

National Park Service
U.S. Department of the Interior

Glacier National Park
Waterton-Glacier International Peace Park
Montana



ST. MARY MICROWAVE RADIO ANTENNA TOWER FINDING OF NO SIGNIFICANT IMPACT

Background

In compliance with the National Environmental Policy Act of 1969 (NEPA), the National Park Service (NPS) prepared an environmental assessment (EA) to examine alternatives and environmental impacts for a proposal to install a new microwave radio antenna tower in the St. Mary developed area on the east side of Glacier National Park. The new tower will replace an existing NPS radio tower.

The St. Mary developed area contains a maintenance area, residential park housing, and administrative offices. The adjacent St. Mary township is located outside the park and is a commercial center for visitors entering or leaving the park. The St. Mary Visitor Center, the St. Mary Entrance Station, and the east entry point for the Going-to-the-Sun Road are within one mile of the St. Mary developed area. Currently, communication facilities at the St. Mary developed area include the NPS radio tower and equipment shed, and a CenturyLink equipment building and associated infrastructure. The existing NPS communication system provides 360-degree radio coverage for regular and emergency radio communications for park personnel in the eastern portion of the park. The CenturyLink communication system is the St. Mary Central Office hub for hard-wired telephone service to the St. Mary developed area and the adjacent St. Mary township.

The greater St. Mary area is currently limited to cellular modem and satellite technologies for Internet services, and does not include the faster and larger capacity digital subscriber line (DSL) broadband Internet service for residential, visitor, and government use. CenturyLink's Internet service in the greater St. Mary area is therefore not meeting the demands of local users. As part of an "Alternative Form of Regulation" (AFOR) agreement between CenturyLink and the Montana Public Service Commission, CenturyLink has agreed to extend DSL Internet service to the East Glacier area (MPSC 2008). In the agreement, CenturyLink would deploy DSL service over three years to 27 Montana communities where DSL service was not available. The expanded service in the East Glacier area would include service to the greater St. Mary area.

The new tower will upgrade existing infrastructure, provide DSL Internet service to the greater St. Mary area, and improve the reliability and speed of Internet access. It will be taller than the existing tower, and will include a microwave dish that will deliver a signal for the CenturyLink Internet service upgrade. The tower will also be used for continued NPS radio communications. The tower must be located inside the park because the microwave dish must be hardwired to the CenturyLink equipment building, which has been in the park, in the St. Mary developed area, since 1955. Internet service is not a new use within the park, and the new tower will not be a cell tower or provide cell service. There are no cell towers in Glacier National Park.

Selected Action

Alternative B, construction of a new microwave radio antenna tower to replace the existing tower, is the NPS's preferred alternative because it best meets the purpose and need for the project as well as the project objectives to:

- Assist CenturyLink in meeting the AFOR agreement with the Montana Public Service Commission.
- Provide DSL Internet service to the surrounding community.
- Conduct work so NPS radio communications capabilities will not be interrupted.
- Minimize the amount of telecommunications infrastructure within the park.

Under Alternative B, the existing NPS 70-foot radio tower (including antennas) will be removed. A right-of-way permit in accordance with NPS DO #53: *Special Park Uses* will be issued to CenturyLink to build and operate a new tower. To avoid adding more towers to the St. Mary developed area, NPS radio equipment will be co-located on the replacement tower with the CenturyLink equipment. The new tower will be designed to provide a direct line of sight to the CenturyLink Divide Mountain transfer station.

The new tower will be located next to the existing NPS communication building in the St. Mary developed area in the park. It will be an approximately 80-foot tall, three-legged, steel lattice structure supported on an approximately 16-foot by 16-foot concrete footing. The tower will support a 6-foot diameter microwave dish placed at 67 feet above ground. Up to three NPS radio whip-type antennas, approximately 4 feet in length, will be placed on the top of the tower. Approximately 100 feet of microwave transmission line between the tower and the existing CenturyLink communication building will be buried in underground conduit. The NPS transmitter/receiver equipment co-located on the tower will run down the tower and into the immediately adjacent NPS communication building.

Site reclamation will consist of backfilling the transmission conduit trench with native subsoil and compaction of the subsoil. Separately stockpiled topsoil will be placed on the subsoil to near ground surface. Native vegetation removed during the initial excavation activities will be placed on the topsoil. Seeding with an NPS approved seed mix will occur if necessary.

Construction will take approximately three weeks with intermittent periods of activity before or after this period. All tools, equipment, barricades, signs, surplus materials, demolition debris, and rubbish will be removed from NPS property upon project completion. Any road and off-road surfaces damaged due to work on the project will be repaired to original condition as much as is feasible.

As technological advances in microwave transmission or other broadband transmission technologies occur, the replacement of the tower and associated equipment will be evaluated in the future to determine if a less visible form of technology can be utilized at the site.

