

POST BURN EVALUATION

COMPARTMENT NO. \_\_\_\_\_ DATE OF BURN \_\_\_\_\_  
ACRES BURNED \_\_\_\_\_ TRACT NO. \_\_\_\_\_ FIELD NO. \_\_\_\_\_  
TOWNSHIP \_\_\_\_\_ RANGE \_\_\_\_\_ SECTION \_\_\_\_\_

EVALUATION - DATE OF BURN

1. WEATHER FORECAST: Temp. \_\_\_\_\_ Humidity \_\_\_\_\_ Wind - Speed \_\_\_\_\_ Direction \_\_\_\_\_  
Sunny/Partly Cloudy/Cloudy-Weather Fronts or Changes \_\_\_\_\_
2. ACTUAL WEATHER AT BURN: Temp. \_\_\_\_\_ Humidity \_\_\_\_\_ Wind-Speed \_\_\_\_\_ Direction \_\_\_\_\_  
Sunny/Partly Cloudy/Cloudy-Weather Fronts or Changes \_\_\_\_\_
3. BURNING METHOD: \_\_\_\_\_
4. FIRE BEHAVIOR: (Circle One)  
a. Spotting (none/few/many)                      c. Convection Column (yes/no)  
b. Difficulty in Control (yes/no)                d. Fire Whirls (yes/no)

Comments: \_\_\_\_\_  
\_\_\_\_\_

5. OBJECTIVE ACCOMPLISHMENTS:  
\_\_\_\_\_  
\_\_\_\_\_

6. POST BURN MANAGEMENT PLAN: LAND USE \_\_\_\_\_  
Planned Treatment: \_\_\_\_\_  
Est. Need for Future Burn: \_\_\_\_\_

7. REMARKS:  
\_\_\_\_\_  
\_\_\_\_\_

EVALUATION BY \_\_\_\_\_ DATE: \_\_\_\_\_

FOLLOW-UP EVALUATION  
(60-90 days after burn)

1. Objective Accomplishment:  
\_\_\_\_\_  
\_\_\_\_\_

2. Post Burn Management Plan: Land Use: \_\_\_\_\_  
Planned Treatment: \_\_\_\_\_  
Estimated Need for Future Burn: \_\_\_\_\_

3. Remarks:  
\_\_\_\_\_  
\_\_\_\_\_

EVALUATION BY \_\_\_\_\_ DATE : \_\_\_\_\_

# BURN PLAN

## CLEARWATER LAKE PROJECT

**Area/Unit:** Clearwater Lake, River Road Right Bank Board Walk

**Prepared By:** Jason Wilson

**Date:** 6-7-06

**Legal Description:** (with map) T28N, R3E, S5 & 6

**Acreage:** 4 acre

**Site Description:** Board walk has been pushed into piles and needs to be burned in order for new walk to be built.

**Fire Sensitive Areas:** none

**Smoke Sensitive Areas:** River Road Park north of burn site.

**Fire Lines:** Blown trail, Black River.

**Adjacent Fuels:** Timber

**Burn Objectives:** Debris removal site prep.

**Prescription:**

Preferred Timing- Early morning, June-July  
Desired behavior- ring headfire

	Range	Ideal
Temperature	30-95	65-80
Relative Humidity	25-65	40
Wind Direction	variable	South

**Project Resources:**

Crew Size: 4

Burn Boss: Jason Wilson

Ignition/Holding Crew(s): 2

Suppression Crew(s):

Equipment:

Hand Equipment		
Needed(x)		Number
X	drip torch	2
	backpack pump	
	swatters	
X	fire rakes	4
	bow rakes	
	chainsaw	
X	backpack blower	1
	Other (list)	

Mechanized Equipment		
Needed(x)		Number
	ATV	
	tractor	
	pickup w/ water unit	
	dozer	
	ATV water unit	
	pulled water unit	
	Other(list)	

Other Equipment		
Needed		Number
X	matches	2
X	portable radios	6
X	blower fuel	
X	drip torch fuel	
	bolt cutters	
	pliers	
X	drinking water	
	food	
	compass	
X	area maps, topos	
	Other(list)	

**Weather Monitoring:** Missouri Department of Conservation, Clearwater forestry prior to burn

**Public Notifications:** MDC Forestry, Sheriff

**Burn Plan Review/Approval (Name, Title, Date):**

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**Operations Manager**

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**Project Branch Chief, Resource/Recreation**

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**District Forester (if required)**

