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Dear Interested Party:

The National Park Service (NPS) is proposing to rehabilitate and upgrade the Canyon Visitor Center in Yellowstone National Park. The present visitor center was constructed in 1958 and has a number of structural and design defects that we want to correct. Additionally, the current visitor center is too small to adequately serve the number of visitors who use it. In order to provide adequate space and services to the public, the size of the rehabilitated building would be doubled (approximately) to 22,820 square feet by adding a second story and utilizing the space at the south end of the building now occupied by the Post Office.

The structural problems of the visitor center and the inadequacy of the facility for accommodating interpretive exhibits and information services for the public have been recognized since the 1970s, but funding constraints prevented any real progress toward a solution. With Congressional authorization of the Recreational Fee Demonstration Program in 1996, planning for rehabilitation of the Canyon Visitor Center could begin.

Because the Canyon Village development was originally constructed as part of the NPS Mission 66 Program (a program initiated in the mid-1950s to modernize facilities and remove park developments from sensitive natural resources), Yellowstone was required to prepare an assessment of the project for a regional NPS Mission 66 panel. That assessment, submitted in January 2000, determined that the Canyon Village development was eligible for listing in the National Register of Historic Places as a historic district because of its importance to the NPS Mission 66 history. The Wyoming State Historic Preservation Office concurred with this determination on July 6, 2000. Because the Canyon Visitor Center is a contributing building within the historic district and because the proposed rehabilitation and upgrade of the visitor center would alter its historic appearance, the enclosed environmental assessment of the project was prepared.

We invite you to submit your comments on the Canyon Visitor Center Rehabilitation Environmental Assessment Service during the 30-day comment period. Please send your comments to the Planning Office, Canyon Visitor Center Rehabilitation Project, P.O. Box 168, Yellowstone National Park, Wyoming 82190, by March 12, 2001.

Sincerely,

Michael V. Finley
Superintendent

Enclosure

ENVIRONMENTAL ASSESSMENT
CANYON VISITOR CENTER REHABILITATION

February 2001

YELLOWSTONE

National Park • Wyoming / Montana / Idaho

Purpose and Need

The National Park Service (NPS) is proposing to rehabilitate and upgrade the Canyon Visitor Center in Yellowstone National Park. The present visitor center (shown in the photo below) was constructed in 1958 and has a number of structural and design defects that must be corrected. Additionally, the current visitor center is too small to adequately serve the number of visitors who use it. In order to provide adequate space and services to the public, the size of the rehabilitated building would be doubled (approximately) to 22,820 square feet. This would be done by adding a second story and utilizing the space at the south end of the building now occupied by the U.S. Post Office.

The original design of the Canyon Visitor Center proved inadequate from the beginning. Multiple (often-failed) attempts to repair and mitigate various structural and design defects of the building have occurred during the past 30 years. For example, the original roof was poorly designed for the environmental conditions at Canyon where there are long winters with heavy, deep snows. Specifically, the roof pitch is not steep enough to allow snow to slide, thereby creating a severe and dangerous snow-load problem; the original wood shingles exacerbated this problem by inhibiting snow movement. The shake shingles were replaced in the early 1990s with a metal roof with the expectation that the snow would slide, however, snow continues to build up on the roof. Despite two additional attempts to alter the roof pitch, the problem has not been corrected. Added to this, the number of valleys (the trough formed where two roof slopes meet) in the original roof design exacerbates the snow load by trapping snow. A recent architectural assessment of the roof concluded that the pitch and valley problems in the current roof can only be corrected with a totally new roof design.



Canyon Visitor Center

Even though Canyon is at a high elevation (7,734 feet) and temperatures can be near freezing at any month of the year, the original building was not sufficiently insulated to be comfortable or to protect plumbing systems. The lack of insulation along with other design features, such as huge panels of glass, caused the visitor center to be energy inefficient. There have been numerous attempts to correct these deficiencies. The window panels that were originally set along each side of the staff office wing were removed, a solid wall added, and smaller windows set in. The ceilings in both the lobby and the auditorium were lowered. When the ceiling was lowered in the lobby, the large windows above the entry doors were covered with wood panels. Even though insulation was added (where possible) to the building's walls and ceiling, the building is still energy inefficient. In order to afford some limited use of the building in the winter as office space, interior walls in the administrative section were moved to create a smaller space that could be heated; however, the conditions remain uncomfortable.

Of significant concern to the NPS, the building was determined structurally deficient during a December 1998 seismic evaluation. Yellowstone is an area of high seismic activity, with thousands of minor earthquakes occurring annually. The predicted geological hazards at Canyon include liquefaction, slope failure, and surface fault rupture. The seismic evaluation noted serious problems with the shear walls, openings, and building systems of the Canyon Visitor Center. The report states that without correction, the likely result of a catastrophic earthquake would be roof collapse and loss of life.

