

Chapter 7:

Yellowstone and the Politics of Disaster

During the decade following the large, high-intensity Yellowstone fires of 1988, the National Park Service had to reinvent its approaches to fire and fire management. From the authorization of NPS-18 in the late 1970s, the NPS had faced fire as an operational assignment. Its responses reflected a powerful sense that the NPS could deploy resources in such a way as to make fire conform to management objectives. Professional fire planners and managers believed that by adhering to scientific principles derived from research, they could create a system that controlled fire and even turned it to the Service's advantage. The belief was reasonable, but it failed to take into account the unusual instance – the once-in-a-generation event that could not be planned for. The Yellowstone fires were that event: a giant fire in a place so important to Americans that it shattered the fire management program as it had been conceived, illustrating not only the boundaries inherent in the implementation of policy, but the fundamental impossibility that existing strategies could meet the challenge presented by large-scale, out-of-control fires.

In essence, major fires such as the ones that occurred at Yellowstone in 1988 transformed fire policy from a science-based response to a political issue. As long as fire remained a threat but did not present an immediate and insurmountable danger, scientists and park managers controlled the terms of debate. They could frame the underlying science in practical and abstract forms to buttress their arguments for policy implementation. Against such a carefully reasoned, science-based strategy, those who opposed NPS fire policy sounded shrill, unreasonable and self-interested. Under such circumstances, professionals had the upper hand, supported by the growing body of research that seemed to illustrate the value of fire management.

But the convergence of events in 1988 challenged the entire fire management model of the National Park Service as well as its administration of the parks themselves. In the summer of 1988, 1,427,902 acres in the Greater Yellowstone area burned during almost four months of fire. That total included 793,880 acres in Yellowstone itself, almost one-third of the park. When a November snowfall finally put an end to the blazes, the nation's first park, symbol for many of the country's relationship to nature and its wisdom in preserving even a small part of it, had burned uncontrollably. In that fire, the National Park Service found its image singed, its mantle as the most beloved federal agency seriously tarnished by the public's sense of betrayal over a circumstance beyond the Service's control. The mission of the National Park Service was to protect nature; the "devastation" that the public saw on television seemed to belie their trust.

There was nothing new about political grandstanding associated with the national parks, but the swirls around Yellowstone reached new heights. The symbolic power – the world's first national park in flames as seemingly ineffective firefighters and administrators responded with little success – provided powerful ammunition for outright assaults on the NPS and its programs. The fires and the inability to restrain them in any

meaningful way made the public question NPS fire management policy as it never had before. The resulting transition from science to politics was costly for the park system and for its managing agency.

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During the summer of 1988, the event that the National Park Service long dreaded finally occurred. Following a difficult trio of fire years nationally, Yellowstone National Park, the pivotal symbol of the idea of national parks in the United States, burned out of control. That summer served as the NPS equivalent of the fires of 1910 for the Forest Service – the exception that proved the rule and that altered all that followed. The events at Yellowstone and the responses to them disrupted every institution in the Service, and indeed, in the federal government that dealt with fire, challenged existing knowledge and all the new ideas put in place since 1968, and threw fire management as a concept and a practice into unprecedented disarray. If the National Park Service earned its stature in fire management in the California parks, it found the limits of its knowledge, experience, and resource base at Yellowstone.

The NPS long had been the most beloved federal agency, providing park visitors with their most positive encounters with the face of national authority.¹ Fire management in general had caused some friction with the public, leading to diminishing loyalty to the Service in some quarters, but the public still generally beamed when it looked at the national parks, and it retained real fondness for the people who protected these treasures. The Yellowstone fires accelerated existing tensions and added new dimensions that led to outright condemnation of the NPS, its policies, and even individuals in the Service by the media and the public.

The summer of 1988 was the driest on record at Yellowstone National Park. Although the spring had been wet, with 155 percent of normal rainfall in April and 181 percent of normal amounts recorded in May, very little precipitation fell in the park during June, July, or August. Early in the summer, when Yellowstone was still wet, park staff elected to let about twenty lightning fires burn in accordance with policy. Each fire was evaluated on its own merits, the decision to monitor or suppress dependent on conditions.² As always, the fire situation demanded close scrutiny. As the summer progressed, conditions for fire to start and spread became common, and the National Park Service and every other land management agency in the region – at federal, state, or local levels – was prepared for the eventuality. NPS officials at the park and the regional office carefully monitored Yellowstone's situation, making decisions based on constantly changing circumstances.

In early June, the situation became threatening, but the risk appeared to fall within acceptable parameters. Fire managers had no reason to believe that any fires that occurred during the summer could not be controlled. Even though the region quickly dried out and rainfall appeared unlikely in the short term, the overall year had been wet to date and the

¹ Ronald A. Foresta, *America's National Parks and Their Keepers* (Washington, D.C.: Resources for the Future, 1984), 1-6.

² No author, "The Yellowstone Fires: A Primer on the 1988 Fire Season, October 1, 1988," Yellowstone Y-198, 6-7; Jim Carrier, *Season of Fire* (Salt Lake City: Gibbs Smith, 1989), 16; Rocky Barker, *Scorched Earth: How Fires in Yellowstone Changed America* (Washington, DC: Island Press, 2005), 185-87; David Carle, *Burning Questions: America's Fight with Nature's Fire* (Westport, CT: Praeger Press, 2001), 192; Douglas Gantenbein, *A Season of Fire: Four Months on the Firelines of the American West* (New York: Jeremy P. Tarcher/Penguin, 2003), 128-30.

weather pattern of recent years suggested that summer rainfall soon would follow. Fire managers had overcome very difficult summers in each of the three previous years, handling record levels of fire on federal lands in each successive summer. Confidence ran high among fire managers throughout the federal land management system; prescribed natural burning and prescribed burning had lowered fuel loads where implementation had taken place, and plans for more comprehensive introduction of fire permeated the National Park System. Interagency cooperation modeled on Alaska had taken root at the BIFC in Idaho, and programs such as FIREPRO in the NPS and equivalent programs in other agencies inspired a level of confidence in planning and deployment of fire resources that had not been possible a decade before. Yellowstone Superintendent Robert Barbee, who had come to the park in 1983 at the request of Director Russell Dickenson, was an old fire hand, with experience that dated back to the introduction of prescribed fire in the park system in 1968.³ Fire was always a tough opponent, but in 1988, most federal land managers believed that the tools they had to manage and combat it were equal to the task.

The Yellowstone region began to burn on June 14, when lightning started a fire in the Custer National Forest, north of Cooke City, Montana, the entrance in the northeastern corner of Yellowstone National Park. Called the Storm Creek fire, it began in Absaroka-Beartooth Wilderness and eventually spread over 95,000 acres. New fires continued to start, most induced by lightning. On June 23, lightning struck near Shoshone Lake, a remote area about ten miles from Grant Village. The initial blaze was small, about seventy acres. On June 25, another fire began in the northwestern corner of the park about thirty-one miles west of the north entrance. On July 1, yet another fire ignited east of Yellowstone's southern entrance. The fires multiplied, with new ones ignited on July 5 and July 9.⁴ A management nightmare for the National Park Service had begun. Natural fires proliferated, and the NPS had to make quick decisions.

The Service initially remained committed to its complicated mix of allowing some fires to burn, suppressing others, and in some cases, initiating prescribed burns in well-defined areas for management purposes. The more sophisticated programs that began in the 1980s had not yet been developed for the park and Yellowstone's fire plans remained rooted in the philosophical statements of the early 1970s. The park had begun to contemplate revisions, but had not progressed to the point of public review. In the spring of 1988, a plan that had been drafted three years before had not yet been sent through the approval process. It offered four objectives for fire management. It would permit as many lightning-started fires as possible to burn; protect human life and property, natural features, endangered species, and historic and cultural sites from damage or destruction; suppress wildfire in a safe and cost-effective fashion; and utilize prescribed burning to reduce fuel loads. Between 1972 and 1986, fires had burned across 34,175 acres in Yellowstone under the prescriptions that allowed natural fire. The largest single burn was about 7,400 acres. The largest natural burn in the park's history, at Heart Lake in 1931, had been only 18,000 acres. Given the scope and scale of NPS experience,

³ Robert Barbee, interview by Hal Rothman, Part I, November 12, 2004.

⁴ Ross W. Simpson, *The Fires of 1988: Yellowstone Park and Montana in Flames* (Helena, MT: American Geographic Publishing, 1989), 20-22; Carrier, *Season of Fire*, 11-17; Barker, *Scorched Earth*, 187-91.

the Service's actions when the fires started followed policy and reflected the predispositions of NPS experience with fire.⁵

Park managers viewed early fires in 1988 through the lens of recent experience. In the 1980s, Yellowstone experienced a series of abnormally wet summers. Only once between 1977 and 1987 did the park fail to achieve average July rainfall. In four of the five years beginning in 1983, the park experienced more than twice the average monthly rainfall for July. In 1987, the most anomalous year, Yellowstone received three times the annual average in July. With six consecutive years of above average rainfall in July, park managers and fire behavior specialists decided to continue established practice with what they defined as a natural prescribed fire, and simply monitor the lightning fires.⁶

But 1988 did not conform to recent history and eventually the shortfall of rain in June and July led to dangerous conditions. During June, the park recorded only 20 percent of the average rainfall for the month; July reached 79 percent of the monthly average. Moisture content in Yellowstone fell precipitously. By the end of July, fuel moisture levels in plants and tree branches were at astonishing lows. In grasses and small branches, moisture levels had dropped to as low as 2-3 percent, well beneath the 15 percent that signaled danger. Dead trees were measured at 7 percent moisture. NPS records showed that when timber was between 8-12 percent moisture, lightning served as an effective ignition for fires that burned freely. Even worse, unusually high winds associated with the dry fronts passing through the region spread any flames widely, much more than would have occurred as a result of the dryness alone.⁷

The result was a rapid change in policy that elevated suppression to the primary response in Yellowstone. On July 15, the park no longer allowed new natural fires to burn. When the decision was made, fires inside the park topped 8,600 acres. By July 21, fires covered 17,000 acres, prompting an even more aggressive response. As of that date, every fire in the park was to be fought, making suppression the singular objective of NPS policy at Yellowstone. An extensive interagency fire response effort began in mid-July. Experienced firefighters found that the combination of extreme weather and dense and dry fuel load posed conditions rarely encountered. Conventional firefighting techniques such as burning to create fuel breaks and backfiring proved ineffective. New fires started when winds blew embers from the tops of enormously high trees far ahead of the main fire – and almost always beyond a fuel break or a backfire – thwarting most efforts to contain the fires. Called spotting, this phenomenon made ineffectual even the widest of bulldozer lines. Fires started by spotting crossed the Grand Canyon of the Yellowstone River and routinely jumped roads and streams. As a result, the speed with which the fires moved was stunning. In many instances fires traveled between five and ten miles per day, with instances of a two-mile jump in one hour not uncommon. The tremendous heat generated by the huge fires contributed to their spread, for it let the fires consume even the heaviest of fuels that would not have been likely to burn in a more normal fire season. Everything about the Yellowstone fires seemed designed to demonstrate that fire could exceed human control.⁸

⁵ No author, "The Yellowstone Fires," 4-5; Robert Barbee interview, Part I, November 12, 2004; Stephen J. Pyne to Hal K. Rothman, August 8, 2004.

⁶ No author, "The Yellowstone Fires," 6-7; Robert Barbee interview, Part I, November 12, 2004.

⁷ *Ibid.*, 6; Simpson, *The Fires of 1988*, 21-23; Robert Barbee interview, Part I, November 12, 2004.

⁸ No author, "The Yellowstone Fires," 7-8.

Secretary of the Interior Donald Hodel toured the area on July 27, confirming suppression as the Service's primary objective in battling Yellowstone's fires and reminding everyone that the natural fire program had been suspended. The public and congressional representatives expected to see the results of suppression, to see fires extinguished, and to watch as the dramatic fires of 1988 came to an end. Such a result was simply beyond human capability. Firefighters could not attack the fires from the front, as spotting and the high winds made the risk too great to bear. Crews could be overrun or trapped between the spot fires out front and the main fire behind. As a result, firefighting took place from the flanks except when lives or property were in the direct path of an oncoming fire.⁹

Experienced firefighters were shocked at the fires' power and at the ineffectiveness of all responses. Even those with as many as twenty years in fire response had never seen anything like Yellowstone in 1988. Most agreed that the only solution to fires of this magnitude was help from the weather. Rain or snow could alleviate the condition, but no technology, strategy, or amount of labor could overcome the flames. "We threw everything at that fire from Day One," observed Denny Bungarz, a USFS incident commander from the Mendocino National Forest in California who served on the robust North Fork Fire. "We tried everything we knew of or could think of, and that fire kicked our ass from one end of the park to the other." Bungarz's sentiments reflected not only the magnitude of the problem, but the way in which this fire shattered expectations about fire management.

