

**National Park Service
U.S. Department of the Interior**



**Yellowstone National Park
Idaho, Montana, Wyoming**

WIRELESS COMMUNICATIONS SERVICES PLAN FINDING OF NO SIGNIFICANT IMPACT

In 1872 Yellowstone National Park's 2.2 million acres were "set apart as a public park or pleasuring-ground for the benefit and enjoyment of the people" and to "provide for the preservation, from injury or spoliation, of all timber, mineral deposits, natural curiosities, or wonders within said park, and their retention in their natural condition."

Wireless services and infrastructure in Yellowstone are used daily in park operations, research activities, emergency functions, and by park visitors, contractors, and residents. Wireless facilities range from small-scale stations to monitor stream and thermal features to mountaintop communications sites. Functions include commercial telephone and data transmission, earthquake and other scientific monitoring, two-way radios for park operations and emergency communications, contractor and concessioner operation, FM radio stations, weather-band radio, cellular telephone service, Internet access, satellite TV, remote weather stations, and wireless webcams for resource monitoring. The Wireless Communications Services Plan was prepared in order to protect park resources and values by limiting the types and locations of wireless services and infrastructure.

This document records 1) a Finding of No Significant Impact as required by the National Environmental Policy Act of 1969 and 2) a determination of no impairment as required by the NPS Organic Act of 1916.

OBJECTIVES

The objectives of the Wireless Communications Plan/EA were as follows:

- Protect park resources and values by strictly guiding the placement, appearance, and amount of wireless telecommunications infrastructure in the park.
- Improve operational effectiveness of wireless communications in the park and safety for park visitors, employees, residents, contractors, and concessioners.
- Consolidate existing wireless infrastructure and remediate existing impacts where possible.
- Evaluate requests to site non-NPS telecommunication antennas and related facilities in the park in accordance with the Telecommunications Act of 1996 (47 USC 332 note), which authorizes but does not mandate a presumption that such requests be granted

unless doing so would create an unavoidable conflict with the agency mission, the current or planned use of the property, or access to that property.

- Develop a consistent and timely process to evaluate requests for wireless services and facilities in the park. Respond to requests for the use of property, rights-of-way, and easements by duly authorized cellular telephone companies, researchers, and project proponents.

PREFERRED ALTERNATIVE

The preferred alternative identified in the EA was Alternative C. This FONSI adopts Alternative C, with slight modifications intended to better meet the purpose and need of the EA. This FONSI adopts all procedures, constraints, guidelines, criteria and mitigating measures established in the EA.

The following describes the Preferred Alternative and includes a description of the modifications to this alternative. The specific changes to the text of the EA are listed in the Errata Sheet attached to this FONSI.

Summary

Cell phone coverage and Wireless Communications Facilities (WCFs) will continue to be allowed at areas where it currently exists (Mammoth, Canyon, Tower-Roosevelt, Old Faithful and Grant developed areas). New cell phone coverage will be allowed at the Lake developed area using temporary or permanent infrastructure and equipment. The cell tower at Old Faithful will be relocated to a site near the water treatment plant when feasible. Viewsheds and safety at Mt. Washburn lookout will be improved by relocating antennas to a new platform tower adjacent to the existing location. Obsolete equipment will be removed from Bunsen Peak. Cellular infrastructure originating from Bunsen Peak will be relocated to the Elk Plaza location. New infrastructure will be added on Bunsen Peak to increase the capacity of the data transmission system within the park. The electric transmission line to the summit of Bunsen Peak will remain, and the equipment shed will be replaced with a smaller cabinet-sized weather-proof enclosure to accommodate the FM translation equipment.

Telecommunications Committee

This FONSI modifies Alternative C by clarifying the role of the Telecommunications Committee. To clarify, this committee will 1) receive and address requests for wireless service, 2) ensure proposals adhere to the wireless communications plan, 3) make recommendations to the superintendent regarding any action to be taken. The committee will ensure that any new proposals follow the intent of the preferred alternative (i.e. proposals will need to fall within the actions and areas discussed in the alternative and adhere to the limitations imposed under the preferred alternative). Any new proposals to install additional wireless communications services, repeater sites, or equipment will be reviewed by the park Telecommunications Committee, which is led by the telecommunications specialist and comprised of members from compliance and resource programs. This committee will review each proposal for purpose and need, resource impacts, and adherence to the guidance

established by this plan, NPS DO-53, frequency coordination, and permitting by the FCC. The committee will also determine whether each proposal meets the objectives of the plan. The committee will make recommendations to the superintendent regarding the allowance of new or altered Wireless Communications Facilities (WCFs). The committee will also update the criteria established in this plan based on technology changes, make recommendations based on new technology, and document all decisions regarding wireless communications projects. Also as a point of clarification, as a part of the committee process, site specific consultation for National Register listed or eligible property (such as Mt. Washburn, Old Faithful) will take place between the NPS and the Wyoming State Historic Preservation Officer (SHPO) to comply with Section 106 of the National Historic Preservation Act. The NPS will write a short annual report that will be available to the public, and include a list of proposals received, proposals reviewed, what decisions were made, and what actions were taken. If proposals are received that entail actions outside of the scope of the Wireless Communications Plan EA, a separate scoping and public review process will take place under a new NEPA document.

NPS Radio

This FONSI modifies Alternative C to include concessioner, contractor and partner two-way radio systems. The park will upgrade and install new equipment and functions to the NPS radio system as needed to meet changing technology, federal mandates, and park needs. Any new proposals to install additional wireless radio equipment will be reviewed by the park Telecommunications Committee.

Cell phone

Cell phone coverage will remain at Mammoth, Canyon, Tower-Roosevelt, Old Faithful and Grant developed areas. New cell phone coverage will be allowed at the Lake developed area; this meets the Wireless Plan objective to improve operational effectiveness of wireless communications in the park and safety for park visitors, employees, residents, contractors and concessioners. Antennas for this new cell coverage at Lake will be configured to minimize spillover coverage into Yellowstone's backcountry. Sites will not be located in recommended wilderness. All sites will be hidden from view of developed areas, the Grand Loop Road, and area hiking trails. The park will evaluate these and other sites to serve the Lake developed area so they meet the guidelines and criteria adopted by this FONSI.

In response to comments, this FONSI modifies the preferred alternative to reconsider the design of a new antenna mounting structure at the summit of Mt. Washburn to relocate existing antennas and microwave dishes from the fire lookout structure. While the preferred alternative included construction of a new structure to mount existing antennas already located on the Mount Washburn fire lookout building, the Park will consider all options to reduce visual intrusions on visitors and the historic structure, while at the same time addressing the safety and security aspects of the site's proximity to a highly-used visitor destination. The NPS commits to working towards a design of a new structure that will be less obtrusive than what is shown in (Fig. 8) of the EA. Implementation of this aspect of the plan will likely not happen immediately due to size and scope of the project.

The park will consult with the Wyoming SHPO and utilize the best expertise possible to try and reach an appropriate design for a Mt. Washburn wireless communications facility. The design will consider standards submitted by the Wyoming SHPO during Section 106 consultation.

Mt. Washburn will continue to serve as the primary communications hub for the park, and will continue to have multiple antenna, dishes, and electronics equipment at the site. A final design for a mountain top facility will be available to the public prior to any substantial changes being implemented.

The Old Faithful cell tower will be relocated to an area near the Old Faithful water treatment plant when it becomes feasible, to reduce the overall visibility of the tower. This will not occur before the current right-of-way (ROW) agreement with the cell phone provider expires in 2009. This relocation could result in a slight decrease in service near the Old Faithful developed area along a few miles of the Grand Loop Road.

The equipment and antennas associated with cell phone service atop Bunsen Peak will be relocated to the current Elk Plaza. New infrastructure will be added to the top of Bunsen Peak to increase the capacity of voice and data transmission throughout the park. While this system has not yet been designed, it will likely use powered microwave dishes to relay additional bandwidth through an interim point to Mt. Washburn, and then be redistributed to the developed areas of the park.

Applications to the FCC for additional radio frequency spectrum will likely have to be completed and approved in order for this to occur. The existing electric power line to the summit will remain in service for this purpose, if and when it occurs. Any new proposals to install additional cell equipment will be reviewed by the park Telecommunications Committee.

Courtesy signing and protocols will be developed and installed to help guide visitors in use of cell phones and other portable communications technologies. In response to comments Alternative C is further clarified; to reduce annoyances of cell phone usage, courtesy signing and protocols will focus on increasing the distance between visitors enjoying the natural soundscapes and those using cell phones by designating 'cell phone free' zones where possible. Park visitors will be provided this information through such avenues as park interpreters and the park Visitor Guide/Newspaper entitled *Yellowstone Today*. The newspaper will also be amended to show or list areas of the park where cell phone coverage can be expected or not expected.

Resource Monitoring

This alternative will provide for the implementation of the Yellowstone Volcano Observatory (YVO) Monitoring Plan, with the exception that three gauging stations proposed in the Bechler area and the Upper Yellowstone River will not be installed, to reduce wilderness impacts. Five proposed new seismic stations will be allowed in this alternative; four are in park developed areas or road corridors (East Entrance, Northeast Entrance, U.S. 191 north of West Yellowstone, MT and Roaring Mountain–Obsidian Cliff road corridor), and one is within recommended wilderness in the Thorofare region in the southeast corner of Yellowstone. Three new stream gauging stations will be installed in the park (one on the Gibbon River near Norris, one on the Firehole River between Upper and Midway Geyser basins, and one on the

Yellowstone River between Otter Creek and Chittenden Bridge). Gas monitoring stations will be deployed temporarily (up to one year) while gas monitoring strategies continue to be developed. All other proposals in the YVO Monitoring Plan are equipment upgrades to existing facilities.

Existing Remote Automated Weather Station (RAWS) sites within the park will be maintained. A new RAWS will be installed in the northeast portion of the park near the Warm Springs trailhead. Manual weather stations located at Mammoth, Old Faithful, and Canyon will be replaced with RAWS over time, and as feasible. Existing tower structures and weather collecting sites will be used for upgrades. The Bechler RAWS will be upgraded and the existing guyed tower will be replaced with a platform and tripod structure that does not require guy wires. The National Weather Service proposal to upgrade existing automated weather stations at Mammoth, Tower-Roosevelt, Old Faithful and East Entrance will be implemented to monitor flash flood, storm development, and landslide conditions. A site at East Entrance will be determined using the siting criteria adopted in this FONSI. A temporary RAWS located on Hoyt Peak to monitor avalanche conditions on the East Entrance Road near Sylvan Pass will be made permanent.

Any new research permit application that proposes to install a wireless communications facility will be reviewed by the Research Permit Committee and the Telecommunications Committee. This Research Permit Committee is led by the research permit coordinator with members that represent all park divisions. The committee will review permits for purpose and need; scientific merit; impacts to public health and safety, scenic values, natural or cultural resources, visitor use activities, and resource compliance needs (e.g., National Environmental Policy Act [NEPA], National Historic Preservation Act [NHPA], Endangered Species Act [ESA], and Clean Water Act [CWA]).

If a proposed research project has greater than minor impacts, the permit application will additionally be reviewed by the park's Resource Compliance Team. This committee is led by the compliance coordinator and made up of staff representing all park divisions. This committee will review the impacts of the proposal to determine whether additional NEPA or NHPA compliance should be completed prior to implementation of a project and will make recommendations regarding the level of resource compliance necessary to the park's Management Team.

If a research project is proposed within Yellowstone's recommended wilderness, a Minimum Requirement Analysis application will be completed and the permit application will be reviewed by the park's Wilderness Committee. This committee reviews proposed projects for adherence to the Wilderness Act and NPS Policies on wilderness management, makes a recommendation to the chief ranger on which projects to approve, and documents the outcome of each project it reviews.

The National Ecological Observatory Network (NEON) is a continental-scale monitoring platform for discovering and understanding impacts of climate change, land use change, and invasive species on ecology. NEON will gather long-term data on ecological responses of the biosphere to changes in land use and climate, and on feedbacks with the geosphere, hydrosphere, and atmosphere. It will consist of distributed sensor networks and experiments linked by advanced cyber-infrastructure to record and archive ecological data for at least 30 years. The Yellowstone Northern Range site has been selected by NEON, Inc. as one of 20

Core Wildland Sites throughout the country. Core NEON sites will require permanent scientific monitoring equipment. A full proposal will detail what types and where such infrastructure is needed. Any infrastructure proposals will follow the guidelines adopted by this plan and additional compliance may be required. A separate NEPA analysis is currently being developed for this project.

Wireless Internet (WiFi)

This FONSI modifies Alternative C in regards to WiFi in lodging. In order to protect the experience expected at historic lodging locations, the availability of WiFi will not be approved at the Lake Hotel, Old Faithful Inn, the Roosevelt Lodge, Old Faithful Lodge, Lake Lodge or the Mammoth Hotel. WiFi will be limited in these areas, to the greatest extent possible, by limiting the approval of technologies under the park’s control in these areas. Where cell phone service is available, visitors with the appropriate technology (i.e., Blackberries, air cards) may still be able to access the Internet at these locations, but the NPS will not permit commercial WiFi services to be installed. WiFi could be approved at the Old Faithful Snow Lodge, Canyon Village, Grant Village, Lake Lodge cabins and Old Faithful Lodge cabins. The Table 1 below provides more specifics on locations.

The following rationale was developed to reach decisions on which park lodging could have WiFi service opportunities.

WiFi will not be approved if:

- the lodging structure is a National Historic Landmark (NHL).
- the lodging structure is likely to become a National Historic Landmark.
- in a lobby of historic lodging.
- most visitors are likely to expect a historic or rustic setting or experience.

WiFi could be approved in structures if:

- use of WiFi would have little potential to affect other visitors even if the building is historic.
- potential is low that WiFi signals could propagate into areas where WiFi signal was not desired.
- opportunities for WiFi in nearby locations were not available.

The table below lists buildings within developed areas of the park where WiFi coverage will not be approved, areas where WiFi coverage could be approved in the future, and a brief rationale for the determination. The WiFi service for areas listed in the second column of the table could be provided via commercial vendors approved to provide such service through park concessioners within Yellowstone National Park.