The Canyon Visitor Center was constructed during the era when the NPS philosophy on interpretation and visitor education was to offer a centralized center where information could be obtained, if wanted, in a fast and efficient manner, but the presentation of more in-depth interpretation in visitor centers was minimized. Consequently, visitor centers built during this era have a large lobby where staff could be positioned at an information desk to answer questions and space for interpretive exhibits is limited. Large auditoriums were built to provide audio-visual presentations in lieu of interpretive exhibits, presenting the park's "story" quickly with a film. Today, experience has shown that that philosophy was short-sighted. Park visitors (then and now) are eager to learn about the natural and cultural resources that they have come to parks to see, and they constantly request more in-depth information and a variety of educational services (talks, films, exhibits, and printed materials).

Yellowstone National Park was set aside as the world's first national park because of its unique geology, but nowhere in Yellowstone is that "story" told. Simple geology exhibits used to be available at Canyon, but the age and condition of the exhibits led to their removal in 1990; since then, the small (1,500 square feet) exhibit hall has housed temporary exhibits on non-geological topics. About 400,000 visitors use the Canyon Visitor Center annually. The lack of adequate interpretive exhibits has put undue strain on staff at the visitor center information desk, who (because of the numbers of visitors needing information) have little time to answer more than simple questions.

The law enforcement ranger staff also operate out of the current visitor center, which adds to congestion in the office/administration area. An impact to visitors from the lack of space and crowding results when they try to obtain backcountry camping permits. Campers are required to watch a 10-minute video on backcountry etiquette and safety and to review regulations before being issued a camping permit. At the present time, permit seekers must funnel behind the visitor information desk and walk through and stand in an administrative office corridor to obtain permits at the tiny backcountry office. Often, several parties, in various stages of the process, are crowded into the office and hallway.

Added to these problems, functions not originally planned for have been added to the visitor center. For example, at the time the visitor center was built, non-profit cooperating associations were only beginning to provide educational and interpretive information for visitors through visitor center bookstores. Because no space had been designed into the Canyon Visitor Center for an educational bookstore, bookshelves and a sales operation were placed at one end of the lobby. Through time, this operation has grown and now occupies about 50% of the lobby. Because the bookstore encroaches upon the lobby, the lines of visitors waiting to talk to staff at the information desk are uncomfortably crowded into the space available. Likewise, visitors who would like to browse through materials in the book sales area find their experience compromised by the lack of space.

The rehabilitation project would correct structural deficiencies of the building and correct the defective roof design. It would also upgrade substandard wiring and heating systems and inadequate restroom facilities and air-handling functions. Following rehabilitation, the building would provide adequate space for critical safety, resource protection, and interpretive functions, and it would provide dedicated space for both a cooperating association bookstore and a backcountry permitting office. The auditorium would remain and be modernized. New exhibits in a 6,000-square-foot exhibit hall would enhance the visitors' experiences and understanding of Yellowstone's significance by interpreting Yellowstone's geology, the park's major theme.

Project History

The structural problems of the visitor center and the inadequacy of the facility for accommodating interpretive and educational exhibits and information services for the public have been recognized since the 1970s, but funding constraints prevented any real progress toward a solution. With Congressional authorization of the Recreational Fee Demonstration program in 1996, planning for rehabilitation of the Canyon Visitor Center could begin. Meetings with park staff to analyze the functions necessary for the visitor center and appropriate space needs as well as meetings with outside consultants concerning building design and interpretive exhibit content began in 1998. In April 1999, the project was presented to the NPS Development Advisory Board (a panel of experts, both government and private, that evaluates the need for a project and its costs), and the project was approved. In December 1999, the Director of the NPS approved funding for the project from Recreational Fee Demonstration monies, with additional

funds coming from private sources. In September 2000, Congress approved the use of Recreational Fee Demonstration monies for this project.

Because the Canyon Village development was originally constructed as part of the NPS Mission 66 Program (a program initiated in the mid-1950s to modernize facilities and remove park developments from sensitive natural resources), Yellowstone was required to prepare an assessment of the project for a regional NPS Mission 66 panel. This panel was authorized in October 1998 to review any major changes proposed to Mission 66 buildings even though these facilities are not yet considered historic with regard to their age. That assessment, submitted in January 2000, determined that the Canyon Village development was eligible for listing in the National Register of Historic Places as a historic district because of its importance to the NPS Mission 66 history. The Wyoming State Historic Preservation Office (SHPO) concurred with this determination on July 6, 2000. Because the Canyon Visitor Center is a contributing building within the historic district and because the proposed rehabilitation and upgrade of the visitor center would alter its historic appearance, this environmental assessment (EA) of the Canyon Visitor Center rehabilitation project was prepared.