Throughout the grueling months of the fire, the commitment of fire crews and their professionalism exceeded even the highest expectations. Because of the pressure and danger in the work, crews turned over with great frequency. Superintendent Robert Barbee met with a "constant parade of fire commanders," and as he became comfortable with them, "they served their time, they cycled out, a new team came in, and you had to get used to them," he recalled. Barbee recalled the turnovers as a disruption to Yellowstone's ability to respond.¹⁰

"You got somebody, there was a guy named Dave Poncin who was an incident commander Type I, who was just beyond outstanding. So was his whole team," Barbee remembered. "When you lose somebody like that, you really feel the loss." Barbee felt the same toward Richard T. (Rick) Gale, who served as the unified area commander later in the fire. "He was a star in my opinion," Barbee recalled. "There is a guy who is smart, whose synapses fired cleanly, no carbon buildup. He did a wonderful job." The turnovers led to changes at about the time the working relationships coalesced. "Then you get a complete change and it is disruptive," Barbee insisted. "No question in my mind. Now, I don't know what you do about it, because you can't have those guys in harm's way all the time. They get [too] tired."¹¹ With mandated turnover in personnel, continuity was hard to achieve.

New fires continued to start across Yellowstone, with existing, separate fires joining together to create even more dangerous, powerful, and threatening conglomerates. By August 2, the Clover-Mist fire topped 73,754 acres as it spread into the heavily

⁹ Ibid., 8; Barker, *Scorched Earth*, 194-202; Simpson, *The Fires of 1988*, 22-24

¹⁰ No author, "The Yellowstone Fires, 8; Robert Barbee, interview by Hal K. Rothman, Part III, November 14, 2004; Carrier, *Summer of Fire*, 38.

¹¹ Robert Barbee interview, Part III, November 14, 2004.

timbered Shoshone National Forest. On August 10, the more than 20,000-acre Red Fire joined with the 25,200-acre Shoshone Fire. Burning in the southern end of the park, the Red Shoshone Fire grew rapidly, burning across another 10,000 acres over the next five days. Other fires continued to spread, with the Clover-Mist fire reaching 95,000 acres on August 14 and the North Fork Fire at 52,960 on the same day. August 20, called “Black Saturday,” set new records, with fires burning over 165,000 acres of timber, the highest daily total ever recorded at Yellowstone. “Giant mushroom clouds rose into the atmosphere,” observed reporter Rocky Barker, “making it seem like the park was under nuclear attack.” Silver Gate and Cooke City, two of the northeastern gateway communities to Yellowstone soon were in danger. The fire exploded in response to dry cold weather fronts that produced winds as high as sixty miles per hour. A backburn reduced fuel loads enough to keep the fire from the two towns, but the situation was serious enough that someone added a letter to the Cooke City sign and made the town “Cooked City.”¹² It was a fitting modification, given the difficulty of containing the blaze. Still, saving the two towns affirmed the confidence that had been the hallmark of interagency fire management.

The national policy response to the fires was rapid but symbolic. On August 23, 1988, in the midst of the Yellowstone fires, NPS Director William Penn Mott declared a freeze on all prescribed burns in the national park system.¹³ Mott’s decision was a throwback to an earlier era. The suppression order introduced at Yellowstone a month before became a system-wide standard for the first time in twenty years. While such a decision revealed elements of clear and precise after-the-fact decision-making, it also demonstrated a heightened sensitivity to public criticism of the Service and its practices. Even while firefighting efforts continued, the NPS had returned to trying to prove its worth as a scientific manager and as a steward of the public resources.

On September 7, high winds brought the North Fork Fire blaze to the Old Faithful complex, the first time fire had threatened the area in the 116-year history of the park. An aerial suppression assault attempted to slow the fire’s progress, but those efforts failed. Early in the morning, the National Park Service evacuated the complex. Between 500 and 600 people left by the 10 a.m. deadline, although visitors traveling by car still were allowed to visit the geyser as late as mid-afternoon, some arriving just minutes before the firestorm struck. The fire eventually encircled the Old Faithful area, and firefighters successfully battled to save the Old Faithful Inn as well as the electrical substation nearby. The fire burned so hot that it melted the rubber off the wheels of cars and a truck, shattered vehicle windshields, and scorched their paint. As many as nineteen buildings in the area burned to the ground, and the old dormitory building suffered damage. No one was hurt in defense of Old Faithful, although two deaths were associated with the North Fork Fire in the Greater Yellowstone Area.

The North Fork Fire was the classic fire that the National Park Service had always combated: a human-caused fire that resulted from the carelessness of individuals who used the woods for their own purposes. It began on July 22 in the Targhee National

¹² Simpson, *The Fires of 1988*, 20-21, 25-37; Carrier, *Season of Fire*, 54-68; Barker, *Scorched Earth*, 187-91; Carle, *Burning Questions*, 191-95.

¹³ Acting Director to Directorate, Field Directorate, WASO Division Chiefs, and Park Superintendents, Subject: Fire Management Policy Review Team, July 12, 1989, Yellowstone Y-198 “Coordination and Management Review: 1988 Fires,” Yellowstone National Park Archives.

Forest, managed by the USFS, the result of a cigarette dropped into dry leaves by one of four woodcutters who were taking a smoke break.¹⁴ The NPS and other agencies acted quickly to suppress the fire. But while the fire was typical of those the NPS and other federal agencies had aggressively battled over the years, the conditions under which it occurred were rare. Weather conditions, including high winds and a lack of precipitation, made the situation volatile. It was an ordinary event made extraordinary by its circumstances. The media could never quite grasp that critical piece of information.¹⁵ In the end, the North Fork Fire burned across more than 56,000 acres on September 7.¹⁶

The threat to Old Faithful Geyser highlighted a major public relations issue for the NPS. As the fire swept toward this potent symbol, it accentuated the inaccurate perception that the Service was ill-prepared to protect its resources. In turn, this contributed to further erosion of any sense that the NPS was special, an entity worthy of the public's affection. Even worse was the inaccurate presumption that the National Park Service stood by and intentionally permitted this beloved park to burn. Nothing could have been further from the truth.

Yet the park and its staff were rightly frightened by the spread of the fire and its spiral out of control. Chief Ranger Dan Sholly recalled that "not so many weeks ago, I thought the 4,700-acre fire sweeping toward the Calfee Creek cabin was a major blaze. What was it now? I looked at the fire summaries. It was the first one listed: Clover-Mist fire – 238,000 acres." Fire again proved more powerful than even the most professional planning and modeling, destroying all the assumptions specialists had made about its behavior. Park Ecologist Don Despain had played an instrumental role in designing Yellowstone's natural fire policy and earlier in the summer had predicted that the fires would grow no larger than 40,000 acres. As they approached 1 million acres, he evacuated his family from the park. Despain's research had been the standard on which most modeling had been based, and following his data, leading fire behaviorists predicted that any fire in Yellowstone would consume available fuel or be doused by rain before August ended.¹⁷ Once again, fire proved that its behavior defied prediction.

The Yellowstone fires were the worst in a year that saw brutal fires throughout the West and Alaska. More than 72,000 fires were reported on federal lands in twenty-two states – 299 of these were classified as major. This designation meant that more than 300 acres burned or Class I or Class II teams were dispatched. Ultimately, fire burned across more than 4.3 million acres, enhancing the sense of apocalypse that was widespread in summer and fall of 1988. NIFC dispatched more than 41,000 fire personnel, including 4,000 temporary firefighters, in response. Between the middle of July and late September, 35,000 people actively fought fires. Almost 6,000 soldiers were deployed. The bills for fighting these fires were staggering. The USFS spent \$384.3 million, while the Department of the Interior reported adding \$200 million to the total. The final count

¹⁴ Simpson, *The Fires of '88*, 24; Carle, *Burning Questions*, 191; Gantenbein, *A Season of Fire*, 129-30.

¹⁵ "Yellowstone in the News: What Went Wrong in the Fires of 1988?" *Yellowstone Science* 2 2 (Winter 1994), 9.

¹⁶ *Ibid.*, 8-9; National Park Service, "The Yellowstone Fires," 6-7; Barker, *Scorched Earth*, 2-8.

¹⁷ Dan R. Sholly with Steve M. Newman, *Guardians of Yellowstone: An Intimate Look at the Challenges of Protecting America's Foremost Wilderness Park* (New York: William Morrow and Company, 1991), 221-22; Barker, *Scorched Earth*, 203-10; Carrier, *Summer of Fire*, 42.

showed the federal government expended more than \$600 million fighting fires throughout the region in 1988.¹⁸

An assessment of the impact of the Yellowstone fires revealed stunning consequences for the park and its environs. Fires raged across more than 1.4 million acres in the Greater Yellowstone Area; funds in excess of \$120 million were spent on firefighting and management. Almost one-third of the burned acreage, 566,608 acres, was inside the Targhee, Custer, Gallatin, Bridger-Teton, and Shoshone national forests surrounding the park. The rest, slightly less than 1 million acres, was inside Yellowstone.¹⁹ This total, nearly 36 percent of the park's 2.2 million acres, represented the most visible evidence of the fire's power and the fundamental ineffectiveness of all human countermeasures.

The outcry about the NPS response started in August, well before the worst of the fires. The media became a constant presence at Yellowstone. "It was an incredible episode," Superintendent Robert Barbee remembered. "I kept waiting for Quadafi or somebody to do something outrageous, because we were the only game in town all summer long." The national spotlight focused on Yellowstone never wavered. "We had unbelievable media focus," Barbee recalled. "We were not really prepared for that kind of media triage," Barbee said in a candid assessment. "I got to the point where I was having press conferences with a whole room of media. Our Washington office was not all that equipped to deal with it. I don't think anybody is really. The media piece was no small part of the whole thing." Media coverage of the event was "superficial and stereotypical," observed Ohio State University Journalism Professor Conrad Smith, who studied the press response to the fire. He believed that urban reporters brought a set of preconceptions derived from city structure fires that colored their perception of the Yellowstone fires. The media's cameras shaped the view of the experiences of the Yellowstone fires, contributing to their political consequences.²⁰

Attempts to manage the fire took place in full view of the public. Barbee found himself at the center of a maelstrom. "I personally became a lightning rod," he grimaced. "By August it was beginning 'to take a bit of a toll on me,'" he recalled. His superiors "kept saying 'well gee, maybe we ought to let someone else come in, and let you take a breather'. And I said no. I argued strongly against that; it would have caused all sorts of problems." Barbee had become what he described as the agent provocateur, the focal point of animosity about the fires. "The worst thing that could have happened would have been for me to step back, and them to bring somebody else in, some other senior person to take over," he insisted. "It would have sent all kinds of bad signals." Abdication or removal both conveyed a sense that the park was admitting that it had done something wrong. As Barbee noted, it also placed some other unfortunate, less completely identified with the park, at the epicenter of an enormous maelstrom. Barbee believed strongly that as superintendent, he should weather the storm of anger and questioning that accompanied the fire.²¹

¹⁸ Facts Summary of 1988, October 14, 1988, Yellowstone National Park archives, K-112.

¹⁹ Ibid.

²⁰ Robert Barbee interview, Part III, November 14, 2004; Conrad Smith, *Media and Apocalypse: News Coverage of the Yellowstone Forest Fires, the Exxon Valdez Oil Spill, and the Loma Prieta Earthquake* (Westport, CT: Greenwood Publishing Company, 1992), 37-76; John Dodge, "Does National Media Coverage Represent the West Accurately?" *The Olympian*, December 15, 2002.

²¹ Ibid.

