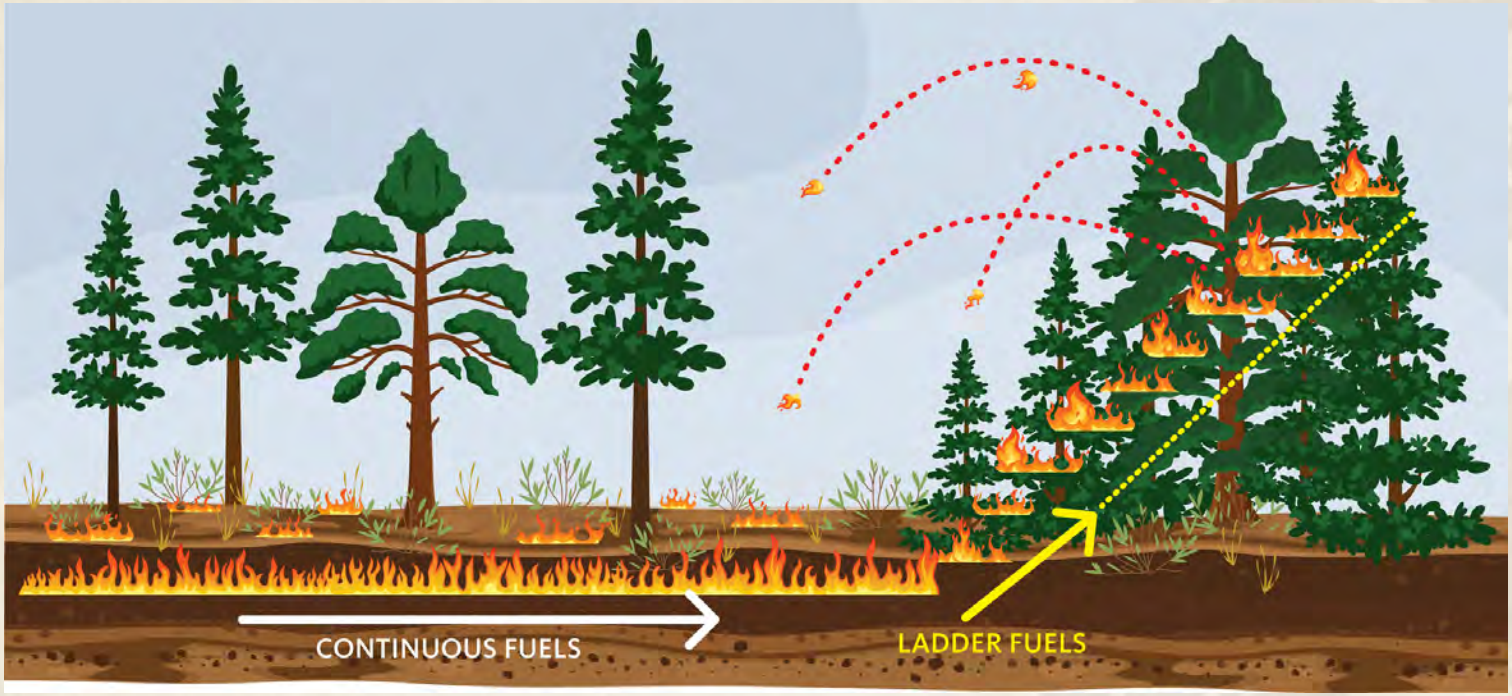
- Forests in the southwest used to experience a fire regime of frequent but low-intensity fires.
- These fires kept forests much less dense than the current norm
- Fires encouraged fresh young growth of grasses and woody browse for elk and deer
- Lack of fuel buildup made catastrophic, stand-replacing fires rare

Multi-forest Burn Preparation

Photos: https://www.swfireconsortium.org/

- Management practices changed in the 1940s, and decades of active fire suppression led to an increase of tree density, resulting in more catastrophic fires
- The climate in the Southwest is becoming increasingly hot and dry, exacerbating wildfire risk
- Due to fuel buildup, we can no longer allow wildfires to run their course

Why do we need burn prep?