TABLE #1 - WiFi Locations for Yellowstone National Park	
WiFi will not be approved in these locations	WiFi could be approved in these locations
Canyon Village	
	Everywhere (<i>little effect to visitors; less expectation of an historic setting</i>)
Grant Village	
	Everywhere (<i>not historic</i>)

Old Faithful	
Old Faithful Inn (NHL)	Old Faithful Snowlodge (<i>not historic</i>)
Old Faithful Lodge (<i>Historic and in Historic District</i>)	Old Faithful Lodge Cabins - as long as no spillover of signal into unwanted areas (<i>little effect to visitors in common areas of Old Faithful Lodge</i>)
	Old Faithful Upper Store (<i>little effect to visitors</i>)
	Old Faithful Lower Store (<i>little effect to visitors</i>)
Lake/Fishing Bridge	
Lake Hotel (<i>Historic and could become a NHL</i>)	Lake General Store (<i>historic, but allows for an area of service close to Lake Hotel that would not affect visitors at Lake Hotel; less expectation of an historic setting</i>)
Lake Hotel Annex(<i>Historic and in Historic District</i>)	Fishing Bridge General Store (<i>little effect to visitors; less expectation of an historic setting</i>)
Lake Hotel Cabins (<i>Historic and in Historic District</i>)	Lake Lodge Cabins (<i>little effect to visitors in common areas of Lake Lodge</i>)
Lake Lodge – Lobby and Porch (<i>Historic and in Historic District</i>)	Lake Lodge Cafeteria - as long as no spillover of signal into unwanted areas (<i>little effect to visitors; less expectation of an historic setting</i>)
Mammoth	
Mammoth Hotel (<i>Historic and in Historic District</i>)	Mammoth Hotel Cabins - as long as no spillover of signal into unwanted areas (<i>little effect to visitors in common areas of Mammoth Hotel</i>)
Mammoth Dining Room (<i>More expectation of an historic setting</i>)	Lounge at Mammoth Dining Room - as long as no spillover of signal into unwanted areas (<i>little effect to visitors; less expectation of an historic setting</i>)
	Mammoth General Store (<i>little effect to visitors; less expectation of an historic setting</i>)
Tower/Roosevelt	
Roosevelt Lodge (<i>Historic and in Historic District</i>)	Tower Store (<i>not historic</i>)
Administrative Use	
	Employee Dormitories (<i>not historic</i>) Medical Facilities (<i>not historic</i>) Employee Recreation Halls and Pubs (<i>not historic</i>) Other administrative areas (<i>not historic</i>)

By limiting authorized locations for WiFi infrastructure, NPS is attempting to establish WiFi-free zones in most historic lodging areas. The first column in the table above would be kept WiFi-free by limiting technologies under the park's and concessioners' control. Visitors who have purchased subscriptions from cell phone providers for wireless service for use with devices such as Blackberries, smart phones, and laptop computers would likely have access to the Internet in these locations if cell phone service is available. However, overall WiFi use by visitors would be much less than if WiFi was provided through the concessioner. Visitors will still be observed using computers in many locations even in the absence of WiFi access.

WiFi could be approved in the locations listed in the second column of the table above, if the technology used would prohibit, to the best extent possible, coverage into the areas listed in the first column. For locations listed in the interior of the park, a bandwidth upgrade may need to be completed prior to WiFi availability.

Wireless Internet service will remain in the areas where it is currently installed for administrative and employee use (employee dormitories and recreation facilities, medical clinics, and concessioner offices). The preferred alternative will allow WiFi to be installed in park stores as listed in the table above, administrative facilities, medical facilities, and concessioner offices. WiFi may be available for administrative use by concessioners and partner organizations. WiFi may be available in developed areas where cell towers are installed by use of residential subscriptions for the service. The park will work with its concessioners to develop WiFi-free zones, courtesy protocols, and courtesy signing.

Webcams

Existing webcams within developed areas could be upgraded to wireless, or new wireless webcams could be installed in developed areas of the park if they are found to meet the siting criteria adopted by this FONSI. No wireless webcams for visitor use will be installed within backcountry areas of the park. It is possible that wireless monitoring cameras could be placed in backcountry areas for resource monitoring or to address safety concerns, but these will not be available for public viewing purposes.

FM Radio Stations

The existing FM radio stations and equipment will remain, but will be placed in smaller cabinet-sized equipment enclosures. The Gardiner/Mammoth FM Association will be allowed to continue to provide rebroadcast of KMTN (Jackson, WY), KEMC (Billings, MT), KXLB (Bozeman, MT), and KMMS (Bozeman, MT). One frequency that is available to the association and not currently used may be retained for use as needed. The existing radio equipment at Elk Plaza will continue to be housed in the existing equipment building. Existing antennas for each station will be retained.

Electrical Power at Mt. Washburn

The existing power line to the top of Mt. Washburn is buried along the Chittenden Road, from the Grand Loop Road to a point about one quarter of a mile from the summit of Mt. Washburn. From this point the electric line is only semi-buried or lies on the surface of the ground and runs to the summit of Mt. Washburn. A new upgraded electric power line will be installed and buried within the existing roadbed or ditch of the last quarter-mile of the Chittenden Road on the north side of Mt. Washburn to the summit. The existing electric line that lies atop the ground will be removed. This upgraded power to Mt. Washburn will allow for individual metering of electric power consumption for all users.

Bandwidth Upgrade into the Park

A new facility will be constructed at the summit of Bunsen Peak to allow for additional wireless data transmission from Mammoth to Mt. Washburn. Data transmission from Mt. Washburn will then be distributed throughout the park. This facility will likely need at least two microwave dishes to beam signals from Mammoth to an interim point, and then to Mt. Washburn. Additional electronic equipment will be located in a new equipment building.

Security fencing will be installed. Any new site will adhere to the guidelines and criteria adopted in this FONSI.

PROCEDURES, CONSTRAINTS, GUIDELINES AND CRITERIA

A copy of the Procedures, Constraints, Guidelines and Criteria analyzed for the Preferred Alternative are provided in Appendix A of this FONSI. The guidelines will be used by the Telecommunications Committee to help mitigate impacts to park resources and values and will be used to help determine whether a proposed project is approved or rejected.

MITIGATING MEASURES

The following mitigation measures were analyzed as part of the preferred alternative and will be required of all new projects:

To preserve park resources

- Resource monitoring equipment will be placed in a recommended wilderness area only if it will provide information of scientific, educational, conservation, or historical use and only if it can be installed in a way that preserves the wilderness character of the area.
- If it is necessary to use a historic structure as an antenna mount, park staff will monitor all placement activities to minimize the possibility of damage to the structure, and ensure that the mount is positioned to minimize its visibility to the public. Section 106 compliance will be completed for any National Register listed or eligible property.
- Construction workers and supervisors will be informed about relevant park regulations and the requirement to take appropriate measures to minimize impacts to park resources.
- Construction workers and supervisors will be informed about special status species. If any of these species is discovered in a project area, contract provisions will require cessation of construction activities until park staff can assess the situation. The contract will be modified if necessary to protect the species.
- Construction activities will not be permitted in locations where archeological or paleontological resources are known to be present. If such resources are discovered during construction, the work will cease until park staff have consulted with the State Historic Preservation Officer and the Advisory Council on Historic Preservation (§36 CFR 800.13, *Post-review Discoveries*). In the unlikely event that human remains are discovered, provisions outlined in the Native American Graves Protection and Repatriation Act (1990) will be followed.
- Contractors and subcontractors will be informed of the penalties for illegally collecting artifacts or intentionally damaging paleontological materials, archeological sites, or historic properties.

To minimize ground disturbance

- Staging and stockpiling areas will be located in previously disturbed sites, away from visitor use areas to the extent possible, and returned to pre-construction conditions following construction.
- The minimum area needed for an approved construction activity will be delineated by construction tape, snow fencing, or similar material. All protection measures will be

clearly stated in the construction specifications and workers will be instructed to avoid conducting activities beyond the identified construction zone.

- Because disturbed soils are susceptible to erosion until revegetation takes place, standard erosion control measures such as the use of silt fences will be used to minimize the possibility of soil erosion or impacts from soil erosion.

To minimize impacts during construction

- If necessary, dust generated by construction activity will be controlled by spraying water from an approved source on the site.
- The contractor will regularly monitor and check construction equipment to identify and repair any petrochemical leaks.
- To reduce noise and emissions, construction equipment will not be permitted to idle for extended periods and construction workers will not be permitted to broadcast portable audio devices through speakers.
- The timing of construction activities may be altered to minimize impacts on park visitors. One option would be to conduct most of the work in the off-season (winter) or shoulder (spring/fall) seasons. Another option would be to prohibit the use of construction equipment from 6 PM to 7 AM in summer (May-September), and 6 PM to 8 AM in winter (October-April). The National Park Service will determine this in consultation with the contractor.

To restore disturbed areas

- All disturbed areas will be restored shortly after construction activities are completed. Revegetation and re-contouring will be designed to minimize the visual intrusion of the WCF while replicating as nearly as possible pre-construction conditions. Revegetation efforts will strive to replicate the natural spacing, abundance, and diversity of the native plant community. Weed control methods will be implemented to prevent the introduction of non-native species.

ALTERNATIVES CONSIDERED

Alternatives considered included Alternative A, *No Action* which would continue the current practice of reviewing and deciding individually on applications for WCFs, NPS radio upgrades, resource monitoring equipment, and wireless Internet services (WiFi) on a case-by-case basis. Alternative B, *Reduction in Wireless Services* would allow only the most basic of wireless communications services within the park. The NPS two-way radio system would remain essentially unchanged, but most cell phone service would be eliminated and wireless infrastructure would be removed, as would many weather monitoring sites. No new wireless Internet service would be allowed. Alternative D *Substantial Increase in Wireless Services*, would allow cellular service at the Lake developed area; at the Madison, Norris, Bridge Bay, Tower-Roosevelt, and Fishing Bridge campgrounds; along the Grand Loop Road; and along the five park entrance roads. This alternative would maintain the existing Old Faithful cell

tower and its appearance would be camouflaged. The construction of a facility on Bunsen Peak would allow for increased capacity for data transmission (bandwidth) into the park.

Alternative C, *Limited Increase in Wireless Services* is the environmentally preferred alternative. The environmentally preferred alternative is the alternative that will promote the national environmental policy as expressed by §101 of the National Environmental Policy Act. This includes alternatives that best meet the following six evaluation factors:

- (1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- (2) assure for all generations safe, healthful, productive, and esthetically and culturally pleasing surroundings;
- (3) attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
- (4) preserve important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice;
- (5) achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and
- (6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

The *Limited Increase in Wireless Services* alternative will allow a limited increase in wireless services and WCF infrastructure and will provide an appropriate level of wireless communications services that meets health and safety recommendations, while minimizing environmental impacts to the extent possible. This alternative will have no net gain of cell phone sites within the park (i.e. the relocation of the Bunsen Peak cell site to an existing site at Elk Plaza and the addition of a cell site at Lake); this will allow cell phone access in all major developed areas while keeping to a minimum any spillover of service into the backcountry areas of the park. This alternative best addresses the six evaluation factors and provides maximum protection of park resources and values, human health and safety, and visitor use and enjoyment of Yellowstone National Park through implementation of the mitigation measures, guidelines and criteria for action alternatives. The preferred alternative best meets the standards for resource protection while allowing for a range of use.

WHY THE PREFERRED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As defined in 40 CFR §1508.27, significance is determined by examining the following criteria:

Impacts that may be both beneficial and adverse. A significant effect may exist even if the agency believes that on balance the effect will be beneficial.

Moderate impacts of the preferred alternative include beneficial impacts to visitors that feel cellular service will enhance their experience and safety. Moderate adverse impacts would

occur for visitors where cell phone service detracts from their experience. Minor impacts of the preferred alternative occurred for the following impact topics: migratory birds and birds of special management concern, wilderness, soundscapes, historic properties and cultural landscapes, health and human safety, park operations, and visual quality. Impacts of other alternatives varied and are described in the EA.

Degree of effect on public health or safety

Under the preferred alternative, combined impacts to human health and safety would be long-term, minor, and beneficial based on increased coverage and the ability to reach emergency services and a reduction in potential exposure to radio frequency emissions. All applications for new facilities would be evaluated for radio frequency (RF) emissions. All new facilities would need to meet all applicable standards related to radio frequency emissions in order to be considered within the park. Improvements to the Mt. Washburn sites would ensure that visitors are not exposed to radio frequency emissions above Maximum Permissible Exposure (MPE) limits.

The addition of cellular service at the Lake developed area would increase the ability to make necessary contacts during an emergency. Due to the minimal increase of cellular coverage to roads under the Preferred Alternative, and since cellular coverage under existing conditions has had no apparent impact on the number of motor vehicle accidents or the number of motor vehicle accidents involving wildlife, it is expected that this small increase in ability of drivers to use cell phones while driving would have negligible impacts on the number of motor vehicle accidents related to cell phone use while driving.

Degree to which effects on the quality of the human environment are likely to be highly controversial

Concerns regarding additional cellular telephone coverage within Yellowstone National Park have been discussed in the news media as spurred by the installation of a monopole tower just south of the administrative area at Old Faithful nearly a decade ago (2001). Controversy on effects on the quality of the human environment for this project is most evident as it relates to the potential effects of cellular phone service and cell phone infrastructure on park visitors, safety, and visual resources. As described in the EA, all effects to park resources are minor or less, with the exception of Visitor Use and Experience. The sights of wireless infrastructure may affect visitors, and some may disagree with others using wireless devices in an area that some feel is one of the last escapes from such activity. The addition of cellular service for the majority of those commenting seemed to be less impacting if confined to developed areas of the park and kept out of the backcountry.

Although there has been some minor dispute about the effects, the minimal complaint record supports the conclusion drawn in the EA that there are no highly controversial effects.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks

The risks related to wireless communications as discovered by this planning process include: driving while talking on the phone, proximity to wireless antennas, guyed towers and tower lighting hazards to migrating birds, the lack of cell phone service increasing emergency response times, and wireless devices impacting the visitor experience for some

visitors. By adhering to the mitigation measures, guidelines and criteria for siting of any new facilities, the effects to these resources will be reduced. Therefore, there were no highly uncertain or unique or unknown risks identified.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration

The Wireless Communications Services Plan/EA is not the first EA of its kind in the NPS. Both Rock Creek Park and Lake Mead National Recreation Area (NRA) have also completed plans that establish comprehensive guidelines and procedures for wireless communications. For Rock Creek Park, the purpose of their Wireless Telecommunication Facility Plan / Environmental Assessment (plan/EA) was to provide all administered units of Rock Creek Park with a consistent framework for protecting park resources during the consideration of “special use permit” applications and other inquiries submitted to the park for the construction, operation, and maintenance of wireless telecommunication facilities (WTF). For Lake Mead NRA, the intent of the plan was to provide a proactive approach for determining potentially acceptable cellular sites within Lake Mead NRA (1,495,664 total acres; 1,314,516 land area acres; over 180,000 acres of designated wilderness, approximately 300,000 acres of proposed, potential, or recommended wilderness) that were consistent with the NPS Mission, Lake Mead NRA enabling legislation, existing park management documents, and future planning considerations. The plan would determine locations within the park where cellular service was desirable and appropriate, and ascertain the minimum tower height needed to provide the desired area coverage while minimizing impacts to park resources.

