### Appendix M

### **Trespass Fire Guidelines**

Forest Service Francis Marion & Sumter National Forests

4931 Broad River Road Columbia, SC 29212-3530 (803)561-4000

File Code: 5130/6530 Date: March 15, 2004

**Route To:** 

**Subject:** Trespass Fire Policy

To: District Rangers

In November 2002, the Forest Leadership Team reviewed and affirmed our policy concerning trespass fire. Our policy is to take aggressive action to collect costs arising from fire trespass where the responsible party has criminal intent or is negligent.

A law enforcement investigation will be the basis for initiating any trespass fire cost collection. If law enforcement issues a citation to the responsible person or persons, a bill for collection will be issued. If law enforcement has identified the responsible party but does not issue a citation, a Forest panel will review the case. The review panel will make a recommendation to the Forest Supervisor as to whether the responsible party should be held liable for the costs. The panel may also make a recommendation concerning the amount of liability. A letter of warning may be issued to the responsible party if they are not held financially liable.

In situations where we incur costs when a fire is burning on adjacent private lands, but does not reach National Forest System lands, we will not collect suppression costs from the responsible party.

The remainder of this memo and the attached flow chart outline the process.

### Preparing Fire Trespass Bill for Collection

- 1) The District Ranger is responsible for preparing and submitting the initial bill for collection, along with all the supporting documentation, to the Forest Fire, Lands and Minerals (FLM) Staff Officer for review and processing.
  - The bill for collection will include all appropriate fire suppression costs through the time
    of fire containment (end of shift), and may include damages to National Forest resources
    or property as well as other costs.
  - Appropriate fire suppression costs to be included in a bill are those set forth in FSH 6509.11h, section 21.11c.
  - Further direction on damages to resources and property is described in FSH 6509.11h, section 21.12
- 2) The Forest Fire Management Officer (FMO) and Budget and Finance (B&F) Officer will review the bill for appropriate charges and adequate documentation.
- 3) The final bill for collection is prepared by B&F.
- 4) The Public Affairs Officer is notified of the case.





District Rangers 2

- 5) The Forest Supervisor approves final bill.
- 6) The District Ranger will make a personal contact with the responsible party prior to sending the bill.

7) A prevention message and/or news release may be issued.

#### Documentation

Good supporting documentation is essential prior to preparing a bill for review and submittal to the responsible party. At a minimum, the following documentation should accompany any bill submitted for review by the District Ranger:

- FS-5100-29 Individual Fire Report
- Incident Dispatch Card
- Transaction Registers with costs highlighted
- An itemized list of the costs to be included in the bill
- Accurate map of the fire perimeter with NF boundary, private property and fire point of origin identified
- Acreage calculation
- Law Enforcement Report and/or Violation Notice

If resource and/or property damages are to be included in the bill, there should be supporting documentation identifying these damages and how values have been determined (see FSH 6509.11, section21.12c).

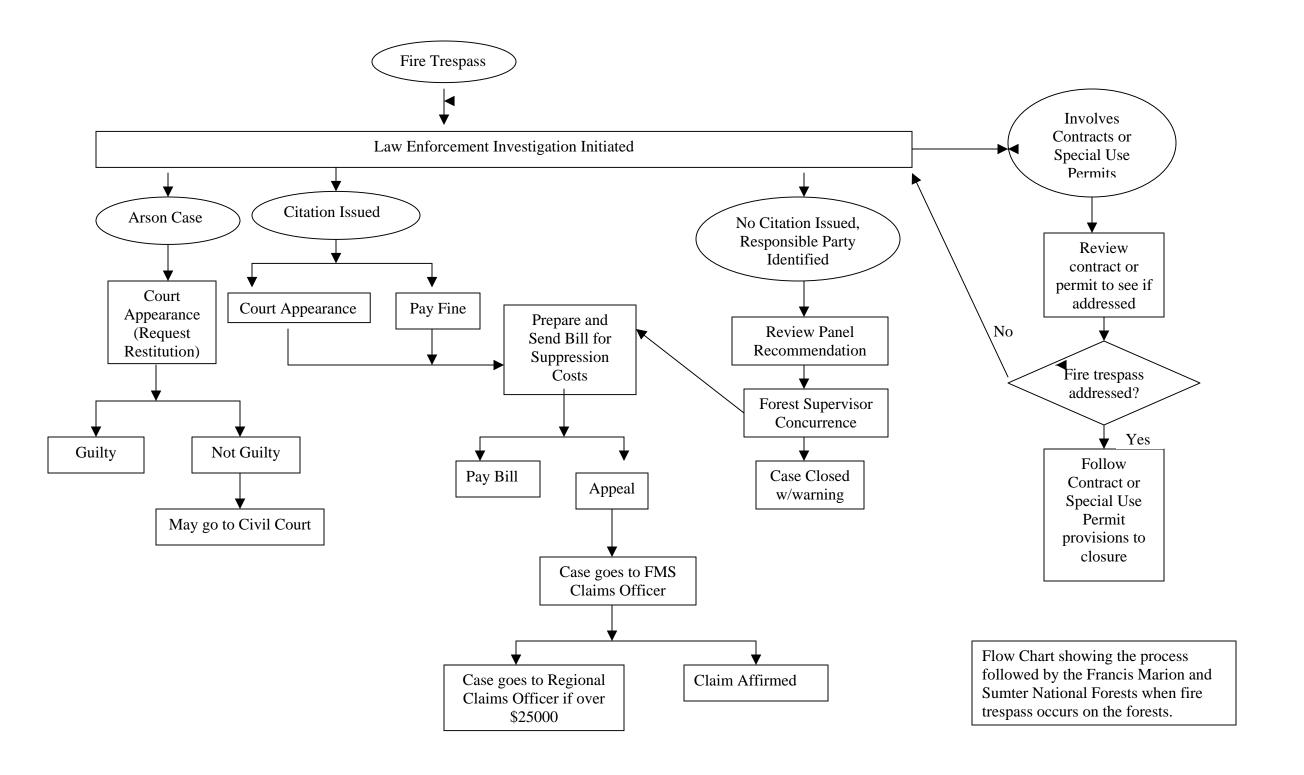
### Review Panel

At a minimum, the review panel will include the District Ranger, Incident Commander or District FMO, and FLM Staff Officer or Forest FMO. Other support staff such as a law enforcement officer or B&F representative may be included as needed.

Any questions concerning implementation of this policy should be directed to the Fire, Lands and Minerals Staff Officer.

/s/ Jerome Thomas JEROME THOMAS Forest Supervisor

cc: Andy Sadler, Claudette R Bryant, Charlie Kerr, FMS Staff Officers, District Fire Program Mgrs



### Appendix N

# Process for Prescribed Fire Variances

Forest Service **Southern Region** 

1720 Peachtree Road, NW Atlanta, Georgia 30309

Date:

File Code: 5140

**Route To:** (5140)

Subject: Process for Prescribed Fire Variances from Regional Parameters

To: Directors, Forest Supervisors, District Rangers, Experiment Station Directors

### **OPTIONAL REPLY DUE NOVEMBER 21, 2003**

\*\*\*DRAFT\*\*\*

For many years National, Regional, and local prescribed fire parameters have been in place to guide our prescribed fire program and reduce the risk of a catastrophic escape. Over this period of time our forests have led the nation in prescribed fire accomplishments and are to be commended.

In rare situations or unusual circumstances a Regional Parameter may unnecessarily impact our ability to conduct prescribed fire operations without good reason. To address this situation a process is under development to allow requests for a variance from a Regional prescribed fire parameter. Please review the attached draft process document and provide suggestions or feedback to Dan Olsen, Assistant Director for Fire Planning and Fuels Management. He can be reached at 404-347-2347.

Once finalized, requests for variances or exceptions to Regional Prescribed Fire parameters should follow the process being described. Exceptions should not be last minute requests, but rather be based upon an analysis of historic weather conditions and burn unit properties, such as location, topography, special conditions, special goals or purpose outside of the norm, or other exceptional need outside of or beyond normal prescribed burning conditions.

Requests should be formulated by individuals with fire qualifications and experience commensurate with a Type 1 Burn Boss.

ROBERT T. JACOBS Regional Forester





### \*\*\*Draft\*\*\*

### Process to Request a Variance or Exception from Regional Prescribed Burn Parameters

### **Background**

Prescribed fire parameters were established to ensure prescribed fire operations are conducted in a safe manner, and that the risk and frequency of escaped fires with catastrophic consequences is minimized. These parameters limit the use of prescribed fire during dangerous periods of drought, extreme burning conditions, extreme fire occurrence, or when conditions are not conducive to smoke management objectives. It must be recognized that National, Regional, and Forest prescribed fire parameters have been in place for many years, during which time our forests have led the nation in prescribed fire accomplishments.

### **Current Regional Parameters**

Mixing Height Minimum
Meters
850
790
740
700
660
630
600
570
550
520
500

- 2) 10 Hour Fuel Moisture no less than 7% (no less than 9% under canopy)
- 3) Wind speed no more than 18mph
- 4) Night burning predicted Rh no more than 79%
- 5) No unmitigated smoke sensitive targets within predicted plume impact area
- 6) No prescribed fire without Agency Administrator approval during periods of high preparedness, such as Regional or National PL4 or PL5 levels. (Note: This is an operational parameter whereby a case-by-case waiver can be requested without the thorough analysis described herein.)

#### Rationale for Requesting a Waiver

The case for requesting a waiver for a Regional prescribed fire parameter must be based upon a thorough analysis of site-specific conditions as they relate to burn objectives. The management risks and associated consequences of not conducting the

treatment outside of regional parameters should be the driving rationale for requesting a waiver.

### Management actions leading to the request

In situations where fire management recognizes a longstanding and frequent issue, generally localized to one portion of the district or a particular situation, they should analyze the situation to determine if the problem is real or perceived. To accomplish this task an analysis of burn days available currently (with the existing parameter) should be conducted. If an analysis reveals that a situation is inconvenient, however there are still plenty of acceptable weather days this particular unit could be burned, no waiver should be necessary. In contrast, if following an analysis it is determined that a Regional Parameter severely limits a unit's ability to accomplish fuel reduction goals, a waiver can be requested. Waivers are to be requested well in advance of any prescribed fire project and will not be considered for approval on the day of the burn.

### Example 1:

The goals and objectives of the burn call for stand replacing fire behavior and FBAN analysis shows that Regional Rh limits would not allow a burn to occur with the intensity needed for a stand replacement fire. In this case, the forest would make a case for a waiver for stand replacement burns on a particular district or site(s) to allow firing outside of Regional Rh thresholds.

### Example 2:

One burn area on the forest meets air dispersion requirements for 99% of the area, however one unpopulated and unroaded knob rises high enough to routinely exceed minimum mixing height parameters. An analysis shows that more than half of the burning days are lost due to this situation, which is unfortunate, since no one would be affected by smoke due to the knob.

### Process for requesting a waiver

The request must include:

- Specific goals and objectives of the burn
- Management risks and consequences of not approving the waiver
- Site specific analysis of expected results in relation to goals
- Climatological analysis of the probabilities of occurrence of the desired weather or climate conditions
- FBAN predicted fire behavior
- Completed risk analysis
- Mitigation to be conducted
- Contingency Plans

Requests for a waiver should be addressed to the Director of Fire and Aviation.

## Appendix O

### **Prevention Team**

Forest Service Francis Marion and Sumter National Forests 4931 Broad River Road Columbia, SC 29212-3530

File Code: 5120 Date: April 2, 2004

**Route To:** 

Subject: Delegation of Authority

To: Rich Olsen, Team Leader

You are designated as team leader for the National Fire Prevention Education Team (NFPT) assigned to work on the Witherbee/Wambaw Ranger District of the Francis Marion National Forest. As the team leader, you will have authority and responsibility to carry out the delegated duties on the Francis Marion National Forest.

The following individuals are the agency contacts for the duration of the NFPT activities under this delegation:

- 1. Orlando Sutton, District Ranger, 843-336-3248.
- 2. Stephanie Johnson, Forest PAO, 803-561-4091.
- 3. Steve Wells, Fire Staff Officer, 803-561-4061.
- 4. Charlie Kerr, Fire Management Officer, 803-561-4054.
- 5. Calvin Bailey, South Carolina Forestry Commission, 843-538-3708.

These people will be the primary contacts for assistance to the NFPT. They will:

- Identify key public contacts and cooperators including Sheriffs, County Officials, and other elected officials at the county, state, and federal levels.
- Provide other reports (e.g. McCourt Report), maps, and documents that may be of help to the Team.
- Help arrange media contacts.
- Help with logistics and other operating needs
- Assist with any public meetings, if warranted.
- Review media releases, posters, publications, and other communications to ensure consistency with agency requirements.
- District Ranger, Orlando Sutton will provide assistance with financial matters.

The Francis Marion National Forest has had a history of many human caused fires on a year round basis. Most of these have been by arson. This current fire season most of the human





caused fires are the result of escaped debris and prescribed fire from private lands. Several of these fires were classified as large fires.

### **The NFPT Duties include:**

- 1. Coordinating closely with District Ranger Orlando Sutton on <u>all</u> costs related to the Team assignment, including purchasing and expenditures related to this assignment. An initial cost cap of \$50,000 has been established. This cap can be re-visited if necessary.
- 2. Coordinating closely with PAO Stephanie Johnson on all media, public and print contacts.
- 3. Keeping Calvin Bailey informed of actions involving the media and public meetings. This will be done after coordination with Stephanie Johnson.
- 4. Keeping Francis Marion National Forest Law Enforcement Officers informed of prevention plans and actions. Contact numbers to be provided.
- 5. Conducting all prevention and education programs with sensitivity to the feelings of our good neighbors, some of whom may have been in trespass with their fires.

### The objectives for the NFPT are:

- 1. Prioritize locations for fire prevention education efforts
- 2. Working with local contacts, identify key community leaders to begin the education process.
- 3. Design and implement prevention education programs to address the risk of human caused fires.
- 4. Develop and include fire education messages with fire information, mitigation, and prevention messages and programs. Including, where the potentially affected interests will have an understanding of the seriousness of the fire problem on National Forest System lands and the surrounding forest area.
- 5. Make obvious that arson is a crime and has serious consequences.

- 6. Promote fire hazard mitigation as a means to prevent losses in the event of wildfire.
- 7. Educate the public of their responsibilities for fires escaping from their property onto federal lands.
- 8. Communicate and interpret fire restrictions, bans and closures to relevant public segments.
- 9. Document NFPT efforts and prepare a report to be submitted at the end of the assignment describing prevention education efforts and effects.

Work of the NFPT will be conducted with efficiency and effectiveness with an emphasis on personal safety of team members and the public. All federal, state, and local laws, regulations and ordinances will be adhered to.

/s/ Jerome Thomas JEROME THOMAS Forest Supervisor

/s/ Rich Olsen RICH OLSEN NFPT Leader

### **Fire Prevention Education Team Assignment Evaluation**

Team	Leader: Loc	ation:		
Assign	ment:			
1.	Did the Team accomplish the objectives described in the and the Agency Administrator Briefing (if available)?	Team Agreement	∐Yes	□No
2.	Was the Team cost effective in their management of the	assignment?	□Yes	□No
3.	Was the Team sensitive to resource limits and environment	ental concerns?	□Yes	□No
4.	Was the Team sensitive to political and social concerns?	•	□Yes	□No
5.	Was the Team professional in the manner in which they management of the assignment, managed the total assignt to the hosting agency?		□Yes	□No
6.	Did the Team anticipate and respond to changing conditi effective manner?	ons in a timely and	□Yes	□No
7.	Did the Team activate and manage the demobilization in effective manner?	a timely, cost-	□Yes	□No
8.	Did the Team attempt to use local resources and trainee practical?	s to the extent	□Yes	□No
9.	Was the Team Leader an effective manager of the Team	and its activities?	□Yes	□No
10.	Was the Team Leader obviously in charge of the Team a the Team Leader performing a leadership role?	and incident? Was	□Yes	□No
11.	Was the Team Leader aggressive in assuming responsible assignment and initiating appropriate action?	oility for the	∐Yes	□No
12.	Did the Team Leader express a sincere concern and em unit and local conditions?	pathy for the hosting	□Yes	□No
13.	Other comments:			
Agenc	y Administrator or Agency Representative	Date		
Team	Leader	 Date		

### **HOST UNIT**

### **AND**

## WILDLAND FIRE PREVENTION/EDUCATION TEAM (WFPE)

### **INTERACTION GUIDE**

### **TABLE OF CONTENTS**

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PREVENTION/EDUCATION TEAM RESPONSIBILITIES	4
PREVENTION/EDUCATION TEAM PROGRAM AREAS	7
APPENDICIES	11

## HOST UNIT AND WILDLAND FIRE PREVENTION and EDUCATION TEAM INTERACTION GUIDE

The purpose of this guide is to facilitate the interaction between units requesting Wildland Fire Prevention/Education (WFPE) Team support and the team as it relates to the different aspects of business and finance.

### **OBJECTIVE:**

The Wildland Fire Prevention and Education Team supports geographical fire prevention and wildland fire prevention and educational needs preceding and during periods of high wildland fire danger or prescribed fire activity.

The team's purpose is to reinforce local fire prevention/education resources and to bring special prevention/education planning, logistics, and operations expertise to bear in larger, complex severity situations that exceed the capabilities of local organizations. Their roles in fire prevention/education are similar to the roles of Type I and Type II Incident Management Teams in large and complex incident management situations.

The agreement that authorizes and supports the use of teams is the master agreement between the United States Department of Interior and the United States Department of Agriculture. A copy of the agreement is found in the National Interagency Mobilization Guide, NFES 2092, Chapter 40. In addition to these Departments, the 2001 Federal Wildland Fire Management Policy contains recommendations to interact with other Departments and Cooperators broadening the potential use of Prevention/Education teams.

