



National Park Service
U.S. Department of the Interior

Grand Teton National Park
John D. Rockefeller, Jr. Memorial Parkway

Wyoming

FINDING OF NO SIGNIFICANT IMPACT

TELECOMMUNICATIONS INFRASTRUCTURE PLAN

Recommended:

Gopaul Noojibail
Acting Superintendent
Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway

8.1.19

Date

Approved:

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Acting Regional Director
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8/15/2019

Date

INTRODUCTION

In compliance with the National Environmental Policy Act (NEPA), the National Park Service (NPS) prepared an Environmental Assessment (EA) to examine alternative actions and environmental impacts associated with the proposed issuance of a right-of-way permit for the installation of a fiber optic cable network and wireless telecommunications facilities at strategic developed locations within Grand Teton National Park and the John D. Rockefeller, Jr. Memorial Parkway (collectively the park) and connecting to Yellowstone National Park's south entrance. This NEPA review is in response to receipt of an application for a right-of-way permit (SF-299) dated January 15, 2015 from AT&T, with Diamond Communications LLC as AT&T's agent (collectively, the applicant).

Telecommunications upgrades and expansion are necessary to effectively:

- Meet mission critical park operations,
- Recruit and retain NPS and park partner employees, and
- Provide connectivity to park visitors.

The statements and conclusions reached in this Finding of No Significant Impact (FONSI) are based on documentation and analysis provided in the EA and associated decision file. When necessary, relevant sections of the EA are incorporated by reference below.

SELECTED ALTERNATIVE AND RATIONALE FOR THE DECISION

Based on the analysis presented in the EA, the NPS selected the Proposed Action. The NPS will issue a right-of-way permit for the telecommunication infrastructure improvements reflected in the EA. The selected alternative will improve cellular and broadband service at strategic developments in the park that currently have significant park staff presence and/or see a high volume of visitors.

The telecommunications permit request covers 11 developed locations in the park (See Figure 1 in the EA). Of these 11 areas, all will have fiber optic cable installed to them and nine of the locations will also have wireless telecommunications facilities installed. Each of the wireless telecommunications facility sites will have between one and three monopoles or an Outdoor Distributed Antenna System (ODAS), as well as equipment and generator shelters (See Table 1 of the EA).

The proposed fiber optic network will include approximately 330,000 linear feet (62.5 miles) for the main line, and approximately 113,000 linear feet (21.4 miles) for the lateral fiber optic network. The fiber optic cable will be installed underground in conduit within road corridors, previously disturbed areas, or other utility rights-of-way. Construction methods are described in Section 2.3.4.1 of the EA.

The nine wireless telecommunications facilities will 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, screening with vegetation or existing topography, and/or other means. Of the nine sites proposed, seven of the sites will contain monopole towers, ranging in height from 75 to 85 feet. Monopoles will be painted to match the surroundings and blend with the surrounding trees and other NPS structures. The South Jenny Lake and Jackson Lake Lodge sites will have an ODAS installed. The ODAS sites will consist of either five or eight 26-foot tall poles distributed throughout the site (as described in Table 1 of the EA). All of the structures proposed for the park will be designed to house multiple antennas to meet the needs of multiple carriers.

Infrastructure associated with the wireless telecommunications facilities includes the support utilities required for operation. Infrastructure will include buried electric lines to provide power to

the facility and buried fiber optic cable to provide the internet service. Each site will include equipment buildings along with their contents that are necessary for the operation of the wireless telecommunications facilities. The exteriors will be designed to match and/or blend in with the surrounding environment.

The park will also upgrade the NPS radio system under the Proposed Action. Repeaters will be replaced at pre-existing sites as necessary. Additional compliance will take place if they are not considered replacement in kind (i.e., if there is a change in location or design). The repeaters at Rendezvous Mountain, Signal Mountain, and Flagg Ranch will be upgraded to allow for digital transmissions to be utilized. The NPS will expand the Signal Mountain secondary repeater to include Gros Ventre and Flagg Ranch repeater locations to create Law Enforcement and Emergency Medical Services digital transmission footprint equal to the analog system.

RATIONALE

The Proposed Action was selected because it best meets the project purpose of addressing inadequate and outdated telecommunications services required to effectively meet mission critical business operations, including safety and emergency services, resource protection, visitor services, and to meet visitor expectations for connectivity. Specifically, the Proposed Action best meets the project objectives to:

- Improve emergency services provided by the NPS and its federal/county partners, including fire, law enforcement, health and safety, and emergency medical response (including 911 emergency system coverage).
- Expand capacity, reliability, and reach of telecommunications to support park operations, including park administration, visitor protection and services, research and education, concessioner operations, and facility maintenance.
- Provide cellular high speed wireless voice and data coverage to provide information to visitors via park-developed educational websites, interactive mobile applications, and other online tools that inform and connect visitors to the park and its resources.
- Provide cellular high speed wireless voice and data coverage to visitors while they are in the park.
- Enhance resource monitoring and research-related communications equipment (i.e., wildlife, seismic, air quality, noise, weather, streamflow, and photographic/video) that transmit data to park staff, universities, government agencies, and the public.
- Provide reliable internet and cellular service within the park and partner/concessioner facilities and housing areas, vital for recruiting and retaining the next generation of employees.

MITIGATION MEASURES

Mitigation measures are designed to prevent or minimize adverse impacts or to contain impacts within acceptable limits during and after project implementation. Impact mitigation measures and guidance have been woven into various elements of the selected alternative. Attachment A to this FONSI contains a list of mitigation measures that will be implemented for the selected alternative.

PUBLIC INVOLVEMENT/AGENCY CONSULTATION

Public Involvement

Initial public scoping for the project occurred from June 14 to July 14, 2017. The scoping newsletter and information about the project were shared in a variety of ways. On June 14, 2017, an email was sent to 440 entities, of which approximately 95 were reporters, 280 were media release interested parties, and 100 were planning interested parties. The newsletter was also posted on the NPS Planning, Environment, and Public Comment (PEPC) website and hard

copies were made available in several locations, including the park visitor centers. A total of 35 individual correspondences were received during the public scoping period.

The EA was made available for public review and comment during a 30-day period, from March 12 to April 10, 2019. The media release was emailed to 99 media contacts and 701 parties interested in the park and park planning. The media release was also posted on the park's website at <https://www.nps.gov/grte/learn/news/newsreleases.htm> and on its Facebook and Twitter pages. During the public review period, two open houses were held: the first on March 19 was held in Kelly, Wyoming and the second on March 20 was held in Jackson Hole, Wyoming. The park received 411 correspondences during the public review period. Responses to questions and substantive comments are provided in the errata in Attachment B.

Agency Consultation

Wyoming State Historic Preservation Office (SHPO) Consultation

The park initiated the Section 106 review process with the Wyoming SHPO on April 13, 2018. Prior to the formal consultation initiation, the park and SHPO had been communicating about the plan via general park compliance updates over the phone.

During the week of May 21st, 2018, a Historic Preservation Specialist with the Wyoming SHPO conducted visibility analysis field visits at the park. The park's Branch Chief of Cultural Resources and the SHPO representative reviewed the potential visual impacts from multiple proposed locations and helped to fine-tune potential tower locations to minimize impacts.

On June 21, 2018, a representative from the NPS Intermountain Regional Office Heritage Partnerships Program conducted a site visit with the Branch Chief of Cultural Resources to Jackson Lake Lodge and South Jenny Lake, where the Proposed Action was discussed, and the logic behind telecommunications infrastructure placement was reviewed in detail.

In October 2018, the Class III cultural resources inventory report and a formal determination of no adverse effect was submitted to the SHPO. The SHPO concurred with the no adverse effect determination on November 21, 2018.

Native American Consultation

The park sent letters with information about the plan and requests for input to the affiliated tribes listed in the EA, Section 4.4 *Tribal Consultation*. On March 8, 2019, an invitation to comment on the Grand Teton National Park and the John D. Rockefeller, Jr. Memorial Parkway Telecommunication Plan and Draft Environmental Assessment and Class III Cultural Resources Inventory report was sent to the park's affiliated tribes. Three responses were received. On April 25, 2019, the Northern Cheyenne Tribe provided a finding of no adverse effect to cultural resources. On July 1, 2019, the Eastern Shoshone Tribe responded with no adverse effects to historic properties and concurred with the continuation of the project. In addition, they stated that they would like the opportunity to provide a tribal monitor for ground disturbing activities. On July 11, 2019, the Confederated Tribes of the Umatilla Indian Reservation stated the NPS had done a good job of keeping the towers in locations with some degree of previous development and of keeping the monopole heights to a minimum.

