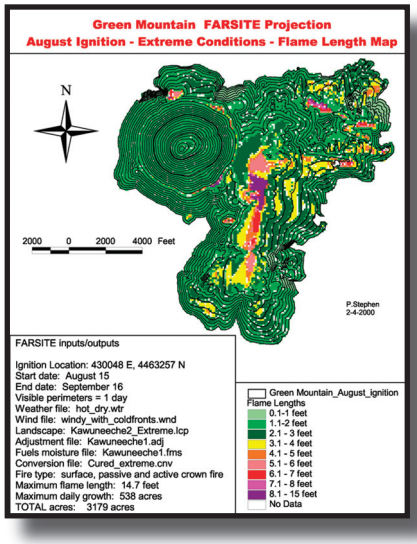
# Wildland Fire Use

## Implementation Procedures Reference Guide



May 2005

Minor Revisions
March and April
2006

**Note: In March 2006, changes were made to Table 3 on page 22. An errata sheet was issued. In April 2006, minor changes were made to the description for RERAP on page 35 of Table 4 and to the qualifications onTable 6 on page 56.**

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Table 3 shows the **minimum** level of implementation qualifications. During implementation, as fire activity and management needs escalate, implementation qualification needs ascend to a higher level. But as conditions moderate and management needs drop, implementation qualifications can descend to lower levels. Table 3 and Figure 8 are used jointly as fire situations and conditions escalate. When conditions are moderating or lessening, Table 3 and Figure 8 provide the necessary qualification levels for implementation, regardless of what level of the WFIP has been completed (i.e. Stage I, II or III). Qualifications can descend back to an ICT4 after either Stage II or Stage III has been completed, but must be guided by Figure 8.

Initial information to consider in selecting the value for each variable in Figures 7 and 8 is provided in the following section and after each individual chart in Appendix A. This list is not all inclusive and items on the list can be expected to vary by place and time. Users are expected to exercise their judgment in selecting the values; information is intended to provide both guidance in completion and flexibility in determining exactly what the descriptions mean. Local information can and should be amended to the lists to better reflect site-specific situations.

**Table 3. WFIP implementation minimum qualifications**

| WFIP Stage | **Minimum Implementation Qualifications** (Use Fire Use Manager Decision Chart to determine recommended position) |
|---|---|
| WFIP Stage I | Incident Commander Type 4 (ICT4) **(Must have local knowledge or prior experience in implementing WFIPs and managing wildland fire use events.)** |
| WFIP Stage II | Incident Commander Type 4 (ICT4) **(Must have local knowledge or prior experience in implementing WFIPs and managing wildland fire use events.)** |
| WFIP Stage III | Incident Commander Type 4 (ICT4) **(Must have local knowledge or prior experience in implementing WFIPs and managing wildland fire use events.)** |