Mobilization procedures for teams can be found in the National Interagency Mobilization Guide:

Chapter 20, Section 22.9.10.

Chapter 7, Preparedness Level Action Items, Severity Fund Guidance – Fire Prevention Team Request

Chapter 7, Wildland Fire Mitigation/Education

### WILDLAND FIRE PREVENTION/EDUCATION TEAM INTERACTIONS

### HOST UNIT RESPONSIBILITIES

- Determine need for a wildland fire prevention/education team
  - Severe burning conditions
  - Unusually high fire occurrence
  - Heavy resource commitment
  - Preparedness Level II
  - Wildland/urban interface issues
- The host unit will provide:
  - Team leader with an approved Delegation of Authority
  - Source, type, and amount of funds for use by the team
  - Initial briefing to the team leader and team members as to purpose of requesting the team, objectives, and expectations
  - Communication with local unit personnel of the prevention/education team's goals and objectives
  - A liaison representing the Agency Administrator to the team leader
  - Contact names and telephone numbers of key contacts:
    - Public information officer
    - Cooperators
    - Local media
    - Financial contact
    - Procurement contact
    - Computer support
    - Incident Management Team information officer (if applicable)
  - Agency documentation and cost tracking requirements
  - A copy of unit's service and supply plan
  - A copy of unit's incident business guidelines
  - Office space, with desks, chairs and operating equipment
  - Telephones
  - Access to a copy machine and copy paper
  - Connections for personal computers and printers
  - Facsimile
  - Office Supplies
  - Transportation, as need to support team activities

### **HOST UNIT EXPECTATIONS**

- Wildland Fire Prevention/Education (WFPE) Team operations are conducted safely
- Interactions between WFPE Team and host unit are to be professional and cooperative
- WFPE Team members are to operate within the scope of all laws, regulations, and policies relative to the operations, including fiscal
- WFPE Team members are to communicate with Agency Administrator or their designate as necessary
- Host unit will provide initial briefing to the team leader and team members as to purpose of requesting the team, objectives, and expectations
- Host unit will communicate to the local unit personnel the prevention/education team's goals and objectives to create an open line of communications with the team while it is assigned to the unit
- Provide copy of the unit's incident business guidelines to the team leader
- Review all plans developed prior to implementation
- Provide funding considerations for implementation of materials required to meet the assigned objectives

### PREVENTION/EDUCATION TEAM RESPONSIBILITIES

- WFPE Team operations are conducted safely
- Team leader reports to the host unit
- Establish a liaison role with the various fire protection agencies federal, state, and local
- Obtain approvals and authority to implement the fire prevention effort area wide
- Obtain copies of host unit's service and supply plan, incident business guidelines, and key contact names and telephone numbers
- Obtain briefing from host unit and determine level of support that will be provided as well as office work area available
- Maintain contacts with agency administrative and procurement personnel to ensure fiscal integrity
- Develop area-wide prevention strategies based on fire protection assessment and evaluation of communication behavior and information needs of population demographics
- Develop and procure prevention products for use by the team and host unit
- Maintain/promote interagency approach
- Promote responsibility for fire safety and encourage self-help actions in all handouts
- Leave documentations with host unit

- Report accomplishments
- Obtain action plan/local and national operational procedures, if available
- Identify agency issues, concerns, and barriers
- Identify barriers to an effective prevention program and offer solutions
- Leave positive solutions/suggestions for a sustainable program in fire prevention with area liaison
- Document all work on agency forms for inclusion in summary report
- Conduct organized exit interviews and information sharing based on documentation

### <u>WILDLAND FIRE PREVENTION/EDUCATION TEAM EXPECTATIONS</u> – The team will be provided with the following:

- Information and documentation as source, type, and amount of funds for the assignment
- Initial briefing from the host unit that includes the purpose of requesting the team, objectives, and expectations
- Delegation of Authority
- Assurance that the host unit has communicated with local unit personnel of the prevention/education team's goals and detailed objectives and expectations from the team
- Telephone numbers for the Agency Administrator designated liaison
- Contact names and telephone numbers of key contacts:
  - Public information officer
  - Cooperators: federal, state, and local
  - Local media
  - Financial contact
  - Procurement contact
  - Computer support
  - Incident Management Team information officer (if applicable)
- A copy of unit's service and supply plan
- A copy of unit's incident business guidelines
- Office space, desks, telephones, copy machine access, computers and or connections, printers, and other office needs
- The opportunity to meet with agency representatives and cooperators to review proposed operating plans and strategies
- The opportunity to meet host unit personnel and interact with them in a professional and cooperative atmosphere
- Receive and understand host unit documentation and cost tracking requirements
- Receive exit briefing and performance review

#### WILDLAND FIRE PREVENTION/EDUCATION TEAM PROGRAM AREAS

### FIRE PREVENTION ORGANIZATION

In order to organize a fire prevention education response to meet a wildland fire prevention objective, it is necessary to define an organizational structure. The basic fire prevention/education team consists of:

- Team Leader
- Fire Prevention Specialist
- Fire Prevention Team Member
- Public Affairs Officer

Other positions may be added, depending on the extent and complexity of the assignment. The requesting unit may perform some duties or one person on the team may cover multiple duties. Additional positions are:

- Agency Representative
- Finance Specialist
- Logistics Specialist
- Administrative Support
- Operations Specialist

### POSITION DESCRIPTIONS

- Team Leader provides overall fire prevention planning, implementation, evaluation, and monitoring of the area-wide interagency program. The team leader reports directly to the requesting unit and has a primary mission to serve as leader and liaison to the various fire prevention specialists in the area. This individual also maintains a liaison role for the various agencies, both federal and state levels in fire prevention.
- o Fire Prevention Specialist implements the fire prevention and education programs and activities. This is the key role for implementation of a fire prevention/education program and may consist of more than one person depending on the workload of the area. This person, or persons, reports and receives work assignments directly from the Team Leader or designate.
- Fire Prevention Team Member works under the direction of an experienced fire prevention specialist. Applies basic fire prevention techniques and have a working knowledge of fire prevention as the incumbent carries out various assignments. Assignments are in support of the implementation of the prevention/education plan.

- Public Affairs Officer provides overall coordination, implementation, and monitoring of the area-wide interagency fire prevention/education communication program while coordinating and assisting with the production of tangible products. The Public Affairs Officer reports to the Team Leader.
- Agency Representative is assigned to a prevention team and may be from a cooperating or assisting agency. Works with the team leader in order to accomplish the mutually agreed upon mission and goals of the team.
- Finance Specialist provides overall budget tracking coordination for the team, assisting in business management, clerical, travel, computer, timekeeping and purchasing.
- Logistics Specialist provides for facilities, services, and materials in support of the team.
- Administrative Support responsible for clerical and other administrative assistance.
- Operations Specialist responsible for the management of all operations directly applicable to the primary mission.

### FIRE PREVENTION ASSESSMENT

The two elements of assessment are the gathering of information and its evaluation. Wildland fire prevention programs are directed toward risks that pose the greatest potential for fires that will result in unacceptable damage or loss.

The assessment elements are:

- Gathering Information
  - Collect information from local agencies, groups, and individuals
  - o Host unit will identify what and where the problem is
  - Fire statistics
  - Collect any existing prevention plans
- Evaluating Information
  - Assess the risk
  - Assess the hazard
  - Assess the Values
  - Fire occurrence evaluation

- Assessment Actions
  - Determine method(s) to treat the risk
  - Determine method(s) to treat the hazard
  - o Determine what fire cause prevention actions should target
- Developing a Wildland Fire Prevention Plan
  - Analyzes the situation
  - Identifies the opportunities and problems facing wildland fire prevention
  - Identifies goals and actions required
  - Defines a prevention strategy
  - o Includes a communication plan
  - Provides a contingency plan to deal with developments which would have an impact on the host unit
- Purpose of Wildland Fire Prevention Planning
  - The plan must produce results
  - The plan should enable the fire manager to exercise some control and discipline over the wildland fire prevention effort
  - The plan should communicate
- Wildland Fire Prevention Strategy Two Categories
  - General Actions include prevention activities that have application throughout the unit
  - Specific Actions target a specific compartment or area and fire cause
- Presenting the Wildland Fire Prevention Plan
  - o Create and follow an agenda
  - Clearly state purpose of the presentation
  - Limit objectives to no more than two at presentation
  - Obtain action or response in order to proceed to the next stage of planning

### SOCIAL CONSIDERATIONS

The United States is a diverse country – geographically and demographically. The team will be sensitive to the local agency's existing programs and the many cultural differences in the region of operation.

The fire prevention/education team will gain awareness and understanding of local audiences and what, if any, prevention and education programs currently exist. Adaptation of current programs or creation of new ones to meet the situation should be tailored for the communication needs of the local audiences.

- Identifying Cultures and Lifestyles
  - o Learn about the demographics of where the assignment is
  - Learn about the target audience
- Learning About a New Population
  - Host unit should assist with identifying target audience, cultural diversity, political considerations
  - o Local Public Affairs Officer should assist
  - o Identify sensitive issues
  - Be knowledgeable about the community when attending public meetings

### <u>MATERIALS</u>

Support and reference materials are used to assist in developing a neighborhood, community, or residential fire prevention program. The host unit will provide guidelines and authority to produce and/or procure needed materials.

- Brochures/Pamphlets
- Videotapes
- Publications/Documents
- Wildland Fire Prevention Training Courses
- Targeted PSA's both audio and video
- On site visits for assessments

## HOST UNIT AND PREVENTION/EDUCATION TEAM INTERACTION GUIDE

### **APPENDICIES**

APPENDIX 1	FIRE PREVENTION TEAM CHECKLIST
APPENDIX 2	BRIEFING FOR INCOMING TEAM MEMBERS CHECKLIST
APPENDIX 3	LIST OF REFERENCES

### APPENDIX 1

### WILDLAND FIRE PREVENTION/EDUCATION TEAM CHECKLIST

Develop area-wide prevention strategies, based on a fire protection assessment and evaluation of communication behavior and information needs of different segments of the population
Develop talking points to ensure a unified message
Develop prevention products for use
Maintain/promote interagency approach (use of logos)
Promote responsibility for fire safety and encourage self-help actions in all handouts
Leave documentation with others
Report accomplishments
Action plan/local and national operational procedures, are they available?
Assess the situation, gather information, and plan for the future
Conduct organized exit interviews and information sharing based on documentation
Identify agency issues, concerns, and barriers
Planning barriers, statistical information, and policy available
Leave positive solutions/suggestions for a sustainable program in fire prevention with area liaison
Document all work on agency forms – all contacts, etc., for inclusion in summary report
Identify barriers to an effective prevention program and offer solutions

#### APPENDIX 2

#### BRIEFING FOR INCOMING TEAM MEMBERS CHECKLIST

☐ Orientation packet

☐ Area Maps

The orientation should be given by team leader or operations specialist, and, if possible, previous prevention specialist.

Welcome

Team mission, goals, objectives

Team organization

Orientation to office and introductions

Ethics of time and money

Area organization and management

Upper level politics, cultural sensitivities, interagency concept

Importance of documentation, e.g., conversation records, expenditures, activities

Make contact with all agency representatives and all field going people (prevention and others) – provide a key contact list if possible

### **APPENDIX 3**

#### LIST OF REFERENCES

National Interagency Mobilization Guide, NFES 2092

Interagency Incident Business Management Handbook, NFES 2160

Federal Acquisition Regulations

Government Printing Office

Administratively Determined Pay Plan

Wildfire Prevention Analysis & Planning Guide, NIFC, BLM

Wildfire Prevention-Event Management Guide, NFES 1253

Introduction to Wildfire Prevention, P-101

NWCG Web Site (<u>www.nwcg.gov</u>)

NIFC Web Site (www.nifc.gov)

Participating on Wildland Fire Prevention/Education Teams Field Guide

National Wildland Fire Prevention/Education Team Member Training

National Wildland Fire Prevention/Education Team Leader Training

Standards for Fire and Aviation Operations 2003

## Appendix P

### **ICS Forms**

	1. Incident Name	2. Date	3. Time
INCIDENT BRIEFING			
	4. Map Ske	tch	
	5. Current Orga	nization	
	Incident Commander		
		Safety O	ficer:
		Liaison Officer or Agency	
		Information O	ficer.
Planning	Operations	Logistics	Finance
Div	Div	Div	Air
			Air Operations
			Air Support
			Air Tanker Coord
			Helicopter Coord
A Dec	epared by (Name and Position)		
Page 1 of	parea by (Martie and Fusition)		

ICS 201 NFES 1325

6. Resources Summary							
Resources Ordered	Resource Identification	ETA	On Scene	Location/Assignment			
	7.	Summary	of Current Ac	tions			
Page 2 of							

ICS 201 NFES 1325

INCIDENT OR IFOTIVES	1. Incident N	Name	2. Date	3. Time
INCIDENT OBJECTIVES				
4. Operational Period				
5. General Control Objectives for the Incident (include of	Ilternatives)			
6. Weather Forecast for Period				
7. General Safety Message				
8. A	ttachments	(mark if attached)		
Organization List - ICS 203	□ М	edical Plan - ICS 206	(Other)	
☐ Div. Assignment Lists - ICS 204	☐ In	cident Map		
Communications Plan - ICS 205	☐ Tr	affic Plan		
9. Prepared by (Planning Section Chief)		10. Approved by (I	ncident Commander)	

ORGANIZATIO	N ASSIGNMENT LIST	Chief	
1. Incident Name		Deputy	
1. Incluent Name		a. Branch I - Divis	sion/Groups
		Branch Director	
2. Date	3. Time	Deputy	
		Division/Group	
4. Operational Period		Division/Group	
		Division/Group	
Position	Name	Division/Group	
5. Incident Comm	nander and Staff	Division/Group	
Incident Commander		b. Branch II - Divi	sion/Groups
Deputy		Branch Director	
		Deputy	
Safety Officer			
Information Officer Liaison Offier		Division/Group	
	ontativo	Division/Group	
6. Agency Repres		Division/Group	
Agency	<del>-</del>	Division/Group	
		c. Branch III - Div	ision/Groups
		Branch Director	
		Deputy	
7. Plar	nning Section	Division/Group	
Chief	9	Division/Group	
Deputy		Division/Group	
Resources Unit		Division/Group	
Situation Unit		d. Air Operations	Branch
Documentation Unit		Air Operations Branch Director	
Demobilization Unit		Air Attack Supervisor	
Technical Specialists		Air Support Supervisor	
Human Resources		Helicopter Coordinator	
Training		Air Tanker Coordinator	
			ance Section
		Chief	
		Deputy	
		Time Unit	
8. Log	istics Section	Procurement Unit	
Chief		Compensation/Claims Unit	
Deputy		Cost Unit	
Supply Unit			
Facilities Unit		Prepared by (Resource Unit Lead	ler)
Ground Support Unit			
Communications Unit			
Medical Unit			
Security Unit			
Food Unit			

Operations Section

ICS 203 NFES 1327

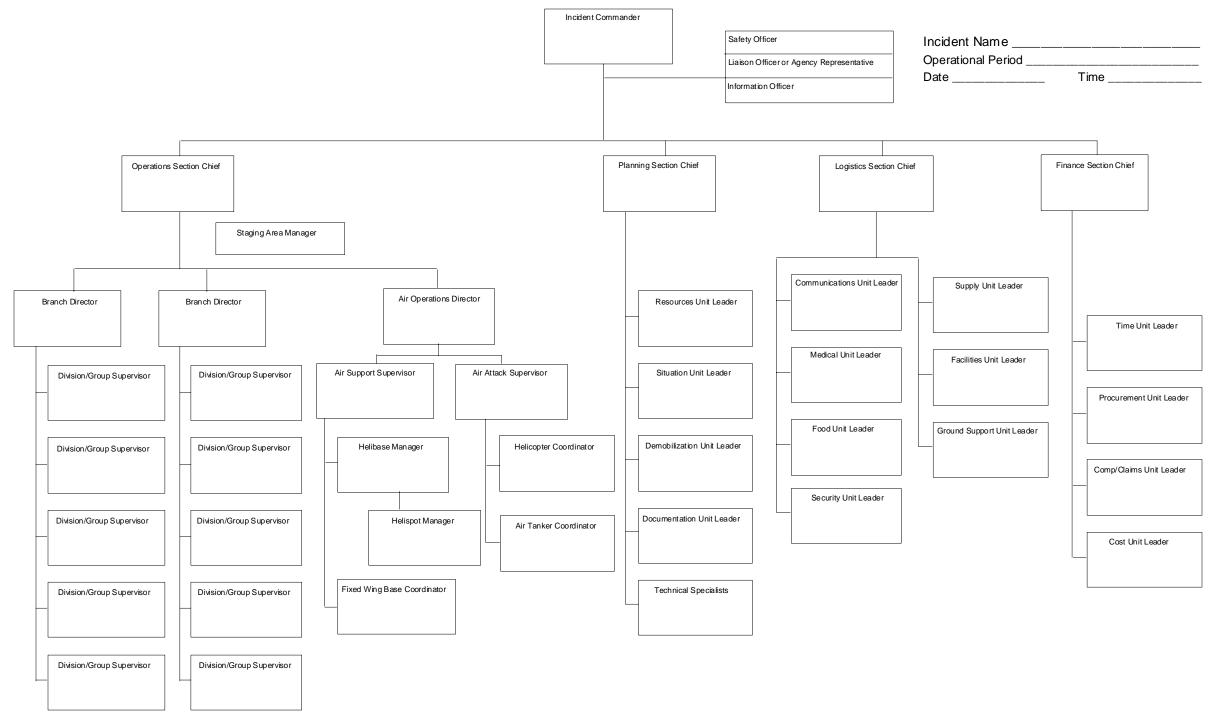
DIVISION ASSIGNMENT LIST			1. Branch			2. Division/Group			
3. Incident Name				4. Operational Period					
				Date	<del>)</del> :	Ti	ime:		
5.			Ор	erations P	ersonnel				
Operations Chief				Division/Gr	oup Supervisor				
Branch Director				Air Attack S	Supervisor No.				
6.			Res	sources As	ssigned this Pe	eriod			
Strike Team/Task Resource Desig		Leader		Number Persons		Drop Off PT.	./Time	Pick Up PT./Time	
7. Control Operations  8. Special Instructions									
9. Division/Group Communication Summary									
Function	Frequency	System	Cho	nnel	Function	Frequency		Chann	nel
Command		King NIFC			Logistics		King NIFC		
Tactical Div/Group		King NIFC			Air to Ground		King NIFC		
Prepared by (Resource Unit Leader)  Approved by (Planning Section				Section Chi	ef)	Date	1	Time	

