
Appendix A: Laws and Authorities

Organic Administration Act of June 4, 1897 (16 U. S. C. 551)

Weeks Law, Act of March 1, 1911 (16 U. S. C. 563)

National Park Service Act of 1916 as amended (67 Stat. 495; 16 U.S.C. 1 et seq.)

Protection Act of September 20, 1922 (42 Stat. 857; 16 U.S.C. 594)

Clark-McNary Act of 1928 (45 Stat. 221; 16 U. S. C. 487)

McSweeney-McNary Act of 1928 (45 Stat. 221; 16 U.S.C. 487)

Economy Act of June 30, 1932 (47 Stat. 417; 31 U.S.C. 1535)

Taylor Grazing Act of June 28, 1934 (48 Stat. 1269; 43 U.S.C. 315)

Oregon and California Act of August 28, 1937 (50 Stat. 875; 43 U.S.C. 1181e)

Bankhead-Jones Farm Tenant Act of July 22, 1937 (7 U. S. C. 1010 - 1011)

Federal Property and Administrative Service Act of 1949 (40 U.S.C. 471; et seq.)

Reciprocal Fire Protection Act of May 27, 1955 (69 Stat. 66; 42 U.S.C. 1856a)

Clean Air Act of July 14, 1955, as amended (42 U. S. C. 7401 et seq.)

Multiple-Use Sustained Yield Act of 1960 (16 U. S. C. 528)

Wilderness Act of 1964 (16 U. S. C. 1131 - 1132)

National Wildlife Refuge System Administration Act of 1966 as amended (80 Stat. 927; 16 U.S.C. 668dd through 668ee)

National Environmental Policy Act of 1969 (42 U. S. C. 4321)

Alaska Native Claims Settlement Act of 1971 (85 Stat. 688; 43 U.S.C. 1601)

Endangered Species Act of 1973 (16 U. S. C. 1531 - 1544)

Disaster Relief Act of May 22, 1974 (88 Stat. 143; 42 U.S.C. 5121)

Federal Fire Prevention and Control Act of 1974 (88 Stat. 1535; 15 U.S.C. 2201)

National Forest Management Act of 1976 (16 U. S. C. 1600 et seq.)

Federal Land Policy and Management Act of 1976 (90 Stat. 2743)

Federal Grant and Cooperative Agreement Act of 1977 (P.L. 950224, as amended by P.L. 97-258, September 13, 1982 (96 Stat. 1003; 31 U.S.C. 6301 thru 6308)

Alaska National Interest Lands Conservation Act of 1980 (94 Stat. 2371)

Supplemental Appropriation Act of September 10, 1982 (96 Stat. 837)

Wildfire Suppression Assistance Act of 1989 (P.L. 100-428, as amended by P.L. 101-11, April 7, 1989), 42 U. S. C. 1856

Indian Self-Determination and Education Assistance Act (PL 93-638) as amended

National Indian Forest Resources Management Act (P. L. 101-630 November 28, 1990)

Tribal Self-Governance Act of 1994 (P.L. 103-413)

Department of the Interior and Related Agencies Appropriations Act, Fiscal Year 1995 (P.L. 103-332)

National Wildlife Refuge System Improvement Act of 1997 (P.L. 105-57)

Federal Financial Assistance Management Act of 1999 (P.L. 106-107)

Healthy Forest Restoration Act of 2003 (P.L. 108-18, 117 Stat. 1887)

Tribal Forest Protection Act of 2004 (P.L. 108-287)

Department of the Interior, Departmental Manual; Part 620: Wildland Fire Management;
Chapter 4: Fuels Management and Wildland-Urban Interface Community Assistance

Department of Agriculture, US Forest Service Manual; FSM 5100: Fire Management; Chapter 5140:
Fire Use

National Historic Preservation Act (1966 as amended)

Appendix B: Prescribed Fire Plan Template

A standardized, reproducible template form for the Prescribed Fire Plan development process is included in this appendix. A standardized format is provided for the Prescribed Fire Plan in PDF. An electronic version editable in Word is also available. Users should prepare the plan using the electronic version.