Mitigation Measures

The following mitigation measures were developed to minimize the degree and/or severity of adverse effects and will be implemented:

General Measures

- The NPS project manager will be responsible for ensuring that the project remains within the construction limits and parameters established in the compliance documents and that mitigation measures are properly implemented.
- The construction zone will be identified and fenced with construction tape or similar material prior to any construction activity. The fencing will define the construction limits and confine activity to the minimum area required for construction.
- All protection measures will be clearly stated in the construction specifications/special construction requirements, and workers will be instructed to avoid conducting activities beyond the construction limits as defined by the construction fencing or similar material, such as erosion control fencing.
- Contractors will be required to properly maintain construction equipment (i.e., mufflers) to minimize noise from use of the equipment.

Wildlife, Federally Listed Threatened and Endangered Species, and State Species of Concern

- Workers will be trained on appropriate behavior in the presence of wildlife and on proper storage of food, garbage, and other attractants.

Vegetation

- The park's Best Management Practices will be implemented to minimize the extent of impacts.
- Disturbance to vegetation will be avoided as much as possible and contained to as small a footprint as possible while meeting project objectives.
- Any vegetation removed during the project will be stored in a shaded, protected site and watered as necessary. Once the new tower and microwave transmission conduit are installed and the existing NPS radio tower is removed, the vegetation will be replaced and the edges of the disturbance will be seeded with viable native seed specified by the NPS.
- If non-native invasive plants establish at the site, an integrated weed management process will be implemented.

Soils

- The park's Best Management Practices will be implemented to minimize the extent of impacts.
- Disturbance to the ground will be avoided as much as possible and contained to as small a footprint as possible while meeting project objectives.
- Soils removed for the project will be set aside and replaced when the work is complete. Salvaged soils will be protected from trampling, and topsoil will be stored separately from sub-excavated materials. Once the new tower and conduit are installed and the existing NPS tower is removed, the holes will be backfilled with the salvaged soil. Sub-excavated materials will be replaced first, topsoil will be replaced last, and the holes will be overfilled slightly to ensure that soils do not settle and form a depression.

- Erosion control measures that provide for soil stability and prevent movement of soils into waterways will be implemented.

Archeological Resources

- Ground disturbing activities will be monitored by an archeologist.

Visual Resources

- The tower structure and microwave dish will utilize diffuse or non-polished light reflecting materials on exterior surfaces.

Health and Safety

- Visitors and NPS staff (other than project participants) will not be allowed to access the construction site. The tower area and transmission conduit trench area will be temporarily fenced and signed as a restricted area. Emergency vehicles will be allowed on site if needed.

Alternatives Considered

The EA evaluated two alternatives: the no action and one action alternative. Under Alternative A, no action, a new tower will not be built and associated upgrades to the Internet service for the St. Mary area will not occur. The Montana Public Service Commission's goal to expand broadband Internet capabilities to rural exchanges will not be fully met. Alternative B, construction of a new microwave radio antenna tower in the St. Mary developed area, is the preferred alternative as described in the previous section.

The EA also evaluated the following three alternatives that were eliminated from detailed study:

- ***Install the new tower and leave the existing NPS radio tower.*** This alternative was considered and dismissed because it would add more infrastructure to the Divide Creek floodplain. The NPS goals, including minimizing the amount of telecommunications infrastructure within the park, are better met with one tower.
- ***Install the new tower outside of the park.*** This alternative was considered and dismissed because the signal feed wiring from the microwave system on the new tower must be connected to equipment in CenturyLink's existing building, which has been inside the park boundary since 1955. CenturyLink does not have the ability to purchase land outside the park and relocate their building while remaining in compliance with the Montana Public Service Commission's timeline requirements for upgrading communications capabilities at its rural exchanges.
- ***Install "hard wire" transmission conduit from the Divide Creek relay tower.*** This alternative was considered and dismissed by CenturyLink due to the increased cost to install the wire and due to non-compliance with the Montana Public Service Commission's timeline requirements for upgrading communications capabilities at its rural exchanges.

Environmentally Preferable Alternative

According to the CEQ regulations implementing NEPA (43 CFR 46.30), the environmentally preferable alternative is the alternative “that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historical, cultural, and natural resources. The environmentally preferable alternative is identified upon consideration and weighing by the Responsible Official of long-term environmental impacts against short-term impacts in evaluating what is the best protection of these resources. In some situations, such as when different alternatives impact different resources to different degrees, there may be more than one environmentally preferable alternative.”

Alternative A (No Action) is the environmentally preferable alternative because there will be no activities that will disturb elements of the biological and physical environment.