ICS 204 NFES 1328

INCIDENT DADIO	COMMUNICAT		. Incident Name	2. Date/Time Prepared	3. Operational Period Date/Time					
INCIDENT RADIO	COMMUNICAL	IONS PLAN	4 Davida Davidla Ola							
4. Basic Radio Channel Utilization										
Radio Type/Cache	Channel	Function	Frequency/Tone	Assignment	Remarks					
King										
NIFC										
King										
NIFC										
King										
NIFC										
King										
NIFC										
King										
NIFC										
King										
NIFC										
King										
NIFC										
King										
NIFC										
5. Prepared by (Communic	ations Unit)									

ICS 205

MEDICAL PLAN	1. Incident Name		2. Date Prepared		:	3. Time Prepared		Operational Period				
5. Incident Medical Aid Station												
Medical Aid Stations	Location							Paramedics Yes No				
											-10	
6. Transportation												
A. Ambulance Services												
Name		Address		Phone			F		Paramedics Yes No			
B. Incident Ambulances												
Name		Location								Paramedics Yes No		
			7 11 2 1									
7. Hospitals												
Name	Address		Travel Time Air Ground Pho			one Helipad Yes		No	Burn Center No Yes No			
											-	
8. Medical Emergency Procedures											1	
C. Modical Emolgonoy Frocodures												
Prepared by (Medical Unit Leader)				10. Reviewed by (Safety Officer)								



ICS 207 NFES 1332

								INC	CIDE	ENT FS		ATU 100			MA	RY									
1. Date/Time			2.	Init Upda	ate		3. Inci	ident	Name						4. lr	ncide	nt Nu	mber							
5. Incident Com	nmander	,	6. Ju	ırisdict			7. Co	unty		8	8. Тур	oe Inc	ider	nt	9. L	ocati	on			10. St	artec	d Date	e/Time		
11. Cause	12. Area In	volve	d	13	3. % C	ontro	lled		Expect e/Tim	cted C	ontc	iinme		15. Esti Date/1		ed Co	ntrolle	ed		. Dec		Conf	rolled		
17. Current Threc	l at							18.	Contr	ol Prob	olem	S													
19. Est. Loss	20. Est Savii	ngs		2	1. Injui	ries		Dec	aths				:	22. Line	e Buil	t			23	. Line	to Bu	ild			
24. Current Wear	ther Temp			25. Pre	dicte	d Wed		mp			26.	. Cost	to D	ate	27. Est. Total Cost										
WD	RH			WD			R	Н																	
00. D		l		1		l		1		28	8. A	gen I	cies	; T				l		l		l		1	TALO
29. Resources		CD	СТ	CD	СТ	CD.	СТ	CD	СТ	CD	CT	CD	СТ	CD	СТ	CD	СТ	CD	CT	CD	СТ	CD	СТ		TALS
Kind of Resource		SR	ST	SR	ST	SR	ST	SR	ST	SR	ST	SR	ST	SR	ST	SR	ST	SR	ST	SR	ST	SR	ST	SR	ST
ENGINES																									
DOZERS  CREWS Numb	per of Crews:																							-	
Number of Cre																									
HELICOPTERS	W Felsolillel.																	L							
AIR TANKERS																									
TRUCK COS.																									
RESCUE/MED.																									
WATER TENDERS																									
OVERHEAD PERSO	ONNL																								
TOTAL PERSONNE	L																								
30. Cooperatin	ng Agencies																					•			
31. Remarks																									
32. Prepared by					3	33. Ap	prove	ed by					34. S	ent to:											
													Date	•			Tim	е		Ву					

ICS 209 NFES 1333

#### **General Instructions**

Completion of the Incident Status Summary will be as specified by Agency or municipality. Report by telephone, teletype, computer, or facsimile to the local Agency or municipality headquarters by 2100 hours daily on incidents as required by Agency or municipality (reports are normally required on life threatening situations, real property threatened or destroyed, high resource damage potential, and complex incidents that could have political ramifications). Normally, wildland agencies require a report on all Class D (100 acres plus) and larger incidents (unless primarily grass type in which case report Class E (300 acres or larger). The first summary will cover the period from the start of the incident to 2100 hour the first day of the incident, if at least four hours have elapsed; thereafter the summary will cover the 24 hour period ending at 1900 (this reporting time will enable compilation of reporting data and submission of report to local agency or municipality headquarters by 2100 hours) daily until incident is under control. Wildland fire agencies will send the summary to NIFC by 2400 hours Mountain Time.

- 1. Enter date and time report completed (mandatory).
- 2. Check appropriate space (mandatory).
- 3. Provide name given to incident by Incident Commander or Agency (mandatory).
- 4. Enter number assigned to incident by Agency (mandatory).
- 5. Enter first initial and last name of Incident Commander (optional).
- 6. Enter Agency or Municipality (mandatory).
- 7. Enter County where incident is occurring (optional).
- 8. Enter type of incident, e.g. wildland fire (enter fuel type), structure fire, hazardous chemical spill, etc. (mandatory).
- 9. Enter legal description and general location. Use remarks for additional date if necessary (mandatory).
- 10. Enter date and zulu time incident started (mandatory maximum of six characters for date and four characters for time).
- 11. Enter specific cause or under investigation (mandatory).
- 12. Enter area involved, e.g. 50 acres, top three floors of building, etc. (mandatory).
- 13. Enter estimate of percent of containment (mandatory).
- 14. Enter estimate of date and time of total containment (mandatory).
- 15. Enter estimated date and time of control (mandatory).
- 16. Enter actual date and time fire was declared controlled (mandatory).
- 17. Report significant threat to structures, watershed, timber, wildlife habitat or other valuable resources (mandatory).
- 18. Enter control problems, e.g. accessibility, fuels, rocky terrain, high winds, structures (mandatory).
- 19. Enter estimated dollar value of total damage to date. Include structures, watershed, timber, etc. Be specific in remarks (mandatory).
- 20. Enter estimate of values saved as result of all suppression efforts (optional).
- 21. Enter any serious injuries or deaths which have occurred since the last report. Be specific in remarks (mandatory).
- 22. Indicate the extent of line completed by chains or other units of measurement (optional).
- 23. Indicate line to be consturcted by chains or other units of measurement (optional).
- 24. Indicate current weather conditions at the incident (mandatory).
- 25. Indicate predicted weather conditions for the next operational period (mandatory).
- 26. Provide total incident cost ot date (optional).
- 27. Provide estimated total cost for entire incident (optional).
- 28. List agencies which have resources assigned to the incident (mandatory).
- 29. Enter resource information under appropriate Agency column by singe resource or stike team (mandatory).
- 30. List by name those agencies which are providing support (e.g. Salvation Army, Red Cross, Law Enforcement, National Weather Service, etc. mandatory).
- 31. The Remarks space can be used to (1) list additional resources not covered in Section 28/29; (2) provide more information on location; (3) enter additional information regarding threat control problems, anticipated release or demobilization, etc.(mandatory).
- 32. This will normally be the Incident Situation Status Unit Leader (mandatory).
- 33. This will normally be the Incident Planning Section Chief (mandatory).
- 34. The ID of the Agency entering the report will be entered (optional).

ICS 209 NFES 1333

	IN	CIDE	NT CH	HECK-I	N LIST	1. Incident No	ame			2. C	heck	-In Location	(complete	all that (	apply)			3. Date/Time	
□ Pers □ Engi □ Helid	nes		Check   Hand   Dozer   Aircra	crew s	☐ Misc.						Base	☐ Cam	np 🗆 Stagi	ing Area	ПК	CP Restat	☐ Helibase		
								Chec	ck-In Inforn	natic	n								
4. List Pe	ersonnel	(overhe	ead) by	Agency	& Name -OR-	5.	6.	7.	8.	9.		10.	11.	12.		13.	14.	15.	16.
Agency				format:	I.D. No/Name	Order/Request Number	Date/Time Check-In	Leader's Name	Total No. Personnel	<u>Ma</u> Yes	<u>nifest</u> No	Crew or Individual's Weight	Home Base	Depo Po	arture oint	Method of Travel	Incident Assignment	Other Qualification	Sent to RESTAT Time/Int

ICS 211 NFES 1509

Page	2 of	17. Prepared k	by (Name and	Position) Use	e back for remarks o	or commen	nts				

ICS 211 NFES 1509

		GENERAL M	MESSAGE		
TO:		POS	SITION:		
FROM:		POS	SITION:		
SUBJECT:		DAI	E:	TIME:	
MESSAGE:		<del>'</del>			
SIGNATURE:			POSITION:		
REPLY:					
DATE:	TIME:	SIGNATURE/PC	DSITION:		
			-		

ICS 213 NFES 1336

UNIT I	LOG	1. Incident Name	2. Date Prepared	3. Time Prepared
4. Unit Name/Designato	ors	5. Unit Leader (Name and Position)		6. Operational Period
7		Domannal Dosta	A solono ol	
7. Nan	ne.	Personnel Roste ICS Positio		Home Base
NOI	i i e	1031 03110	Л	Home base
8.		Activity Log		
Time		Activity Log	Major Events	
			aje: 21er.iio	
9. Prepared by (Name o	and Position)			
z. Frepaied by (Naithe (	ana Fusinuti)			

									1. Incider	nt Name					2. Date	e Prepare	ed		3.	Operation	nal Period (Date/Tir	ne)	
(	OPERATIONAL	PLAN	NIN	1G M	/ORK	SHE	ET								Time P	repared							
1. Division/ Group or Other	5.								·		(S	Resource how Strike	e by Type Team as S	T)	·							6. Reporting Location	7. Requested
Location	Work Assignments			Eng	gines		Water	Tenders	Hand	Crews		Dozers			Helico	opters			Air Tanker	S	Other		Arrival Time
		_,	1	2	3	4	1	2	1	2	1	2	3	1	2	3	4	1	2	3	Olliei		
		Req																					
		Have																					
		Need																					
		Req																					
		Have																					
		Need																					
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		Need																					
		Req																					
		Have																					
		Need																					
		Req																					
).		Have																					
Toto	al Resources - Single	Need																					
		Req																				Propagad by (Namo and Perities)	L
Total Re	esources - Strike Teams	Have																				Prepared by (Name and Position)	
		Need												+									

NFES 1338

		INICI	DENI		TION	LDLA	NI CAEETY	V A NI	IAIVC	ıe	1. Incident Name			2. Do	ite			3. Time
		INCI	DEINI	I AC	IION		N SAFET											
						Look	LCES* A outs Comm	Analysi iunicat	is of Ta ions <b>E</b> s	ctical A cape ro	lications es <b>S</b> afety zones					Oth	er Risk A	nalysis
Division/Group	Indirect Fireline	Downhill Fireline	Underslung Fireline	Mid-slope Fireline	Frontal Assault	Anchor Points	Extreme Conditions (Spotting, Wind-driven)	Reburn Potential				Hazard Materials	Transportation, 1 Hr +	Communications	Structure Protection			
											LCES Mitigations		1					Other Risk Mitigations
													-					
													-					
Prepo	red b	y (Na	me ai	nd Po	sition)	)	l	1	<u> </u>	l .			1	<u> </u>	l			

RA	DIO REG	UIREMENTS WO	RKSHEET	1	1. Incident Name				2. Date			3. Time
4. Branch			5. Agency			6. Operationa	l Period			7. Ta	actical Frequen	cy
8. Division/G	Froup		Division/Gro	up	-	Division/Gro	up		Division	n/Grou	р	
Agency			Agency			Agency			Agenc	СУ		
9. Agency	ID No.	Radio Requirements	Agency	ID No.	Radio Requirements	Agency	ID No.	Radio Requirements	Agei	ncy	ID No.	Radio Requirements
	Page	1 of	10. Prepare	d by (Name	e and Position)							

ICS 216 NFES 1339

	SUPPORT VEHICLE INVENTORY (Use separate sheet for each vehicle category)				1. Incident	Name		2. Date Prepared		3. Time Prepare	∍d		
	·	ach veh	icle category)			·							
Vehicle Category:		Buses		Dozers		Engines		Lowboys	Pickups/Sedan	s $\square$	Tende	rs 🗌	Other
				_	Vehi	cle/Equipmer	nt Inf	ormation					
Resource Order No.									Vehicle License				
"E" Number	Incident ID No.		Vehicle Type	Vehic	ele Make	Capacity Size	€	Agency/Owner	Rig Number	Locatio	n	Releas	se Time
Page _	_of	5. Pre	epared by (Ground	d Support Ui	nit)	1			 				

ICS 218 NFES 1341

AIR OPERATION	IS SUMMARY	1. Incident Na	me				Helibases Fixed Wing Bases		
4. Personnel and Communications	Name	Air/Air Fr	requency	Air/Ground	Frequency	5. Remarks (Spec	. Instructions, Safety	Notes, Hazards, Priorit	ies)
Air Operations Director									
Air Attack Supervisor						1			
Helicopter Coordinator						1			
Air Tanker Coordinator						- -			
6. Location/Function	7. Assignment	8. Fixe	d Wing Type	9. Helico	pters Type	10. 1 Available	lime Commence	11. Aircraft Assigned	12. Operating Base
			7		//				
				1					
	13. Totals								
14. Air Operations Support Equipmen	t	1	ı	I	15. Prepared	d by (include Date	and Time)		

ICS 220 NFES 1351

		DEMOE	BILIZATION CHECKOUT		
1. Incide	ent Name/Number		2. Date/Time	3. Demob. No.	
4. Unit/P	ersonnel Released				
5. Transp	portation Type/No.				
6. Actuc	al Release Date/Time		7. Manifest?  Yes No	Number	
8. Destin	ation		9. Notified: Agency	☐ Region☐ Area	☐ Dispatch
			Name:		
			Date:		
10. Unit l	Leader Responsible for Collecting	Performance Rating			
		11	. Unit/Personnel		
You ar	nd your resources have be	en released subject t	o sign off from the follow	ving:	
	<ul> <li>b. Unit Leader check the observation</li> </ul>	appropriate box			
LOGISTIC	23 00011011				
	Supply Unit				
	Communications Unit				
	Facilities Unit				
	-				
	Ground Support Unit Leader				
Plannin	ng Section				
Plannir					
	ng Section				
	ng Section  Documentation Unit				
□ Financ	ng Section  Documentation Unit e Section				
□ Financ	ng Section  Documentation Unit e Section				
Financ	ng Section  Documentation Unit e Section				
Financ	ng Section  Documentation Unit e Section				
Financ  Other	ng Section  Documentation Unit e Section				
Financ  Other	ng Section  Documentation Unit e Section				
Financ  Other	ng Section  Documentation Unit e Section				

ICS 221 NFES 1353

#### Instructions for completing the Demobilization Checkout (ICS form 221)

Prior to actual Demob Planning Section (Demob Unit) should check with the Command Staff (Liaison Officer) to determine any agency specific needs related to demob and release. If any, add to line Number 11.

Item No.	Item Title	Instructions
1.	Incident Name/No.	Enter Name and/or Number of Incident.
2.	Date & Time	Enter Date and Time prepared.
3.	Demob. No.	Enter Agency Request Number, Order Number, or Agency Demob Number if applicable.
4.	Unit/Personnel Released	Enter appropriate vehicle or Strike Team/Task Force ID Number(s) and Leader's name or individual overhead or staff personnel being released.
5.	Transportation	Enter Method and vehicle ID number for transportation back to home unit. Enter $N/A$ if own transportation is provided. <i>Additional specific details should be included in Remarks, block</i> # 12.
6.	Actual Release Date/Time	To be completed at conclusion of Demob at time of actual release from incident. <i>Would normally be last item of form to be completed.</i>
7.	Manifest	Mark appropriate box. If yes, enter manifest number. <i>Some agencies require a manifest for air travel.</i>
8.	Destination	Enter the location to which Unit or personnel have been released. <i>i.e.</i> Area, Region, Home Base, Airport, Mobilization Center, etc.
9.	Area/Agency/ Region Notified	Identify the Area, Agency, or Region notified and enter date and time of notification.
10.	Unit Leader Responsible for Collecting Performance Ratings	Self-explanatory. Not all agencies require these ratings.
11.	Resource Supervision	Demob Unit Leader will identify with a check in the box to the left of those units requiring check-out. Identified Unit Leaders are to initial to the right to indicate release.
		Blank boxes are provided for any additional check, (unit requirements as needed), i.e. Safety Officer, Agency Rep., etc.
12.	Remarks	Any additional information pertaining to demob or release.
13.	Prepared by	Enter the name of the person who prepared this Demobilization Checkout, including the Date and Time.