In the electronic Word version, the Project Name and/or Unit Name should be entered in the document's header which will automatically appear on each following page of the plan.

To insert information into the document's header:

1. Double-click in the header region (upper region of each page displayed on the screen).
2. Type Project and/or Unit information.
3. Double-click *outside* the header region in the body of the document.

You may also access the header under **View > Headers and Footers**. This will open the header region for edits automatically. After entering the information, go again to **View > Headers and Footers** which will return you to being able to enter information into the body of the document.

PRESCRIBED FIRE PLAN

ADMINISTRATIVE UNIT(S): _____

PRESCRIBED FIRE NAME: _____

PREPARED BY: _____ **DATE:** _____

Name & Qualification

TECHNICAL REVIEW BY: _____ **DATE:** _____

Name & Qualification

COMPLEXITY RATING: _____

APPROVED BY: _____ **DATE:** _____

Agency Administrator

Project Name: _____

Unit Name: _____

ELEMENT 2: AGENCY ADMINISTRATOR PRE-IGNITION APPROVAL CHECKLIST

Instructions: The Agency Administrator's Pre-Ignition Approval is the intermediate planning review process (i.e. between the Prescribed Fire Complexity Rating System Guide and Go/No-Go Checklist) that should be completed before a prescribed fire can be implemented. The Agency Administrator's Pre-Ignition Approval evaluates whether compliance requirements, Prescribed Fire Plan elements, and internal and external notifications have been or will be completed and expresses the Agency Administrator's intent to implement the Prescribed Fire Plan. If ignition of the prescribed fire is not initiated prior to expiration date determined by the Agency Administrator, a new approval will be required.

YES	NO	KEY ELEMENT QUESTIONS
		Is the Prescribed Fire Plan up to date? <i>Hints: amendments, seasonality.</i>
		Will all compliance requirements be completed? <i>Hints: cultural, threatened and endangered species, smoke management, NEPA.</i>
		Is risk management in place and the residual risk acceptable? <i>Hints: Prescribed Fire Complexity Rating Guide completed with rational and mitigation measures identified and documented?</i>
		Will all elements of the Prescribed Fire Plan be met? <i>Hints: Preparation work, mitigation, weather, organization, prescription, contingency resources</i>
		Will all internal and external notifications and media releases be completed? <i>Hints: Preparedness level restrictions</i>
		Will key agency staff be fully briefed and understand prescribed fire implementation?
		Are there any other extenuating circumstances that would preclude the successful implementation of the plan?
		Have you determined if and when you are to be notified that contingency actions are being taken? Will this be communicated to the Burn Boss?
		Other:

Recommended by: _____ Date: _____
FMO/Prescribed Fire Burn Boss

Approved by: _____ Date: _____
Agency Administrator

Approval expires (date): _____

Project Name: _____

Unit Name: _____

ELEMENT 2: PRESCRIBED FIRE GO/NO-GO CHECKLIST

A. Has the burn unit experienced unusual drought conditions or contain above normal fuel loadings which were not considered in the prescription development? If NO proceed with checklist., if YES go to item B.	YES	NO
B. If YES have appropriate changes been made to the Ignition and Holding plan and the Mop Up and Patrol Plans? If YES proceed with checklist below, if NO STOP.		