Because there are existing plans at other parks in the National Park System, action for this project will not set any NPS precedent. The preferred alternative is consistent with those permitted elsewhere.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts

No major (significant) cumulative effects were identified in the EA.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

Various historic districts, structures, and road segments within Yellowstone National Park are listed on the National Register of Historic Places. Compliance with §106 of the National Historic Preservation Act was completed by concurrence with the NPS determination of no historic properties affected by the Idaho (October 21, 2008) and Montana (October 6, 2008) State Historic Preservation Officers (SHPO). The Wyoming (December 10, 2008) State Historic Preservation Officer concurred with the NPS preferred alternative, and the park will continue to consult with the Wyoming SHPO on effects to historic properties on a project-by-project basis.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat

The U.S. Fish and Wildlife Service concurred with the determination of “may affect, but is not likely to adversely affect” threatened or endangered species in their letter dated October 22, 2008.

Whether the action threatens a violation of federal, state, or local environmental protection law

This action violates no federal, state, or local environmental protection laws.

APPROPRIATE USE, UNACCEPTABLE IMPACTS, AND IMPAIRMENT

Sections 1.5 and 8.12 of NPS *Management Policies* underscore the fact that not all uses are allowable or appropriate in units of the National Park System. The proposed plan was screened to determine consistency with applicable laws, executive orders, regulations, and policies; consistency with existing plans for public use and resource management; actual and potential effects to park resources; total costs to the Park Service; and whether the public interest would be served. The NPS *Management Policies* 2006 states that requests to site non-NPS telecommunication antennas and related facilities on NPS lands will be considered in accordance with the Telecommunications Act of 1996, which authorizes, but does not mandate a presumption that such requests be granted absent unavoidable conflict with the agency mission, or the current or planned use of the property or access to that property. Therefore, because such use is authorized under the Telecommunications Act of 1996 and NPS *Management Policies* and because this Wireless Plan establishes procedures, constraints, guidelines, and criteria to strictly guide the placement, appearance, and amount of wireless telecommunication infrastructure in the park to meet the Plan objective of protecting park resources and values, the Park Service finds that the preferred alternative is an appropriate use. Because the application of mitigating measures is expected to be successful in ensuring that no major adverse impacts would occur and that satisfactory reclamation of any disturbed area is expected to be achievable by following the guidelines and criteria attached to this FONSI, implementation of the preferred alternative would not result in any unacceptable impacts.

In analyzing impairments in the NEPA analysis for this project the NPS takes into account the fact that if an impairment were likely to occur, such impacts would be considered to be major or significant under CEQ regulations. This is because the context and intensity of the impact would be sufficient to render what would normally be a minor or moderate impact to be major or significant. Taking this into consideration, NPS guidance documents note that, “Not all major or significant impacts under a NEPA analysis are impairments. However, all impairments to NPS resources and values would constitute a major or significant impact under NEPA. If an impact results in impairment, the action should be modified to lessen the impact level. If the impairment cannot be avoided by modifying the proposed action, that action cannot be selected for implementation” (Interim Technical Guidance on Assessing Impacts and Impairment to Natural Resources National Park Service, Natural Resource Program Center, July 2003).

In addition to reviewing the definition of “significantly” under the NEPA regulations, the NPS has determined that implementation of the preferred alternative would not constitute an impairment to the integrity of Yellowstone National Park’s resources or values as described by NPS *Management Policies* (NPS 2006 § 1.4). This conclusion is based on the NPS’s analysis of the environmental impacts of the proposed action as described in the EA, the public comments received, relevant scientific studies, and the professional judgment of the decision-maker guided by the direction in 2006 NPS *Management Policies*. The EA identified less than major adverse or beneficial impacts on threatened and endangered species, migratory birds and birds of special management concern, wilderness, soundscapes, historic properties and cultural landscapes, health and human safety, park operations, visitor use and experience, and visual quality. This conclusion is further based on the Superintendent’s professional judgment. Although the plan/project has some adverse impacts, in all cases these impacts are the result of actions taken to preserve and restore other park resources and values. Overall, the plan results in benefits to park resources and values, opportunities for their enjoyment, and it does not result in their impairment.

PUBLIC INVOLVEMENT

Public scoping for the EA began on July 13, 2006, with a news release, a mailing to interested parties, and posting of a scoping newsletter in the NPS Planning, Environment and Public Comment (PEPC) website. In August 2006, public open houses were held in Idaho Falls, Idaho (11 persons attended), Bozeman, Montana (12), and Cody, Wyoming (1), and in three locations in the park; the Lake Developed Area (15), the Old Faithful Developed Area (5), and the Mammoth Developed Area (4). The 50-day scoping period ended on August 31, 2006.

A total of 107 written comments were received through mailed letters (17), mailed park forms (22), and PEPC (68). No comments were received from state or federal agencies.

Many of the comments opposed increased cellular coverage for visitor convenience, but generally supported the use of wireless communication for NPS and visitor safety and emergency response needs. Some of the comments favored increased wireless coverage in the park. Comments on the use of wireless technology for scientific research and monitoring were highly supportive. Recommendation for impact topics to be analyzed in the EA centered on visual impacts, noise/social impacts from cell phone use in geyser basins and wilderness, impacts to safety from radio frequency exposure and vehicle collisions, and impacts to migratory birds from cell towers. Preferences included restricting cellular telephone use to 911, restricting wireless coverage to building interiors, eliminating all wireless infrastructure, eliminating all wireless coverage from the backcountry, and increasing public radio use. Several comments focused on NPS wireless communication policies, and on health and human safety. Scoping comments were used during the formulation of alternatives and impact topics to be analyzed in the EA.

The environmental assessment was made available for public review and comment during a 45-day period ending October 31, 2008. A total of 2,055 pieces of correspondence were received on the EA during the public comment period. Of this total, 1,904 of these were form letters.

The majority of respondents' comments favored limiting wireless communications to park developed areas, opposed cellular service being added at Lake, favored reducing or consolidating unneeded and/or visually obtrusive wireless infrastructure, favored protecting visual resources, opposed adding WiFi to historic lobbies, opposed adding webcams to the backcountry, did not think the proposed Mt. Washburn antenna platform was acceptable, and that cell phones created noise pollution, thus reducing solitude. Some comments objected to any wireless coverage for visitor convenience. A few felt that cell service within the park should be expanded.

A total of five public review and comment meetings were held in October 2008 during the public comment period. One at the Public Library in Bozeman, Montana on October 1 (17 attended), and one at the Forest Service Office in Idaho Falls (5 attended), Idaho on October 2. Three additional public meetings were held within the park for residents, employees, and concessioners. They occurred on October 14 at Mammoth (8 attended), October 15 at Old Faithful (4 attended), and October 16 at Lake (6 attended).

Substantive comments centered on restricting wireless communications coverage, restricting availability of WiFi, protecting park visual resources, protecting park soundscapes, and concerns for health and safety. Responses to these comments are attached to this FONSI. Responses to these comments resulted in slight modifications to the text of the EA that are listed in the Errata Sheet. Modifications are also summarized in the Preferred Alternative section above. The modifications are clarifying in nature, are intended to better meet the purpose and need of the EA and do not have bearing on the determination of significant impact. The FONSI and errata sheets will be sent to all who commented.

CONCLUSION

As described above, the preferred alternative does not constitute an action meeting the criteria that normally require preparation of an environmental impact statement (EIS). The preferred alternative will not have a significant effect on the human environment. Environmental impacts that could occur are limited in context and intensity, with generally adverse impacts that range from localized to widespread, short- to long-term, and negligible to moderate. There are no unmitigated adverse effects on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal, state, or local environmental protection law.

Based on the foregoing, it has been determined that an EIS is not required for this project and thus will not be prepared.

Recommended:



Superintendent

4.3.09

Date

Approved:



for Regional Director, Intermountain Region

4/7/09

Date

ERRATA SHEETS
WIRELESS COMMUNICATIONS SERVICES PLAN
ENVIRONMENTAL ASSESSMENT
YELLOWSTONE NATIONAL PARK

Substantive comments to the Wireless Communications Services Plan Environmental Assessment centered on level of restriction for cell coverage, level of restriction for WiFi, the need to protect park viewsheds and soundscapes, and health and safety. The topics, which are addressed below, resulted in minor changes to the text of the environmental assessment.

TEXT CHANGES

Page 27 – Add the following to the end of paragraph 2:

Any new proposals to install additional wireless communications services, repeater sites, or equipment will be reviewed by the park Telecommunications Committee, which is led by the telecommunications specialist and comprised of members from compliance and resource programs. This committee will 1) receive and address requests for wireless service, 2) ensure proposals adhere to the wireless communications plan, 3) make recommendations to the superintendent regarding any action to be taken. The committee will review each proposal for purpose and need, resource impacts, and adherence to the guidance established by this plan, NPS DO-53, frequency coordination, and permitting by the FCC. The committee will also determine whether each proposal meets the objectives of the plan. The committee will make recommendations to the superintendent regarding the allowance of new or altered Wireless Communications Facilities (WCFs). The committee will also update the criteria established in this plan based on technology changes, make recommendations based on new technology, and document all decisions regarding wireless communications projects. Also as a point of clarification, as a part of the committee process, site specific consultation for National Register listed or eligible property (such as Mt. Washburn, Old Faithful) will take place between the NPS and the Wyoming State Historic Preservation Officer (SHPO) to comply with Section 106 of the National Historic Preservation Act. The NPS will write a short annual report that will be available to the public, and include a list of proposals received, proposals reviewed, what decisions were made, and what actions were taken. If proposals are received that entail actions outside of the scope of the Wireless Communications Plan EA, a separate scoping and public review process will take place under a new NEPA document.

Page 27 – under the NPS Radio section –

Add the following additions to the last sentence: Any new proposals to install additional wireless radio equipment will be reviewed by the park Telecommunications Committee using guidelines stated in the EA for evaluating radio repeater sites.

Add the following after the previous revision: These proposals can include concessioner, contractor and partner two-way radio systems.

Page 28 – under the Cell phone section -

Strike the final sentence and replace with: A new secure equipment building would be placed near the base of any new structure constructed.

Add the following to the end of the first paragraph: The Park will consider options to improve visual intrusions on visitors and the historic structure, while at the same time addressing the safety and security aspects of the site’s proximity to a highly-used visitor destination. The design will be developed in consultation with the Wyoming SHPO during Section 106 consultation.

Mt. Washburn would continue to serve as the primary communications hub for the Park, and will continue to have multiple antenna, dishes, and electronics equipment at the site. A final design for the mountain top facility will be available to the public prior to any substantial changes being implemented.

Page 29 – under the Cell phone section -

Delete the last sentence and replace with the following: To reduce annoyances of cell phone usage, courtesy signing and protocols will focus on increasing the distance between visitors enjoying the natural soundscapes and those using cell phones by designating ‘cell phone free’ zones where possible. Park visitors will be provided this information through such avenues as park interpreters and the park Visitor Guide/Newspaper entitled Yellowstone Today. The newspaper will also be amended to show or list areas of the park where cell phone coverage can be expected or not expected.

Page 30 – under the Wireless Internet (WiFi) section –

Remove the final sentence in this paragraph and insert the following: WiFi will not be approved at the Lake Hotel, Old Faithful Inn, the Roosevelt Lodge, Old Faithful Lodge, the Lake Lodge (except cafeteria) and the Mammoth Hotel and dining room (except for the Mammoth Lounge). WiFi will be excluded as much as possible from these areas by limiting technologies under the park’s control in these areas.

Add the following table:

TABLE #1 - WiFi Locations for Yellowstone National Park	
WiFi will not be approved in these locations	WiFi could be approved in these locations
Canyon Village	
	Everywhere <i>(little effect to visitors; less expectation of an historic setting)</i>
Grant Village	
	Everywhere <i>(not historic)</i>
Old Faithful	
Old Faithful Inn <i>(NHL)</i>	Old Faithful Snowlodge <i>(not historic)</i>
Old Faithful Lodge <i>(Historic and in Historic District)</i>	Old Faithful Lodge Cabins - as long as no spillover of signal into unwanted areas <i>(little effect to visitors in common areas of Old Faithful Lodge)</i>
	Old Faithful Upper Store <i>(little effect to visitors)</i>
	Old Faithful Lower Store <i>(little effect to visitors)</i>

Lake/Fishing Bridge	
Lake Hotel (<i>Historic and could become a NHL</i>)	Lake General Store (<i>historic, but allows for an area of service close to Lake Hotel that would not affect visitors at Lake Hotel; less expectation of an historic setting</i>)
Lake Hotel Annex(<i>Historic and in Historic District</i>)	Fishing Bridge General Store (<i>little effect to visitors; less expectation of an historic setting</i>)
Lake Hotel Cabins (<i>Historic and in Historic District</i>)	Lake Lodge Cabins (<i>little effect to visitors in common areas of Lake Lodge</i>)
Lake Lodge – Lobby and Porch (<i>Historic and in Historic District</i>)	Lake Lodge Cafeteria - as long as no spillover of signal into unwanted areas (<i>little effect to visitors; less expectation of an historic setting</i>)
Mammoth	
Mammoth Hotel (<i>Historic and in Historic District</i>)	Mammoth Hotel Cabins - as long as no spillover of signal into unwanted areas (<i>little effect to visitors in common areas of Mammoth Hotel</i>)
Mammoth Dining Room (<i>More expectation of an historic setting</i>)	Lounge at Mammoth Dining Room - as long as no spillover of signal into unwanted areas (<i>little effect to visitors; less expectation of an historic setting</i>)
	Mammoth General Store (<i>little effect to visitors; less expectation of an historic setting</i>)
Tower/Roosevelt	
Roosevelt Lodge (<i>Historic and in Historic District</i>)	Tower Store (<i>not historic</i>)
Administrative Use	
	Employee Dormitories (<i>not historic</i>) Medical Facilities (<i>not historic</i>) Employee Recreation Halls and Pubs (<i>not historic</i>) Other administrative areas (<i>not historic</i>)

Page 30 – under Webcams section -

Substitute the term ‘backcountry areas’ for ‘recommended wilderness’. Add the following to the end of the last sentence in this section: “but these will not be available for public viewing purposes.”

Page 129 – under Glossary add –

Backcountry: Defined for the purposes of this plan as being the same as recommended wilderness as portrayed in Figure 11 on page 57 of the EA.

Revise the definition for Cell Site to read: The location where a cellular antenna and network communications equipment is placed in order to provide cell phone service. Not all wireless communication sites have cell sites.

Recommended Wilderness: Defined for the purposes of this plan as being the same as backcountry. Recommended wilderness is portrayed in Figure 11 on page 57 of the EA.

Substantive Comments

Restrictions on cell coverage

Construction of new towers or antenna structures should be limited to the existing developed areas.

Comment Text: There is merit to expanding wireless access within Yellowstone National Park, but primarily this effort should be focused on where the larger concessionaire activities are located: Mammoth, Grant Village/West Thumb and Old Faithful.