Alternative B (construction of a microwave radio antenna tower in the St. Mary developed area) is not the environmentally preferable alternative because, while there will be no increase in the number of telecommunications structures within the park, it will temporarily disturb vegetation and soil in the St. Mary developed area, and the taller tower and the presence of a microwave dish will cause increased visual impacts. Ongoing impacts to the proper function of the Divide Creek floodplain and historic structures in the St. Mary developed area will continue unchanged under Alternative B.

Why the Selected Action 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 Federal agency believes that on balance the effect will be beneficial. Implementation of the preferred (selected) alternative will result in some adverse impacts; however, the overall benefit of the project outweighs these negative effects. The adverse impacts are summarized as follows: The increased visibility of the tower and the presence of a microwave dish will adversely impact historic structures, including the St. Mary Utility Area Historic District, the St. Mary Visitor Center, and the Going-to-the-Sun Road; adverse impacts will be moderate, long-term, and site-specific. Similarly, the tower's increased visibility will adversely impact the Going-to-the-Sun Road cultural landscape; impacts will be moderate, long-term, and site-specific. However, the impacts will not substantively diminish elements associated with the St. Mary Area Utility District or the St. Mary Visitor Center that led to their listing in the National Register of Historic Places, nor will it substantively diminish elements that led to the Going-to-the-Sun Road's listing as a National Historic Landmark. Therefore, under Section 106 of the National Historic Preservation Act (NHPA), a finding of no adverse effect has been made for both historic structures and cultural landscapes.

Because the tower will result in a very slight modification of floodplain acreage, the action will have negligible, adverse, long-term, and localized impacts on floodplains. The increased height of the new tower and the presence of a microwave dish will have moderate, long-term, adverse, and local to regional impacts on visual resources. There will be minor, long-term, adverse impacts to visitor experience due to negative visual impacts associated with the new tower.

Additional vehicle traffic will occur during construction, but the impact from construction traffic is expected to be negligible in intensity and short term in duration.

There will be a long-term, minor to moderate beneficial impact to a segment of visitors who access the Internet through local businesses in the neighboring communities. While there will be no cell service, there will be faster Internet service, improving communication services offered to visitors as well as businesses, local residents, and NPS staff.

The degree of effect on public health or safety: The new tower will not create an unsafe or unhealthy environment. CenturyLink's highly directed signaling will not leak or transmit any additional radio frequency noise into the park. The amount of radio frequency noise within the park will remain at its current level, resulting in no additional impacts to human health and safety from radio frequency emissions. The microwave transmission will comply with Federal Communication Commission (FCC) regulations. A higher tower could provide the NPS with increased radio communications coverage with a corresponding benefit to emergency response capabilities, thereby benefitting human health and safety. The NPS's existing tower is considered adequate for health and safety concerns, however, and any beneficial impacts from the tower will be minor.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas: The increased visibility of the tower and the presence of a microwave dish will adversely impact historic structures, including the St. Mary Utility Area Historic District, the St. Mary Visitor Center, and the Going-to-the-Sun Road, and will also adversely impact the Going-to-the-Sun Road cultural landscape. Impacts will be site-specific, moderate, long-term, and adverse. A finding of "no adverse effect" on historic structures and cultural landscapes has been determined, as defined by Section 106 of the NHPA.

The preferred alternative will only slightly modify floodplain acreage and have a negligible effect on floodplains. The project will not affect wetlands or recommended wilderness, since there are no wetlands in the project area and because the tower site is outside of the recommended wilderness boundary. Construction will not occur within riparian areas, and there are no wild and scenic rivers within or near the project area. There are no prime farmlands in Glacier National Park.

The degree to which effects on the quality of the human environment are likely to be highly controversial: Forty-two comment letters or emails were received during the scoping period. Of these, 11 contained substantive comments that were in opposition to or questioned aspects of the project. Scoping comments were addressed in the EA.

Twenty-seven correspondences were received during public review of the EA. Seven comments were considered substantive or warranted a response and are addressed in the Errata Sheets at the end of this document. None of the comments received indicated that the project or the impacts are highly controversial.

The degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks: The environmental process has not identified any effects that are highly uncertain or may involve unique or unknown risks. In addition, the

project will be in compliance with existing FCC regulations concerning the health and safety of surrounding populations.

The 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 new tower will be replacing existing infrastructure, and Internet service is not a new use at Glacier National Park or other NPS sites. The preferred alternative therefore does not set a precedent for future actions with significant effects, nor does it represent a decision in principle about a future consideration.

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

Cumulative effects were analyzed in the EA and no significant cumulative impacts were identified.

