Appendix I: Incident Complexity Analysis

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 items are answered yes, and three or more of the other primary factors are positive responses, a Type I team should be considered. If the composites of H are negative, and 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. OWNERSHIP:	Yes/No
1. Fire burning or threatening more than one jurisdiction.	___ ___
2. Potential for claims (damages).	___ ___
3. Different or conflicting management objectives.	___ ___
4. Dispute over fire management responsibility.	___ ___
5. Potential for unified command.	___ ___
Total	___ ___

F. EXTERNAL INFLUENCES:	
1. Controversial wildland fire management policy.	___ ___
2. Pre-existing controversies/relationships.	___ ___
3. Sensitive media relationships.	___ ___
4. Smoke management problems.	___ ___
5. Sensitive political interests.	___ ___
6. Other external influences.	___ ___
Total	___ ___

G. CHANGE IN STRATEGY	
1. Change in strategy (from lower to higher intensity management).	___ ___
2. Large amounts of unburned fuel within planned perimeter.	___ ___
3. WFSA invalid or requires updating.	___ ___
Total	___ ___

H. EXISTING OVERHEAD:	
1. Worked two operational periods without achieving initial objectives.	___ ___
2. Existing management organization ineffective.	___ ___
3. Overhead/IMT overextended mentally and/or physically.	___ ___
4. Incident actions plans, briefings, etc., missing or poorly prepared.	___ ___
Total	___ ___

Signature	
Date	Time