



National Park Service
U.S. Department of the Interior
Glacier National Park
West Glacier, Montana

Finding of No Significant Impact Construction of Park Housing at East Glacier and Swiftcurrent Developed Areas

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 associated with implementing the proposed construction of park housing at East Glacier and Swiftcurrent in Glacier National Park. The project will begin implementation of a decision in the park's 1999 *General Management Plan* (GMP) to relocate NPS infrastructure off the Divide Creek floodplain, and will provide needed housing for NPS employees on the east side of the park by replacing beds lost when 10 deteriorated trailers were removed from the St. Mary housing area.

The lack of safe and functional housing on the park's east side has been problematic for several years since the trailers were removed, especially for seasonal employees. The ten NPS-owned trailers were removed due to rodent infestations, mold, leaks, safety issues, and other factors. They provided 23 beds, primarily for seasonal employees, and housed staff working in St. Mary as well as other areas on the east side of the park. Since the trailers' removal, the park has made up for the lost beds by doubling employee occupancy in remaining quarters. This has led to crowded and challenging living conditions, especially in the St. Mary dormitory, where 12 x 14 foot rooms (approximate) are frequently occupied by two employees, and limited shower, toilet, and laundry facilities are shared (in the past, 35 occupants in 25 rooms have shared two toilets and three showers on the men's side, two toilets and two showers on the women's side, and three washers/dryers). In East Glacier, park housing for seasonal and permanent employees is limited to historic buildings with poor insulation and other issues. More permanent employees are occupying housing on the east side of the park than in the past, which has led to an overall shortage of housing for the seasonal workforce.

Replacing the trailers at St. Mary is not an option because the trailer sites and most of the St. Mary developed area are within the 100-year floodplain of Divide Creek, one of the most active floodplains in the lower 48 states. The park investigated options to build new housing at St. Mary. However, life safety and infrastructure concerns, regulations, policies, and the decision in the park's 1999 GMP to move park infrastructure off the Divide Creek floodplain, together with recent flood events in other NPS units that have resulted in infrastructure damage and loss, led the park to look for alternatives. A local market analysis in 2011 determined that opportunities to rent or buy private market housing in communities adjacent to the east side of the park are inadequate. The park also considered leasing private and/or federally owned land outside the park for housing, but this would have required new utility and infrastructure installation that would have been cost prohibitive.

Therefore, given the legal, policy, and life-safety prohibitions on building housing infrastructure at St. Mary and the infeasibility of establishing housing outside the park, the NPS has determined that the Swiftcurrent housing area and East Glacier NPS compound are the best locations for the construction of new housing.

Selected Action

The EA evaluated two alternatives, including the *No-Action Alternative* (No New Housing) and the *Construct Replacement Housing at Swiftcurrent and East Glacier Alternative*, which is the park's Selected Alternative. The *Construct Replacement Housing at Swiftcurrent and East Glacier Alternative* is the NPS selected alternative because it best meets the purpose and need for the project as well as the project objectives to:

- Provide necessary, safe, and functional employee housing to address the park's housing shortage and replace beds lost from the removal of 10 residential trailers.
- Begin implementing the decision from the 1999 GMP to relocate park infrastructure out of the Divide Creek floodplain as a step toward restoring natural floodplain dynamics and to protect life safety.

Under the *Construct Replacement Housing at Swiftcurrent and East Glacier Alternative*, replacement housing will be constructed in the Swiftcurrent housing area (Many Glacier) and at the NPS developed area in East Glacier. A one-story fourplex and a two-story eightplex will be built at the Swiftcurrent housing area, and a one-story duplex will be built at the East Glacier NPS developed area. The three proposed residential structures will replace 22 of the 23 beds lost in the removal of the trailers. The structures will include laundry facilities for employees housed in the new units. Utilities for the new structures will connect with existing utilities. Construction will take place as funding becomes available, most likely in three phases. Funding is currently available for the fourplex at Swiftcurrent and the duplex at East Glacier.

The selected alternative defines the East Glacier NPS Developed Area (inclusive of the East Glacier Ranger Station Historic District), to be the full extent of parcel 20-106, in East Glacier Park, Montana.

Swiftcurrent

The fourplex (two 2-bedroom, 2-bath units and two 1-bedroom, 1-bath units) will be constructed immediately north of the Swiftcurrent Loop Road in the park's Many Glacier Valley, across from the east end of the Swiftcurrent Ranger Station Historic District. To minimize long-term impacts on the wildlife connectivity area immediately east, additional infrastructure east of the fourplex will be limited to an entry sidewalk, which is required for compliance with the Architectural Barriers Act (ABA) (i.e. there will be no parking or other outdoor use facilities, such as picnic tables, east of the fourplex). Parking for the fourplex will be in front of the building, along the Swiftcurrent Loop Road; approximately 8 parking spaces are anticipated.