ICS 221 NFES 1353

CREW PERFORMANCE RATI	NG	blocks	must be	complete	is to be used only for determining an individual's fire fighting qualificatieted. Crew will be rated by the immediate supervisor, not crew represented for items 9 and 10, explain in item 11.			
Crew Name and Number		2. Fire	Name ar	nd Numbe	er 3. Crew Boss (nam	e)		
4. Crew Home Unit and Address					5. Location of Fire (complete address)			
6. Crew Representative		7. Dat	es on Fire		8. Number of Shifts	Worked		
9. Crew Ev	/aluatio	<b>1</b>			11. Areas Needing Improvement			
Rating Factors	Excellent	Satisfactory	Deficient	Needs To Improve				
Physical Condition								
Hot Line Construction								
Мор-Ир								
Off Line Conduct								
Use of Safe Practices								
Crew Organization and Equipment								
Other (specify)								
10. Supervisory	Perform	ances						
Crew Boss								
Squad Bosses								
Crew Representative								
12. Names of Outstanding Workers (con	nment)				13. Names of Individuals Needing Improveme	ent (indicate area(s))		
14. Remarks								
15. Crew Boss (signature) This rating has	been disc	ussed with	n me.			16. Date		
17. Rated By (signature)	18. Ho	me Unit (	ne Unit (address)		19. Position of Fire	20. Date		

ICS 224 NFES 1577

DEDECTIVE DATING		INSTRUCTIONS: The immediate job supervisor will prepare this form for each subordinate. It will be delivered to the planning section before the rater leaves the fire. Rating will be reviewed with employee who will sign at the bottom.						
THIS	RATING IS TO BE	USED ONLY FOR DETE	ERMINING AN IND	IVIDUAL'S PERFORM	ANCE			
1. Name			2. Fire Name ar	nd Number				
3. Home Unit (address)			4. Location of Fire (address)					
5. Fire Position	6. Date of As	signment	1	7. Acres Burned	8. Fue	el Type(s)		
	From:	To:						
		9. Evo	aluation					
Enter <b>X</b> under appropriate rating number	and under prope	er heading for each	category listed. [	Definition for each ro	ating number follows:	:		
0 - Deficient. Does not meet minimum red	quirements of the	individual element.						
DEFICIENCIES MUST BE IDENTIFIE	D IN REMARKS.							
1 - Needs to improve. Meets some or mo	st of the requirem	ents of the individuo	ıl element.					
IDENTIFY IMPROVEMENT NEEDEL	) in remarks.							
2 - Satisfactory. Employee meets all requi	rements of the in	dividual element.						
3 Superior. Employee consistently excee	eds the performa	nce requirements.						
D :: E :				N.A. 11	_	011 1( )		

Rating Factors	Hot Line			Mop-Up			Camp			Other specify)						
	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3
Knowledge of the job																
Ability to obtain performance																
Attitude																
Decisions under stress																
Initiative																
Consideration for personnel welfare																
Obtain necessary equipment and supplies																
Physical ability for the job																
Safety																
Other (specify)																

10.	Remarks
-----	---------

11. Employee (signature) This rating has be	11. Employee (signature) This rating has been discussed with me					
13. Rated By (signature)	14. Home Unit (address)	15. Position of Fire	16. Date			

ICS 225 NFES 1576

ORGANIZATIO	N ASSIGNMENT	LIST -	Chief				
		Deputy					
1. Incluent Name		a. Branch I - Division/Groups					
	1 .	-	Branch Director				
2. Date	3. Time	<u>-</u>	Deputy				
		_	Division/Group				
4. Operational Period		_	Division/Group				
			Division/Group				
Position	Name	<del>-</del>	Division/Group				
5. Incident Comm	nander and Staff	_	Division/Group				
Incident Commander		<u> </u>	b. Branch II - Divi	sion/Groups	!		
Deputy		<u>-</u>	Branch Director				
		-	Deputy				
Safety Officer			-				
Information Officer Liaison Offier			Division/Group				
	contativo		Division/Group				
6. Agency Repres		-	Division/Group				
Agency	6	<u>-</u>	Division/Group				
		-	c. Branch III - Div	rision/Groups			
		-	Branch Director				
		-	Deputy				
		-					
7. Plar	nning Section	<del>-</del>	Division/Group				
Chief		-	Division/Group				
Deputy			Division/Group				
Resources Unit		-	Division/Group				
Situation Unit			d. Air Operations	s Branch			
Documentation Unit		-	Air Operations Branch Director				
Demobilization Unit		_	Air Attack Supervisor				
Technical Specialists		<u>-</u>	Air Support Supervisor				
Human Resources		-	Helicopter Coordinator				
Training		<del>-</del>	Air Tanker Coordinator				
			10. Fir	nance Section	1		
			Chief				
			Deputy				
			Time Unit				
8. Log	jistics Section		Procurement Unit				
Chief			Compensation/Claims Unit				
Deputy		-	Cost Unit				
Supply Unit							
Facilities Unit			Prepared by (Resource Unit Lead	der)			
Ground Support Unit			1				
Communications Unit			1				
Medical Unit			1				
Security Unit			1				
Food Unit			1				
		<del>_</del>	1				

Operations Section

ICS 203 NFES 1327

## Appendix Q

R-8 Prescribed Fire Plan &
Prescribed Fire Complexity Analysis

## USDA FOREST SERVICE SOUTHERN REGION

R8-FS-510	00-6 (1/04)
Page	of

#### Section A. Review, concurrences, changes

Burn Name (cor	mpartments/st	ands or burn uni	t reference):			-	
Forest:		Ranger District:	:	_ Complexity:			
Prepared by:R				Date:			
RX	XPL, RXB1, o	or RXB2 (circle	appropriate QU	AL)			
Resource Coord	ination:			Date:			
	Timb	er, Silviculture					
	Wild	l:fo		Date:			
		e		Date:			
		lands, minerals,		Dutc			
				Date:			
	CRM	-Heritage		_			
	NED	A coordinator		Date:			
	NEF	A Coordinator					
Reviewed by: _					e:		
RX	XPL, RXB1, o	or RXB2 (circle	appropriate QU	AL)			
A				Data			
Approved by: _A	nproved Line	Officer (signato	ory also concurs	Date: with risk assess	sment and c	complexity rating)	)
						in premity rading,	,
Change Approva	al:		Date: _	Time: _			
	Approved 1	Line Officer (sig	gnatory also con	curs with risk a	ssessment a	and complexity ra	ting)
Nature of chang	e annroval·						
J							
All alamants of	tha DyDD ara	as prosarihad an	ud ara pradiatad	to romain in pro	acarintian d	lumina tha avnaata	d life
of the burn (day				to remain in pre	escription a	luring the expecte	u me
or the barn (day	or the burn g	orno go decision	.,.				
			<u> </u>				
RXB1, RXB2, F	RXB3 (cirlce a	appropriate QUA	AL) Da	ate	Time		
Date/time lines	ahaakad	Who checked	Mathad (air/a	eround)			
Date/time imes (	checked	who checked	Method (air/g	(Tourid)			
	<del></del>						
D '1 '1	1 1 1						
Prescribed burn	declared out:	RXB1, RXB2,	or RXR3	Date	Time		
		1001, 1002,	OI IVADS	Date	1 11110		

#### **B.** Location and Administrative Information:

Lattitude (middle of	burn):						
Longitude (middle o	•						
Quadrangle name(s)							
Quantum Bro manne (s)							
Township:		Range			Sections	:	
Township:		_					
Township.		Kange			Sections	:	
Joh Codo	1 1 2 2 2 2		hio otivo /Du				
Job Code:			bjecuve/Pu	rpose:			<del>-</del>
Job Code:				rpose:			_
Job Code:							
Job Code:		O	bjective/Pu	rpose:			
	Total Ac:						
FY of Treatment:							
C. History of Pre	vious Burn:						
•							
D. Description of	Burn Unit:						
1. Overstory:							
2. Understory:							
2. Chacistory.							
3. Fuels:							
J. Tueis.							
[							
4. Topography:							
<ol><li>Chains of line on</li></ol>	burn unit: Total	perimeter_	chs, ha	and linech	ıs, dozer_	chs, creek	chs,
	hs, bladed road _					black line	_ chs
				<u> </u>			
6. Complexity Lev	vel: LO	W	MODE	RATE	HIGH		

E. Specific Ol	ojectives:				
F. Special Con	nsiderations:				
1. Public Notification	Name	Contact Method	Completion date/whom		
2. Coordinati	on with other Resources:				
2. 000101111111					
2 11 1 4	1				
3. Hazard Ana	lysis:				
4. Contingency	y Area Description-Plan of Action If Cond	litions Change:			
G. Prescribed	Burn Execution				
1. Organization	on:				
2. Firing, Containment, Mop-up and Patrol Procedure:					

#### H. Smoke Management

1. R-8 Screening System (Smoke Screening Map Required Attachment)

a. Targets with existing Visibility or Air Quality Problems Identified:
b. Targets to be Mitigated Identified:
(1) Mitigating Measures to be taken:
c. Targets Requiring Patrol Identified:
(1) Mitigating Measures to be Taken:
I. State Burning Permit Number and Date:
J. Prescribed Parameters and On Site Observations: (Table on next page)
Closest RAW Station # Name:
1/ All prescription items to be completed at planning time.
2/ General forecast items to be completed on the day of the burn; secured general & spot wx forecasts are to be attached to RxBP
3/Test fire required and post fire weather parameters must be taken on-site
4/ RH predicted between 25-29% requires FMSO or Forest Supervisor approval
5/Sliding scale based on transport wind speed (5144-exhibit 02)
6/Forest Supervisor change approval (see 5140.42-exhibit 01)
7/Dispersion index 21 or greater or use of category day (2 through 4)
K. Required attachments to each RxBP
a. Risk assessment
b. Wildland & Rx fire complexity rating worksheet
c. Monitoring format
d. Fire use briefing & tailgate safety checklist
e. Organizational chart and aerial ignition org chart if applicable
f. Smoke screening map (1/2" per mile)
g. RxBP map (1:24000 RF)
h. Fire wx and spot weather forecasts
i. Prescribed fire report (FS-5100-29) template
L. Notes:

### J. Prescribed Fire Parameters and On-Site Observations (Table): | Regional | RyRP | Congrest | Post | Post

	Regional	RxBP	General	Test	Post	Post	Post
	or Forest	Prescrip-	Forecast	Fire	Fire	Fire	Fire
	Standard	Tion 1/	2/	3/	3/	3/	3/
DATE/TIME							
FUEL MODELS (FBPS)							
1 HR FUELS %							
10 HR FUELS %	>=7%						
	open site						
LIVE FUEL MOISTURE							
(herb) %							
LIVE FUEL MOISTURE							
(woody) %							
TEMPERATURE (F)							
RELATIVE HUMIDITY	>=25% 4/						
0/0							
20 ft WIND (mph)	<=18 mph						
20 ft WIND DIRECTION							
MIDFLAME WIND							
SPEED (mph)							
MIDFLAME WIND							
SPEED DIRECTION							
TRANSPORT WIND	3-4 m/s						
SPEED (m/s)	5/						
TRANSPORT W/S							
DIRECTION							
MIXING HEIGHT (m)	500-850						
	meters 5/						
SMOKE DISPERSION	>21 DI 7/						
<b>BURNING INDEX</b>	<=mid D						
(NFDRS)	6/						
IGNITION PROB %							
KBDI							
DAYS SINCE RAIN							
AMOUNT (inches)							
FIRING TECHNIQUE							
IGNITION METHOD							
SLOPE (AVERAGE) %							
EFFECTIVE							
WINDSPEED (mph)							
FLAME LENGTH (ft)							
RATE OF SPREAD							
(chs/hr)							
HEAT PER UNIT AREA							
(btu/sqft)							
FIRELINE INTENSITY							
(btu/ft/sec)							

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# PRESCRIBED FIRE COMPLEXITY RATING SYSTEM GUIDE



PMS 424 Jan 2002

**NFES 2474** 

#### PRESCRIBED FIRE COMPLEXITY RATING SYSTEM

#### **Purpose**

The Prescribed Fire Complexity Rating System was developed to assist personnel in determining a relative complexity of any single prescribed fire project. The system was designed for interagency application and provides the local prescribed fire manager the opportunity to include local considerations in the decision process. The first edition was published in 1995. Based on the experience gained working with this document, an update was needed to help clarify how and when to use the document and to provide descriptors for the factors of Potential Consequences and Technical Difficulty.

The purpose of the complexity rating process is to provide:

- Management and implementation personnel a relative ranking as to the overall complexity of a specific prescribed fire project.
- A process that can be used to identify prescribed fire plan elements or characteristics that may pose special problems or concerns and where prescribed fire plan changes may be prudent to mitigate or eliminate these problems or concerns.

The analysis can be used at any of the various stages during the planning process, initial project identification level to a late stage draft of the prescribed fire plan.

The "Risk" and "Potential Consequences" ratings can be used to help determine an overall management risk associated with the project; the "Technical Difficulty" ratings can be used to facilitate the planning process and help identify prescribed fire positions and skill levels necessary to safely and successfully implement the prescribed fire.

The process is intended to serve as an aid in evaluating common elements and components of prescribed fires that contribute to their level of difficulty. Numerical rating scales were purposely avoided because these may lead to a distorted perception of the project, and different agencies and geographic areas place different values on similar resources and objects on or near the prescribed fire location. Documentation may be required at various decision points to support conclusions reached by evaluating the complexity elements.

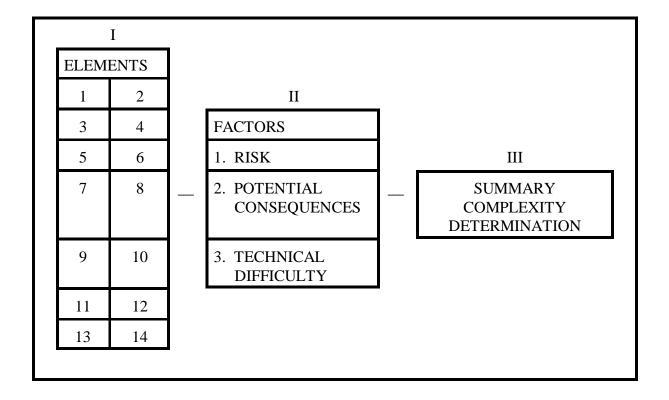
Many state and Federal agencies and geographic areas may have additional analysis criteria. These should be used to supplement the NWCG complexity rating system. The rating system is for a single prescribed fire project and is not intended to rate other stand alone operational procedures where safety and/or operational measures are in place as a normal course of business (e.g., Alaska, where most activities require significant aviation operations just to get to the site and separate standards exist that provide safety and operational procedures along with personnel qualifications).

#### **Overview**

The broad concept is to consider three fire complexity factors: (1) Risk (the probability or likelihood that an adverse event or situation will occur); (2) Potential Consequences (some measure of the cost or result of an adverse event or situation occurring); and, (3) Technical Difficulty (which indicates the skills needed to implement the project and deal with unexpected or adverse events). The system uses 14 elements that are common to most prescribed fire projects. Each element rating is determined by assigning a Low, Moderate, or High value. A rating descriptor is given for each rating level and for all elements. Each element is evaluated individually in the complexity analysis process by reading the criteria and selecting the most appropriate descriptor. The rating is documented on the Complexity Rating Worksheet. A rationale section is provided to document the decision process.

A summary rating is provided to assist in assigning an overall project complexity rating. The working part of the analysis assigns relative values to Risk, Potential Consequences, and Technical Difficulty to each of the complexity elements.

Illustration #1 - Flow Chart



#### **Process**

This process is be used to identify prescribed fire plan elements or characteristics that may pose special problems or concerns and where prescribed fire plan changes may be prudent to mitigate or eliminate these problems or concerns. It is recommended that a preliminary rating be completed during the project development stage *prior* to the development of the prescribed fire plan. In this way problem areas identified may be mitigated during the prescribed plan preparation process. When determining the complexity rating, areas outside of the project boundaries that could be impacted if the fire escaped or could be impacted by smoke should be considered. Once the prescribed fire plan is near completion, the <u>final complexity rating</u> is made. The final rating should take into account any mitigation included in the plan. This process should be completed on the original form with additional narration to describe the mitigation taken. Items or issues which cannot be mitigated should be clearly identified and will be highly influential in the complexity determination.

The elements and factors are not independent. Mitigating one frequently alters several others, i.e., adding more holding resources to mitigate the probability of escape increases the number and dependence of activities and project logistics.

#### **Instructions**

#### Step #1 - Preliminary Review of the Element Descriptors

A review of the rating descriptors prior to going on site will help to identify the elements that will be of most concern. Alternatives and/or mitigation measures that will help to reduce the final complexity rating can be considered early in the planning process.

#### Step #2 - Preliminary Rating Determination

The Complexity Rating Worksheet contains the 14 elements for the Risk, Potential Consequences, and Technical Difficulty factors and provides a place to record the rating. Rate the level for each element by selecting the most appropriate descriptor. Circle the low, moderate, or high rating on the worksheet and identify the rationale for that rating. In addition, if mitigation is desirable and opportunities are available, briefly identify them for further development in the planning process. This is the point where local management judgement and experience is most important. The documentation is critical to the process in that it lets the reviewer understand the thinking behind the rating and that mitigation is possible.

Some elements may not apply and should be noted on the work sheet as "N/A" to indicate they were considered, but did not apply to this project. The 14 elements may not be adequate for all or unique situations. Local issues which are not properly addressed by the standard elements can be added to the rating system. Additional elements can be added at the field office or

geographic area. If additional elements are added, specific definitions for the low, moderate and high levels of Risk, Potential Consequences, and Technical Difficulty should be prepared.

Individual element Technical Difficulty ratings provide skill position information (i.e., Prescribed Fire Burn Boss, Ignition Specialist, Fire Effects Monitor, Fire Behavior Analyst, Safety Officer, holding, etc.). Those that appear as <a href="high-may">high-may</a> indicate that high levels of skill are needed, or may be reviewed and found to be routine business for local fire managers, allowing the fire to be ranked lower than its highest individual entry.