U.S. Fish and Wildlife Service (USFWS) Consultation

In a biological assessment (BA) submitted to the USFWS dated April 27, 2018, the NPS determined that the selected alternative may affect, but is not likely to adversely affect North American wolverine (*Gulo gulo*), Western yellow-billed cuckoo (*Coccyzus americanus*), and Canada lynx (*Lynx canadensis*) and its critical habitat. Concurrence on this finding was received from the USFWS on May 14, 2018. An amended BA which addressed grizzly bear (*Ursus arctos*), was submitted to the USFWS on November 15, 2018. Concurrence on the not likely to adversely affect determination for grizzly bear was received on December 14, 2018.

FINDING OF NO SIGNIFICANT IMPACT

As described in Chapter 1 of the EA, the following resource topics were carried forward for detailed analysis: Visual Resources, Cultural Resources, and Visitor Use and Experience. The potential for significant adverse impacts on these resources has been analyzed, taking into account context and the relevant consideration from the Council on Environmental Quality regulations at 40 Code of Federal Regulations (CFR) 1508.27(b), ten criteria for determining whether the Selected Action will have a significant effect on the human environment. The NPS reviewed each of these criteria given the environmental impacts described in the EA and determined there will be no significant direct, indirect, or cumulative impacts under any of the criteria. Attachment C contains a determination of non-impairment.

Visual Resources

The Proposed Action will result in short-term visual impacts along roadways and other installation areas from construction of the fiber optic network and cellular infrastructure installation and during vegetation regrowth phases, as well as long-term visual impacts at the wireless telecommunications facility locations. After installation is complete, although fiber optic will be buried and not visible, wireless telecommunications infrastructure will introduce visual contrasts related to the presence of monopoles, ODAS antennas, and equipment shelters. By locating the equipment shelters and monopoles in developed areas, they will be in the vicinity of other man-made structures such as buildings, marinas, telephone poles, transmission lines, and other infrastructure, and their presence will be compatible with the surrounding areas. However, the poles will be visible to visitors and employees in some locations of the developed areas, and thus will create a visual contrast that does not presently exist. Although the equipment shelters proposed are sited among similar structures, they will still be an additional structure in the viewshed of visitors and NPS, U.S. Bureau of Reclamation (USBR), and concession employees. Careful consideration was taken to ensure that facilities and their components are designed and sited to avoid or reduce impacts on visually sensitive areas.

Cultural Resources

As described on page 34 of the EA, a Class III cultural resources inventory of the project area was completed from October 6-12, 2016 and June 11-15, 2018 to identify whether any National Register of Historic Places (NRHP)-listed or -eligible cultural resources are present that could be affected by proposed activities. The Class III cultural resources inventory report that was completed contains information on the identification and NRHP analysis of cultural resources, as well as a finding of effect from the Proposed Action on those cultural resources listed or eligible for listing in the NRHP in compliance with the National Historic Preservation Act. This report was submitted to the Wyoming SHPO for concurrence and, as described above, the Wyoming SHPO concurred with the no adverse effect determination on November 21, 2018. Based on the analysis of the effects of the Proposed Action, there will be no adverse effect to historic properties.

Visitor Use and Experience

Implementation of the selected alternative will provide wireless cellular and data coverage at strategic locations across the park and will enable the NPS to disseminate information to visitors more easily and quickly to communicate park conditions to visitors, including real-time information on parking, traffic, weather, and hazardous conditions. Park visitors will have increased educational opportunities due to the availability of interactive information to support park education programs such as the park website and other sources (including park-developed applications, interpretive programming, alerts, maps, Google earth, etc.); the ability to stay connected to family and friends while visiting, including the ability to share the experience of the

park using social media; and the ability to receive email and other critical information while visiting the park.

The proposed coverage from new cellular infrastructure will provide additional service for accident reporting and improved communications between visitors and park staff. The improved coverage will enhance communications with the park's law enforcement rangers, who are responsible for ensuring safety and security for park infrastructure and visitors, including visitor safety programs such as emergency medical services; search and rescue; structural fire; and law enforcement. Improvements will also facilitate plans for development of the FirstNet first responder network that will improve emergency communications.

Improvements to the NPS's two-way radio system will enhance the park's primary form of emergency communications used for Emergency Medical Services, structural fire, wildland fire, law enforcement, Search and Rescue, weather, avalanche, earthquake and other required types of necessary emergency services response, including for communication with outside agencies and the Teton County Interagency Dispatch Center. This will have beneficial impacts to visitor safety both within the park and on surrounding lands.

Visitors may benefit from improved cellular signals in the developed areas because of ready access to park information, such as real-time information on reservation systems, parking, camping, etc. For those visitors that feel cellular service and wireless internet service enhance their experience, they will enjoy increased cell phone coverage and wireless internet connections as an important part of their visitor experience. However, some visitors may also observe an increase in disruptions due to the use of cell phones by other visitors and it may degrade their experience.

The proposed wireless communication facilities will broadcast wireless signals to the identified developed areas. Although it is not the intent of the plan, moderate or weak wireless signals may extend or spillover to areas within line-of-sight of the poles including undeveloped and backcountry/wilderness areas. The limited backcountry/wilderness areas that currently have spillover cell phone coverage from developed areas will likely be expanded. The expanded coverage outside of targeted developed areas could improve backcountry/wilderness user connectivity with cellular service which will potentially enhance access to 911 and other services in the event of an emergency. However, backcountry/wilderness users should not expect to have cellular connectivity once they leave the park developed areas. While some emergency communication needs may be served via the spillover effect, park information will explain to backcountry/wilderness users that the uncertain nature of this communication does not support visitors taking additional risks in the backcountry/wilderness. "Park visitors must assume a substantial degree of risk and responsibility for their own safety when visiting areas that are managed and maintained as natural, cultural, or recreational environments" (NPS Management Policies 2006, Section 8.2.5.1).

CONCLUSION

As described above, the selected alternative will not have a significant effect on visual resources, cultural resources, and visitor use and experience. Additionally, there will be no significant impacts on public health, public safety, or unique characteristics of the geographic area. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the NPS selected alternative will not violate any federal, state, or local environmental protection law. Therefore, it has been determined that there will be no significant adverse impacts on the human environment, and in accordance with Section 102(2)(c) of NEPA, an Environmental Impact Statement is not required for this project, and thus will not be prepared.

ATTACHMENT A – MITIGATION MEASURES

To minimize impacts related to the selected alternative, the National Park Service (NPS) will implement the following best management practices (BMPs) and resource protection measures.

Construction

- Determine hours of work on a site-specific basis dependent upon visitor use and/or sensitive wildlife habitat.
- Field locate and mark the location of all potential utility lines in work areas prior to work to avoid impacts to existing utilities.
- Furnish the park GIS Office with utility location information, including a shapefile using coordinates NAD83 UTM 12N, company name, and type and number of lines, following construction.
- Coordinate with NPS project manager to identify limits of disturbance prior to project installation.
- Control dust during construction by minimizing soil exposure, watering, and using other dust prevention methods.
- Keep all project zones trash free at all times.
- Locate staging areas in previously disturbed sites and away from visitor use areas to the extent possible to minimize the amount of ground disturbance. All staging areas shall be returned to pre-project conditions following completion. Parking of construction vehicles will be limited to these staging areas, existing roads, and previously disturbed areas.
- Identify and define construction zones with construction tape, snow fencing, or other material prior to any construction activity. Use the zone to confine activity to the minimum area required for construction. Construction activities, including material staging and storage, cannot occur beyond the construction zone fencing.
- Control traffic during construction if necessary to ensure the safety of the public, park employees, and residents.
- Require temporary shoulder closures along roadways and traffic control at roadway crossings during installation.
- Coordinate with NPS and USBR to minimize disruption of normal park activities.

