



Douglas County
Prescribed Fire Planning and
Implementation Guide

March 12, 2024

Preface

Landscapes of the Front Range of Colorado, including Douglas County, historically experienced frequent, naturally occurring fires of varying intensity, mostly low to moderate but some areas of high intensity. Grass ecosystems typically experienced fire every 3-5 years while shrub and forested communities experienced fire every 5-30 years. Naturally occurring fires reduced fuel loads, provided nutrient cycling, invigorated habitat, and reduced invasive species. One hundred years of fire exclusion through policy and practice has resulted in fuel loads that support catastrophic fire that may negatively impact ecosystems and threaten public safety, including communities and firefighters.

Prescribed fire is a powerful and important land management and stewardship tool. As part of County-wide efforts to best prepare humans, critical infrastructure and the built environment to live with, adapt and respond to, and recover from wildfire, Douglas County is working to implement a prescribed fire program that meets land management, firefighter and public safety goals and objectives. Prescribed fire is an effective, cost-efficient vegetation management tool for fire adapted and fire dependent ecosystems found in Douglas County.

Goals and objectives for this program align with the intent and vision of the *National Cohesive Wildland Fire Management Strategy (Cohesive Strategy)*, an *all hands, all lands collaborative approach to wildfire risk reduction and learning to live with wildfire*, and goals and objectives identified in the DC Community Wildfire Protection Plan (CWPP). Implementation of this science-based fire management program is designed with nationally recognized standards and protocols. It is an investment in long-term benefits for communities, fire managers, and the Douglas County landscape. It helps to enhance and protect the Douglas County economy, values, and way of life.

Introduction

Per Douglas County Resolution R-014-120, the National Wildfire Coordinating Group (NWCG) Standards for Prescribed Fire and Implementation (*formerly known as the NWCG Prescribed Fire Planning and Implementing Procedures Guide*) is the guiding document for all prescribed fire operations on County owned lands or performed by County employees. This document, the Douglas County, Colorado Prescribed Fire Planning and Implementation Guide, provides standardized procedures, roles, and responsibilities specifically associated with the planning and implementation of prescribed fire on County-owned lands, within Unincorporated Douglas County, Colorado.

Fire is an essential ecological process in many fire-dependent ecosystems. In large areas of Douglas County, fire exclusion from these ecosystems has led to unhealthy forest, woodland, and rangeland conditions. These areas are at risk of intense, severe wildfires that threaten communities and cause significant damage to key ecological components.

As one component of fire management, prescribed fire is often utilized to alter, maintain, enhance, or restore vegetative communities; achieve desired resource conditions; and protect life, property, and values that would otherwise be degraded and/or destroyed by wildfire.

Purpose

The purpose of this document is to define roles and responsibilities, provide consistent county-wide direction, establish common terms and definitions, and identify planning and implementation processes for prescribed fire.

The guide describes what is minimally acceptable for Douglas County prescribed fire planning and implementation on County lands. Any user of prescribed fire who chooses to adopt this policy may provide more restrictive standards and policy direction but must adhere to these minimums.

This guide outlines the process to develop single unit, multiple unit and programmatic plans where the intent is to ignite a unit or units with active perimeter control. Single units are usually implemented over the course of a few days. Multiple or large single units are usually implemented over the course of multiple days to weeks. Programmatic plans are implemented as single or multiple units. Large single or multiple unit and programmatic projects may span several years.

Plans for long-duration, landscape-scale prescribed fires, where the intent is to ignite portions of the unit and allow fire to move across the project area over time may require supplemental information and analysis. This is to address the long-term planning for the prescribed fire where implementation actions may be dependent on fire growth and seasonal changes. Guidance for elements of the Prescribed Fire Plan that may be require additional attention is identified in the applicable element section.

Prescribed Fire Program Goals

- Primary Goals:
 - Enhance first responder and public safety.
 - Reduce wildfire risk to communities, infrastructure, watersheds, and other values.
 - Incorporate risk management into all prescribed fire planning and implementation,

- ensuring safe, carefully planned, cost efficient use of prescribed fire.
- Protect and improve natural ecological processes and functions to help achieve land management objectives.
- Provide real-time training opportunities to county staff and area fire professionals to ensure the readiness of a capable and coordinated response team in the face of future emergencies.
- Secondary Goals:
 - Decrease risk and increase efficiency of firefighters and first responders during wildland fire events.
 - Reduce excess fuel loading thereby decreasing the potential for large, damaging wildfires.
 - Establish and maintain desired plant communities in a more natural mosaic reflective of historic forest structure.
 - Reduce the potential impact of damage from insects and pathogens.
 - Protect and improve wildlife habitat and promote species diversity.
 - Protect and improve soil productivity.
 - Protect and improve water quality and support resilient watersheds.
 - Improve forage and browse for livestock and grazing wildlife.
 - Increase and improve recreational opportunities for future generations.
 - Protect the taxpayer's investment by reducing potential catastrophic effects from wildfire, reducing potential suppression costs, and ensuring Douglas County natural resources are available for generations to come.
 - Educate Douglas County residents about the forest ecosystem and the role fire plays in keeping that ecosystem healthy; educate audiences about their role in a healthy forest ecosystem.