The analysis may be halted at this point and the results used to prepare or revise the prescribed fire plan to mitigate or remove unnecessarily higher complexity issues.

#### Step #3 - Final Rating Determination

Near completion of the planning phase, the elements are again rated against the Risk, Potential Consequences, and Technical Difficulty factors on the same form using the same process and circling the final rating in the space provided. Again, local management judgement and experience are called for. Short justification statements are recommended to substantiate the assignment of the rating. Items rated higher than the overall average should be re-analyzed to see if mitigation opportunities were overlooked or have become available because of other actions during the plan development, changes in operational procedures, or on-the-ground preparation. Of primary concern in this step is the documentation of those items that have been changed from the preliminary rating because of the planned mitigation, site conditions, or other situations that have occurred. Again, the rationale is very important in that it documents for the manager how the rating was determined. The ratings here will provide the foundation for the Summary Rating.

#### Step #4 - Summary Rating Determination

Generally, since all mitigating measures have been applied, the highest rating from any single element will provide the foundation for the individual rating of Risk, Potential Consequences, and Technical Difficulty. The highest of those will provide the Summary Complexity Rating and this rating is the overall project complexity rating. This rating should take into account agency policies. The rationale for this rating should be brought forward from those elements that established that rating level, e.g., if all elements for Risk and Technical Difficulty and most for Potential Consequences are rated as low, but two elements under Potential Consequences are rated moderate, the project would normally have a moderate Summary Rating. In another situation, if one element was rated as high, the summary rating would be high.

If there is anything unique or abnormal about a project, it is recommended the agency administrator be briefed prior to submitting for approval.

#### Step #5 - Agency Administrator Approval

The Summary Complexity Rating and rationale for the project provides the administrator critical facts to make a decision. The administrator reviews the rating material and if in concurrence approves and dates the document.

#### PRESCRIBED FIRE COMPLEXITY RATING DESCRIPTORS

#### 1. POTENTIAL FOR ESCAPE - RISK

LOW: Ranges from no potential for escape up to the likelihood of some spot fires, each comprising small areas that are readily detected, accessed, and controlled by modest holding forces available on the burn. No dangerous ladder fuels or concentrations are near critical holding points. Ignition procedures do not create intense fire. Probability of ignition in fuels outside the unit is below 60% or doesn't apply due to isolation of the unit. There is no residual fire expected beyond the day of ignition.

MODERATE: Potential for multiple spot fires that can propagate at moderate rates of spread but can be held by skilled and prompt holding actions. The fire has some limited potential to cross burn unit perimeters or allowable area boundaries and exceed the capability of holding forces to suppress it. Some fuel concentrations exist near critical holding points. The probability of ignition in fuels outside of the unit is between 60% and 80%. Some ladder fuels may be present but are mostly well inside the unit. Residual burning may last up to three days, with a moderate potential to cause escapes.

HIGH: There is a possibility of multiple spot fires or slop-overs that exceed the capability of the holding force to detect and suppress. Concentrations of dangerous fuels near critical holding points including ladder fuels that hamper holding operations. Expected fire line intensities in the primary fuel type are known to challenge standard fire lines or to produce abundant spotting. Probability of ignition in fuels outside the unit is over 80%. Residual burning may last for several days to several weeks with potential to flare up and escape the unit.

#### 1. POTENTIAL FOR ESCAPE - POTENTIAL CONSEQUENCES

LOW: An escape could result in little damage to natural resource values or to improvements. No structures are expected to be involved. Any damage can be quickly repaired. There will be minimal impact to the public or users. Few social or political concerns from an escape are expected.

MODERATE: An escape could result in moderate damage to vegetation, habitat, or improvements. No residences are expected to be involved, but other structures might be involved. The fire could burn onto private or other agency lands. Damages to improvements would take some time to repair. There would be moderate impact to the public or users. Some social or political concerns from an escape could be expected.

HIGH: An escape could result in severe damage to vegetation, critical habitat, critical watersheds, or improvements. Residences may be involved. The fire is likely to burn onto private or other agency lands. Damages to improvements would take significant time to repair. Claims for damage to private property or resource damage on other agency lands may be expected. Restoration work or salvage of natural resources could be required to repair damage. There would be significant impact to the public or users. Considerable social or political concerns from an escape could be expected.

#### 1. POTENTIAL FOR ESCAPE - TECHNICAL DIFFICULTY

LOW: Holding operations would normally be supervised at the Single Resource Boss level. The burn unit and allowable area is easily accessible to the holding resources identified in the plan. Weather conditions as identified in the Prescribed Fire Plan are normal for the area and season. All of the key implementation personnel from the local area.

MODERATE: Holding activities require supervision at the Strike Team/Task Force Leader level. Several types of resources are involved in the holding operation. Portions of the burn unit and allowable area are not easily accessible to the holding resources. Some key implementation personnel are from outside the local area.

HIGH: Holding activities require supervision at or above the Division Supervisor level. Several portions of the burn unit and allowable area are not easily accessible or some portions are inaccessible to the holding resources. Several types of holding resources are required. Most key implementation personnel are from outside the local area.

#### 2. NUMBER AND DEPENDANCE OF ACTIVITIES - RISK

LOW: Activities are generally independent or only loosely dependent on other activities.

MODERATE: Several activities depend on successful achievement of previous or concurrent actions. The failure of one or more call for remedial measures within the capabilities of the management team.

HIGH: Activities are complex and highly interactive. The failure of single key activities can prevent the implementation of many subsequent actions and lead to a failure to successfully complete the project. Few opportunities to remedy failures exist and require highly skillful actions to be taken.

#### 2. NUMBER AND DEPENDANCE OF ACTIVITIES - POTENTIAL CONSEQUENCES

LOW: Coordination issues do not result in an increased risk of escape, threaten the completion of the project, failure to meet project objectives, or create a safety issue.

MODERATE: Coordination problems could result in an increased risk of escape, threaten the completion of the project, failure to meet some project objectives, or create a safety issue. Some delay in implementation would be expected.

HIGH: Coordination failure(s) could result in a high risk of escape, failure to complete the project, failure to meet the project objectives, or serious safety issues for implementation personnel or the public. A significant delay in implementation would be expected.

#### 2. NUMBER AND DEPENDANCE OF ACTIVITIES - TECHNICAL DIFFICULTY

LOW: Minimal difficulty in coordinating the required activities. Coordination problems or communication failures or issues will not affect the completion of the project.

MODERATE: Coordination activities require a moderate skill level. Continuous communication is necessary for successful project completion.

HIGH: Requires a highly skilled team to successfully complete the project. Continuous coordination and communication is critical to the success of the project.

#### 3. OFF-SITE VALUES - RISK

LOW: There are few values at risk or the values identified are generally considered low or minimal or the project is expected to take place during periods of low visitor use. Minimal risk to improvements, private or other agency lands.

MODERATE: Some limited areas of high value are located adjacent or near the project area or the project is expected to take place during periods of moderate visitor use. Moderate risk to improvements, private or other agency lands. One critical protection area has been identified.

HIGH: Several areas of high value are located adjacent or near the project area or the project is expected to take place during periods of high visitor use. Substantial risk to improvements, private or other agency lands. More than one critical protection area has been identified.

#### 3. OFF-SITE VALUES - POTENTIAL CONSEQUENCES

LOW: The vegetation potentially affected generally has rapid recovery rates or the expected fire behavior should would cause minimal or no damage to off-site values, improvements, private or other agency lands. No restrictions on visitor use are expected during project implementation.

MODERATE: Some negative impacts are expected in the event of spot fires, slopovers, and escapes. The vegetation potentially affected generally has moderate recovery rates or the expected fire behavior may cause limited damage or some other limited serious consequences to off-site values, improvements, private or other agency lands. Visitor use may be restricted during project implementation for a short period of time.

HIGH: The vegetation potentially affected generally has slow recovery rates or the expected fire behavior could cause serious damage or destruction to off-site values, improvements, private or other agency lands. Visitor use will be restricted during project implementation for an extended period of time.

#### 3. OFF-SITE VALUES - TECHNICAL DIFFICULTY

LOW: Protection of the off-site values requires no special management, equipment or skills.

MODERATE: Protection of the off-site values requires some special management, a moderate skill level and good team coordination, particularly at the critical holding points.

HIGH: Protection of the off-site values requires special management, a high skill level and a high level of team coordination, particularly at the critical holding points.

#### 4. ON-SITE VALUES (SPECIAL FEATURES) - RISK

LOW: Few or no special internal features are present that require special attention in planning or implementation. There are few on-site values at risk or the values identified are generally considered low or minimal.

MODERATE: Special features may be present within the unit that may need to be addressed in planning, strategies and briefings, and during project implementation. Some limited areas of high value are located within the project area.

HIGH: Special features are present within the unit. Several areas of high value are located within the project area. Strategies must address details in planning, at preburn briefings, and during project implementation.

#### 4. ON-SITE VALUES (SPECIAL FEATURES) - POTENTIAL CONSEQUENCES

LOW: Implementation problems will not damage special features or adversely affect on-site resource values.

MODERATE: Implementation problems or failures will result in moderate damage to special features and some reduction or loss of on-site resource values.

HIGH: Implementation problems or failures will result in substantial damage to, or destruction of special features or on-site resource values.

#### 4. ON-SITE VALUES (SPECIAL FEATURES) - TECHNICAL DIFFICULTY

LOW: No special skills or operating procedures are required. Resource values within the unit are easy to protect.

MODERATE: Protection of special features or on-site resource values requires the development of special ignition OR holding plans. Some pre-burn preparation work may be required.

HIGH: Protection of special features or on-site resource values requires the development of special ignition AND holding plans. Special or additional equipment will be needed. Considerable pre-burn preparation work is required.

#### 5. FIRE BEHAVIOR - RISK

LOW: Fuels are uniform and/or loading is light and can be characterized using a single fuel model. Terrain is mostly flat or the slope and aspect are uniform, leading to a relatively unvarying fire. Winds, microclimate, and other fire conditions are relatively uniform. Fire behavior is highly predictable. Fire is primarily a two-dimensional surface fire and any vertical development is isolated and insignificant.

MODERATE: Fuels vary moderately within the unit, both in loading and arrangement. Medium loadings with some high concentrations are present. More than one fuel model may be present on significant portions of the area. Variable terrain features may significantly affect fire behavior and present moderate ignition and control problems. Local winds and burning conditions may vary enough to cause notable shifts in fire behavior. Periodic torching can be expected either as isolated points or limited areas at one time. Spotting is expected to be short-range.

HIGH: Major variations in the fuel complex require the use of several fuel models to account for the fire behavior. High fuel loadings and/or concentrations are present. Terrain encompasses a wide range in slope steepness, abrupt changes in slope, and several directional aspects that lead to widely variable and unpredictable local winds and microclimate differences. High intensity fire behavior may be expected with high rates of spread, torching, possible crown fire runs, and possible long-range spotting. The resulting variations in fire behavior may present major control challenges.

#### 5. FIRE BEHAVIOR - POTENTIAL CONSEQUENCES

LOW: Fire behavior outside of the primary unit boundary would be less than the fire behavior within the unit. For landscape level projects a large "allowable area" (MMA) has been identified.

MODERATE: Fire behavior outside of the primary unit boundary would be about the same as that experienced within the unit. For landscape level projects an "allowable area" (MMA) has been identified.

HIGH: Fire behavior outside of the primary unit boundary would be higher than that experienced within the unit. For landscape level projects an "allowable area" (MMA) has not been identified, or is limited in size.

#### 5. FIRE BEHAVIOR - TECHNICAL DIFFICULTY

LOW: Standard fire safety precautions are adequate to ensure personnel safety. The number or size of spot fires and slopovers would not require additional suppression resources. Fire behavior is such that holding forces can control most or all spot fires and slopovers using direct attack tactics. No on-site operational fire behavior assessments or calculations are needed.

MODERATE: Some special provisions for safety are needed to protect personnel. At least one barrier or containment opportunity exists. Fire behavior is such that holding resources may need to use indirect tactics to control some spot fires and slopovers. Occasional on-site fire behavior assessments or calculations are needed and can be performed as a collateral duty.

HIGH: Fire behavior may create unique safety problems or the need for special escape routes or other safety measures. Limited containment opportunities exist. Fire behavior is such that additional holding resources would be required along with indirect attack tactics. Systematic fire behavior assessments and calculations are needed by a dedicated skill position. (FBAN or LTAN suggested for short or long duration prescribed fire operation respectively)

#### 6. MANAGEMENT ORGANIZATION - RISK

LOW: A small number of qualified people are required to implement the prescribed fire. A single person may fill several positions. A single level of supervision is all that is needed (i.e. Burn Boss plus lighters and holders).

MODERATE: May require staffing of a majority of the prescribed fire positions with qualified personnel. A single person may fill more than one position. Two levels of supervision are needed (i.e. Burn Boss, Ignition Specialist and/or Holding Specialist plus lighters and holders).

HIGH: Requires staffing of all primary prescribed fire positions by qualified persons. Multiple divisions, groups, or units may be necessary to maintain an acceptable span of control. Three levels of supervision may be needed (i.e. Burn Boss, Ignition Specialist, Holding Specialist, plus Squad Leaders and Squads) or multiple teams are needed to cover multiple shifts or a long-duration project. Other staff and technical specialists may be needed.

#### 6. MANAGEMENT ORGANIZATION - POTENTIAL CONSEQUENCES

LOW: Problems related to supervision or communication are expected to be minimal.

MODERATE: Problems related to supervision or communication may cause failure to meet some objectives, an increased chance of escaped fire, or violation of safety standards.

HIGH: Problems related to supervision or communication will likely cause failure to meet objectives, high probability of an escaped fire, or violation of safety standards.

#### 6. MANAGEMENT ORGANIZATION - TECHNICAL DIFFICULTY

LOW: All team members are available within the local unit and are familiar with local factors affecting project implementation. Several qualified personnel are available. No special supervision required.

MODERATE: At least one primary team member will need to come from outside of the local unit and may not be familiar with local factors. The numbers of qualified personnel available on the local unit are limited. Special skills or supervision required for one function. (RXB2 suggested)

HIGH: Numerous and varied resources, multiple ignition methods, and/or a large team of specialized positions are needed. The burn has difficult assess, complicated logistics, potentially conflicting objectives, unusual fuel complexes, and is proximate to smoke sensitive/non-attainment areas or wildland urban interface, and/or large scale/long duration. The Burn Boss and/or two or more primary team members will need to be ordered from outside the local unit and may not be familiar with local factors. Certain skills and qualified personnel are not available on the local unit. Special skills or supervision required for more than one function. (RXB1 suggested)

#### 7. PUBLIC AND POLITICAL INTEREST - RISK

LOW: The prescribed fire is in an isolated or remote area and/or small in size. There has been little or no public or political controversy related to the project and little or no news media interest.

MODERATE: The prescribed fire is visible to some portions of the public and/or moderate in size. There has been some public or political concern about the project or the program. There is some media interest in the project.

HIGH: The prescribed fire is highly visible to the public. Public or political interest is high in either the project or the program causing high management interest in the day-to-day preparation necessary to carry out the project. Media are interested in the project and may desire to be present on-site during some phases of the project.

# 7. PUBLIC AND POLITICAL INTEREST - POTENTIAL CONSEQUENCES

LOW: Unexpected or adverse events would attract little public, political, or media attention.

MODERATE: Unexpected or adverse events would attract some public, political, or media attention and may delay implementation of other projects. News releases and local news briefings would be required.

HIGH: Unexpected or adverse events would attract significant public, political, or media attention and may cause a shut-down of the program. Calls for investigations into the unexpected or adverse events could be expected from the public or politicians. Heads may roll.

### 7. PUBLIC AND POLITICAL INTEREST - TECHNICAL DIFFICULTY

LOW: Requires no special fire information function. Routine media releases needed. No special notifications of the public are needed.

MODERATE: Requires dedicated time from the unit public affairs officer and or Agency Administrator. Public information stations or public meetings may be warranted. May require special media releases or field trips. Some specific members of the public or political entities may need to be notified directly.

HIGH: Requires a fire information officer. A political liaison may be assigned to the project. Requires considerable involvement from the Agency Administrator. Public information stations and door-to-door contacts are warranted. Extensive pre-burn public meetings may be needed. Media is expected to be on site during implementation. Multiple direct notifications are needed prior to project implementation.

### 8. FIRE TREATMENT OBJECTIVES - RISK

LOW: Objectives are limited to easily achieved fuel reduction or ecosystem maintenance. The necessary fire behavior is easily created, managed, and monitored.

MODERATE: Objectives may include changes in two or more strata of vegetation for ecosystem restoration or maintenance. Objectives are judged to be moderately hard to achieve. Basic monitoring of fire behavior and weather is needed to determine if prescribed fire objectives are being met.

HIGH: Objectives include changes in several strata of vegetation for ecosystem restoration or hazardous fuels reduction. Objectives are judged to be hard to achieve and may require specialized monitoring of fire behavior and weather.

# 8. FIRE TREATMENT OBJECTIVES - POTENTIAL CONSEQUENCES

LOW: Other opportunities to meet objectives will be available. Other management activities are not dependant on the completion of the project. Failure to meet objectives would have few or no adverse impacts on natural resources.

MODERATE: Other opportunities to meet objectives are very limited in a given year. Other management activities are dependant on the completion of the project but other management options are available. Failure to meet objectives could have short-term adverse impacts on natural resources.

HIGH: Opportunities to meet objectives are not available every year or may not be available at all. Other management activities are dependant on the success of this project and other management options are limited. Failure to meet objectives could have long-term adverse impacts on natural resources.