National Park Service Director William Penn Mott sought to help Barbee by explaining the NPS position and its mission. Almost three weeks after the NPS declared that it would suppress all fires in Yellowstone, Mott informed Senator Malcolm Wallop, R-Wyoming, of the Service's fire planning objectives. "The flexibility to suppress naturally ignited fires when conditions become extreme, or facilities and adjacent land are threatened is unequivocally part of our policy," Mott assured Wallop. He attributed the difficult fire situation at the time to a combination of high fuel loads and dry weather. "I am pleased to report that with the help of some 2,000-plus fire fighters and professional staff, all Yellowstone area fires are under control," Mott trumpeted a little prematurely on August 11. "Unless extreme weather, such as continuous high winds, occurs, we expect them to remain so."²²

This letter was identical to ones sent to the governors, U.S. senators, and congressional representatives from Wyoming, Montana, and Idaho. All three states relied on tourism and the dollars generated by Yellowstone National Park, giving each a particular vision of the NPS fire response. While Mott attempted to persuade each that there was "a positive and pragmatic side of the fires we see today," his argument fell on unsympathetic ears. No matter how he couched the fires – as a "rebirth" or a "renewal of the park ecosystems" – leaders of states that depended on visitors did not accept the Service's argument.²³ In their view, the fires were a short-term economic and ecological disaster. Their budgets depended on potential visitors, but they were watching Yellowstone burning every night on the evening news. Most tourists decided to travel somewhere else that summer, costing every state around Yellowstone enormous revenue. State leaders – and many others in the West and in the nation – sought to affix blame for what political leaders from surrounding states framed as a disastrous situation.

By early September, the cries against what was perceived as a defective NPS policy reached a crescendo. Even though the Service had reverted to suppression in mid-July, a collection of western congressmen and senators, mainly Republicans, approached President Ronald Reagan in protest. "We strongly feel the National Park Service policy of 'let it burn' is wrong, especially with the drought and weather conditions in the west," stated a petition by Representative Ron Marlenee of Montana that also was signed by Don Young of Alaska, Jim Hansen of Utah, Larry E. Craig of Idaho, Bob Dornan of California, and by Representative Byron L. Dorgan of North Dakota, the lone Democrat to sign. "Ask anyone from the area and they will tell you that this is the wrong time and the wrong year to let a fire burn. The National Park Service did not heed these signs or the advice from many sources of the gravity of this year's fire conditions," the petition charged. The representatives demanded a change in what they inaccurately perceived to be the NPS policy of allowing fires to burn.²⁴

This accusatory stance was consistent with the negative feelings such representatives held toward the NPS. Most were "Sagebrush Rebels" from the decade before, vocal proponents for the transfer of federal land to the states. Many had bought into the larger vision of the "Wise Use Movement," an appropriation of Gifford Pinchot's

²² William Penn Mott, Jr., to Sen. Malcolm Wallop, August 11, 1988, Yellowstone National Park, K-1112, L57(170), Yellowstone National Park archives. (YELL-II 57).

²³ Ibid.

²⁴ Petition to Ronald Reagan, September 7, 1988, Yellowstone K-112, Yellowstone National Park Archives (YELL-II 58).

language for the idea of the greatest good for the greatest number for the longest time. Despite a changing regional and world economy, a new and overwhelming emphasis on outdoor recreation and leisure that made the National Park Service even more important to their states, and the growing and progressively denser urbanism in every western state, the Sagebrush Rebels sought fewer restrictions on the uses of public land. These latter day states-rights activists resented federal agencies' stringent policies about grazing, timber cutting, and other forms of extractive economic endeavor. The NPS had become a particular focus of the property rights movement, with one of its gurus, an angry but articulate Ron Arnold, preposterously calling the NPS "an empire designed to eliminate all private property in the United States."²⁵ The fires perfectly fit an anti-federal agenda. Framed as the result of bureaucratic indecision and incompetence, they lent credence to the charges of the Sagebrush Rebels. With a sympathetic president in the White House, one who had proven himself hostile to the environmental movement and its goals not only through his actions, but as a result of his Cabinet-level appointments, Western congressmen attacking NPS policies counted on a friendly reception for their charges.

The NPS responded as powerfully as it could to what its staff perceived as an unjust and inaccurate set of charges. In a response to the Phase II Yellowstone Fire Report in early 1989, Superintendent Barbee offered the most direct counter to the specific charges that the NPS let prescribed fires continue to burn after the July 27, 1988 confirmation of Yellowstone's decision to reinstate suppression. Barbee insisted that the park consciously chose not to invest resources in stopping smaller fires that were in the path of larger ones if they did not threaten developed areas. Under suppression strategy, such fires fell into the "confine" category; Barbee wanted them classified as wildfires with no response taken rather than as prescribed natural fires. He told Regional Director Lorraine Mintzmeyer, "Strategically, it was decided by Area Command and agency administrators to assign all available suppression resources to those fires that posed threats to developed areas or neighboring national forest land." Even if resources had been available, Barbee assured her, "direct suppression would have made no sense and would not have been committed" to such fires. "I personally find the suggestion that Yellowstone was promoting or allowing "prescribed natural fire" throughout late July, August, and September incredulous," he concluded. "The Yellowstone staff wants, in the strongest possible terms, this misperception corrected."²⁶

There were supporters of the NPS, some from surprising quarters. In a powerful commentary in *Rod & Reel*, noted conservation writer Ted Williams supported NPS goals and objectives with his characteristic clear logic and incisive prose. "All the superstition about the Yellowstone fires has provided an opportunity for those who yearn to loot wild land," he told his audience. A trout advocate, he saw in the Yellowstone fires a renewing of trout habitat, a principle he extended to the rest of wild land. Yellowstone's environmental health was better as a result of the fires, Williams told his readers in a message many of them, schooled in the conventional idea that fire was hazard, surely

²⁵ David Helvarg, *The War Against the Greens: The 'Wise Use' Movement, the New Right, and Anti-Environmental Violence* (San Francisco: Sierra Club Books, 1994), 131; William Riebsame, Hannah Gosnell, and David Theobald, *Atlas of the New West: Portrait of a Changing Region* (New York: W. W. Norton, 1997), 103-11.

²⁶ Superintendent, Yellowstone National Park to Regional Director, Rocky Mountain Region, May 8, 1989, Yellowstone Y-198 "Phase II Evaluation."

found counterintuitive. He extended his argument to the NPS. “The federal government isn’t perfect,” he finished, “every now and then one of its agencies takes its mission seriously and proceeds with courage, intelligence, and foresight.” Williams’ nominee for that status in 1988 was the National Park Service.²⁷

Buoyed by such support, Director William Penn Mott appeared before a joint meeting of the U.S. House of Representatives Subcommittee on National Parks and Public Lands of the Committee on Interior and Insular Affairs and the Subcommittee on Forests, Family Farms, and Energy of the Committee on Agriculture on January 31, 1989 to explain how the fires occurred and how the NPS would change its response as a result. “We must re-examine the events which led up to these fires and the fires themselves to learn all we can from them,” Mott told the congressional representatives. “We can do better in similar situations in the future.” Mott outlined a program of recovery that focused on fire line rehabilitation, reconstruction of burned cabins, and other infrastructure replacement and repair for Yellowstone, Grand Teton, and Glacier. The efforts would pump \$23 million into the three parks over five years, in addition to \$9.1 million of emergency money for 1989. He intended to follow the recommendations of the interagency fire policy management review team comprised of members from both the departments of the Interior and Agriculture, which had recently delivered a draft report and was compiling the public comments that derived from it. The public review of the report began in February 1989, with a final report expected soon after. Mott pointed to other changes in Service policy and procedure that he said would help with the response to fire, standardize practices, and create clearer reporting and greater accountability.²⁸

Outside observers felt uneasy about both Mott’s remedies and the status of Yellowstone’s fire management program. Some believed the park had mistakenly ignored NPS-18, which incorporated the best institutional thinking about how to make fire management happen on the ground. In the eyes of some, managers at Yellowstone seemed to have determined that their park was different. Yellowstone refused even to characterize its forests in the same language that the rest of the fire community used, preferring to invent its own idiom for describing its resources. After the 1981 season, the National Park Service convened a committee to review the park fire program; it gently urged Yellowstone to join the rest of the park system. In 1985, the regional office arranged for an experienced fire planner to spend the summer at Yellowstone in the hope that a modern document might evolve. Although the planner closely followed NPS-18, the outcome was openly flawed because the park refused to allow any written prescriptions or decision triggers that would limit the park managers’ discretion and because it never submitted the revised document for public or even full agency review. Yellowstone’s plan remained a 1970s-style statement of philosophy, not the manual of operations that characterized 1980s fire plans throughout the rest of the system.

After the fires of 1988, some fire scholars made trenchant critiques of NPS policy. Professor Thomas Bonnicksen, head of the Department of Recreation and Parks at Texas A&M University and a student of Edward C. Stone, was particularly harsh.

“The tragic wildfires in Yellowstone National Park have marked 1988 as the year the national park and wilderness frontier came to a close.

²⁷ Ted Williams, “The Park Service and its Burn Policy,” *Rod & Reel* (March 1989), 19-22.

²⁸ Statement of William Penn Mott, Jr., Director, National Park Service, January 31, 1989, National Interagency Fire Center, Yellowstone Box 2, D-131, 6639, National Interagency Fire Center, Boise, ID.

Simply stated, shifting the responsibility or the blame to nature for the Yellowstone disaster is not an acceptable excuse. The [National] Park Service and the Forest Service are in control and they are solely responsible for their decisions. . . . The ‘great experiment’ was the last attempt by [National] Park Service purists to retain the fantasy of a wild untamed frontier in our national parks.”²⁹

This characterization of the NPS as the bastion of purists defied the reality of 1988. Since the 1916 inception of the Service, it had been pulled between the two different dimensions of its mandate – protection of natural resources and accommodation of the public, with accommodation the easy victor in most circumstances. Directors such as Conrad L. Wirth had been unabashed accommodators, and with Secretary of the Interior Donald P. Hodel following the prescription established by President Reagan’s first Secretary of the Interior James Watt, the idea that the NPS was going to let nature take its course was patently absurd. If fire policy had escaped the efforts of the Reagan-era Department of the Interior to accommodate visitors everywhere, it was only because the mantra of small government forced choices among programs.

While ideological and emotional, Bonnicksen’s comments reflected a particular strain of the post-fire critique of the NPS. Despite the fact that his characterization of the Yellowstone situation was demonstrably false, he insisted that “wildwest management techniques [such] as letting fires burn unchecked” would have to change. National park lands had been altered by nearly a full century of management, he said, and were not wild, no matter how they appeared to the public. According to Bonnicksen, the National “Park Service in particular [was] unwilling to accept the reality that national park and wilderness areas must be managed now and forever.”³⁰ Of course, the NPS had been managing its lands since its birth in 1916, and fire programs were always central to its efforts. Once again, the Service faced the problem of trying to explain a complicated situation in a manner that those who did not understand the basic premises of fire management could understand. That such an attack came from a fire scientist highlighted both the man’s ego and the difficulty of communicating a scientific program in an age when most simply did not understand the subject.

Bonnicksen clearly did not understand the constraints on the National Park Service. Quoting the Leopold report, Bonnicksen claimed the NPS did not recognize that park areas where suppression had been common might require “careful advance treatment” prior to the introduction of fire, although in reality the NPS had engaged in exactly that practice before every prescribed burn. In addition, at the most basic level, natural prescribed burns served almost precisely that advance treatment function for an agency that never had sufficient resources to implement a full-fledged program. Such a strategy was risky without a doubt, but it was the best available to the NPS.

Bonnicksen continued his tirade in *American Forests*, where in 1989 he published “Fire Gods and Federal Policy,” essentially a distillation of his earlier arguments. Management of national parks was possible and viable, Bonnicksen insisted, but the NPS relied “instead on Mother Nature and God. In the future, managing a Park or a Wilderness will only require that rangers stand on mountaintops making incantations to

²⁹ Thomas M. Bonnicksen, “Yellowstone Fire Information Update, Monday September 12, 1988,” Yellowstone K-112, (YELL-II 59).

³⁰ *Ibid.*, 2.

the Greek God Zeus. Who needs science when you believe that the gods are managing your forests?”³¹

The subject of brutal criticism, Yellowstone Superintendent Robert Barbee and a number of scientists fashioned their responses. As a natural resource specialist, Barbee had been one of the first fire managers at Yosemite more than two decades before, and he retained a powerful commitment to the principles of fire management. Excoriated during and after the Yellowstone fires, he was tagged with a nickname, “Barbee-Que Bob,” and faced considerable pressure to resign from the superintendency. “They had a big thing over there in West Yellowstone at one of the hotels, ‘Welcome to West Yellowstone and the Barbee-que,’” he remembered. In a tempered and measured response, Barbee defended NPS fire management and its goals, reiterated the value of science, and challenged Bonnicksen’s judgment, values, and even his competence. In scientific terms, Barbee and his co-authors wrote, Bonnicksen lacked the clear-eyed perspective necessary to evaluate the policies and actions of the NPS.³²

Barbee’s response pleased many within the National Park Service. But because Barbee argued in the terms of science, his response could only resolve part of the problem. Despite Bonnicksen’s peculiar attacks, few others believed the NPS departed from scientific models in its management. What they disputed was the fundamental policy, the idea that some fires should be allowed to burn even if – as it seemed after Yellowstone – NPS officials were not sure they could stop any blaze once it got started. This was a more mundane question, one that had little to do with either Bonnicksen or Barbee’s pointed response.

