

TEXAS PARKS AND WILDLIFE

PRESCRIBED FIRE PLAN
For Use on Private Lands

RANCH NAME: Click here to enter text.

LANDOWNER: Click here to enter text.

BURN UNIT NAME(S): Click here to enter text.

PLAN PREPARED BY:

Name (print): Signature: Date:

PLAN REVIEWED BY:

Name - RXBB Signature: Date:
(print):

PLAN REVIEWED BY:

Name - Burn Boss Signature: Date:
(print):

1. Description of Prescribed Fire Area

A. Physical Description:

County: Lat/Long:
911 Address:
Size: Topography/Elevation:

B. Vegetation/Fuels Description:

Live Fuels - Type, Density, Size:
Dead Fuels - Description, Moisture, Time-Lag, Load:

C. Description of Unique Features, Natural Resources, Values at Risk:

Inside the Unit:

Structures: Livestock:
Utilities: Wildlife:
Oil/Gas Facilities: Threatened/Endangered Species:
Fences: Other Protected Areas:

Outside the Unit:

Structures: Livestock:
Utilities: Wildlife:
Oil/Gas Facilities: Threatened/Endangered Species:
Fences: Other Protected Areas:

D. Previous Treatments:

Burn Treatment Date:_Click here to enter text._

Results:_Click here to enter text._

Other Treatments/Dates:_Click here to enter text._

2. Prescribed Burn Justification (goals, objectives, rationale, purpose)

A. Long-term Resource Goals:_Click here to enter text._

B. Prescribed Fire Objectives: Complete a safe fire operation with no injuries or adverse effects to personnel on the fire and the public. Click here to enter text._

3. Prescription

In order to meet the prescribed fire goals and objectives; weather, environmental, and fire behavior conditions must meet specific criteria prior to the start of, and during, fire operations. The below environmental conditions represent the broadest possible conditions that will allow for a successful burn. However, it is important to note that conditions at the edge of each range may compound or mitigate each other. Low humidity and high wind speeds on the same day may pose safety and containment problems, while both are still within the acceptable range. Conversely, a burn could be implemented and meet objectives with higher winds if humidity levels are also high.

Prescription Parameters	Acceptable Range	
	Low	High
Weather Conditions		
Temperature (°F)		
Relative Humidity (%)		
Wind Speed, 20-ft forecast (mph)		
Wind Speed, mid-flame (mph)		
Wind Direction		
Transport Wind Speed (mph)		
Transport Wind Direction		
Mixing Height (ft)		
Environmental Conditions		
1-hr Fuel Moisture (%)		
10-hr Fuel Moisture (%)		
100-hr Fuel Moisture (%)		
Live Fuel Moisture (%)		
Soil Moisture (KBDI)		
Fire Behavior		
Flame Length (ft)		
Rate of Spread (ch/hr, [ft/min])		
Fireline Intensity (BTU/ft/sec)		

4. Scheduling

A. Implementation Schedule:_Click here to enter text._

B. Projected Duration:_Click here to enter text._

C. Constraints:_Click here to enter text._

5. Pre-burn Considerations

A. Fire Breaks (specify width):

Plow or Blade:_Click here to enter text._

Blackline:_Click here to enter text._

Mow:_Click here to enter text._

Natural Features (please describe):_Click here to enter text._

Wet Line:_Click here to enter text._

Other:_Click here to enter text._

B. Special Fire Protection Considerations: (See Section 1.C. Description of Unique Features, Natural Resources, Values at Risk):_Click here to enter text._

C. Method and Frequency for Obtaining Weather and Smoke Management Forecast(s): A fire weather planning forecast will be obtained prior to ignition. On-site weather observations will be taken prior to ignition and during burn operations. If possible, a spot weather forecast will also be obtained from the NWS office.

D. Notifications:

Notifications should be made both prior to ignition of the prescribed burn and upon completion of the burn.