## 8. FIRE TREATMENT OBJECTIVES - TECHNICAL DIFFICULTY

LOW: Measures to achieve the objectives are easy to complete and there are few or no restrictions on techniques. Limited pre-burn monitoring is needed to determine if the unit is in prescription.

MODERATE: Measures to achieve the objectives are either 1) easy to complete but there are restrictions on the techniques or 2) moderately difficult to complete and there are few or no restrictions on techniques. Moderately intense fire behavior is needed to meet the resource objectives. Pre-burn monitoring is needed to determine when the unit is in prescription. During-burn monitoring is necessary to determine if the prescribed fire objectives are being met.

HIGH: Measures to achieve the objectives are both moderately difficult/difficult to achieve and there are restrictions on the techniques. High intensity fire or a combination of fire intensities are needed to meet resource objectives. Success depends on precise timing and sequence of ignition. Extensive pre-burn monitoring is required to determine when the unit is in prescription. Qualified Fire Effects Monitors are needed to determine if prescribed fire objectives are being met.

### 9. CONSTRAINTS - RISK

LOW: No constraints related to access, water sources, firelines, specific tactics, or equipment and aircraft use exist. There are few or no scheduling restrictions.

MODERATE: Some constraints exist on access to parts of the project area, use of some water sources or the amount of water that can be taken, types of fireline, specific tactics, heavy equipment, or aircraft use. Ignition may be restricted during some portions of the potential burn window to minimize impacts to special events or seasonal activities.

HIGH: Significant constraints exist on access to parts of the project area, use of some water sources or the amount of water that can be taken, types of fireline, specific tactics, heavy equipment, or aircraft use. Ignition will be restricted, potentially for long periods, during the potential burn window to minimize impacts to special events and seasonal activities.

## 9. CONSTRAINTS - POTENTIAL CONSEQUENCES

LOW: Project can be implemented whenever it is in prescription. Tactics and burn activities are not limited.

MODERATE: Some burn windows may be unavailable due to the constraints, and may cause the project to be implemented under less than optimal conditions, reducing the ability to meet resource objectives. Limitations on the available tactics may increase the risk of unexpected or adverse events.

HIGH: The constraints result in a very narrow burn window and are likely to cause the project to be implemented under less than optimal conditions, reducing the ability to meet resource objectives. Limitations on the available tactics will increase the risk of unexpected or adverse events.

### 9. CONSTRAINTS - TECHNICAL DIFFICULTY

LOW: Constraints do not increase the difficulty of completing the project.

MODERATE: Constraints moderately increase the difficulty of completing the project. The length of time to complete the project and the size of the organization needed may increase.

HIGH: Constraints significantly increase the difficulty of completing the project. The length of time to complete the project and the size of organization will increase and project feasibility may be in doubt.

# 10. SAFETY - RISK

LOW: Safety issues are easily identifiable and mitigated. Potential hazards are typical and easily addressed in briefings. There is little or no potential for adverse impacts to public health and safety. Activities can be characterized as high frequency/low risk. Fatigue and exposure to safety risks are limited.

MODERATE: Significant safety issues have been identified. Detailed briefings are needed to raise safety consciousness of all involved. Most safety hazards have been mitigated, but some remain that require special caution. There could be adverse impacts to public health and safety. At least one activity can be characterized as low frequency/high risk. Fatigue and prolonged exposure to safety risks may occur.

HIGH: Complex safety issues exist. Special safety briefings are required. Several safety hazards remain that require special cautions. Potential adverse impacts to public health and safety require special mitigation. Several activities can be characterized as low frequency/high risk. Fatigue and prolonged exposure to safety risks require special mitigation or consideration.

# 10. SAFETY - POTENTIAL CONSEQUENCES

LOW: Minimal potential for serious accidents/injuries to firefighters or the public.

MODERATE: Moderate potential exists for more serious accidents/injuries to firefighters or the public.

HIGH: High potential exists for serious accidents/injuries or multiple accidents/injuries to firefighters or the public.

## 10. SAFETY - TECHNICAL DIFFICULTY

LOW: Safety concerns can be easily mitigated through LCES. A standard safety briefing as part of the project briefing should be sufficient to cover the safety concerns. Special mitigation to protect public health and safety are not needed.

MODERATE: Most safety concerns can be easily mitigated but some remain that require extra caution during project operations. Special emphasis is needed for some elements of LCES. The project briefing will include a safety briefing with special issues or emphasis areas. Limited mitigation to protect public health and safety are needed.

HIGH: Extra caution is needed during project mitigation to manage several safety concerns. Careful attention to all elements of LCES is required. The implementation team may include a qualified fire Safety Officer. A special safety briefing with special issues or emphasis areas is needed as part of the project briefing. Special mitigation are required to protect public health and safety.

### 11. IGNITION PROCEDURES/METHODS - RISK

LOW: Firing sequence and timing is not critical to meet project objectives. The entire project area is readily visible to the Ignition Specialist/Burn Boss.

MODERATE: Firing sequence and timing are somewhat critical to meet project objectives. Most of the project area is readily visible to the Ignition Specialist or Burn Boss.

HIGH: Firing sequence and timing are critical to meet project objectives. Portions of the project area are not readily visible to the Ignition Specialist and Burn Boss.

# 11. IGNITION PROCEDURES/METHODS - POTENTIAL CONSEQUENCES

LOW: Firing methods and procedures do not pose a safety concern to personnel, compromise project objectives, or increase the risk of an unexpected or adverse event.

MODERATE: Firing methods and procedures must be coordinated to provide for adequate safety, meet project objectives, and reduce the risk of an unexpected or adverse event. Opportunities for remedial actions or corrections are available in the event of problems.

HIGH: Firing methods and procedures must be carefully planned and well coordinated to address safety concerns, meet project objectives, and reduce the risk of an unexpected or adverse event. Opportunities for remedial actions or corrections are limited in the event of problems.

### 11. IGNITION PROCEDURES/METHODS - TECHNICAL DIFFICULTY

LOW: There is no need for special firing equipment, techniques, or patterns. Firing procedures are simple and ignition team is small. Use of only one type of ignition device is planned. The ignition pattern requires minimal supervision of the lighters to achieve project objectives and manage safety concerns.

MODERATE: The need for special firing equipment, techniques, or patterns has been identified. Firing procedures are somewhat complex in at least some portions of the project area and the ignition team may be broken into two or more squads. Use of two different types of ignition devices are planned. The ignition pattern requires direct control of the lighters to achieve project objectives and manage safety concerns. (RXI2 suggested)

HIGH: The need for special firing equipment, or different techniques, or firing patterns has been identified. Firing procedures are complex and the ignition function may be broken into multiple teams with more than one Ignition Specialist used. Simultaneous ignitions will occur. Use of several different ignition devices (aerial and ground) is planned. The ignition patterns and techniques to manipulate fire behavior are used and require tight control of the lighters to achieve project objectives and manage safety concerns. (RXI1 suggested)

### 12. INTERAGENCY COORDINATION - RISK

LOW: The project does not involve another land management agency or jurisdiction. No concerns or issues associated with interagency partners have been identified. Restrictions related to National and regional preparedness levels are not expected.

MODERATE: The project involves another land management agency or jurisdiction but project completion is not dependent on coordinated implementation. One or more interagency partners have interest or concerns with the project that are easily addressed and satisfied. Restrictions related to National and regional preparedness levels may cause minor delays in project implementation.

HIGH: The project involves other land management agencies or jurisdictions and project completion is dependent on coordinated implementation. Several interagency partners have interest or concerns with the project that may require additional attention. Restrictions related to National and regional preparedness levels may cause significant delays in project implementation or project cancellation in a given burn window.

## 12. INTERAGENCY COORDINATION - POTENTIAL CONSEQUENCES

LOW: Project can be completed as planned.

MODERATE: Interagency coordination issues may delay project implementation or require minor modifications to the prescribed fire plan.

HIGH: Interagency coordination issues may cause significant delays in project implementation, may cause project cancellation in a given burn window, or may require major modifications to the project.

### 12. INTERAGENCY COORDINATION - TECHNICAL DIFFICULTY

LOW: No interagency issues. No special agreements needed. No unusual communication or coordination issues. Interagency resources are readily available with few or no restrictions on their use.

MODERATE: Project requires use of one or two special agreements. Implementation may require special attention to certain interagency details, such as communications and standards for operations. Interagency resources are generally available but some restrictions on their use may be present.

HIGH: Project requires use of several special agreements. Implementation requires special attention to certain interagency details, such as communications and standards for operations. Interagency resources are limited in availability and several restrictions on their use may be present.

#### 13. PROJECT LOGISTICS - RISK

LOW: The project requires minimal logistical support with no specific logistic function assigned. Supplies needed to conduct the burn are readily available and no special transportation or storage needs have been identified. No special equipment or communications needs have been identified. Project duration is 2 days or less.

MODERATE: The project requires some logistical support in certain areas, such as communications, ground transportation, or personnel support. Most supplies are readily available. Some special transportation or storage needs may exist for burning equipment. One to two pieces of special equipment or communication equipment requiring more intensive logistical support may be needed to complete the project. Project duration requires at least one resupply trip to support remotely stationed personnel.

HIGH: The project requires extensive logistical support in several areas. Certain key supplies are limited in availability or require special transportation and storage. Several pieces of equipment or a communications network is needed that require intensive logistical support. Project duration requires several resupply trips to support remotely stationed personnel.

# 13. PROJECT LOGISTICS - POTENTIAL CONSEQUENCES

LOW: Problems related to logistics will not increase the risk of escape, affect the completion of the project or create a safety concern.

MODERATE: Problems or failures related to logistical support will increase the risk of escape, or affect the completion of the project or create a safety concern

HIGH: Problems or failures related to logistical support will substantially increase the risk of escape, and/or affect the completion of the project and/or create a serious safety concern

# 13. PROJECT LOGISTICS - TECHNICAL DIFFICULTY

LOW: No special logistical support issues. Supervisors normally handle their own support needs. Supplies and personnel are readily available and easy to obtain.

MODERATE: Project implementation requires a small logistical support operation. Logistical support may be combined with other functions. Securing, transporting, or storing some supplies or equipment may require additional effort. Obtaining some personnel may require additional contacts and advanced scheduling. Additional support may be needed for out-of-area personnel.

HIGH: Project implementation requires a large logistical support operation. Logistical support will operate as a separate function. Securing, transporting, or storing several supplies and equipment requires additional effort. Obtaining the necessary personnel requires at least some additional contacts and does require careful scheduling. Additional support will be needed for out-of-area personnel.

### 14. SMOKE MANAGEMENT - RISK

LOW: Smoke concerns are generally few or easily mitigated. The project will produce smoke for only a short period of time or is barely visible to the public. Smoke exposure or amounts are not expected to cause health or safety concerns to project personnel or the public. Members of the public have expressed few or no concerns about smoke.

MODERATE: Smoke concerns are moderate and some concerns require special mitigation. The project will produce smoke visible to the public over several days. Smoke exposures or amounts may cause some health or safety concerns over a short period of time. Members of the public have expressed some concerns about smoke.

HIGH: Smoke concerns are high and require special and sometimes difficult mitigation. Smoke will be readily visible to the public and last several days to weeks. Smoke exposures or amounts are likely to cause some health and safety concerns that will require special mitigation. Large segments of the public are concerned about smoke.

### 14. SMOKE MANAGEMENT - POTENTIAL CONSEQUENCES

LOW: No impacts OR minor impacts to isolated residences, remote roads or other facilities are expected. Firefighter exposure to smoke is expected to be minimal and not cause health and safety concerns.

MODERATE: Vistas, roads, and some residences may experience short-term decreases in visibility. A few health related complaints may occur. Minor smoke intrusions may occur into smoke sensitive areas, but below levels that trigger regulatory concern. Project personnel may be exposed to dense smoke for short periods of time.

HIGH: Vistas, roads, and residences may experience longer-term decreases in visibility OR significant decreases in visibility over the short-term. Major smoke intrusions may occur into smoke sensitive areas, such as Class I airsheds, non-attainment areas, hospitals, and or major airports, at levels that trigger regulatory concern. Project personnel may be exposed to dense smoke for prolonged periods of time.

### 14. SMOKE MANAGEMENT - TECHNICAL DIFFICULTY

LOW: No special operational procedures are required. Limitations on wind direction, season, etc. may be present in the plan.

MODERATE: Some considerations are needed in the prescription OR ignition portions of the plan. Burn window/opportunities are reduced by the required weather/dispersion conditions. Normal coordination with air quality officials is required. Some mitigation measures or additional smoke modeling may be needed to address potential concerns with smoke impacts. Specific smoke monitoring may be required to determine smoke plume heights and directions. Rotating project personnel out of dense smoke is necessary but easy to accomplish.

HIGH: Special considerations are needed in the prescribed fire plan. Special smoke management techniques will be used. Burn window/opportunities are limited by the required weather/dispersion conditions. Special coordination with air quality officials is required. Accelerated mop up may be planned to reduce smoke impacts. Some mitigation measures or additional smoke modeling are required to address potential concerns with smoke impacts. Specific smoke monitoring is required to determine smoke plume heights and directions. Rotating project personnel out of dense smoke is necessary but may be difficult to accomplish.

# **Complexity Rating Worksheet**

Instructions: This worksheet is d	lesigned to used with the Prescribed Fire Complexity Rating descriptors on Page 6.
Complexity elements:	Project Name Number
complexity elements.	
	1. Potential for Escape
Risk	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
<b>Potential Consequences</b>	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
<b>Technical Difficulty</b>	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
2.	The Number and Dependency of Activities
Risk	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
<b>Potential Consequences</b>	Rationale

Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
<b>Technical Difficulty</b>	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
	3. Off-Site Values
Risk	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
<b>Potential Consequences</b>	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
<b>Technical Difficulty</b>	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	

# 4. On-Site Values

Risk	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
<b>Potential Consequences</b>	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
<b>Technical Difficulty</b>	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	

# 5. Fire Behavior

Risk	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
<b>Potential Consequences</b>	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
<b>Technical Difficulty</b>	Rationale

Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
	6. Management Organization
Risk	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
<b>Potential Consequences</b>	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
<b>Technical Difficulty</b>	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
	7. Public and Political Interest
Risk	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
<b>Potential Consequences</b>	Rationale

Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
<b>Technical Difficulty</b>	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
	8. Fire Treatment Objectives
Risk	Rationale
Preliminary Rating:	
Preliminary Rating:  Low Moderate High	
Low Moderate High	
Low Moderate High Final Rating:	Rationale
Low Moderate High  Final Rating:  Low Moderate High	Rationale
Low Moderate High  Final Rating:  Low Moderate High  Potential Consequences	Rationale
Low Moderate High  Final Rating:  Low Moderate High  Potential Consequences  Preliminary Rating:	Rationale
Low Moderate High  Final Rating:  Low Moderate High  Potential Consequences  Preliminary Rating:  Low Moderate High	Rationale

# 9. Constraints

**Preliminary Rating:** 

**Final Rating:** 

Low Moderate High

Low Moderate High

Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
<b>Potential Consequences</b>	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
<b>Technical Difficulty</b>	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
	10 Sofoty

10. Safety

Risk	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
<b>Potential Consequences</b>	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
<b>Technical Difficulty</b>	Rationale
Preliminary Rating:	
Low Moderate High	

Final Rating:		
Low Moderate High		
	11. Ignition Procedures/Methods	
Risk	Rationale	
Preliminary Rating:		
Low Moderate High		
Final Rating:		
Low Moderate High		
<b>Potential Consequences</b>	Rationale	
Preliminary Rating:		
Low Moderate High		
Final Rating:		
Low Moderate High		
<b>Technical Difficulty</b>	Rationale	
Preliminary Rating:		
Low Moderate High		
Final Rating:		
Low Moderate High		
	12. Interagency Coordination	
Risk	Rationale	
Preliminary Rating:		
Low Moderate High		
Final Rating:		
Low Moderate High		
<b>Potential Consequences</b>	Rationale	
<b>Preliminary Rating:</b>		
Low Moderate High		

Final Rating:	
Low Moderate High	
<b>Technical Difficulty</b>	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
	13. Project Logistics
Risk	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
<b>Potential Consequences</b>	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
<b>Technical Difficulty</b>	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
14. Smoke Management	
Risk	Rationale
Preliminary Rating:	
Low Moderate High	

Final Rating:	
Low Moderate High	
<b>Potential Consequences</b>	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	
<b>Technical Difficulty</b>	Rationale
Preliminary Rating:	
Low Moderate High	
Final Rating:	
Low Moderate High	

# COMPLEXITY RATING SUMMARY

RISK	OVERALL RATING
POTENTIAL CONSEQUENCES	OVERALL RATING
TECHNICAL DIFFICULTY	OVERALL RATING
SUMMARY COMPLEXITY RATING	
RATIONALE:	
Prepared by:	Date:
Approved by:(Agency Administrator)	Date:

# EXAMPLE Complexity Rating Worksheet

<u>Instructions: This worksheet is designed to be used in conjunction with the Prescribed Fire Complexity Rating</u>

<u>System Descriptors on page 6.</u>

GOOSEBERRY	XXXX
Project Name	Number

Complexity elements:

1. Potential for Escape

Risk	Rationale
Preliminary Rating:  Low Moderate High	The 1986 Anderson Creek fire served to break up fuel continuity on the landscape, limiting the potential spread of any escapes. While access into certain parts of the unit is minimal, generally these areas have sparse fuels outside the unit or change over to a significantly wetter aspect for a spring burn. Most ladder fuel situations occur in patches away from points of concern and critical holding points. The prescription calls for a maximum flame length of 6-7 feet. Little or no residual fire is expected.
Final Rating:	No change.
Low Moderate High	
<b>Potential Consequences</b>	Rationale
Preliminary Rating:  Low Moderate High	An escape is likely to result in moderate damage to vegetation on north aspects. Up to three residences and several outbuildings could be affected, but these lie in an adverse direction from the prevailing winds. The fire could also burn onto Boise Cascade private timberlands, but these also lie in an adverse direction to the prevailing winds. Upslope, land is administered by the U.S. Forest Service. An agreement is in place for participation and identification of allowable areas should slopover or an escape occur. Some social or political concerns could be expected due to the high visibility of the project area to Crouch and Garden Valley. Some impact to the public or users can be expected should a escape occur near April 15, the open day of bear and turkey hunting seasons. Some mitigation can occur by not burning within two or three days of the 15, signing access roads, and placing notifications at local facilities.
Final Rating:  Low Moderate High	Prescribed fire plan does not authorize operations during the period April 12-18. Patrols and lookouts will be placed at key location on and adjacent private property. See map.
<b>Technical Difficulty</b>	Rationale

Low Moderate High	deal with the size of the area, holding operations will be supervised at the Single Resource Boss level. The occasions when one or both engine crews would be working directly with the hand crew are most likely to occur away from the road such that the engine crews become additional hand crew members. Portions of the burn unit are not easily accessible, but the top and bottom of the unit are accessed by roads. Expected weather conditions should be normal for the area and season and all key implementation personnel are expected to be from the local area.
Final Rating:  Low Moderate High	No change.

