Protecting Communities and the Environment: Fuels Management Conference

Indicators of Success

Issue Statement:

Current performance measures for hazardous fuels reduction do not account for all program accomplishments. Indicators need to be identified that demonstrate both incremental and complementary successes resulting from program implementation.

Fuels program funding for the federal agencies increased dramatically as a result of the National Fire Plan. Accountability and the ability to demonstrate success of the fuels program is imperative for continued program growth. Performance measures have been established for the goals contained in the Ten-Year Comprehensive Strategy Implementation Plan to enable all parties to assess and track progress toward the desired goals. However, the performance measures pertaining to the fuels program are limited in their ability to fully demonstrate all achievements and benefits resulting from implementation of the program.

Examples of the limitations of the existing performance measures include:

> The condition class concept is used to identify and document changes in relation to historical ranges of key components within a fire regime. In some cases multiple treatments on the same acre over time are required to affect a reduction in the condition class. However, most treatments immediately provide a change in fire hazard and subsequent reduction in potential fire behavior. Utilizing the condition class concept does not adequately address the entire short and long term benefits resulting from a fuels treatment. The condition class system is not sensitive to the incremental improvement in Fire Regime Condition.
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> Condition Class has been utilized as a substitute for hazard but fuels treatments in Fire Regimes 4 and 5 that reduce hazard will usually not result in reductions in condition class even after multiple treatments. Numerous communities throughout the west are located in Fire Regimes 4 and 5. Although fuels treatments can be designed that reduce the threat to these communities, a reduction in condition class will usually not occur as the long return interval fire regimes are usually in condition class 1.
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> A fuels treatment may produce positive effects for other resource management goals and objectives. Most resource management activities that result in a change to vegetation composition, structure, density, or vigor will affect Condition Class.

Currently with the existing performance measures there is no way to adequately demonstrate these secondary benefits nationally.

Recording accomplishment by a metric that focuses on changed condition does not incorporate spatial fire behavior principles. Areas that are the highest hazard or in greatest need for restoration (CC 2 or 3) may not be the highest priority to treat to disrupt the spread of fire across the landscape (Finney and Cohen 2003).

Finally, there are other items such as biomass utilization, maintenance treatments and increasing the range of the appropriate management response (AMR) that are not captured by the current measures

Recommendations:

The performance measures related to the hazardous fuels reduction program contained in the Ten-Year Comprehensive Strategy Implementation Plan need to be modified to allow for an accounting of all incremental accomplishments. Wildland Fire Leadership Council decision is needed to implement the following recommendations. Decision is needed as soon as possible to allow sufficient lead-time for necessary changes to NFPORS for field implementation in FY 05 for FY 06 Projects.

Suggested revisions are:

1) Ten-Year Comprehensive Strategy Implementation Plan Performance Measure 2a, b and c need to be replaced with the following measures.

   2a - Number of acres treated that result in changed fire behavior

   This is an annual reporting requirement that is reported in NFPORS at the treatment level with pre and post treatment observations of fire intensity/resistance to control. NFPORS business rules will need to be developed. Implementation in FY 05 for FY 06 Projects

   2b – Number of acres treated in or adjacent to high and medium risk communities or landscapes. (Per NASF Field Guidance for Identifying and Prioritizing Communities At Risk)

   This is an annual reporting requirement that is reported in NFPORS at the treatment level. NFPORS business rules will need to be developed. Implementation in FY 05 for FY 06 Projects

   2c - Number of acres treated of changed fire behavior per million dollars of gross investment.

   This is an annual reporting requirement that is reported from information in NFPORS. A NFPORS report will need to be developed. Implement in FY 06.

2) Ten-Year Comprehensive Strategy Implementation Plan Performance Measure 3a and c need to be replaced with the following measures.