Contact Name		Phone Number
	County Sheriff (Dispatch)	
	County Fire Marshal	
	Fire Department(s)	
	Texas Forest Service	
	TCEQ	
	Other	
Neighboring Landowners		

6. Organization and Equipment

A. Positions:

Crew Size (minimum number required):_Click here to enter text._

The organization chart (Section 14.B) at the end of this template can be used as a guide to identify positions needed. The numbers/organization of the chart may need to be adjusted depending on the size and/or complexity of the burn. One person can hold more than one position on the organization chart. The Burn Boss will complete an organization chart before ignition of the prescribed fire and include the chart with the post-burn documentation.

B. Equipment:

Equipment	Number	Name(s)
Holding/Water Equipment		
Pumper/Engine		
UTV w/ sprayer		
ATV w/sprayer		
ATV or UTV w/o sprayer		
Dozer/Tractor w/ plow		
Backpack Pumps (bladder bags)		
Hand Tools (assortment)		
Ignition Equipment		
Drip Torch		
Drip Torch fuel (gallons)		
Other Equipment		
Radios (portable)		
Smoke On Road/Smoke Ahead Signs		
Belt Weather Kit		
Other:		

7. Communication

A. Radio Frequency/Channel (if applicable): [_Click here to enter text._](#)

B. Telephone Numbers (to be filled out prior to burning):

Position	Name	Phone Number

8. Safety

A job hazard analysis has been included in Section 16 to assist with identifying and mitigating safety hazards associated with prescribed burning. Safety hazards unique to a particular burn unit should be identified below as well as the measures that need to be taken to reduce the hazards.

A. Specific Safety Hazards: [_Click here to enter text._](#)

B. Mitigation Measures Taken to Reduce the Hazards: [_Click here to enter text._](#)

C. Emergency Medical Procedures:

EMTs and anyone trained in CPR, First Aid, or AED operation will be identified at the briefing. The location of first aid/trauma kits, AEDs, and other similar medical equipment will also be identified during the briefing.

If a medical emergency takes place, the Burn Boss should be immediately notified and told the nature of the emergency.

The Burn Boss should:

1. Obtain clear patient assessment and location.
2. Initiate 911, establish on scene care provider.
3. Identify transportation needs.
4. Document all information.

D. Emergency Evacuation Procedures: Injured personnel will be transported, if possible, along the perimeter of the burn unit to. If evacuation by air is necessary, the Burn Boss will coordinate with the emergency responders to determine the best spot for a landing zone.

E. Nearest Medical Emergency Facilities: [_Click here to enter text._](#)

9. Test Fire

A. Planned Location:

A test fire will be initiated on the downwind portion of the burn unit in representative fuels nearest the proposed blacklining anchor point. This will be determined by the Burn Boss based on the on-site weather observations the day of the burn.

B. Test Fire Documentation:

Location of Test Fire:					
Weather Conditions at Test Fire					
Time	Temp (°F)	RH (%)	Wind Speed (mph)	Wind Direction	Cloud Cover (%)
Fire Behavior at Test Fire					
Backing Fire		Flanking Fire		Head Fire	
Flame Length	Rate of Spread	Flame Length	Rate of Spread	Flame Length	Rate of Spread
Smoke Conditions at Test Fire					
Direction		Production		Dispersion	

10. Ignition Plan (techniques, sequences, and patterns)

The Burn Boss will determine the ignition strategy and sequences of fire activities on the day of the burn, based on the observed and forecasted fuel and environmental conditions. The selected firing strategy will be explained at the pre-burn briefing. Ignition will begin as a backfire on the downwind side of the burn unit. The Burn Boss will coordinate all ignition crews to maintain safe procedures.

Special Ignition Procedures: [_Click here to enter text._](#)

11. Holding Plan

A. General Procedures for Holding:

Holding resources will follow ignition along control lines monitoring for: creep in the line, high fire intensity along the control line, engaged snags/aerial fuels, and spot fires outside of control lines. Holding resources should also patrol back along the control lines to the point of ignition (test fire) as often as possible.