Scoping

Public scoping for this project was carried out between July 31 and August 31, 2000. Comments were received from the Wyoming State Historic Preservation Officer and have been incorporated into the project design. One internal comment was also received, which was similar to the comments from the Wyoming SHPO.

Alternatives

As part of a recently instituted process in the National Park Service to evaluate major projects (those costing more than \$500,000), value analysis for the proposed Canyon Visitor Center Rehabilitation project was conducted in 1999. Value analysis is the systematic process whereby a project's required functions and their estimated values are identified, and the lowest overall cost to provide those functions is outlined. All public service functions that should be located within the visitor center were defined, including information and orientation services, interpretive and educational exhibits, an auditorium for interpretive and educational films, backcountry permitting, first aid/first responder capabilities, cooperating association bookstore, and public restrooms. Additionally, the office space and storage space necessary to staff the visitor center and adequately provide services for the public were also defined.

Project members met to discuss the best and worst features of the current visitor center, to outline the objectives for the project, and to brainstorm ideas for achieving the objectives. Square footage figures were obtained for similar, recently constructed interpretive and educational visitor centers for functional space comparisons. Following numerous discussions, alternatives were prepared and evaluated.

Preferred Alternative

The preferred alternative would rehabilitate and upgrade the current Canyon Visitor Center and double the size of the building to 22,820 square feet by adding a second story and utilizing the space at the south end of the building now occupied by the U.S. Post Office. Structural defects in the building would be corrected. A new roof that is appropriate for the environmental conditions would be designed. Substandard wiring and heating systems and building insulation would be upgraded. Adequate restroom facilities would be constructed. The rehabilitated Canyon Visitor Education Center would include a 6,000 square-foot interpretive and educational exhibits hall and a 1,500 square-foot lobby with adequate space for safety and resource protection information. There would be dedicated space for a cooperating association bookstore, dedicated space for a backcountry permitting office, an auditorium for interpretive and educational films, and adequate office and storage space. All construction as well as interpretive and educational exhibits would comply with accessibility standards.

Preliminary design of the building occurred in order to initiate §106 consultation with the Wyoming SHPO. The proposed building (shown below) reflects and melds the Mission 66 architectural philosophy, which embodied a manufactured, “modern” appearance, and the architectural philosophy of the Arts and Crafts period, which was reflected in the Canyon Hotel (this structure burned in 1959). Exposed posts and beams would be sawn and squared, and the siding would be either smooth, sawn cedar shingles or solid wood panels broken with wood cross-trim. The base of the building and pillars would be cut stone. The steeply pitched roof would be covered with sawn cedar shingles. The architect would work with NPS staff to find ways to reduce swallow-nesting opportunities under the overhangs.



Proposed Canyon Visitor Education Center

In order to relieve congestion, reduce parking lot vehicular collisions, and provide for safer pedestrian access to the building, there would be no parking in front of the visitor center. This would reduce available parking by about 40 spaces. A 1994 study of the Canyon parking lot (as part of the *Alternative Transportation Modes Feasibility Study*) indicated that there were at least 124 excess parking spaces in that lot. Consequently, removing parking in front of the visitor center would not negatively impact the visitor. A bus loading and unloading zone would be located here, and accessible parking spots

would be designated immediately adjacent to the no-parking zone. The roadway in front of the visitor center would be designated as one-way travel (to the south) into the horseshoe development (the remaining parking area and travel pathways would not change). A landscaped pedestrian plaza would be designed immediately in front of the visitor center that would allow adequate visitor circulation space as well as a place to sit and relax.

While the new Canyon Visitor Education Center will be designed for year-round use, operation during the winter would depend on staffing levels and funding. However, the restroom facilities would remain open year-round. The winter warming hut would continue to be housed in a temporary trailer near the visitor center until a more permanent location for this function can be arranged.

The U.S. Post Office, which is currently located adjacent to the visitor center in the south end of the building, would be relocated into a new building (approximately 25 x 40 feet in size) that would be centrally placed between the Hamilton General Store and the Canyon Lodge. Appropriate compliance would be completed prior to construction, including §106 compliance with the Wyoming SHPO to ensure that the architectural characteristics of the new building are compatible with the eligible historic district.

This alternative is the environmentally preferred alternative because it would rehabilitate a current structure on its existing location and only slightly expand the building's footprint. This alternative also addresses life, safety, and cultural resources issues and concerns.

