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# PARK SERVICE

# Agency Is Not Meeting Its Structural Fire Safety Responsibilities

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Mr. Chairman and Members of the Committee:

We are pleased to be here today to discuss the Park Service's structural fire safety efforts.[1] Our comments today are based on our May 2000 report in which we evaluated (1) whether the parks were meeting their structural fire safety responsibilities; (2) if not, why not; and (3) what efforts were underway to address any identified problems.[2] Our report raised serious concerns about the agency's commitment and priority to ensuring that the risks of structural fires harming visitors, employees, resources, and other assets were minimized.

In summary, we found:

Structural fire safety efforts in national parks are not effective. The structural fire activities at the six parks we visited lacked many of the basic elements needed for an effective fire safety effort. These gaps included such fundamental things as inadequate fire training for employees, inadequate or nonexistent fire inspections, and—for many buildings—inadequate or nonexistent fire detection or suppression systems. These situations led to many fire safety hazards. We found fire extinguishers that had not been checked for years, overnight accommodations that had not been inspected by qualified fire safety people, cabins without smoke detectors, and visitor centers that did not have fire-suppression systems. Furthermore, even when fire hazards are detected, they can go uncorrected for years.

These deficiencies occur principally because local park managers are not required to meet minimum structural fire safety standards and because structural fire activities have been a low priority within the agency for many years. Even though the Park Service issued policy to local park managers about how to address structural fire safety, park managers are not required to follow the agency policy,

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[1] Structural fires include fires in buildings, dumpsters, and vehicles.
[2] *Park Service: Agency Is Not Meeting Its Structural Fire Safety Responsibilities* (GAO/RCED-00-154, May 22, 2000).

nor are they required to meet a minimum set of fire safety standards. Instead, individual park managers are permitted to define the scope and emphasis given to the threat of structural fire. Our work shows that structural fire safety is near the bottom of the parks' priority lists.

The Park Service has acknowledged problems in implementing its structural fire safety program and has begun a number of initiatives to address them. These include (1) developing new agency policies for addressing structural fire safety responsibilities, (2) placing specific minimum fire safety requirements on park managers, and (3) developing a process for structural fire inspections and performing assessments of structural fire risks at each unit of the national park system. However, these initiatives have only recently begun. Until these initiatives are completed, the safety of park visitors, employees, buildings, and artifacts are being jeopardized and are vulnerable to fire that could cause damage, destruction, severe injury, and even loss of life.

## Background

Today, the Park Service is the nation's steward for over 30,000 structures, many of them historic; many national icons, such as the Statute of Liberty; and over 80 million artifacts. These structures include hotels; motels; cabins; visitor centers; interpretative centers; and historical buildings, such as Independence Hall and many former presidents' homes. In terms of buildings alone, the Park Service is the federal government's third largest landlord--behind only the Department of Defense and the U.S. Postal Service.

The Park Service is responsible for ensuring that the buildings and artifacts entrusted to it are protected and that the people who visit or work in them are safe from undue hazards or risks. However, one risk—the threat of fire—has been a recurring issue. While much public and media attention has historically focused on spectacular wildland fires, like those that occurred in Yellowstone National Park in 1988, or around Los Alamos, New Mexico, earlier this year,

building or structural fires within parks have not received much attention. Nonetheless, since 1990, more than 1,400 fires have occurred in national park buildings and other facilities. These fires have killed five people, caused serious injury to many others, and resulted in millions of dollars in property loss.

## Key Elements Generally Missing From Parks' Structural Fire Safety Activities

None of the six parks we visited had effectively addressed their structural fire safety responsibilities.[3] In fact, most of the basic components necessary for addressing parks' structural fire risks were missing at each park. These gaps have resulted in significant and, in some parks, long-standing deficiencies that have seriously compromised fire safety. Although we visited only a few parks, according to the Park Service's Deputy Chief Ranger who is responsible for the agency's structural fire program, similar problems with park structural fire programs would be found whether we visited 6 or 60 parks.

According to structural fire safety experts from the National Fire Protection Association, U.S. Fire Administration, and fire experts from six other associations and government agencies we contacted, an effective structural fire safety effort has three essential components: fire prevention and protection, fire response, and funding. Both the fire prevention and protection component and the fire response component have a number of key elements associated with them. However, at each of the six parks' that we visited most of the key elements were missing.

### Fire prevention and protection

According to the structural fire experts we contacted, the key elements to effective fire prevention and protection are (1) a fire plan for handling fire risks

[3] The six parks were Ford's Theatre National Historic Site in Washington, D.C.; Olympic National Park in Washington State; Prince William Forest Park and Shenandoah National Park in Virginia; and Sequoia-Kings Canyon National Park and Yosemite National Park in California.

and incidents, (2) fire inspections conducted by qualified staff, and (3) an incident reporting system to analyze fire incidents and identify corrective actions to the fire safety program. However, the parks that we visited were lacking in most or all of these components.

