**The Next Step in Managing Unplanned Ignitions**

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The confluence of Risk Management, the 2009 policy for one type of wildland fire and developing spatial fire plans in the Wildland Fire Decision Support System (WFDSS) will allow managers to make better risk decisions, document the risk analysis and meet relevant Land and Resource Management Plan (LRMP) objectives on every fire that occurs on Forest Service lands. This may be viewed as a paradigm shift in wildland fire management or perhaps it is merely a combination of best practices; sound science, decision modeling and balancing the risk associated with fire suppression versus fire exclusion.

The history of Resource Benefit fires has been long and varied in the Forest Service. Starting with a single fire and moving into the time of Prescribed Natural Fires with different management codes and set budgets, to Wildland Fire Use with two different codes; then changing to using a single management code (P code), we have now arrived at the point where we no longer have Resource Benefit fires, but Resource Benefit acres. Since 2009, when FS policy describes “..all unplanned ignitions are termed wildfires.” With this change and single management codes we started hard down the path of being able to achieve the goal of counting acres and not fires.

The change from 2003 policy to the 2009 policy has given fire managers and agency administrators the ability to achieve the 5 R’s; that is, to have fires with the Right Plan, in the Right Place, at the Right Time, with the Right Assets and for the Right Duration, while achieving Forest Plan direction and managing risk.

The policy and the 5 R’s increases the flexibility of managers to realize benefits of fire on the landscape as well as to respond to the need for suppressing fires to protect values at risk. This increased flexibility also comes with increased responsibility to continually evaluate fire conditions, resource availability, and risk management to re-evaluate decisions and management direction.

The recognition of fiscal challenges and the need to reduce large fire costs is another step in the continuing improvement process as Risk Management becomes the dominant theme in wildland fire management. Incorporating the ecological benefit of fire is an important part of the risk decision, since while we no longer recognize Resource Benefit fires, it is important that we use existing LRMP’s to recognize and credit Forest Service units for accomplishing Resource Benefit acres. As the cost of a fire is now seen to flow from proper Risk Management, resource benefit acres will also be a result of Risk Management and LRMP objectives.

For WFDSS documentation, we can take the stance that each fire has just the following objectives:

* Protect Life
* Protect Values
* Socio/Political/Economic Considerations
* Achieve Forest Plan Objectives

Then it follows that Resource Benefit is seen to flow from the Forest Plan and not as specific objective of the fire (moving from RB fires to RB acres). These objectives can be thought of as those that protect values from fire (values at risk) and those that use fire effects to change conditions that meet Forest Plan objectives (resource benefit).

Relation to the National Cohesive Strategy and Forest Service Ecological Restoration Goals

This approach is consistent with the guiding principles and Goals 1 and 3 of the National Cohesive Strategy as noted below:

• Reducing risk to firefighters and the public is the first priority in every fire management

activity.

• Sound risk management is the foundation for all management activities.

• Actively manage the land to make it more resilient to disturbance, in accordance with

management objectives. Wildland fire, as an essential ecological process and natural change agent, may be incorporated into the planning process and wildfire response.

• Fire management decisions are based on the best available science, knowledge and

experience, and used to evaluate risk versus gain.

• Where land and resource management objectives differ, prudent and safe actions must be taken through collaborative fire planning and suppression response to keep unwanted wildfires from spreading to adjacent jurisdictions.

• Safe aggressive initial attack is often the best suppression strategy to keep unwanted

wildfires small and costs down.

• Fire management programs and activities are economically viable and commensurate with values to be protected, land and resource management objectives, and social and

environmental quality considerations.

Goal 1: Landscapes across all jurisdictions are resilient to fire related disturbances in accordance with management objectives.

Basic premise: **Sustaining landscape resiliency and the role of wildland fire as a critical ecological process requires a mix of actions that are consistent with management objectives.** **The West will use all available methods and tools for active management of the landscape to consider and conserve a diversity of ecological, social, and economic values.** The West will coordinate with all partners and seek continued stakeholder engagement in developing market-based, flexible and proactive solutions that can take advantage of economies of scale. **All aspects of wildland fire will be used to restore and maintain resilient landscapes.**

Goal 3: All jurisdictions participate in making and implementing safe, effective, efficient, risk-based wildfire management decisions.

Basic premise: A balanced wildfire response requires integrated pre-fire planning with effective, efficient and coordinated emergency response. Pre-fire planning helps to tailor responses to wildfires across jurisdictions and landscape units that have different uses and management objectives. **Consideration should be given to the role that fire might play in ecosystem maintenance and restoration. It is possible in some cases to achieve conditions under which fire can spread with little or no damage to values and effectively be used to treat the landscape.**

The Forest Service goal of Ecological Restoration for National Forest Service Lands states the following and this approach will help to accomplish these goals:

* Committed to increasing the pace of restoration by 20% by FY2014
* Focusing on priority areas that exhibit the greatest need and greatest potential for success. Our restoration priorities will consider landscape conditions and capability, prospective ecosystem services as well as collaboration opportunities.
* Cultural shift towards restoration as a primary goal
* Successful delivery of the restoration objective – success is restoration that achieves overall ecological, social and economic benefits and is defined by meeting our multiple-use objectives and increasing resiliency across all lands.