No-Action Alternative

The existing visitor center at Canyon would continue to be utilized. While structural defects identified during the 1998 seismic evaluation would be corrected when funding is obtained, roof design defects could not be corrected. Space for safety, resource protection, and interpretive functions would remain inadequate, as would the space for the cooperating association bookstore. The interpretive exhibit hall would remain inadequate for exhibits that could enhance the visitors' understanding of Yellowstone's unique geology.

Alternatives Considered But Rejected

Demolishing the visitor center and constructing an entirely new structure on-site was rejected because of costs and the inefficiency of not rehabilitating an existing structure.

Constructing an entirely new visitor center on the edge of the Grand Canyon of the Yellowstone River was rejected because the long-term goal of the National Park Service has been to remove development from primary park resources, where feasible.

Through the value analysis process, it was determined that the "ideal" visitor center would be a 33,000 square foot building that included an emergency services function

(which includes an ambulance bay and fire-fighting equipment) and a winter warming hut. Because the cost of this alternative was prohibitive and because it was recognized that the mix of functions would lead to continued and increased congestion, the team took a hard look at absolute needs for a visitor center and pared this alternative down to the one described in the preferred alternative. To compare this “ideal” alternative to the preferred alternative, the following areas were changed:

- In the “ideal” alternative, the lobby would be 30% larger than that proposed in the preferred alternative.
- In the “ideal” alternative, the interpretive and educational exhibits space would be 40% larger than in the preferred alternative.
- In the “ideal” alternative, the emergency services function would be co-located in the visitor center. During analysis, as mentioned above, it was determined that the emergency services function could be better met by construction of a dedicated building in Canyon’s administrative/maintenance area. Application for funds to construct this emergency services building has been submitted, but there is no estimated date for obtaining the monies.
- In the “ideal” alternative, the winter warming hut would be co-located in the visitor center.

Affected Environment and Environmental Consequences

Canyon is a major developed area within Yellowstone National Park (see map below). Visitor facilities include concession lodging (approximately 600 rental units) and meal service, general stores, a service station, laundry and shower facilities, horseback riding/corrals, a 280-site campground, and a visitor center and ranger station. The Canyon area is staffed by NPS employees year-round.

Geology and Soils

Yellowstone National Park lies in a geologically dynamic region of the northern Rocky Mountains. The park is noted for its geologic features that are the result of volcanism, glaciation, and continued geological processes fueled by a continental hotspot. The Canyon area itself is located in the caldera of a huge, collapsed volcano. Numerous, subsequent lava flows filled the caldera, and periods of glaciation covered the region and sculpted the landscape. There are no known sensitive geological resources or active thermal discharges in the project area.

Soils in the Canyon area are derived from the rhyolitic sands and gravels that were originally deposited as glacial till or glaciofluvial alluvium. The resulting soils are moderately coarse textured inceptisols with medium to low base saturation.

Approximately 0.1 acre of land that has been previously disturbed by the original construction and subsequent human trampling would be used for construction. Topsoils



Yellowstone National Park

would be stockpiled following Yellowstone National Park guidelines and used for revegetation purposes. The project is not expected to adversely impact the natural soils on-site.

Water Quality/Floodplains/Wetlands

In general, surface waters and subsurface aquifers in Yellowstone exhibit nearly pristine water quality. Water quality in the park has the potential to be affected by both natural processes and human-related activities. Natural influences include erosion, geothermal discharge, wildlife, and fire. Because these natural components are intrinsic and contribute to the maintenance of the Yellowstone ecosystem, they are generally permitted

to function freely. Human activities can influence water quality through wastewater discharges, road construction and runoff, and recreational activities that cause erosion (e.g., walking along stream edges).

Water quality in the Canyon area is excellent. A tertiary wastewater treatment system was constructed and brought on-line in 1997 and is functioning properly. The rehabilitation of the Canyon Visitor Center is not expected to increase the load on the wastewater treatment system. No additional parking is proposed that would increase runoff of surface waters or increase day use of the developed area. Appropriate erosion control devices would be used during construction to control runoff.

No floodplains or wetlands are located within the project area, and none would be affected by the project.

Air Quality

Yellowstone National Park is designated as a mandatory Class I area under the Clean Air Act. Monitoring of air quality is required by law to avert violations of national air quality standards, to preserve views and visibility, and to prevent health and safety risks to residents and visitors. Air quality is monitored in the park at two locations. The Tower Ranger Station is part of the National Atmospheric Deposition Program network, and particulate matter as well as precipitation volume and chemistry are monitored there. At Lake, there is a semi-automatic station that measures air pollutants (such as fine particulates, sulfates, nitrates, organic and inorganic carbon, and heavy metals), an ozone analyzer and calibrator, and meteorological equipment.