2. The Number and Dependency of Activities

2.	The Number and Dependency of Activities
Risk	Rationale
Preliminary Rating:  Low Moderate High	Other than the initial burnout along the road at the top of the unit, burning of the unit will be with the use of a helitorch and requires a moderate level of coordination between the ignition specialist and the holding crews to maintain safety and hold the fire along the flanks. The Burn Boss should be stationed at a lookout point within the unit in order to see the unit well enough to direct operations.
Final Rating:	No change.
Low Moderate High	
<b>Potential Consequences</b>	Rationale
Preliminary Rating:  Low Moderate High	Coordination failure(s) could result in a high risk of escape, failure to complete the project, failure to meet the project objectives, or serious safety issues for implementation personnel or the public. A significant delay in implementation would be expected. Burn Boss will need to assure all communication equipment is ready and operational prior to ignition.
Final Rating:	Prescribed fire plan has radio operations and checks built in.
Low Moderate High	
<b>Technical Difficulty</b>	Rationale
Preliminary Rating:  Low Moderate High	Continuous or nearly continuous communication between the Burn Boss, Ignition Specialist, and Holding Bosses is needed to manage the risk of escape and firefighter safety.
Final Rating:	Communication procedures are identified.
Low Moderate High	

# 3. Off-Site Values

Risk	Rationale
Preliminary Rating:  Low Moderate High	Four parcels of private land are located either adjacent or near the project area. Three parcels have primary residences and outbuildings. However all parcels are located downhill from the project area and in an adverse direction from the prevailing winds. Several tree plantations are scattered throughout the entire area. Turkey season may be open during part or all of the project life, but the project area is small enough that hunters can easily avoid the area.
Final Rating:	No change.
Low Moderate High	
<b>Potential Consequences</b>	Rationale
Preliminary Rating:  Low Moderate High	If fire were to reach any of the private parcels, at minimum claims for various types of fire damage could be filed. Loss of plantations would require replanting with a subsequent delay in full recovery of the sites intensely burned in 1986. Shrubs adjacent to the project area are generally strong resprouters or have long-lived, soil stored seed. Dominant tree species are typically considered fire resistant and burning is scheduled to take place before bud burst.
Final Rating:	No change.
Low Moderate High	
Technical Difficulty	Rationale
Preliminary Rating:  Low Moderate High	Protection of the private parcels should require no special management, equipment or skills. Since these parcels are located downhill, backing fire spread is expected in the direction of these parcels should an escape occur. The closest plantations are accessible by engines.
Final Rating:  Low Moderate High	No change.

# 4. On-Site Values

Risk	Rationale
Preliminary Rating:	No special features are present within the project area.
Low Moderate High	
Final Rating:	No change.
Low Moderate High	
<b>Potential Consequences</b>	Rationale

Preliminary Rating:  Low Moderate High	There are no special features within the project area and on-site resources will not be adversely affected as long as the project stays within the prescribed fire behavior.
Final Rating:	No change.
Low Moderate High	
Technical Difficulty	Rationale
Preliminary Rating:	Resource values within the unit are easy to protect.
·	
Preliminary Rating:	

# 5. Fire Behavior

Risk	Rationale
Preliminary Rating:  Low Moderate High	Fuels vary moderately within the unit between fuel models 8 and 9, with 9 dominant. Multiple aspects are involved with resulting changes in winds, microclimate and other fire conditions, but fire behavior is highly predictable. Some torching can be expected near slope breaks and at the head of the main draw at the northern tip of the ignition area, but little spotting outside the unit is anticipated.
Final Rating:	No change.
Low Moderate High	
<b>Potential Consequences</b>	Rationale
Preliminary Rating:  Low Moderate High	Fire behavior outside the unit should be similar to that inside the unit on west and south aspects and less than inside the unit on north and east aspects.
Final Rating:	No change.
Low Moderate High	
Technical Difficulty	Rationale
Preliminary Rating:  Low Moderate High	Care must be taken to ensure that the Burn Boss and lighters in the interior of the unit are adequately protected. The number and size of slopovers should not require additional suppression resources as long as conditions remain within prescription. Both Anderson Creek and Smith Creek Roads provide containment opportunities and most main ridge lines are sparsely fueled with rocky areas. Direct attack tactics should be successful on most spot fires and slopovers.

Final Rating:	No change.
Low Moderate High	

6. Management Organization

	0. Wanagement Organization
Risk	Rationale
Preliminary Rating:	A majority of the prescribed fire positions must be staffed with fully qualified personnel with separate personnel filling the positions of Burn Boss, Ignition
Low Medium High	Specialist, and Holding Boss. Media personnel will be positioned outside the unit.
Final Rating:	No change.
Low Moderate High	
<b>Potential Consequences</b>	Rationale
Preliminary Rating:	Problems related to communications may cause violations of safety standards or an increased risk of an escaped fire. Checking communications frequently
Low Moderate High	will be necessary.
Final Rating:	No change.
Low Moderate High	
Technical Difficulty	Rationale
Preliminary Rating:	At least one primary team member will need to come from outside of the local unit and may not be familiar with local factors. The numbers of qualified
Low Moderate High	personnel available on the local unit are limited. Special skills or supervision required for one function. (RXB2 suggested)
Final Rating:	Communication checks are built into the prescribed fire plan.
Low Moderate High	

# 7. Public and Political Interest

Risk	Rationale
Preliminary Rating:	The project is moderate in size for this plant community type. Smoke will be visible to residents of Crouch and Garden Valley and if the wind was from the
Low Moderate High	north or northeast it would be in town. Limit the prescription to not accept the north or northeast wind to prevent this problem.
Final Rating:	The issue has been resolved, thus lowering the rating, by not allowing a north or northeast wind in the prescription and if weather conditions change,
Low <b>Moderate</b> High	suppressing remaining areas of fire.
<b>Potential Consequences</b>	Rationale

Preliminary Rating:  Low Moderate High	Unexpected or adverse events would attract some public attention due to the proximity of the burn to Crouch and Garden Valley but may not attract political and media attention unless a large escaped fire occurred. Local briefings of community leaders would be required at minimum.
Final Rating:	No change.
Low Moderate High	
<b>Technical Difficulty</b>	Rationale
	Tunonine
Preliminary Rating:	During normal operations no media releases will be needed. Three
·	
Preliminary Rating:	During normal operations no media releases will be needed. Three homeowners and Boise Cascade need to be notified when ignition is projected to begin and kept current on fire status. An information board may be needed

8. Fire Treatment Objectives

Risk	Rationale
Preliminary Rating:  Low Moderate High	The prescribed fire objectives only require low to moderate intensity fire behavior to achieve. Both weather and fire behavior monitoring are expected to be easily conducted.
Final Rating:	No change.
Low Moderate High	
<b>Potential Consequences</b>	Rationale
Preliminary Rating:  Low Moderate High	Several opportunities will exist to meet these objects. This particular burn is the last installment on a larger project. Failure to complete this particular unit will have minimal effects on overall project success.
Final Rating:	No change
Low Moderate High	
<b>Technical Difficulty</b>	Rationale
Preliminary Rating:  Low Moderate High	Measures to achieve the project objects are both easy to complete with few restrictions on the techniques. What restrictions exist are designed to mitigate any threats to the adjacent and nearby private lands. Pre-burn monitoring is needed to determine if the unit appears to be in prescription. Some during burn monitoring of fire behavior is needed to assure the limitations on large tree mortality are being met.

Final Rating:	No change.
Low Moderate High	

# 9. Constraints

Risk	Rationale
Preliminary Rating:  Low Moderate High	Use of heavy equipment is prohibited in many areas due to slope steepness and soil type. Other that weather-related, no constraints exist on access, use of water sources, specific tactics, or aircraft use. Ignition is not expected to be restricted during any portion of the burn window or to minimize impacts to any special events or seasonal activities.
Final Rating:	No change.
Low Moderate High	
<b>Potential Consequences</b>	Rationale
Preliminary Rating:  Low Moderate High	Project can be implemented whenever it is in prescription with exception of the period April 12-18. The only limitations on tactics is that use of heavy equipment to construct fireline is prohibited on slopes greater than 25%.
Final Rating:	No change.
Low Moderate High	
<b>Technical Difficulty</b>	Rationale
Preliminary Rating:	The limitations on use of heavy equipment should have no impact on project difficulty.
Low Moderate High	
Final Rating:	No change.
Low Moderate High	

# 10. Safety

Risk	Rationale
Preliminary Rating:  Low Moderate High	Special caution will be needed to protect the safety of the Burn Boss while on the lookout point while working around the center ridge line, and holders at the head of the draw at the northern tip of the unit. The risk to the Burn Boss is mitigated by sparse fuels on the center ridge line, continuous communication and the aerial platform provided by the helicopter. No firing should occur down wind of the Burn Boss's lookout location until he has been removed. Fatigue must be managed due to long drive times, the steep and narrow road accessing the top of the unit, and potentially long hours on steep slopes within unit.

Final Rating:	These mitigation measures have been built into the plan.
Low Moderate High	
<b>Potential Consequences</b>	Rationale
Preliminary Rating:	Moderate potential exists for more serious accidents related to fatigue, such as
Low Moderate High	vehicle accidents, and prolonged walking on steep slopes, such as strains and sprains. Escape routes and safety zones must be constantly updated as burning progresses.
Final Rating:	No change.
Low Moderate High	
<b>Technical Difficulty</b>	Rationale
Preliminary Rating:	Some extra caution is needed to manage the safety risks to lighters while within the interior of the unit and for the Burn Boss while at the lookout point;
Low Moderate High	special emphasis will be needed for communications and escape routes. Safety zones will be a special emphasis for holders on the flanks on the unit, particularly at the head of the draw on the northern tip and along the eastern flank. Special mitigation to protect public health and safety are not anticipated.
Final Rating:	No change.
That Rating.	140 Change.

11. Ignition Procedures/Methods

Risk	Rationale
Preliminary Rating:  Low Moderate High	The firing sequence and timing are somewhat critical to meet project objectives and manage safety risks through the center of the unit on the interior ridge. The Burn Boss can see most of the project area from the center ridge. The Ignition Specialist or the Holding Boss can usually be positioned to see those portions of the unit that the Burn Boss cannot and still perform those duties.
Final Rating:	
Low Moderate High	
<b>Potential Consequences</b>	Rationale
Preliminary Rating:	Firing methods and procedures must be coordinated across the center ridge to provide for adequate safety and meet project objectives. In the event of
Low Moderate High	problems, firing could be halted in either draw or along the center ridgeline.
Final Rating:	No change.
Low Moderate High	

<b>Technical Difficulty</b>	Rationale
Preliminary Rating:	There is no need for special firing patterns, but coordination is needed when firing out the center ridge. Otherwise, standard strip-firing techniques from
Low Moderate High	the upper elevation downward will be employed.
Final Rating:	No change.
Low Moderate High	

12. Interagency Coordination

	12. Interagency Coordination
Risk	Rationale
Preliminary Rating:  Low Moderate High	This particular project is entirely on BLM-managed lands. Although the overall project involves the Forest Service, there has been excellent cooperation and coordination. Both National and regional preparedness levels are expected to be no higher than 2 and likely to be 1 at the time the burn is planned for completion.
Final Rating:	No change.
Low Moderate High	
<b>Potential Consequences</b>	Rationale
Preliminary Rating:	An agreement is in place with the U.S. Forest Service and no interagency coordination issues are anticipated.
Low Moderate High	
Final Rating:	No change.
Low Moderate High	
Technical Difficulty	Rationale
Preliminary Rating:	There are no interagency issues, special agreements needed, or communication or coordination issues. Interagency resources should be readily available.
Low Moderate High	of coordination issues. Interagency resources should be readily available.
Final Rating:	No change.
Low Moderate High	

13. Project Logistics

Risk	Rationale
Preliminary Rating:	No logistical support is anticipated. Supplies are readily available and no special transportation or storage needs exist. Ignition is expected to be
Low Moderate High	completed in one day with rapid burnout of ignited fuels.

Final Rating:	No change.
Low Moderate High	
<b>Potential Consequences</b>	Rationale
Preliminary Rating:	The primary potential logistical problem that might affect ignition completion in a single day is would be centered around the helicopter, PSD unit or the
Low Moderate High	operator.
Final Rating:	No change
Low Moderate High	
<b>Technical Difficulty</b>	Rationale
Preliminary Rating:	No logistical support operation is anticipated.
Low Moderate High	
Final Rating:	No change.
Low Moderate High	

14. Smoke Management

Risk	Rationale
Preliminary Rating:  Low Moderate High	The project is expected to produce readily noticeable smoke for 1-2 days; afterwards, nighttime smoke may be noticed by the 3 residences closest to the burn for an additional 2-3 days. Smoke exposure or amounts are not expected to cause health or safety concerns for either firefighters or the public. Procedures have been identified in the plan to deal with any possible smoke impacts to the Middle Fork Road and Payette River Highway.
Final Rating:	No change.
Low Moderate High	
<b>Potential Consequences</b>	Rationale
Preliminary Rating:  Low Moderate High	The Middle Fork Road or Payette River Highway may experience nighttime reductions in visibility for the first 1-2 days of the project should strong nighttime inversions develop.
Final Rating:	No change.
Low Moderate High	
Technical Difficulty	Rationale

Preliminary Rating:  Low Moderate High	Wind directions are limited in the burn plan to address both smoke concerns and escaped fire risk. Special coordination would be needed with Idaho State Police should the weather forecast call for strong nighttime inversions during the period of highest smoke production (first 1-2 days), but no special coordination is needed with the South Idaho Airshed Group.
Final Rating:	No change.
Low Moderate High	

# **SUMMARY COMPLEXITY RATING**

RISK OVERALL RATING Mod	<u>lerate</u>
POTENTIAL CONSEQUENCES OV	TERALL RATING Moderate
TECHNICAL DIFFICULTY OVERA	ALL RATING Moderate
SUMMARY COMPLEXIT	Y RATING Moderate
and communications needed to safely co communication is driven by the presence risk of escaped fire in the direction of pr high in the highly unlikely event of a hig residences closest to the project area. Ri risk and the escaped fire risk are mitigate	derate complexity due to the higher than average degree of coordination induct the ignition operations. This higher level of coordination and to of multiple aspects and a ridge through the center of the unit. While the invate lands is considered low, the consequences range from moderate to gh intensity fire reaching either the Boise Cascade timberlands or the 3 sk to hunters has been mitigated through notifications. Both the safety ed by low fuel loadings, an early spring burn timing, generally low willity to safely halt burning at three different locations within the unit.
Prepared by:	Date:
Approved by:	
(Agency Administra	itor)

# Appendix R

# Wildland Fire Situation Analysis (WFSA)

# **WILDLAND FIRE SITUATION ANALYSIS**

Wildland Fire Situation Analysis (WFSA) is a decision-making process in which the Agency Administrator or representative describes the situation, establishes objectives and constraints for the management of the fire, compares multiple strategic wildland fire management alternatives, evaluates the expected effects of the alternatives, selects the preferred alternative, and documents the decision. The format and level of detail required is dependent on the specific incident and it's complexity. The key is to document the decision.

## **WFSA INITIATION**

FIRE NAME			
JURISDICTION(S)			
DATE AND TIME INITIATED			
VI. DECISION			
The selected alternative is:			
RATIONALE:			
AGENCY ADMINISTRATOR SIGNATURE			
DATE/TIME			
I. WILDLAND FIRE SITUATION ANALYSIS			
A. JURISDICTION(S):	B. GEOGRAPHIC AREA:		

<del> </del>	
C. UNIT(S):	D. WFSA #:
E. FIRE NAME:	F. INCIDENT #:
G. ACCOUNTING CODE:	
H. DATE/TIME PREPARED:	
I. ATTACHMENTS:  COMPLEXITY MATRIX/ANALY RISK ASSESSMENT¹ PROBABILITY OF SUCCESS¹ CONSEQUENCES OF FAILUR MAPS¹ DECISION TREE² FIRE BEHAVIOR PROJECTION CALCULATIONS OF RESOUR OTHER (SPECIFY)	E <sup>1</sup> NS <sup>1</sup>
<ul><li>1 Required</li><li>2 Required by the USFS</li></ul>	

# **Section II. Objectives and Constraints**

The Agency Administrator completes this page.

II.A. Objectives: Specify criteria that should be considered in the development of alternatives.

Safety objectives for firefighters, aviation, and public must receive the highest priority, Suppression objectives must relate to resource management objectives in the unit resource management plan.

Economic objectives could include closure of all portions of an area, thus impacting the public, or impacts to transportation, communication and resource values.

