A FOREST SUPERVISOR'S PERSPECTIVE ON THE PRESCRIBED NATURAL FIRE PROGRAM

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From a forest supervisor's perspective, I sincerely appreciate the opportunity to share with you the feelings and insights that I have surrounding the prescribed natural fire program. As some of you might know, I've been very close to this program since its inception. In 1972, I made the decision to allow the first Forest Service fire to continue burning under this program. This past summer, sixteen years later, I decided, again, to allow a lightning start to continue burning. This start became the Canyon Creek Fire, which, after having been successfully managed for 65 days, escaped the Bob Marshall Wilderness Area and became a damaging and very controversial wildfire.

In 1974, the Tall Timbers Fire Ecology Conference was held in Missoula, Montana. Back then, the prescribed natural fire program was in its infancy. As I reflected in a paper that I presented at that conference, the new program was subject to the kinds of challenges that a change in direction often illicites (Daniels 1976). Up until 1972, we in the Forest Service routinely suppressed all fires, including those in wilderness areas. When I approved the Fritz Creek fire as prescribed that July day in 1972, we embarked on a new, and—I would come to find out—sometimes difficult path.

The departure from a suppression policy predicated on fire's destructive effects to a more balanced management policy that recognized some of fire's beneficial effects was challenged with many obstacles in the early 70s. It represented a big step from a land management agency largely known and appreciated for efficient and, sometimes, heroic suppression actions. Although external acceptance of the new fire management program was a big step forward, perhaps the internal acceptance of that change in thinking was an even bigger step.

My paper to the 1974 Tall Timbers Fire Ecology Conference addressed the commitment a fire management program in wilderness requires. In that presentation I said,

The manager who embarks on fire management must recognize that he is challenging tradition. He is advocating change. As a result, there will be many barriers to overcome, some predictable and some totally unexpected. (Daniels 1976)

Many of the obstacles that we confronted in 1972 and I talked about in 1974 still persist. The 1988 season has had and continues to have a profound impact on the prescribed natural fire program. The aftermath of prescribed fires that became wildfires and burned people's buildings, killed their cattle, and so severely impacted their lives is not likely to quickly subside. The Canyon Creek Fire made many people damned angry—at me, at the agency I repre-
sent and at the policy I believe in. I’m afraid that it also resulted in a serious challenge to our credibility.

I’d like to take a few minutes and describe the management activities that surrounded the Canyon Creek Fire and talk about the decisions that directed those activities. I’d also like to share with you some of my perspectives and feelings that developed from this fire and identify some of the obstacles that I believe we have yet to overcome.

The Canyon Creek Fire started from lightning on June 25, 1988. Under prescription criteria outlined in the Scapegoat-Danaher Fire Management Plan, and following discussion with my fire management staff and other key individuals, I approved this start as a prescribed natural fire. The on-site conditions, the fire behavior projections, and the long-term weather forecasts were all favorable. Three Type-I fire behavior analysts participated in developing the recommendation for this decision. As I said in 1974, there's too much at risk to accept anything less than thorough plans and complete staff work.

I've never taken this kind of decision casually. In point of fact, the same day I approved the Canyon Creek Fire, I called for suppression action on another wilderness fire only 1.5 miles away. I believed that fire could have presented us with serious control problems later in the summer.

Unlike fires occurring elsewhere, the Canyon Creek Fire did not exhibit any early high-intensity behavior. As a matter of fact, it remained essentially dormant at less than one acre for 26 days. Then, on July 25, it began a series of runs that, over the course of three days, took its perimeter to around 10,000 acres. Within this area perhaps 3,000 acres had burned, creating a broken mosaic. As it would for most of its life, this fire settled into a pattern of burning aggressively for two or three days then lying stationary for a week or so. In the 78 days it burned, there were only 10 days where fire growth was 10% or more above the previous day's size.

I believe this pattern of extensive, high-intensity fire followed by periods of innocuous fire behavior is typical of the stand replacement burns that characterize much of the Bob Marshall Wilderness Complex. Moderate intensity fires are not associated with the cool, moist habitat types that dominate nearly all of this area. Although these fires can burn violently, they have historically been short-lived and end abruptly when August rains normally materialize.

After the first run, we recognized that we were dealing with a fire that might require actions not normally needed. With the exception of the Charlotte Peak Fire that occurred on the Flathead National Forest in 1985, prescribed natural fires in the Bob Marshall Complex have gone largely unnoticed by outfitters and other wilderness users.