More temperate observers offered more substantive and powerful criticisms of NPS policies and actions at Yellowstone. In the estimation of Stephen J. Pyne, the park had unconscionably delayed developing a meaningful fire plan. Pyne found the lack of planning crucial. The park still operated under the terms of its 1972 fire management plan, one of the earliest in the system. “The 1972 document was a statement of philosophy, not a working plan,” Pyne insisted. Preceding NPS-18, it showed none of the influence of the new model. In the 1980s, when it seemed every park in the system worked on a fire plan with strong operational characteristics such as how to respond to different types of fires, Yellowstone seemed content to follow its earlier general model. Units as diverse as Pinnacles National Monument and Glacier National Park, a park that in many ways was the closest parallel to Yellowstone in the system, implemented sophisticated plans; Yellowstone did not. Barbee gracefully accepted this criticism: “The plan had been developed, but had not gone through the development process,” he admitted. “I think that probably it was taking a back seat to other resource issues.” Yellowstone had not been a problematic park for fire for a long time, and other pressures and concerns drew Barbee’s attention away. “Fire was out there, but not stage center,” Barbee concluded. “In fact, it was hardly making an appearance.”³³

³¹ Thomas Bonnicksen, “Fire Gods and Federal Policy,” *American Forests* (July/August 1989), 14-16.

³² Robert D. Barbee, Nathan L. Stephenson, David J. Parsons, and Howard T. Nichols, “Replies from the Fire Gods,” *American Forests* (March/April 1990), 34-5, 70; Robert Barbee interview, Part II, November 12, 2004.

³³ Stephen J. Pyne to Hal Rothman, August 8, 2004; Robert Barbee interview, Part I, November 12, 2004.

The reasons were clear. Between 1972 and 1988, fire simply had not been a major problem at Yellowstone. In that fifteen-year period, 235 lightning fires burned 34,000 acres in the park. Only fifteen such fires grew to more than 100 acres in size, and the largest was only 7,400 acres. The park's response had usually been swift and comprehensive. During 1979, the park experienced twenty-nine lightning fires, eleven of which were suppressed when they threatened facilities or property. Thirteen of the other eighteen lightning fires burned less than one acre. Even the most severe year, 1981, offered little reason to doubt the existing strategy. The fifty-seven lightning fires nearly equaled the highest annual total since the New Deal. Nor were they threatening in any meaningful way. That year, 20,240 acres burned, an area that comprised roughly one percent of the 2.2 million acre park.³⁴

Barbee faced a range of other issues between 1983 and 1988. The controversy over the Craighead brothers' research on grizzly bears continued, concerns about the removal of female bears attracted his attention, deferred maintenance issues loomed large, the NPS had recently purchased concession operations throughout the park, and as Barbee recalled, "grizzly bears, grizzly bears, grizzly bears, buffalo, buffalo, buffalo," dominated the park's horizons. In 1986, scientist Alston Chase published *Playing God in Yellowstone*, with its acerbic critique of park natural resource management, further pulling Barbee away from issues related to fire. Yellowstone was the most visible management post in the National Park Service and one of the most complicated. Barbee and both his predecessors and successors tended to focus on the hot issue of the moment. In the mid-1980s, that list contained everything but fire.³⁵

These and many other comments illustrated the degree to which the Yellowstone fires affected the public perception of the National Park Service. More than twenty years before, observers had pitied the NPS for its friends rather than its enemies.³⁶ Pulled between constituencies during those years, the Service had engaged in a political balancing act, throughout it all maintaining the affection of the general public. By the late 1980s, the Service sometimes could not tell the difference between its friends and its adversaries. After the constant media reports throughout the summer, no matter how wrong-headed, the presumption that the NPS did the right thing seemed to disappear.

Two commissions evaluated the Yellowstone fires, producing two very different kinds of reports. Comprised of ten people from the departments of Interior and Agriculture, the Interagency Fire Management Policy Review Team was established on September 28, 1988, to review national policies and their application to fire management in national parks and wilderness and to recommend responses to the problems of the 1988 season. The team quickly submitted a draft report to the secretaries of Interior and of Agriculture, delivering it on December 15, 1988. A two-month public comment period began on December 20, and on May 5, 1989, the team produced a final report that prompted the creation of new guidelines for NPS fire management. The objectives of the service's fire management program – reduction of fuel load, the use of fire as a tool to

³⁴ Robert E. Sellers and Donald G. Despain, "Fire Management in Yellowstone National Park," in *Proceedings of the Tall Timbers Fire Ecology Conference and Intermountain Fire Research Council and Land Management Symposium*. (Missoula, MT. Tallahassee, FL. Tall Timbers Research Station, 1976), 108; Barker, *Scorched Earth*, 168-73.

³⁵ Robert Barbee interview, Part I, November 12, 2004; Alston Chase, *Playing God in Yellowstone: The Destruction of America's First National Park* (Boston: Atlantic Monthly Press, 1986).

³⁶ Foresta, *America's National Parks and Their Keepers*, 8.

shape landscape and create a more historic ecosystem – were solid, it ruled. However, the report did find that the policies to reach such objectives required refinement and additional thinking and planning.

The Service had to reaffirm and strengthen its prescribed natural fire policies. The report reiterated Pyne’s observations: “many current fire management plans do not meet current policies. The prescriptions in them are inadequate and decision-making needs to be tightened,” the summary observed. Further review of the plans was essential. Better dissemination of information about natural prescribed fire was a necessity, the report said, adding better interagency planning as another goal. Of the existing fire models, Alaska provided the most successful example, but even its remarkable degree of cooperation could be improved. In particular, regional planning had to be created to allow for contingency planning in extreme circumstances. A region-wide fire emergency such as occurred in Yellowstone in 1988 drew suppression crews away from home base, leaving what the review team regarded as inadequate coverage of the home areas. Internal NPS communication needed to improve. Many Americans still believed the NPS let the Yellowstone fires burn to serve biological purposes, when the record showed that the NPS initiated total suppression in mid-July, a full week before woodcutters inadvertently started the North Fork fire that eventually swept through the Old Faithful complex.³⁷

New fire recommendations resulted from the review team’s work. On June 1, 1989, Secretary of the Interior Manuel Lujan, Jr., and Secretary of Agriculture Clayton Yeutter directed their agencies to suppress all natural fires in national parks and wilderness areas until fire management plans that conformed to new federal standards could be developed. In addition, all fires were to be classified as either prescribed fires or wildfires, with wildfires fought by appropriate suppression methods and personnel. The responsible line officer was required to certify daily that prescribed fires were within their prescription, and that resources to keep such fires within their prescription area during the next twenty-four hours were available. Other longer term recommendations were included. These decisions affected not only the NPS, but the Bureau of Land Management, the Fish and Wildlife Service, the Bureau of Indian Affairs, and the Forest Service.³⁸ The default of the pre-1968 era had returned with a vengeance, in no small part as a result of the recommendations of a team of professionals. While it was easy to impugn the motives of the commission and to chastise the secretaries of Interior and Agriculture for following politics rather than science, their decision to shut down natural prescribed fire made sense in the political climate that followed Yellowstone in 1988.

A second review panel, assembled by the Greater Yellowstone Coordinating Committee, brought together scientists with backgrounds in natural disturbances. Chaired by Norman Christensen of Duke University, who had led the earlier review of fire policy at Sequoia and Kings Canyon National Parks, the committee ranged freely among the many questions that surrounded the fire. “My group and my panel were given a wide mandate,” Christensen recalled. “We were sort of free to go where we wanted, and we

³⁷ U.S. Departments of Agriculture and the Interior, “Recommendations of the Fire Management Policy Review Team,” *Federal Register* 53 no. 244 (December 20, 1988), 51,196-51,205; “Interagency Final Report on Fire Management Policy, May 5, 1989,” in Lary Dilsaver, ed., *America’s National Park System: The Critical Documents* (Lanham, MD: Rowman and Littlefield, 1994), 418-19.

³⁸ Department of the Interior, “New U.S. Fire Recommendations Approved by Secretaries of Interior and Agriculture,” June 1, 1989, National Archives, Pacific Alaska Region, RG 79, Box 1, 79-01-A1103.

did, I think at times with a little bit of concern on the part of the Yellowstone staff people,” who feared an assault on themselves, their decisions, and their policies.³⁹

The science that underpinned the review process was never in question. Fire specialists such as William Romme, Dennis Knight, and Don Despain had established a historic basis for high-intensity crown fires in Yellowstone, allowing the panels to see the fires of 1988 as being part of a natural or even normal process of ecological change. This finding simultaneously provided a scientific rationale for the fires and obviated the debate about NPS policy. In effect, existing research answered a salient question about fire in general and the fires of 1988 in particular: it was appropriate in Yellowstone and it did belong in the park.⁴⁰ The importance of the research and the acceptance of its data set the terms of the discussion.

While the federal review team focused on government policy, the committee of scientists reiterated a commitment to nature. “The group was always mindful of being in a situation of not wanting to create a public sense that Yellowstone as an ecosystem was in great trouble, that great ecological harm had been done by the 1988 fire,” Christensen recalled. Members asserted the importance of fire as a force in maintaining a natural landscape, memorably insisting that the “only way to eliminate wildland fires is to eliminate wildlands.” Fire was an “essential component” in nature and its removal would alter ecosystems in so dramatic a fashion as to belie the idea of natural systems, the committee declared.⁴¹

The commission’s most compelling recommendations showed an inherent flaw in the structure of Yellowstone’s fire management. Christensen believed that a “widely shared naiveté of what it is to have a natural prescribed fire program” provided a practical flaw in planning that contributed to the Yellowstone situation. Scientists had believed that Yellowstone National Park was large enough to comprise its own ecosystem. “If you would have asked me prior to those fires if it there was any place that we might allow nature to run its course, Yellowstone National Park might be the place to do it,” Christensen speculated. Fifteen years of research and management showed that fire played an important and critical role in the Yellowstone forest, particularly the high-elevation lodgepole pine. The experience with the prescribed fire program in the same time period, in Christensen’s view “suggested that the landscape could contain that activity.” Most fires in the park during the era in which prescribed burning and prescribed natural burning had been utilized were relatively small, resuscitating an earlier myth that Yellowstone did not have big fires. Later research showed that lodgepole pine experienced fire of the magnitude of 1988 about every 300 years, with the last identifiable episode taking place in a period of high winds and extended drought in the early 1700s. The prevailing climatic conditions during most of the twentieth century seemed conducive to fires burning for short periods in small areas and then extinguishing

³⁹ Norman Christensen, interview by Hal Rothman, Part II, August 17-18, 2004, 1.

⁴⁰ William H. Romme and Don G. Despain. “The Yellowstone Fires” *Scientific American* 261 (November 1989), 36-44; William H. Romme, “Fire and Landscape Diversity in Subalpine Forests of Yellowstone National Park. *Ecological Monographs* 1982 52(2): 199-221; William H. Romme and Dennis H. Knight, “Landscape Diversity: The Concept Applied to Yellowstone Park,” *BioScience* 1982 32(8): 664-669; William H. Romme and Don G. Despain, “Historical Perspective on the Yellowstone Fires of 1988,” *BioScience* 39(10) 1989: 695-699.