The eightplex (four 2-bedroom, 2-bath units and four 1-bedroom, 1-bath units) will be constructed west of the Swiftcurrent Ranger Station and north of four housing structures built in the 1990s. Parking for the eightplex will be developed on the north and east sides of the building; approximately sixteen parking spaces are anticipated.

Parking for both the eightplex and the fourplex will accommodate no more than a single row of vehicles and will be along existing road segments in order to minimize loss of vegetation and visual impacts on the historic district. The existing entry to the Swiftcurrent Loop Road (from the campground entry) will be closed at its west end, and access to the eightplex's north parking area will be from the east. The original entry to the Swiftcurrent Ranger Station (from the north) will be restored to its historic condition and reopened.

The permanent footprint for the fourplex and eightplex and associated parking areas will be approximately 0.3 acre at each site, with a total of approximately 0.6 acre. Additionally, approximately 0.1 acre adjacent to the building footprint at each site will be temporarily occupied by construction equipment and staging during the construction period. Construction staging will likely occur entirely within the local vicinity of the building sites, including areas that will be developed for parking. It is

possible that an existing pullout(s) along the Many Glacier Road may be needed for staging purposes, but this is unlikely. Otherwise, no satellite staging areas away from the project area are anticipated.

Additional native vegetation will be planted within the 10-meter buffer zone on the west side of the wildlife connectivity area east of the housing area to increase screening, absorb/disperse disturbance effects, and limit human use to foot traffic between the fourplex and the connectivity area.

New housing at Swiftcurrent will provide quarters for at least 18 and up to 36 seasonal employees, depending on the number of employees assigned to each unit. The park will offer housing at Swiftcurrent to employees working at Many Glacier or to employees without daily commutes (such as trail crews travelling to the backcountry for extended periods) whenever possible. Employees with duty stations outside of Many Glacier (such as St. Mary) may be housed at Swiftcurrent if other housing options near their duty station are not available. Lower graded employees will be given preference for housing near their duty station whenever possible. Housing will be available during the summer season, approximately 4.5 months per year, with access dependent on wildlife closures and weather.

East Glacier

The duplex at East Glacier (two 2-bedroom, 2-bath units) will be located within the East Glacier Ranger Station Historic District, at the south edge of the current maintenance yard/parking area. Each unit will have an attached garage. The permanent footprint for the duplex will be approximately 0.3 acre; approximately 0.1 acre will be temporarily occupied during the construction period. Construction staging will likely occur entirely within the existing maintenance yard/parking area. New housing at East Glacier will provide quarters for at least two and up to four employees, and will be available year-round. As with Swiftcurrent, the park will offer housing at East Glacier to employees with nearby duty stations or to employees without daily commutes whenever possible; lower graded employees will be given preference for housing near their duty station whenever possible.

Construction

Construction will take an estimated total of six months for each building (the fourplex and eightplex at Swiftcurrent and the duplex at East Glacier), with construction possibly occurring over non-consecutive months. Construction could occur at any time of year at East Glacier, but the construction period at Swiftcurrent will only be from April 1 until December 31, when the Many Glacier Road is open for administrative access; no construction will occur at Swiftcurrent when the road is closed to administrative access (January 1 to March 31). At Swiftcurrent, no construction activity or staging will be permitted within the wildlife connectivity area, except for temporary work necessary to connect the fourplex to the existing utility line that already bisects the connectivity area. Otherwise, all construction activity will occur west of the wildlife connectivity area.

In accordance with the NPS *Green Parks Plan* and the *DOI Sustainable Buildings Implementation Plan*, the NPS incorporates green building approaches into site choice, design, construction, and maintenance/sustainability features of new structures. This project will use green construction materials as much as possible, optimize energy performance, minimize resource damage, and minimize construction and maintenance costs. Although the park will not seek *Leadership in Energy and Environmental Design* (LEED) certification due to the high cost, LEED design principals will be used in the design of the facility. The park completed LEED Gold Certification for construction of the Apgar Transit Center and similar emphasis on green practices will be applied, such as the use of recycled materials when possible, high R-value insulation, avoiding the use of an irrigation system, and finishes with low volatile organic content (VOC), i.e. finishes that do not give off a lot of fumes.

In compliance with NPS Reference Manual 36: Housing Management, and Glacier National Park's 2011 Housing Management Plan, each building will have units that accommodate persons with mobility, hearing and vision impairment.

Mitigation Measures

The following mitigation measures will be implemented during the project:

Park Operations and Socioeconomics

- Employees will be offered housing near their duty stations whenever possible, and lower graded employees will be given preference for housing near their duty stations whenever possible.