YES	NO	QUESTIONS
		Are ALL fire prescription elements met?
		Are ALL smoke management specifications met?
		Has ALL required current and projected fire weather forecast 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?
		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

Project Name: _____

Unit Name: _____

ELEMENT 3 COMPLEXITY ANALYSIS SUMMARY

PRESCRIBED FIRE NAME			
ELEMENT	RISK	POTENTIAL CONSEQUENCE	TECHNICAL DIFFICULTY
1. Potential for escape			
2. The number and dependence of activities			
3. Off-site Values			
4 On-Site Values			
5. Fire Behavior			
6. Management organization			
7. Public and political interest			
8. Fire Treatment objectives			
9 Constraints			
10 Safety			
11. Ignition procedures/ methods			
12. Interagency coordination			
13. Project logistics			
14 Smoke management			

COMPLEXITY RATING SUMMARY	
	OVERALL RATING
RISK	
CONSEQUENCES	
TECHNICAL DIFFICULTY	
SUMMARY COMPLEXITY DETERMINATION	
RATIONALE:	

Project Name: _____

Unit Name: _____

ELEMENT 4: DESCRIPTION OF PRESCRIBED FIRE AREA

A. Physical Description

1. Location:
2. Size:
3. Topography:
4. Project Boundary:

B. Vegetation/Fuels Description:

1. On-site fuels data
2. Adjacent fuels data

C. Description of Unique Features:

ELEMENT 5: GOALS AND OBJECTIVES

A. Goals:

B. Objectives:

1. Resource objectives:
2. Prescribed fire objectives:

ELEMENT 6: FUNDING:

A. Cost:

B. Funding source:

Project Name: _____

Unit Name: _____

ELEMENT 7: PRESCRIPTION

A. Environmental Prescription:

B. Fire Behavior Prescription:

ELEMENT 8: SCHEDULING

A. Ignition Time Frames/Season(s):

B. Projected Duration:

C. Constraints:

ELEMENT 9: PRE-BURN CONSIDERATIONS

A. Considerations:

1. On Site:
2. Off Site

B. Method and Frequency for Obtaining Weather and Smoke Management Forecast(s):

C. Notifications:

ELEMENT 10: BRIEFING

Briefing Checklist:

- Burn Organization
- Burn Objectives
- Description of Burn Area

Project Name: _____

Unit Name: _____

- Expected Weather & Fire Behavior
- Communications
- Ignition plan
- Holding Plan
- Contingency Plan
- Wildfire Conversion
- Safety

ELEMENT 11: ORGANIZATION AND EQUIPMENT

A. Positions:

B. Equipment:

C. Supplies:

ELEMENT 12: COMMUNICATION

A. Radio Frequencies

1. Command Frequency(s):
2. Tactical Frequency(s):
3. Air Operations Frequency(s):

B. Telephone Numbers:

ELEMENT 13: PUBLIC AND PERSONNEL SAFETY, MEDICAL

A. Safety Hazards:

Project Name: _____

Unit Name: _____

B. Measures Taken to Reduce the Hazards:

C. Emergency Medical Procedures:

D. Emergency Evacuation Methods:

E. Emergency facilities:

ELEMENT 14 TEST FIRE

A. Planned location:

B. Test Fire Documentation:

1. Weather conditions On-Site:
2. Test Fire Results:

ELEMENT 15: IGNITION PLAN

A. Firing Methods:

B. Devices:

C. Techniques:

D. Sequences:

E. Patterns:

F. Ignition Staffing:

Project Name: _____

Unit Name: _____

ELEMENT 16: HOLDING PLAN

- A. General Procedures for Holding:**
- B. Critical Holding Points and Actions:**
- C. Minimum Organization or Capabilities Needed:**

ELEMENT 17: CONTINGENCY PLAN

- A. Trigger Points:**
- B. Actions Needed:**
- C. Additional Resources and Maximum Response Time(s):**

ELEMENT 18: WILDFIRE CONVERSION

- A. Wildfire Declared By:**
- B. IC Assignment:**
- C. Notifications:**
- D. Extended Attack Actions and Opportunities to Aid in Fire Suppression:**

ELEMENT 19: SMOKE MANAGEMENT AND AIR QUALITY

- A. Compliance:**

Project Name: _____

Unit Name: _____

B. Permits to be Obtained:

C. Smoke Sensitive Areas:

D. Impacted Areas:

E. Mitigation Strategies and Techniques to Reduce Smoke Impacts:

ELEMENT 20: MONITORING

A. Fuels Information (forecast and observed) Required and Procedures:

B. Weather Monitoring Required and Procedures:

C. Fire Behavior Monitoring Required and Procedures:

D. Monitoring Required To Ensure That Prescribed Fire Plan Objectives Are Met:

E. Smoke Dispersal Monitoring Required and Procedures:

ELEMENT 21: POST-BURN ACTIVITIES

Post-burn Activities That Must be Completed:

Project Name: _____

Unit Name: _____

APPENDICES

- A. Maps: Vicinity and Project**
- B. Technical Review Checklist**
- C. Complexity Analysis**
- D. Job Hazard Analysis**
- E. Fire Behavior Modeling Documentation or Empirical Documentation (unless it is included in the fire behavior narrative in Element 7; Prescription)**

Project Name: _____

Unit Name: _____

A: MAPS

1. Vicinity Map:

Project Name: _____

Unit Name: _____

2. Project Map:

Project Name: _____

Unit Name: _____

C. TECHNICAL REVIEWER CHECKLIST

PRESCRIBED FIRE PLAN ELEMENTS:	S /U	COMMENTS
1. Signature page		
2. GO/NO-GO Checklists		
3. Complexity Analysis Summary		
4. Description of the Prescribed Fire Area		
5. Goals and Objectives		
6. Funding		
7. Prescription		
8. Scheduling		
9. Pre-burn Considerations		
10. Briefing		
11. Organization and Equipment		
12. Communication		
13. Public and Personnel Safety, Medical		
14. Test Fire		
15. Ignition Plan		
16. Holding Plan		
17. Contingency Plan		
18. Wildfire Conversion		
19. Smoke Management and Air Quality		
20. Monitoring		
21. Post-burn Activities		
Appendix A: Maps		
Appendix B: Complexity Analysis		
Appendix C: JHA		
Appendix D: Fire Prediction Modeling Runs		
Other		

S = Satisfactory U = Unsatisfactory

Recommended for Approval: _____

Not Recommended for Approval: _____

Technical Reviewer

Qualification and currency (Y/N)

Date

Approval is recommended subject to the completion of all requirements listed in the comments section, or on the Prescribed Fire Plan.

Project Name: _____

Unit Name: _____

C: COMPLEXITY ANALYSIS

Project Name: _____

Unit Name: _____

D. JOB HAZARD ANALYSIS

Project Name: _____

Unit Name: _____

**E. FIRE BEHAVIOR MODELING DOCUMENTATION OR EMPIRICAL
DOCUMENTATION**

4.5 National Park Service Burn Plans

SECTION	TITLE	PAGE
A	SIGNATURE PAGE	1
B	EXECUTIVE SUMMARY	3
C	DESCRIPTION OF PRESCRIBED FIRE AREA	3
D	GOALS AND OBJECTIVES	4
E	PROJECT COMPELXITY	5
F	ORGANIZATION	5
G	COST	5
H	SCHEDULING	6
I	PRE-BURN CONSIDERATIONS	6
J	PRESCRIPTION	7
K	IGNITION AND HOLDING ACTIONS	8
L	ESCAPE FIRE PLAN	8
M	PROTECTION OF SENSITIVE FEATURES	9
N	PUBLIC AND PERSONNEL SAFETY	9
O	SMOKE MANAGEMENT AND AIR QUALITY	10
P	INTERAGENCY COORDINATION AND PUBLIC NOTIFICATION	10
Q	MONITORING	11
R	POST FIRE REHABILITATION	11
S	POST FIRE REPORTS	11

APPENDECIES

1. Technical Reviewer Checklist and Comments
2. Reviewers' Comments
3. Maps
4. Risk Mitigation and Complexity Worksheets
5. Fire Modeling Outputs
6. Agency Administrator Go/No-Go Pre-ignition Approval
7. Prescribed Fire Operations Go/No-Go Checklist
8. IAP/Briefing Guide
9. Adequate Holding Resources Worksheet
10. Post-Project Analysis
11. Prescribed Fire Monitoring Form
12. Job Hazard Analysis
13. 5 Year Burn Schedule