⁴¹ Norman Christensen interview, August 17-18, 2004, 1.

themselves. “So, the idea that you could do this was supported by the thirteen years of data up to that point,” Christensen indicated.⁴²

From the comfortable vantage point after the fires, it was “easy to diagnose in hindsight,” Christensen conceded, “but in retrospect there should have been a few things that caused us some alarm.” The rate of burning in the Yellowstone ecosystem was very slow. Based on the thirteen years of scientific research, it would have taken millennia for the Yellowstone plateau to undergo a complete fire cycle. “We did not have on that landscape in 1987 really, really old forests,” Christensen observed. “It is pretty clear that they had all experienced fire in the last hundreds of years. I suppose that that might have tipped us off that maybe the experience from 1972 to 1987 was not exactly typical, or was not giving us a complete picture.” But the management program for prescribed and natural prescribed fire had not been developed with this reality in mind. As a result, what Christensen called “shut-off criteria,” the terms under which the NPS would begin suppression of natural fires, were not clearly defined.⁴³

The lack of definition stemmed from the presumption that natural prescribed fire, those started by nature, was inherently good in a national park landscape. The only difference between natural prescribed fire and prescribed fire was supposed to be a matter of policy: when nature started the fire, one set of management precepts were invoked. The NPS did not accept ignitions that came from accidents or people in a natural prescribed fire program – a fire started from a tossed cigarette or a camp fire was automatically disqualified. Lightning fires met the qualifications, but once they began, they were subject to same rules as any other prescribed fire. All of the issues going into the development of a prescribed fire plan for a regular burn control unit would then come into play. “But in fact they did not,” Christensen observed. “What in actuality happened was that very qualified people would monitor these fires and on a day-to-day basis would change in their view whether or not they were burning within prescription.”⁴⁴

This method left fire control decisions in local hands, once a goal of NPS fire management policy, but one superseded with the approval of NPS-18. Effectively Yellowstone followed a policy from the 1970s as the rest of the Service moved toward a more integrated model. From the perspective of the Regional Office, this was not an optimal situation. In 1985, Pyne was hired to accomplish the task of updating Yellowstone’s plan. “Once I got the numbers,” he recalled, “it took about five minutes to prepare a legitimate step-up plan.”⁴⁵

Pyne’s presuppression work was a prelude to the Regional Office’s real goal for the park, a new fire management plan. Pyne was expected “to nudge Yellowstone into a genuine fire plan,” he recalled. “I spent ten weeks at the task and drafted a lengthy document along the lines of NPS-18,” but encountered resistance from park staff. The draft plan had two critical flaws. Although it accepted “prescribed natural fires” inside park boundaries, it listed no prescriptions. “None,” Pyne vehemently insisted. “The park simply would not allow anything that would limit its own discretion.” Nor did Yellowstone take the plan through formal review channels. In 1988, neither public

⁴² Ibid., 2-3; Romme and Despain, “Historical Perspective on the Yellowstone Fires of 1988,” 695-99.

⁴³ Norman Christensen interview, August 17-18, 2004, 3.

⁴⁴ Ibid., 4.

⁴⁵ Stephen J. Pyne to Hal K. Rothman, August 8, 2004, copy in possession of the author.

review, which was required under the National Environmental Policy Act and the Resource Conservation and Recovery Act of 1976, nor review by the NPS Branch of Fire Management had taken place. Nor did the park follow the plan. Instead, Pyne observed, Yellowstone “simply used the fact of the document to get everyone off their case.”⁴⁶

The park did not agree with or appreciate Pyne’s perspective. “I ended my tour with a presentation to the park fire committee and Superintendent [Robert] Barbee,” Pyne recalled. He argued for another scheme, circulated in a memo to the park and to the Branch of Fire Management. It called for a rechartering of the entire Yellowstone fire program, on the grounds that the existing structure couldn’t fight wildfires and was not suited to monitor prescribed natural fires. “The NPS was not happy. I was never invited back for another bout of planning,” he said. Barbee did not recall attending the meeting, but accepted the character of Pyne’s assessment, if not necessarily the specifics.⁴⁷ From Pyne’s point of view, Yellowstone actively resisted the implementation of NPS fire management objectives.

From a later vantage point, some Yellowstone staff members disputed Pyne’s account. His perspective was only one version, a fact he acknowledged at a later date. “There is no justification for my insisting that I and I alone am right,” Pyne admitted in 2004, a perspective roundly seconded by the people who experienced the fire at Yellowstone. According to noted Yellowstone historian Paul Schullery, “Pyne had a philosophical preference just as individual and forceful as the one held by the National Park Service managers and researchers in Yellowstone. It was just a different preference from those of park researchers.”⁴⁸ The difference in opinions illustrated the gulf in possible responses and the genesis of subsequent debates about future direction.

Christensen’s evaluation of the Yellowstone situation was more generous. “I sensed working with the staff, all of them from Superintendent Barbee on down, there remained a degree of defensiveness and paranoia about the program,” he remembered from the vantage point of fifteen years past the events in question. The park’s defensiveness was compounded by Yellowstone’s position as the first and premier national park in a varied and diverse system. Yellowstone staff believed that their issues were unique, and that models elsewhere in the park system were not necessarily relevant to their circumstances. The combination of “all of those things led to a kind of hubris in the staff,” Christensen believed, “if not certainly a defensiveness in the program.”⁴⁹ To managers at Yellowstone, maintaining their discretion and prerogative was a paramount value that affected the development of park fire management policy.

Yellowstone staff saw this issue from a very different perspective. “It was more basic than that,” one staffer recalled. “Park staff simply were tired – of breathing smoke, of answering hysterical phone calls and snide media questions, of being accused of ‘destroying’ the very place they lived and devoted their professional lives to—and by people who mostly were not there to see that, in the eyes of local beholders, that Yellowstone was not ‘gone.’ No one, from the superintendent down, was immune to that

⁴⁶ Ibid.

⁴⁷ Ibid.

⁴⁸ Stephen J. Pyne to Hal Rothman, December 18, 2004; Paul Schullery to Roberta D’Amico, October 13, 2004; Paul Schullery and Don G. Despain, “Prescribed Burning in Yellowstone National Park: A Doubtful Proposition,” *Western Wildlands* 15 2 (Summer 1989): 30-34.

⁴⁹ Norman Christensen interview, August 17-18, 2004.

personal defensiveness – which doesn't make it all wrong headed."⁵⁰ In the crosshairs of public and media expectation, in a situation they did not create, under assault for circumstances largely beyond their control, park personnel could be forgiven any measure of defensiveness that manifested itself.

The degree of discretion meant that Yellowstone local-level monitoring to regulate the response to fire continued without the benefit of reviewed processes and prescriptions. As a result, the monitoring program took precedence; individual fire managers made the decisions. "The crux of the issue is fires get bigger regardless of all other circumstances," Christensen observed. "They just become harder to put out because the amount of perimeter that you have to deal with increases geometrically as the fire increases in time and size. So, there was this other problem [of response], and the problem of coming up with an operational definition of what a natural prescribed fire would be." There was little basis for decisions about what was acceptable and what was not. The guidelines were not sufficiently substantive. "The hope had been that fire started by natural causes would simply be allowed to burn," Christensen remembered, but the lack of real definition of parameters made decisions about what would burn and what would be suppressed into arbitrary local ones. In "certain circumstances that might be natural," Christensen observed, "because of other risk factors you would put the fire out." The lack of clear definition simply left too much leeway in the process.⁵¹

"Knowing what I know now, what would I have done?" Barbee rhetorically queried in 2004. "I would have probably taken action on the Fan Fire; I would have snuffed out, if I could, the Clover-Mist fires. These were all lightning fires. We didn't have any [fires] that we started, and I don't think I would have done anything different on the North Fork at all." Barbee did not believe such actions would have significantly altered the results. "Had we taken action on all these things, full suppression, there is no question in my mind the configuration would have been somewhat different, but we would have had great fires in Yellowstone. No question about it." The conditions were simply too severe, he maintained. "When you get all those variables coming out on the stage, the single digit relative humidity, and the explosively dry fuels, and then choreographed by the wind, the wind, the wind, the wind. That wind was incredible that summer," he remembered. "There is nothing that can be done."⁵²

Barbee recognized that he had faced a conundrum, a set of forces not only beyond his control, but equally beyond those of any institution established to address fire management. "I would have argued that let's just pull back, let's stop this nonsense of trying to draw lines around everything, let's go in and button-up values at risk, utility corridors, neighboring ranches, that sort of thing and just let [the fire] go. Because it became pretty obvious that we built lines, put in lines, worked hard, and then there were spots two to three miles ahead that burned out of control. The effort was heroic," he concluded, "but it was of little consequence. The joke over in West Yellowstone was 'what is brown in the middle and black on both sides? A bulldozer line!'"⁵³

⁵⁰ Sue Consolo-Murphy, review comments, "National Park Service Wildland Fire History," December 5, 2004. Consolo-Murphy served as a resource management specialist at Yellowstone in 1988.

⁵¹ Norman Christensen interview, August 17-18, 2004.

⁵² Robert Barbee interview, Part III, November 14, 2004.

⁵³ Robert Barbee interview, Part II, November 12, 2004.

Christensen agreed with Barbee's assessment, but with a cautionary coda. He was convinced that policy changes would have had little effect on the course of events in 1988. From a larger climatic perspective, 1988 was a remarkable year. Huge fires burned across the U.S., not just in the Yellowstone basin. "That does not excuse us from these management issues," he cautioned. The fires might "have burned different[ly], they might have burned less. Who knows? From there we really focused our attention on the consequence side of things, and maybe on the future in terms of what this might mean in a revised fire management program."⁵⁴

Yellowstone proved that fire management was not only a scientific process, it was equally a political exercise. Although the relationship between the two dimensions of the fire was obvious, the peculiar nature of western fire management created the illusion of their separation. The scope and scale of the 1988 fires shattered the presumption that fire was a scientific issue managed by ecological precepts. Natural prescribed fires and natural fires were ecological applications of scientific principles, generally managed by intense advance preparation and other methods that kept them under control. As long as those fires stayed within their bounds, they did not rise to the level of national policy attention. But a human-caused fire of this scale, of precisely the kind against which Smokey Bear had long warned the public, took the science experiment and placed it on a national stage, subject to new levels of review. The scale of commentary was exactly what might have been expected out of a society in which everyone grappled for their fifteen minutes of fame. Although the NPS certainly deserved criticism at Yellowstone for the state of planning in 1988, the motivations that underpinned critiques of its performance had a great deal more to do with political positioning than with the events of the summer of 1988.

The result was a wholesale change in fire management practice, not only in the NPS but throughout the entire federal land management system. The greatest initial consequence was the effective end of prescribed natural fire and its replacement with greater emphasis on prescribed burning. Between 1983 and 1988, the National Park Service intentionally burned an annual average of 32,135 acres. In 1989, NPS-prescribed burns totaled 56,889 acres, indicative of rising emphasis on prescribed burning that continued into the 1990s. An average of 62,843 acres was burned under prescription between 1990 and 1994. The suppression order that followed the Yellowstone fires severely constrained the amount of prescribed natural fire. The acreage of prescribed natural fires decreased from 17,944 per year from 1983-1988 to an average of 3,708 acres between 1990 and 1994. Simply put, the risk of the consequences of an escaped natural fire so outweighed any ecological or scientific advantages that might be derived from it that any reasonable park or regional office administrator eschewed the option except under circumstances that could not be disputed.⁵⁵

At the same time, the NPS stepped up its strategic response to fire. In 1989, the acreage burned in national parks decreased by 82 percent while the number of fires in the park system diminished by less than 1 percent. A combination of more aggressive suppression and sheer good fortune accounted for the difference, but it was not clear that

⁵⁴ Norm Christensen interview, August 17-18, 2004.

⁵⁵ Judi Zuckert, *National Park Service Wildland Fire Report, 1989* (Boise, ID: Branch of Fire Management, 1990), 8; Rodney Norum, "Natural Fire Management in the National Park Service After 1988," *Renewable Resources Journal* 11 1 (1993): 18.

the change was a portent of either a more secure future or a more ecologically sound national park system. Wildfires continued in characteristic fashion, with the largest typically burning in Florida in the southeastern United States. In 1989, the year after Yellowstone, 135,494 acres burned in wildfires in the Southeast, more than 80 percent of the national park system total. Neither the prevalence of wildfires nor the 47,910 acres in prescribed burns in the Southeast excited much interest from the national press or anyone else still in an uproar about the Yellowstone fires the year before. The difference in activity, with only 10,240 acres burned in 287 wildfires and 4,993 acres in prescribed burns in the Western Region, suggested the full impact of the Yellowstone fires.⁵⁶ In effect, at least in the drier western United States, the National Park Service returned much closer to the suppression regime that had prevailed prior to 1968.

The pressure on the National Park Service to justify its fire policy did not abate. By May 1990, the NPS was preparing its final report on implementation of the changes recommended by the interagency fire management policy review team. In front of the House Subcommittee on Energy and Natural Resources, NPS Associate Director John Morehead conceded that “a much needed tightening” of policy and procedure was necessary and “perhaps could not have been accomplished without the impetus generated by the national attention” that stemmed from Yellowstone. Yet, Morehead insisted, the possibility to overreact was great. “We must exercise caution lest we move too far toward total suppression,” he reminded the subcommittee. “It is important to remember the role of fire in ecological dynamics and to ensure [that] our prescriptions maintain that natural role.”⁵⁷

Changes to prescribed burning led the implementation list. In the aftermath of the review team’s recommendations, NPS Special Directive 89-7, issued July 12, 1989, accepted the team report and ordered a complete review of NPS-18. The Service detailed a team of NPS field and regional fire experts to the National Interagency Fire Center in Boise to review the fire plans for each national park.⁵⁸ By that date, the NPS had been scrutinized completely; park- and Washington office-level officials had begun to rethink and revise policy and the Service had compiled a five-page list of corrective actions that were already under way. Most stringent was the continuation of a new suppression policy, introduced on June 1, 1989 that was to remain in force for national parks and wilderness areas until the Service judged the fire management plans for individual areas to be in compliance with the new federal recommendations.