None of the six parks that we sampled had adequate fire plans. At each park, the plans were either out of date or not coordinated with nearby community fire departments or had some combination of these problems. For example, the fire plan at Shenandoah National Park was prepared in 1991 but has not been updated since that time to reflect the addition of new buildings or other changes in park operations. Updating the plan is particularly important at this park because, according to park managers, the park has an inadequate fire response capability and, therefore, must rely heavily on fire departments from local jurisdictions outside the park to respond to fires.

Similarly, regarding inspections, none of the parks we visited had their facilities regularly inspected for fire safety by qualified individuals. Examples of structural fire inspection deficiencies that we identified included the following:

- At Yosemite National Park, until 1999, none of the park's structures had a formal structural fire safety inspection, including the 123-room Ahwahnee Hotel—a national historic landmark. In fiscal year 1999, the park hired, for the first time, a trained structural fire inspector to begin fire inspections for its 800 structures.
- Sequoia-Kings Canyon National Park had not conducted any structural fire safety inspections, even though the park has about 250 buildings and other facilities, and has had 41 structural fires since 1988.
- During a visit to Ford's Theatre in Washington, D.C., we noted that serious deficiencies concerning stairwell and stage doors had not been corrected even though they were first identified by a Park Service contractor in 1993. The contractor's report also raised concerns about the theater's sprinkler

> system and noted that, "If the sprinkler system fails or does not operate as designed, a fire in the stage area, particularly during a production, has the potential to kill several hundred people. . .. Fires in other theaters show that a severe fire can develop in a few minutes."

The remaining key element in fire prevention and protection is an incident reporting system to analyze fire trends and causes in order that corrective measures can be devised and initiated. Three of the six parks we visited did not participate in an agencywide fire incident reporting system. Failure to report this kind of information undermines the agency's ability to understand the scope of fire problems and vulnerabilities throughout the national park system as well as the agency's ability to set priorities for its safety needs.

**Fire response**

According to the structural fire safety experts that we contacted, two key elements are needed to effectively respond to fires, namely, (1) fire detection and suppression systems and (2) fire brigades and/or agreements with community fire departments. None of the parks in our sample had an adequate fire response capability.

Suppression systems, such as sprinklers, should be a key component in any structural fire safety effort, according to fire experts, and are especially important to the Park Service because of the remoteness of many facilities and the delayed fire response capabilities generally found in many parks. In addition, where fire detection and/or suppression systems are installed in buildings, experts agree that it is critical that these systems be maintained and tested periodically to ensure they are working properly. Each of the six parks we visited were either missing detection or suppression systems in key facilities, such as visitor centers and overnight lodging facilities, or were not being maintained and tested properly, if at all.

- At Prince William Forest Park, smoke detectors were not installed in many cabins used as overnight accommodations by visiting guests. Frequently, these guests are youth organizations.
- At Yosemite National Park, none of the sprinkler systems installed in park buildings have been tested since they were installed to make sure that they are operating properly. In addition, we found that park officials did not replace defective sprinklers involved in a well-publicized nationwide recall. A park manager told us that the park did not meet a 1999 deadline set by the U.S. Consumer Product Safety Commission and the manufacturer to qualify for the reimbursement of labor costs associated with replacing, parkwide, about 1,000 recalled sprinkler heads. These sprinkler heads are used in fire suppression systems in residences where park employees live. The defective sprinkler heads, identical to those installed at Yosemite, failed to function in at least 20 fires. Nonetheless, the park has not replaced these sprinkler heads and is still relying on them as a key part of its fire safety effort.

To complement fire detection and suppression systems, adequate fire response requires fire response crews that are properly trained and equipped. Within the Park Service, adequate fire response is frequently accomplished by the use of fire brigades. Fire brigades are similar to community fire departments and include firefighters, fire equipment, and flame-retardant clothing located in or near the park. The Park Service has come to rely on the use of fire brigades in parks that are some distance from community fire departments. In parks that are not remote, the park managers frequently have agreements with nearby community or other fire districts for initial response or additional backup for responding to fires. Each of the six parks we visited either did not have a qualified or properly equipped fire brigade or their response capability was not fully coordinated with local fire departments. For example:

- At Yosemite, in 1999, 42 of 45 of the firefighters stationed in Yosemite Valley—the central and busiest area of the park—had not taken the agency's annual 16 hours of required minimum training or had no record of any training.
- Shenandoah National Park does not have qualified personnel to respond to structural fires. The park has a collateral-duty fire brigade that has not been trained to enter a burning structure and lacks the necessary equipment to respond to vehicle fires. The park's policy is to rely on local fire departments for entering burning structures. However, the departments' response times range from 10 to over 45 minutes, in contrast to a much shorter response time—4 to 6 minutes—that is generally needed to respond to burning buildings.
- Olympic National Park has fire response agreements with only two of nine fire departments in the surrounding area. As a result, many areas of the park have no formal arrangements with local fire departments for a structural fire response.