Cultural Resources

- Halt work in the immediate vicinity (600 feet) of a discovery and contact the NPS if previously unknown archeological (human-modified) resources and/or human remains are discovered during construction until the resources are identified and documented and an appropriate mitigation strategy is developed.
- All vegetation modification, including tree removal, at NRHP-listed or -eligible properties will be reviewed and approved by NPS in order to ensure no project actions affect the property's cultural resources.
- Conduct all work on or near historic buildings, structures, sites, and landscapes in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties in consultation with NPS or USBR. Any deviation from the approved specifications must be submitted for further review to ensure that NPS and USBR have considered the potential impacts to the resource.
- Consult with NPS or USBR in advance (generally 60 days) of any ground disturbing activities or work on or near buildings, structures, sites and landscapes eligible for or determined eligible for listing in the NRHP in order to avoid impacts to these resources.
- Inform all contractors and subcontractors of the penalties for illegally collecting artifacts or intentionally damaging archeological sites or historic properties.

Soils

- Avoid rutting or excessive soil compaction caused by vehicles or equipment by restricting construction activities during saturated soil conditions or severe weather conditions to reduce potential damage to soils and vegetation. In the event of adverse weather conditions, the project leader will consult with the NPS to ensure that ground conditions are acceptable for project activities.
- Use erosion control BMPs including protection measures such as sediment traps, silt fences, erosion check screens/filters, jute mesh, if necessary, to prevent the loss of soil.
- Focus erosion control on avoidance and direct control measures at bore sites, handholes, and building and monopole installations, and any areas where surface disturbance exceeds 1 foot in width. The major treatments for these areas will include:
 - Dust Control
 - Soil Roughening
 - Re-contouring
 - Seeding
- If it is determined that there is a need for additional erosion control around bore, handhole, and monopole and building installation sites, additional controls may include.
 - Sediment Basins
 - Sediment Traps
 - Silt Fences
 - Vegetated Buffers
- Salvage topsoil at the beginning of all ground disturbance activities by scraping the topsoil to the side prior to deeper digging.
- Store salvaged topsoil separately from other materials. Limit the height of topsoil stockpiles to 36 inches. Do not stockpile topsoil or subsoil within drip line of remaining trees. Excess soil will be stored only at approved locations.
- Replace topsoil and other excavated soils and rock in the proper order, cobble lowest, then subsoil, then topsoil. Use a trench box if one is needed to reduce disturbance. Spread topsoil as near to the original location as possible.
- Do not drive or operate equipment on newly replaced topsoil. Do not re-enter the project site once revegetation/restoration work has been initiated and/or completed.

Paleontological Resources

- Halt work in the immediate vicinity (600 feet) of a discovery if previously unknown paleontological (fossils) resources are discovered during construction, until the resources are identified and documented and an appropriate mitigation strategy developed.

Vegetation

- Conduct plant surveys for rare and/or sensitive species prior to ground disturbing activities and during growing seasons when these species could be identified.
- Use native vegetation of local genetic stock from the area of the park in which the infrastructure is located, when possible if mitigation of construction disturbance requires the planting of vegetation. A monitoring and control plan will be in place to avoid the introduction or spread of any exotic vegetation.
- Use seed mixes for revegetation in roadside corridors that are composed of native species and approved by NPS.
- Conduct invasive, non-native plant surveys in the project area prior to project implementation. Invasive weed control measures will be implemented to monitor and mitigate impacts within the first three years (minimum) of construction.
- Obtain all imported material (i.e., sand, gravel, rock, rip-rap, etc.) from a park approved or county weed district approved source to reduce the threat of non-native, invasive

vegetation being introduced to the park. If a new material source is requested, NPS will seek county-approved material source pits and/or perform a non-native, invasive plant inspection.

- Material sources, including sand, gravel, rock, rip-rap, mulch, etc. that is not attained from a county or park approved weed-free material sources must be precooked (300 degrees) or washed to prevent spread on invasive weeds in the park.
- Use wooden mats for vehicle and equipment access to the site to limit damage to existing vegetation.
- Preserve existing trees to the extent possible, and during installation, avoid damaging roots of nearby trees.
- All vehicles and equipment will arrive at the job site in a condition free of mud, dirt, and plant material. A method such as pressure washing prior to transport will be needed to comply with this requirement. Prior to offloading of any equipment, inspection and verbal approval must be obtained from the NPS. No equipment will be allowed to offload or remain within the park if dirt or other contaminants with the potential to harbor seeds or other plant material is apparent.

Visual Resources

- Construct wireless telecommunications facilities 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., slimline poles, enclosed antenna, and micro-cells), screening with vegetation or existing topography, concealment, and/or camouflage.
- Prohibit finishes or colors that will be shiny or reflective in sunlight.
- Protect trees and other vegetation adjacent to the disturbance footprint of the proposed wireless telecommunications facilities from damage. Topographic cuts and fills for wireless telecommunications facilities will be limited to the identified disturbance footprint.
- Down-shield security or safety lighting to keep light within the site boundaries.

Fish and Wildlife

- To prevent the introduction of terrestrial or aquatic invasive species, all equipment, including rubber-tired land and tracked land vehicles, and construction and facility equipment will be thoroughly cleaned, and inspected by NPS before being operated in the park.
- Unless specifically provided elsewhere, routine construction activities will be limited to 30 minutes after sunrise to 30 minutes prior to sunset to avoid disturbance to wildlife.
- To protect special status species:
 - Inform staff about the potential for special status species in or near the area of the proposed activity. Work will cease if a special status species is discovered in the project area, until NPS re-evaluates the project. Protective measures, including potential modification of the work or the work schedule, could be determined necessary.
 - In circumstances when it is deemed necessary to conduct activities near sites known to support Canada lynx (*Lynx canadensis*) or North American wolverine (*Gulo gulo luscus*), the NPS will be consulted with to minimize impacts to the listed species (e.g., working quietly on-site, and minimizing time in or near habitats en route to their work sites).
 - All project activities must comply with Grand Teton's Superintendent's Compendium regulations related to food storage and park recommended BMPs for living and working in bear country. Bear "attractants" include food, drinks, garbage, cooking utensils, dirty/soiled pots/pans/plates, stoves, grills (charcoal or gas), empty or full coolers, storage containers with food or previously holding food (except approved

- bear resistant canisters), beverage containers, pet food/bowls, and any odorous item that may attract a bear such as toiletries.
- At all times in all locations, including the backcountry/wilderness, all staff (NPS, Volunteers-in-Parks, contractors, etc.) must ensure that all bear attractants are attended at all times. All unattended attractants must be stored securely inside a building, a bear resistant food storage locker (if available), in a hard sided vehicle with doors locked and windows closed, or in an Interagency Grizzly Bear Committee approved portable bear resistant food storage canisters; or disposed of properly in a bear-resistant garbage receptacle. Backpacks and/or daypacks containing unsecured attractants (i.e., not in a canister) must not be left unattended.
 - All personnel must attend a briefing on proper food/attractant storage and bear safety presented by a qualified member of the NPS bear management team or their designee. Please contact the NPS Bear Management Office at least two weeks prior to the desired start date to schedule a briefing.
 - All human-bear conflicts must be reported to Teton Interagency Dispatch Center immediately. All bear sightings must be reported to the NPS Bear Management Office within 24 hours.
 - Provide for proper storage and disposal of materials that may be toxic to bears. All potentially toxic attractants, including petroleum products, must be stored or disposed of in such a way that they are not available to bears.
 - Construction debris must be separated from human food garbage and disposed of in dumpsters that can be closed at night. No open dumpsters are allowed. However, a request for an exception to the open dumpster stipulation can be made to the project manager who will consult with the NPS Bear Management Office to determine if such use will be authorized. The use of open dumpsters will only be considered if the following conditions can be met: the open dumpster must be stored behind a locked fence out of view and inaccessible to the public, will be labeled construction debris only, and be inspected daily to ensure that no human food garbage is in the dumpster.
 - For all projects occurring within the Grizzly Bear Primary Conservation Area, coordinate with the NPS Bear Management Office to ensure that all project activities comply with habitat standards in the Final Conservation Strategy for the Grizzly Bear in the Greater Yellowstone Area, and to the extent practicable, that projects occurring in occupied grizzly bear habitat outside of the Primary Conservation Area adhere to the spirit of standards in the Final Conservation Strategy.
 - Minimize human interaction and potential grizzly bear mortality by implementing the park's Bear Hazing and Aversive Conditioning Policy.
 - Grizzly bears concentrate in certain areas during specific time periods to take advantage of concentrated food sources or because the area provides a high seasonal food value due to diversity in vegetation and plant phenology (e.g., important spring or fall range). Where grizzly bear use is known or likely to occur and where practicable, delay disturbing activities during the spring in spring habitats to minimize displacement of grizzly bears.
 - Manage building construction/removal and other activities in a manner that will minimize noise and visual disturbances and facilitate safe movement through habitat by grizzly bears.
 - Control speed, traffic, and parking to minimize negative impacts to grizzly bear activity, including active enforcement of speed limits.
 - All project activities will adhere to all conservation measures outlined in the Lynx Conservation Assessment and Strategy. In particular, harvest of trees on site for the

proposed activities within Lynx Analysis Units and/or in Critical Lynx Habitat will not be authorized without further review and analysis in consultation with USFWS.