There are currently no major point sources of air pollution in the vicinity of the park, and air quality and visibility are generally considered excellent. Occasional periods of degradation may occur due to regional haze or forest fire smoke. The major sources of air pollutants in the area are those emitted locally by motor vehicles (automobiles, busses, snowcoaches, and snowmobiles) concentrated along motorized routes and in developed areas and smoke from wood fires (stoves, fireplaces, and campfires).

There would be no significant long-term impacts on air quality or visibility in the Canyon area as a result of this project. Effects would be temporary and limited to the duration of construction. Dispersed dust and mobile exhaust emissions would be caused by truck traffic and equipment activity. Contractor activities would comply with state and federal air quality regulations, and contractors would operate under applicable permits.

Vegetation

Coniferous forests or moist meadows generally cover the mountainous regions and high plateaus of Yellowstone. The most common tree species is the lodgepole pine. Non-forested areas are mostly wetlands and upland meadows. Active hydrothermal areas are often devoid of vegetation.

The general landscape at Canyon is gently rolling and covered with mature to old growth lodgepole pine forest interspersed with small grassy meadows. The understory in the forest is sparse and typical of the Yellowstone plateau (typical species include grouse whortleberry, elk sedge, and heartleaf arnica). A survey for rare plants was conducted in the project area, and none were found. There are no federally listed threatened or endangered plants in the project area.

At least 190 species of non-native plants are known to have occurred in the park, and many of these species are invading natural communities. Most non-native plants are found in disturbed areas such as developments and road corridors. The potential for proliferation of non-native plants is possible with any ground disturbance, and the potential for spreading non-native plant species during construction operations is a concern. Contractors would be required to adhere to proper construction techniques and precautions, including washing of equipment before it enters the park. Reclamation and revegetation efforts would follow Yellowstone's policy on vegetation management for construction, which also includes procedures for long-term management of non-native vegetation.

After construction activities are completed, revegetation with native plant materials would return disturbed areas to a more natural state. Plant species used would reflect the vegetation native to the area and would not include plants known to attract bears. The long-term effects on vegetation would be minor after completion of the revegetation efforts.

Wildlife

Yellowstone is home to one of the largest concentrations of large and small mammals in the lower 48 states. While some species are rare or occasional, 60 different mammals are found in the park, including 7 large ungulate species and 2 species of bear. Also documented in Yellowstone are 305 birds, 12 native fish, 5 non-native fish, 6 reptiles, and 4 amphibians. No fish or amphibians are found in the project area.

Large mammals commonly found in the Canyon area include bears (both black and grizzly), elk, bison, mule deer, mountain lions, and coyote. Small mammals include deer mice, yellow pine chipmunk, red-backed voles, short-tailed weasels, tree squirrels, and golden-mantled ground squirrels. Birds commonly found in the Canyon area include raven, Clark's nutcracker, red-breasted nuthatch, ruby crowned kinglet, pine siskin, and osprey. Great gray owls are also found in the area. Reptiles that might be found at Canyon include the wandering garter snake and rubber boa.

The proposed project is within a developed area of the park that has been in place for 45 years. Some animals such as small mammals and songbirds could temporarily be displaced during construction activities but would be expected to return following completion of the project. Impacts to wildlife are generally expected to be short-term in nature, and no significant increases in wildlife mortality are anticipated.

Threatened and Endangered Species

Within Yellowstone can be found the endangered whooping crane (*Grus americana*); the threatened bald eagle (*Haliaeetus leucocephalus*), Canada lynx (*Lynx canadensis*), and grizzly bear (*Ursus arctos horribilis*); and the gray wolf (*Canis lupus*), which is designated as an experimental population.

The peregrine falcon was removed from the list of threatened and endangered species in 1999. However, the species is still protected from unauthorized killing, possession, transportation, and importation by the Migratory Bird Treaty Act and will be monitored for 13 years to ensure that it is doing well following delisting.

Whooping cranes are occasional summer visitors to the southern, backcountry portions of the park; in past years as many as two individuals have been seen separately in that area of the park. Whooping cranes nest in marshlands, and Yellowstone lacks the tall reed habitat that is preferred. Whooping cranes have not been observed in the proposed project area, and the Canyon Visitor Center project would not affect the whooping crane.

Both resident and migrating **bald eagles** can be found throughout Yellowstone. Bald eagle nesting sites occur primarily along the margins of lakes and along the shoreline of the larger rivers in the park. The bald eagle management plan for the greater Yellowstone ecosystem (GYE) has achieved the goals set for establishing a stable bald eagle population in the park. Bald eagles do not typically nest or regularly roost in the Canyon Village developed area, and the Canyon Visitor Center project would not affect the bald eagle.