Regulation  
No. 1130-2-32Project Operations  
Project Fire Management

1. Purpose. The purpose of this regulation is to provide guidelines to Little Rock District project managers and employees in fire management operations, including prescribed burning, and preparing and responding to wildfire situations. The regulation is intended to be flexible; therefore, of value to all projects, and to provide the necessary foundation to establish standards for all fire management operations.
2. Applicability. This memorandum is to be implemented at all Corps of Engineers water resource development projects in the Little Rock District.
3. References.
  - a. ER 1130-2-540, Project Operations, Environmental Stewardship Operations and Maintenance Policies dated 15 November 1996.
  - b. National Wildfire Coordinating Group. 1993. National Interagency Incident Management System, Wildland Fire Qualification Guide 310-1.
  - c. National Wildfire Coordinating Group. 2000. Wildfire and Prescribed Fire Qualification System Guide, National Wildfire Coordinating Group, Incident Operations Standards Working Team
4. Public Safety. If a wildfire threat is considered eminent, potential impacts on public safety should immediately be evaluated. It is imperative that no communication be taken for granted in notifying the visiting public related to the danger from fire and keeping resident and project office personnel informed. An immediate communication should be opened between the park ranger or park attendant nearest the fire and resident or project office to insure that there is an appropriate first response and that future decisions related to extinguishing the fire can be based on the most accurate information. Local law enforcement and fire fighting response agencies

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This regulation supersedes SWLOM 1130-2-32 dated 4 March 1991.

should be kept informed. Project Managers or their counterparts may authorize evacuations for Public Safety. In the event evacuation is deemed necessary, the evacuation needs to be orderly. Instructions should be simple, clearly stated, and easily understood. Project Offices and Gate Shacks should have emergency phone numbers and a prior action plan established in the event of wildfires. All new employees and gate attendants should be briefed, and action plans should be routinely discussed and re-evaluated during employee safety meetings prior to recreation seasons and/or high fire danger periods, and with gate attendants during pre-work conferences. Burn Bans and posted notices during periods of high fire danger, notifications in local papers, coordination with local governments and other appropriate restrictions are some methods by which projects may control the danger of wildfires in public use area. Periodic fuels reduction prescribed burns during the off season are useful in controlling hazardous fuel levels, but should be accomplished in conjunction with written prescribed burn plans, professional fire crews, and coordinated with appropriate agencies.

5. Local Flexibility. Operations Managers may develop a fully trained and qualified project fire management force at project locations if the program is based on the training and certification requirements established in the Wildland Fire Qualifications Subsystem Guide 310-1, Parts one and two, prepared by the National Wildfire Coordinating Group (NWCG). Compliance with training and certification requirements will be the responsibility of the Operations Manager or his designated evaluator. The project would act as the Home Unit for deployment, if applicable. Projects that would not benefit from this level of operation may elect to develop OMP fire protection plans that depend on local agency agreements solely or in part.

6. Employee Safety. Local initiative may be the most effective in determining how much training is needed, how much is available, from whom, and which employees need it. However, all individuals who will be actively engaged in support of prescribed burning activities must receive, at a minimum, training comparable to the standard fire fighting training: S-110, Basic Fire Suppression; S-130, Basic Fire; and I-100, Incident Command System Orientation. This training is also recommended for individuals who might be first responders to wildfire situations. All Employees confronted with wildfire situations may, of necessity, participate in evacuation, dispatch, or other indirect duties when the situation merits. However, only adequately trained and physically fit personnel, as referenced under employee fitness, are recommended to engage in extinguishing a wildfire situation other than those considered easily extinguishable and unthreatening. Appropriate training may be coordinated through the District Forester, or through the Arkansas-Oklahoma interagency Coordinating Center, ([www.fs.fed.us/oanf/fire/index.html](http://www.fs.fed.us/oanf/fire/index.html)).

7. Employee Fitness. Any individual who will be actively engaged in conducting prescribed burning must enroll in the project office medical surveillance program, and receive a doctor's physical and clearance to be able to perform arduous, moderate, or light physical exercise depending on the individual's fitness level. Through proper planning, prescribed fires should not exceed moderate intensity. The individual along with the doctor will be responsible for assessing the individual's abilities with respect to fitness level and individuals generally should

govern the extent and pace of their physical activity. The individual will arrange for appropriate duty through the Operations Manager. Operation's Managers may elect to appoint a project contact person to act in this capacity. Project personnel designated to coordinate Fire Management requirements or evaluate fire training needs should receive advanced fire management training, and have a thorough knowledge of fire management and qualifications established under the 1999 Wildland and Prescribed Fire Qualification System PMS 310-1, established by the National Wildfire Coordinating Group ([www.fed.us/fire/310-1/](http://www.fed.us/fire/310-1/))

8. Equipment, Vehicles, and Personal Protective Equipment. In times of high fire danger, backpack sprayers and flappers should be carried in each ranger and inspection vehicle. Individuals with the proper equipment can extinguish small fires with quick action. Other equipment should be readily available at the resident or project office. In no case should vehicles be parked in an area where there is the possibility that heat, sparks, or fire could damage or cause combustible parts to burn. On projects where the potential for threats from wildfire are considered high, and/or local response may be delayed, adequate first response equipment such as backpack sprayers or small vehicle mounted pumpers are recommended. All equipment and tools should be inventoried, serviced, and readied annually and when local fire danger becomes high. Employees directly involved in fire management activities will use the proper personal protective equipment (PPE) as recommended in the safety manual. However, steel toe shoes will be discretionary to the individual per the recommendations under the National Wildfire Coordinating Group.