Comment Text: Cellphone coverage in the developed areas is fine, but not in the areas where there should be only sounds of the wilderness.

Comment Text: We both feel cell phone service within Yellowstone National Park is a valuable service. However, the service need not be available everywhere in the park. If the service were available in the lodging areas only, that would fulfill a vast majority of visitor and staff needs.

Comment Text: allow visitors in main areas to have dependable access to cell phones and internet

Comment Text: I think cell service in the park is a good idea. But limit it to the developed areas so people viewing the natural wonders of Yellowstone are not disturbed by constantly ringing cell phones.

The park should adopt a policy that eliminates cell phone coverage in the backcountry as its preferred alternative.

Comment Text: Back country visitors would not want cell service out on the trails nor would recreational hikers such as ourselves. Time on the trails is for escaping such devices and would interrupt the wilderness experience.

Comment Text: I support very limited cell/wireless coverage in discrete areas that do not impact historic buildings open to the public, any hotel lobbies, geyser basins and other frontcountry and backcountry natural areas.

Yellowstone should consider limiting electronic coverage for personal communication devices to building interiors only.

Comment Text: I would suggest that designated cell phone usage areas be restricted to inside buildings where people gather, rather than just out in the open in the park. The cell phone areas should route the calls from the indoor cell antennas to landlines that currently exist at the part that are buried or out of sight.

Comment Text: I support very limited cell/wireless coverage in discrete areas that do not impact historic buildings open to the public, any hotel lobbies, geyser basins and other frontcountry and backcountry natural areas.

Comment Text: In areas where cell coverage currently exists, the Park Service should proactively designate areas where people can talk freely on their cell phones.

Avoid spillover cell coverage into backcountry areas.

Comment Text: What specific steps will Yellowstone take to minimize "spillover" from each cellular site in the park? What if the steps are ineffective?

Comment Text: Nor does the EA specify or explain what steps YNP will take to minimize "spillover" from cellular sites in the park.

Comment Text: ensure no unintended cell-coverage spillover in areas managed as wilderness

Comment Text: while the dEA makes a commitment to 'minimize' spillover coverage in the backcountry, the Lake region is surrounded by 'backcountry', and therefore the unintended coverage area will likely conflict with YNP's goal of not providing cell coverage to park backcountry

Comment Text: Backcountry areas need to be maintained as wilderness and must be free of cell phones.

Leave a developed area of the park without cellular or wireless service to allow visitors a choice.

Comment Text: Why not continue to have one "developed" part of Yellowstone without coverage, so we can compare experiences in different parts of the park?

Comment Text: Both Old Faithful and Mammoth already have, and will continue to have, wireless communications access. Therefore, Lake is the only 'comparable' historic site currently with no wireless access. Based on that aspect alone, it would seem critical that Yellowstone would want to maintain at least one of these comparable historic areas free of wireless communications disturbance.

Specifically state the limitations of proposed new cell phone coverage for YNP.

Comment Text: We note that the only place within the draft EA where it is explicitly stated that new cell coverage will be limited to Lake is in table 2, p. 19. We ask that the description of the preferred alternative explicitly state the limitations of new cell phone coverage as well.

(Response) The NPS considers the Wireless Plan/EA as a crucial step in ensuring that cell coverage remains limited in Yellowstone National Park. The purpose and need of the Wireless Plan/EA is, first and foremost, to protect park resources and values by limiting the types and locations of wireless services and infrastructure. The preferred alternative does restrict cell coverage in Yellowstone to meet this purpose and need. The preferred alternative only allows cell phone coverage in the primary developments of the park. One new cell phone site within the park would serve the Lake developed area, the only primary developed area of the park yet without coverage. Allowing cell coverage at Lake meets the Wireless Plan/EA objective to improve operational effectiveness of wireless communications in the park and safety for park visitors, employees, residents, contractors and concessioners. Cell phone coverage would not be promoted or available along park roads outside developed areas, or promoted or available in any of the backcountry. While it is possible for some of these areas to gain coverage due to spillover of the signal, it is not the intent of the alternative. Guidelines and criteria established in the Plan/EA will help to minimize spillover as much as possible.

Wireless services are discussed in the Wireless Communications Services Plan/EA in two ways: first, cell phone coverage is prescribed in the plan, meaning that if coverage in a certain area is not discussed, it would not occur without an additional NEPA document and public notification; second,

equipment such as NPS radio, monitoring stations, and wireless Internet would adhere to processes, guidelines, and criteria specified in the plan. It should be noted that cell coverage is restricted from Madison, Norris, and other developed areas without overnight hotel accommodations in order to offer wireless-free zones.

Support increases in cell phone/wireless coverage **For expansion of cell phone/wireless coverage in the park**

Comment Text: I am interested in having free (no password required) wireless Internet in public buildings here at Mammoth so that I could use my personal laptop to access the Internet.

Comment Text: Receive feedback from customers that more coverage is desired

Comment Text: Please consider getting wireless communication for all populated areas of the park.

Comment Text: I am very much for adding new technology to the park - especially in cases of emergency and cellphones are just part of today's thing.

Comment Text: Retain the existing communications site at Bunsen Peak, instead of relocating the facility to Elk Plaza

Comment Text: I think more cell towers should be allowed in Yellowstone National Park. There are accidents and situations where precious minutes could make the difference of life or death. There's no reason they can't be put in place and structured in such a way as to not lessen the experience of Yellowstone.

Comment Text: As electronic communications have increasingly relied on cellular telephone service and the internet over the past decade, our ability as a concessioner to provide these services for guests and employees is essential. No longer are these services viewed as desired by our visitors and employees. They now expect these services in an effort to maintain their communication needs. Both of these groups have become increasingly vocal over the past several years regarding the lack of appropriate cell and internet services in developed areas in the park. In fact, of the total of approximately 75,000 guest comments that we received this year (2008 summer season), nearly 13,000 complained about the lack of adequate internet access. Numerous employee complaints are received every year from individuals who need to communicate with family members from around the US and other countries, conduct personal financial business and participate in online classes, as well as numerous other reasons.

Comment Text: I recommend that wireless service be installed in Yellowstone Park.

Comment Text: Having elder parents back home, it is important for us to check on them during our 30 day stay in the park. Cell phone service would make calling them much easier.

Comment Text: I would appreciate the benefits of Wi-Fi internet access as well as cell phone services.

Comment Text: For many people, this would make their vacations so much more stress free, being able to call work or family, receiving calls in case of emergency, or being able to call 911 if the situation arises.

Comment Text: I disagree with their campaign to stop cell towers. These can be life-saving utilities. My only concern is that they be placed carefully as to not distract from the beauty of Yellowstone. The misplaced tower near Old Faithful is a good example how NOT to do it next time.

Propose wireless service to the high traffic areas inside the park, the main roads, and the areas where visitor populations are concentrated, such as campgrounds, hotels, and dorms.

Comment Text: The wireless internet can provide many features in the Park to attract more Park visitors, as they could send home pictures immediately of their ventures in the Park through the internet. More business conferences/conventions could be held in the Park, if wireless communications were improved in the Park.

In support of wireless Internet in high visitor areas.

Comment Text: As for wireless fidelity (WiFi), I believe such service would be similar to cell phone coverage allowed in the lodging areas only.

Comment Text: I am sure that the model that is used at the Jackson Lake Lodge, that of having wireless communication in the lobby area of the Lodge can be replicated at the developed areas of Yellowstone (e.g., the Canyon Lodge and reservations center, the Lake Lodge and Lake Hotel, the Mammoth Hot Springs Hotel and cafeteria, the Roosevelt Lodge.

Comment Text: I for one would really appreciate WiFi in the developed areas of the park, in the hotels and the cabin areas. When I am in the park, I find my self wanting to look up information on the park and the local area.

(Response) The Telecommunications Act of 1996 directs that federal agencies develop and issue procedures to make available to the maximum extent possible, telecommunication communications facilities on federal lands as long as their placement does not conflict with other federal laws and regulations. The Wireless Plan/EA provides for such placement, while still ensuring that park resources including viewsheds and soundscapes are protected in conformance with other federal regulations the NPS must follow.

The preferred alternative will provide cell coverage and wireless capabilities to all developed areas. This should allow park visitors to feel safer if emergencies were to occur near these areas because 911 access should be available; visitors would also be able to maintain contact back home.

Let visitors know where cell coverage can be expected

Visitor information should let people know where cell phone service can reasonably be expected.

Comment Text: The key in the safety aspect is for people to know what coverage they can, and CANNOT, expect.

Rather than increase cell coverage, let visitors know where existing coverage exists.

Comment Text: There are currently many places in Yellowstone that receive cell coverage. Instead of further developing this pristine wilderness you should simply make a map or handout with these locations.

Comment Text: The convenience of visitors and employees could be met with very limited cell phone coverage, in small areas that could be described so visitors could make use of them.

Comment Text: consider designating zones within developed areas where cell phone use is considered ok.

(Response) The NPS agrees that visitors need to be notified as to where cell phone coverage can be expected. Park staff will provide this information via such avenues as the park newspaper and park interpreters.

Webcams may not be appropriate

Reconsider adding webcams to the backcountry.

Comment Text: reconsider adding webcams to the backcountry

Comment Text: I vehemently oppose the physical presence of any technological devices in the backcountry, such as webcams or other. As a backcountry user, I would view the presence of physical technological devices in the backcountry as the greatest violation of my right to experience the level of solitude I seek from the park's backcountry.

Comment Text: No backcountry webcams should be permitted now or in the future

Comment Text: We would instead like to see the preferred alternative state a general prohibition against webcams in the backcountry,

Against webcams in developed areas.

Comment Text: This wireless webcam statement leaves open the possibility of unlimited webcams (wireless or otherwise) spread throughout Yellowstone's developed areas.

(Response) The preferred alternative states that wireless webcams could be approved on a case-by-case basis within developed areas for public viewing and telecommunication needs. Webcams for public viewing would only be located in frontcountry areas. Webcams increase opportunities for learning about and viewing select areas of Yellowstone from the Internet. Existing webcams in frontcountry developed areas are hard-wired. These existing webcams could be changed to wireless technologies for interpretive and educational use, and would adhere to the guidelines and criteria included in the plan. Some wireless monitoring equipment could also be installed to help monitor wildfire, resources, and safety issues in an effort to reduce personnel costs.

Webcams for public viewing would not be located in backcountry areas. Only administrative or research /monitoring related equipment would be allowed in these areas. The Telecommunications committee will use a minimum tool analysis to determine whether wireless monitoring equipment for research/monitoring purposes should be placed in backcountry areas.

Limit WiFi to specific areas or omit completely

Designate a room within existing buildings for WiFi access (WiFi Hotspot).

Comment Text: Designate a room within existing buildings for WiFi access—a WiFi Hotspot. A router can fairly easily be set up so that it provides limited coverage to a room or rooms where park visitors can go to get online. Signals can be set so that coverage can fairly accurately be limited to

the intended locations. The hotspots can be established so they are away from the lobbies and other public spaces where such use may impact other visitors. We believe this is an affordable, reasonable alternative.

WiFi use OK in limited areas only, such as hotel rooms.

Comment Text: Low-power, limited antenna designs allow Wi-Fi Internet access to be used unobtrusively in many areas. This mode of communications in hotel areas of Yellowstone seems to have less problems than cell phone usage and still allows people to conveniently access the modern world.

Even in developed areas, some places should be designated as "wireless free zones".

Comment Text: The park might also designate certain areas as a "Recommended" Wireless free zone - such as Roosevelt Lodge and the Old Faithful Inn.

Comment Text: As to hotel lobbies, consider that Snow Lodge is the only Old Faithful lodging open in winter, and should offer a serene wireless-free environment to visitors in between their outdoor excursions.

Reconsider adding WiFi to historic lobbies.

Comment Text: I like alternative C the best followed by A, D and B. I appreciate having Wi-Fi free zones in prime areas in the hotels.

Comment Text: the park should not provide for the use of WiFi technology in public spaces such as hotel lobbies.

Comment Text: Wi-fi should not be allowed in Yellowstone's hotel lobbies at all.

Comment Text: Given that gateway communities provide numerous opportunities for visitors to connect to the Internet, it is unnecessary to provide WiFi services at the park's historic lodges.

Against WiFi Service in Park.

Comment Text: WiFi coverage is inappropriate in public sections of any Yellowstone hotels and stores. Why encourage visitors to waste precious time indoors, shackled to their laptop computers, when they should be experiencing as much of Yellowstone as their time, abilities and adventurous

Comment Text: I also see no need for wireless internet applications for visitors.

Recommend centralized Internet services for visitors at visitor centers, hotel lobbies, or business stations.

Comment Text: Internet access can be provided through the use of wired ports (firewire) within hotel rooms. This will allow for personal use of the internet for park visitors while minimizing disturbance of other visitors to Yellowstone's historic hotels.

For cell phone use for visitor's emergency needs but do not support WiFi availability for visitors.

Comment Text: The need for Wi-Fi internet service I see as less important for visitor's. It does make sense for business operations, administrative operations, and NP service residents. I experienced

the difficulties of long lines at businesses in Yellowstone due to the slowness of credit card terminals using dial-up connections.

(Response) In response to comments, the NPS will limit WiFi more specifically than described in the EA. Because WiFi signals can be limited in the distance they can travel by the choice of equipment used, equipment choices will be made to meet the goals of this plan. The preferred alternative states that WiFi will be limited to employee dorms, medical clinics, lodging units, general stores, and administrative facilities. WiFi would be available for administrative use by concessioners and partner organizations. The park would work with its concessioners to develop WiFi-free zones. In order to protect the experience expected from historic lodging, WiFi will not be approved at the Lake Hotel, Old Faithful Inn, the Roosevelt Lodge, Old Faithful Lodge, Lake Lodge (except the cafeteria), or the Mammoth Hotel. WiFi coverage will not be approved, to the extent possible, from these areas by limiting technologies under the park's control in these areas. Where cell service is available, visitors with the appropriate technology may still be able to access the Internet at these locations, but the NPS will not permit commercial WiFi services to be installed.

Increase in noise, and loss of solitude

Cell phones create noise pollution and Yellowstone has an obligation to preserve solitude and manage soundscapes.

Comment Text: visitor solitude and experience, and the very special feeling that we have indeed spared a small piece of what was.

Comment Text: the draft plan needs work in order to protect Yellowstone's scenic vistas, solitude and visitor experience

Comment Text: The last thing that I want to encounter is watching wildlife or one of the many attractions with someone standing close talking on the phone. People travel to the park to get away and leave those distractions at home.

Comment Text: Yellowstone should offer visitors ample opportunities to experience natural soundscapes and a semblance of solitude; these experiences are ruined when other visitors carry on loud cell phone conversations.