The need to provide for public safety prompted my decision to close our administrative portion of the Scapegoat on July 23 and begin an involve and inform program designed to keep visitors and adjacent communities abreast of the fire's activity. We provided media flights to local television stations and the Missoula newspaper. Bulletin boards with map displays and perti-
nent information were provided to local communities surrounding the Scapegoat Wilderness Area.

A decision was also made early on to broaden involvement with neighboring forests. The fire was visited by fire managers and line officers from nearby districts and adjacent forests. Their opinions and observations were solicited and became important considerations in the management of this fire. An impact analysis team, formed on July 11, would meet nine times throughout this fire's life and grew to include neighboring administrative units. The impact analysis team was formed under provisions of the Scapegoat-Danaher Plan to make recommendations in the long-term and day-to-day management of the fire. This team developed contingency actions, coordinated media coverage, and directed an education effort designed to inform forest visitors and neighboring communities on the ecological role of fire. The impact analysis team also evaluated public safety as fire activity heightened and coordinated trail closures between the four affected national forests. Documentation of recommendations, decisions, and actions became another important function that I asked of the team.

Tactical teams were formed when it appeared that contingency actions would become necessary to maintain the fire in prescription status and keep it within the fire management area boundary. Helicopter bucket drops were made on the weekend of August 6 to take advantage of a break in weather and, within the next few days, tactical teams were formed to begin line construction and burnout work on interior portions of the fire management area.

As wildfire activity intensified throughout the northern Rocky Mountains, the availability of resources started to become a critical factor. Prescribed fires burning in wilderness areas with low resource values, had to compete with wildfires threatening private property and other high value resources. In an attempt to mitigate this scarcity of personnel and equipment, the forests managing Canyon Creek began to commit more and more of their initial attack resources. This created another problem for us that centered on our ability to keep new fires small. Two hundred twenty-seven wildfires occurred on the Lolo National Forest alone, during the life of the Canyon Creek Fire. While in prescription status, four of these fires developed into large, serious incidents. The movement of suppression resources became an important job that demanded firm management.

By late August, we were experiencing intense fire activity— the worst I had ever seen. Here, I recognized the need to negotiate for additional resources. It was clear that we could not simultaneously suppress all new starts and, at the same time, manage the Canyon Creek Fire without regional and national support. I asked one of the national teams working a fire for us to notify me when it looked like suppression resources might no longer be needed on that incident. When that occurred, I directed the reassignment of a Type-I hot shot crew to the Canyon Creek Fire for contingency work. Although this action helped us balance needs across the forest, it circumvented the normal dispatch system and raised some concern among the suppression community.
Very early in the life of the Canyon Creek Fire, I identified our point of failure—the point at which we could no longer maintain this fire in prescription status and where we would be forced to declare it a wildfire. Two factors became important considerations: 1) our ability to keep this fire within the fire management area boundary, and 2) our ability to manage it within the $45,000 funding limit that finances the prescribed natural fire program in Region One. Based on this fire's location and, again, anticipating August rain, maintaining this fire within the boundary did not appear difficult to accomplish. Funding, however, was another matter. Several times over the course of the summer, the three managing forests met with the regional forester and his staff to secure additional funding for maintaining prescription status. There was a good deal of enthusiasm and commitment for the prescribed natural fire program and here was an opportunity to capitalize on a fire that was meeting all of our expectations.

In hindsight, we may have been too conservative with some of our suppression or tending actions. Our people recognized that funding limitations were an important consideration and tried to be especially prudent with their spending. Perhaps there were times when we saved money, but in the end we were compelled to spend much more. I can't fault our people as I was clear in our direction to avoid over-spending.

A disappointing feature of the prescribed natural fire program, in comparison to the wildfire program, is the problem that funding limitations often pose. While we often operate well beyond the point of diminishing returns in the wildfire arena, especially on large, politically sensitive fires, we are often underfunded in the management of prescribed natural fires. In balancing a fire management program nationwide, we're going to have to come to grips with this inequity. As the Canyon Creek Fire demonstrated, extraordinarily large suppression dollars can be spent when contingency actions are at risk because of limited funds or limited resources while a fire is in prescribed status. The Canyon Creek Fire was managed in prescription for about $150,000 over the course of 65 days. After being declared a wildfire, the two-week suppression bill approached eight million dollars.