B. EXECUTIVE SUMMARY

Tall grass prairies once covered more than 140 million acres of the United States, from Indiana to Kansas and from Canada to Texas. Nearly all of it is gone, plowed under for agriculture. Prairies respond to their environment, which includes soil type, water availability, and natural processes such as grazing and fire. Most ecologists agree that for the last 5,000 years, prairie vegetation would have mostly disappeared if it had not been for the burning of these grasslands. After climate it can be said that *fire* is the next most important determinant in the spread and maintenance of prairie grassland.

Remnants of these tall grass prairies can be found at George Washington Carver National Monument. With management ignited prescribed fire, these fragile ecosystems will be preserved for generations to come.

This plan encompasses all nine burn units in the park. All nine will not be burned in any one year. The five year burn schedule in the park's Fire Management Plan and the entry of individual burn units in NFPORS will dictate which units will get treated each year.

C. DESCRIPTION OF PRESCRIBED FIRE AREA

GENERAL AREA: George Washington Carver National Monument/2 miles west of Diamond, MO.

LOCATION:

1. Latitude N 36' 59' 17" (36.98836)
Longitude W 94' 21' 22" (096.35480)

Fire Management Zone: Suppression (Tallgrass Prairie).

GEOGRAPHIC ATTRIBUTES:

Size: 88 total acres

Elevation: 1050'

Slope Range: 0-5%

Aspect Range: Flat to rolling

DESCRIPTION OF PROJECT BOUNDARIES:

The units scheduled for treatment are outlined in the five year schedule in the park's fire management plan. For this year, FY2006, units 3, 4, 5, 6, and 7b will be treated. Units 3 and 6 will be combined since they lie adjacent to one another.

Units 3 and 6: The north boundary will be the woods north of unit 6. The east boundary will be the woods and the service road separating these units from unit 4. The south boundary will be the barbed wired fence south of unit 3. The west boundary will be the park boundary.

Unit 4: The east boundary will be the service road the separates units 4 and 5 and the mowed cool season grasses around the visitor center construction zone. The north boundary will be the woods north of unit 4. The west and south boundaries will be the service road.

Unit 5: The north boundary will be the mowed line adjacent to the park's development sub-zone. The east boundary will be the park boundary. The south boundary will be the park boundary. The west boundary will be the service road that separates units 4 and 5, and the barbed wire fence that extends from the service road to the south park boundary.

Unit 7b: The north boundary will be the woods north of the unit. The east boundary will be the park boundary. The south boundary will be the manicured lawn. The west boundary will be the woods west of the unit.

VEGETATION DESCRIPTION:

Fuel Model 3 occurs throughout the units. Some woody species are encroaching into the prairies. Fuel Model 9 and 1 surround the units.

Vegetation type	Fuel Model NFFL	Estimated Acres	Estimated Tons Per Acre
100% Tall grass prairie	3	80	3

PROJECT MAP (attachment)

VICINITY MAP (attachment)

D. GOALS AND OBJECTIVES

GOALS

1. Provide for firefighter safety.
2. Promote public awareness and support for the NPS Fire Management Program.
3. Restore fire and associated natural ecological processes in order to retain species composition and other characteristics of natural communities.
4. Maintain and expand prairie complexes.
5. Reduce hazardous fuels.
6. Keep the fire from escaping or damaging public or government property.
7. Enhance Wildlife habitat.
8. Provide for training opportunities for firefighters.

SPECIFIC OBJECTIVES:	PROPOSED REDUCTION WITHIN ONE YEAR	ACTUAL RESULTS
Burn units with low to moderate intensity	75-95%	
Top-kill woody species encroaching prairies	>75%	

Range of Acceptable Results Expected Across The Project Area

Throughout the entire unit a mosaic of different levels of fire severity are desired and acceptable.