- All project activities will comply with the NPS Superintendent's Compendium closures implemented around wolf den/rendezvous sites. Should a den or rendezvous site not previously known be found within 1 mile of the proposed activity a seasonal area closure will be implemented as needed, typically between 15 April and 15 August.
- Prohibit construction activities before 8 a.m. and after 6 p.m. during the elk rutting and migration period (typically from September 1 to December 1, or as recommended by the NPS).
- Avoid construction, maintenance, or other disturbing activities in crucial ungulate winter ranges (15 December to 15 April) and in identified ungulate parturition ranges (15 May - 30 June).
- Fencing (including temporary fencing for construction projects and permanent fencing) used in projects will comply with wildlife friendly fencing standards. Consult with the NPS for assistance with specifications and appropriate design.
- Take care not to disturb any wildlife species (amphibians, reptiles, migratory birds, mammals, raptors, or bats) found nesting, hibernating, estivating (in an inactive dormant state during hot, dry periods), or otherwise living in, or immediately nearby, worksites. For example, areas will be avoided and buffers will be established around nests, dens, etc. until young fledge or dens are no longer occupied.
 - Before commencement of any activities that involve removal or manipulation of vegetation including large trees, grasses, and shrubs during the breeding season conduct a survey for nesting birds. Surveys must be conducted by qualified personnel before tree removal and/or ground disturbing activities begin. Work must be completed within two weeks of the nesting bird survey. If this is not possible, another survey must be scheduled with NPS.
 - Eagles are specifically protected under the Bald and Golden Eagle Protection Act of 1940 (16 USC 668-668c) and the Migratory Bird Treaty Act. Project activities must not lead to the take of bald or golden eagles. The Bald and Golden Eagle Protection Act defines "take" to include disturbing birds.
 - Implement seasonal closures (typically February 1 to August 15) of ½ mile around occupied bald eagle nests and prohibit work on or occupancy of area within the closures while they are in effect.
 - Report any eagle activity in the vicinity of proposed activity to NPS in a timely way so that they may assess whether additional mitigation measures are needed to comply with the Bald and Golden Eagle Protection Act and Migratory Bird Treaty Act.
 - All project activities must comply with the NPS Superintendent's Compendium closure regulations for sage-grouse leks and to the extent practicable all project activities occurring within occupied sage-grouse habitat within the core sage-grouse area will apply the management direction and conservation measures outlined in the Wyoming Governor's Executive Order 2015-4 and the Upper Snake River Basin Sage-Grouse Conservation Plan.
 - Prohibit removal of shrub-steppe habitat within 4 miles of an occupied sage-grouse lek to protect breeding, nesting, and brood rearing habitat for sage-grouse in the park (generally between March 15 and June 30, or as recommended by NPS). Exceptions may be made on a limited and case-by-case basis.
 - Limit new permanent facilities (including, but not limited to roads, buildings, well pads, pipelines, leach fields, and vegetation treatments) within 0.6 miles of active sage-grouse lek areas.

- Restrict maintenance and rehabilitation activities between the hours of 6:00 p.m. and 8 a.m. at proposed activities within 4 miles of active leks/nesting complexes (generally from March 15 – June 30, or as recommended by NPS).
- Limit noise to less than 10 decibels above ambient measures from 6:00 p.m. to 8:00 a.m. at the perimeter of leks (generally from March 1 – May 15, or as recommended by NPS).
- Minimize disturbance to mature sagebrush cover in identified winter concentration areas where possible.
- Use the Wyoming Density and Disturbance Calculation Tool to assess activities that involve vegetation or ground disturbance within the sage-grouse core area that correspond with recommended mitigations for sage-grouse and their habitat.

Wetlands and Water Resources

- Attach fiber optic cables to bridges or bore under waterways and wetlands.
- Install the drilling pits outside of the bank and floodplain areas when waterways are to be crossed using directional boring.

ATTACHMENT B – ERRATA SHEET AND RESPONSE TO PUBLIC COMMENT

The Telecommunications Infrastructure Plan Environmental Assessment (EA) was released for a 30-day public review period from March 12 to April 10, 2019. The park received comments from 411 entities during the EA public review period. The National Park Service (NPS) reviewed and considered comments and suggestions, and incorporated several slight modifications into the EA, as described in this Errata. None of the commenters provided additional, new, or substantive information that changed the determination of effects in the EA. This Errata has two parts:

- Part 1 discusses changes to text in the EA.
- Part 2 is a summary of the substantive comments received during public review with NPS responses.

ERRATA PART 1 – CHANGES TO TEXT

In reference to changes to the EA, the topic heading and page number are shown in bold text.

Section 1.1, Proposal, Page 1

Replace third paragraph with the following: In January 2014, the park issued a request for information for technically possible options for consolidating and expanding telecommunications infrastructure with the capacity to expand to the south gate of Yellowstone National Park. In March 2014, Diamond Communications LLC, itself, or its affiliate responded to the request for information. The park received the initial right-of-way permit request (dated January 15, 2015) that initiated this planning process from AT&T, with Diamond Communications LLC as AT&T's agent (collectively, the applicant). After meeting with applicant representatives, the NPS requested additional information and details, and held several meetings and field trips to identify potential alternatives that would minimize impacts to park resources. The applicant also submitted a right-of-way permit request to the USBR for the portion of the proposal that would cross federal lands and facilities managed by the USBR. The permit request depicts the most recent equipment locations and technology that together best achieve the project's purpose and need. (See Appendix A – Alternatives and Designs Considered but Dismissed for alternatives and options that were previously considered.)

Section 1.3, Applicable Laws, Regulations, and Policies, Page 3

Insert text after paragraph 1: This EA was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, regulations of the Council on Environmental Quality (CEQ) (40 Code of Federal Regulations (CFR) §1508.9), and National Park Service (NPS) Director's Order (DO)-12: Conservation Planning, Environmental Impact Analysis, and Decision-Making, the 2015 NPS NEPA Handbook, and Director's Order 53 and Reference Manual 53 (RM-53, NPS 2009): Special Park Uses. The 2015 NEPA manual was followed where the NEPA handbook and RM-53 differ, in accordance with Director's Order 12, section 4.2 of the NEPA handbook and the NPS Directives System.

ERRATA PART 2 – EA SUBSTANTIVE COMMENTS AND NPS RESPONSES

This section summarizes substantive comments that were received during the public review period of the EA. Substantive comments are those that: 1) question, with reasonable basis, the accuracy of the information in the NEPA document; 2) question, with reasonable basis, the adequacy of the environmental analysis; 3) present reasonable alternatives other than those presented in the NEPA document; or 4) cause changes or revisions in the proposal.

Substantive comments were developed into “concern statements,” which represent the comment from one or more commenters. All correspondence received by the NPS are contained in NPS's Planning, Environment, and Public Comment (PEPC) site.

Concern statements are italicized below; the NPS responses are in plain text.

Concern Statement: *Commenter suggested the park consider different alternatives, including: a fiber or Wi-Fi for phone only alternative; minimum upgrades only for emergency services, park operations, and employees; changes to design and/or location of monopoles (e.g., shorter and/or different locations away from work or housing areas); co-locating new cellular service outside of park boundaries; and exploring innovative technologies that provide coverage without new infrastructure, including unobtrusive antennas in or on existing buildings.*

Response: The NPS is responding to a right-of-way (ROW) permit application submitted for the installation of wireless cellular facilities and fiber optic infrastructure. In addition to responding to this permit request, the NPS is using this opportunity to address the park's telecommunications infrastructure needs comprehensively in order to enhance communication and operational efficiencies as stated in the “Selected Alternative and Rationale for the Decision” section of the FONSI. A number of alternatives were considered during the process such as different locations, designs, or technology, as described in Appendix A of the EA, along with an explanation of the reasons for their dismissal. In general, Wi-Fi technology alone is not considered a viable alternative to cellular service, as coverage will continue to be very limited and there will be little improvement in communication services available to the public and staff. Limited connectivity does not meet the goals of the plan, including to improve emergency services provided by the NPS and its federal/county partners, including fire, law enforcement, health and safety, and emergency medical response (including 911 emergency system coverage) and providing reliable internet and cellular service within the park and to partner/concessioner facilities and housing areas, vital for recruiting and retaining the next generation of employees.