B. Critical Holding Points and Actions: [_Click here to enter text._](#)

C. Mop-up Plan

As a general rule, all surface fuels will require complete mop up within 30 feet of the unit perimeter once ignition is complete. Aerial fuels should be mopped to a distance of three times their height to the fireline with a minimum distance of 60 feet.

Combinations of high winds and low relative humidity will increase the distance to which combusting fuels will need to be extinguished

Special Mop-up Requirements: [_Click here to enter text._](#)

12. Contingency Plan (plan of action if fire escapes)

Some spotting or creeping across fire breaks may occur as normal activity on the prescribed burn. These small fires outside the control lines can usually be suppressed by the holding resources. However, it is part of the planning process to identify what resources are available in the event that any fire outside of the control lines cannot be suppressed by personnel on the prescribed fire. It is also necessary to establish trigger points in order to determine at what point these contingency resources will be brought to the fire and how they will be requested.

A. Contingency Resources Available: [_Click here to enter text._](#)

B. Method for Requesting Additional Resources: [_Click here to enter text._](#)

C. Contingency Lines/Fire Breaks Outside the Burn Unit (show on map): [_Click here to enter text._](#)

D. Trigger Points (when/at what point will contingency resources be ordered)

IF (fire outside control lines, multiple spot fires, etc.)	THEN (actions to be taken)
Spot fire outside fire break.	Direct attack will be used. Fires outside control lines will be completely extinguished. Ignition will stop while spot fire is being controlled.
Multiple spot fires outside fire breaks	All ignition operations will cease on the burn unit. The Burn Boss will coordinate resources on burn to suppress spot fires.
Fire becomes established outside burn unit.	If direct attack is not successful

13. Smoke Management and Air Quality

All prescribed fire operations will comply with the Texas Commission on Environmental Quality (TCEQ) regulations unless special permissions for TCEQ have been obtained.

A. Smoke-Sensitive Receptors: No Yes

If yes, please explain (approximate distance and direction from burn unit): [_Click here to enter text._](#)

B. Potential Impacted Areas: No Yes

If yes, please explain (approximate distance and direction from burn unit): [_Click here to enter text._](#)

C. Mitigation Strategies and Techniques to Reduce Smoke Impacts (to smoke sensitive receptors or potential impact areas identified above): [_Click here to enter text._](#)

14. Post-burn Activities

A. Required Checklist and Evaluations

The following table should be filled out after every burn and attached to the burn plan. It is also recommended a copy of the fire weather forecast for the day of the burn be attached to the plan as well.

Landowner:	County:
Date of Burn:	Time of Burn:
Burn Boss:	Acres of Burn:
Number of Crew On	Number and Size of Spot Fires:

Forecasted Environmental Variables:	Minimum	Maximum	Forecast Location
Temperature (°F):			
Relative Humidity (%):			
Wind Speed (mph):			
Wind Direction:			

Forecasted Smoke Management Variables

Forecast Location:	Transport Wind Direction:
Transport Winds Speed	Mixing Height (ft):

Observed Environmental Variables:	Minimum	Maximum	Average	Observer
Temperature (°F):				
Relative Humidity (%):				
Wind Speed (mph) and				

Estimated Fuel Conditions	Percent (%)	Method of Calculation
1-hour Fuel Moisture:		
10-hour Fuel Moisture:		
Live Fuel Moisture:		