Authorities

24-33.5-1217 C.R.S. *Prescribed Burning Program*

24-33.5-1217.5 C.R.S. *Minimum Prescribed Burning Standards*

24-33.5-1217.7 C.R.S. *Escaped Prescribed Fires*

30-10-512 C.R.S. *Sheriff to act as Fire Warden*

18-13-109 (2)(b)(IV) C.R.S. *Firing Woods or Prairie*

R-014-120 *Adoption of the NWCG Prescribed Fire Planning and Implementation Guide*

Pursuant to 24-33.5-1217 C.R.S., Prescribed Burning Program, the State of Colorado has established "requirements for certified burners to conduct lawful activities pursuant to authorization under section 18-13-109 (2)(b)(IV), C.R.S., regarding firing of woods or prairie", and under such requirements, "users of prescribed fire, including local governments and nongovernmental organizations must adopt or have already adopted guidelines or standards that are in substantial compliance with the intent of section 24-33.5-1217.5 C.R.S., for prescribed burning under their control."

PMS 484 NWCG Standards for Prescribed Fire Planning and Implementation is the national standard for such operations, has been utilized by the County in the past, and fully meets the intent of section 24-33.5-1217.5 C.R.S. Minimum Prescribed Fire Standards.

Douglas County prescribed fire projects will follow the current PMS 484 NWCG Standards for Prescribed Fire Planning and Implementation.

Roles and Responsibilities

- Board of County Commissioners (BOCC)
 - Have the authorities and statutory responsibility for the care of county property and are the administrative body governing unincorporated areas of Douglas County.
 - Provide guidance to the County Manager and Staff regarding prescribed fire implementation on County lands.
 - A majority vote of approval at a BOCC public meeting is required before prescribed fire burn plans may be finalized, signed, and implemented.
 - Understand the public information approach to each prescribed fire.
 - Attendees at BOCC meetings for approving prescribed fire burn plans should include:
 - Commissioners
 - County Manager and Agency Administrator Designee
 - Sheriff or designee
 - OEM Director or designee
 - Director of Open Space or designee
 - Director of Public Works or designee
 - Director of Parks or designee
 - Prescribed Fire Planning Group or designee(s)
 - Applicable Fire Protection District Representative
 - County Attorney
 - County Risk Management
 - Public Affairs and Public Information Directors
- County Manager / Agency Administrator (AA)
 - Responsible for implementing guidance determined by the BOCC; recommends improved management practices and directs county operating divisions.
 - The County Manager or designee will be considered the Agency Administrator for purposes of prescribed fire on Douglas County lands.
 - Agency Administrator is a required signatory to prescribed fire burn plans.
 - Agency Administrator responsibilities include but are not limited to reviewing and approving the final complexity rating, approving prescribed fire plans, and understanding the risks and benefits associated with prescribed fire implementation.
- Agency Administrator (AA) Designee
 - Responsible to the Agency Administrator for project management, planning, implementing, and monitoring the prescribed fire program in accordance with this document and all applicable Douglas County policies and procedures.
 - AA Designee shall appoint burn plan preparers, as recommended by the Office of Emergency Management, responsible for writing/reviewing of burn plans, in coordination with the Douglas County Prescribed Fire Planning Group.
 - AA Designee shall coordinate burn unit preparation with appropriate County departments, in accordance with plan specifications.