Comment Text: Preferred Alternative Disregards Values of Serenity and Communing with Nature Nowhere does the EA mention the park value of serenity. Similarly unmentioned is the ability to commune with nature or escape from the incessant chatter of the modern world.

Comment Text: Advances in technology that increase the personal convenience needs of a small percentage of park visitors is an unacceptable reason to noticeably or otherwise alter the physical or emotional solitude of all park visitors.

Comment Text: more "spill-over" coverage in park wilderness and backcountry and a forfeiture of serenity and the ability to be in a place totally unplugged from the modern world

Comment Text: I would hate to see any further cell coverage into the back country.

Comment Text: cell phone use has transformed the atmosphere inside historic buildings and in geyser basins and other outdoor areas

Comment Text: conversations interfere with the enjoyment of those who wish to appreciate their natural surroundings.

Comment Text: The dEA discloses the tremendous value that park visitors place on hearing the sounds of Yellowstone that can be heard nowhere else in the world. The park should make every effort to protect this unique resource and certainly not approve new uses that are not based on visitor safety but on desire to improve visitor conveniences.

Comment Text: Currently, visitors can walk the north shore of the Lake and enjoy the natural quiet so valued by Yellowstone's visitors, free from the chatter associated with cell phone conversations. Were the preferred alternative to permit an additional cell tower at Lake, that natural quiet would be lost to park visitors, and there's nothing the park can do to mitigate that loss, signage or otherwise.

Comment Text: the mere existence of modern day technology on a journey into the primitive back country of Yellowstone had some affect on the "wilderness experience."

Comment Text: concerns with the preservation of solitude in undeveloped areas of Yellowstone as well as in those developed areas of Yellowstone where natural features draw crowds, e.g., geyser basins and the Grand Canyon of the Yellowstone

There need to be places left where people can go to unplug (from technology).

Comment Text: Unplugging from the modern world and enjoying the solitude is a rare commodity - if we lose it here where else will people find it?

Comment Text: Maybe I'm just an "old fogey" but it seems to me that there are places where we don't need to be "connected" at every minute.

Comment Text: Please leave us some place that we can go to and experience the wild, not having to look at mechanical towers, listen to obnoxious people on their phones or be reminded of our jobs typing away on computers.

Comment Text: one of the highlights was becoming "unplugged". Over the course of our visit the lack of cell service and email became a highlight. We were able to completely absorb all the beauty of the park.

Comment Text: One of the things that we love is the opportunity to unplug and enjoy the pristine wilderness that makes Yellowstone magical.

Comment Text: restrict the use of cell phones in public settings, such as boardwalks

Comment Text: there needs to be a location that people can go to unplug

Comment Text: Can't we have a few places on earth where those of us who do NOT have cell phones, can enjoy Mother Nature without cell phones going off all around us?

Comment Text: We can't stop wireless technologies from coming, but we need to preserve the historic value of Yellowstone's primitive "get away from it all" nature especially in specific areas in the park.

(Response) *The NPS agrees that natural soundscapes and solitude are valuable visitor experiences. Park rangers currently remind visitors to turn cell phones off during interpretive talks and tours. The NPS will continue to address sound issues by limiting cellular service to developed areas to the extent possible, reminding visitors of proper wireless communications etiquette, and not providing cellular service in the backcountry. The park will work in the future to minimize the existing*

spillover coverage. If a wireless communications facility were to be installed at Lake, it would be located well away from any normal visitor use area, thus mitigating much of the impact to visitors from cooling units associated with WCFs. Noise levels decrease 6 A-weighted decibels (dBA) with a doubling of distance from the source of the noise.

The additional use of cell phones in the Lake developed area, and the continued use of cell phones at other developed areas would result in long-term, minor adverse impacts to natural soundscapes. The use of cell phones in backcountry areas would not be expected to increase over current conditions; however, the impact to natural soundscapes because of cell phone "spillover" coverage would be long-term, minor, and adverse

Courtesy signing and protocols would be developed and added to help guide visitors in the courteous use of cell phones and other portable communications technologies.

Protect the Park's viewsheds

Attention should be given to ensure towers are not visible from unroaded or wilderness areas.

Comment Text: Special attention should be given to avoiding (prohibiting) proposed tower locations that might be visible from unroaded and Wilderness areas.

Remove the Old Faithful Cell Tower.

Comment Text: immediately move forward with removal of the Old Faithful cell tower

Comment Text: I find the tower at Old Faithful to be an obscene eyesore, so the relocation looks like a good thing.

Comment Text: I am one of those in favor of moving the Old Faithful tower

Comment Text: would prefer YNP seek a way to immediately move forward with relocation of the Old Faithful cell tower.

Comment Text: it would be good to move Old Faithful's cell tower to some setting that would be less visible to visitors

Comment Text: The park should commit to moving the Old Faithful cell tower immediately

Comment Text: I am amazed that a cell tower was placed so near Old Faithful. This tower should be moved to a more less-intrusive sight.

Comment Text: The cell tower at Old Faithful needs to be moved to the water plant where it won't be such a pervasive visual intrusion. If the elevation of the new cell tower site is higher than its present location, then the tower should be shortened accordingly. The cell tower should be disguised, if feasible.

The proposed antenna platform on Mt. Washburn is unacceptable.

Comment Text: A multi-storied antenna platform on Mt. Washburn will do nothing but detract from the reason MOST visitors come to Yellowstone: wide open spaces, beautiful vistas and the opportunity to "get away" from it all.

Comment Text: the proposed "antenna platform" on Mt. Washburn is unacceptable. As designed, the proposed multi-story platform makes the area look worse, and Yellowstone must do better to reduce the visual impacts

Comment Text: am told that the antenna platform proposed for Mt. Washburn would be another blight on our scenic landscape. Surely there is an alternative.

Comment Text: there must be a better, less obtrusive alternative to the very large and obtrusive 'antenna platform' depicted in the photo simulation on p. 28 of the dEA

Comment Text: the visual impact of the Mount Washburn tower must be minimized

Comment Text: Photo simulation of Mt. Washburn with new cell tower: A tower that looks like this photo simulation should not be allowed anywhere in the world's grandest national park, especially not on top of a famous peak.

Yellowstone has an obligation to preserve viewsheds and reduce visual impacts through NHPA and NPS policies.

Comment Text: towers will mean a disturbance to some of the most scenic vistas

Do not try to disguise cell towers as fake trees, they're worse than the cell tower itself.

Comment Text: Oh, yeah, and PLEASE, no "Frankenpines!" I'd rather see a bare cell tower than one of those mutants.

Reduce or consolidate unneeded and/or visually obtrusive wireless infrastructure.

Comment Text: reduce and consolidate unneeded and/or visually obtrusive wireless infrastructure at Old Faithful and Bunsen Peak

(Response) The siting criteria listed in the Wireless Plan/EA address the need to maintain the unobstructed views within the park. As such, the Old Faithful cell tower would be moved to a less visible site, and much of the equipment atop Bunsen Peak would be removed or relocated to clean up the site.

To respond to comments, further site design must be completed for Mount Washburn. While the preferred alternative included construction of a new structure to relocate the existing antennas already located on the Mount Washburn fire lookout building, the Park will consider other possibilities to minimize or reduce visual intrusions for visitors and to address safety concerns regarding the electro-magnetic waves.

The Park would consult with the Wyoming State Historic Preservation Office and other professionals to reach an acceptable design for the Mt. Washburn wireless communications facility. This facility would be designed to minimize visual impact on visitors and the historic structure, while at the same time addressing the safety and security aspects of the site's proximity to a highly-used visitor destination.

Mt. Washburn will continue to serve as the primary communications hub for the park, with multiple antenna, dishes, and electronics equipment at the site.

What assurances are there, that wireless services will not continue to expand unchecked?

It appears that there are loopholes in the plan that would allow for unlimited wireless facilities to be built over time.

Comment Text: On page 40, the EA adds that "guidelines would be updated over time to reflect changes in technology and experience in the park and other jurisdictions regarding wireless services." These are massive loopholes through which any number of future proposals can be rammed. This language makes Yellowstone's claim that Alternative C represents a "limited" increase in cellular coverage laughable. An "unlimited" increase "over time" seems much more likely.

Concerned about placement of resource monitoring equipment (e.g. NEON) in recommended wilderness

Comment Text: We are concerned that the preferred alternative does not provide clear enough direction to the permit committees regarding the placement of research equipment and NEON sites within recommended wilderness.

(Response) Prior to this plan, the park had no guidance for addressing the siting or placement of wireless communications facilities. Implementation of this plan would provide guidance and siting criteria, initiate the formation of a park Telecommunications Committee to discuss and ensure proposals adhere to the plan, and make recommendations for action to the superintendent. Cell phone service proposed in this plan is prescriptive; if it is not discussed in the plan, it cannot be approved under the plan. An example would be: a proposal for new cell phone service at Norris; since providing new cell phone coverage at Norris was not analyzed in the preferred alternative, it would not be considered by the Telecommunications Committee. Because the plan was prepared in order to protect park resources and values by limiting the types and locations of wireless services and infrastructure, additional detailed NEPA analysis and public comment would be required for any proposed cell phone service not included in the plan.

Improve maps/Lack of modeling

Maps need more detail

Comment Text: Canyon area: Alternative C will increase coverage at Canyon (according to the maps on pages 20 and 26), but by how much is unclear. To what extent will the North and South Rim Trails be covered?

Comment Text: The maps do not contain sufficient detail to allow the public to properly assess the various Alternatives

Comment Text: the EA masks the consequences of the alternatives by failing to display accurate coverage maps.

Comment Text: We request that once the park has finalized it's preferred alternative, that it update the propagation maps provided in the dEA and that it provide a finer level of specificity so that the public can fully understand the extent of the wireless coverage in the park for all the alternatives so we can accurately compare the alternatives.

A shortcoming of this EA is the lack of modeling for wireless signal propagation.

Comment Text: One of the short-comings of the EA is the lack of modeling to predict cell-phone coverage from future actions where new cell phone antennas are installed and existing cell phone

antennas are relocated. I believe that such models exist within the industry, and they should be employed in the Park's decision-making process.

(Response) The intent of this plan/EA was to set a direction for wireless services deemed appropriate for use within Yellowstone National Park. The maps used in each alternative of the Environmental Assessment depict the goals for the services and coverage area of that alternative. This plan was prepared, in part, to formalize guidelines and criteria by which future projects would be measured, and then either approved or denied. Signal propagation maps would be prepared prior to the installation of any project to ensure its keeping with the intent of the plan, to help determine equipment choices, and to ensure the desired coverage area is obtained while minimizing spillover of the signal beyond the intended area. Signal coverage maps will be required to be submitted as part of the application process.

Wireless signal propagation maps would be used to provide information about whether to approve, deny, or redesign a system to ensure compliance with the plan.

Will wireless infrastructure affect wildfire management?

Will wildfire be fought differently to protect wireless infrastructure'

Comment Text: What effect will the presence of expensive instruments have on wildfire decisions; will fires be fought to safeguard the station when otherwise they would be allowed to burn?

(Response) Wildland fire management is an important component of park management. Fire management already incorporates wireless communications including Remote Automated Weather Stations (RAWS), fire lookouts, and the park's existing two-way radio station during fire management activities. When there is a wildland fire burning within the park, an interdisciplinary team works to identify important resources/infrastructure that may be threatened. Cost of firefighting efforts, significance of resources and impact to operations are all factors in determining a preferred course of action. It would be realistic to assume that firefighting efforts would help protect wireless infrastructure, which are typically located adjacent to developed areas of the park. These decisions would also be made for park infrastructure located in the backcountry of the park whether they are a park cabin, a resource monitoring instrument or a communication structure. The interdisciplinary team and a Fire Resource Advisor would work with the fire suppression or monitoring team to identify these structures and determine the best strategy to protect these structures and park resources. Webcams on fire lookout structures could be used with the firefighting effort as remote resource monitoring devices to monitor fire movements and behavior and help with safer fire management decision making.

Alternatives to wireless

Consider alternatives to wireless structures such as emergency call boxes and issuance of free or rental 2-way radio, walkie-talkie or GPS unit to visitors.

Comment Text: The EA also does not look at alternatives such as call boxes or an expanded radio system with access to visitors.

Land line phones for public use need to be maintained within the park.

Comment Text: Even if cell service is installed, not every visitor has a cell phone or service that includes Wyoming, plus the batteries go dead, etc. Please ensure that developed areas and

occasional picnic areas continue to provide working public phones, and that the trend of disappearing/failing public phones does not continue.

(Response) The NPS agrees that land lines such as public telephones still have a role within Yellowstone and will attempt to keep public telephones available. Call boxes and/or public telephones are provided by a telecommunications company that has been approved to provide that service in the park. Businesses that operate in the park must be assured of a reasonable profit, which is difficult for public telephone providers under the current technology and business climate. Any proposal for removal of the current public telephone system would use the process identified in the Wireless Plan. Part of this process will be a determination of whether to continue supporting these public telephones if the proposal is to remove some from the Park.

Two-Way Radio

Two-way radio service for concessioners and others was not included in the plan.

Comment Text: an entire category of wireless communications has been ignored. 2-way radio for concessionaire of Yellowstone Park

Eliminate dead zones in NPS radio system.

Comment Text: The only upgrades that make sense are to eliminate dead spots in the NPS radio system.

(Response) Two-way radio service is the primary component of communications for park operations. Proposals for any additions or enhancements to the system would use the process identified in the plan. Proposals would first be reviewed by the Telecommunications Committee and checked to ensure compliance with the intent of the plan. A recommendation would be made to the park superintendent. Commercial two-way radio systems will continue to exist in parallel with the NPS system for use by concessioner and park partners and are subject to this plan.

Legislative history

Legislative history of Telecommunications Act should be included and considered in WCS plan.

Comment Text: The legislative history of the Telecommunications Act of 1996 specifically mentions Yellowstone National Park. How can you not list it on page 4 and use it as "guidance"?

(Response) The purpose of the Telecommunications Act of 1996 is to promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunication technologies. Section 704(c) of the Act directs federal agencies to make federal properties, rights-of-way, and easements available for the placement of new telecommunications services, such as wireless antennas. With regard to a bill, H.R. 1555, that, revised, gave rise to Section 704(c) of the Act, the House of Representative's Committee of Commerce, in House Report 104-204, stated:

The Commission is directed to develop and issue procedures to make available to the maximum extent possible the use of Federal Government property, rights-of-way, easements and any other physical instruments and appropriate assets that could be used as CMRS [commercial mobile radio service] facilities sites that do not conflict with the intent of other Federal laws and regulations. The Committee recognizes, for example, that use of the

Washington Monument, Yellowstone National Park or a pristine wildlife sanctuary, while perhaps prime sites for an antenna and other facilities, are not appropriate and use of them would be contrary to environmental, conservation, and public safety laws.