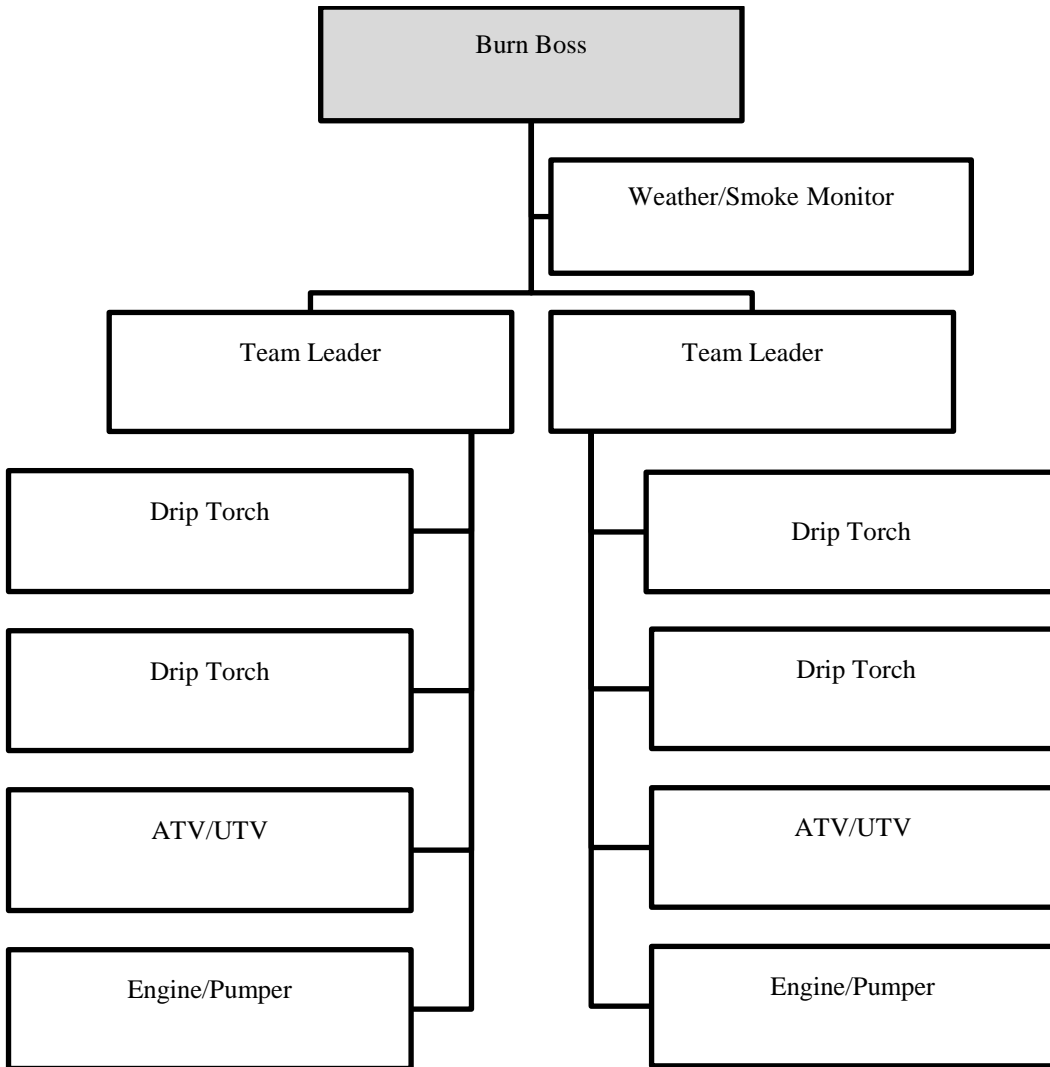
Crew Assignments

Activity	Personnel Assigned (note certified burners)
Ignition Crew:	
Suppression and Mop Up Crew:	
Weather Observer:	
Media / Information:	
Road Flagmen:	
Maintain close observation of the burned area until the fire is completely extinguished:	

Final Evaluation

Identify any equipment failures, injuries, or other problems:
Public complaints, explain:
Were objectives achieved? What should have been done differently?

B. Organization Chart (required positions shaded)



15. Maps

Include items such as: legend, magnetic north, property boundaries, water sources, roads, gates, safety zones, escape routes, fire breaks, areas to be protected, ignition area, smoke sensitive areas, contingency lines, special precautions, etc.