9. Fire Fighting Agreements. To accomplish wildland fire management for prescribed burn and fire control, the projects may enter into reciprocal agreements with appropriate public organizations or agencies. Such agreements may provide for re-imbursalment of any or all costs incurred in performing wildland fire management actions on Corps lands for prescribed burn and fire management activities. Such agreements should include a waiver from claims for compensation (typically reciprocal) of any loss, damage, personal injury, or death resulting in the performance of the agreement. Operations Managers are encouraged to accomplish wildland fire management through reciprocal agreements and/or appropriately trained and equipped personnel. Fire Management requires close and continuous coordination with other resource management and fire control agencies to ensure mutual understanding of respective levels of responsibility and reciprocity.

10. Fire Reports. Appendix A is a check-off fire reporting form (SWL 423) and Appendix B is a sample Prescribed Burn Plan. SWL Form 423 will provide an informational document when hired labor or local fire departments or districts are called to respond to fires on the project. Appendix 2, the Arkansas Forestry Commission's Prescribed Burn Plan standard form will provide an informational document for developing prescribed burn plans provided project personnel have the appropriate training and authority. These forms are examples to be used and may be modified for individual project use. Completed forms will be maintained at the Resident or Project Office. The district Forester should also be notified of fire management activities to facilitate any public inquiries. When park facilities are damaged by fire, a memorandum will be

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drafted detailing the extent of the fire, the estimated amount of damages, and an estimate of the time that the facility will be lost to the public.

Appendix (2)

1. Appendix A, Fire Fighting and Response
2. Appendix B, Prescribed Burn Plan

BENJAMIN H. BUTLER  
Colonel, Corps of Engineers  
Commanding

Distribution: F

APPENDIX A

LITTLE ROCK DISTRICT  
FIRE FIGHTING AND RESPONSE

1. PROJECT: \_\_\_\_\_
2. DATE: \_\_\_\_\_
3. TIME OF NOTIFICATION: \_\_\_\_\_
4. LOCATION: \_\_\_\_\_  
\_\_\_\_\_
5. CAUSE OF FIRE: \_\_\_\_\_
6. TYPE OF RESPONSE: \_\_\_\_\_  
\_\_\_\_\_
7. PERSONNEL INVOLVED (CORPS AND OTHER): \_\_\_\_\_  
\_\_\_\_\_
8. EQUIPMENT USED (CORPS AND OTHER): \_\_\_\_\_  
\_\_\_\_\_
9. EXTENT OF LOSS: \_\_\_\_\_
10. PRIVATE PROPERTY LOSS: \_\_\_\_\_  
\_\_\_\_\_
11. TIME EXTINGUISHED THE FIRE: \_\_\_\_\_
12. ESTIMATED ACREAGE BURNED: \_\_\_\_\_
13. RELATED INJURIES AND/OR DEATHS: \_\_\_\_\_
14. INDIVIDUAL MAKING REPORT: \_\_\_\_\_

APPENDIX B

**ARKANSAS FORESTRY COMMISSION  
PRESCRIBED BURN PLAN**

**1. UNIT INFORMATION**

Landowner's name and  
phone#: \_\_\_\_\_  
Tract size  
(acres): \_\_\_\_\_  
Location  
(S/T/R): \_\_\_\_\_  
  
County: \_\_\_\_\_

**2. OFFICIAL NOTIFICATION BEFORE BURN**

AFC Dispatch: \_\_\_\_\_  
  
Sheriffs: \_\_\_\_\_  
  
FireDept.: \_\_\_\_\_

**3. NEIGHBOR NOTIFICATIONS (within ¼ mile)**

Name & Phone: \_\_\_\_\_  
  
Name&Phone: \_\_\_\_\_  
  
Name&Phone: \_\_\_\_\_  
  
Name&Phone: \_\_\_\_\_  
  
Name&Phone: \_\_\_\_\_

**4. PRESCRIBED BURN OBJECTIVE**

- Natural Regeneration site prep
- Artificial Regeneration site prep
- Windrows
- Slash

- Other (define) \_\_\_\_\_
- Undesirable Species
- Hazard Reduction
- Wildlife Habitat

**Other burn objectives:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

PREPARED
Burn Boss: _____
Date: _____

APPROVED
Supervisor _____
Date: _____

**5. MANAGING THE BURN (Describe how each of the following will be addressed)**

Fireline preparation: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Firing Techniques: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