Historic Structures and Cultural Landscapes

- Building and site design will be as compatible as practicable with the historic architectural characteristics of the historic districts through similar architectural features, materials, and color.
- The two-story eightplex at Swiftcurrent will be located near (north of) housing built in the 1990s, near buildings of similar mass and scale. The duplex at East Glacier will be located in the maintenance yard behind the district's main features and near existing buildings of similar mass and scale.
- Parking areas will accommodate no more than a single row of vehicles and will be along existing road segments in order to minimize visual impacts on the historic districts.
- Landscaping and revegetation will be used to reduce the visual impacts of the new residences on the historic districts.
- With the exception of some overlap at the northwest corner, the new infrastructure will be located outside the boundary of the Swiftcurrent Ranger Station Historic District.
- The existing west entry to the Swiftcurrent Loop Road (from the campground) will be closed, and the original north entry to the Swiftcurrent Ranger Station Historic District will be restored to its historic condition and reopened.
- Both historic districts will be photographically documented using National Register digital photography standards before and after construction. Photo prints and digital files will be archived in Glacier National Park's archives.
- Glacier National Park will continue to seek funding for preparation of Cultural Landscape Reports for both historic districts.

Wildlife, Habitat, and Threatened Wildlife Species

- Storage requirements for food, garbage, and other attractants will be strictly enforced during both the construction period and when the housing area is in use.
- Construction crews will be trained on attractant storage regulations and appropriate behavior in the presence of wildlife. The handbook "*Bear Safety, Site Sanitation and Other Requirements While Working in Glacier National Park: a Handbook for Construction Contractors*" will be provided to all contractors and work crews.
- During construction, park staff (e.g. wildlife technicians and law enforcement rangers) will monitor work and staging areas.
- The fourplex will be located at least 30 feet (9 meters) from the west boundary of the wildlife connectivity area in order to minimize disturbance and displacement of wildlife.
- Any infrastructure east of the fourplex at Swiftcurrent will be limited to an entry sidewalk (i.e. there will be no parking or other outdoor facilities, such as picnic tables, east of the fourplex).
- No construction activity or staging will be permitted within the wildlife connectivity area, except for temporary work necessary to connect the fourplex to the existing utility line that already bisects the connectivity area. Otherwise, all construction activity will occur west of the wildlife

connectivity area. The west boundary of the wildlife connectivity area at Swiftcurrent will be flagged to discourage entry.

- Native vegetation east of the fourplex will be retained.
- Additional vegetation will be planted within the 10-meter buffer zone on the west side of the wildlife connectivity area to increase screening, absorb/disperse disturbance effects, and limit human use to foot traffic between the fourplex and the connectivity area.
- The remnant trailer pads in the wildlife connectivity area at Swiftcurrent will be revegetated.
- No construction activity will occur at Swiftcurrent during the core wildlife security period, when the Many Glacier Road is closed to vehicle access for wildlife security between January 1 and March 31.
- Hours of outside construction will be limited to between 1 hour after sunrise and 1 hour before sunset. There will be no hourly limits on interior construction.
- Equipment will be inspected for fluid leaks prior to use. Leaking equipment will not be permitted in the park. Any equipment that develops leaks will be repaired immediately or removed from the park. Absorbent materials manufactured specifically for the containment and clean-up of hazardous materials will be kept onsite in case a spill should occur.
- Contractors will provide portable toilets for construction workers. All portable toilets onsite during construction will be securely anchored to prevent them from blowing or tipping over. Toilet fluids will be fully contained. In the event of a spill, all contaminated fluids will be contained, collected and disposed of.

Natural Soundscapes and Air Quality

- Equipment operators will be encouraged to limit idling time to no longer than 15 minutes.
- Whenever possible, employees will be offered housing near their duty areas to reduce commuting and associated greenhouse gas emissions.

Vegetation and Soils

- Construction areas will be flagged to minimize impacts to vegetation.
- Parking areas will accommodate no more than a single row of vehicles and will be along existing road segments in order to minimize loss of vegetation.
- Topsoil will be evaluated for non-native invasive plant infestations. Heavily infested topsoil will be removed. Non-infested topsoil will be salvaged, stored according to Glacier National Park soil conservation guidelines, and used on site once construction is complete.
- Small trees and shrubs will be salvaged before construction and replanted in disturbed areas after construction.
- Erosion control measures will be implemented, such as silt fencing.
- After construction, compaction and further erosion will be mitigated by aerating disturbed ground and replanting/reseeding with native vegetation, and performing non-native invasive plant control.
- Native trees will be planted at the east end of the Many Glacier Campground to retain vegetative screening and minimize the effects of cleared forest in the adjacent Swiftcurrent housing area.
- At East Glacier, areas adjacent to the duplex will be landscaped with native plants.

