

Appendix A

Complexity Analysis Guide

Introduction

An integral part of IFPM is the unit's IFPM complexity analysis. Upon implementation of IFPM in 2004, all federal wildland fire management agencies were required to complete a unit complexity analysis. For some positions, the level of IFPM Qualification Standard and Standard Position Description was based on the unit's complexity rating. A rating of low, moderate or high was assigned for each unit, with higher qualification standards for more complex units. The following Forest Service IFPM positions are based on unit complexity:

Unit Fire Program Manager

Prescribed Fire and Fuels Specialist

Dispatch Center Manager

Note: Engine Complexity is based on the direction contained in the W.O. September 18, 2008 letter (<http://www.fs.fed.us/fire/management/ifpm/documents.html>)

Complexity is evaluated based upon the area of responsibility (geographic or otherwise) for the unit being rated. For example, in the Lower Colorado River, BIA, FWS, and BLM

share fire management responsibilities. All agencies provide fire management resources, but the BLM provides program management oversight, i.e. the BLM fire program manager reports to the three agency administrators. So, when the three agencies evaluate their respective programs, BLM's area of responsibility would be greater than the other two agencies.

Determination of program complexity in turn determines the complexity of the Unit Fire Program Manager's position. It does NOT necessarily determine the complexity of a subordinate position that has variable complexity, such as the Prescribed Fire/Fuels Specialist. That sub-program complexities is determined by the relative complexity of the fuels management program within the overall fire management program. The appropriate complexity elements identified in the Complexity Descriptors may assist in making those determinations, but in and of themselves may not be the sole determinants, if for example other fire duties are included in a Specialist's position description.

Unit

For the purpose of this implementation plan, at the program management level a unit is considered to be a Forest or multiple Forests that have been combined into one unit.

Unit Fire Program Managers assigned to support more than one unit should complete just one complexity analysis covering all units under their responsibility, not a separate complexity analysis for each unit.

Geographic Areas

A Geographic Area is considered to be a Forest Service Region.

Guidance for Re-analysis of the Unit's Complexity Rating

Step 1: Establish the need for a re-analysis of the unit's complexity rating

Changes to a unit's complexity rating can be made at any time. The need for re-analysis may be generated at the local unit level, or from regional direction. Possible reasons for a re-analysis include, but are not limited to:

- Changes in protection area that increase or decrease a unit's responsibility for providing fire protection.
- The combining of multiple units into an interagency zone or organization
- Addition or subtraction of key components to a unit's fire management program.

Changes to key elements of a fire management program should be "programmatic" and long term, and not adjustments to respond to a temporary arrangement.

Step 2: Complete the new complexity analysis

The unit fire program manager and staff should complete a new complexity analysis, reflecting programmatic changes in the new analysis. The results should then be reviewed at the regional level for concurrence.

Step 3: Review Unit Position Identification Worksheet

Once the new complexity rating has been determined, fire managers should review their *Unit Position Identification Worksheet* and update any changes to the minimum qualification standards (MQS) or positive education requirements for the three fire management positions that are dependent on complexity. Refer to the *Forest Service SPD Crosswalk* for description of NWCG qualifications and additional required training for each position at different complexity levels. A copy of the updated *Unit Position Identification Worksheet* should be provided to the Geographic Fire Program Manager for reference purposes.

Step 4: Determination of Qualification

If the new complexity rating resulted in changes to an employee's MQS, a new incumbent declaration should be completed and routed to the Forest FMO (UFPM) for determination of qualifications. If the employee meets the new MQS, they should be notified in writing of the qualification determination. Refer to Appendix D of the *IFPM Implementation Plan* for employee notification templates.

Employees that do not meet the new MQS will be required to work with their Supervisor and/or Unit Fire Program Manager/Line Officer to develop an IDP with definite timelines to for the employee to meet minimum qualification standard for their position. Once the employee meets their new MQS, they should resubmit the incumbent declaration and be notified in writing of the qualification determination by their Forest FMO (UFPM).

Unit Responsibilities

Each Fire Program Manager at the unit level will complete the Unit Complexity Analysis for the unit(s) under their responsibility. The *IFPM Standard*, instructions, supporting documents and worksheet to complete the analysis can also be found on the Internet at:

<http://www.ifpm.nifc.gov/>

The Unit Fire Program Manager is the lead for completing the unit's complexity analysis. It is recommended that additional fire staff be included/consulted when completing the analysis. Unit Fire Program Managers assigned to support more than one unit should complete just one complexity analysis covering all units under their responsibility, not a separate complexity analysis for each unit.