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Fire sensitive areas (adjacent young pine plantations, buildings, etc.): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Smoke sensitive areas (smoke screening map prepared on topographic and/or county road that will identify roads, drainages, and residences): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Contingencies (include safety zone, escape routes, escape response procedures): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**BURNING ASSIGNMENTS**

Burn Boss: \_\_\_\_\_

**INSTRUCTIONS TO IGNITION PERSONNEL**

Ignition Person

Instructions

1) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**DIVISION ASSIGNMENT**

Division A  
Crew Member Assignment

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Division B  
Crew Member Assignment

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Division C  
Crew Member Assignment

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Division D  
Crew Member Assignment

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Division E  
Crew Member Assignment

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**SPECIAL ASSIGNMENT**

Crew Member

Division Location & Assignment

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**EQUIPMENT ASSIGNMENT BY DIVISION**

	A	B	C	D	E	F	G	H	I	J
PPE										
Plow Unit										
Torch										
Rakes										
Fuel										
Water										
Food										
Radios										
Extra Radio Battery										
ATV										
Chainsaw										
First Aid Kit										
Other										

Provide for the prescribed burn crew a map with physical and topographic features and division assignment boundaries. Designate safety zones, drop points, and what equipment and materials are located at these drop points.

### BURN DAY CHECKLIST

Date of Burn: \_\_\_\_\_

Parameters	Recommended Do Not Burn Conditions	Recommended Range	Forecasted Weather Conditions
Date of Burn			
Air Temp (°F)			
Relative Humidity (°/°)	<or = 25%		
Prob. Of Ignition	>or = 80%		
Windspeed			
Wind Direction			
Smoke Category Day	1 or 5		

CHECK (✓) AND BURN ONLY IF ALL ITEMS ARE ADDRESSED:

- Burning assignments
- Map for crew
- Extra precautions for fire sensitive areas
- Smoke sensitive areas not threatened
- Official notifications made
- Neighbor notifications made
- Personal Protective Equipment in use
- Transport truck(s) and other equipment in a safe area
- Fireline width adequate
- Forecasted temperature within recommended range
- Forecasted relative humidity > 25%
- Forecasted probability of ignition < 80%
- Forecasted mid flame wind speed within recommended range
- Forecasted wind direction as recommended
- Forecasted smoke Category day 2, 3, or 4

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Hourly Belt Weather Recording During the Burn

	1	2	3	4	5	6	7	8
Temp								
RH								
Wind speed								
Wind direction								

### PRESCRIBED BURN PLAN

LANDOWNER: U.S.A.C.E. WAPPAPELLO LAKE

DATE: 11-1-05

NAME OF AREA: Bonards Crk

DATES FOR BURN: Feb-Mar ACTUAL BURN DATE: \_\_\_\_\_

LEGAL DESCRIPTION: TOWNSHIP 29 RANGE 5 SECTION 26

LAND USE: old field

#### VALUE

1                      2                      3                      4                      Score

#### ASSESSMENT CRITERIA

FUEL TYPE	Herbaceous or Herbaceous Dominated	Old field or Shrub dominated	Timber litter-Branches and leaves	Slash	<u>2</u>
SIZE OF BURN AREA (acres)	0-10	10-20	20-30	>30	<u>4</u>
ESCAPE POTENTIAL	No adjacent Fucl.	Adjacent fucl W/low ignition Probability	Adjacent fucl W/moderate Ignition Probability	Adjacent fucl W/high ignition Probability	<u>3</u>
ADJOINING HAZARDS	No adjoining Private land or High value Resources	Adjoining Private land But no high Value resources	High value Developments In 1/4 to 1/2 mi.	High value Developments In < 1/4 mi.	<u>1</u>
TOPOGRAPHY	Flat to gently Rolling, < 5%	Gentle to Moderate 5-10%	Moderate To severe 11-30%	Severe slopes Often >30	<u>2</u>
POTENTIAL IMPACT OF SMOKE ON TRAFFIC	No impact	1/4 - 1/2 mi. from secondary roads	< 1/2 mi. from major highway or < 1/4 mi. from secondary roads	< 1/4 mi. from major highway	<u>4</u>
IMPACT OF SMOKE ON RESIDENTIAL, INDUSTRIAL OR HIGH PUBLIC USE AREAS	No impact	Isolated residences, low public use	Small rural community, Moderate public use	Large residential area industrial site high public use	<u>3</u>

#### PRESCRIPTION:

Desired fire behavior: King fire reduce woody vegetation

Desired temperature: 50°/70°

Desired humidity: 25% - 50%

Desired wind direction: S

Fire line construction: Dozer/Roads

Note: All fire lines will be rechecked prior to ignition.

Ignition method(s): Back burn along Roads - Ring

Note: See burn plan map.

PROJECT RESOURCES:

Crew size: 8

Burn Boss James

Ignition crew 2

Suppression crew 6

Smoke spotters State Modot

Note: smoke spotters do not have to be fire team members.