There are few records of **Canada lynx** in the park, and population numbers in Yellowstone are not known. Lynx prefer upper elevation coniferous forests in cool, moist vegetation types, particularly those that support abundant snowshoe hares, the primary food source for lynx. There have been no recent reports of lynx in the Canyon area where the proposed project would occur.

It is estimated that fewer than 1,000 **grizzly bears** survive in the lower 48 states. Surviving populations occur in six areas in Montana, Wyoming, and Idaho, including the GYE where there is estimated to be a maximum of 610 bears. Nearly 40% of the GYE (approximately 2.2 million acres) is within the boundaries of Yellowstone National Park. The bear management program in Yellowstone is directed toward the recovery, maintenance, and management of the grizzly bear population while also providing for safe park visitor experiences.

Grizzly bears are omnivores and seek many types of food. For example, they prey on pocket gophers, elk calves, and ants, and they forage on bulbs, roots, and foliage of many forest, meadow, and marsh plants. Whitebark pine seeds are a high quality food source for grizzly bears, especially during the late summer and fall. Grizzlies also feed on ungulate carrion. Ungulate mortalities during the winter serve as a readily available and

high protein food source for bears when they emerge from their dens in early spring. When food is scarce, bears can be attracted to human developments.

The Canyon development is located within a prime grizzly bear travel corridor from the slopes of the Washburn Range to Hayden Valley. At the time the development was constructed, this ecological corridor was not recognized or understood. Many incidents occurred between bears and people at this new development through the early 1970s. However, today, with the strict enforcement of management regulations and because bears have learned to avoid this human development, grizzly bear/human incidents here have declined to nearly zero.

The Canyon development itself is designated Management Situation 3 habitat. These habitats encompass developed areas and are managed for regular human use or occupation. Bear/human conflicts are resolved by trapping and translocating the bear. By confining construction to the developed area, the potential effects on grizzly bears and their habitat would be minimized, and no adverse effects are expected.

Gray wolves were eliminated by humans from the northern Rocky Mountains by the 1930s and placed on the endangered species list in 1973. After years of research and planning, it was determined that wolves would be re-established in Yellowstone National Park in order to restore this native species to the ecosystem. Fourteen wolves were captured in Canada and released in the park in 1995. Another 17 were captured and released in 1996. As of January 2001, there are approximately 160 gray wolves in 16 groups (including at least 11 packs) within the greater Yellowstone area. Wolves in Yellowstone are designated as an experimental population, and, therefore, no areas are designated as critical habitat for wolves. While wolf pack activity has been recorded in the Canyon area, no wolf pack has focused its activity here. The Canyon Visitor Center project would not affect the gray wolf.

Visual Resources

Visual quality affects both visitor enjoyment and perception of Yellowstone. Canyon Village is a developed area, highly visible to the public. The short-term visual effects of the proposed visitor center project would include disturbed land, construction equipment, and development activities. Contractors would be required to maintain an organized construction site and to minimize adverse visual impacts on park residents and visitors.

In the long-term, the height of the rehabilitated visitor center would increase 12 feet, which would make it more visible from the Norris-to-Canyon Road (for a short section of roadway) as visitors approach the Canyon development from the west. Colors and textures of the building would help mitigate this effect. Other visual effects are addressed in the Cultural Resources section.

Cultural Resources

The project area has been surveyed for archeological resources by the Wyoming State Archeologist, and no resources were found. There are no known ethnographic resources in the area proposed for development. During scoping for this project, Native American tribes affiliated with Yellowstone National Park were notified of the project, and no properties of cultural or religious significance were identified. During construction, if any cultural properties are encountered, work would stop until the appropriate cultural resources specialist and the Wyoming SHPO are consulted.

As mentioned earlier, the Canyon Village development was determined eligible for listing in the National Register of Historic Places as a historic district because of its importance to the NPS Mission 66 history. The Mission 66 program began in February 1955. Years of neglect along with the focus of the country's economic resources on winning World War II meant that facilities throughout the National Park System were in grave disrepair. The Director of the NPS, Conrad L. Wirth, initiated the program to solve these problems and to provide the newly traveling public with optimum opportunities for enjoying the parks. The program was targeted for completion by 1966, the Golden Anniversary of the National Park Service, and, thus, was called Mission 66.

Each park involved in Mission 66 prepared a prospectus about its plans for implementing the program. The goal of Yellowstone's Mission 66 program was to move developments away from the important and (often) delicate natural resources. These scenic spots would be reserved for sightseeing, observation, and aesthetic enjoyment, while the services necessary for the physical comforts of the visitor (accommodations, food services, gift shops) would be located in less resource-impacting areas. Yellowstone's priority project for its Mission 66 program was a new development at Canyon.