- The AA Designee role should be filled by the county department charged with managing the land intended for prescribed fire application.
- Douglas County Sheriff
 - Shall act as fire warden and is responsible for the coordination of fire suppression efforts in case of prairie, forest or wildfires occurring in the unincorporated area of the county outside the boundaries of a fire protection district or that exceed the capabilities of the fire protection district to control or extinguish.
 - Sheriff or designee shall be informed of all prescribed fire operations in the event a prescribed fire needs to be declared a wildfire.
 - Sheriff is a required signatory to prescribed fire burn plans.
- Office of Emergency Management
 - Responsible to the Agency Administrator, AA Designee, and to the Sheriff for the provision of consulting and technical support for the planning, implementing, coordinating, and monitoring of the prescribed fire program in accordance with county policy and direction.
 - OEM shall recommend Prescribed Fire Plan Preparers responsible for writing/reviewing of burn plans to the Agency Administrator and AA Designee, in coordination with the Douglas County Prescribed Fire Planning Group.
 - OEM shall coordinate burn unit preparation with appropriate county departments, in accordance with plan specifications.
- Douglas County Prescribed Fire Planning Group
 - Responsible to the Agency Administrator and AA Designee for planning and implementation of prescribed fire projects on Douglas County lands.
 - Presents proposed prescribed fire burn plans to the BOCC at public meetings.
 - The following departments and groups may be involved:
 - County Manager or designee
 - Agency Administrator Designee
 - Sheriff or designee
 - Risk Management
 - County Attorney's Office
 - Office of Emergency Management
 - Open Space and Natural Resources
 - Public Works Department
 - Community Development Department, Parks Division
 - Douglas County Building Department, Wildfire Mitigation
 - Local Fire Protection District for proposed prescribed fire projects
 - Public Affairs and Public Information Directors
- Prescribed Fire Plan Preparer
 - The Prescribed Fire Plan preparer is the individual responsible for the preparation of the Prescribed Fire Plan. Several people may be involved in preparation of the Prescribed Fire Plan, but the Prescribed Fire Plan preparer is responsible for the final plan content.
 - Any qualified Prescribed Fire Burn Boss or trainee may develop the initial

complexity analysis and participate in the development of the Prescribed Fire Plan. The preparation of the final complexity analysis and Prescribed Fire Plan must be overseen, recommended, and signed by a fully qualified NWCG Burn Boss.

- Burn boss trainees can be cosigners as preparer of a Prescribed Fire Plan if their work was overseen by a fully qualified NWCG Burn Boss.
- Responsibilities include but are not limited to:
 - Coordinate with the resource management or technical specialists (or both) to ensure that the plan meets resource management and operational objectives.
 - Interact with the technical reviewer to ensure that all plan elements are adequately addressed.
 - Complete and sign the complexity analysis.
 - Brief Agency Administrator and AA Designee, and gain approval of the final complexity rating by signature.
- Technical Reviewer
 - The Technical Reviewer is responsible for reviewing each Prescribed Fire Plan element for content as well as evaluating the risk and complexity analysis to ensure that the goals and objectives can be safely and successfully achieved. The technical reviewer must be a fully qualified or previously qualified NWCG Burn Boss at or above the level of project complexity. The technical reviewer must be someone other than the Prescribed Fire Plan preparer.
 - Technical Reviewer responsibilities:
 - Ensure prescribed fire plans meet agency policy and direction.
 - Ensure the complexity analysis accurately represents the project, so the Agency Administrator understands the risks to identified values and ensures adequate mitigation is provided in the Prescribed Fire Plan to justify the pre and post risk ratings. This may require on-site review in wildland urban interface (WUI) or high-complexity situation by the technical reviewer.
 - Provide concurrence with the calculated prescribed fire complexity determination.
 - Check the prescription parameters by fuel types to ensure that the project, as planned, has a reasonable chance or realistic opportunity of meeting the resource management objectives.
 - Ensure the fire behavior calculations or prescription parameters are appropriate and within the acceptable range (or both).
 - Ensure the ignition, holding, and contingency plans are consistent with the predicted fire behavior and fuel types inside and outside the planned ignition unit(s).
 - Complete and sign Appendix B Technical Reviewer Checklist, Prescribed Fire Plan and the Element 1: Signature Page, Prescribed Fire Plan

Prescribed Fire Planning Process

Douglas County prescribed fire planning will at minimum include County Administration, any additional County department that is responsible for the property being burned, the Office of Emergency Management, and local Fire Protection District following the NWCG Standards for

Prescribed Fire Planning and Implementation, PMS 484. Additional departments may include, but is not limited to, the Sheriff's Office, Open Space, Public Works Operations, Parks, Wildfire Mitigation, Risk Management, and other Fire Protection Districts.

The NWCG Prescribed Fire Plan Template, PMS 484-1 is the site-specific implementation document. It is a legal document that provides the Agency Administrator the information needed to approve the plan, and the Prescribed Fire Burn Boss with the information needed implement the prescribed fire. A prescribed fire project must conform to the written plan.

Departments and burn planners should understand that the timeframe for planning and approving a Prescribed Fire Plan does not always follow a strict and exact timeframe. The entire process often takes at least six months or longer, depending upon the specific situation.