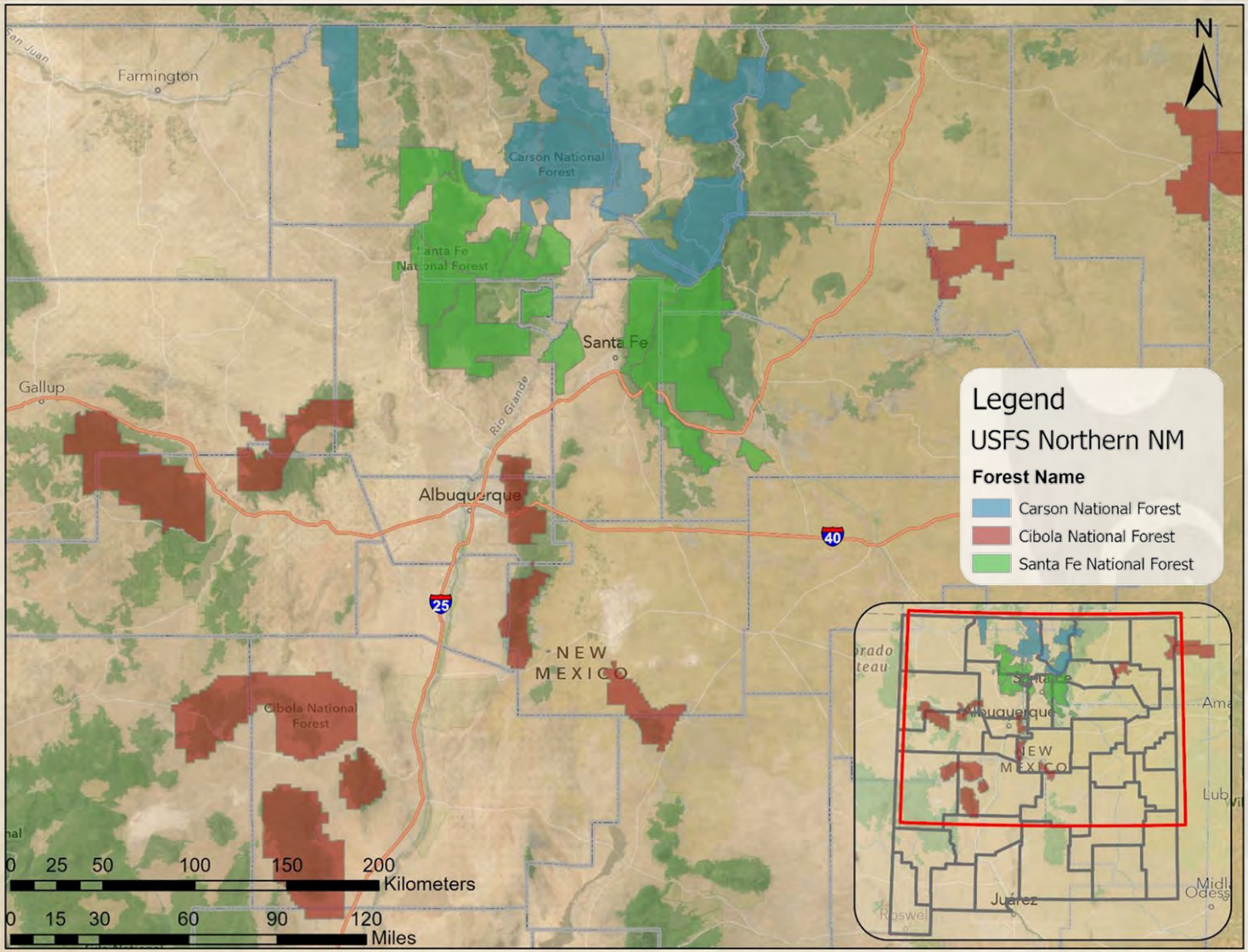
Graphic: Oregon State University

- If a forest has a natural fire regime or has been prepped to burn, trees are less dense. There may be grasses, shed leaves/needles (duff) and shrubs on the ground, but they burn quickly and fire stays on the ground
- Trees like ponderosa pine have fire resistant bark, so fires that stay low don't kill them. But if their crowns catch, they will die
- In a dense, unprepped forest, smaller trees create a fuel ladder, allowing fire to climb to the crowns of even the tallest trees

Why do we need burn prep?