Regional/State Responsibilities

The Geographic Area Fire Program Manager (GFPM) is responsible for reviewing and leveling the complexity analysis from each unit, to ensure that no glaring errors or discrepancies exist, and that each unit's score is realistic in comparison with other adjacent units.

National Responsibilities

The National Fire Program manager will receive and review all revised complexity analysis ratings (high, moderate or low) for each fire program management unit from all the regions, and maintain a record for analysis and review. The objective of the national level review is to ensure that the complexity analysis has been applied consistently across the regions. The National Office may also be able to assist in suggesting development opportunities for employees who fail to meet NWCG qualification standards as a result of the unit complexity change.

COMPLEXITY ANALYSIS GUIDE

Program Activities: Wildland Fire Management, Prescribed Fire Management, Fuels Management, Prevention (must have approved plan), Preparedness, Aviation, and Interagency Operations.

Element	Sub-Element	Rule of Thumb
Program Management	Fire Season	<ul style="list-style-type: none"> • Must have a prescribed fire program to get credit for overlap season. • Permanent full time FMO may rate a “2” if there are no overlapping seasons and season is less than six months. • Season length is the total of prescribed and wildland fire seasons.
	Budget	<ul style="list-style-type: none"> • Two Program Activities is at least a “3” score.
	Logistics	<ul style="list-style-type: none"> • Accessibility should be based upon “where fire risk exists that requires IA response.” • Programs managed by other agencies score “low” for logistics (1 or 2). • Remote station is defined as being a satellite station, e.g., guard station, outstation, etc.
	Workforce Management	<ul style="list-style-type: none"> • Assumes unit fire program manager is being evaluated (supervisor). • First line supervision refers to permanents or furlough positions. • Temporary employees refers to seasonal positions. • If union is not present ignore this factor.
	Program Objectives	<ul style="list-style-type: none"> • “Internally controversial” implies within the home unit; “externally controversial” is outside home unit. • This sub-element is specific to fire program objectives.
	Planning	<ul style="list-style-type: none"> • There are no rules of thumb for this sub-element.
	Contracts	<ul style="list-style-type: none"> • Contract means the unit retains contract oversight responsibilities (COTR, reviews, etc.).
	Agreements, Cooperators	<ul style="list-style-type: none"> • Contract vs. MOA: Money up front vs. reimbursement. • Contracted services handled in previous sub-element. • MOU means no exchange of funds.
	Multi-Unit	<ul style="list-style-type: none"> • Responsibility is assumed to mean management of the land, which would also include IA

		<p>responsibility.</p> <ul style="list-style-type: none"> • Jurisdiction = Determined by governmental authority; Unit = determined by geographic boundary. • Applies to lands for which you are responsible for primary initial attack. • Single jurisdiction, single unit means 1 parcel and 1 owner. • Single jurisdiction, multiple unit means fragmented parcels by one governing body. • Multiple jurisdictions, multiple units means many owners and many parcels. • Multiple jurisdictions, single unit means one parcel with multiple governing bodies.
	Socio-Political-Economic	<ul style="list-style-type: none"> • Internal implies within the home unit; external is outside home unit. • Include impact of local AD and seasonal hires in last factor.
Preparedness	Training & Qualifications	<ul style="list-style-type: none"> • Unit personnel are defined as red-carded individuals only.
	IA Dispatch Offices	<ul style="list-style-type: none"> • There are no rules of thumb for this sub-element.
	Caches	<ul style="list-style-type: none"> • This should also include consideration for EFF.
	Support to Other Units	<ul style="list-style-type: none"> • Interagency Coordination/Dispatch Center refers to local dispatch, not a GACC. • Support means provides funds/FTE. Hosts means shop located on unit. • Retardant base includes air tankers and SEATS.
	Fuels for Fire Danger	<ul style="list-style-type: none"> • Visitation means human-caused ignitions. • "Management activity fuels prevalent with limited mitigation controls" implies persistent high hazard conditions exist because slash treatment cannot or has not been done. • Units not using BI should use an equivalent index and percentiles. • BI values, or equivalent index, should be based upon average for the planning period.
	Fire Resource Modules	<ul style="list-style-type: none"> • To receive credit for modules, they must be funded by the unit with regular recurring dollars. Does not include CWN or rarely used resources. • MEL includes everything identified in the budget planning analysis process, plus extended attack modules and support functions (see Guiding Principle #15). • EFF crews should be the number of crews used