Archeological and Ethnographic Resources

- Excavation will be monitored by an archeologist; if cultural resources are discovered, excavation will cease immediately and the park's Cultural Resources staff will be notified. Due to the possible presence of an historic maintenance dump site beneath the compound, the East Glacier project area will be surveyed prior to ground disturbing activities. If cultural data recovery is necessary, ground disturbing activities will cease until the data is recovered.
- Tribes hold a body of knowledge that may result in the identification of ethnographic resources in the area in the future. If ethnographic resources are identified later, consultation will occur in accordance with federal legislation and regulations and NPS policy.
- Should construction unearth cultural resources, work will be stopped in the area of discovery and the park will consult with the State Historic Preservation Officer (SHPO) and the Tribal Historic Preservation Officers (THPO) in accordance with §36 CFR 800.13, Post Review Discoveries. In the unlikely event that human remains are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act (1990) will be followed.
- All contractors and subcontractors will be informed of the penalties for collecting artifacts or intentionally damaging paleontological materials, archeological sites, or historic properties.

Lightscape Management and Night Skies

- Outdoor lighting associated with the residences will be for safety only and directed toward the buildings.
 - Only full cut off or lighted bollards with timers will be installed for safety.
 - At Swiftcurrent, exterior light fixtures will be oriented so that no artificial light spreads into the wildlife connectivity area.

Visual Resources

- New construction will be designed to blend with existing structures as much as possible through similar architectural features, materials, and color.
- Existing vegetation will be preserved and landscaping will be done to screen the new infrastructure as much as possible.

Alternatives Considered

Two alternatives were evaluated in the EA including the no action alternative and one action alternative. Under the No-Action Alternative (No New Housing), the NPS would not replace housing lost from the removal of ten dilapidated trailers (providing 23 beds) from the St. Mary housing area. No replacement housing would be built, and double occupancy would continue in existing quarters.

The Construct Replacement Housing at Swiftcurrent and East Glacier Alternative is the Selected Alternative as described in the previous section.

Why the Selected Action Will Not Have a Significant Effect on the Human Environment

CEQ regulations at 40 CFR Section 1508.27 identify 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 impacts for any of the criteria. The criteria most relevant to this EA are addressed more fully below.

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 Selected Action will result in some adverse impacts and some beneficial impacts; however, it will not result in any significant adverse impacts.

Summary of Adverse Impacts

There may be some adverse impacts to park operations for employees whose duty station is St. Mary but who are housed outside of St. Mary, because longer commutes (approximately 21 miles between St. Mary and Swiftcurrent; approximately 30 miles or more between St. Mary and East Glacier) and a disrupted sense of community could adversely affect employee morale, which could discourage some long-time seasonal employees from returning and have temporary adverse impacts on park operations that have benefitted from those employees' skills and experience. The park will reduce commuting by offering employees housing near their duty stations whenever possible. Park operations overall are expected to continue normally. Construction activity will disrupt housing communities in Swiftcurrent and East Glacier for an estimated total of six months for each structure (with construction months possibly occurring non-consecutively).

The mass and scale of the new structures will be out of proportion with existing buildings in the Swiftcurrent Ranger Station and East Glacier Ranger Station Historic Districts, which will lead to a negative visual effect and adverse impacts to historic structures and cultural landscapes. The visibility of the new buildings and the removal of vegetation within an approximately 0.3-acre area at the building sites will alter landscape characteristics and intrude on rustic aesthetics. The new duplex at the East Glacier Ranger Station Historic District will also likely influence circulation patterns within the maintenance yard, but the yard's essential function will remain unchanged. There will be temporary non-historic audible impacts to both historic districts during the construction period. Permanent non-historic audible impacts may also occur at both sites, but are not expected to differ much from existing human-caused noise levels. Project design and mitigation measures will ensure that the action does not affect the architectural and historical significance of the districts and their contributing structures, and the integrity of the historic districts will not be affected to the degree that their eligibility for listing in the National Register of Historic Places (NRHP) is affected.

Adverse impacts to wildlife will result from potential disturbance effects during the construction period and from the addition of more seasonal residents to the Swiftcurrent housing area. Effects to wildlife are not likely to increase significantly beyond existing levels, however, since the project will occur in an already developed area with typically high levels of human activity. Impacts will also not affect wildlife species at the population level. During winter, wildlife will be able to utilize surrounding habitat with minimal, if any, human-caused disturbances or displacement. The overall development footprint at the housing area will increase by approximately 0.6 acre, but will not encroach into the approximately 2-acre wildlife connectivity area immediately east of the project area. The potential for some increase in traffic on the Many Glacier Road will put wildlife at a greater risk of injury or mortality from motor vehicles; the increased level of risk will be small, however, relative to that associated with existing traffic volumes, with no population-level effects. Adverse effects on wildlife at East Glacier will be negligible or less because the project area is in town on an approximately 2-acre lot, with very little usable wildlife habitat.