- Firebreaks create a gap between forest stands, slowing the spread of fire
- They give firefighters a line to hold and access for machinery
- Firebreaks are often created around existing features like woods roads or canyons

Multi-forest Burn Preparation



- The Carson, Cibola, and Santa Fe National Forests include ranger districts throughout northern and central New Mexico
- These areas provide habitat and public hunting and fishing access for a variety of game species

Background

- Goals
  - Reduce the threat of catastrophic wildfire throughout Northern and Central NM
  - Restore forests to a more natural density, improve forest health
  - Encourage fresh new growth to improve understory browse quality
- Actions
  - Fuel Preparation
    - Forest thinning in target areas
    - Fire breaks
  - Prescribed fire
    - Support broadcast fire and/or pile burn efforts

Background

In 2024, the CAC allocated $250,000 to prescribed fire implementation on the Carson, Cibola, and Santa Fe National Forests

$224,651 spent so far
$100,000 Carson NF
$100,000 Santa Fe NF
$ 25,000 Cibola NF

Contributions in 24/25 and 25/26

Background

2024 HSP Prescribed Burns project

- **Supported on-the-ground efforts** → funded helicopter time, personnel, and supplies
- **Enhanced timeliness**→ facilitates Rx fire timing in desirable and safe windows
- Specific Rx burns supported from October 2024-present
  - Carson National Forest…Sotano Rx, American Creek Rx, Lamy/Barela Rx, and Powderhouse Rx Fires
  - Santa Fe National Forest…Holiday North, American Park Pile, and Borrego Campground, North Joaquin
  - Cibola National Forest…Durfee Bolander