In the Notice of Availability of Policy Statement Concerning Access to National Park Service Property for the Siting of Mobile Services Antennas (“Notice of Availability of Policy Statement”) published in 62 Fed. Reg. 19537 (July 23, 1997), the NPS stated the following:

NPS implementation of Section 704(c) of the Act will take into account language in the House Report [104-204] on the bill [H.R. 1555] which eventually became law [Section 704(c) of the Act], stating “The Committee recognizes, for example, that use of the Washington Monument, Yellowstone National Park or a pristine wildlife sanctuary, while perhaps prime sites for an antenna and other facilities, are not appropriate and use of them would be contrary to environmental conservation, and public safety laws.”

The NPS interprets these statements made in House Report 104-204 and the Notice of Availability of Policy Statement to mean that, in implementing the Telecommunications Act, the NPS must not overlook its primary mission and responsibility, which, as stated in the National Park Service Organic Act, 16 U.S.C. § 1, is to “conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” Nor is it to overlook directives for the management of each National Park System unit in the statutes, executive orders, or other action which established each unit.

With regard to the Wireless Communications Services Plan Environmental Assessment (“Wireless EA”) for Yellowstone National Park, the NPS intends that each proposed alternative plan for wireless communications services in the Park would implement the Telecommunications Act in conformance with all applicable laws which require the NPS to preserve the scenic, natural, and historic values of the Park. By proposing such plans, the Wireless EA necessarily “takes into account” the referenced language of House Report 104-204, as stated in the Notice of Availability of Policy Statement.

To interpret the referenced statements in the House Report and Notice of Availability of Policy Statement otherwise, for example, to interpret it to mean that no wireless communications facilities may be placed in the Park as a whole, would be improper and unwarranted. It would conflict with the purpose and provisions of the laws which Congress enacted to establish the Park and guide its management. Such a result was certainly not intended by the authors of the House Report or the Notice of Availability of Policy Statement.

Thus, the Wireless EA fulfills the NPS’s referenced statement made in the Notice of Availability of Policy Statement.

Proposed cellular service at Lake

Cellular service should not be added at Lake.

Comment Text: Additional cell service/wireless service in the Lake Area is not needed

Comment Text: We ask that the addition of new cell service at Lake be struck from the preferred alternative.

Comment Text: A lack of wireless and cell service complements the antique Lake Hotel. I think this is valued and valuable.

Comment Text: I enjoy the quiet in the hotel and area around it. I don't want to hear cell phones ringing and people talking in the sunroom , lobby , dining room or EDR. If there are cell phones they would be going off during the times when the string quartet are playing and the pianist is playing.

Comment Text: Cell coverage should not be expanded to the historic Lake Lodge area.

Comment Text: Keep in mind (please), that new technology is not always helpful and good. The atmosphere in the historic locations of the developed parts of Yellowstone will forever be changed. It can already be seen in the Old Faithful Inn. Now the uniqueness of the Lake Yellowstone Hotel will be gone too. Once perceived as the quite, beautiful, historic, park location, this place will now be filled with cell phone ringtones and work-related conversations disrupting those who are here to escape that exact type of experience.

Comment Text: Please improve the plan by striking the provision to add new cell service to the Lake area

The need for cell phone service at Lake is not fully described.

Comment Text: The preferred alternative fails to discuss the specific need for the proposed new cell coverage in the Lake area. When asked about the need for this new service at the public meeting in Bozeman MT on October 1, NPS staff stated that the primary 'need' was based on requests made by YNP staff for additional cell service in that area. Given the fact that YNP staff already have land lines available for personal and park-related calls, as well as NPS radio communication for work and emergency related duties, there appears to be no real need, other than convenience for a handful of park employees, to impose this additional impact on the scenery and tranquility of the Lake area.

Cell service should be expanded at Lake Village.

Comment Text: Lake Village needs a cell tower for my safety and welfare, and for the safety and welfare of visitors to this area.

Comment Text: It is our belief that the cell tower at Lake is essential to provide cell coverage at all of the major locations in the park.

Comment Text: Also, increased coverage at Lake makes sense because there is no signal at the hotel currently

Comment Text: With the amount of traffic that the Lake area receives and the amount of incidents that occur, that it's important for safety and emergency response that cell phone reception be available.

Comment Text: If cell coverage remains as it is, it's acceptable to add coverage at Lake, provided the cell tower is not obtrusive, because all other large developed areas already have cell phone coverage.

(Response) *The purpose and need of the Wireless Plan/EA is, first and foremost, to protect park resources and values by limiting the types and locations of wireless services and infrastructure. Allowing new cell coverage at Lake meets the Wireless Plan/EA objective to improve operational effectiveness of wireless communications in the park and safety for park visitors, employees, residents, contractors and concessioners. Lake is the last major developed area of the park that does not have cell phone coverage. The Lake developed area on any given summer night will have combined population of approximately 2,100 visitors and employees. The current number of public telephones is limited, both by business opportunity and available infrastructure. Additionally, the*

number of landline administrative telephones is also limited by available infrastructure. Cell phone coverage will allow visitors more rapid access to emergency services, and improve operational effectiveness for employees. Restrictions will still occur at Lake in the form of restricting WiFi access at the Lake Hotel and Lodge which will help to protect the value of the historic lodge experience for visitors. Courtesy signing and protocols will also help to reduce use of cell phones adjacent to areas where visitors are most likely to enjoy natural soundscapes.

Consider cell phone service in the Madison area

Consider adding cell service at Madison.

Comment Text: the park should consider placing a cell tower near Madison Junction to allow for limited cell coverage for the west side of the park

Comment Text: Cell service in the Madison Junction is not a matter of conveniences as it is a safety issue. The communities have hotels and cell service. The response time is much faster. Madison Junction and Norris area should have the same service.

Important to have cell coverage between Madison Jct. and Old Faithful.

Comment Text: I think it would be just as important to have cell service between Madison Junction and Old Faithful as it is to have it at the Old Faithful area.

(Response) While cell phone service between Madison Junction and Old Faithful could benefit some visitors such as those in the Madison campground, limiting cell service was one of the primary means for the Wireless Communications Services Plan to protect park resources and visitor experience. Allowing cell phone service only in developed areas of the park that maintain overnight lodging accommodations (hotels and cabins) helps to meet this important objective by concentrating cell coverage in areas where the most visitors (both day and overnight) could benefit without introducing safety concerns such as cell phone usage along the roadways.

Technical Questions / Wireless Technology Issues

Explain how wireless coverage can change with various towers, antennas, etc.

Comment Text: The maps in the EA show the same backcountry coverage for the current antennas on the fire tower and the proposed free-standing, taller tower. How is that possible?

If technologically feasible, the park should consider restricting wireless services to 911 only for the public and essential NPS communications.

Comment Text: The EA rejects the promising emergency-only alternative without any analysis. On page 48, the EA states that the "emergency-only" alternative will not be considered because "[c]ell phone service providers would likely not make a return on their investment, and would have to maintain the WTF for this purpose. Thus, maintaining a system for 911 would not be economically feasible..."

Comment Text: the alternative of maintaining a cell system for emergency or 911 calls only was not evaluated because it "would not be economically feasible" (page 48) □ a conclusion that is unsupported by any reasoning, let alone evidence.

Comment Text: low-power, strategically-placed cell phone transceivers be placed in developed areas where people might wish to place phone calls and that 911-only service be considered for those areas of the park where the preservation of solitude and the natural world have been preserved for over a 100 years

Existing bandwidth in park is limited.

Comment Text: Also, existing communication users have exhausted all means to improve internet service within the Park arena. Additional T-1's lines are no longer available as new communication facilities have not been approved in the Park area for many years.

Co-locate wireless facilities as a first choice when possible.

Comment Text: Co-locations are always a first consideration for a number of reasons such as capital resources, standard lease terms, time to market, etc.

Potential future wireless needs should be addressed.

Comment Text: as the EA is proposing installation of new communications facilities (i.e. antenna structures), then it should address the potential for additional requests and future needs beyond this project. The basis for such a preemptive measure should be addressed under cumulative effects, mitigation

Existing facilities may need to be upgraded to use newer wireless technologies.

Comment Text: Existing communication users favor the CDMA digital system and the GMS digital system is limited in its use within the Park. Again, additional facilities are needed to improve GSM cellular coverage with the park.

Consider use of mobile and temporary wireless infrastructure during high visitor use seasons.

Comment Text: With respect to cell coverage, the EA does not consider rolling in mobile, temporary towers into parking lots during high visitation periods and removing them in the winter, so that the resulting quiet is undisturbed.

Moving the existing Old Faithful Cell Tower may change the coverage area.

Comment Text: Moving the Old Faithful Facility to a new location, is another concern of Union Telephone Company. This relocation, more likely, will not have the same cellular coverage as the previous communication site. Union wishes to work with the Park Service and the other users in determining the site for the new location.

(Response) Wireless coverage depends on various factors, antenna height, topography, power output, type of antenna, angle of antenna. Because of these variables, signal strength in a given area can vary by changing any of the above. Signals can be directed to a certain degree when trying to cover a specific area, but there will be areas outside the target area that receive coverage. The plan's siting criteria and the formation of a Telecommunications Committee were developed specifically to deal with new and changing technologies as well as limiting spillover. Proposals for changes in wireless coverage due to this changing technology would follow the process outlined in the plan. The preferred alternative does propose to increase bandwidth into the park by adding infrastructure to Bunsen Peak, which may help alleviate constraints that currently do not allow

changes in service such as coverage, increases in data transmission, or increased numbers of available phone lines within developed areas.

One of the objectives of this plan was to "Improve operational effectiveness of wireless communications in the park and safety of park visitors, employees, residents, contractors, and concessioners". A "911-only" cellular phone system still requires the entire infrastructure necessary for any other cell phone site throughout the country (i.e. power, access, antenna mounting structure, and maintenance visits). Therefore, the planning team determined that providing complete cellular phone service within the developed areas met the objective of improving operational effectiveness much better than a 911-only system in these same areas.

Mobile or temporary cell phone sites require all the same equipment that permanent sites would require. Mobile sites are typically trailer- or truck-mounted units that are deployed in emergencies or for the short-term. The NPS will consider the use of mobile/temporary facilities in emergencies or on a trial basis. Since any new site would be required to follow the guidelines and siting criteria to address visual impacts, permanent and/or temporary sites will need to be designed to blend with its environment.

Telecommunications Committee Suggestions

There should be public representation on, or public notices for public attendance to meetings of the YNP Telecommunications Committee involving wireless.

Comment Text: NPS should conduct public meetings on an annual basis for interested parties to provide any comments and discuss revisions to the Wireless Communications Services Plan.

Comment Text: The YNP Telecommunications Committee which will make decisions about future wireless proposals has no representative of the public. Nor is there any indication that its meetings will be publicly noticed or open to the public.

Comment Text: Given the high degree of public interest, we request that the meetings of the telecommunications committee be advertised and open to the public. Further, we request an opportunity for the public to comment on items for consideration by the committee prior to decisions being made.

More information should be given as to the roles and how the proposed telecommunications committee would function and make decisions.

Comment Text: The EA refers frequently to the Telecommunications Committee but gives little information about it, other than that it is "led by the telecommunications specialist and comprised of members from compliance and resource programs." How much authority does this committee have, how does it make decisions, how is membership determined, and what happens if compliance or resource representatives do not concur with a project favored by telecommunication interests-are their concerns overridden?

(Response) *The purpose of the Telecommunications Committee is to: 1) receive and address requests for wireless service, 2) ensure proposals adhere to the wireless communications plan, 3) make recommendations to the superintendent regarding any action to be taken. Public attendance at Telecommunications Committee meetings will not be the usual procedure, because public comments were already collected and considered throughout the scoping and planning process for the Wireless Communications Services Plan Environmental Assessment (EA). In lieu of public meetings, the NPS will provide a short annual report available to the public. The report will include a*

list of proposals received, proposals reviewed, what decisions were made, and what actions were taken. If proposals are received that entail actions outside of the scope of the Wireless Communications Plan EA, a separate scoping and public review process will take place under a new NEPA document.

Courtesy signing

Courtesy signing is often ignored, how will the park ensure compliance if this happens'

Comment Text: "No Cell Phone" signs are often ignored. If that turns out to be the case in Yellowstone, what other steps will you take to ensure compliance?

Comment Text: Third, it is not specified what precise behavior "courtesy protocols, and courtesy signing" would discourage or why such voluntary measures would be expected to work.

Comment Text: The dEA proposes the use of courtesy signing in developed areas where cell service exists. That approach may work with some visitors, but will certainly not work with many or possibly even a majority. We do not oppose the use of signage to discourage inappropriate use of cell phones, but we believe that is an incomplete approach to the challenge.

***(Response)** Signing would be installed to educate and encourage users of wireless communications technologies to act in a courteous manner. Signs are presently used to help educate and guide visitors in protection of other resources as well, such as "please stay on boardwalk" or "please don't throw objects into thermal features." Signs will be coupled with education and oversight by park staff in areas where abuse is reported whenever possible.*

Ham radio

Consideration should be given to installing multiple Amateur (Ham) radio repeaters, all of which would be connected by wireless Amateur radio links, and co-located with existing and future communication sites to minimize antenna tower footprints in the park.

Comment Text: We would like to request your consideration for allowing Amateur (Ham) Radio capabilities in the new Wireless Communication Services Plan Environmental Assessment

***(Response)** Requests such as this would be considered using the process outlined in the plan, but some uses may not meet the objectives of the Wireless Plan. The proposal would first go to the Telecommunications Committee for discussion in regards to whether such a use would be in adherence to the objectives of the Wireless plan. A recommendation to either allow, or deny the proposal would be made by the committee to the superintendent.*

Public health and safety data

Little data to back up health and safety concerns.

Comment Text: Where are the statistics and studies that show how many lives have been lost over the years because there is no tower at Lake?

Lack of cell coverage on park roads increases emergency response times.

Comment Text: If there is an emergency on the roads or at any location where wireless communication is not available then it takes extra time for emergency personnel to reach the emergency.

Comment Text: Improved cell coverage would be a great tool in aiding visitors to Yellowstone that have disabled vehicles or emergencies. Where these occurrences were minimal, it would still be beneficial to have more complete cell phone coverage.

Comment Text: Past events have indicated that lack of immediate response to critical situations that occurred in the Park, such as, the mud slide that almost buried two SUV's along a Park road, in which, the travelers in the vehicles had no cell coverage for emergency assistance and the Park respond time to assist the travelers was over 40 minutes. The mountain hiker, which was attacked by a bear needed to walk several miles to developed area for medical attention due to the lack of cellular coverage.

Yellowstone's claim of public safety benefits by use of cell phones appear to have no factual basis and is at variance with the position of the NPS.

Comment Text: The EA analysis provides no evidence that cell coverage equates to better access to emergency services.