16. Release of Liability

**DISCLAIMER OF LIABILITY, RELEASE AND INDEMNITY AGREEMENT
PRESCRIBED BURNING**

Landowner: _____
 Address: _____
 City, State, Zip _____
 Home: _____ Ranch: _____
 Business: _____ Mobile: _____
 Fax: _____ Email: _____
 Date of Prescribed Burn: _____

In consideration for receiving technical guidance, training, and/or assistance from Texas Parks and Wildlife Department (TPWD) associated with the implementation of a prescribed burn on my property, on property for which I am the manager and/or authorized agent of the landowner, and/or as an individual assisting with a prescribed burn, I personally assume all risks associated with the prescribed burn, whether foreseen or unforeseen, and unconditionally release and hold harmless TPWD, its commissioners, directors, officers, employees, volunteers, agents and representatives, from and against any and all liabilities, costs, expenses, claims, and damages for which TPWD might otherwise become liable by reason of any accidents, or injuries to, or death of any persons, or damage to property, or both, in any manner arising or resulting from, caused by, connected with or related to the prescribed burn, regardless of how, where, or when such injury, death or damage occurs even if caused by the negligence of TPWD.

I have read this release and understand all its terms. I execute the agreement voluntarily with full knowledge of its significance.

SIGNED AND EXECUTED this _____ day of _____, 20 _____

 Landowner Signature

 Manager/Agent/Burn Boss

 Individual Assisting with Prescribed Burn

17. Job Aids

A. Prescribed Fire GO/NO-GO Checklist

<p>A. Has the burn unit experienced unusual drought conditions or does it contain above normal fuel loadings which were not considered in the prescription development? If <u>NO</u> proceed with checklist below, if <u>YES</u> go to item B.</p>	YES	NO
<p>B. Has the prescribed fire plan been reviewed and an amendment and technical review been completed; or has it been determined that no amendment is necessary? If <u>YES</u> to any, proceed with checklist below, if <u>NO</u>, STOP._</p>		

YES	NO	QUESTIONS
		Are ALL pre-burn prescription parameters met?
		Are ALL smoke management specifications met?
		Has ALL required current and projected fire weather forecasts been obtained and are they favorable?
		Are ALL planned operations personnel and equipment on-site, available, and operational?
		Has the availability of ALL contingency resources been checked and are they available?
		Have ALL personnel been briefed on the project objectives, their assignment, safety hazards, escape routes, and safety zones?
		Have all the pre-burn considerations identified in the Prescribed Fire Plan been completed or addressed?
		Have ALL the required notifications been made?
		Are ALL permits and clearances obtained?
		Has the Request for Technical Guidance AND the Release of Liability been reviewed and signed by ALL parties?
		In your opinion, can the burn be carried out according to the Prescribed Fire Plan and will it meet the planned objective?

If all the questions were answered "YES" proceed with a test fire. Document the current conditions, location, and results

 Burn Boss

 Date

B. Briefing Outline

I. Burn Organization

- A. Organizational Chart/Personnel Assignments
- B. Equipment Assignments
- C. Other Resources

II. Burn Objectives

III. Description of Burn Area

- A. Review Map of Burn (acreage, topographic features, etc.)
- B. Values at Risk (structures, T&E species, etc.)
- C. Problem Areas (fuel loading, smoke mgmt., etc.)
- D. Fuel Type (Both inside and outside the burn unit)
- E. Roads/Access
- F. Water Sources
- G. Control lines/Fire Breaks

IV. Ignition/Holding Plan

- A. Test Burn
- B. Ignition/Holding Equipment
- C. Ignition Strategy

V. Weather/Fire Behavior

- A. General History (previous period, drought, etc.)
- B. Expected Weather
 - 1. Wind Speed and Direction
 - 2. Relative Humidity
 - 3. Temperature
- C. Current Weather (relate to expected weather)
- D. Fuel Moisture
- E. Expected Fire Behavior

VI. Communications

- A. Procedures
- B. Frequencies/Channels (if applicable)
- C. Cell Phones (Burn Boss, etc.)