Soon after, the Branch of Fire Management exercised the authority granted it under Special Directive 89-7 and offered new guidelines for policy. Finding “common management intent” with the Forest Service, the NPS developed new prescribed fire management guidelines. “A park may implement a prescribed natural fire program,” the new policy stated, “only if it has an approved fire management plan” that met the criteria established for prescribed natural fire; established contingency plans for personnel and

⁵⁶ Zuckert, *National Park Service Wildland Fire Report, 1989*, 11-12.

⁵⁷ “Statement of John M. Morehead, Associate Director, National Park Service, Department of the Interior, before the Subcommittee on Energy and Natural Resources, House Committee on Government Operations, on the implementation of the newly established fire management policy for federal land management agencies,” May 24, 1990, NIFC 39.

⁵⁸ Acting Director to Directorate, Field Directorate, WASO Division Chiefs, and Park Superintendents, Subject: Fire Management Policy Review Team, July 12, 1989, Yellowstone Y-14, Yellowstone National Park Archives.

material with cooperating entities; had an approved quantified defined prescription and monitoring procedures; detailed the availability of adequate fire management resources, and contained a process designed to outline and analyze management alternatives during a fire. This was a high standard, an effort to codify NPS fire procedures at a level never before attempted.⁵⁹

Yellowstone was subject to the most intense scrutiny in this process. One of the first to have its fire plan assessed, Yellowstone received concentrated review. The Branch of Fire Management determined that the unreviewed draft plan of 1987 did in fact sufficiently update the 1976 plan that had been the source of much consternation in the aftermath of the 1988 fire. It required some further consideration before it could be approved and any prescribed burning in the park could resume. These technical and procedural steps were crucial, as were other reforms in practice and procedure before the plan was ready for implementation. Acting NPS Fire Director Douglas D. Erskine was too circumspect to point out that the lack of implementation was exactly what critics focused on in the Yellowstone debacle in 1988. Work on a new plan continued, with a scoping statement under public review in August and September 1990 and ongoing internal critiques. The Yellowstone plan final debuted in June 1991, with questions about its practices and procedures continuing.⁶⁰

Prescribed burning at Yellowstone remained a controversial topic. Even some quarters in the NPS derided its prospects. Don G. Despain, one of the leading fire researchers at the park, called prescribed burning at Yellowstone “a doubtful proposition.” Prescribed burning could not be “justified as ecologically necessary in most of the park,” he concluded in a piece co-authored with Historian Paul Schullery. “Even an aggressive program of prescribed burning launched many years ago would not have significantly reduced the acreage burned in and near Yellowstone in 1988. . . . Yellowstone’s only real problem with fire is that once, every century or two, fire conditions allow more fires to burn than humans would like.” Others at the park echoed such sentiments. “No plan would have altered what happened in 1998,” observed Yellowstone Chief of Research John Varley, “and no plan will change what will happen in the future.”⁶¹

Critics might charge that such commentary was part of an elaborate National Park Service effort to shift the culpability for the fire away from the Service, but Despain, Schullery and Varley accentuated an important and easily overlooked part of the discussion. The 1988 fires begged the question of management, a fact that NPS officials pointed out over and over again to no avail. History showed that the Yellowstone environment burned at fairly regular intervals. From this perspective, it was human tolerance for such episodes that caused the uproar. Such a perspective might be scientifically accurate, but it

⁵⁹ Director to Directorate, Field Directorate, WASO Division Chiefs, and Park Superintendents, January 27, 1990, Revised, Wildland Fire Management, NPS-18 Prescribed Fire, 12-40, January 1990.

⁶⁰ Acting NPS Fire Director, BIFC to Regional Director, Rocky Mountain Region, Attention: Fire Coordinator, May 9, 1989, Yellowstone Y-198 “Review of Fire Management Plan;” Richard H. Bahr, Assistant Fire Management Officer to Bob Barbee, Superintendent, November 13, 1991, Yellowstone Y-14, Yellowstone National Park Archives; “Yellowstone National Park Wildfire Management Plan, June 1991,” (Yellowstone: Yellowstone National Park, 1991).

⁶¹ Schullery and Despain, “Prescribed Burning in Yellowstone: A Doubtful Proposition,” 30-34; John Varley, “The Status of Yellowstone’s New Fire Plan,” *Renewable Resources Journal*, Spring 1993: 20-21.

did not mesh well with the political realities of western land, resource extraction, dependence on tourism, and fire management.

The fires also highlighted a different dilemma for the National Park Service. It wanted to use science to benefit ecosystems, but politicians operated in another arena, with very different goals. Western politicians used the fires as backdrops for their various complaints about federal power and action. During the peak of the fire, Democratic presidential candidate Michael Dukakis came to Yellowstone. He arrived with more than 200 media in tow, and Yellowstone had a “big thing out there at Madison Junction.” Barbee remembered. “I asked him, ‘what do you want here, what are you trying to do? What do you expect from me?’ He said: ‘I don’t want to give you a bad time.’” Barbee responded: “I appreciate that.” Dukakis continued: “I will be honest with you. This is the only game in town. This is where the action is and I want some visibility and that is why I am here. I want to demonstrate my concern for the West.” While Dukakis did the park no damage, his visit illustrated the difference between science and politics. “Politicians want to run things from their own perspective,” observed long-time Yellowstone staff member Lee Whittlesey, “and often without regard for science, and the NPS has to listen to politicians.” Most politicians neither appreciated nor understood the role of fire in an ecosystem and “that made the (NPS) task more difficult,” Whittlesey concluded.⁶²

Bruce Kilgore, by then chief of the Division of Natural Resources and Research for the NPS’s Western Region, observed that “everyone realizes [that] there are limitations to what any fire management program can accomplish when extremely dry and windy conditions occur in forests with the heavy fuel loads found in Yellowstone and similar forest types in 1988.”⁶³ While Kilgore appreciated the impetus for policy rethinking that the situation provided, he stated what everyone close to fire management recognized: catastrophic fire was not subject to policy constraints. Any program of management faced circumstances in which its planning, resource allocation, and procedure would be inaccurate and insufficient. Yellowstone in 1988 had been one such instance. Making policy from such an unusual circumstance was a risky proposition, but one that federal fire managers had no choice but to embrace.

By the time Morehead addressed the subcommittee nearly a year later, a new prescribed burning program had been approved for a one-year test implementation period. The revision of NPS-18 also carefully defined the prescriptions under which natural prescribed fires would be allowed to burn. In the aftermath of Yellowstone, all prescribed natural fire programs had been suspended. The plans at the twenty-six parks with active natural prescribed fire programs were reviewed and revised to assure that they complied with the recommendations of both the review team and the commission headed by Norman Christensen as well as the new NPS-18 guidelines. When Morehead addressed the subcommittee, three parks – Yosemite, Sequoia and Kings Canyon, and Voyageurs – had met all the requirements and were in the process of reinstating their programs. The remaining parks were expected to follow the same process.⁶⁴ The parks

⁶² Robert Barbee interview, Part II, November 14, 2004; Lee Whittlesey to Roberta D’Amico, email of November 22, 2004, provided to the author.

⁶³ Bruce M. Kilgore, “Review Team Finds Fire Policy Sound But ‘Application Needs Changing,’” Yellowstone Vertical File, n.d ca. 1989.

⁶⁴ “Statement of John M. Morehead, Associate Director, National Park Service, Department of the Interior, before the Subcommittee on Energy and Natural Resources, House Committee on Government

were charged with strengthening fire management plans and improving command and control structures. Each would develop a comprehensive set of criteria to govern the conditions under which natural ignition fires would be allowed to burn and were expected to achieve significant progress in establishing regional and national contingency plans as well as procedures for curtailing prescribed fire if necessary.⁶⁵

The acreage that burned in 1990 reflected the new strategies. Wildfires in the NPS Western Region were prevalent, with 245 fires burning across 17,732 acres during a summer when more than 225,000 acres in California burned during August alone. In contrast, 135 fires in the Southeast Region burned on 23,341 acres, accentuating the ways in which the issues of the post-Yellowstone era were largely in the West. Prescribed burns illustrated the ongoing caution. The program proceeded tentatively and as the fire year worsened, the Service brought its prescribed fire program to a halt. "At this time," Acting NPS Fire Director Richard T. Gale told his regional and park staff on June 29, 1990, "all fire management officers should reconsider any and all prescribed burn plans, giving special attention to the limits on prescriptions that could pose control problems." The care that Gale encouraged was reflected in the program's execution. The forty-one such burns in the Western Region burned 2,026 acres, a minuscule total compared to the pre-1988 efforts. Comparison with the Southeast Region provided stark relief. The thirty prescribed fires in the Southeast, largely in Big Cypress National Preserve and Everglades National Park, burned 70,396 acres. By 1992, 111 small fires in thirteen national parks comprise the prescribed natural fire total in the park system. Ninety-five percent of the acreage burned came from Sequoia and Kings Canyon and Yosemite national parks, where experiments in prescribed burning started almost twenty-five years before. Only seventeen of the twenty-six parks that had a prescribed burning program before 1988 had reinstated it by 1992.⁶⁶

In the end, one consequence of the Yellowstone fires was a less aggressive approach to prescribed natural fire in the NPS. "The revised management policies," Kilgore observed, "appear to have toned down the apparent substantial commitment to allowing natural fires to burn whenever possible."⁶⁷ Kilgore's observation reflected the dismay current among specialists who administered fire at the grassroots who were forced to abide by the post-1988 rules. For many in the fire management structure, it was hard to see the change in goals as an advancement of NPS principles. The default to suppression flew in the face of twenty years of experience.

The greatest challenge to the renewed ethic of suppression took place in Alaska. After a number of unusual years in which the Alaskan parks experienced little or no fire,

Operations, on the implementation of the newly established fire management policy for federal land management agencies," May 24, 1990, NIFC 3, 3-4.

⁶⁵ Ibid., 3; U.S. Departments of Agriculture and the Interior, "Recommendations of the Fire Management Policy Review Team."

⁶⁶ Dean Berg, National Park Service Wildland Fire Report, 1990 (Boise, ID: Branch of Fire Management, 1991), 12-13; NPS Western Region, "Yosemite Fires, 1990," (San Francisco: National Park Service, 1991), 1-7; Acting NPS Fire Director, BIFC to All National Park Service Regional and Park Fire Management Officers, Jun 29, 1990, Y14 (Fire), National Interagency Fire Center; Bruce M. Kilgore and Tom Nichols, "National Park Service Fire Policies and Programs," in James K. Brown, Robert W. Mutch, Charles W. Spoon, and Ronald H. Wakimoto, "Proceedings: Symposium on Fire in Wilderness and Park Management," (Missoula: USDA Forest Service, General Technical Report, INT-GTR-320, 1995), 24-27.