The 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: The increased visibility of the new tower and the presence of a microwave dish will adversely impact historic structures, including the St. Mary Utility Area Historic District, the St. Mary Visitor Center, and the Going-to-the-Sun Road, and will also adversely impact the Going-to-the-Sun Road cultural landscape. Adverse impacts will be moderate, long-term, and site-specific. However, the impacts will not substantively diminish elements associated with the St. Mary Area Utility District or the St. Mary Visitor Center that led to their listing in the National Register of Historic Places, nor will it substantively diminish elements that led to the Going-to-the-Sun Road's listing as a National Historic Landmark. Therefore, under Section 106 of the NHPA, the project will have no adverse effect on historic structures and cultural landscapes, and the project will not result in the loss or destruction of significant scientific, cultural or historical resources.

The NPS documented a "no adverse effect" finding in the EA transmittal letter to the Montana State Historic Preservation Officer (SHPO), dated October 19, 2012. On October 30, 2012, the SHPO concurred with the NPS's "no adverse effect" finding. No comments were received from the Blackfeet Tribal Business Council or the Confederated Salish and Kootenai Tribes.

The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act (ESA) of 1973: Under Section 7 of the Endangered Species Act, the determination for the threatened grizzly bear, Canada lynx, bull trout, water howellia, and Spalding's catchfly is "no effect". There will also be no effect to wolverine, the meltwater stonefly, Sprague's pipit, or whitebark pine, all Candidate species. The project area does not contain key habitat for grizzly bears, nor will the project negatively affect primary grizzly bear food production or important foraging areas. The St. Mary developed area includes permanent housing and experiences year-round human activity, and bears are actively discouraged from the area. The project will therefore not impact grizzly bears. The project is also not anticipated to impact bull trout, since sediment will be controlled and prevented from reaching Divide Creek. Lynx, meltwater lednian stonefly, Sprague's pipit, wolverine, and whitebark pine are not likely to be found within the project area and will not be affected by the project.

State-listed species of concern will not be measurably impacted by the project. Fishers are not likely to use the project area, the tower will not generate ultrasonic sound emissions that could affect sensitive bat species, and the structure will not present a risk of electrocution to bald or golden eagles. Nesting and foraging habitat for eagles and other bird species of concern will not be impacted, and sedimentation control will minimize impacts to amphibians and fish species of concern. Information on state listed species of concern was provided by the *Montana Natural Heritage Program* on March 8, 2012.

Whether the action threatens a violation of federal, state or local law or requirements imposed for the protection of the environment: The action will not violate any federal, state, or local laws or environmental protection laws.

Public Involvement and Agency and Native American Consultation

The EA was made available for public review and comment during a 30-day period ending November 23, 2012. The announcement was also posted on the NPS's public comment website. Letters were sent to recipients on the park's EA mailing list and various federal, state, and local agencies, including the U.S. Fish and Wildlife Service (USFWS), Montana Fish, Wildlife and Parks, the Montana State Historic Preservation Officer (MTSHPO), the Advisory Council for Historic Preservation (ACHP), the Blackfeet Tribal Business Council, and the Confederated Salish and Kootenai Tribes. Twenty-seven correspondences were received during the EA review period. Fifteen were supportive of the proposal, nine were opposed, and three expressed neither support nor opposition. Seven of the comments were considered substantive or warranted a response, and are addressed below in the Errata Sheets' *Responses to Comments* section. Comments raised concerns about the tower's visibility from hiking trails and electromagnetic signal intrusion into the park; suggested a park-wide telecommunications analysis and that the tower be disguised as a tree; inquired about improved radio communications for EMS providers outside the park; and indicated a common perception that the tower is a cell phone tower.

The NPS documented a "no adverse effect" finding in the EA transmittal letter to the Montana SHPO, dated October 19, 2012. On October 30, 2012, the SHPO concurred with the NPS's "no adverse effect" finding. No comments were received from the Blackfeet Tribal Business Council or the Confederated Salish and Kootenai Tribes.

The Department of the Army Corps of Engineers (COE) submitted a comment dated October 25, 2012 stating that no permit would be required from the US Army Corps of Engineers if no work occurs in aquatic areas.

The FONSI and Errata Sheets will be sent to all commenters, and will be made available to the public on PEPC.

References

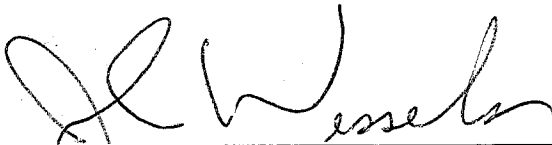
[MPSC 2008]. Montana Public Service Commission 2008. Alternative Form of Regulation Order, Docket No. D2008.1.6, December 16, 2008.

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 adverse and beneficial impacts that range from negligible to moderate, short to long-term, and site-specific to regional. There are no unmitigated adverse effects on public health, public safety, threatened or endangered species, or historic properties 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, the National Park Service has determined that an EIS is not required for this project and thus will not be prepared.