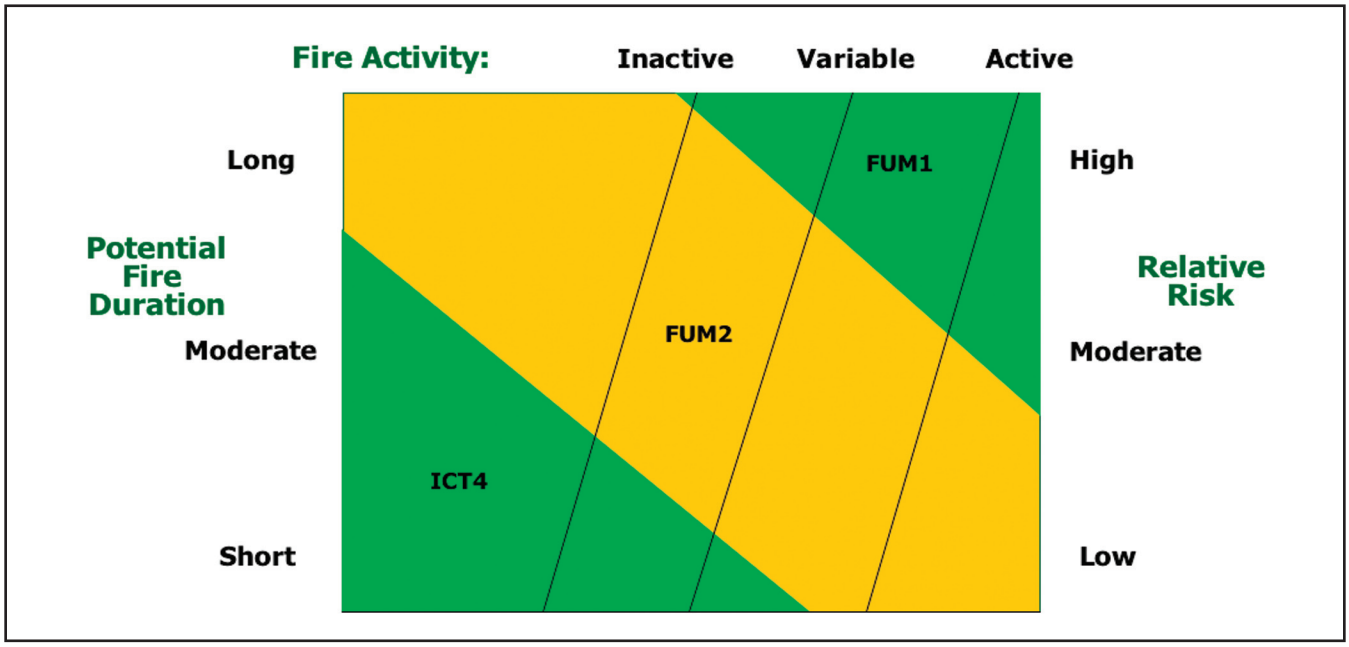



Figure 8. Fire Use Manager Decision Chart.

| | |
|---|---|
| RERAP (Rare Event Risk Assessment Process) | RERAP determines probabilities that a wildland fire will reach or exceed an MMA or reach an area of concern due to a rare weather event. It also can provide probabilities of a season-ending event. |
| VCIS | The Ventilation Climate Information System (VCIS) allows users to assess risks to values of air quality and visibility from historical patterns of ventilation conditions. |
| VDDT (Vegetation Dynamics Development Tool) | This model uses state in transition models or box and arrow diagrams to show how vegetation can change over time. |
| WFAS (Wildland Fire Assessment System) | The Wildland Fire Assessment System is an internet-based information system. The current implementation provides a national view of weather and fire potential, including national fire danger and weather maps and satellite-derived "Greenness" maps. |

### Threats

Identification of all known and anticipated threats is critical in evaluating values, hazard, and probability for the fire(s). The nature of long-term strategic planning involves anticipating and prediciting where the fire may move, what it may impact, and designing a strategy to minimize or eliminate those impacts. Threats must be defined for the MMA boundary, all sensitive natural and cultural resources inside and immediately outside that boundary, firefighters and the public, air quality, and other concerns as appropriate. Once a threat is defined in this section of Stage III, it must be linked through subsequent sections and appropriate actions (monitoring and mitigation) must be tied to that identified threat.