The Bridger-Teton National Forest has developed strong partnerships with local and state governments as well as other partners, including local, state and federal. Since the BTNF has successfully managed fires both inside and outside designated wilderness areas for resource benefit, the forest has an established record of collaboration with the local communities, stakeholders and partners that will allow us to continue this type of resource and fire management.

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Case Study: Bridger-Teton NF

The Bridger-Teton NF completed a Forest Plan Amendment in 2004 that allows Resource Benefit to apply across the entire forest. The plan also contains specific Management Areas that have Desired Future Conditions, some that have specific objectives for timber production, while others have wildlife direction and some have a combination of these objectives to manage towards the Desired Future Conditions. Using the Forest Plan and applying the wildfire response protocols as outlined in the Chiefs Letter as well as the 2009 guidance, will be the base for decision-making on all wildland fires.

We now have the ability to successfully manage a wildland fire for multiple objectives, but managed using Risk Management principles and analysis as the overriding concern. In this sense, it no longer matters how large or small the fire is, a fire on the landscape that is managed using Risk Management principles and according to Forest Plan objectives, can be analyzed for the fire effects to determine those areas that moved the land towards the Desired Future Conditions and those that did not. For example, on the Bridger–Teton, we would count acres for resource benefit that burned in decadent aspen stands with conifer encroachment that would normally be targeted for prescribed fire treatment for aspen restoration. Counting those acres towards restoration would simply take advantage of this particular ignition to achieve benefits (DFC’s) for that stand. In another stand that is in an Management Area emphasizing timber management, and that stand experiences a damaging fire from a timber production standpoint would not be seen as a Resource Benefit (however it may be seen as a benefit from a wildlife perspective if the MA has that as part of it’s DFC). These fires would have protection requirements (as every fire does) that would take place where risk management is determined to have a high probability of success while protecting human life and values and the resource benefit would be a result of this decision process.

With the Wildfire Response Assessment completed across the Bridger – Teton Forest, combined with moving to a spatial fire plan over the next year, the BTNF has the opportunity to continue to work with fully engaged partners to pursue this concept. Using the knowledge we have gained over the years of prescribed natural fire, wildland fire use and resource benefit fires, the assessments we have completed and the ability to display these threats and opportunities spatially provides a strong base to move onto the next step of not only wildland fire management, but of complete land management.

We would propose that the Bridger-Teton National Forest to start to use these concepts for managing wildland fire. With the long history of resource benefit fires (from PNF’s to WFU to Resource Benefit) a Forest Plan that allows fire across the forest and many areas that have a mixture of management direction from timber production, aspen restoration, wildlife objectives to wilderness, it will provide an excellent chance to bring this type of fire and resource management to the land.

Three examples may help to explain this concept:

* Wilderness Fire (10,000 acres): Fire perimeter is entirely within designated wilderness. Initial analysis and the decision documents that values-at-risk are low both within the wilderness and external to the wilderness. No suppression actions are taken (but the fire does have protection requirements), exposure to firefighters is limited to trail and area closure management and aerial observation. All 10,000 acres can be counted as resource benefit according to Forest Plan direction.
* Boundary Fire (10,000 acres): Fire perimeter crosses several Management Areas. Initial analysis and decision dictates suppression. Fire escapes initial attack and the fire complexity increases. Risk analysis indicates that the upper portions of the fire have heavy snag amounts due to bug kill and the fire has burned into a wilderness area with rocky ground not conducive to safe suppression operations. Post-fire analysis shows the following results according to Forest plan objectives: 2000 acres of aspen regeneration, 1000 acres of under-burning in a timber stand that reduces fuels and thins regeneration, 2000 acres in the wilderness area. These 5000 acres would be counted as resource benefit since they move the area towards DFC’s under the forest plan. 5000 acres would not be considered resource benefit.
* WUI Fire (100 acres): Fire perimeter is within ½ mile of WUI boundary. Initial analysis and decision focus on full suppression due to threats to value-at-risk outside of the fire perimeter. Post-fire analysis shows that the fire effects were acceptable by reducing fuel loadings, thinning regeneration and little to no mortality to overstory trees. All 100 acres could be counted as resource benefit.

Conversely, if the Agency Administrator decides that they do not wish to include any acres on a fire for resource benefit, they have the ability to do so. There is no compelling reason to account for every single acre on every fire if there is no clear resource benefit.

All wildland fires have objectives that need to be met, through Risk Management (suppression objectives and risk objectives) as well as Forest Plan objectives. Land management plans such as the Bridger-Teton have the direction to use fire for resource benefit wherever on the forest we experience fire at the intensity level that produces fire effects beneficial to the resources involved. All fires require some form of management action based on values to be protected. A Risk Analysis which places firefighter and public safety first while incorporating regional and national fire activity and resource availability and has close local interagency support can allow for restoration objectives as identified in land management plans.