Adverse impacts to Canada lynx could result from increased residential activity in the Swiftcurrent housing area, and lynx could be disturbed or displaced during the construction period. The development footprint will increase by approximately 0.6 acre, but will be confined to relatively small patches of undisturbed ground of little to no habitat value for lynx within the existing developed area. The project therefore will not create additional physical fragmentation of critical lynx habitat. Lynx could be displaced from the connectivity area and funneled to other foraging areas and travel corridors, which may expose them to increased risk of predation or interactions with humans. During the core security wildlife period between January 1 and March 31, when vehicle access to the Many Glacier Valley is restricted,

lynx will be able to use the wildlife connectivity area without disturbance. Displacement effects are not be expected to impact lynx at the population level because lynx in the Many Glacier Valley belong to a parkwide population that utilizes habitat throughout the park. The small, incremental increase in disturbance will not appreciably alter habitat characteristics and prey densities in the area, and Many Glacier supports some of the highest snowshoe hare densities in the park. Other research has suggested that lynx are relatively tolerant of human disturbance and that prey availability is more important in terms of maintaining habitat viability and population sustainability. The East Glacier project area does not contain habitat for lynx, and lynx will not be affected by the construction of the duplex.

There will be little if any change in the degree to which grizzly bears are adversely impacted at the Swiftcurrent housing area, since the project will occur within an existing developed area with typically high existing levels of human activity. Grizzly bears are discouraged from using the Swiftcurrent housing area in accordance with the Management Situation 3 designation for developed areas, where grizzly habitat maintenance and improvement are not the highest management considerations, grizzly bear presence is actively discouraged, and any grizzly involved in a grizzly-human conflict is controlled. The wildlife connectivity area, also within Management Situation 3, is presumed to be minimally used by grizzly bears. The potential for an increased risk to grizzlies of human habituation or conflict is low due to bear management practices and food and attractant storage requirements. Construction of the duplex at East Glacier will not affect grizzly bears, as bears are unlikely to venture into the town and are actively discouraged from frequenting the NPS developed area there.

Adverse impacts to vegetation and soils will result from the disturbance of approximately 0.8 acre in the Swiftcurrent housing area. Impacts will primarily occur on previously disturbed and restored ground, but undisturbed ground and areas where disturbance has not occurred for some time will also be affected. An estimated 25% of the disturbed area will be temporarily impacted by construction activity then revegetated and restored. The loss of 0.6 acre will have less than negligible effects on soils and vegetation because it will occur within an approximately 40-acre developed area that is part of a non-contiguous, 75-acre development footprint along the Many Glacier Valley floor, and because the surrounding Many Glacier Management Area is over 65,000 acres of otherwise largely undeveloped land. Adverse impacts will not affect plant species at the population level because the disturbance will be localized to the building sites and the species affected are present throughout the Swiftcurrent area. No sensitive plants will be affected. Construction at East Glacier will occur entirely within the previously disturbed parking area, with no new disturbance and no negative impacts.

Summary of Beneficial Impacts

Relocating seasonal housing from over-crowded living conditions in St. Mary to more appropriate housing will benefit housing operations by reducing the need for employees to share quarters and/or seek housing outside the park. Most private market housing on the east side of the park is costly, in poor condition, or is outside the 60-minute commute identified in the park's Housing Needs Assessment. The new housing will accommodate future staff increases and facilitate the process of making housing arrangements. Mission-critical east side park operations, including resource protection, facility maintenance, and visitor services, will benefit because the new housing will help maintain the workforce necessary to continue those operations. Positive effects on employee morale, created by offering safe and functional housing, will improve the likelihood that seasonal employees will return, thereby maintaining a stable workforce with the necessary skills and experience.

Restoring the historic entry to the Swiftcurrent Ranger Station Historic District will benefit the site's cultural landscape by restoring historic circulation patterns. Landscaping and the addition of native vegetation to the duplex site at the East Glacier Ranger Station Historic District will also have positive impacts to the cultural landscape.

Closing and revegetating the existing entry road to the Swiftcurrent Ranger Station Historic District will benefit vegetation and soils by restoring native vegetation to disturbed ground. Landscaping with native

vegetation near the new residences will benefit visual aesthetics, protect soil function, reduce the potential for non-native weed infestation, and provide habitat for pollinating insects. Landscaping near the duplex at East Glacier will result in the addition of up to an estimated 0.25 acre of native vegetation to the site, with similar benefits.

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 Swiftcurrent building sites are adjacent to the Swiftcurrent Ranger Station Historic District, with a slight overlap at the northwest corner. The historic district was listed in the NRHP in 1986, and is significant for its unusual design and materials and because all the buildings were built within a year of each other. All twelve original buildings are features contributing to the district's significance. Cultural landscape characteristics were not addressed in the 1986 NRHP nomination. However, in addition to the original buildings, rustic setting, and forested viewshed, the historic district includes several cultural landscape features, such as flagstone paths, a children's play area, barbecue area, and horseshoe pit. (Effects to historic structures and cultural landscapes in the Swiftcurrent Ranger Station Historic District are previously described in this document under *Impacts that may be both beneficial and adverse.*)