**Funding**

Fire experts generally agree that sufficient, consistent funding is necessary to support an effective structural fire safety effort. However, there is no specific appropriation dedicated to structural fire activities in the Park Service. Individual park managers are permitted to determine the funding levels, if any, for structural fire activities. Park managers at the six parks we visited acknowledged that structural fire safety activities received insufficient funding.

Our findings on the gaps and problems in the parks' structural fire safety efforts appear to be consistent with the Park Service's own analyses. A 1998 Park Service report stated, "sooner or later the NPS stands to be seriously embarrassed (at a minimum) by the catastrophic loss, either of an irreplaceable historic structure or collection, or of human life, from a structural fire." In addition, in

December 1997, the Director of the Park Service expressed serious concerns when an internal agency report identified about 1,900 fire safety deficiencies associated with the agency's museum collections—such as the storing of flammable liquids and materials near museum storage spaces. Yet, as of January 2000—over 2 years later—almost 75 percent of these deficiencies have not been corrected. According to the director, "These deficiencies can be corrected at a modest cost. To do otherwise would be negligence."

**Key Reasons for the Agency's Ineffective Structural Fire Effort**

The parks we visited lacked an effective structural fire safety effort because the agency (1) has not fully specified the minimum structural fire safety standards individual parks must meet and (2) has placed little emphasis on structural fire safety. As a result, managers at these parks gave this aspect of operations a low priority. This low priority is inconsistent with Park Service assertions that health and safety issues are a top agency priority.

Currently, the Park Service provides park managers with a generalized policy on what their fire safety efforts should include. However, the policy does not require parks to meet minimum fire safety standards. It places primary responsibility for daily management and compliance for structural fire safety with individual park managers. The extent to which such activities are implemented at each park, however, depends on how individual park managers define the scope, priority, and emphasis given to structural fire safety efforts.

While the policy places primary responsibility on park managers to carry out structural fire safety activities, little support or emphasis for the effort appears to exist at the headquarters or regional levels. Furthermore, the Park Service has no process for ensuring that plans for renovating existing facilities or constructing new structures is routinely reviewed for fire safety. The lack of agency attention to structural fire seems inconsistent with the Department of the Interior's and the

Park Service's statements that addressing unmet health and safety concerns is a top priority. In April 1999, the Department of the Interior provided its component agencies—including the Park Service—with guidance that identified health and safety issues as a top funding priority. This guidance explicitly identifies violations of national fire protection standards as requiring immediate attention. Although the Park Service's fiscal year 2001 annual performance plan stresses that employee and visitor health and safety are top agency priorities, in the case of structural fire safety, the Park Service's practices and activities have not been consistent with this policy.

## Initiatives to Address Problems, but Practical Results Depend on Effective Implementation

The Park Service is aware that there are major weaknesses in its structural fire safety effort and has begun a number of initiatives to address them. It is unclear, however, whether the Park Service will follow through on these initiatives to ensure that an effective structural fire safety program is developed and implemented.

Park Service officials are aware that structural fire safety is a low priority at many parks, and the agency has begun a number of initiatives to revitalize and improve its effort. In 1998, the agency appointed a structural fire safety steering committee, which drafted a fire management policy and mission statement. These documents defined the purpose, scope, and general policy toward structural fire in the agency. Also in 1999, the Park Service hired a new structural fire chief and directed the individual to develop an agencywide structural fire safety program. This program is now being developed. Once implemented, these initiatives are likely to increase the level of structural fire prevention and response over that currently in place. Over time, such initiatives would shift the agency's focus from one that currently emphasizes fire response to one that emphasizes fire

prevention—an approach that, according to program administrators, is much more cost-effective.

While the initiatives under way are certainly steps in the right direction, their success depends on their being effectively implemented. However, it appears that the planned levels of resources for these structural fire safety initiatives will not be sufficient to get several key initiatives completed, including one of the agency's most critical efforts—completing an overall assessment of the structural fire risks facing facilities and structures throughout the Park Service.

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In closing, as a result of the findings in our report, we recommended that the Park Service complete and implement the various structural fire safety initiatives that have recently begun in the agency. This effort should include, among other things, establishing minimum structural fire safety requirements, developing and implementing a plan for correcting the fire safety needs and deficiencies, and ensuring that new and rehabilitation projects comply with generally accepted fire codes. In addition, to ensure that local park managers elevate the priority given to addressing structural fire safety needs and deficiencies, we also recommended that park managers be held accountable for meeting the agency's health and safety responsibilities by requiring them to develop and implement effective structural fire safety programs.

In commenting on our May 2000 report, the Park Service agreed with our findings, conclusions, and recommendations. The agency also indicated that is was continuing to work on its ongoing initiatives and considering plans to implement our recommendations. Until the agency takes action in this area, the problems that we identified will likely persist.

This concludes my statement. I would be happy to answer questions from you or other Members of the Committee.

## Contact and Acknowledgment

For further information on this testimony, please contact Barry T. Hill at (202) 512-3841. Individuals making key contributions to this testimony include Cliff Fowler, Paul Staley, Frank Kovalak, Brian Estes, Lew Adams, and Ned Woodward.

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