Concern Statement: *Commenter expressed concern about the height and overall visual impacts of cellular towers.*

Response: Section 8.6.4.3 of NPS Management Policies 2006 states superintendents will require the best telecommunication technology available, such as colocating cellular equipment. As a result, taller towers are necessary to accommodate additional antennas and required spacing. The height allows for colocation of additional communications equipment while avoiding the need to build more towers and disturbing additional areas for future telecommunication needs.

The placement, spacing, and height for each site/pole has been carefully analyzed, as stated in the EA, Section 3.2.1.1, which describes the Visual Impact Study that was conducted. NPS professionals will continue to evaluate and determine a final color at each of the locations so the cellular equipment blends in with the surrounding background. The NPS Interdisciplinary Team (IDT) will pay close attention to the primary viewing areas or where the largest number of visitors may view the cellular equipment and mitigate using colors that reduce the visual contrast. The IDT may also evaluate the use of cellular equipment that is disguised as

evergreen trees in one or two locations. This type of cellular equipment will only be used when it represents the best way to blend the infrastructure into the adjacent landscape.

Concern Statement: Commenter stated the document does not address impacts to wilderness due to backcountry users viewing 80 foot towers adjacent to proposed or recommended wilderness (wilderness). They stated South Jenny Lake pole 5 will have significant impacts on wilderness due to its proximity to, and view from, wilderness.

Response: As described in Section 1.4.2.6 of the EA, there will be no impacts to wilderness because the proposed cell towers will be located in developed areas outside of wilderness. Potential visual impacts from the wilderness areas were considered as part of the visual impact study described in Section 3.2.1.1 of the EA. NPS staff conducted visual inspections to ensure that poles were appropriately screened by existing vegetation, or were minimally visible but not distinguishable or conspicuous. In areas where the proposed 80-foot towers were adjacent to backcountry areas (Beaver Creek and North Jenny Lake), team members walked trails nearby to determine visibility of the proposed monopoles. From the Taggart Lake South Trail, the Beaver Creek monopole was intermittently noticeable, for approximately ¼ mile of the trail. But the monopole was viewed along with numerous other structures in the immediate vicinity, so visual contrast levels were considered low. No 80-foot towers are proposed at South Jenny Lake. The South Jenny Lake pole 5 will be 26 feet tall, and will not have a significant visual impact on proposed or recommended wilderness. The poles at South Jenny Lake are a network of five, 26-foot tall poles. This approach of using a low power, low profile antenna array was proposed specifically to reduce visual impacts at South Jenny Lake, as well as to reduce potential signal coverage in wilderness areas.

Concern Statement: Commenter stated their concern with/or support of cell phone spillover coverage into the backcountry. One asked if the new towers include a directional signal component to keep the signal out of the backcountry and Recommended Wilderness.

Response: While the proposed wireless telecommunications infrastructure will be constructed in developed areas and is not intended to target backcountry and wilderness, cellular service will likely extend more into some backcountry and wilderness areas, and may cover a larger area than currently exists. Anticipated cellular service spillover is likely to occur in the areas where the 75 to 85 foot monopoles are installed and most likely in the front range. In the two areas where ODAS are proposed (South Jenny Lake and Jackson Lake Lodge), the spillover is predicted to be minimal to non-existent, as the reach of the shorter monopoles is limited.

Although the technology exists to limit the spillover of cell phone frequency into backcountry and wilderness areas, the NPS determined the potential increase in overall coverage of cellular service is acceptable in these areas. Smartphone applications, as well as FirstNet described in the EA, which are cellular dependent platforms, can assist search and rescue personnel in locating and rescuing ill, injured, and lost persons.

Concern Statement: Commenter stated having cellular technology in backcountry and wilderness areas may give visitors a false sense of security.

Response: As stated above, the proposed wireless telecommunications infrastructure will be constructed in developed areas and is not intended to target wilderness. Cellular service will likely extend more into some wilderness areas, and may cover a larger area than currently exists. The NPS provided a cellular coverage map of all existing and proposed cell towers within and adjacent to the park on the project PEPC page, <https://parkplanning.nps.gov/document.cfm?parkID=68&projectID=66133&documentID=94017>. Although there could be increased 911 coverage into some backcountry and wilderness areas, visitors should not expect to have cellular connectivity once they leave the park developed

areas. While some emergency communication needs may be served via the spillover effect, park information will explain to backcountry/wilderness users that the uncertain nature of this communication does not support additional risks in the backcountry/wilderness. Cell phones should never be relied on in place of proper preparation for backcountry and wilderness travel. The NPS will use interpretive media to inform park users of the limited (or nonexistent) cellular service in these areas and their personal responsibility to plan accordingly as directed in NPS Management Policies 2006, Section 8.6.4.3, Telecommunication Sites. Park visitors must assume a substantial degree of risk and responsibility for their own safety when visiting areas that are managed and maintained as natural, cultural, or recreational environments (NPS Management Policies 2006, Section 8.2.5.1).

Concern Statement: *Commenter asked for the cellular frequency coverage maps of each individual tower proposal, as well as map showing other towers within a 15 mile radius.*

Response: The NPS provided a cellular coverage map of all existing and proposed cell towers within and adjacent to the park on the project PEPC page, <https://parkplanning.nps.gov/document.cfm?parkID=68&projectID=66133&documentID=94017>. Providing separate coverage maps of each tower will not provide a more accurate assessment than is already provided. Federal Communications Commission (FCC) regulated towers in Teton County, WY, can be found on: <http://www.city-data.com/towers/cell-Jackson-Wyoming.html>.

Concern Statement: *Commenter requested combining the monopole with radio towers in Moose and on Signal Mountain.*

Response: Due to the topography, the tower on Signal Mountain summit does not provide reliable cellular coverage for the area from south of the Jackson Lake Dam to the Signal Mountain Summit Road, including the entire Signal Mountain Lodge developed area. Colocation of the park radio systems along with the cellular infrastructure will also require significantly higher towers, or additional, separated towers. Both cellular and park radio systems operate within a narrow band of radio frequencies, and these radio waves can overlap and affect each other. The park's radio systems are used for fire and emergency dispatching, and creating the chance of frequency conflict for those radio systems with cellular signals is not viable.

Concern Statement: *Commenter stated the need for investment and improvements in the radio system, as critical areas of the park have limited radio reach.*

Response: Proposed improvements to the NPS radio infrastructure are described in the EA in Section 2.3.3, on page 19.

Concern Statement: *Commenter suggested that cellular infrastructure will increase the likelihood of distracted drivers resulting in increased wildlife vehicle collisions and human injury or fatalities on roads within the park.*

Response: Cell phone coverage currently exists on several roads within the southern area of the park and intermittently up to Colter Bay and park management has not established a correlation between cell phone usage and wildlife-vehicle collisions. In fact, the number of reported wildlife/vehicle collisions in the park has gone down 22% in the last three years:

1. 2016 - 199 reported wildlife-vehicle collisions
2. 2017 - 173 reported wildlife-vehicle collisions
3. 2018 - 155 reported wildlife-vehicle collisions

Concern Statement: *Commenters are concerned with the prospect of visitors talking on their cell phones in the park and affecting other visitors' experiences.*

Response: This concern has been analyzed in the EA (Section 3.4.3, pages 45 and 46). The NPS has determined that the long-term health, safety, and communication benefits associated with enhanced telecommunications, including the benefits to visitor and employee safety through facilitation of emergency and non-emergency reporting and response, outweighs the disruption some visitors may experience in response to other visitors' use of cell phones in public spaces given that these impacts can be mitigated with education. To address the potential impact to visitor experience, the park will implement mitigation measures such as visitor education through signage on the importance of natural soundscapes and being respectful of other visitors.

Concern Statement: *Commenter quoted page 44 of the Grand Teton National Park Foundation Document that installation of cell towers threatens historic resources.*

Response: One of the purposes of the Foundation Document is to inform the park and the public on existing and potential future threats, such as the installation of telecommunications and other non-historic infrastructure on historic districts and cultural landscapes. These lists of threats and opportunities to park resources and values are a way to prompt or remind park staff to comprehensively study and analyze such threats and opportunities when new projects, activities, and initiatives are proposed.