Although thorough and intensive planning to implement a Prescribed Fire Plan ranging from a simple and low-complexity pile burn all the way up to a highly complex landscape-scale broadcast burn may seem to be an example of "over-kill", one must remain cognizant that short-cutting the planning process will often result in less than desirable outcomes.

Prescribed fire planning should include a thorough analysis that examines the trade-offs among various treatment alternatives including the no-action alternative. Prior to prescribed fire implementation, the county must first determine that it has evaluated all realistic alternatives to prescribed burning and conclude that prescribed burning is an appropriate treatment method for the property.

Prescribed Fire Planning Benchmarks

1. A department proposes a prescribed fire project area with location and basic information. Proposed projects are reviewed by the Prescribed Fire Planning Group to determine feasibility. The local Fire Protection District having jurisdiction over the proposed prescribed fire project area must be included in this process and confirm initial support for the project.
2. The Prescribed Fire Planning Group assigns AA Designee, Prescribed Fire Plan Preparer (Burn Planner) and the local Fire Protection District to research the project area and gather data. During this time, basic information is being placed into the County Prescribed Fire Plan format to create a pre-plan Prescribed Fire Project Proposal, including initial Complexity Analysis.
3. AA Designee and Burn Planner present the Prescribed Fire Project Proposal to the Agency Administrator (AA) for initial awareness and support. If the AA does not support the project at this time, no further action is needed. If the AA does support the project, continue with steps below.
4. AA Designee and Prescribed Fire Planning Group present the Prescribed Fire Project Proposal at a BOCC public meeting to request approval to proceed, inclusive of any budget requests necessary for project implementation. If the BOCC does not support the project at this time, no further action is needed. If the BOCC does support the project, continue with steps below.
5. Douglas County Communications Group is engaged to implement a comprehensive public outreach and education campaign.

6. The Burn Planner completes the Prescribed Fire Plan, which includes the following required individual elements:
 - a. Element 1: Signature Page
 - b. Element 2: Agency Administrator Ignition Authorization and Prescribed Fire GO/NO-GO Checklist
 - c. Element 3: Complexity Analysis Summary and Final Complexity
 - d. Element 4: Description of Prescribed Fire Area
 - e. Element 5: Objectives
 - f. Element 6: Funding
 - g. Element 7: Prescription
 - h. Element 8: Scheduling
 - i. Element 9: Pre-Burn Considerations and Weather
 - j. Element 10: Briefing
 - k. Element 11: Organization and Equipment
 - l. Element 12: Communication
 - m. Element 13: Public and Personnel Safety, Medical
 - n. Element 14: Test Fire
 - o. Element 15: Ignition Plan
 - p. Element 16: Holding Plan
 - q. Element 17: Contingency Plan
 - r. Element 18: Wildfire Declaration
 - s. Element 19: Smoke Management and Air Quality
 - t. Element 20: Monitoring
 - u. Element 21: Post-Burn Activities
7. Burn Planner contacts the Agency Administrator and AA Designee to discuss the draft plan which may include a secondary field review. The burn planner, Agency Administrator and AA Designee will review the initial Complexity Analysis and if necessary, re-analyze the project's complexity level. Risk management and contingency plans are discussed at length. Proactive measures are planned to ensure the highest degree of safety in prescribed fire implementation. All Douglas County departments are considered for participation and evaluated for potential contributions to increase likelihood of success.
8. Draft Prescribed Fire Plan is completed and presented to the Prescribed Fire Planning Group for review and initial concurrence.
9. As part of the comprehensive public outreach and education campaign, adjacent property owners are notified of the proposed prescribed fire project.
10. The Burn Planner forwards the Prescribed Fire Plan to NWCG-qualified Technical Reviewer(s) as required. Technical Reviewer(s) receive the plan and begin a technical review in consult with the burn planner and County. All edits, suggestions and revisions are forwarded to the burn planner within 30 days of receipt.
11. Burn Planner applies for a Smoke Management Permit with the Colorado Air Pollution Control Division as well as any other local or county permitting agencies. This includes applying for fire control burning permits with fire protection districts or other fire authorities.
12. Burn Planner makes corrections to the burn plan as per the written technical review

checklist and returns the corrected burn plan to the technical reviewer for confirmation and signature.

13. Final review by preparer, Agency designated specialists, and Prescribed Fire Planning Group.
14. Burn plan receives appropriate smoke management and fire control permits.
15. Agency Administrator has received all necessary permits and recommendations and approves the project for initiation.
16. Project is ready for implementation.