People look to a leader for direction. It doesn't matter if the leader is an incident commander or an engine foreman or a forest supervisor. As a forest supervisor, my role is to be clear in defining expectations and accept nothing less than thorough staff work. I've said many times that I believe the Canyon Creek Fire was an example of a good decision gone bad. Given the information that we had at hand and knowing how thoroughly the recommendation was staffed out, I feel confident that a good decision was made to allow Canyon to continue burning.

A leader, though, does more than outline what's expected and deliver direction. Once the decision was made to place the Canyon Creek Fire in prescribed status, I found my role changing. In 1974, I talked about how this program takes commitment. Following 65 days of watching this fire run, then lay quiet,
then run, again—and watching my people witness the same thing—I can tell you that this program also takes endurance. The times when places like the Bob Marshall Wilderness Complex are subject to burning are times when every place is burning fiercely. Remember Canyon Creek’s activity in the context of an extremely active fire season throughout the interior West. People were tired.

The success of a prescribed natural fire is dependent on the management of people and, of course, the effects of weather. One we influence and one we don’t. In managing people, it’s important that we maintain a sense of purpose and calm, a sense that this fire is in hand and that we know what we need to do and we’re able to do it. At times, I saw myself as a coach giving encouragement or correcting a problem. The point is that you need to stay involved and focused, and be prepared to expend a lot of energy.

Although it’s something of a contradiction in terms, land management agencies are charged with the management of natural systems. By definition, that brings with it an element of uncertainty and risk that may, at times, exceed our ability to always control or effectively manage. Weather has a tremendous influence on the movement and intensity of fire, but it’s an element of the environment that we are unable to change or, at times, even predict. There’s no question that had we known what “worst case” actually looked like, we would have made a far different decision back in June, when this fire started. Late during the life of this fire, we perhaps should have brought state and county government into the decision-making process. Again, though, we simply did not anticipate such rapid, severe expansion of the fire’s perimeter. The worst case perimeter was beyond our ability to imagine it. Despite the fact that Canyon was managed successfully for 65 days, once it escaped the wilderness boundary we became the target of much criticism. We had failed. It was time to fight fire. A few days later the criticism intensified. In a sixteen-hour period, between the sixth and seventh of September, this fire expanded from 68,000 acres to nearly a quarter-of-a-million acres. Satellite imagery indicates that this violent growth was the result of a surfacing, low-level jet stream—something no one could have predicted. Before the smoke had cleared, we were charged with poor management and bad decisions and, in one case, with not knowing our own environment.

I know better.

I know that, although we must manage carefully and with conscience, we need fire to maintain healthy forests and shape wilderness ecosystems. In the West, where we coexist with fire-dependent ecosystems, it’s ironic that fire’s role is often so poorly understood. Man has inextricably placed himself into settings that he sometimes depends on and nearly always enjoys. These forested settings, though, are wild and often beyond our immediate and sure control. We all recognize the need to protect man’s values, but that’s sometimes a difficult charge. In many areas of the northern Rocky Mountains, the fire cycle is come due. An extended period of fire exclusion has resulted in vegetation that is older now that it’s ever been and fire’s recurring presence is inevitable.
Our vulnerability is only growing in these areas where the values of man establish a management direction that may be in conflict with the dynamics of our forest environment.

In *The Big Sky*, Montana's favorite novelist A. B. Guthrie, Jr. (1947), wrote,

The feel of the country... the great emptiness and age of it... the feel of western mountains and plains wide as forever and the blue sky flung across. What did it care about man or his hankerings or what happened to him.

We need to remain sensitive to the values of man, but we need, also, to be willing to assume short-term risks for long-term ecosystem stability. In 1974, I talked about commitment and today I've talked about it once more. Perhaps now more than ever, the prescribed natural fire program requires commitment. The political and social pressure to abandon this program will be intense. I believe, however, it will come in an inconspicuous form—a subtle reluctance to commit, rather than a more adamant, more visible, more vocal opposition that can be more rationally confronted.

Since 1972, and including 1988, we've placed some 378 lightning starts into prescription status in the wilderness areas of Montana and Idaho. Of this total, only nine of these have changed from fires that were beneficial to fires that were destructive. Of these nine declared wildfires, only two ever escaped their wilderness boundary. Although terrible losses accompanied the 1988 fire season, we need to keep the extreme nature that characterized this past summer in perspective.

As land managers responsible for making the go/no-go decision, many of us have viewed lightning starts in wilderness not as a likely or certain threat to present generations, but as an opportunity to provide for values given future generations. Following what many of us witnessed last summer, it will take commitment and a strength of conviction to continue that view.

**LITERATURE CITED**