E. PROJECT COMPLEXITY

This burn rates as a low complexity project that should pose no unusual risks to personnel safety or property. Burn duration will be 24 hours or less, with isolated residual burning expected in fuel jackpots. HAZARD, RISK AND COMPLEXITY WORKSHEETS (attached)

F. ORGANIZATION

The Burn Boss may order additional resources to assist with the project as long as no slopovers or spot fires are occurring. The holding resource worksheet and Fireline Handbook will be used to determine adequate number and type of holding resources for each scenario. Specific resources will be identified in an incident action plan prepared prior to each operational period during the implementation of the burn. While FM3 is the fuel model that represents the burn units, FM9 surrounds the units and is the fuel model used on the holding resources worksheet to determine adequate holding resources.

Total of (12) persons will be the minimum required conducting the prescribed fire.

Overhead Personnel:

1 Burn Boss/ Incident Commander (RXB2)

Additional Crews/Personnel/Resources For Daytime Holding and Ignition Operations:

2 FFT2 – Ignition Crew
2 Type 6 engines with engine boss and operator.
2 ATVs with Water Tanks and operators
3 FFT2- Holding Crew

G. ESTIMATED PROJECT COSTS (non-base, other agency, contract):

Costs will be primarily for personnel and equipment preparing and conducting burn operations. The unit requires some preparation. Firing operations and post firing patrols should be of short duration with the goal of keeping overall costs low.

<u>FUNCTION</u>	<u>PROJECTED WORK HOURS/</u>	<u>PROJECTED COSTS*</u>
Planning	8/Rx Fire Plan development, site visit	\$100.00
Unit Preparation	40/brush hog line	\$1000.00
Operations (including burning, holding, mop-up)	96	\$4800.00
Monitoring & Evaluation	16	\$100.00

TOTAL PROJECTED COST \$6000.00 divided by 88 acres = \$68.18 PER ACRE

*Required information in final report: ACTUAL COSTS, COST PER ACRE, WORK HOURS PER ACRE.

H. SCHEDULING

Proposed Ignition Date:	March 22- April 12, 2006
Projected Burn Duration:	Less than 6 hours
Actual Ignition Date:	
Date Declared Out:	
Date DI-1202 Submitted:	

I. PRE-BURN CONSIDERATIONS

PREPARATION NEEDS ON SITE:

1. Eight to twelve foot wide fire lines will be mowed around the perimeter of burn units.
2. Rangers or designated traffic control will be available with 5 "smoke ahead" signs for V highway and the road adjacent to the park on the east.
3. Reduce fuel jackpots near control lines (cut and stack or scatter) within 100 ft. of control line.
4. Check all control lines for debris and remove as appropriate.
5. Coordinate burn schedule with GWCA staff to maximize chance of achieving objectives while minimizing impacts to park observations/visitation.
6. Ensure radios, and handtools for each assigned person, will be on scene.
7. Ensure minimum of six drip torches and 30 gallons of drip torch fuel will be on scene. This will be provided by resources assigned.
8. Take pre-burn photos of unit and record photo point locations.
9. Ensure engines can fill from either the hydrant near the visitor center or from a porta-tank. Hydrant will be tested the morning of the burn and necessary hardware attached to allow engines to quickly fill. If porta-tank is used, it will be filled and a pump set up with hardware to attach to an engine. The pump will be started to ensure its reliability before ignition begins. This will be done by resources assigned.

OFF SITE:

1. Coordinate daily weather and burn conditions monitoring with park staff for at least four days prior to ignition date.
2. Ensure notifications are made.
3. Ensure local media is contacted as appropriate.