Approved:



John Wessels
Director, Intermountain Region

1/22/13
Date

ERRATA SHEETS

St. Mary Microwave Radio Antenna Tower

GLACIER NATIONAL PARK

According to NPS policy, substantive comments are those that 1) question the accuracy of the information in the EA, 2) question the adequacy of the environmental analysis, 3) present reasonable alternatives that were not presented in the EA, or 4) cause changes or revisions in the proposal.

Twenty-seven correspondences were received during public review of the EA. Seven comments were considered substantive or warranted a response, and are addressed below in the *Responses to Comments* section. Comments raised concerns about the tower's visibility from hiking trails and electromagnetic signal intrusion into the park; suggested a park-wide telecommunications analysis and that the tower be disguised as a tree; inquired about improved radio communications for EMS providers outside the park; and indicated a common perception that the tower is a cell phone tower.

TEXT CHANGES

A few text changes were made to the EA to clarify that the tower is not a cell tower, reiterate the park's intention to minimize telecommunications infrastructure in Glacier National Park, clarify why the new tower must be located within the park, address the effects of radio frequency emissions on human health and safety, and correct minor terminology and typographical errors. *Italicized and underlined text indicates the section in the EA that has been altered. Strikeout is used to show text that has been struck from the EA. Bold text is used to show new text and text that replaces stricken text.*

p. i, Summary. The St. Mary area is limited to cellular modem and satellite services and does not include the faster and larger capacity DSL broadband service for resident, visitor, and government Internet use. **Internet service is not a new use within the park. The new tower would not be a cell tower or provide cell service. The tower would support a microwave dish that would deliver a signal for a CenturyLink Internet service upgrade; the tower would also be used for continued NPS radio communications. There are no cell towers in Glacier National Park.**

It would be an approximately 8480-foot tall ~~(including four feet of antenna)~~, three-legged, steel-lattice structure supported on a concrete footing that would replace the adjoining NPS's existing 70-foot tall (including 20 feet of antenna) radio tower.

p. 1, Introduction. The St. Mary area is limited to cellular modem and satellite services and does not include the faster and larger capacity DSL broadband service for resident, visitor, and government Internet use. **Internet service is not a new use within the park. The new tower would not be a cell tower or provide cell service. The tower would support a microwave dish that would deliver a signal for a CenturyLink Internet service upgrade; the tower would also be used for continued NPS radio communications. There are no cell towers in Glacier National Park.**

After discussions with concerns were raised by park management about additional communications infrastructure within the park, a modified proposal was submitted that would remove the existing NPS tower and co-locate both the CenturyLink and NPS equipment on a single tower.

p. 4, Background. CenturyLink's communication network Internet service in the greater St. Mary area is currently not meeting the demands of local users. As part of an Alternative Form of Regulation (AFOR) agreement between CenturyLink and the Montana Public Service Commission, CenturyLink has agreed to extend DSL Internet service to the East Glacier area (MPSC 2008). In the agreement, CenturyLink would deploy DSL service over three years to 27 Montana communities where DSL service was not available. Two remaining communities to receive DSL service are East Glacier and St. Mary. The expanded service in the East Glacier area would include service to the St. Mary developed area and the St. Mary township. CenturyLink's new tower must be located within the park because the new system would need to be hardwired to the CenturyLink equipment building, which has been in the park in the St. Mary developed area since 1955.

Completed in 1932, the 50-mile GTSR opened up the park's interior to more visitors, allowing motorized vehicle access to spectacular scenic landscapes. The GTSR is currently undergoing an extensive rehabilitation project and is projected to be completed in 2016. As annual visitation to the park has increased (from approximately 53,000 visitors in 1932 to 2.2 million in 2010), the use of the GTSR has also increased (NPS 2012). An increase in visitor services outside and immediately adjacent to the park in the St. Mary township has occurred, and corresponding increases in NPS provided services to meet staff and visitor demands are needed.

pp. 4-5, Purpose and Need. The purpose of the CenturyLink proposal is to bring the telecommunication capacity upgrade existing infrastructure in order to increase Internet speed and capacity in the St. Mary area to a modern standard. To achieve this, CenturyLink has applied to obtain a right-of-way permit for the installation of a new tower to replace the existing NPS structure, buried telecommunication conduit, and continued operation of their St. Mary Central Office hub. The NPS needs to evaluate whether to issue a new or revised right-of-way permit to CenturyLink.

