



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

--

WFSA COMPLETION/FINAL REVIEW

THE SELECTED ALTERNATIVE ACHIEVED DESIRED OBJECTIVES ON (DATE/TIME):

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THE SELECTED ALTERNATIVE DID NOT ACHIEVE THE DESIRED OBJECTIVES AND A NEW WFSA WAS PREPARED ON (DATE/TIME):

--

AGENCY ADMINISTRATOR OR REPRESENTATIVE SIGNATURE:

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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.**

I. WILDLAND FIRE SITUATION ANALYSIS**A. JURISDICTION(S):****B. GEOGRAPHIC AREA:****C. UNIT(S):****D. WFSA #:****E. FIRE NAME:****F. INCIDENT #:****G. ACCOUNTING CODE:****H. DATE/TIME PREPARED:****I. ATTACHMENTS:**

- COMPLEXITY MATRIX/ANALYSIS¹**
- RISK ASSESSMENT¹**
- PROBABILITY OF SUCCESS¹**
- CONSEQUENCES OF FAILURE¹**
- MAPS¹**
- DECISION TREE²**
- FIRE BEHAVIOR PROJECTIONS¹**
- CALCULATIONS OF RESOURCE REQUIREMENTS¹**
- OTHER (SPECIFY)**

¹ Required² Required by the USFS

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. OBJECTIVES (must be specific and measurable):

1. **SAFETY:**
Public

Firefighter

2. **ECONOMIC:**

3. **ENVIRONMENTAL:**

4. **SOCIAL:**

5. **OTHER:**

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			
	A	B	C
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	B	C
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			
OTHER			

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 SUMMARY			
ALTERNATIVES	A	B	C
A. COMPLIANCE WITH OBJECTIVES: SAFETY ECONOMIC ENVIRONMENTAL SOCIAL OTHER			
B. PERTINENT DATA: FINAL FIRE SIZE COMPLEXITY COST RESOURCE VALUES PROBABILITY of SUCCESS CONSEQUENCES of FAILURE			
C. EXTERNAL/INTERNAL INFLUENCES: NATIONAL AND GEOGRAPHIC PREPAREDNESS LEVEL _____ INCIDENT PRIORITY _____ RESOURCE AVAILABILITY _____ WEATHER FORECAST (LONG-RANGE) _____ FIRE BEHAVIOR PROJECTIONS _____			

VI. DECISION
The selected alternative is: RATIONALE:

AGENCY ADMINISTRATOR SIGNATURE _____

DATE/TIME _____

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**

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

IF WFSA IS NO LONGER VALID, A NEW WFSA WILL BE COMPLETED