4. Brief assigned personnel and park staff as appropriate.
5. Burn Boss will coordinate escape and other wildfire coverage with MDC (Neosho 417-451-4158) and Diamond VFD (417-325-4442 fire chief)
6. Spot weather forecast will be obtained from NWS in Springfield, MO (417-863-9124)

J. PRESCRIBED FIRE PRESCRIPTION

NFFL Fuel Models used: 3 100%

PRESCRIPTION

Weather	Range
Relative Humidity %	25-50%
Wind Direction	All
Mid Flame Wind Speed	0-8
Fuel Moisture (1 hour)	8-16%
(10 hour)	
(100 hour)	
Mixing height	≥1500'
Transport winds	≥7

FIRE CHARACTERISTICS

Characteristics	Range
Rate of Spread (chains/hour)	23-185
Flame Length (feet)	5.8-16
Fireline Intensity (btu/ft/s)	259-2342

K. IGNITION AND HOLDING ACTIONS

The Burn Boss or Ignition Specialist will thoroughly describe the firing plan and safety considerations to all burn personnel at the pre-burn briefing. Everyone will be provided a copy of the project map. Firing operations for the entire unit should be completed in one day.

Firing and Ignition:

A test fire will be lit near the main point of origin of the burn. The Burn Boss will decide the location of the test fire, which will depend on current and forecasted winds. Fuels and topography will be representative of most of the project. The Burn Boss will decide at that point to initiate the main burn or not.

Strip head fire will be used on the downwind side to establish a "black line". Once enough black is established on the down wind side, a ring fire technique will be used to finish off each unit. The Burn Boss and Ignition Specialist will develop an ignition plan prior to the pre-burn briefing. They will consider the current and expected weather for the day, primarily wind direction, to decide where to start ignition.

This plan will be explained to all burn personnel at the pre-burn briefing. Once a unit is complete, the Burn Boss will hold another briefing prior to igniting the next unit.

If prescription parameters are exceeded during project execution, the Burn Boss should terminate ignition operations at a safe and appropriate location based on fire behavior, fuels topography and weather conditions. If the project area comes back into prescription based on current and forecasted weather, ignition operations may continue. If not, the project area is put into a mop-up and patrol status. Holding actions shall maintain control of the fire until a decision to continue, postpone or extinguish the prescribed fire is made and the Agency Administrator or their designee is notified. The Burn Boss will document this decision process on a unit log.

Holding Actions:

All ATV's will be mobile and used accordingly to provide adequate patrol behind ignition teams. Engines will be used to lay down wet lines to ignite from. They will also perform structure protection near the visitor center and maintenance building. Holding crew personnel will take appropriate suppression actions on all slopovers and spot fires

Mop-Up Operations:

Mop-up will occur only for the purpose of maintaining control of the burn. Jackpots, snags, or problem areas will be secured through the use of water or foam. Chainsaw and handtools will only be used when other methods are not practical.

L. WILDLAND FIRE TRANSITION PLAN

1. If spot fires or slopovers occur, the Holding Squad Leader will initially supervise suppression actions.
2. If spot fires and/or slopovers cannot be controlled within one burning period with on site resources the Burn Boss will convert the fire to a wildland fire. A Wildland Fire Situation Analysis (WFSA) will be completed.
3. If the burn is converted to a wildland fire, the Burn Boss will make the declaration and assume the role of Incident Commander until relieved by an Incident Commander Type III (ICT3). If the Burn Boss is not a qualified ICT3, one will be ordered through the Missouri/Iowa Interagency Coordination Center (MOCC). The burn boss will immediately notify Park Dispatch (417-325-4151) and the Park Superintendent of the change in status to a wildland fire and will order resources through MOCC.
4. The Burn Boss will coordinate safety considerations with the section leaders (Holding, Ignition, and Monitoring) to provide and ensure the safety of ALL personnel assigned. All personnel will be assigned holding or suppression duties.
5. Water sources (drafting sites, hydrants, etc.) will be identified on the project map.

M. PROTECTION OF SENSITIVE FEATURES

N. PUBLIC AND PERSONNEL SAFETY

1. A safety briefing will be given at the pre-burn briefing and at the start of each operational period. All personnel will be advised of Lookouts, Communications, Escape Routes, and Safety Zones. Any other potential safety hazards will be pointed out and mitigated as soon as possible upon identification of hazard.
2. All burn personnel will wear standard firefighting personal protective equipment. They will carry a fire shelter and fire tool at all times.