The following objectives would be met by this project: 1) assist CenturyLink in meeting the AFOR agreement with the Montana Public Service Commission, 2) provide DSL Internet service to the surrounding community, and 3) conduct work so NPS radio communications capabilities would not be interrupted, and 4) minimize the amount of telecommunications infrastructure within the park.

p. 9, Impact Topics Dismissed from Further Analysis, Federally Threatened, Endangered, and Candidate Species, Grizzly Bear. Construction activities scheduled to take place in the summer for approximately three weeks may cause individual bears to avoid the area during the day, but construction would not occur at night so occasional nighttime foraging would not be affected.

p. 15, Impact Topics Dismissed from Further Analysis, Human Health and Safety. The dish on the new tower would be receiving a point to point microwave frequency beam from the planned CenturyLink repeater on Divide Mountain outside the park. The microwave beam would be directed at the dish on the tower and would not leak or transmit any additional radio frequency noise into the park. The amount of radio frequency noise

within the park would remain at its current level, resulting in no additional impacts to human health and safety from radio frequency emissions. The microwave transmission would comply with FCC regulations.

p. 18, Alternatives Carried Forward, Alternative A, No Action Alternative. Under the No Action alternative, a new special use lease would not be issued to CenturyLink. A tower would not be built and associated upgrades to the current communication capacities Internet service for the St. Mary area would not occur.

p. 18, Alternatives Carried Forward, Alternative B, Preferred Alternative. Under Alternative B, a new or revised right-of-way permit in accordance with NPS DO #53: *Special Park Uses* (special use lease) would be issued to CenturyLink to build and operate a new tower.

The new tower and associated infrastructure would provide DSL Internet service to the greater St. Mary area and improve the reliability and speed of Internet access to NPS personnel and local and visitor users.

The project would support the larger statewide Montana Public Service Commission requirement mandating CenturyLink to upgrade communications capabilities at its rural exchanges (including St. Mary) in Montana. The new tower would not be a cell tower or provide cell phone service. The tower would support a microwave dish that would deliver a signal for a CenturyLink Internet service upgrade; the tower would also be used for continued NPS radio communications. There are no cell phone towers located within Glacier National Park.

p. 21, Alternatives Carried Forward, Alternative B, Preferred Alternative. Construction would occur in Fall of 2012 or Summer of 2013. Including site restoration, construction of the tower would take approximately three weeks with intermittent periods of activity before or after this period.

p. 21, Mitigation Measures.

- The construction zones outside of the existing project site would be identified and fenced with construction tape or similar material prior to any construction activity. The fencing would define the construction limits and confine activity to the minimum area required for construction.

p. 23, Alternatives Considered but Eliminated from Detailed Study.

Install the new tower and leave the existing NPS radio tower. This alternative was considered and dismissed because it would add more infrastructure to the Divide Creek floodplain. The NPS goals, including minimizing the amount of telecommunications infrastructure within the park, are better met with one tower.

Install the new tower outside of the park. This alternative was considered and dismissed because the signal feed wiring from the microwave system on the new tower must be connected to equipment in CenturyLink's existing building, which has been inside the park boundary since 1955. due to CenturyLink does not having have the ability to purchase land outside the park and relocate their building while remaining in compliance with the

Montana Public Service Commission's timeline requirements for upgrading communications capabilities at its rural exchanges.

pp. 24-25, Table : Summary of Alternatives and how each Alternative Meets the Project Objectives

Alternative Elements	Alternative A – No Action	Alternative B – Preferred
Special-use lease Right-of-way Permit	A new special-use lease right-of-way permit would likely be negotiated for the existing CenturyLink facilities at the St. Mary developed area.	A new special-use lease right-of-way permit would be negotiated for the existing and new CenturyLink facilities at the St. Mary developed area.
Project Objectives	Meets Project Objectives?	Meets Project Objectives?
Minimize the amount of telecommunications infrastructure within the park.	Yes. Telecommunications infrastructure within the park would remain at a minimum.	Yes. Telecommunications infrastructure within the park would be minimized.

p. 26, Table 2: Environmental Impact Summary by Alternative

Floodplains	There would be no change to current conditions, and therefore no new impacts to floodplains. A localized, minor, long-term adverse effects on the Divide Creek floodplain would continue from ongoing human uses in the floodplain.	The proposed project would produce localized, minor negligible, long-term adverse effects on the floodplain of Divide Creek by continuing human uses in the floodplain until funding is found to relocate the St. Mary developed facilities due to a slight modification of floodplain acreage (approximately 256 square feet).
Visitor Use and Experience	No effect.	Minor, long-term adverse impacts would occur to visitor experience related to visual impacts from the tower. Minor to moderate, long-term beneficial impacts would occur for visitors, residents, and NPS personnel requiring access to modern DSL Internet access.

p. 27, Environmentally Preferable Alternative. Alternative B is not the environmentally preferable alternative because, while there would be no increase in the number of telecommunications structures within the park, it would cause increased visual impacts and temporarily disturb vegetation and soil in the St. Mary developed area, and the taller tower and the presence of a microwave dish would cause increased visual impacts. Ongoing impacts to the proper

function of the Divide Creek floodplain and historic structures in the St. Mary developed area would continue unchanged under Alternative B.