⁶⁷ Kilgore and Nichols, "National Park Service Fire Policies and Programs," 24.

blazes returned in 1990. Two years earlier, when fires were rife in the interior Rocky Mountain West, only 303 acres burned in the Alaskan parks. In 1989, only twenty-eight acres burned. Since Alaska did not routinely engage in any prescribed burning, it remained almost entirely free of fire during 1988, the worst fire year in national park history. Nor did the massive prescriptive changes have any immediate affect. The rules of cooperation from the early 1980s persisted until 1990. That year, seven large fires in Alaska burned more than 108,722 acres, hardly a record in the nation's northernmost state, but a harbinger of management issues that challenged the NPS's vision of what it could do with fire in the far north and elsewhere. When the total acres burned in Alaska in 1991 reached 86,651, the NPS was forced to address the substantial differences between the forty-ninth state and the situation in the western part of the lower forty-eight.⁶⁸

The Alaskan response to the review team's recommendations had been outrage. Both state and federal land management agencies had recognized the efficacy of natural prescribed fire and were committed to its continued use. NPS officials could say little after the public outcry around the Yellowstone fires, but state officials loudly highlighted the differences between the lower forty-eight and the north. "The state of Alaska takes objection to the review team's recommendation that it is 'unprofessional and impractical for fires to be allowed to burn free of prescriptions or appropriate suppression action,'" the official response of the Division of Forestry of the Alaska Department of Natural Resource intoned. "We must express that there are regional differences across the nation in natural resource management goals and natural fire regimes. Alaska is a fire dependent ecosystem. There are vast areas of Alaska where fire does not pose a threat to people, property, or valued resources. In these places, fire is viewed as a natural event." Alaska State Forester M.R. "Bob" Dick, Jr., asked NPS Regional Director Boyd Evison to "carefully review any change in national fire policy that would compromise the ability of Alaska-based federal agencies to continue with current fire management plan arrangements. Put bluntly," Dick concluded, "if it ain't broke, don't fix it."⁶⁹

Dick's trenchant observations illustrated that the NPS grappled with wildland fire in two and even possibly three dramatically different situations. Alaska shared many parallels with Everglades, Big Cypress, and the Southeast Region, themselves significantly different from the western fire parks, but in the end, the forty-ninth state was substantially dissimilar from even the closest examples in the lower forty-eight. Fire in Alaska was perceived by land managers as an irresistible force that could overwhelm resources to battle it at any time. Alaskan fire, in the view of the conglomeration of state officials and federal agency managers who administered the vast estate of the north, was

⁶⁸ Ibid., 12-14; Dale Haggstrom, "Fire and Forest Management Policies on the Boreal Forest and Wildlife of Interior Alaska," *Wildfire*, December 1994: 31-36, ALK29; Zuckert, National Park Service Wildland Fire Report, 1989, 11-13; Zuckert, National Park Service Wildland Fire Report, 1989, 12-13; Dean Berg, National Park Service Wildland Fire Report, 1994 (Boise, ID: Branch of Fire Management, 1995), 43-45.

⁶⁹ M.R. Dick, Jr., to Boyd Evison, February 3, 1989, National Interagency Fire Center, Yellowstone Box 2, D-131, 6639, National Interagency Fire Center, Boise, ID; Alaska Department of Natural Resources, Forestry Division, "National Fire Management Policy Review," January 1989, 3-5, National Interagency Fire Center, Yellowstone Box 2, D-131, 6639, National Interagency Fire Center, Boise, ID.

natural fire at its most distinct, a clearly defined natural force that humans could not genuinely conquer or even trifle with, except at great peril and greater cost.

The result was a strategy simultaneously more open and more defensive than the one the NPS applied at Yellowstone. The openness stemmed from the acceptance of natural fire's value as a primary ecological tool, as well from the tacit admission that there was little that could be done about most Alaskan fires anyway: they would burn and that was an ecological and social good. The defensiveness resulted from the peculiar governmental circumstances in Alaska – the multiple layers of federal, state, Native, and regional agencies and their varying missions that combined to make allowing natural fire into a complicated bureaucratic exercise that seemed in and of itself to belie the very force of natural fire. In Alaska, federal agencies could not genuinely expect to implement a comprehensive suppression policy and no one associated with Alaskan fire believed that they could. As a result, the Christensen commission's findings did more to upset the existing strategies in Alaska than to reign in any tendencies toward idiosyncratic approaches. The Alaskan joint fire plan “allows substantial savings by fighting fire only where it needs suppression,” Dick noted in his letter to Evison.⁷⁰ It was the determination of where suppression was necessary that placed significant boundaries around the process.

In a 1991 response to such concerns, the NPS dispatched a team to discuss long-range fire management objectives for Alaska. NPS Fire Director Douglas Erskine and Fire Management Specialists Richard T. Gale and Rod Norum reviewed a proposal from Regional Fire Management Officer Steve Holder and Regional Prescribed Fire Specialist Brad Cella to establish an Alaska Wildfire Coordination Group. The reviewers discovered “a renewed and vigorous interest in the use of management ignited prescribed fires” among land management agencies in Alaska, and advocated enhanced planning, programming, and interagency cooperation. Their work affirmed a principle that resonated in Alaska and that the NPS embraced in the Far North. Suppression decisions “will remain with the local land manager,” Erskine informed Deputy Commissioner Ron Somerville of the Alaska Department of Fish and Game. “Because the DOI agencies manage their lands on multiple use principles, we have received favorable interpretations that wildfire surveillance is an appropriate response if it is allowed in an approved plan and determined to be the most cost effective action. . . . The DOI agencies have elected to use their Alaska fire management personnel to implement this fire policy for Alaska rather than accept a very narrow national definition.” By articulating the differences between the Alaskan experience and the rest of the nation, the NPS built stronger ties with state and local agencies and interests.⁷¹

After the early 1990s, fires in Alaska diminished enough that its issues were no longer in the forefront of national policy discussions. After 40,035 acres burned in twenty-six fires in Alaska in 1993, the acreage diminished to a low of twenty-one acres in

⁷⁰ Dick to Evison, February 3, 1989.

⁷¹ NPS Fire Director BIFC to Chief, Branch of Fire and Aviation Management, July 1, 1991, National Interagency Fire Center, miscellaneous files; Ron Somerville, Deputy Commissioner, Alaska Fish and Game to Edward F. Spang, Boyd Evison, Walt Steiglitz, and Niles Caesar, April 2, 1991 NIFC miscellaneous files; Steve Holder to Russ Hansen, May 14, 1991, Evison to Somerville, May 14, 1991, draft, NIFC miscellaneous files.

1998. Only in 1999, when fourteen fires burned across 164,397 acres did Alaska again attract policy attention.⁷²

During 1990, as large fires burned in Alaska, the NPS faced the first real challenge to its reconstituted fire management in the lower forty-eight states at Yosemite. 1990 became a brutal fire year in California, affecting the Service's ability to battle fires and all but eliminating any efforts to reintroduce prescribed fire in the western parks. As Yosemite prepared for the centennial of its establishment, the park was closed for the first time in its history. Lightning storms ignited fires in the park between August 7 and 10. Suppression efforts ensued, but failed to halt the spread. By August 10, more than 12,000 acres were aflame. Yosemite Valley and El Portal were evacuated that day, and the Merced Grove of Big Trees was threatened. Although the fires continued, they were brought under control later in the month, and the episode seemed likely to pass without renewing the controversy that dogged Yellowstone.⁷³

Later observers noted that the situation at Yosemite in 1990 roughly paralleled Yellowstone in 1988. In both fires, severe drought contributed to the accelerating danger. In both instances, high temperatures and low humidity combined with thunderstorms to intensify the fire risks. But the two parks were different both in their ecology and their vision of the role of fire. The prescribed natural fire zone boundaries had not been restricted at Yosemite in response to the Yellowstone events, making it an anomaly; in fact, they had remained stable for many years. All of the damaging fires at Yosemite occurred outside of prescribed natural fire zones, and were automatically subjected to suppression. Yosemite had long recognized that fuel conditions in the mixed conifer forest and chaparral zones were not within the natural range of variability, and that lightning fires would not be ecologically beneficial. Park managers decided that those fires could not be managed safely until more natural conditions could be restored. In Yellowstone, managers believed that conditions allowed virtually the entire park to be included in a prescribed natural fire zone. At Yosemite, those realities combined with the caution inherent in the National Park Service following the summer of 1988, and the 1990 suppression response began immediately. NPS responders were initially overmatched, but the arrival of Class I and Class II teams gave pivotal assistance. Another Class I team was ordered. The relatively small size of the fire –between 12,000 and 15,000 acres – and the combination of skilled personnel and changing weather helped bring the fires under control.⁷⁴

Yosemite's response showed how much the political climate had changed. For the previous twenty years in most circumstances, the National Park Service allowed lightning fires – the quintessential natural prescribed fire – to burn until they threatened life or property. In contrast, at Yosemite in 1990, the Service began urgent efforts to suppress immediately, setting a different management standard as a direct result of the NPS experience at Yellowstone.

Widespread media attention added to the Service's caution at Yosemite. NBC, CBS, ABC, and CNN were all present; *Good Morning America*, the *Today Show*, *Newsweek*, and *Time* all covered the fire, and countless local, regional, and national

⁷² National Park Service, *National Park Service Wildland Fire Report, 1999* (Boise, ID: Branch of Fire Management, 2000), 45.

⁷³ NPS Western Region, "Yosemite Fires, 1990," 4, 17, 81.

⁷⁴ *Ibid.*, 5.

newspapers tracked the NPS's response.⁷⁵ Park officials could be forgiven if they felt as if the media was checking up on the NPS to see how different the Service's response would be in the aftermath of Yellowstone.

By 1990, fire management had become national news, and the National Park Service found itself at the center of a public debate about how to respond. Yellowstone and Yosemite both experienced significant fires at a time when policies and public perception did not coincide. This brought the national parks further scrutiny. Even more, changing patterns of living and a callous ignorance of fire patterns had brought growing populations into potentially threatening environments, sometimes near or adjacent to national park areas. It only remained a matter of time until hillside suburbs around arid western communities faced the brunt of fires of their own.

In the early 1990s, the West turned mildly wet for a few years. The result was a clear decline in acreage burned by wildfires. The Intermountain Region of the NPS recorded fires on 30,750 acres in 1990, 7,776 acres the next year, 3,744 acres in 1992, and 14,400 acres in 1993. Fire damages in the Pacific West region decreased from 20,616 acres burned in 1990 to 6,342 acres in 1991, 11,468 acres in 1992, and 8,788 acres in 1993.⁷⁶ As a result, national park fires fell from the forefront of fire concerns. The fires that drew attention took place on the lands of other agencies.

The West's dramatic and brutal fire year of 1994 drew the issue of fire management even further from the National Park Service. In the first bad year in the region in five years, considerable NPS lands burned – 52,502 acres in the Intermountain region and another 20,565 acres in the Pacific West. The real story of 1994 became the horrific human toll of firefighting: thirty-four firefighters died in the line of duty and \$965 million was spent on suppression as fires burned on 3.5 million acres. In one tragic afternoon on July 6, 1994, in the South Canyon fire on Bureau of Land Management land outside of Glenwood Springs, Colorado, twelve firefighters and two helicopter crew members, trapped as a fire swept upslope, burned to death. Stephen Pyne opined that “the firefighters lost at the South Canyon fire were, for the fire community, the equivalent of the Army Rangers killed at Mogadishu.” Those tragic human losses inexorably altered both policy and procedure.⁷⁷

In the aftermath of the tragic summer of 1994, the National Park Service again reassessed its fire management strategies and goals. A study team of Stephen J. Botti, G. Thomas Zimmerman, Howard T. (Tom) Nichols, and Jan van Wagtenonk, all respected fire researchers or managers, analyzed NPS fire problems. They advocated increasing the amount of park acreage that functioned as natural ecosystems; reducing the risk of severe wildfire in developed areas in national parks and along boundaries by clearing and the use of prescribed burning; enhancing efforts to provide information about the role of fire in parks to the public and to decision makers; increasing interagency planning; and

⁷⁵ *Ibid.*, 85-89; Smith, *Media and Apocalypse*, 75-77.

⁷⁶ National Park Service, National Park Service Wildland Fire Report, 1999, 46-47, 58-60.

⁷⁷ National Interagency Fire Center, “South Canyon Fire Investigation: Report of the South Canyon Fire Investigation Accident Team, August 17, 1994,” (Boise, ID: National Interagency Fire Center, 1994), 1-4; Bret W. Butler; Roberta A. Bartlette; Larry S. Bradshaw; Jack D. Cohen, Patricia L. Andrews; Ted Putnam; Richard J. Mangan, “Fire Behavior Associated With the 1994 South Canyon Fire on Storm King Mountain, Colorado,” Research Paper RMRS-RP-9, (Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, 1998), 1-7; Carle, *Burning Questions*, 225; Stephen J. Pyne email to Hal Rothman, September 15, 2004, copy possession of the author.

increasing the capability to analyze data and integrate fire management into general planning and management throughout the park system.⁷⁸ The recommendations reflected the set of goals the NPS developed prior to Yellowstone, with a strong dose of the programmatic changes that followed the 1988 fires. Yet what made the report significant was its willingness to assert the value of natural fire in the aftermath of the summer of 1994. The NPS continued to embrace the role of natural fire even as such a stance became politically more difficult.