3. Only red-carded personnel will be utilized during the burn.
4. All standard wildland firefighter safety rules will be strictly enforced (ref: Fireline Handbook).
5. V Hwy and the county road adjacent to the east boundary of the park will be signed to warn motorists of smoke and fire along the road. A total of five (5) signs will be need to sign the roads adjacent to the park. If smoke becomes a problem on the highway, then the burn boss will instigate traffic control using the park staff or burn staff under the following guidelines:

Monitoring Highway Visibility

Minimum Acceptable Visibility	Posted Speed Limit
< 100 Feet	Stop ALL traffic
100 Feet*	15 MPH
152 Feet*	20 MPH
216 Feet	25 MPH

* Requires that vehicles be stopped and told to proceed slowly

6. EMERGENCY MEDICAL PROCEDURES:

- EMT or First Responder assigned the day of the burn.
- First Aid equipment available and location made known to all burn personnel.
- Burn Boss notified immediately of injury.
- Burn Boss will coordinate with EMT/First Responder.
- Burn Boss will notify Park Dispatch of an injury and will follow up with information as soon as the injury has been assessed.
- EMT/First Responder will assess injury and begin treatment.
- Once injury has been assessed, the Burn Boss or designee will activate the appropriate EMS response for evacuation of injured personnel.
- If personnel need to be evacuated, park dispatch will dispatch/contact EMS resources from the following table:

RESOURCE	CONTACT PHONE NUMBER	LOCATION
METS (Metro Emergency Transport Service)	911	Joplin, MO
Newton County Ambulance Service	911	Newton County
Life Flight Dispatch Air Evac 1	911	Joplin, MO
St. John's Regional Health Center Burn Unit	417-885-2876	Springfield, MO

O. SMOKE MANAGEMENT AND AIR QUALITY

COMPLIANCE:

In the state of Missouri, prescribed fire is considered to be agricultural burning and there are no burn or smoke permit requirements to ignite a prescribed burn. However, agency standards require meeting minimum requirements for mixing height and transport winds. The minimum mixing height is 1500 feet and a minimum transport wind of 7 mph. A smoke management forecast will be obtained the day of the prescribed burn and attached to the plan.

MODELING:

A smoke projection map is attached for all proposed wind directions.

MITIGATION:

Smoke production will be light to moderate, but will lift and disperse adequately as long as the burn is conducted within smoke management guidelines.

P. INTERAGENCY COORDINATION AND PUBLIC NOTIFICATION

1. The GWCA fire coordinator will produce a press release a minimum of two (2) days before the burn. Generally a single media release made prior to the particular burn season (fall or spring) suffices.

2. Fire management staff will notify the following at least one week prior to the proposed ignition date:

- Park Superintendent
- Senior Management Staff & District Rangers

3. Fire management staff will notify the following at least two days prior to the proposed ignition date:

MDC Forestry(Neosho-Gary Smith District Forester)	417-451-4158
MOCC	573-341-7455
Newton County Sheriff's Office	417-451-8333
Diamond Fire Department(Mark Garbett, Fire Chief)	417-325-4442
Neosho Fire (Greg Hickman, Fire Chief)	417-451-8021
Carthage Fire Department	417-237-7100
MWRO (Connie Burns)	402-661-1756
National Weather Service – Springfield, MO	417-863-9124

Park Neighbors:

Elza Winter	417-325-6212
Mike Funderburgh	417-325-5116
Jess Holler	417-325-6268
Melvin Alford	417-325-5280
Glen & Randi Brown	417-325-6292

4. The GWCA fire coordinator will provide advance notification to any groups who have made reservations to visit the park on the proposed burn day.

5. Additional contact information:

Bobby Bloodworth (Ozark FMO)	573-323-4236 x252 office
	573-300-0840 cell
Scott Bressler (Ozark Engine Foreman)	573-323-8234 x24 office
	573-300-0842 cell