		on an average local extended/initial attack/mop-up incident, not the number of crews identified in the GACC roster.
Program Interdependence	Consequences of Outcome	<ul style="list-style-type: none"> • Consider diversity (# of program activities), overlap of program activities, skills (likeness or uniqueness) and impact (success or failure). • Program activity “Interagency Operations” is not analyzed in this element. Element is looking at internal program interdependence. • If a unit has 6 of the activities, consider a score of “5.” • If the unit has 3 or fewer program activities, consider a score of “2” or less. • If a unit has 4 to 5 of the program activities, consider a score of “3” or “4.” • This is the only element that is not looking at the current consequences/situation. It addresses consideration for future, possible consequences of additional program activities could have (prevention could reduce occurrence, but not experiencing this now.)
Land Management Base	Total Acres	<ul style="list-style-type: none"> • Consider total protection acreage, not all land within boundary. • Areas not managed by the unit should not be included. • Response time should be evaluated by traveling on roads.
	Ownership	<ul style="list-style-type: none"> • Responsibility is assumed to mean management of the land, which would also include IA responsibility. • Jurisdiction = determined by governmental authority; Unit = determined by geographic boundary. • Applies to lands for which you are responsible for primary initial attack. • Single jurisdiction, single unit means 1 parcel and 1 owner. • Single jurisdiction, multiple unit means fragmented parcels by one governing body. • Multiple jurisdiction, multiple unit includes multi-agencies. • Multiple jurisdiction, single unit means one parcel with multiple governing bodies. Multiple jurisdiction, single unit means one parcel with multiple governing bodies.

	Wildland/Urban Interface	<ul style="list-style-type: none"> A "4" would be highest possible score without structural fire responsibility.
	Cultural/Natural Resources	<ul style="list-style-type: none"> Resource must be "at risk" to direct fire or post-fire effects.
Wildland Fire	Average Occurrence	<ul style="list-style-type: none"> Based on a 10-year average. "Episodes" = at least once every 2 years.
	Average Acres	<ul style="list-style-type: none"> Based on a 10-year average.
	Season Length	<ul style="list-style-type: none"> There are no rules of thumb for this sub-element.
	Values	<ul style="list-style-type: none"> There are no rules of thumb for this sub-element.
	Wildland Fire Management	<ul style="list-style-type: none"> Fire Use Management Team = T2 team.
	Firefighter and Public Safety	<ul style="list-style-type: none"> See Guiding Principle #14, page 6-6; this discusses safety and how it should be analyzed
	Fuels and FB	<ul style="list-style-type: none"> If more than 50% of predominant fuel type is out of historic range of variability or condition class 2 or 3, add 1 point.
Prescribed Fire	Prescribed Fire	<ul style="list-style-type: none"> Units should be scored "0" when there are no prescribed fires being performed at all. "Episodes" of concurrent ignitions include ongoing Wildland Fire Use fires.
	Multiple Ownerships	<ul style="list-style-type: none"> If no Rx fires being conducted, score a "0." Implies that this is conducting joint prescribed burns with other jurisdictions, not supporting off-unit fires.
	Burn Season Length	<ul style="list-style-type: none"> If no Rx fires being conducted, score a "0". This does not include pile burning.
Mechanical	Treatment Objectives	<ul style="list-style-type: none"> If no mechanical treatment is being conducted, score a "0."
	Implementation	<ul style="list-style-type: none"> If no mechanical treatment is being conducted, score a "0." If heavy equipment is used consider a minimum score of "2."
	Values	<ul style="list-style-type: none"> If no mechanical treatment is being conducted, score a "0." This sub-element is rated only if the unit is implementing mechanical treatments. Then the rating is based upon the inherent risks to people, property and resources from wildland fire.
Aviation	Aviation	<ul style="list-style-type: none"> Contributions (positions, funding) to a shared resource = a minimum score of "2." Exclusive use resource scores a minimum of "3." Hosting NMAC or National Shared Resource-type contracts = minimum of "3."

Prevention	Prevention	<ul style="list-style-type: none">• Units that administer a permitting system for burning: consider a minimum score of "3."• Consider % of human-caused ignitions: <10%=L; 10-20%=M; >20%=H.
Education	Education	<ul style="list-style-type: none">• Consider minimum of "4" if unit has a dedicated full-time position in Fire Prevention/Education.