Hand Equipment:

Needed

- Drip torches
- Backpack pumps
- Rakes
- Chainsaws
- Backpack blowers
- Flappers

Mechanized Equipment:

Needed

- Mule w/ water unit
- Tractor w/ disk
- Pickup w/ water unit
- Dozer

WEATHER MONITORING: National weather service, weather station, onsite temperature, humidity, wind speed and directions: NWS 447-1887

PUBLIC NOTIFICATIONS:

Adjacent Landowners	
Missouri Department of conservation	223-4525
U.S. Forest Service	785-1475
Wayne County Sheriff	224-3219
Butler County Sheriff	785-8444
Wappapello Fire Department	222-8342
Greenville Fire Department	224-3221
Chaonia Fire Department	297-3206
Patterson Community Fire Department	856-4974

*City of Greenville*

*MoDOT-Silva*

BURN PLAN

PREPARED BY: *Eric S. Turner* DATE: *11-1-05*

CHECKED BY: *James W. Madcox* DATE: *11/7/05*  
NATURAL RESOURCES SPECIALIST

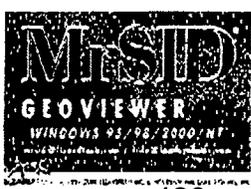
APPROVED BY: *Ray A. Hill* DATE: *11/9/05*  
OPERATIONS MANAGER or  
ASSISTANT OPERATIONS MANAGER

QQ\_B\_GREENVILLE\_MO\_SW



Bounds Creek

Scale 1:6068



420

#### 4.8 Missouri Department of Conservation Burn Plan

## INSTRUCTIONS MDC BURN PLAN

Following are specific instructions for completing each section of the MDC burn plan:

### PROJECT DESCRIPTION

- Area/Field, Stand or Unit No.:** Place all designations here as to area, management unit, field or stand number, project designation, landowner, etc. Multiple small fields or stands in close proximity to each other with similar management objectives and fuel types may be lumped together on one burn plan.
- Prepared by:** Name of the person who actually completed the burn plan even if completed by Prescribed Fire Planner.
- Date:** Date the plan was prepared.
- RXBB signature:** Certified Prescribed Fire Burn Boss who has reviewed the plan and area to be burned and accepts responsibility for the plan being complete and accurate.
- Date:** Date the plan signed by the Prescribed Fire Burn Boss.
- Location:** List the legal description (section, township, range) or latitude and longitude of the burn location. Provide map(s) that illustrate topography, county roads, project boundaries, vegetative cover and ignition plan.
- Acreage:** List the acres within the planned burn area boundary.
- Site description:** List the plant communities and estimate proportions of each (i.e., 20% prairie, 40% savannah, 40% idled cropland). List the fuels – type and estimated tonnage using NRCS estimators for forage grasses. For other fuels, estimate amount (light, moderate, heavy). List the terrain slopes and aspects if they are expected to be a factor in the resulting fire behavior or fire effects.
- Sensitive areas:** List any areas or ownerships that may be sensitive to a prescribed fire or the smoke. Include areas such as: houses/structures, towns/cities, airports, landowners that need special attention, roads/highways. Also include any areas within the burn unit that will require special attention, i.e., powerlines, wet areas near roads and trails, concentrations of snags or high fuel loads near the boundary. If there are any streams with permanent flow or permanent pools, be sure to note them and secure the Fisheries Regional Supervisor's approval. Burn plans that include Natural Areas must be reviewed by the Natural History Biologist.
- Risk Assessment Value:** List the risk assessment value (8-32) from the Risk Assessment and Review Level Worksheet. Attach a copy of the worksheet to the plan.

### PRESCRIPTION

- Burn objectives:** The stated objectives for the burn need to be clear and quantifiable so the project can be evaluated for success or if planned management needs to be altered. "Burn it to see what happens" isn't quantifiable. Even if you are interested in evaluating the results of "returning fire to its

natural role in the ecosystem," you have a general idea of what the impacts will be. List those impacts quantifiably. For example, amount of litter removed, type or amount of herbaceous vegetation encouraged, species/sizes/percents of woody species removed. Select your desired conditions, write the objectives and then evaluate the burn to see if either your expectations or the management program need to be modified.

**Preferred timing:** List the calendar dates and any phenologic (plant development) indicators such as: April 1 desired but within March 15-April 15 period. Prefer dogwood leaves to be size of squirrel's ear, or bluestems with 1-3" of new growth. NOTE: Plant development indicators are optional.

**Desired fire behavior:** Fire behavior needed to achieve your objectives: hot or cool, head or backing fire, flame length if known, amount of fuel consumed or percent of area burned.