VII. Contingency Plan

VIII. Safety

- A. Personal Protective Equipment
- B. Lookouts, Escape Routes and Safety Zones
- C. Hazards (Poisonous animals/insects, smoke, visibility, etc.)
- D. EMT's – Medical Plan
- E. Other

C. Job Hazard Analysis (JHA)

ACTIVITY	HAZARDS	ACTION TO ELIMINATE HAZARD
Driving to work site	General operations and public traffic.	Defensive driving techniques.
	Winding, narrow roads.	Drive slow. Be able to stop in ½ the usual distance. Lights on.
	Hauling flammable substances.	Use appropriate containers for hauling driptorch fuel and gas.
	Transporting sharp tools and equipment.	Use guards, cages, boxes, or tool mounts. Tie down all loads.
Flammable Materials	Loading vehicles.	Check load before departing. The driver is responsible.
	Exposure to sparks, embers, and heat.	Use proper containers, move away from hot areas, no smoking.
	Leaking containers or torches	Empty and tag in the field, have repairs made before next use.
	Improper gas/diesel ratios for driptorch fuel.	Use labels on containers, field test small amounts before use.
Driving at or near work site	Backing or turning around in small areas.	Use spotters. Face the hazard while turning around.
	Smoke, poor visibility.	Place a guide on foot ahead of the vehicle. Wait until smoke is less dense. Lights on. Use light bars and/or warning lights. Use radio communication.
	Parking near a prescribed burn.	Use parking brake. Leave keys in ignition. Avoid leaving exposed combustible materials in bed of vehicle. All windows closed.
	ATVs and UTVs	Operated by trained and experienced drivers only. Lights on. Avoid steep slopes. Full PPE
	Public safety and smoke on road	Post signs and/or use road blocks if needed.
Equipment set-up	Operating pumps and saws.	Tuck in shirt tails, remove scarves and jewelry. Proper PPE used at all times.
	Operating high pressure nozzles.	Maintain visual contact with pump operator and other crew members. Use goggles.
Hand ignition	Close proximity to intense heat and erratic fire behavior	Use PPE. Maintain communication. Know escape routes.
	Smoke, sparks, and cinders.	Avoid very dense smoke. Wear PPE, Alter firing patterns. Rotate personnel out of worst areas.
	Poor footing, steep slopes, heavy fuels.	Constant awareness, learn to identify hazard area. Slow down.
	Burning fuel dripping from torches.	Know location of others. Extinguish when not inside burn unit. Be aware of spurting from drip torch.
	Misguided lighter lighting wrong area. Inadvertent firing over/under shot.	Post lookouts. Notify Burn Boss. Holding crews extinguish spot, subsequent to further ignition.
ATV Ignition	Rough terrain, heavy ground fuels, side hills and slopes.	Scout and locate accessible routes, make dry run, experienced operator or supervised trainee. Fire by hand if needed.
	Noise of ATV and fire obscures verbal warnings.	Hand held radios recommended for all ignition personnel.
Holding	Tool Use.	Proper training. Keep tool guards on while traveling, remove only while in use.
	Burned snags or widow-makers.	Avoid entering burned over areas. Post lookout, flag.
	Burns from radiant heat and hot embers.	Nomex clothing, hard hats and gloves required.
	Rolling debris.	Post lookouts, brief crew as to potential hazard areas.
	Erratic fire behavior	To be covered by Burn Boss in pre-burn briefing, escape routes shall be known by everyone.
Mop-up	Snag falling.	Falling and bucking to be done only by trained personnel.
	Smoke inhalation.	Crews will be rotated in and out of dense smoke.
	Fatigue, long hours of work.	The Burn Boss will monitor crew for signs of fatigue. For long mop-up operations, additional crew members may be needed. Work in pairs, have rested drivers available.
	Heat	Drink adequate fluids to maintain hydration.
	Venomous Insects & Reptiles	Stay Alert for snakes, bees, and scorpions.

Texas State Government Privacy Policy

Texas Parks and Wildlife maintains the information collected through this form. With few exceptions, you are entitled to be informed about the information we collect. Under Sections 552.021 and 552.023 of the Texas Government Code, you are also entitled to receive and review the information. Under Section 559.004, you are also entitled to have this information corrected. Contact information:

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