Environmental objectives could include management objectives for airshed, water quality, wildlife, etc.

Social objectives could include any local attitudes toward fire or smoke that might affect decisions on the fire, safety, etc.

Other objectives might include legal or administrative constraints which would have to be considered in the analysis of the fire situation, such as the need to keep the fire off other agency lands, etc.

II.B. Constraints: List constraints on wildland fire action. These could include constraints to designated wilderness, wilderness study areas, environmentally or culturally sensitive areas, irreparable damage to resources or smoke management/air quality concerns. Economic constraints such as public and Agency cost could be considered here.

# **II. OBJECTIVES AND CONSTRAINTS**

A.	OBJECTIV	VES (must be specific and measurable):		
	1.	SAFETY:		
		Public		
		Firefighter		
	<b>2</b> .	ECONOMIC:		
	<i>3.</i>	ENVIRONMENTAL:		
	4.	SOCIAL:		
	<i>5.</i>	OTHER:		
В.	B. CONSTRAINTS:			

### **Section III. Alternatives**

The FIRE MANAGER/and or INCIDENT COMMANDER complete(s) this page.

- III.A. Wildland Fire Management Strategy: Briefly describe the general wildland fire strategies for each alternative. Alternatives must meet resource management plan objectives.
- III.B. Narrative: Briefly describe each alternative with geographic names, locations, etc., that would be used when implementing a wildland fire strategy. For example, "Contain within the Starvation Meadows' watershed by the first burning period".
- III.C. Resources Needed: Resources listed must be reasonable to accomplish the tasks described in Section III.B. It is critical to also look at the reality of the availability of these needed resources.
- III.D. Estimated Final Fire Size: Estimated final size for each alternative at time of containment.
- III.E. Estimated Contain/Control Date: Estimates for each alternative shall be made based on predicted weather, fire behavior, resource availability and the effects of wildland fire management efforts.
- III.F. Cost: Estimate all fire costs for each alternative. Consider mopup, rehabilitation, and other costs as necessary.
- III.G. Risk Assessment: Probability of success/Consequences of failure:

  Describe probability as a % and associated consequences for success and failure. Develop this information from models, practical experience or other acceptable means. Consequences described will include fire size, days to contain, days to control, costs and other information such as park closures and effect on critical habitat. Include fire behavior and long-term fire weather forecasts to derive this information.
- III.H. Complexity: Assign the complexity rating calculated in the Guide for Assessing Fire Complexity.
- III.I. Maps: A map for each alternative must be prepared. The map shall be based on the "Probability of success/Consequences of Failure" and include other relative information.

# **III. ALTERNATIVES** C Α В **A. WILDLAND FIRE STRATEGY: B. NARRATIVE: C. RESOURCES NEEDED: HANDCREWS ENGINES DOZERS AIRTANKERS HELICOPTERS** D. ESTIMATED FINAL **FIRE SIZE: E. ESTIMATED CONTAIN/ CONTROL DATE** F. COSTS: G. RISK ASSESSMENT: **PROBABILITY OF** SUCCESS/ **CONSEQUENCES OF FAILURE** H. COMPLEXITY: I. ATTACH MAPS FOR EACH ALTERNATIVE

#### **Section IV. Evaluation of Alternatives**

The Agency Administrator(s), FMO and/or Incident Commander(s) completes this page.

IV.A. Evaluation Process: Conduct an analysis for each element of each objective and each alternative. Objective shall match those identified in section II.A. Use the best estimates available and quantify whenever possible. Provide ratings for each alternative and corresponding objective element. Fire effects may be negative, cause no change or may be positive. Examples are: 1) a system which employs a "-" for negative effect, a "0" for no change, and a "+" for positive effect; 2) a system which uses a numeric factor for importance of the consideration (soils, watershed, political, etc.) and assigns values (such as -1 to +1, -100 to +100, etc.) to each consideration, then arrives at a weighted average. If you have the ability to estimate dollar amounts for natural resource and cultural values this data is preferred. Use those methods which are most useful to managers and most appropriate for the situation and agency. To be able to evaluate positive fire effects, the area must be included in the resource management plan and be consistent with prescriptions and objectives of the Fire Management Plan.

Sum Of Economic Values: Calculate for each element the net effect of the rating system used for each alternative. This could include the balance of: pluses (+) and minuses (-), numerical rating (-3 and +3), or natural and cultural resource values in dollar amounts. (Again resource benefits may be used as part of the analysis process when the wildland fire is within a prescription consistent with approved Fire Management Plans and in support of the unit's Resource Management Plan.)

IV. EVALUATION OF ALTERNATIVES										
A. EVALUATION PROCESS	A	В	С							
SAFETY										
Firefighter										
Aviation										
Public										
Sum of Safety Values										
ECONOMIC										
Forage										
Improvements										
Recreation										
Timber										
Water										
Wilderness										
Wildlife										
Other (specify)										
Sum of Economic Values										
ENVIRONMENTAL										
Air										
Visual										
Fuels										
T & E Species										
Other (specify)										
Sum of Environmental Values	_									
SOCIAL										
Employment										
Public Concern										
Cultural										
Other (Specify)										
Sum of Social Values										

# **Section V. Analysis Summary**

The Agency Administrator(s), FMO and/or Incident Commander(s) complete this page.

- V.A. Compliance with Objectives: Prepare narratives that summarize each alternative's effectiveness in meeting each objective. Alternatives that do not comply with objectives are not acceptable. Narratives could be based on effectiveness and efficiency. For example: "most effective and least efficient", "least effective and most efficient", "or "effective and efficient". Or answers could be based on a two-tiered rating system such as "complies with objective" and "fully complies with or exceeds objective". Use a system that best fits the manager's needs.
- V.B. Pertinent Data: Data for this section has already been presented and is duplicated here to help the Agency Administrator(s) confirm their selection of an alternative. Final Fire Size is displayed on page three, section III.D. Complexity is calculated in the attachments and displayed on page three, section III.H. Costs are displayed on page three, section III.F. Economic Values have been calculated and displayed on page four. Probability of Success/Consequences of Failure are calculated in the attachments and displayed on page three, section III.G.
- V.C. External and Internal Influences: Assign information and data occurring at the time the WFSA is signed. Identify the Preparedness Index (1 through 5) for the National and Geographic levels. If available, indicate the Incident Priority assigned by the MAC group. Designate the Resource Availability status. This information is available at the Geographic Coordination Center and needed to select a viable alternative. Designate "yes" indicating an up-to-date weather forecast has been provided to, and used by, the Agency Administrator(s) to evaluate each alternative. Assign information to the "other" category as needed by the Agency Administrator(s).

#### **Section VI. Decision**

Identify the alternative selected. Must have clear and concise rationale for the decision, and a signature with date and time. Agency Administrator(s) signature is mandatory.

		V. ANALYSIS S	SUMMARY	
	ALTERNATIVES	A	В	С
	COMPLIANCE WITH DBJECTIVES:			
	SAFETY			
	ECONOMIC			
	ENVIRONMENTAL			
	SOCIAL			
	OTHER			
	PERTINENT DATA:			
_	FINAL FIRE SIZE			
	COMPLEXITY COST			
,	RESOURCE VALUES			
	PROBABILITY of SUCCESS			
	CONSEQUENCES of			
	FAILURE			
	EXTERNAL/INTERNAL			
′	NATIONAL AND GEOGRA	PHIC PREPAREDNESS LE	<u></u>	
,	NCIDENT PRIORITY			
•	RESOURCE AVAILABILIT	Y		
L	NEATHER FORECAST (LC	ONG-RANGE)		
•	FIRE BEHAVIOR PROJEC	TIONS		

# **Section VII. Daily Review**

The Agency Administrator(s), or designate complete(s) this page.

The date, time and signature of reviewing officials are reported in each column for each day of the Incident. The status of Preparedness Level, Incident Priority, Resource Availability, Weather Forecast, and WFSA Validity is completed for each day reviewed. Ratings for the Preparedness Level, Incident Priority, Resource Availability, Fire Behavior, and Weather Forecast are addressed on page five, section V.C. Assign a "yes" under "WFSA Valid" to continue use of this WFSA. A "no" indicates this WFSA is no longer valid and another WFSA must be prepared or the original revised.

# **VII. DAILY REVIEW**

#### SELECTED ALTERNATIVE TO BE REVIEWED DAILY TO DETERMINE IF STILL VALID UNTIL **CONTAINMENT OR CONTROL**

			INCIDENT PRIORITY  PREPAREDNESS LEVEL		RESOURCE AVAILABILITY	WEATHER FORECAST	FIRE BEHAVIOR PROJECTIONS	WFSA VALID
DATE	TIME	ВУ						

# WFSA COMPLETION/FINAL REVIEW

THE SELECTED ALTERNATIVE ACHIEVED	
DESIRED OBJECTIVES ON (DATE/TIME):	
THE SELECTED ALTERNATIVE DID NOT	
ACHIEVE THE DESIRED OBJECTIVES AND A	
<b>NEW WFSA WAS PREPARED ON (DATE/TIME):</b>	
·	
AGENCY ADMINISTRATOR OR	
REPRESENTATIVE SIGNATURE:	

#### A GUIDE FOR ASSESSING FIRE COMPLEXITY

The following questions are presented as a guide to assist the Agency Administrator and staff in analyzing the complexity or predicted complexity of a fire situation. Because of the time required to assemble or move an Incident Management Team to a fire, this checklist should be completed when a fire escapes initial attack and be kept as part of the fire records. This document is prepared concurrently with the preparation of and attached to a new or revised Wildland Fire Situation Analysis. It must be emphasized that this analysis should, where possible, be based on predications to allow adequate time for assembling and transporting the ordered resources.

#### **Use of the Guide:**

- 1. Analyze each element and check the response yes or no.
- 2. If positive responses exceed, or are equal to, negative responses within any primary factor (A through G), the primary factor should be considered as a positive response.
- 3. If any three of the primary factors (A through G) are positive response, this indicates the fire situation is or is predicted to be Type I.
- 4. Factor H should be considered after all above steps. If more than two of these iter there are fewer than three positive responses in the primary factors (A-G) a Type II team should be considered. If the answers to all questions in H are negative, it may be advisable to allow the existing overhead to continue action on the Fire.

#### **GLOSSARY OF TERMS**

**Potential for blow-up conditions -** Any combination of fuels, weather and topography excessively endangering personnel.

Threatened and endangered species - Threat to habitat of such species, or in the case of flora, threat to the species itself.

**Smoke Management -** Any situation which creates a significant public response, such as smoke in a metropolitan area or visual pollution in high-use scenic areas.

Extended exposure to unusually hazardous line conditions - Extended burnout or backfire situations, rock slides, cliffs extremely steep terrain, abnormal

fuel situations such as frost killed foliage, etc.

**Disputed Fire Management responsibility -** Any wildland fire where responsibility for management if not agreed upon due to lack of agreements or different interpretations, etc.

**Disputed fire policy - Differing fire policies between suppression agencies when the fire involves multiple ownership is an example.** 

Pre-existing controversies - These may or may not be fire management related. Any controversy drawing public attention to an area may present unusual problems to the fire overhead and local management.

Have overhead overextended themselves mentally or physically This is a critical item that requires judgment by the responsible agency. It is difficult
to write guidelines for this judgment because of the wide differences between
individuals. If, however, the Agency Administrator feels the existing overhead
cannot continue to function efficiently and take safe and aggressive action due to
mental or physical reasons, assistance is mandatory.

# **FIRE COMPLEXITY ANALYSIS**

A. FIRE BEHAVIOR: Observed or Predicted	Yes/No					
1. Burning Index (from on-site measurement of weather conditions).						
Predicted to be above the 90% level using the major fuel model in						
which the fire is burning.						
2. Potential exists for "blowup" conditions (fuel moisture, winds, etc).						
3. Crowning, profuse or long-range spotting.						
4. Weather forecast indicating no significant relief or worsening						
conditions.						
Total						
B. RESOURCES COMMITTED:						
1. 200 or more personnel assigned.						
2. Three or more divisions.						
3. Wide variety of special support personnel.						
4. Substantial air operation which is not properly staffed.						
5. Majority of initial attack resources committed.						
Total						
C. RESOURCES THREATENED:						
1. Urban interface.						
2. Developments and facilities.						
3. Restricted, threatened or endangered species habitat.						
4. Cultural sites.						
5. Unique natural resources, special designation zones or wilderness.						
6. Other special resources.						
Total						
D. SAFETY:						
1. Unusually hazardous fire line conditions.						
2. Serious accidents or fatalities.						
3. Threat to safety of visitors from fire and related operations.						
4. Restrictions and/or closures in effect or being considered.						
5. No night operations in place for safety reasons.						
Total						

E. C	WNERSHIP:		Yes/No
1.	Fire burning or threatening more tha	n one jurisdiction.	
2.	Potential for claims (damages).		
3.	Different or conflicting management	objectives.	
4.	Dispute over fire management respo	nsibility.	
5.	Potential for unified command.		
		Total	
F. E	XTERNAL INFLUENCES:		
1.	Controversial wildland fire managem	nent policy.	
2.	Pre-existing controversies/relationsh	nips.	
3.	Sensitive media relationships.	•	
4.	Smoke management problems.		
	Sensitive political interests.		
	Other external influences.		
		Total	
<b>G</b> . (	HANGE IN STRATEGY		
1.	Change in strategy (from lower to his	gher intensity management).	
2.	Large amounts of unburned fuel with	nin planned perimeter.	
3.	WFSA invalid or requires updating.	•	
		Total	
H. E	XISTING OVERHEAD:		
1.	Worked two operational periods with	nout achieving initial objectives.	
2.	Existing management organization in	neffective.	
3.	Overhead/IMT overextended mentall	y and/or physically.	
4.	Incident actions plans, briefings, etc	c., missing or poorly prepared.	
	_	Total	
Sign	ature		
Date		Time	

## WFSA INSTRUCTIONS

# **Section I. WFSA Information Page**

The Agency Administrator completes this page.

- I.A. Jurisdiction(s): Assign the agency that have or could have fire protection responsibility, e.g., USFWS, Forest Service, BLM, etc.
- I.B. Geographic Area: Assign the recognized "Geographic Coordination Area" in which the fire is located, e.g., Northwest, Northern Rockies, etc.
- I.C. Unit: Designate the local administrative unit, e.g., Hart Mountain Refuge Area, Flathead Indian Reservation, etc.
- I.D. WFSA #: Identify the number assigned to the most recent WFSA for this fire.
- I.E. Fire Name: Self-explanatory.
- I.F. Incident Number: Identify the agency number assigned to the fire, e.g., BOD 296, BNF 001.
- I.G. Accounting Code: Insert the local unit's accounting code.
- I.H. Date/Time Prepared: Self-explanatory.
- I.I. Attachments: Check here to designate attachments used in the completion of the WFSA. "Other" could include data or models used in the development of the WFSA. Briefly describe the "other" items used.

# Appendix S

5100-29 Fire Report

1. Fire Name 2. Local Fire Number (Local use only)																	
3. Location					4. Township			Range	Section		n Sub-section		n Principal Meridian				
in	ENTIFIC	ATION															
	ENTIFIC		7 Dietrie	. O F:-	- Niversia -	0	Desta	ti A		40.0		44 Ct-t-	4	40. 0	4	40 F:	Mant Zana
5.	Region	6. Forest	7. District	8. FIF	e Numbe		at Or	ecting Ag rigin	gency	10. Owr at Or		11. State Orig		12. Cou at C	nty Origin	13. FII	e Mgnt Zone
00	CCURRE	NCE	*	•		*				<del>.</del>		*					
14.	. Point of	Origin				15. 7	Γime α	of Ignitic	n			16.	Time o	of Discov	ery		
	Lati	tude	L	ongitude-		Мо	٠.	Day	,	Year	HHMN	1 Mo	0.	Day	Ye	ear	HHMM
17.	. Detectio	Detection Method 18. Statistical Cause 19. General Cause 20. Specific Cause 21. Class of People								People							
AC	CTION																
	. Initial Str	ateuv.	Sunn	ression		l Wild	lland	fire used	d for re	esource ber	oefite	2'	3 Fs/	caped Fir	Δ.		
		Initial Action	Supp	16221011	L									Fire Out	С.	ш	
24.	Mo.	Day Yea	r H	IHMM	25. 1	Mo.			ear	rategy Attaii HHMM	neu	20.	Mo.		Ye	ar l	НММ
								.,						- 5.7			
	J.	"	Resour Type		Group or C)	Quantity			source	Agency Group (F or C)	Quantit	ty			ncy Grou F or C)	ıp Quai	ntity
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	Initial St	rategy					_			//		_				/	
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	SCRIPT																
28		ted FS FFF whole dollars		S Acres (All Fores		30.Non Pr FS	otect	Acre ed b		31. Non-FS Not Pro	Acres ot by FS	То	tal Ac	res	32. <i>F</i>		anaged for ce Benefit
33	3. FMZ N\	/C/ 34. Fi	re Intensity	y 35. I	Rep Wea	ather	36.	NFDRS	Fuel	37. Cove	r Class	38. S	Slope	39.	Aspect	40	Elevation
	Acre (	\$) L	evel		Station			Model				ı	Pct				(feet)
OF	PTIONS																
41	1. Specia	Codes	/		/				/		/			/			/
42	2. Remark	S							/		/			/			/
43	3. Submitt	ed by:			44. Da	te			45	5. Approved	l by:				46. Da	te	
SL	JPPLEM	ENT FOR L	ARGE FI	RE ACE	ES BU	RNEC	)										
	47. Prot	48. FS		49. Lan			Acres	s		47. Prot	48	. FS Unit		49. Land		50.	Acres
	Agency	,		Owners	hip					Agency		,		Ownersh	nip		
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