Comment Text: I challenged the assumption that greater use of cell phones in Yellowstone would necessarily mean greater safety to tourists

(Response) Visitor use in the park is concentrated in the major developed areas. Backcountry use accounts for only 5-10% of park visitation (NPS 2000). The preferred alternative includes cell phone coverage in all major developed areas in part to allow for quicker response times where visitors are most concentrated. Greater cell phone coverage is assumed to equate to an increase in the ability to make 911 emergency services contacts, therefore reducing emergency response times. The addition of cell phone service at Lake will make 911 services available to 2,100 overnight guests and employees, ensuring that response times can be reduced in all developed areas.

Protection of visitors

The EA should recognize the compelling public safety need for reliable telecommunications in order to protect visitors' enjoyment of the park.

Comment Text: Cell phone service is DEFINITELY needed in the Lake/Fishing Bridge Area of Yellowstone National Park, as it is the only area in the Park without cell phone service. It is needed for safety, as it is not possible to reach 911 in a timely manner if you are traveling in that area of the Park.

Comment Text: I fell while walking our dog, and had to limp back to the campsite, since our phones didn't work at that time. We never leave the developed parts of the park since we have a dog, but if we did, I would not feel safe without cell service.

Public safety and homeland security concerns.

Comment Text: Public Safety and Home Land Security Issues should carry a stronger evaluation in the EA Plan for Wireless Communications.

There may be public health risks to cell coverage on park roads because cell phone use has been shown to increase the number of vehicle accidents, especially those involving wildlife.

Comment Text: The reason is while driving through the park people suddenly slow down or pull over without warning. If a driver is on the cell phone the chance is greater for an accident which could increase the danger to visitors and create more work for park rangers. I would have to encourage no cell use just to protect visitors and park workers alike

Comment Text: alarmed at the expansion into cell phone service for park visitors. Not only are personal conversions at scenic features an annoyance and intrusion on the solitude of the park but how about all of the drivers with the cell pressed to an ear driving the narrow hills and curves? Please look again at safety.

Comment Text: To increase that service in the park will increase the distraction of people that cannot detach themselves, and also increase to people's lack of attention while driving, hiking, etc. in a park where that attention is necessary for the safety of other motorists and animals.

(Response) One of the objectives of this plan was to improve the operational effectiveness of wireless communications in the park and to improve safety for park visitors, employees, residents, contractors, and concessioners. Visitors tend to congregate in the developed areas of the park. By providing cell phone service to these areas, it is expected that many emergency situations will see quicker reporting of the emergency, leading to quicker response times for emergency services. Cell phones may be the only tool available to visitors during emergencies. The preferred alternative does not provide increased cell service to cover road corridors, the Grand Loop Road or entrance roads. Cell service was not proposed for the roads, recognizing that there may be a potential delay for roadside emergency service if needed. Cellular coverage under existing conditions in the park has had no apparent impact on the number of motor vehicle accidents or the number of vehicle accidents involving wildlife. It is expected that the small increase in ability of drivers to use cell phones while driving, due to spillover of signal from major developed areas, would have negligible impacts on the number of motor vehicle accidents related to cell phone use while driving. Cell phones are not considered the primary tool for emergencies by NPS personnel; the NPS two-way radio system is the primary system for NPS use. Cell phones are considered an enhancement tool for NPS personnel to be used when incidentally available.

Backcountry safety net

Wireless technology should not be used as a safety net for irresponsible backcountry users.

Comment Text: do not support cellular service as a safety net for irresponsible backcountry users.

(Response) It is not the intent of this plan to provide cell service to the backcountry areas of the park. Any cell service in the backcountry would be the result from limited spillover of the signal provided for coverage of a developed area. Backcountry visitors receive safety messages prior to their trip to help set user expectations of what to expect. Currently some backcountry areas of the park have some limited cell phone coverage, and visitors may be able to use cell phones to request emergency assistance, though it should never be considered an alternative to responsible trip planning. A statement would be added to the park newspaper/visitor guide letting visitors know where cell coverage can be expected in the park.

Appendix A. – Procedures, Constraints, Guidelines and Criteria Adopted by this FONSI

Procedures and Constraints

Any proposed project will be subject to compliance with applicable laws, regulations, and NPS policies. For example:

- Proposed WCFs will be submitted to the park at the conceptual design stage for NEPA and NHPA scoping and review of consistency with park plans. The final construction plans, including all mitigations, will be presented in a formal application for final review of consistency with park plans and NEPA, NHPA (Section 106), and ESA requirements.
- Park staff will send a copy of the application for a proposed WCF to the managers of federal lands adjacent to the proposed site so that they can comment on potential impacts or other matters of concern.
- Park staff will comply with NPS DO-53 (Paragraph 10.3) and its implementing guidance in NPS Reference Manual 53 (RM-53), (Appendix 5, Exhibit 6). These policies direct how the NPS implements the Telecommunications Act of 1996 and subsequent directives, including requirements for notices in local newspapers and the Federal Register after NEPA and NHPA review has been completed.
- Some people are concerned about the EMF radiation generated by wireless equipment. The FCC has established EMF safety standards and extensive domestic and international research has not determined any hazard from WCFs operating at regulated power levels. No single WCF or combination of WCFs will be permitted to produce power densities anywhere in the park that exceed the FCC standards for human exposure at the point of closest public access.
- Any WCF must be constructed in a manner that meets the minimum requirements and standards of the Standard Building Code, the National Electrical Code, and the Standard Mechanical Code.
- The NPS strives to construct facilities with sustainable designs and systems that minimize environmental impacts and do not compete with or dominate the park's natural features or interfere with natural processes, such as the seasonal migration of wildlife or hydrothermal processes (*NPS Management Policies 2006*). To the extent possible, the WCF design and management should emphasize environmental sensitivity in construction, use of nontoxic materials, resource conservation, recycling, and integration of visitors with natural and cultural settings. The NPS also attempts to reduce energy costs and consumption by using energy-efficient and cost-effective technology.

This Yellowstone WCS Plan/EA will be used as the NEPA document to cover all subsequent wireless communications proposals that have direct, indirect, and cumulative impacts no greater than moderate, either adverse or beneficial, to any park resource. With respect to species protected under the ESA, projects that have moderate effects, (i.e., those that may have adverse effects on individuals or populations) would require additional consultation with the U.S. Fish and Wildlife Service under Section 7 of the ESA. However, even if the action could have a significant impact, emergencies requiring immediate action are exempt from the Council on Environmental Quality's regulatory provisions for implementing NEPA. In the event of an emergency, the park would take immediate action to prevent or

reduce risks to public health and safety or serious resource losses. These actions could include the temporary placement of telecommunications or resource monitoring equipment to help manage the incident. Examples of emergency actions are cleanup of immediately threatening hazardous materials spills, fire suppression, and prevention or repair of damage by floods or other natural disasters.

For purposes of this section, the term “WCF” includes all associated infrastructure (equipment, antennas, poles, towers, supports, structures, power, conduit, access roads, and other components) used for construction, operation and maintenance of the WCF.

WCF Applications

Only FCC licensees can submit applications for sites for WCFs. All requests for wireless communications services, whether for a cell tower, a resource monitoring site, weather monitoring site, or a site to help improve public safety, will be directed to the park’s telecommunications specialist and referred to the Telecommunications Committee, comprised of park staff from compliance and resource programs. This committee will review each proposal for purpose and need, adherence to NPS DO-53, frequency coordination, and permitting by the FCC. The committee will determine if the proposal is consistent with the selected alternative of this plan, ensure that actions are incorporated into the project to minimize resource impacts, and recommend a course of action for the Superintendent, who will decide whether to approve, deny, or request further information on the proposal.

Park managers must ensure that any WCFs approved for installation in Yellowstone National Park are appropriately sited and do not degrade park resources or present hazards to park visitors or wildlife, that the requirements imposed upon WCFs by adjacent jurisdictions have been considered; and that compliance with NEPA and the NHPA is fully informed by knowledge of how to avoid adverse effects and use available techniques for mitigation. DO-53 Paragraph 10.3 and RM-53 Appendix 5 are not applicable to broadcast television or radio towers, microwave facilities, amateur radio, or other non-WCF. Other sections of RM-53 contain procedures to be used to consider applications for these types of non-WCF. If a WCF is approved, an internal memo to file would be written and added to the project administrative record.

Pursuant to the regulations in 36 CFR 14 and RM-53 guidance, the park will recover from WCF proponents the full cost of work related to processing their applications, NEPA and NHPA compliance (including subsequent environmental monitoring), and issuance and management of permits, including design review, plan checking, and construction inspection. The NPS is also required to collect a fair market value permit charge.

Right-of-Way Permits

Utility services have long been located in NPS units to provide service within a park or because geographic or other considerations necessitate the use of park lands to provide service outside the park. Title 16, United States Code, Section 5, and other authorities allow the NPS to issue right-of-way permits for such services under specified conditions. RM-53 provides detailed instructions on how to process and when to approve applications for rights-of-way permits. The permit documents proponent compliance with all conditions of approval. Right-of-way permits for Yellowstone lands must be signed by the NPS Intermountain Regional Director to become effective.

For WCFs that require a right-of-way permit (currently cellular communications towers and associated infrastructure), the park would issue a notice in the Federal Register per the requirements of NPS DO/RM-53. The public would have an opportunity to comment on the proposed tower and right-of-way permit. If the impacts of the proposed cellular tower would not exceed the criteria described in this EA and public comments do not indicate a potential for greater adverse impacts or reveal impacts that were

not analyzed in this EA, the park would write a memo to file as part of the project administrative record and issue a permit for wireless use. If appropriate, the park would issue a press release notifying the public of this decision.

Guidelines and Criteria for the Action Alternatives

Under Alternative A, *No Action*, the NPS would not adopt comprehensive guidelines and park managers would continue to evaluate proposals for wireless services on a case-by-case basis. Under Alternatives B, C, and D, park managers would use the following guidelines to determine whether to approve a proposed project and how to mitigate its impacts on park resources and values. These guidelines would be updated over time to reflect changes in technology and experience in the park and other jurisdictions regarding wireless services.

The guidelines are intended to:

- Permit wireless telecommunications services in a manner that is sensitive to and protects the scenic, natural, cultural, and historic values of Yellowstone National Park and considers the health, safety and welfare of visitors, staff, residents, and cooperating agencies and neighbors of the park;
- Identify the issues that must be addressed in considering applications for wireless services and infrastructure in the park;
- Identify best practices, as they relate to protection of park resources, for the siting and design of WCFs (to be completed by the Telecommunications Committee);
- Provide guidance to potential WCF proponents, park staff, and interested members of the public that adheres to the procedural requirements of DO-53 and RM-53.

In order to eliminate, reduce, and mitigate the impacts associated with the siting of wireless telecommunications equipment within Yellowstone, the review of WCF applications would be conducted in a manner that ensures that proposed WCFs adhere to the guidelines listed below to the greatest extent possible. Additional site-specific requirements may be identified on a case-by-case basis by the Telecommunications Committee.

Application Process

(1) To avoid sensitive or inappropriate WCF sites and select sites that would most readily comply with these guidelines, the WCF proponent would identify proposed sites in conjunction with park staff before a formal application is submitted to the park.

(2) The identification of appropriate sites would seek to maintain the greatest possible distance between the proposed WCF and concentrations of park visitors, residents, and tenants, consistent with technological requirements and other park objectives. In addition to RM-53 notification requirements, the review of applications would include notification of park residents and tenants located within 300 feet of a proposed WCF as well as adjacent jurisdictions to inform them about the proposed site and allow them to comment.

(3) The construction and installation impacts of a proposed WCF would be assessed to ensure that the use of sites which might otherwise be acceptable would not result in the degradation or destruction of park values through site disturbance, construction disturbance, visual effects, thermal effects, noise, or other impacts. New access roads or trails would not be installed to facilitate either the installation or operation of a proposed WCF. To avoid ground disturbance in areas where it has not previously occurred and minimize ground disturbing activities elsewhere, sites would be located to minimize the need for additions to the park's utility infrastructure. All determinations of feasibility regarding

mitigations or any other matters related to siting, design, or operation of WCFs would be made by park staff.

(4) To the maximum feasible extent, the consideration of applications for proposed WCFs would include an analysis of current and potential future applications from the proponent and other FCC licensees. Proponents would be required to document that no existing tower or structure could accommodate the proposed WCF, identify sites outside the park that were considered and the reason they were rejected, and submit their master plans indicating all anticipated future WCFs in or within two miles of the park for the next five years. Review of applications for proposed WCFs would include an evaluation of the cumulative impact of the proposed sites as well as existing sites. When proposed sites are approved in a particular area, the "carrying capacity" for additional sites would be assessed to avoid a proliferation of sites which could result in a derogation of park values.

(5) Multiple proponents for proposed WCFs in the same area would be encouraged to enter into joint ventures to reduce impacts to the park and simplify the park's review process. To reduce the number of individual WCF sites, proponents would locate their proposed WCFs with other existing or proposed facilities, including those operated by other carriers, whenever feasible. New sites would, where feasible and consistent with other park objectives, be constructed so that they can accommodate co-location or clustering with future WCFs. Right-of-way permits would contain provisions for proportionate reimbursement of construction costs by future WCF proponents if subsequent co-location occurs.

(6) Park staff would use outside technical experts when necessary to better understand the proponent's technical requirements as they relate to the feasibility of a proposed WCF in the park, but it is not expected that such expertise would be needed in every case. The analysis of technical experts would be considered in limiting proponents to sites that best meet park objectives and do not degrade park resources. Park staff would consider developing "constraint maps" or other graphical aids as necessary to identify unsuitable locations in the park.

Information Required for Application Submittals

- The final design and detailed mitigation plans for final review of consistency with park plans and approval pursuant to applicable laws.
- A site and coverage map and expected wireless services and realistic photo-simulation that depict the proposed WCF and access, if applicable, after installation.
- If a proposed WCF is within a viewshed, recreational use area, or occupied area, and would be visible if not screened, a vegetation screening plan or camouflaging method.
- Documentation of the extent to which opportunities for co-location or clustering WCFs have been considered, the number of additional WCFs that can be accommodated at the site, and explanation of factors that limit clustering.
- If the proposed site is within the viewshed of a listed landmark or historic property, photo-simulations depicting which elements of the WCF (including screening) could be seen from the historic resource.
- A description of any vegetation manipulation including tree-trimming or removal that would be required prior to the start of construction of the proposed WCF.
- A description of how vegetation would be protected during construction of the proposed WCF and related underground utility connections (e.g., temporary fencing, non-disturbance within tree drip lines, avoidance of tree roots, removal of trash and debris, and exotic vegetation control) and the site restoration plan.
- A description of the frequency and anticipated extent of tree trimming and vegetation management that will be required during operation of the proposed WCF and how these activities would be

conducted to prevent adverse impacts and ensure compliance with the park's Integrated Pest Management Program.