   3a – Number of acres treated resulting in improved Fire Regime Condition. (Per Interagency Field Guidance for Identifying and Rating Fire Regime and Condition Class)

   This is an annual reporting requirement that is reported in NFPORS at the project and treatment level. Metric is based upon pre and post treatment Fire Regime Condition rating of 0-100. Incremental improvement in condition will now be captured. NFPORS business rules will need to be developed. Implementation in FY 05 for FY 06 Projects

   3c – Number of acres treated resulting in improved Fire Regime Condition per million dollars of gross investment. (Per Interagency Field Guidance for Identifying and Rating Fire Regime and Condition Class)

   This is an annual reporting requirement that is reported from information in NFPORS. A NFPORS report will need to be developed. Implement in FY06

Rationale (discuss reasons for recommendations):

The proposed changes to the performance measures in the Ten-Year Comprehensive Strategy Implementation Plan applicable to the hazardous fuels program will align the measures more closely with the program goals.

Changing performance measures 2 a, b and c to a metric that reflects changed fire behavior rather than changed condition class is more appropriate to reflect progress towards Goal 2 - ***Hazardous fuels are treated, using appropriate tools, to reduce the risk of unplanned and unwanted wildland fire to communities and to the environment.*** Treatments conducted in Fire Regimes IV and V conducted for the purpose of reducing hazard to values at risk will now be reflected in accomplishment along with maintenance treatments in Fire Regime I, II and III and condition class 1.

A change in performance measure 3a and c to a metric based upon the underlying values used to calculate Fire Regime Condition Class (rating 1-3) will allow incremental improvements to be captured in accomplishment reporting. Fire regime condition classes 1-3 reflect a range of condition within the class and although a treatment may improve the condition it may not be sufficient to move it from one class to another and therefore not be reflected as accomplishment towards Goal 3 - ***Fire-adapted ecosystems are restored, rehabilitated and maintained, using appropriate tools, in a manner that will provide sustainable environmental, social, and economic benefits***.

Related Issues/Secondary Priorities

1) Implementation of Fire Regime Condition Ratings. – The current schedule of implementation of for FY 05 projects appears to be too aggressive given the number of individuals in need of training and the inability of units to get to project sites to use protocols.

   Recommendation is for National Program Leads delay full implementation until FY05 for FY 06 to allow for adequate training and transition.

2) HFRA reporting requirements – NFPORS needs to be modified to track the following items related to implementation of HFRA
   a. At-risk municipal watershed
   b. T&E species habitat at risk in or in need of fire
   c. Insect and Disease risk
   d. Community protection Plans

   The national NFPORS users group should complete necessary changes by the beginning of FY 2005.

3) Biomass Utilization – Current reporting for this item in NFPROS needs to be enhanced to account for the amount of biomass offered and biomass utilized. Current reporting is only a check box that reflects whether biomass was utilized from the project. Needs to interface with current agency reporting systems to reduce duplication of data entry.

   The national NFPORS users group should complete necessary changes by the beginning of FY 2005.

4) Collaboration – The current NFPORS reporting elements does not fully capture all the relevant items for collaboration including partnership funding. The definition of collaboration for reporting needs to be enhanced in the NFPORS business rules

   The national NFPORS users group should complete necessary changes by the beginning of FY 2005.

5) Project and Treatment Objectives – NFPORS project objectives do not address the full gamut of objectives for hazardous fuels projects. NFPORS needs to be modified to track the additional project objectives.
   a. Increase Range of Appropriate Management Response
   b. Facilitate Wildland Fire Use
   c. Protect Archaeological Resources

   The national NFPORS users group should complete necessary changes by the beginning of FY 2005.

References

Finney, Mark A. and Cohen Jack D. Expectation and Evaluation of Fuel Management Objectives p.353 – 367 in **Fire, fuel treatments, and ecological restoration: Conference proceedings; 2002 16-18 April; Fort Collins, CO.** Proceedings RMRS-P-29. Omi, Philip N.; Joyce, Linda A., technical editors. 2003. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 475 p.