The East Glacier building site is within the East Glacier Ranger Station Historic District. The historic district is part of the NPS developed area established at East Glacier in the early 1920s as an administrative complex at Glacier Park Station (the original name of the town of East Glacier). The district was listed in the NRHP in 1986. Prior to the construction of Highway 2 and the Going-to-the-Sun Road, the East Glacier Ranger Station was the main administrative site for the east side of the park. Nine of the district's ten buildings are contributing features. The historic buildings contribute to the architectural significance of the site, as the materials and design are characteristic of many NPS rustic buildings built in the 1920s and 1930s. Cultural landscape characteristics were not addressed in the 1986 NRHP nomination. Landscape features include the spatial arrangement of the historic buildings, circulation, and a forested viewshed. (Effects to historic structures and cultural landscapes in the East Glacier Ranger Station Historic District are previously described in this document under *Impacts that may be both beneficial and adverse.*) An historic maintenance dump site may also be present beneath the compound; the East Glacier project area will be surveyed prior to ground disturbing activities, and excavation will be monitored by an archeologist.

The Many Glacier Valley is an ecologically critical area made up of diverse and productive habitat types that support many wildlife species year-round, including the federally listed Canada lynx and grizzly bear. The Swiftcurrent housing area (and project area) is located near the head of the valley, adjacent to an approximately two-acre area of undeveloped mature lodgepole pine forest that may serve as an important travel corridor for wildlife making a north-south traverse of the valley. (Effects to wildlife, Canada lynx, and grizzly bears are previously described in this document under *Impacts that may be both beneficial and adverse.*)

The Swiftcurrent and East Glacier project areas are entirely outside recommended wilderness, there are no wetlands within the project areas, and no farmlands or wild and scenic rivers within the geographic area.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

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 in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

Adverse impacts to the Swiftcurrent Ranger Station Historic District and the East Glacier Ranger Station Historic District are previously described in this document under *Impacts that may be both beneficial and adverse*. The new structures will be out of mass and scale with existing structures in the Swiftcurrent Ranger Station Historic District, and the project will have an “adverse effect” under Section 106 of the National Historic Preservation Act (NHPA). Building and site design will be as compatible as practicable with the historic architectural characteristics of the historic districts; the two-story eightplex at Swiftcurrent and the duplex at East Glacier will be located near existing buildings of similar mass and scale; with the exception of some overlap at the northwest corner, the new infrastructure will be located outside the boundary of the Swiftcurrent Ranger Station Historic District; parking areas will accommodate no more than a single row of vehicles and will be along existing road segments; the existing west entry to the Swiftcurrent Loop Road (from the campground) will be closed, and the original north entry to the Swiftcurrent Ranger Station Historic District will be restored to its historic condition and reopened; disturbed areas will be restored and revegetated and areas adjacent to the new infrastructure will be landscaped with native vegetation; both historic districts will be photographically documented using National Register digital photography standards before and after construction, and photo prints and digital files will be archived in Glacier National Park’s archives; and Glacier National Park will continue to seek funding for preparation of Cultural Landscape Reports for both historic districts. The project will not affect either historic district’s eligibility for listing in the NRHP.

On July 3, 2012, Glacier National Park notified the Montana State Historic Preservation Office (SHPO) of the project in accordance with 36 CFR 800. The NPS discussed the project and the preliminary finding of effect with the SHPO on August 5, 2015. The park sent the EA and a letter documenting its findings to the SHPO on December 17, 2015. The SHPO concurred with the park’s determination of “adverse effect” on December 18, 2015. A Memorandum of Agreement (MOA) between Glacier National Park and the Montana SHPO documenting mitigation requirements for the adverse effect to the Swiftcurrent Ranger Station and East Glacier Ranger Station Historic Districts was signed by the SHPO on February 5, 2016.

The park also notified the Advisory Council on Historic Preservation of the adverse effect finding in a letter dated December 17, 2015, which was copied to the Montana SHPO. The park did not receive a response from the Council. As required under Section 106, the park transmitted the signed MOA to the Council on February 24, 2016.

The Areas of Potential Effect were previously surveyed for archeological resources and none were identified. A more recent survey was conducted at Swiftcurrent and no archeological resources were identified. Excavation will be monitored by an archeologist; if cultural resources are discovered, excavation will cease immediately and the park’s Cultural Resources staff will be notified. The East Glacier Ranger Station compound will be surveyed prior to ground disturbing activities.

The project will not result in the loss of significant scientific, cultural, or historical resources.

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 of 1973.

Adverse impacts to the federally listed threatened Canada lynx (*Lynx canadensis*) and grizzly bear (*Ursus arctos horribilis*) are previously described in this document under *Impacts that may be both beneficial and adverse*. At Swiftcurrent, Canada lynx could be disturbed or displaced during the construction period and due to increased residential activity in the housing area. The project will not create additional physical fragmentation of critical lynx habitat, displacement effects are not be expected to impact lynx at the population level, and the small, incremental increase in disturbance will not appreciably alter habitat

characteristics and prey densities in the area. The East Glacier project area does not contain habitat for lynx, and lynx will not be affected by the construction of the duplex.