During the summer of 1994, two initially small fires at Glacier National Park attracted regional attention because the NPS was willing to let them burn. “In a year when firefighters are scrambling throughout the West, Glacier National Park managers are carefully tending a small 6-week-old fire that could potentially burn a whopping 43,000 acres, maybe twice that much,” wrote Don Schwennesen of the *Missoulan* in an overstatement of the potential impact of the fire. Such media attention could easily impede a fire manager’s desire to support prescribed burning. Even Glacier Superintendent Dave Mihalic seemed to vacillate, noting the enormous difference between a policy and its implementation. “While the public may support prescribed natural fire in theory, such discussions typically occur outside the fire season,” Mihalic told the *Billings Gazette*. Actual fire made such support tenuous at best. Nor was the park helped by a flippant comment from Flathead National Forest spokesman J.D. Coleman, who told reporters that the Forest Service “was not screwing around with prescribed fires right now.” The internal and external struggle over the fire continued into the middle of August, with the NPS closely monitoring the fire even as local and regional reporters queried locals about the policy. Rain on August 18 slowed the fire and snow and rain in early October finally removed the threat.⁷⁹

In the end, one of the two fires, the Howling Fire, proved a triumph for prescribed natural fire. Although the fire was routinely termed “controversial” by regional media, the pressure on the National Park Service was not sufficient to compel suppression action. The Service stuck to principle despite the discomfort it caused local managers. “If we would have put the fires out just because of the (fire) activity around us and political developments,” observed Glacier National Park Fire Management Officer Fred Vanhorn, “we, in effect, (would be) saying that we were not going to allow significant prescribed natural fires to occur in Glacier.” NPS staff felt that the Howling Fire provided an important lesson that could be used as a model elsewhere in the park system. By holding firm to established policy even under political pressure, Glacier National Park proved that prescribed fire could take place, even when at the time fire was a severe problem elsewhere in the region or in the park system.⁸⁰ This was a step toward the more comprehensive vision of the role of prescribed natural fire held by most fire scientists and ecologists inside and outside of the national park system.

The National Park Service continued to develop and support its prescribed natural fire program. In an important workshop in San Francisco early in 1995, the NPS

⁷⁸ Stephen J. Botti, G. Thomas Zimmerman, Howard T. Nichols, and Jan van Wagendonk, “Fire Management and Ecosystem Health in the National Park System: Problem Analysis,” (Boise, ID: NPS Branch of Fire and Aviation Management, 1994), 1-4.

⁷⁹ “Let it Burn?” *Billings Gazette*, August 4, 1994; Don Schwennesen, “Glacier Goes for the Burn,” *The Missoulan*, August 7, 1994, B-6; “GNP Managers Consider Their Options,” *Glacier Reporter*, August 11, 1994; David Carkhuff, “The Howling Fire,” *Hungry Horse News*, August 18, 1994,

⁸⁰ “Howling Fire,” *Hungry Horse News*, October 6, 1994, 5.

reaffirmed its commitment to the concept. The period following 1988 had been marked by an aversion to the risk of an escaped prescribed natural fire. With the minimization of risk as a goal, the burn program could be scored a success. But if the goal was to implement prescribed natural fire programs that were ecologically significant, “pretty disappointing” was a better description of the situation. “We need to find a way for prescribed fire and wildfire programs to coexist during the normal fire season,” the meeting summary recorded. Such a strategy would require expanding prescribed natural fire while maintaining an acceptable level of risk.⁸¹ This was as difficult as the NPS agency mission: to preserve for the future while accommodating the present.

On the ground, new innovations revealed new approaches to fire. In 1995, the NPS introduced its new Prescribed Fire Support Module (PFSM) program. The PFSM program provided mobile tactical support nationally for parks with prescribed fire programs. Because they were specifically unavailable for wildfire response, the NPS teams, initially consisting of four groups of five members, guaranteed experienced professional attention for prescribed fire. This new emphasis reflected the internal push toward the embrace of prescribed fire that characterized NPS thinking after Yellowstone. Subsequently similar teams designed to manage prescribed natural fire were introduced. When the NPS lifted the budgetary ceiling on prescribed natural fire, it effectively removed the rationale for converting fires from the prescribed natural fire category into the wildfire category as a way to access resources. This development further contributed to the growing role for natural prescribed fire in the NPS.⁸²

The idea that the National Park Service would risk potential political pressure in the name of a clear ecological and resource management goal spoke volumes about the commitment of the Service’s fire apparatus to the goals of the previous twenty-five years. Despite the enormous negative publicity associated with the Yellowstone fires and the intense scrutiny and micromanaging that the NPS experienced in its aftermath, the Service had a vision of appropriate strategy and was willing – within reason – to take risks to implement it. At a time when morale was low throughout the National Park Service, due in large part to Director Roger Kennedy’s 1995 reorganization of the service and the way in which it transferred authority and influence from central offices to the field, this firm stand on principle proved an inspiration to many in the NPS.

By this time, the NPS had become a premier fire management organization in the federal land management system. Despite the scrutiny that the Service experienced in the aftermath of Yellowstone, two decades of planning and implementation designed to support clear and distinct goals and objectives had propelled the NPS forward. The Service had responded to a variety of challenges, putting its most creative thinkers into the process of fashioning response. Its practices and procedures had become models for changes in other agencies.⁸³ The National Park Service’s initial recognition of the value of fire as a tool for landscape management led the other agencies; over time its models

⁸¹ Prescribed Natural Fire Workshop, San Francisco, California, January 3-5, 1995, Meeting Summary,” NIFC, miscellaneous files.

⁸² Ben Jacobs, “NPS Prescribed Fire Support Modules-A Pilot Program,” *Fire Management Notes* 56 2 (1996): 4-5; n.a. “Prescribed Fire Support Crew: Pilot Program 1995,” Bandelier National Monument, Y14 (PFSC), n.d ca. 1995; Robert Hunter Jones, “National Park Service Prescribed Fire in the Post Yellowstone Era,” *Wild Earth* (Summer 1997), 27-28.

⁸³ NPS Fire Director, NIFC to Regional Directors, November 1, 1994, NIFC A56 (Fire) Y 1421; Associate Director Operations to Regional Director, Western Region, December 5, 1994.

were picked up and implemented as suppression-oriented agencies such as the Forest Service and the Bureau of Land Management first watched cautiously and then joined in. When the NPS started down this road, the set of ideas that included managed fire – most prominently, that fire was a productive force in ecological management – was hardly standard thinking. By the early 1990s, the NPS’s rationale had become the standard for management. Its programs had been extremely successful in changing the way fire was used throughout the federal land management system, and its ideas had permeated national fire management. Combined with thoughtful leadership and astute planners and implementation teams, the money and attention the Service invested in its fire programs had paid significant dividends.

Success bred some vexing consequences as well. It led to an ideological commitment to fire’s restoration in land management, the sometimes blind goal to introduce fire without clear definitions of appropriate circumstances. Using fire as a tool superseded management as a goal in some circumstances, leading to questions about NPS decisions and goals. Compounded by the reorganization of 1995, erosion of agency experience through early retirement and attrition hit fire management as well as every other dimension of NPS operations. Other agencies recognized the value of the Service’s experience and recruited its personnel. In a testament to the value of the fire program, many members, despite strong loyalty to the NPS, felt an equally powerful drive to spread their message to peer agencies.

In 1995, a revised national fire policy was completed. The NPS played an important role in shaping the document. A direct result of the 1994 fire season and the South Canyon tragedy, the new document articulated nine management principles that sounded much like the NPS’s goals. Under this document, public and firefighter safety remained the top priority. Wildland fire was seen as an essential ecological process and agent of natural change that had to be incorporated into planning. Fire management plans were required for every federally administered area with vegetation that could burn and fire planning had to be designed to support land and resource management planning. Risk management became a foundation for fire management. Fire management programs had to be economically feasible and had to be based on the best available science. The plans had to incorporate environmental quality and public health considerations. Cooperation with other governmental and non-governmental entities was essential and the standardization of policy among federal agencies was to be an ongoing objective. The plan emphasized indirect attacks on fire, the sort of response that had characterized the response to the Yellowstone fires in 1988, as a safer strategy than the direct confrontation of firefighting lore. A full range of responses was permitted, allowing a measure of flexibility than had never before existed across the full spectrum of federal agencies. Any approach, from basic monitoring to full-scale suppression, could be implemented under the right circumstances, a substantial shift in the way federal agencies approached fire. In effect, the federal system changed from looking at the origin of a fire to looking at its circumstances as the basis for decision making.⁸⁴

The new policy led to greater coordination and cooperation among federal land management agencies. An implementation plan in 1996 translated the vision into a series

⁸⁴ U.S. Department of the Interior, U.S. Department of Agriculture, “Federal Wildland Fire Management: Policy and Program Review, Final Report, December 18, 1995,” (Boise, ID: National Interagency Fire Center, 1995), 3-9; Carle, *Burning Questions*, 225.

of programs, dividing the initial recommendations into geographic concerns and long-term commitments. The difference suggested the enormity of the task that confronted federal fire managers, as well as the need for clear signposts – not only to gauge progress but to remind everyone of the direction in which fire management planning was going. Ongoing policy reviews and innovation led to further planning and new goals. A new resource allocation strategy in 1998 sought to develop an interagency process to distribute fire management resources while efforts continued to move fire management policy toward implementation throughout the national park system.⁸⁵

The new policies accelerated the implementation of the fire management strategies that originated in the National Park Service across the federal land management system. Between 1995 and 1999, federal agencies more than doubled the acreage treated with prescribed burning, reaching 2.2 million acres as the new century began. The NPS had been a small portion of that new emphasis, burning 59,495 acres in 1995, 42,511 acres in 1996, 69,481 acres in 1997, and 82,413 acres in 1998, finally topping the 100,000-acre total in 1999 with a total acreage burned of 132,665. With the exception of 1999, the second half of the 1990s showed no significant difference from NPS prescribed burning during the first half of the decade. The shift in national emphasis had little impact on NPS practice, leading to questions about whether the bold promises of the mid-1990s amounted to significant changes in practice.⁸⁶

The national fire policy codified Service values but it further shifted the emphasis of federal fire management away from the NPS. Beginning in 1994, difficult fire seasons followed on a two-year cycle, in 1996 and 1998, coinciding with the national election schedule and becoming a political issue. Most of the fires occurred on Forest Service or BLM land, with the NPS contribution mainly resources to fight the fires. The attention went away from NPS programs and ideas as wildfires on federal land became staples on the evening news and part of a larger national discussion about the role of government in the aftermath of Congress's failed "Contract with America," an effort to shape national priorities with unrealistic and possibly harmful policy promises from elected officials, in 1994 and the shutdown of the federal government late in 1995. In an age when questions about the size and function of government were part of the national dialogue despite a vibrant economy, the image of fires burning out of control suggested inefficiency in the eyes of an uninformed public.

The National Park Service continued to develop strategies for addressing fire. In 1996, NPS Fire Director Doug Erskine pointed to a significant improvement in the tools available "for expanding the use of fire in national parks." Prescribed fire modules had been thoroughly tested and proven successful, and their use had been expanded. In 1996, the NPS established four prescribed natural fire management teams, with a planned increase to six in 1997. Dedicated fire specialists were located in the Midwest, Intermountain, and Pacific West regions, and the Southeast and Northeast field areas shared another team. A significant change in funding allowed further development of the

⁸⁵ U.S. Department of the Interior, U.S. Department of Agriculture, "Federal Wildland Fire Management: Policy and Program Review, Implementation Action Report, May 23, 1996" (Boise, ID: National Interagency Fire Center, 1996), iii; Resource Allocation Task Group, "Implementation of Federal Wildland Fire Management Policy: Allocation of Resources, June 15, 1998," (Boise, ID: National Interagency Fire Center, 1998), 4-8.

⁸⁶ Carle, *Burning Questions*, 225; National Park Service, "National Park Service 1999 Wildland Fire Report," 41.

NPS response to prescribed natural fires. Congress permitted the NPS to fund the operational aspects of prescribed natural fire from the suppression fund. This was in line with the 1995 fire policy, which stated that all unplanned ignitions could be managed along a spectrum of appropriate management responses from full suppression to monitoring. Since all these events were unplanned “emergencies,” they could all be managed by tapping emergency suppression funds. Combined with the endorsement of the Federal Wildfire Management and Program Review (FWMPR) – designed to cross agency boundaries and to be based on the best available science – and of the Secretaries of the Interior and of Agriculture, the NPS could claim that its approach to fire had shaped federal policies.⁸⁷

Throughout the remainder of the 1990s, fire policy remained an important component of federal land management that largely embraced the principles the NPS had developed since the 1970s. In a perplexing turn of events, national park lands were not the focus of the program, something for which the National Park Service could be grateful. A truly national system had developed, one focused on firefighter safety, land restoration, and federal lands other than the park system. The centrality that the Service achieved after 1968 had begun to wane, leaving the NPS with enormous fire management issues that increasingly were apart from the issues and direction of national fire policy.

⁸⁷ National Park Service, “National Park Service 1996 Wildland Fire Report,” (Boise, ID: National Park Service, 1997), 3-4.