The park thoroughly analyzed the park's historic areas to ensure they will not be adversely affected by the proposal. In addition to the Class III Cultural Resources Survey, a visual impact study was undertaken to assess potential visual impacts to historic properties located within or adjacent to the project area resulting from the vertical components associated with the project. Based on the Class III Cultural Resources Survey, extensive consultation, and the Visual Impact Study, the park concluded that this undertaking will have no adverse effect to Grand Teton's diverse cultural resources and the Wyoming SHPO concurred with this finding.

Concern Statement: *Commenter suggested no diesel generators should be installed at the cellular sites.*

Response: In 2015, the FCC required cellular sites to provide 24 hours of backup power (effective 2018) to support emergency services. As many of the sites in this proposal are challenged for year-round access, maintaining large battery banks and swapping them out is extremely difficult and dangerous at certain times of year. Each location is proposed to operate with a diesel backup generator (enclosed in the equipment shelter structure) and fitted with a muffler to reduce noise. The generators are provided for backup power and will only operate during utility power failures or during routine maintenance and testing of the generators (approximately 10 minutes/week) to ensure proper function. In some cases the NPS has required alternate siting of the wireless telecommunications infrastructure or specific equipment to reduce noise impacts. For example, at the Colter Bay Campground location, the generator shelter was moved down to the entrance road to reduce noise disturbance to tent campers.

Concern Statement: *Commenters provided references regarding the negative health effects of 5G technology on humans, wildlife, and plants, and urged the park not to install 5G in the park.*

Response: The Telecommunications Infrastructure Plan EA is based on wireless telecommunications equipment included in a submitted permit application. That application does **not** include 5G equipment. Any change to the permitted equipment will require a permit amendment, including a frequency analysis and radio frequency (RF) emissions analysis (see response to health effects concern above), prior to approval by the NPS. Additionally, the level

of public concern about 5G health effects, as evidenced in this concern statement, could determine the need for additional NEPA compliance for a change to 5G equipment.

Concern Statement: *Commenters cite similar concerns about effects to wildlife and plants from RF and Electromagnetic Frequencies (EMF). Most of the comments received were related to effects from 5G technology.*

Response: Current scientific understanding on the biological effects of EMF, including effects to flora and fauna, is summarized by the World Health Organization's (WHO) International EMF Project, formed in 1996. Their information sheet "Electromagnetic Fields and Public Health Effects of EMF on the Environment" (WHO 2005) concludes after a review of the scientific literature, international exposure limits (similar to those set by the FCC) for EMF emitting devices are protective of the [living] environment. It notes studies that show damage to trees due to electric fields occur at levels far above exposure limit safety standards, and are generally found only close to conductors of very high voltage power lines.

Concern Statement: *Commenter suggested the NPS did not look at the "Ramazzini Study on Radiofrequency Cell Phone Radiation: The World's Largest Animal Study on Cell Tower Radiation Confirms Cancer Link."*

Response: A recent study published in 2018 by the Ramazzini Institute (RI) studied long-term exposure to radio frequency radiation (RFR) in rats under controlled conditions meant to mimic "far-field" or lower doses of RFR emitted by cellular base stations and antennas. The RI study identified measurable carcinogenic effects in various groups of rats and tissues although most of the carcinogenic effects documented did not meet the standard of statistical significance. Statistically significant effects were found only in male rats and only in groups receiving the highest doses of RFR which are above the FCC exposure guidelines (Falcioni et al. 2018). The RI study authors suggested that the results of their study provide enough evidence of carcinogenicity that the International Agency for Research on Cancer (IARC) should consider changing their current Class 2B carcinogen designation to a higher risk category. There is ongoing review in the RFR scientific community over the utility of the RI study to be used as stand-alone justification for changing RFR human health exposure standards or IARC designation. The International Council on Non Ionizing Radiation Protection (ICNIRP) has reviewed the study and concluded that it does not by itself provide a reliable basis for revising the existing RFR exposure guidelines at this time. Both ICNIRP and FCC are currently reassessing exposure guidelines to include recently published science on RFR health effects. The NPS will monitor and follow future regulatory requirement changes from FCC which follows the recommendations established by scientific health organizations such as National Council on Radiation Protection, WHO, International Agency for Research on Cancer, ICNIRP, Institute of Electrical and Electronics Engineers, and American National Standards Institute.

Concern Statement: *Commenter stated the FCC RFR regulatory regulations were set more than two decades ago and are not safety standards.*

Response: The NPS relies on the regulatory requirements of the FCC to determine safe limits of RFR exposure from cell towers for the public and for employees. Maximum regulatory levels have been set by FCC at exposure levels that are considered protective of human health according to the guidance of health organizations that monitor the extensive body of current public health science on RFR and make recommendations to protect human health. The FCC and other regulatory agencies follow the guidance of the scientific human health organizations which track and assess all current science. The identified limits (for cellular base station antenna) are found in the 1997 FCC Office of Engineering & Technology (OET) Bulletin 65 (FCC 1997), as well as the International Commission on Non-Ionizing Radiation Protection (ICNIRP) Guidelines for Limiting Exposure to Time-Varying Electric, Magnetic, and

Electromagnetic Fields (Up to 300 GHz) (ICNIRP 1998). In 2009, ICNIRP reconfirmed the 1998 exposure limitation guidelines (ICNIRP 2009).

Concern Statement: *Commenters were concerned with the health effects of cellular technology in populated residential areas.*

Response: For our understanding of the health impacts of this proposal, the NPS relies on national public health and safety organizations and regulatory agencies. Maximum regulatory levels have been set by FCC at exposure levels that are considered protective of human health according to the guidance of health organizations that monitor the extensive body of current public health science on RFR and make recommendations to protect human health. Examples are the National Council on Radiation Protection, Institute of Electrical and Electronics Engineers, American National Standards Institute, ICNIRP, WHO, and IARC.

It is well-established that RFR causes heating of body tissues when exposed at sufficient levels. Historically, public health scientists have believed that RFR exposure levels that fall below the tissue temperature rise threshold would preclude or minimize any other potential biological/physiological effects. In 2011, IARC published an in-depth review and monograph which summarized the scientific literature and designated RFR a Class 2B carcinogen which means there is limited evidence carcinogenicity and that RFR is “possibly carcinogenic to humans”. According to IARC, human epidemiological studies have not indicated an increased risk of meningioma and glioma with RFR exposure with the exception of a possibly increased risk of glioma only found with those in the highest cumulative hours of mobile phone use. IARC also noted that animal studies showed limited evidence, and studies of relevant mechanistic/endpoint parameters showed weak evidence of carcinogenesis (IARC 2011).

Concern Statement: *Commenter claimed the proposal does not qualify for the streamlined review process provided by the "Programmatic Agreement" among NPS, Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers for compliance with Section 106. They stated that Section 106 regulations fully apply.*

Response: All National Historic Preservation Act (NHPA) compliance undertaken for this proposed project is in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and the Advisory Council on Historic Preservation regulations, 36 CFR Part 800. The undertaking does not meet the “streamlined review process” procedures provided in the *Programmatic Agreement among the National Park Service (U.S. Department of the Interior), the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers for Compliance with Section 106 of the National Historic Preservation Act*. The NPS consulted with the Wyoming SHPO in accordance with the “standard review process” procedures provided in the *Programmatic Agreement*.

Concern Statement: *Commenter stated the NHPA was not mentioned in the scoping newsletter, yet formal initiation of the Section 106 process began in April 2018. They asked about the Section 106 requirement that public input begin at the "earliest stages" of a proposal.*

Response: All NHPA compliance undertaken for this proposed project is in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and the Advisory Council on Historic Preservation regulations, 36 CFR Part 800, as an effort separate from NEPA compliance. Consulting parties for this undertaking were consulted as is defined in 36 CFR 800.2(c). In the case of public input, as defined by 36 CFR 800.2(d), the agency can use NEPA public involvement requirements to fulfill requirements for public consultation under Section 106.