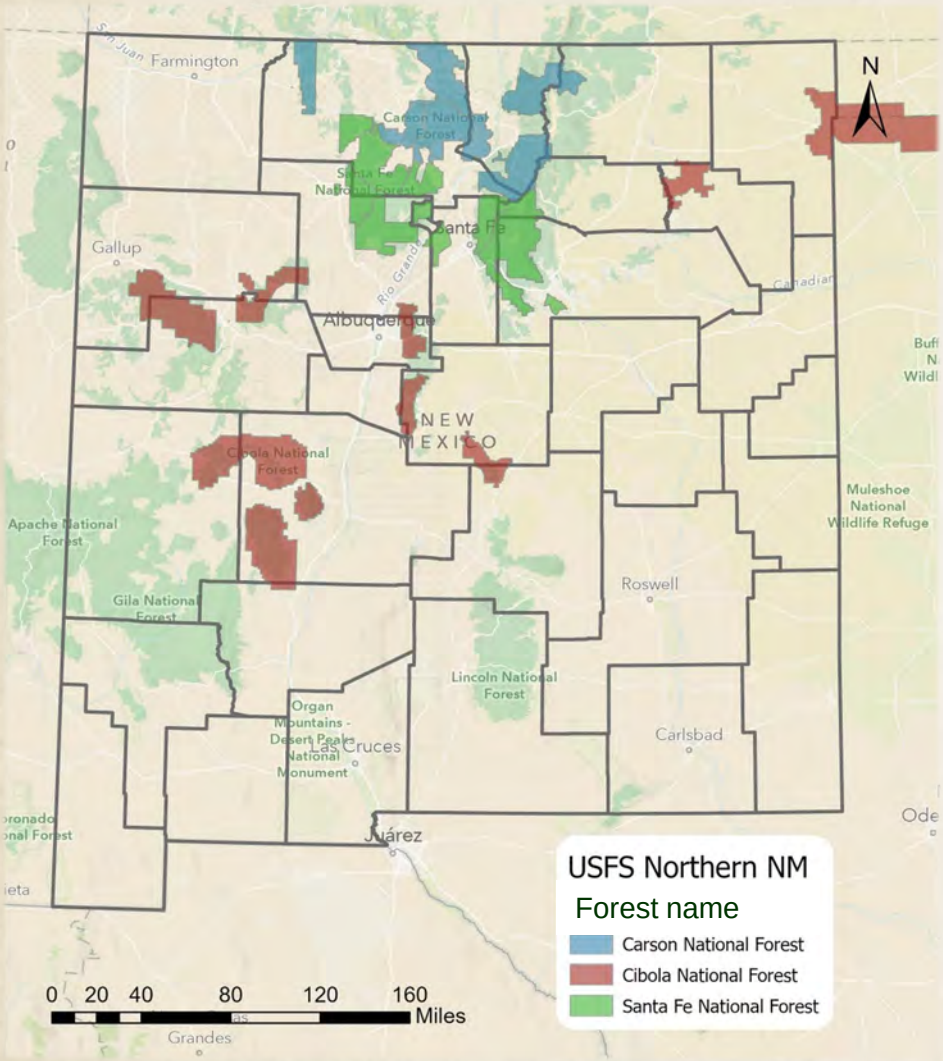
Background

Photo: Caitlin Ruhl

In 2025, the CAC allocated an additional $250,000 for Fuels Prep

Upcoming planned work includes a fuel break in the San Mateo Mountains of the Magdalena Ranger District, Cibola NF

Background Info



- Prescribed fire and fuel prep plans have been collaboratively generated for multiple forests in NM (Carson, Santa Fe, Cibola)
- Plans identify numerous units within each forest targeting important landscapes for wildlife
- If prioritized, these projects would make funding available to contribute to accomplishing landscape scale forest restoration actions.

Background

Photo: Caitlin Ruhl

There is a continuing need for more burn prep and prescribed fire work

These proposals allow us to have funds set aside for jointly-approved forest units as they become ready from administrative, strategic planning, and weather window perspectives

Potential Future Management

- There is endless potential to actively manage for fire throughout these forests
- Essential fuel preparation and prescribed fire go hand-in-hand in achieving restoration goals
- Increase forest health and resilience
- Prevent stand-replacing fires
- Improve forage quality for game species

Funding

Two multi-forest, forest restoration project opportunities:

- **$ 500,000 Prescribed Burn Prep**
- **$ 250,000 Prescribed Burns**

Project Name: Multi Forest Restoration: Fuel Preparation and Prescribed Fire

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Project relation to CAC advice or prioties:

This effort is across multiple jurisdictions and is a complement to previous work funded by Habitat Stamp as well as other hunting and fishing organizations. Prescribed fire is one of the most beneficial tools we can use to restore and enhance wildlife habitat. Fuel preparation work is vital to setting the stage for prescribed fire and may have the additional benefit of facilitating managed wildfire in the right circumstances. The target acres may occur in any of the listed forests but will be aimed at restoring natural processes to frequent-fire systems.

Project Specific Details:

Fuel preparation funding would contribute to efforts creating >4,000 acres of esssential burn unit preparation across the three forests. This, combined with prioritization of prescribed fire funds, would make available funds to contribute toward the preparation and implementation of prescribed fire across 60,000 acres.

Historical Data:

Historically, these forests would have experienced wildfires on the order of every 2-25 years. The longterm suppression of wildfires along with other land management decisions have resulted in a situation where extreme fire behavior is possible without any management interventions. Catastrophic fire may lead to habitat loss. Intervention is required in many forests throughout New Mexico to restore desired conditions in frequent-fire forest habitats (e.g. diverse age class, improved and expanded understory, elimination of ladder fuels).

Itemized Use of Funds:

Fuel Preparation -- $ 500,0000 (~200,000 Carson NF, ~200,000 Cibola NF, ~ 100,000 Santa Fe NF)
Prescribed Fire -- $ 250,000 (~$ 100,000 Carson NF, $ 100,000 Santa Fe NF, $50,000 Cibola NF

Comprehensive Project Analysis:

See presentation materials

Monitoring Plan/ Strategy:

The USFS has a longterm strategy and approach to monitor forest health and has created a schedule to rotate prescribed fire through established blocks, and to identify areas in need of prescribed fire and take management actions necessary to get to a stage where prescribed fire can be implemented. Weather conditions play into the ultimate timing of treatments, and this variability can lead to adaptive reprioritization of both prescribed fire and fuel prep/ thinning units. Flexibility in location of funding is therefore highly valuable for these types of projects.

Project Emphasis Species:

Elk, Deer, Turkey