- A description of the frequency and anticipated extent of operations and management needs including access to the proposed site.

Design Standards and Construction Requirements

The proponent must site, design, install, and operate WCFs to minimize site development, ground-disturbing activities, construction-related disturbances, and disturbances to adjacent areas and park activities. Proponents must coordinate ground-based telecommunications requirements with the Telecommunications Office prior to permitting and compliance review. Any required work must be shown on the submitted design and construction documents.

Location of WCFs

- To minimize impacts to the park's natural habitats, new WCFs would be located with existing clusters of communications equipment or in developed areas if possible; otherwise, altered, fragmented, or degraded habitats would be selected over relatively intact native habitats.
- Radio repeater sites may be located in recommended wilderness areas only if they are determined to be the minimum requirement necessary to carry out wilderness management objectives.
- Access to WCFs must be by existing roads and trails. The WCF proponent may be permitted to repair an unpaved road, but not to pave currently unpaved roads or trails. Additional parking to accommodate the operation of proposed WCFs would be considered only in extraordinary circumstances.
- All WCFs would be designed to promote facility and site sharing by multiple users. The WCF proponent may be required to pay for a report by an independent expert regarding the feasibility of making provisions for co-location by future proponents at the proposed site and strategies that would minimize the number, size, and adverse environmental impacts of a proposed co-located site. The report would also explain the rationale for selection of the proposed site in view of the relative merits of any feasible alternative.
- To ensure that impacts are kept at or below "minor" as described in this EA, WCFs would not be located in a manner that adversely affects a building, district, or element eligible for listing on the National Register of Historic Places. WCFs would not be located where they would be detectable within the viewsheds between historic properties and the natural feature or vista it was designed for, such as the viewshed of the Old Faithful Geyser and surrounding Upper Geyser Basin from the Old Faithful Inn (or vice versa), or the viewshed of Yellowstone Lake and surrounding wilderness from the Lake Hotel or the Fishing Bridge Museum. Proposals must follow *The Secretary of the Interior Standards for the Treatment of Historic Properties* as well as *The Secretary of the Interior Standards for the Treatment of Historic Properties with Guidelines for the treatment of Cultural Landscapes*.
- The effects on threatened and endangered species would be no greater than "may affect, but not likely to adversely affect." Construction activity would not occur within 1.0 miles of an active wolf den and individual impact areas (sites) would not exceed 0.05 acres in size. Aircraft support for installation of infrastructure in Lynx Analysis Units, as defined by the Canada Lynx Conservation and Assessment Strategy, would be infrequent (≤ 2 flights per project), and aircraft would remain $> 1,000$ feet above ground level. A vehicle-strike mortality of a lynx associated with any wireless project would preclude additional wireless projects until formal consultation with the U.S. Fish and Wildlife Service was completed.
- Towers would not be located in or near wetlands, known bird concentration areas, or known migratory or daily movement flyways, or habitat of threatened or endangered species. Tower locations would be configured to avoid areas or landscape features that attract raptors (i.e., hawks,

falcons, eagles, owls). The siting of WCFs would avoid adverse impacts to wetlands, rare plant populations, species of special concern, and hydrothermal features. If possible, towers would not be located in areas with a high incidence of fog, mist, and low cloud ceilings.

Public Safety

WCFs must include: 1) fencing, barriers, or other structures or devices necessary to restrict access; 2) multi-lingual signage with warnings that the facility could cause exposure to EMF; and 3) other practices reasonably necessary to ensure that the facility is operated in compliance with FCC emission standards.

Fire Safety

Telecommunications towers, antennas, and other supporting equipment must be constructed of metal or other non-flammable material. At least one-hour fire resistant interior surfaces must be used in the construction of all equipment cabinets, enclosures, or other necessary structures. Proponents must install monitored automatic fire extinguishing systems, approved by the park, in all WCF buildings. Proponents are solely responsible for the costs associated with bringing WCFs into compliance with fire prevention requirements identified by the park's Division of Resource and Visitor Protection. The park may identify additional fire safety requirements for WCFs located in isolated and potentially high fire risk areas.

Facility Height

- In order to minimize above-ground obstacles to birds in flight and visual obtrusion, WCFs can be no taller than necessary to accomplish their objectives.
- To avoid Federal Aviation Administration lighting requirements, no tower can exceed 199 feet in height, as measured from the natural undisturbed ground surface below the center of the base of structure to the maximum height to which the structure can be raised.
- Applications for WCFs taller than 20 feet above the surrounding tree height would require a detailed explanation of why a shorter installation is not feasible.
- The tops of antennas and equipment installed in building-mounted WCFs would not project above the top of the existing structure, excluding existing attachments such as other antennas.
- Ground-mounted WCFs would be mounted on footings or other devices that minimize the addition of impervious areas (e.g., concrete pads).

Minimizing Other Visual Impacts

- A WCF would include only the minimum amount of equipment needed for its operation, and the design plan would indicate how future proponents could be accommodated.
- New utility services for outdoor WCFs will be installed underground or placed in at-grade conduits unless this would disturb previously undisturbed areas or cause other unacceptable resource impacts.
- All ground-mounted towers must be self-supporting and of a design that best reduces the visual impacts of the support structure. The base diameter of any monopole will be the minimum required for the maximum height of the tower. Guyed towers or additional sections to increase the height of monopole towers would not be allowed.
- WCFs would be constructed in a manner that is compatible with the character of surrounding structures or otherwise made unobtrusive through use of the best available technologies (e.g., stealth technology, slimline poles, enclosed antenna, and micro-cells), screening with vegetation or existing topography, concealment, and/or camouflage. However, use of stealth facilities or other best available technologies must not diminish the physical or visual integrity of cultural resources. Locations where protective fencing would be required should be avoided, but if necessary, the

proponent would work with park staff to determine the type and color. Rooftop installations would not be visible from the ground. Screening may include painting to match the existing structure or locating the WCFs within attics, towers, and behind and below parapets. Finishes or colors that would be shiny or reflective in sunlight would not be allowed. Proposed projects would include the removal of any existing visual obstructions and clutter on the rooftop or roofline that the park does not wish to retain.

- Trees and other vegetation adjacent to the footprint of the proposed WCF must be protected from damage. Topographic cuts and fills for WCFs must be minimized and justified. Park staff would identify appropriate mitigations for approved cuts or fills.
- Towers, buildings, and equipment would remain unlit unless light is needed for maintenance operations. Full cut-off fixtures would be used to minimize degradation of the night sky. Security or safety lighting for on-ground facilities and equipment would be down-shielded to keep light within the site boundaries.
- Support components (i.e., equipment rooms, utilities, and equipment enclosures) for WCFs must be placed in free-standing cabinets, inside buildings, or within existing rooftop, basement, or free-standing mechanical rooms. These facilities must be fireproof and impervious to theft, vandalism, and wildlife.
- No company logos or advertising would be displayed on WCFs.

Environmental Impacts

- The construction and operation of a WCF would not be permitted to increase sediment loading to any creek, stream, or river. Appropriate storm water management practices would be implemented to manage run-off and avoid creating attractions for birds.
- To minimize bird perching and nesting, external ladders and platforms on tubular towers would be avoided and tubular supports with pointed tops would be used when possible rather than lattice supports.
- Construction activities may be seasonally restricted to avoid disturbance of birds during periods of high activity, especially near breeding, feeding, or roosting areas. While birds are nest building or attending young in a nest on a tower, no nests will be removed or maintenance conducted. Tree-trimming or other vegetation removal would be completed before or after the bird-nesting season, which typically runs from mid-February through mid-August. Any work done during the nesting season would require additional coordination with park staff to ensure protection of nesting sites.
- The U.S. Fish and Wildlife Service personnel or other researchers would be allowed access to WCFs to monitor conditions before and after construction, assess impacts to migratory birds and other wildlife, conduct dead-bird searches, and place net catchments and radar, Global Positioning System, infrared, thermal imagery, and acoustical monitoring equipment to collect data on bird movements and the impacts of various tower designs and configurations.
- Proponents would develop a habitat restoration plan for the proposed site that avoids or minimizes negative impacts on vulnerable wildlife while maintaining or enhancing wildlife habitat. If mitigation of construction disturbance or installation of screening requires the planting of vegetation, native vegetation of local genetic stock from the area of the park in which the facility is located would be used. A monitoring and control plan would be in place to avoid the introduction or spread of any exotic vegetation.

Issuance of Permits and Activation of WCFs

When a WCF application has been approved, the NPS would issue a permit that is consistent with the NPS Intermountain Region's right-of-way permit for WCFs and contains standard terms and conditions

for such permits in national parks along with an addendum for provisions specific to WCFs, including the required mitigation measures. Park staff would carefully supervise the construction of WCFs to ensure consistency with the terms of the permit. The carrier would not be allowed to activate the WCF until all required conditions had been met.

Ongoing Management

The Telecommunication Office would monitor the carrier's compliance with the terms of the WCF permit on at least an annual basis, including a review of insurance coverage, required reports submitted by the carrier, and inspection of the WCF by park staff from the Administration Division, Safety Office, and Fire Department. The Telecommunications Office would work with other park offices to determine whether any resource issues or other matters have arisen that need to be addressed and whether any changes in FCC or NPS requirements or policies require additional actions by the carrier.

Park staff would work with the carrier to avoid the need for additional equipment by switching to newer equipment and antennas of the same or smaller size that could provide any needed increase in capacity whenever feasible.

Terminating WCF Operations

A carrier that plans to abandon or discontinue operation of a WCF would notify the park by certified U.S. mail at least 30 days before the effective date. If a carrier fails to give such notice, the WCF would be considered abandoned upon discontinuation of operations.

Unless prior arrangements have been made or a tower is used for another wireless service, the carrier would be required to remove all WCF equipment within 90 days of the date of abandonment or discontinuation of use. This would include: (1) removal of antennas, mount, equipment shelters and security barriers; (2) proper disposal of waste materials from the site in accordance with local and state regulations; and (3) restoration of the site to its pre-WCF condition or the condition specified in the permit. All costs associated with WCF removal and site restoration would be borne by the carrier.

Appropriate Siting Examples

The following are generally acceptable types of sites for proposed WCFs within Yellowstone National Park. Proponents are encouraged to submit proposals consistent with these criteria. However, the appropriateness of any site must be confirmed with park staff; a site matching one or more of these criteria could be unacceptable if it would result in a derogation of park resources.

(1) Sites using existing infrastructure or non-occupied non-historic structures including streetlight standards, utility buildings, bridges, water tanks, existing towers, smokestacks and chimneys, provided that the proposed location and structure treatment is consistent with requirements found in Yellowstone National Park Management Plans and other applicable plans and guidance, including *The Secretary of the Interior's Standards for Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings* as set forth in Title 36 of the Code of Federal Regulations, Part 68 (36 CFR 68) and *The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (as set forth in 36 CFR 67). These standards are applicable because of potential impacts on other historic structures, cultural landscapes, or historic districts.

(2) Non-historic buildings with low use, including non-historic additions to historic buildings, including administrative buildings, utility structures, telephone switching facilities, and non-residential structures such as warehouses, equipment buildings or areas, garages, and service stations.

(3) Vacant or partially vacant non-historic buildings outside residential areas, especially non-occupied buildings that are not scheduled for near term occupancy, reuse, or demolition.

(4) Outdoor sites that A) would not disturb natural resources or require very minimal digging in previously undisturbed areas; B) are not readily visible or accessible to park visitors, tenants, or residents; C) are located away from viewsheds, residences, cultural resources; and recreational use areas; and D) have sufficient road, electrical, and telephone connections available nearby to service the site with minimal new construction.

(5) A historic structure will be considered for a WCF installation only when A) no other potentially acceptable sites are available; B) the lack of other potentially acceptable sites has been documented; C) installation of proposed WCF antennas, conduit, and related equipment is limited to non-historic (non-contributing) additions to the historic structure; and D) the proposed installation would fully comply with the regulatory requirements described in these guidelines. These requirements prohibit new penetrations in the walls, roof, or other features of a historic structure to accommodate WCF equipment or antennas.

(6) Sites for resource monitoring equipment would be provided only in locations that would not adversely affect natural or cultural resources. Monitoring stations for research and safety would only be allowed near a natural or cultural resource if essential to a project approved by the park's Research Review Committee.

(7) Monitoring equipment or radio repeater sites would be allowed in a recommended wilderness area only if the reasons for the placement are consistent with the Wilderness Act of 1964, NPS Director's Order 41 (*Wilderness Preservation and Management*), and the needed information could not be obtained in any area outside the recommended wilderness. Approval of such an installation would be consistent with the minimum requirement concept that determines whether the proposed action is appropriate or necessary for administration of the area as wilderness; does not pose a significant impact to wilderness resources and character; and the equipment used is the minimum needed.

Inappropriate Siting Examples

The following are examples of sites and WCFs that would be expected to result in a degradation of park values or potentially endanger park resources or visitor safety. Proponents are strongly encouraged not to submit applications for WCFs in these sites:

(1) Any residential building or within 300 feet of residential areas in the park. This does not include fire lookouts or personal antennas (e.g., TV, WiFi)

(2) Sites within plain view of sensitive natural or cultural areas, visitor centers, campgrounds, residential areas, trails, or park viewsheds.

(3) Sites that would require special painting or lighting by statute or regulation for the facility to operate (e.g., Federal Aviation Administration requirements).

(4) Sites where WCF construction or operation, including use of access roads, would have an adverse effect on a federally or state-listed endangered or threatened species.

(5) Sites where WCF construction or operation occurs within the park's recommended wilderness, unless allowed through a minimum requirement analysis.

(6) Outdoor sites on or near the top of an exposed ridge or hill, on a public trail, or within a creek/riparian corridor unless A) necessary to monitor wetlands, surface waters, or geothermal resources; or B) an existing structure or stealth technologies would be used to make the WCF unnoticed by the vast majority of visitors and the WCF would not otherwise degrade park resources or endanger visitors or wildlife.

(7) Sites where WCF installation, construction, or operation, including regular access, would require construction of a new road, expansion of trails, or endanger or otherwise harm sensitive natural or cultural resources.

(8) WCFs that are not designed for co-location or clustering with present or future WCFs if that would be feasible at the site. Clustering of antennas may minimize the overall height of tower, which in many cases is the preferred option.

(9) WCFs whose design and installation are inconsistent with related planning documents, *The Secretary of the Interior's Standards for Rehabilitation*, or other plans, guidelines, or documents protecting park resources.

(10) WCFs that are at a significant distance from electrical or telephone connections or existing roads for service access, such that construction to extend connections or access would result in a significant impact to park resources.

(11) No WCF that would cause interference with park communications and emergency systems or other existing or proposed WCF in the park that could not be mitigated would be permitted.