Grizzly bears are discouraged from using the Swiftcurrent housing area in accordance with the Management Situation 3 designation for developed areas, where grizzly habitat maintenance and improvement are not the highest management considerations, grizzly bear presence is actively discouraged, and any grizzly involved in a grizzly-human conflict is controlled. The housing at Swiftcurrent will be constructed within an existing developed area with typically high existing levels of human activity, and there will be little if any change in the degree to which grizzly bears are affected. Construction of the duplex at East Glacier will not affect grizzly bears, because bears are unlikely to venture into the town and are actively discouraged from frequenting the NPS developed area.

The project will not impact the federally listed threatened bull trout (*Salvelinus confluentus*) or bull trout habitat. There is no designated critical bull trout habitat in the vicinity of the Swiftcurrent project area, the proposal will not involve instream work or result in impacts to streams or lakes, and the East Glacier project area is not located near any streams or water bodies.

While present in Flathead County, there are no known locations of the threatened Spalding's catchfly (*Silene spaldingii*) or the threatened water howellia (*Howellia aquatilis*) within Glacier National Park. There are no recorded observations of the species in the vicinity of the project areas, nor is there suitable habitat that could potentially support the species. If locations of listed plant species become known within the vicinity of the project areas, the plants will be avoided.

Habitat for the meltwater stonefly (*Lednia tumana*), a candidate species, does not exist within or near the Swiftcurrent housing area or the NPS developed area in East Glacier. The meltwater stonefly will therefore not be affected by the project.

The Swiftcurrent housing area and East Glacier developed area are too low in elevation to support whitebark pine (*Pinus albicaulis*), a candidate species, and the species does not occur at either site. Whitebark pine will therefore not be impacted.

The Endangered Species Act (ESA) section 7 determination of effects are "may affect, not likely to adversely affect" for Canada lynx and grizzly bears and "no effect" for bull trout, water howellia, and Spalding's catchfly. Glacier National Park initiated informal consultation with the US Fish and Wildlife Service (USFWS); the EA, a biological assessment (BA) addressing effects to grizzly bears, Canada lynx, and critical lynx habitat, and a letter requesting concurrence with the determination of effects were sent to the USFWS on December 14, 2015. On January 7, 2016, the USFWS concurred with the determination of "may affect, not likely to adversely affect" for Canada lynx and grizzly bears. On January 14, 2016, the park consulted with the USFWS regarding a minor adjustment to one of the BA's conservation measures, which changed the limitation on the hours of outside construction at Swiftcurrent from 8 am-5pm to 1 hour after sunrise and 1 hour before sunset (see *Text Changes* in Errata, attached to this document). The change does not change the effects determinations in the BA. The USFWS replied on January 19, 2016, stating that the change does not change their concurrence with the effects determinations.

State-listed species of concern may use the Swiftcurrent project area, and some individuals may be displaced during construction and/or by the presence of additional residents. The project site is within a developed area, however, where habitat quality is already affected by infrastructure and high levels of human activity. The project will not measurably increase existing impacts, and none of the impacts will affect state-listed species of concern at the population level. The East Glacier project area is on a developed lot in town, and the small amount of habitat is unlikely to support species of concern. Impacts to state listed species of concern were dismissed from further analysis in the EA. Information on state listed species of concern was provided by the Montana Natural Heritage Program in a report dated February 25, 2015.

Public Involvement and Native American Consultation

The EA was made available for public review and comment during a 30-day period ending January 19, 2016. A press release was distributed to several media outlets and a letter announcing the availability of the EA was mailed to individuals and organizations on the park's EA mailing list, including members of Congress and various federal, state, and local agencies. Hard copies of the EA were also mailed to several individuals. An email announcement was sent to a number of interested parties with a link to the EA on the NPS Planning, Environment, and Public Comment (PEPC) website.

Glacier National Park notified the Confederated Salish and Kootenai Tribes (CSKT) and the Blackfoot Tribal Business Council as required by 36 CFR 800. The EA was sent to the Blackfeet and the Confederated Salish and Kootenai Tribes on December 17, 2015; neither tribe raised concerns about the action.

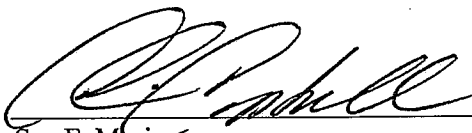
Twenty-one letters were received during the EA public review period. The remaining three letters were agency correspondence from the USFWS, the Montana SHPO, and the US Army Corps of Engineers. Comments that were substantive or otherwise warranted a response are addressed in the Errata Sheets attached to this FONSI. The FONSI and Errata Sheets will be sent to all commenters, and the FONSI will be made available to the public on PEPC.