The original visitor services development at Canyon had been placed directly next to the natural resource attraction, the Grand Canyon of the Yellowstone River. As early as 1927, problems with this location had been identified, and plans had been proposed to remove the Canyon development from the rim of the Grand Canyon of the Yellowstone River. With Mission 66, progress could be made toward preserving and protecting the natural resource. The site of the new Canyon development was away from the canyon rim and surrounded by woods, which screened the development from the canyon itself.

The park worked with The Yellowstone Park Company, the main concessioner at that time to develop plans for the new facilities. The Yellowstone Park Company (and eventually Hamilton Stores and Haynes Photo Shops, two other concessioners) contracted with Welton Becket and Associates of Los Angeles to design the Canyon Village development (this contract did not include the NPS visitor center). Welton Becket was a well-known architect who designed and built numerous important structures, the majority of which are in California; the Canyon Village project appears to be the only NPS project that he designed.

Becket envisioned the Canyon project as a contemporary development designed for the automobile traveler. The focus of the development was a large parking plaza surrounded on three sides by all the public facilities a visitor to the park would need—lodging registration, numerous restaurants, a lounge, various shops and stores, a post office, and a NPS visitor center. Overnight accommodations, in the form of small cabin units, were located a short distance away from these main facilities. The development was on a “fast track” as it was scheduled to open in July 1957. Canyon Village was to be the first Mission 66 project completed by the National Park Service.

The architectural style of the facilities has come to be called “National Park Service Modern.” The buildings are simple and unadorned and often have high ceilings and few interior walls. There is a common use of extended “glu-lam” beams and slump block walls. This style of architecture is not necessarily a part of the park landscape (like rustic-style buildings) and, consequently, these buildings could be sited in areas that were more convenient for park visitors.

Canyon Visitor Center itself was designed by Hurt and Trudell Architects of San Francisco (little is known about this firm) and opened in 1958 as the final part of this Mission 66 project. Its architecture is similar to the other buildings in the development. An important aspect of the visitor center is that it is strategically located as the first building the visitor encounters when entering the Canyon development.

There is no doubt that the Canyon Village development reflects the Mission 66 period in the National Park Service and achieved Yellowstone’s Mission 66 goal of removing facilities from natural features. One knows upon entering the village plaza that this development is unlike any other in Yellowstone. While many would argue that a “strip mall” style is inappropriate in a national park setting, the development reflects the architectural thinking of the National Park Service and the American way of life during that time period. There was a sense at the time that anything “old” had no value or relevance in “modern” times. Everything modern was designed for convenience; it was important to obtain necessities quickly in order to get on with the business at hand. This thinking led to the concentration of facilities in one convenient drive-up location; the large, boxy interiors of stores that were constantly rearranged to reflect changing trends; and the lack of detailing in construction (busy people had no time to stop and contemplate workmanship).

The location of the visitor center will remain unchanged as a result of the rehabilitation project. The feeling one has upon entering the Canyon Village development—the plaza surrounded by different visitor services—will also remain as a distinct characteristic of the development. However, the building’s footprint would expand 26 feet to the rear in the central portion of the building and 26 feet forward in front of the north wing (extending the projection of the current restroom along the entire length of the north wing). The roadway in front of the visitor center would remain, however, it would be designated one-way, and there would be no parking in this area. This change would allow for better traffic flow and for a pedestrian plaza in front of the rehabilitated visitor center.

While the Canyon Visitor Center rehabilitation project would result in an adverse effect to the building's historic architectural character, it would correct structural deficiencies of the building and correct the defective roof design. It would also rectify substandard wiring and heating systems and upgrade inadequate insulation, restroom facilities, and air-handling functions. Following rehabilitation, the building would provide adequate space for critical safety, resource protection, and interpretive functions, and it would provide dedicated space for a cooperating association bookstore. New exhibits in a 6,000-square-foot exhibit hall would enhance the visitors' experiences and understanding of Yellowstone's significance by interpreting Yellowstone's geology, the park's major theme. As mitigation and in consultation with the Wyoming SHPO, the architectural design of the building was modified to reflect characteristics of the original Canyon Hotel and a wayside exhibit will be developed for the Canyon Village area that explains the Mission 66 era and its architectural characteristics.

Socioeconomic Resources

Yellowstone National Park extends into five counties in three different states including Teton and Park counties in Wyoming, Gallatin and Park counties in Montana, and Fremont County in Idaho. The U.S. Forest Service, the state of Montana, and a few private landowners manage most of the property surrounding the park. The park plays a prominent role in the social and economic life of the greater Yellowstone area.