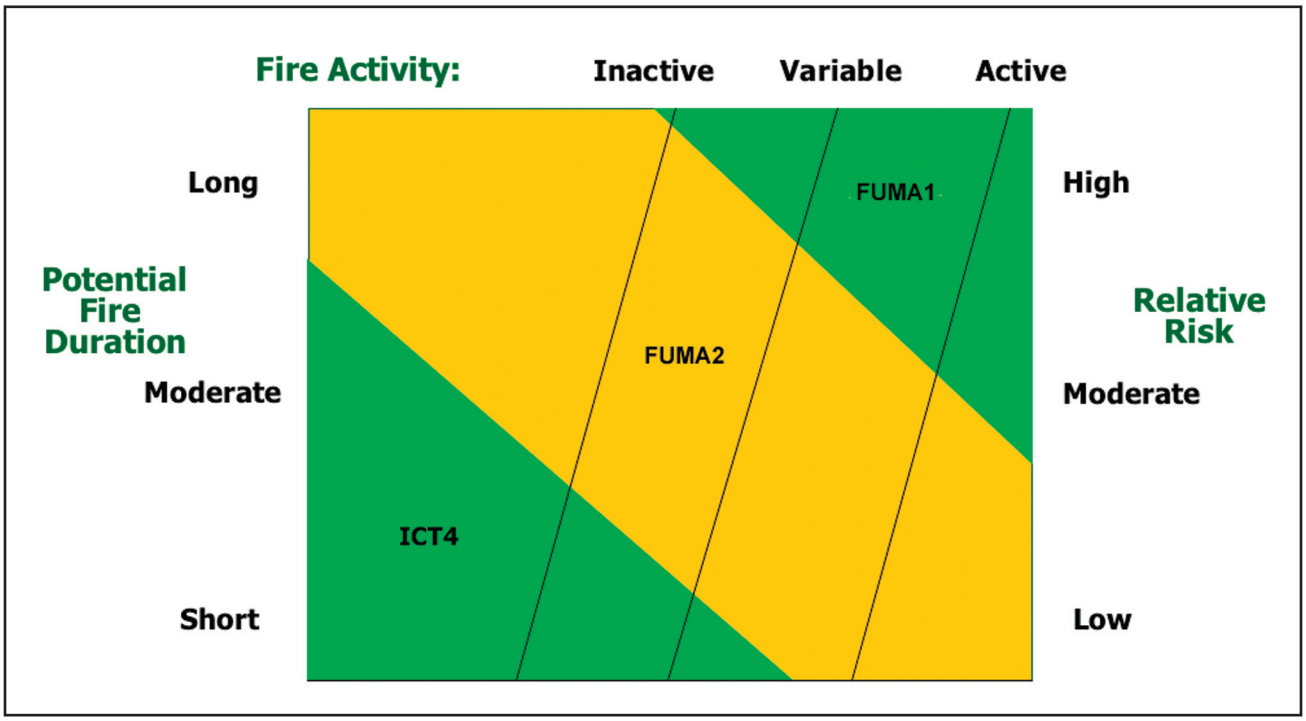
### Monitoring Actions

A monitoring plan of action is necessary to ensure successful accomplishment of the objectives and to continually acquire information relevant to the fire situation. Monitoring is useful for documenting observed fire weather, observed fire behavior, fire movement toward management action points (MAP), fire effects, smoke dispersal and volume, and to aid in validating fire behavior and weather forecasts. Monitoring variables that are important can include, but are not limited to: smoke dispersal, live and dead fuel moistures, daily weather observations, fire perimeter and progression mapping, and observed fire behavior. Monitoring frequency will be based on fire activity and location. All monitoring information will be analyzed, applied as needed, and archived as part of the final documentation package.

### Mitigation Actions

Science-based risk assessments, as discussed in the previous section, provide a solid foundation for developing a successful risk management/mitigation strategy. But, it must be clearly understood that risk assessment and risk management are not synonymous. Based on the risk assessment, decision makers decide what to do about managing the risk. Part of WFIP Stage III is a detailed plan that identifies mitigation actions, the activities for mitigating or eliminating risk. Risk can be mitigated or eliminated in three central ways: reduce the hazard, reduce the probability

# Fire Use Manager Decision Chart




**To complete the chart, connect the left and right variables with a single line (potential fire duration and relative risk, respectively). Select the appropriate level of fire activity at the top of the chart and follow the line beneath that value down to its intersection with the line connecting the left and right variables. Read the level of fire use manager needed directly from the background area where the intersection occurs. The relative risk values are those obtained from the Wildland Fire Relative Risk Assessment process.**

Minimum level of implementation qualifications. During implementation, as fire activity and management needs escalate, implementation qualification needs ascend to a higher level. But as conditions moderate and management needs drop, implementation qualifications can descend to lower levels. Table 3 and Figure 8 are used jointly as fire situations and conditions escalate; when conditions are moderating or lessening, Figure 8 provides the necessary qualification levels for implementation.

**Table 6. WFIP minimum implementation qualifications**

| WFIP Stage | Minimum Planning Qualifications (Use Fire Use Manager Decision Chart to determine recommended position) |
|---|---|
| WFIP Stage I | Incident Commander Type 4 (ICT4) **(Must have local knowledge or prior experience in implementing WFIPs and managing wildland fire use events)** |
| WFIP Stage II | Incident Commander Type 4 (ICT4) **(Must have local knowledge or prior experience in implementing WFIPs and managing wildland fire use events)** |
| WFIP Stage III | Incident Commander Type 4 (ICT4) **(Must have local knowledge or prior experience in implementing WFIPs and managing wildland fire use events)** |