**Conditions needed:** List the range of acceptable temperatures, relative humidities, fuel moistures, mid-flame wind speeds (eye-level winds) and wind directions that will give you the desired fire behavior and then list the "ideal" or best set of conditions, if you could pick them exactly.

Fire behavior parameters will be required using BEHAVE PLUS fire behavior modeling software. You can determine the 1- and 10-hour fuel moisture for your burns using the basic guidelines provided during the Level 3 training and then verify them by taking on-site weather before the burn.

**BEHAVE run results:** Preparers of the burn plan should model the expected fire behavior for both the headfire and backfire and record the visual estimates of the fire behavior in the post-burn evaluation portion of the plan. BEHAVE PLUS will give you estimated rates of spread, flame length, heat/ft<sup>2</sup> and fireline intensity. Each of these factors influences the effectiveness of the burn and the staff/equipment needs on the fireline. Use these expected parameters to determine how the fire should behave. Also make a BEHAVE PLUS run on any adjacent fuel that may create a problem in case of an escape. This allows you to plan contingencies should an escape occur.

### Smoke Management

**Desired atmospheric conditions:** Most burns will be conducted under unstable atmospheric conditions to get maximum lift of the smoke. Unstable atmospheres are typically present on clear to partly cloudy days. Cloudy to overcast days are typically stable conditions and smoke will not rise or dissipate. The plan should contain minimum atmospheric conditions of mixing heights greater than 1650 feet and ventilation rates in excess of 6000 cubic meters per second. These figures are calculated by the weather forecasters and should be available on the twice daily forecasts. These criteria will provide for good smoke rise and mixing with the atmosphere. These are not requirements for all burns, especially if smoke will not be a problem such as in rural areas with few roads or houses or in the deep Ozarks where there are extensive public ownerships and smoke management concerns are negligible.

**Air quality:** List any air quality restrictions from DNR air quality standards, city or county ordinances, etc.

**Firelines:** List the approximate lengths and types of firebreaks, including natural breaks. Note the timing of firebreak establishment and any follow-up firebreak inspections close to or on the day of the burn.

**Adjacent fuels:** List adjacent fuels around the project area and make note of any with a high potential for problems in the event of an escape. BEHAVE PLUS estimates of fire behavior in these fuels, though not mandatory, will provide you expected fire activity should you experience an escape.

## **PROJECT RESOURCES**

**Prescribed Fire Burn Boss:** List the certified Prescribed Fire Burn Boss who will conduct the burn. List multiple names if assignment for the burn will be made at a later date.

**Crew size:** Total number of able bodies needed and levels of training, if needed for specialized tasks.

**Ignition/holding crews:** Number of crews and number on each crew.

**Suppression crews:** Number of crews and number on each crew.

**Other crew members:** List other needed personnel for media contact, temporary conservation area road closures, weather recording, go-fors, etc.

**Equipment:** Using the list, check those standard items needed and the number to be available. Expand the list under each category to list all of the equipment needed on site before you start your burn. Personal safety gear – hard hats, gloves, boots, etc. – need not be listed as these are required by policy and are the responsibility of anyone working on a fire.

## **LOGISTICS**

**Weather monitoring:** List the sources of weather information that will be used and the timing of the weather checks (before, during and after the fire).

**Notifications:** List the people or agencies to be contacted and their phone or radio numbers. List may include, but need not be limited to, affected MDC regional and other supervisors, Fire Zone Managers, related agencies, news media, rural fire departments, sheriff, 911 Dispatch and adjacent landowners.

**Ignition plan:** Provide a brief narrative of the planned ignition strategy and sequence

On map(s) attached to the plan indicate:

- Project boundary
- Firebreaks by type
- Placement of personnel and equipment
- Firing sequence including wind direction
- Hazards either inside or outside the burn area that may cause a problem with conducting the burn - wet spots, fences without gates, fuel jackpots (brushpiles, patches of dense cover), steep slopes, etc.

**NOTE:** All items on the map should be identified in the map legend.

**Ignition sequence:** Start ignition = X

Crew Movement = arrows  
Crew Designations = numbers (1, 2, 3, etc.)  
Map Locations = letters (A, B, C, etc.) references for either ignition progress or crew placement, mark these key points on the ground for positive identification by burn crew members

Contingency plans: What you will do in the event of a problem with the burn?

NOTE: Any fire outside the control line is considered an "escape."

NOTE: Escape routes for personnel should be specified in the event of a major escape or whenever going "into the black" is not sufficient. This is especially important on burns where high fuel loads or terrain make entrapment of personnel more hazardous.

Fire out of prescription: Specify what your actions will be if conditions move outside the prescription after the burn has been ignited. Are there points when the fire will be shut down? Will there be a point where the firing will continue, even if conditions become better or worse than the prescription dictates? Any different actions by crews or backups should the conditions move out of prescription in either direction?

Minor escapes: Minor escapes are "spotovers" or small ignitions outside the control line that can be handled by the ignition and holding crews working that portion of the line.