Gateway communities of varying sizes have developed outside the park's five entrances, some on the immediate border of the park and others within an hour's drive. These communities provide food, lodging, gasoline, automotive services, and shopping opportunities, which vary from community to community. Yellowstone's recreational opportunities tend to create a tourist-based economy in communities surrounding the park. These communities receive significant income by providing goods and services to park visitors and employees.

Economic activity within the park is concentrated in six locations: Canyon Village, Fishing Bridge/Lake/Bridge Bay, Grant Village, Old Faithful, Mammoth Hot Springs, and Tower/Roosevelt. A wide range of visitor services including food, gas, lodging, transportation, horse rental, and medical services are available in these areas. Less than 2% of Yellowstone is developed. This development not only includes the visitor service facilities mentioned above, but also includes roads, trails, utilities, employee housing, and park administrative facilities.

Rehabilitation of the Canyon Visitor Center is not expected to increase visitation to the park, but would provide some jobs during the construction phase. The expanded cooperating association bookstore would require more Yellowstone Association staff, who would be housed in existing facilities.

Other Issues

There are no prime or unique farmlands within or surrounding Yellowstone National Park that would be affected by this project.

This project would not have any health or environmental effects on minorities or low-income populations or communities (as defined in the Environmental Protection Agency's Environmental Justice Guidelines).

Canyon is a major development within Yellowstone National Park that is significant in the NPS Mission 66 history to both the park and the Service. Because the existing visitor center location will not be changed and because the park has worked closely with the Wyoming SHPO to mitigate the effects of the rehabilitation on the eligible Canyon Village historic district (as explained in the "Cultural Resources" section), this project would not impair the resources for which the park was established.

Cumulative Effects

Implementation of the preferred alternative would have a limited effect on natural resources. Although some soils and vegetation would be affected, proposed mitigation efforts include topsoil conservation and revegetation with native plant species. Some visual effect on cultural resources would result from implementation of the preferred alternative, but would be mitigated by using a building design compatible with the eligible historic district. In fact, the new building design would enhance visitors' understanding of the earlier period of historic architecture in the Canyon area. The quality of visitor services available in Yellowstone would be improved.

As a result of this project, a new U.S. Post Office would be constructed within the development along the horseshoe between the Canyon Lodge and the Hamilton General Store. Appropriate compliance, including §106 compliance with the Wyoming SHPO, would be completed prior to construction.

Also as a result of this project, a new Emergency Services Building would be constructed when funding is obtained in the maintenance/administrative area of the Canyon development. Depending on the location of this building, further compliance may or may not be necessary.

Other projects expected to occur in the foreseeable future in the Canyon area include two road reconstruction projects. The first is the Canyon-to-Tower Junction (Dunraven Pass) road reconstruction project. The EA for this project is scheduled for public release in spring 2001. If approved, this project is expected to begin in spring 2002 and last for at least four years. It would occur in at least two phases, Canyon to Chittenden Road and Chittenden Road to Tower Junction. Temporary housing of workers and stockpiling of materials could occur in the Canyon area. The other road project is the overlay of the Canyon-to-Fishing Bridge Junction road segment. The EA for this project is scheduled

for public release in summer 2001. If approved, this project is expected to begin in 2002 and last approximately two years.

Another project being planned at Canyon is the expansion of an existing recreational vehicle trailer court in order to increase the number of spaces available to contractors performing park-requested work within Yellowstone National Park. Because construction of a contractor camp may occur beyond the bubble stated in the Canyon Employee Housing and Community Plan prepared in 1992, a separate EA would be prepared for this project. This document is expected to be ready for public comment later in 2001.

The implementation of any or all of these projects in conjunction with the rehabilitation of the Canyon Visitor Center is not expected to adversely affect the natural or cultural environment at Canyon.

Regulatory Compliance

If the NPS regional director decides, based on this EA, that the project would significantly effect the human environment, a notice of intent (NOI) to prepare an environmental impact statement (EIS) would be issued. Conversely, if it is determined that there would be no significant impact to the human environment from this project, a finding of no significant impact (FONSI) would be issued by the regional director. Consultation with the U.S. Fish and Wildlife Service on impacts to threatened or endangered species would be completed through this EA process.

Contractor activities would comply with state and federal air quality regulations, and contractors would operate under applicable permits.

Consultation with the Wyoming SHPO and the Advisory Council on Historic Preservation on this project is underway and would be completed through this EA process. Native American tribes traditionally associated with Yellowstone National Park have been contacted for their input and comment on this project through this EA process.

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