Concern Statement: *Commenter stated that Grand Teton may not combine NEPA and NHPA compliance unless they have alerted Advisory Council on Historic Preservation and Wyoming SHPO that they intend to do so. They stated there was no mention of any contact with Advisory*

Council on Historic Preservation *in the EA, or any mention that NEPA and NHPA are combined in this document. They stated a separate public comment period is required for the public to comment on the potential "adverse effects" to historic properties from the proposal. (See 36 CFR 800.8(c)).*

Response: The NPS, Wyoming SHPO, and responding Tribal Historic Preservation Officers agreed that the proposed project would have no adverse effect under Section 106, and as such the Advisory Council has not had a need for involvement in the review of findings (36 CFR 800.5(c)). 36 CFR 800.8(c) only applies to the combined NEPA/NHPA compliance process, which was not used in this particular circumstance. However, the NPS coordinated the Section 106 consultation procedures early and throughout the NEPA process (36 CFR 800.8(a)), which included the appropriate scoping, identification of historic properties, assessment of effect upon them, and consultation leading to resolution of any adverse effects (36 CFR 800(a)(3)).

Concern Statement: *Commenter stated the EA failed to include relevant laws, as well as address key terms from the NPS Organic Act and the Redwood Act and their requirements to leave the park unimpaired or not to derogate park values.*

Response: A complete list of relevant laws, regulations, policies, etc. is not required in EAs (2015 NPS NEPA Handbook). According to the Section 1.2 Legal and Policy Overview, Relationship to Decision-Making, a written non-impairment determination for the selected action must be appended to each finding of no significant impact (FONSI). The Redwood National Park Expansion Act amendments, which expanded Redwood National Park to address the impacts of resources from logging outside the park, also amended the Organic Act. The amended provision states that all park management activities shall, "...not be exercised in derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress." Within the attached non-impairment determination (see Attachment C of the FONSI), the NPS has determined there has not been a derogation of values and purposes, for which the park was established. Improved communication between visitors, the NPS, and park staff, and safety will be improved by cellular signals in those areas that are mostly intensely used, and where accidents and visitor fatalities are most likely.

Concern Statement: *Commenter stated the park did not follow RM-53 in numerous ways, including no Federal Register publication.*

Response: NPS Reference Manual 53 – Special Park Uses (RM-53) is a "level 3" policy document, per the NPS Directives System, and was last revised in 2009. RM-53 is a reference manual that provides implementation guidance to level 2 (Director's Order 53 – Special Park Uses) and level 1 (NPS Management Policies) documents. The NPS NEPA Handbook is also a level 3 document, last revised in 2015 with the goal of allowing the NPS to complete more timely and efficient NEPA reviews. Many of the handbook revisions were directed at removing "unsupported requirements" (i.e., requirements not found in law, regulation, or higher level policy documents) that slow down the NEPA process. There is no requirement to publish Federal Register notices for EAs in the NEPA Handbook for most cases. The 2009 RM 53's public notification requirement of right-of-way permit requests is fulfilled with NEPA's public notice.

The NPS is following RM-53 dated April 2000, with a content review and update occurring in 2009. The park completed stage one and two of 'Initial Steps' as outlined in Page A5-4 and A5-5 of Appendix 5 – 'Rights-of-Way.' Those two stages are 'The Application,' in which the permit applicant submitted an SF 299; and 'The Drawing,' in which the applicant submitted an initial set of drawings and an associated metes and bounds survey. The NPS is currently at stage three, 'Compliance Documents,' with cultural and environmental compliance ongoing. The result of this

stage will include compliance requirements as well as special conditions required to control activities during the construction or operational phase of the action. Following completion of the 'Preliminary Requirements Checklist' of RM-53, the NPS will start the process to Construct the Permit (draft right-of-way permit).

Concern Statement: *Commenter wanted to know if the park received a complete SF-299 and if so, why it wasn't shared with the public.*

Response: The park received an initial SF-299 'Application for Transportation and Utility Systems and Facilities on Federal Lands' dated January 15, 2015, which initiated the analysis and the NEPA process. Since that time the applicant and the park have been refining the proposed designs to make it the least impactful on park resources. Therefore the initial SF-299 does not fully represent what is currently proposed to be included in the ROW permit. The Proposed Action in the EA provides the current version of the infrastructure considered. There is no requirement to share a SF-299 with the public, and the park believes that including the original SF-299, submitted prior to its review and coordination with the NPS, will likely increase public confusion about the considered infrastructure and its impacts.

Concern Statement: *Commenter stated that the NPS mission, as delineated in the Organic Act, has precedence over the Telecommunications Act of 1996. In addition, per Management Policies, they stated the NPS needs to consider whether the proposal will cause unavoidable conflict with the park's mission, in which case the permit will be denied.*

Response: The NPS does not believe that the actions proposed in the preferred alternative directly conflict with the department or agency's mission as defined by the Organic Act. The NPS has taken appropriate management actions to avoid or mitigate the adverse effects to park resources by choosing locations and technology that minimizes the potential adverse effects. Please refer to the Non-Impairment Determination in the FONSI (Attachment C) for additional information.

Concern Statement: *Commenter stated that visitor expectations regarding telecommunication needs/desires were identified as a need for the plan, but the NPS never cited data or statistics to back it up.*

Response: Although there has not been a study in Grand Teton National Park quantifying the number of visitors requesting telecommunication infrastructure/capability, there is anecdotal evidence provided by staff from all divisions in the park and concessioners. LSR Preserve, Flagg Ranch, Jenny Lake, and Colter Bay have either limited or no connectivity currently; at all of these visitor centers, park staff answer questions multiple times a day about where visitors can access the internet or WiFi.

Concern Statement: *Commenters state that there is a lack of evidence that the current level of cell phone coverage/ internet service reflects on employee hiring and retention, or that employees need to drive to get connectivity.*

Response: The proposed telecommunications infrastructure will benefit all permanent park employees (concessioner, partner, and NPS), as well as seasonal employees. Annually, there are approximately 1,200 seasonal employees hired and there are approximately 235 permanent employees working/living in the park year-round. In most cases, family members (including children) live with them who do not necessarily work for the park. Below are comments and observations from park staff:

- Every NPS park division had multiple seasonal staff who will not accept jobs unless housing was in Beaver Creek or Moose due to lack of connectivity in other housing areas.

- Currently staff who live in the Highlands, Lupine Meadows, or Colter Bay sit outside at road turnouts and corrals because they cannot use cell phones or obtain internet at home.
- During high visitation seasons, many of the neighborhoods that do have connection lose capability to sustain calls or an internet connection due to overtaxed infrastructure.
- When determining whether to accept a position, many in the current hiring market include questions about technology capabilities. Employees need connectivity for their children to complete homework assignments and to track their children's school progress; an app is a primary method of communication between parents and schools in Teton County and many assignments are required to be completed online.
- The national parks accomplish work through a variety of public private partnerships with organizations who do not share the same telecommunication constraints as the park. Current and prospective staff recognize the need for appropriate connectivity to effectively complete collaborative work. Having constraints, like slow internet speed, that make it difficult to complete work is a significant source of frustration that contributes to departure of highly skilled staff.
- One of the largest concessioners in the park provided first-hand experiences dealing with park visitors and staff frustrations due to lack of cellular and broadband services in many areas: "We struggle to find staff willing to work in remote locations due to lack of internet or cell service... Some parents won't allow [their] children to work in areas where they can't be contacted.... The lack of cell service is a complaint multiple times daily from our guests.... This has led to a number of guests who require cell service for work or emergency connections to cancel reservations last minute and relocate to Jackson."
- The University of Wyoming-NPS Research Station has been an important park partner in its current location at the historic AMK Ranch since 1977. Users of the station consistently rate slow internet and poor cell service as the primary limitations on station usage and research productivity.

Concern Statement: *Commenter stated there is no information regarding the buildings, such as the height, and asked if the buildings could be buried partially below grade to reduce their visual impact.*

Response: Plans for the buildings (e.g., telecommunications equipment shelters) are shown in Appendix C, Site Drawings and Photo Simulations. Constructing a structure for sensitive electronic equipment with a floor surface below-grade carries significant risks from flooding and seepage. Additionally, the heating from communications equipment is substantial, and placing the equipment shelter below grade will likely result in roof-top air-conditioning equipment, negating the gain in visual impact, and likely increasing noise impacts or equipment damage during winter conditions.

Concern Statement: *Commenter asked the NPS to include provisions for revocation and facility removal in the permit. They state that as wireless communications technologies continue to evolve, it is likely that in-park wireless facilities may become obsolete and unnecessary.*

Response: It is Department of the Interior policy to issue ROW permits for 10-year periods, including a clause that the permit can be revoked at any time. Should there be a reason to remove the facility due to technological obsolescence prior to the 10-year period, this clause could be implemented and the permittee will be required to restore the site to the condition before the facility was initially constructed.