p. 45. Affected Environment and Environmental Consequences, Floodplains, Impacts Analysis of Alternative A – No Action. Under the No Action alternative, current management would continue. This would include the continuation of current operations and maintenance of existing facilities. There would be no replacement of the existing NPS radio tower with a new tower and therefore, no effects on the Divide Creek floodplain. **A localized, minor, long-term adverse effect on the Divide Creek floodplain would continue from ongoing human uses.**

p. 45. Affected Environment and Environmental Consequences, Floodplains, Impacts Analysis of Alternative A – No Action, Conclusion. There would be no change to current conditions, and therefore no new impacts to floodplains under the No Action alternative. **A localized, minor, long-term adverse effect on the Divide Creek floodplain would continue from ongoing human uses.**

p. 51. Affected Environment and Environmental Consequences, Visitor Use and Experience, Impacts Analysis of Alternative A – No Action. There would be no action under Alternative A; however, with an increase in visitors in the St. Mary area, **more visitors would be affected by the absence of improved Internet the service.** Effects would represent a minor to moderate adverse impact to visitor experience for visitors who depend on the Internet for communication, particularly for those who access the Internet through local businesses.

p. 51. Affected Environment and Environmental Consequences, Visitor Use and Experience, Impacts Analysis of Alternative B – Preferred. There would be a long-term minor to moderate beneficial impact to a segment of visitors who access the Internet through local businesses in the neighboring communities. **While there would not be cell service, t**There would be faster Internet service, improving communication services offered to visitors as well as businesses, local residents, and NPS staff.

RESPONSE TO COMMENTS

Responses are in bold italics.

1. **COMMENT:** “The maps suggest that this project would provide DSL at Duck Lake, but it does not actually say this. It would be helpful if the exact areas expected to be served could be identified and have Centurylink agree to these areas.”

RESPONSE: The availability of DSL service will be limited by deterioration of the signal after it leaves CenturyLink’s St. Mary equipment building and makes its way through existing wire telephone lines and associated infrastructure. Signal deterioration is highly variable and will likely limit DSL availability outside of the immediate St. Mary area. Signal deterioration is not expected to support DSL service in the Duck Lake area due to the distance of Duck Lake from the CenturyLink equipment building in St. Mary.

2. **COMMENT:** “There are many references to tower visibility from Going to the Sun Road. I appreciate studying the impact on this popular scenic highway. I encourage the National Park Service to also give this level of detailed analysis to visibility from trails and backcountry areas when considering future towers and other visual intrusions.”

RESPONSE: The visibility of the tower from park trails was addressed in the viewshed analysis in the EA.

3. COMMENT: "Please consider another alternative. A tree cell tower would be more appropriate."

RESPONSE: This alternative was suggested during scoping for the project, and was dismissed. Please see p. 24 of the EA.

4. COMMENT: "Cellular service should not now or in the future be offered or extended within the park."

RESPONSE: The new tower is not a cell tower, and therefore will not provide cellular service. Please see text changes to pages i, 1, 4-5, 18, and 51 of the EA clarifying that the tower is not a cell tower.

5. COMMENT: "While the park administration has been at the forefront of many threats to Glacier Park's wilderness character (including noise and light pollution) they do not seem to be at the forefront on the issue of electromagnetic signal intrusion into the park. I strongly encourage the Park administration to think about current trends in this area and to consider future effects that could threaten the park's character and value."

RESPONSE: Glacier National Park is committed to minimizing the amount of telecommunications infrastructure within the park, but has no control or authority over the level of electromagnetic signal intrusion from outside sources. The existence of satellite technologies, especially, makes it impossible to eliminate the intrusion of electromagnetic signals. Electromagnetic signal intrusion into the park from outside sources is also beyond the scope of this EA. The new tower will be replacing existing infrastructure and, while it will enable improved Internet service, it is not a cell tower and will not result in any increase in radio frequency noise within the park. The microwave transmission will comply with all FCC regulations. Please see also a text change to the document addressing the effects of the new tower on radio frequency emissions, under Impact Topics Dismissed from Further Analysis, Human Health and Safety.

6. COMMENT: "...the rapid emergence of new communications technology requires a park-wide analysis regarding the potential siting of future towers. We encourage a park-wide study, similar to the infrastructure analysis undertaken in Yellowstone, on how best to meet communications' needs while at the same time meeting the obligations of the Organic Act. By completing such a study, the park could establish its planned vision for communication infrastructure in the park, and potentially identify opportunities to utilize technologies other than tower-based radio or land-based phones."