Moderate escapes: Moderate escapes are fires outside the control line that are beyond the control of the crew on that portion of the line, but that can be contained by the prescribed fire crew on the burn.

Major escape: Major escapes are fires outside the control line that tax the limits of the on-site crew and necessitate calling backup forces or require the use of secondary suppression boundaries. The secondary lines should be specified in this section to facilitate crew movement in the event of a major escape.

## **BURN PLAN REVIEW AND APPROVAL**

Burn plans must receive regional supervisor approval by the individuals specified in the Risk Assessment and Review Level Worksheet. Regional Supervisors must be Incident Commander (IC) or Prescribed Fire Burn Boss (RXBB) qualified to sign. If a Regional Supervisor lacks either of these qualifications, they will select a member of their staff who is qualified as an IC or RXBB to sign on their behalf. All private land burns conducted by MDC personnel must follow the review process for Moderate Risk or High Risk burns based upon the total assessment value.

## **RE-APPROVAL**

A burn plan may be used for repeat burns of an area without rewrite if the Prescribed Fire Burn Boss certifies that the plan is still valid and none of the risk assessment criteria (such as new construction or developments on adjoining land, fuel type or conditions, smoke impacts, etc.) have changed. The Prescribed Fire Burn Boss certifies by way of signing and dating the original plan.

## **DAY OF BURN CHECKLIST**

To be checked off and signed by the Prescribed Fire Burn Boss as a final check that everything is in order before initiating the burn. Insert name and phone number of nearest emergency medical service. Burn Plans that are reused from a previous burn shall have a new Day of Burn Checklist attached and completed.

## **POST-BURN EVALUATION**

To be completed on-site by the Prescribed Fire Burn Boss upon completion of the burn. Weather is to be recorded before ignition and after the firing is completed on small burns. Weather should be checked periodically during large landscape burns. Burn Plans that are reused from a previous burn shall have a new Post-Burn evaluation attached and completed.

## **NOTE: THE BURN PLAN SHOULD HAVE FOUR DOCUMENTS ATTACHED**

- Map(s) that illustrate topography, county roads, project boundaries, vegetative cover and ignition plan
- Risk Assessment and Review Level Worksheet
- Day of Burn Checklist
- Post-Burn Evaluation

Robert Ferris, M.D., F.A.C.O.G.  
Lorraine Fincke-Dodson, M.D., F.A.C.O.G.  
Allison Huebert, M.D., F.A.C.O.G.



Kevin Bredeman, D.O., F.A.C.O.G.  
Brian Stephens, M.D., F.A.C.O.G.  
Lisa Graessle, Nurse Practitioner

PATIENT REGISTRATION

PLEASE PRINT

Dr. \_\_\_\_\_

Appt. Date \_\_\_\_\_

Primary Care Physician \_\_\_\_\_

Patient Name \_\_\_\_\_  
(Last) (First) (Middle) (Maiden)

Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Home Phone: (\_\_\_\_) \_\_\_\_\_ Cell Phone: (\_\_\_\_) \_\_\_\_\_ Patient's Soc. Sec. # \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Date of Birth \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

Marital Status:  Single  Married  Divorced  Widowed

Patient's Employer: \_\_\_\_\_ Address: \_\_\_\_\_

Work Phone: (\_\_\_\_) \_\_\_\_\_ Extensions \_\_\_\_\_ Occupation: \_\_\_\_\_

Spouse: \_\_\_\_\_ Cell Phone: (\_\_\_\_) \_\_\_\_\_ Date of Birth \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Soc. Sec. # \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

Spouse's Employer \_\_\_\_\_ Work Phone: (\_\_\_\_) \_\_\_\_\_

**Contact Person (not living with you)**

Name \_\_\_\_\_ Relationship \_\_\_\_\_

Home Phone (\_\_\_\_) \_\_\_\_\_ Cell Phone: (\_\_\_\_) \_\_\_\_\_

**Please fill out this section if responsible party is other than patient.**

Name: \_\_\_\_\_ Soc. Sec. # \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

Address: \_\_\_\_\_

Home Phone Number: (\_\_\_\_) \_\_\_\_\_ Birthdate: \_\_\_\_\_ How Related: \_\_\_\_\_

Employer: \_\_\_\_\_ Work Phone Number: (\_\_\_\_) \_\_\_\_\_

**Authorization**

I authorize any holder of medical or other information about me to release to the Social Security Administration and Centers for Medicare and Medicaid Services or its intermediaries or carrier or any other commercial insurance company, any information needed for this or a related claim. I permit a copy of this authorization to be used in place of the original, and request payment of medical insurance benefits to the party who accepts assignment. Relations pertaining to Medicare/Medicaid assignment of benefits apply. I understand that I am financially responsible for all charges not covered by this authorization.