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ATTACHMENT C – NON-IMPAIRMENT DETERMINATION

Telecommunications Infrastructure Plan Environmental Assessment

Grand Teton National Park John D. Rockefeller, Jr. Memorial Parkway August 2019

By enacting the NPS Organic Act of 1916 (Organic Act), Congress directed the U.S. Department of the Interior and the National Park Service (NPS) to manage units "to conserve the scenery, natural and historic objects, and wildlife in the System units and to provide for the enjoyment of the scenery, natural and historic objects, and wildlife in such manner and by such means as will leave them unimpaired for the enjoyment of future generations" (54 U.S.C. 100101). NPS *Management Policies 2006*, Section 1.4.4, explains the prohibition on impairment of park resources and values:

"While Congress has given the Service the management discretion to allow impacts within parks, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the Park Service must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This, the cornerstone of the Organic Act, establishes the primary responsibility of the National Park Service. It ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them."

An action constitutes impairment when its impacts "harm the integrity of park resources or values, including the opportunities that otherwise will be present for the enjoyment of those resources or values" (NPS *Management Policies 2006*, Section 1.4.5). To determine impairment, the NPS must evaluate the "particular resources and values that will be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts. An impact on any park resource or value may constitute impairment, but an impact will be more likely to constitute an impairment to the extent that it affects a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or
- identified in the park's general management plan or other relevant NPS planning documents as being of significance (NPS *Management Policies 2006*, Section 1.4.5).

Fundamental resources and values for Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway are identified in the enabling legislation for the park units, the 1976 Grand Teton National Park Master Plan, the 1980 John D. Rockefeller, Jr. Memorial Parkway General Management Plan, and the 2017 Foundation Document. Based on a review of these documents, the fundamental resources and values for the park units come from the parks' Scenery; Geologic Features and Processes; Ecological Communities and Natural Processes; Aquatic Resources and Processes; Cultural History and Resources; Visitor Experiences in an Outstanding Natural Environment; and Natural Soundscapes and Night Skies. Resources that were carried forward for detailed analysis in the Telecommunications Infrastructure Plan Environmental Assessment (EA) and are considered necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the parks; are key to the natural or cultural integrity of the park; and/or are identified as a goal in relevant NPS planning documents

include: visual resources; cultural resources; and visitor use and experience. Non-impairment determinations are not necessary for visitor use and experience because impairment findings relate back to park resources and values, and these impact topics are not generally considered park resources or values according to the Organic Act.

This non-impairment determination has been prepared for the selected alternative, as described in the Finding of No Significant Impact (FONSI) for the Telecommunications Infrastructure Plan EA.

VISUAL RESOURCES

Visual resources are described on pages 25 and 26 of the EA. The Proposed Action will result in short-term adverse impacts to visual resources during project installation. The Proposed Action will result in visual impacts along roadways and other installation areas from construction of the fiber optic network during the installation and vegetation regrowth phases. Installation will result in visual intrusion from construction vehicles, equipment, materials, and a work force along the new fiber optic network route and at staging areas. These elements will introduce new contrasts in color and form compared to the existing landscape. However, disturbance from installation activities will be transient and of short duration as activities progress along the fiber optic network route.

The Proposed Action will also result in visual impacts at the wireless telecommunications facility locations. During installation, impacts will be similar to those occurring from installation of the fiber optic network. Disturbance from installation activities will be transient and of short duration as activities move from one wireless telecommunications facility location to another. In addition, because these activities will be in developed areas where development and activity is already occurring these impacts will not be out of character with the landscape.

After installation is complete, operation of the wireless telecommunications infrastructure will introduce visual contrasts related to the presence of monopoles, outdoor distributed antenna systems (ODAS), and equipment shelters in developed areas. The greatest visual contrast will result from the vertical structure of the poles. Because wireless telecommunications facilities will be located in areas with existing infrastructure, their presence will be compatible with the surrounding areas. However, the poles will be visible to visitors and employees in some locations of the developed areas, and thus will create a visual contrast that does not presently exist. Equipment shelters will be installed at all of the monopole locations. Although the equipment shelters proposed are sited among similar structures, they will still be an additional structure in the viewshed of visitors and NPS, USBR, and concession employees. Careful consideration was taken to ensure that facilities are sited to avoid or reduce impacts on visually sensitive areas such as siting facilities away from prominent viewsheds or features and placing facilities in previously disturbed landscapes. To minimize visual impacts, structures were designed and selected to blend with the existing landscape setting, e.g., by designing elements to repeat the form, line, color, and texture of the existing landscape, through selection of appropriate colors, surface treatments, and use of non-reflective coatings for structures to reduce color contrast with the surrounding environment. To reduce visual impacts of monopoles, NPS-approved colors will be used to blend the structures with the existing tree cover and the equipment shelters will be constructed to match the surrounding environment.

When considering the mitigation measures in the EA and FONSI, the impacts associated with the selected alternative will not impact visual resources to a point where those specific purposes identified in the park's establishing legislation can no longer be maintained, nor will they inhibit the long-term enjoyment of the park. The selected alternative will not result in an impairment of visual resources.

CULTURAL RESOURCES

Cultural Resources are described on pages 34 through 37 of the EA. The Proposed Action has the potential to affect cultural resources, including historic districts, as described on pages 37 through 41. A Class III cultural resources inventory of the project area was completed on October 6-12, 2016 and June 11-15, 2018 to identify whether any National Register of Historic Places (NRHP)-listed or -eligible cultural resources are present that could be affected by proposed activities. The entire 612 acres, which included proposed fiber optic network installation, equipment shelters, and monopole locations, were surveyed. Twenty-one cultural resource sites and one isolated occurrence were recorded within the Area of Potential Effect. Two of the sites are newly recorded and 19 are previously recorded. With the exception of two of the sites, which consist of small prehistoric lithic scatters, all of the sites are historic in age and include seven NPS administrative and housing units, six visitor facilities, three roads, an entrance station, a dam, and two irrigation ditches. The newly recorded sites are Teton Park Road and the Newbold/Sebastian Ditch, both of which are recommended not eligible for listing.

The Class III cultural resources inventory report that was completed contains information on the identification and NRHP analysis of cultural resources, as well as a finding of effect from the Proposed Action on those cultural resources listed or eligible for listing in the NRHP in compliance with the National Historic Preservation Act. Based on the analysis of effects of project activities, the report concluded that there will be no adverse effect to historic properties. This report was submitted to the Wyoming SHPO for concurrence. The SHPO concurred with the no effect determination on November 21, 2018.

In addition to the Class III inventory, a visual impact study was undertaken by EnerTech Resources, along with North Wind Resource Consulting, the NPS, and the applicant, to assess potential visual impacts to historic properties located within or adjacent to the project area resulting from the vertical components associated with the Proposed Action. The nine wireless telecommunications facility locations were included in the visual study. Following fieldwork, photographs were rated based on visibility from all photo-points. These ratings were used to identify potential visual impacts that will occur during the installation and operational phases of the Proposed Action. The visual impact study resulted in a finding of “no adverse effect” to NRHP-listed or -eligible historic districts or individual properties. There will not be a strong impact to the property’s integrity of setting and feeling as the color of the monopoles will be selected to blend with the existing environment, and all equipment shelters will be constructed to match the surrounding environment. It is expected that compliance with NEPA, Section 106 of the NHPA, and other applicable laws and policies as part of the permit request process will ensure that physical impacts to character-defining features of the historic districts will not occur. In terms of Section 106, the Proposed Action will have no adverse effect on historic properties.

The selected action will not impair cultural resources, in consideration of the measures identified in the EA and FONSI to site and design facilities to blend with the surrounding environment. As a result, the selected alternative will not result in impairment of cultural resources.

CONCLUSION

In conclusion, as guided by this analysis, good science and scholarship, advice from subject matter experts and others who have relevant knowledge and experience, and the results of public involvement activities, it is the Superintendent’s professional judgment that no impairment of park resources and values will occur from implementation of the selected alternative. The NPS has determined that implementation of the selected alternative will not constitute an impairment of Grand Teton National Park’s resources or values. This conclusion is based on consideration of the park’s purpose and significance, a thorough analysis of the environmental impacts described in the EA, comments provided by the public and others, and the professional judgment of the decision maker guided by the direction of *NPS Management Policies 2006*.