RESPONSE: This project is in response to a request from CenturyLink, which has been mandated by the Montana Public Service Commission to upgrade Internet communications capabilities at its rural exchanges. Of the two locations within the park where CenturyLink has communications infrastructure, only the St. Mary radio tower requires the mandated upgrade. The tower is not a cell tower and will not provide cellular service. For these reasons, a park-wide telecommunications analysis is beyond the scope of this project, but will be considered for the future. The NPS is continuously looking at other technologies that could reduce infrastructure.

7. **COMMENT:** Will neighboring fire departments and emergency medical services (EMS) providers have relay capabilities for radio communications?

RESPONSE: *Radio communications for other users will not automatically be enabled by the new tower, and are therefore beyond the scope of this project. However, the park recognizes the importance of reliable communications for emergency medical responders outside the park, and will follow up with neighboring EMS providers.*

Appendix – Non-Impairment Finding

National Park Service's *Management Policies* 2006 require analysis of potential effects to determine whether or not actions would impair park resources. The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. National Park Service managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adversely impacting park resources and values.

However, the laws do give the National Park Service the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the National Park Service the management discretion to allow certain impacts within parks, that discretion is limited by the statutory requirement that the National Park Service must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. The prohibited impairment is an impact that, in the professional judgment of the responsible National Park Service manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. An impact to any park resource or value may, but does not necessarily, constitute an impairment. An impact would 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
- identified as a goal in the park's general management plan or other relevant NPS planning documents.

An impact would be less likely to constitute an impairment if it is an unavoidable result of an action necessary to pursue or restore the integrity of park resources or values and it cannot be further mitigated.

The park resources and values that are subject to the no-impairment standard include:

- the parks scenery, natural and historic objects, and wildlife, and the processes and conditions that sustain them, including, to the extent present in the park: the ecological, biological, and physical processes that created the park and continue to act upon it; scenic features; natural visibility, both in daytime and at night; natural landscapes; natural soundscapes and smells, water and air resources; soils; geological resources; paleontological resources; archeological resources; cultural landscapes; ethnographical resources; archeological resources; cultural landscapes; ethnographic resources; historic and prehistoric sites, structures, and objects; museum collections; and native plants and animals;

- appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them;
- the park's role in contributing to the natural dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park system; and
- any additional attributes encompassed by the specific values and purposes for which the park was established.

Impairment may result from NPS activities in managing the park, visitor activities, or activities undertaken by concessioners, contractors, and others operating in the park. The NPS threshold for considering whether there could be impairment is based on whether an action will have significant effects.

Impairment findings are not necessary for visitor use and experience, socioeconomics, public health and safety, environmental justice, land use, and park operations, because impairment findings relate back to park resources or values according to the Organic Act, and cannot be impaired in the same way that an action can impair park resources and values. After dismissing the above topics, topics remaining to be evaluated for impairment include historic structures and cultural landscapes, floodplains, and visual resources.

Fundamental resources and values for Glacier National Park are identified in the 1999 *General Management Plan*. According to that document, the following impact topics carried forward in the EA are necessary to fulfill specific purposes identified in the establishing legislation of the park, are key to the natural or cultural integrity of the park, and/or are identified as a goal in the park's general management plan or other relevant NPS planning document.

- **Cultural Resources-Historic Structures and Cultural Landscapes.** The increased visibility of the tower and the presence of a microwave dish will have moderate, adverse impacts to historic structures, including the St. Mary Utility Area Historic District, the St. Mary Visitor Center, and the Going-to-the-Sun Road, and to the Going-to-the-Sun Road cultural landscape. However, the project will not substantively diminish elements associated with these properties that led to their listing in the National Register of Historic Places, nor will it substantively diminish elements that led to the Going-to-the-Sun Road's listing as a National Historic Landmark. A finding of "no adverse effect" on historic structures and cultural landscapes has been determined, as defined by Section 106 of the NHPA. Although historic structures and cultural landscapes are a fundamental resource at the park, the preferred alternative will only result in moderate, site-specific, long-term, adverse impacts to historic structures and cultural landscapes; therefore, there would be no impairment to historic structures and cultural landscapes.
- **Floodplains.** The new tower will only slightly modify floodplain acreage (approximately 256 square feet), resulting in negligible adverse effects to floodplains. Although floodplains are a fundamental resource at the park, the preferred alternative will only result in negligible, long-term, adverse impacts to floodplains; therefore, there will be no impairment to floodplains.
- **Visual Resources.** The new tower will be more visible than the existing structure, and the area over which the tower will be visible will increase slightly. Although visual resources are a fundamental resource at the park, the preferred alternative will only result in moderate, long-term, adverse impacts to visual resources; therefore, there will be no impairment to visual resources.

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 there will be no impairment of park resources and values from implementation of the preferred alternative.