SIGNATURE OF PATIENT OR LEGAL GUARDIAN IF PATIENT IS A MINOR:

X \_\_\_\_\_

Date \_\_\_\_\_



# MISSOURI DEPARTMENT OF CONSERVATION

## PRESCRIBED BURN PLAN

PROJECT DESCRIPTION	
<b>Area/Field, Stand or Unit No.:</b>	
<b>Prepared by:</b>	<b>Date:</b>
<b>RX Burn Boss approval:</b>	<b>Date:</b>
<b>Location description (attach map):</b>	
<b>Acreage:</b>	
<b>Site description:</b>	
<b>Sensitive areas:</b>	
<b>Risk Assessment Value (attach Risk Assessment Worksheet ):</b>	

PRESCRIPTION			
<b>Burn objectives:</b>			
<b>Preferred timing:</b>			
<b>Desired fire behavior:</b>			
<b>Conditions needed:</b>		<b>Range</b>	<b>Ideal</b>
	Temperature		
	Relative humidity		
	1 hr. fuel moisture		
	10 hr. fuel moisture		
	Midflame windspeed		
	Wind direction		

<b>BEHAVE run results:</b>			
Burn area fuel model(s):			Adjacent area fuel model(s):
	Head	Back	Head
Rate of spread (ch/hr or ft/min)			
Heat/unit area (BTU/ft <sup>2</sup> )			
Fireline intensity (BTU/ft/sec)			
Flame length (ft)			
<b>Smoke management:</b>			
Desired atmospheric conditions:			
Mixing height (>1650' recommended):			
Ventilation rate (>6000 m <sup>3</sup> /sec recommended):			
Air quality restrictions that apply:			
<b>Firelines:</b>			
<b>Adjacent fuels:</b>			

<b>PROJECT RESOURCES</b>		
<b>Prescribed Fire Burn Boss:</b>		
<b>Crew size:</b>		
<b>Ignition/holding crew(s):</b>		
<b>Suppression crew(s):</b>		
<b>Other crew members:</b>		
<b>Hand equipment:</b>	Number	Assignment
Drip torches		
Backpack pumps		
Swatters		
Broom rakes		
Chainsaws		
Backpack blowers		
Belt weather kit or Kestral		
Other:		
<b>Mechanized equipment:</b>	Number	Assignment
ATVs		
Tractor		
Pickup with water unit		
Dozer		
ATV water unit		
Pulled water unit		
Other:		
<b>Other equipment:</b>	Number	Assignment
Matches		
Portable radios		
Blower fuel		
Drip torch fuel		
Bolt cutters		
Pliers		
Drinking water		
Food		
Compass		
Aerial photos, maps, topos		

First aid kits		
Cell phone		
Other:		
Other:		

<b>LOGISTICS</b>
<b>Weather monitoring:</b>
<b>Public notifications:</b> RFDs: Law enforcement: MDC regional office/field offices/fire zone dispatch: Adjacent landowners: Other:
<b>Ignition plan (attach map):</b>
<b>Contingency plans:</b> Fire out of prescription: Minor escapes (spotovers): Moderates escapes: Major escape:

<b>BURN PLAN REVIEW AND APPROVAL</b>
Low risk assessment (value 8-13) – Forestry, Wildlife or Private Land Services Regional Supervisor*
Signature: _____ Date: _____
Moderate risk assessment (value 14-22) – Forestry and Wildlife or Private Land Services Regional Supervisor
Signature: _____ Date: _____
Signature: _____ Date: _____
High risk assessment (value 23+) – Fire Management Coordination Team
Signature: _____ Date: _____
Fisheries Regional Supervisor approval if riparian zones involved
Signature: _____ Date: _____
Natural History Biologist approval if Natural Area involved
Signature: _____ Date: _____
<b>RE-APPROVAL**</b>
I certify that this burn plan is still valid and the risk criteria (new construction, fuels, etc.) have not changed.
RXBB Signature: _____ Date: _____
I certify that this burn plan is still valid and the risk criteria (new construction, fuels, etc.) have not changed.
RXBB Signature: _____ Date: _____
I certify that this burn plan is still valid and the risk criteria (new construction, fuels, etc.) have not

changed.

RXBB Signature:

Date:

I certify that this burn plan is still valid and the risk criteria (new construction, fuels, etc.) have not changed.

RXBB Signature:

Date:

\* Regional Supervisors must be Incident Commander (IC) or Prescribed Fire Burn Boss (RXBB) qualified to sign. If a Regional Supervisor lacks this experience, they will select a member of their staff who is qualified as an IC or RXBB to sign on their behalf.

\*\* A burn plan may be used for repeat burns of an area without rewrite if the Prescribed Fire Burn Boss certifies that the plan is still valid and none of the risk assessment criteria (such as new construction or developments, fuel type, smoke impacts, etc.) have changed.