Conclusion

As described above, the Selected Alternative does not constitute an action meeting the criteria that normally require preparation of an environmental impact statement (EIS). The Selected Alternative will not have a significant effect on the human environment in accordance with Section 102(2)(c) of NEPA.

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

Approved:


for Sue E. Masiea
Director, Intermountain Region, National Park Service

3/10/14
Date

Errata Sheets
Construction of Park Housing at East Glacier and
Swiftcurrent Developed Areas
Glacier National Park

TEXT CHANGES

A number of text changes have been made to the EA to: clarify that accepting NPS employment and park housing is a choice; clarify that employees will be housed near their duty station whenever possible; revise the discussion on socioeconomics; clarify the intensity of impacts on natural soundscapes and climate change, and include emissions in the discussion of air quality; make a minor adjustment to a mitigation measure for wildlife; include mitigation measures agreed to in the Memorandum of Agreement with the SHPO (measures that were included in the EA's discussion of the alternative but were not listed as mitigation); add mitigation measures for park operations/socioeconomics and air quality; clarify the construction time period; clarify a dismissed alternative (Table 1); add a reference to the References section; and correct minor editorial or typographical errors. Italicized and underlined text indicates the section in the EA that has been altered. Strike-out is used to show text that has been stricken; bold text is used to show new text.

p. 1, paragraph 2: under Introduction in Purpose and Need

Many seasonal employees ~~require~~ **desire** housing within the park.

p. 2, paragraph 2: under Background in Purpose and Need

Inadequate housing on the east side of the park has contributed to low employee morale, and may influence some seasonal employees' decision not to **accept employment** or return.

p. 4, paragraph 2: under Background in Purpose and Need

Given the legal, policy, and life-safety prohibitions on building housing infrastructure at St. Mary; ~~however,~~ and the infeasibility of establishing housing outside the park, the Swiftcurrent housing area and East Glacier NPS compound have emerged as the best options.

p. 4, paragraph 5: under Air Quality in Impact Topics Dismissed from Further Analysis

After construction, there would be some emissions associated with the structures due to utility use and building maintenance **and some emissions from commuting.**

p. 5, paragraph 1: under Environmental Justice in Impact Topics Dismissed from Further Analysis (The stricken text below was incorrectly included under Environmental Justice. The discussion of commuting costs has been moved to Socioeconomics.)

Environmental Justice

If the proposed action is implemented, 18 east side employees (or up to 36 if the maximum possible number of employees share quarters in the new residences), could be required to commute between St. Mary and Swiftcurrent, and up to 4 employees may need to commute between St. Mary and East Glacier. This would be approximately 5 percent (maximum of 12 percent) of seasonal employees in the park, and 4 percent (maximum of 7 percent) of staff overall. The commutes would be less than 60 minutes one way, which is considered reasonable according to the park's Housing Needs Assessment (LMI 2012). Affected employees would be negatively impacted because of an increase in living expenses; this would likely be felt most by seasonal employees, who are within the lowest pay bands in the park. The increase in living expenses would not undermine the overall financial benefit of employment with the park, however. Also, seasonal employment does not usually meet year-round living expenses, and seasonal employees have the ability to pursue other income opportunities for the remaining months of the year. Residential quarters would not be assigned ~~offered~~ to NPS employees on the basis of race or income, and the construction workforce would be hired in accordance with federal law and contracting law and procedures. For these

reasons, Alternative B would not cause disproportionately high or adverse effects on minority or low-income populations.

p. 5, paragraph 3: under Socioeconomics in Impact Topics Dismissed from Further Analysis

Socioeconomics

The project would result in an overall socioeconomic benefit to park employees by providing appropriate, functional, and affordable housing.

There could also be negative socioeconomic impacts to some employees who need to commute. If the proposed action is implemented, up to 18 east side seasonal employees (or up to 36 if the maximum possible number of employees share quarters in the new residences), may need to commute between St. Mary and Swiftcurrent, and up to 4 seasonal or permanent employees may need to commute between St. Mary and East Glacier. This would be approximately 5 percent (maximum of 12 percent) of seasonal employees in the park, and 4 percent (maximum of 7 percent) of staff overall. Those employees who are duty stationed at or near Swiftcurrent or East Glacier, however, would receive preference for housing in these areas whenever possible, as would those employees without daily commutes and lower graded employees. Because of this, the overall percentage of commuting employees is expected to be lower than would be the case if all employees needed to commute from their housing areas to their duty stations. Commutes would be less than 60 minutes one-way, which is considered reasonable according to the park's Housing Needs Assessment (LMI 2012).

Affected employees would be negatively impacted by the cost of commuting expenses, which would likely be felt most by seasonal employees within lower pay bands. However, as noted, the proposed action includes giving lower graded employees preference for housing near their duty station whenever possible, which would lessen negative socioeconomic effects to lower-graded seasonal employees. The cost of commuting expenses would not undermine the overall financial benefit of employment with the park. Also, for those employees who choose to accept NPS housing with a commute, rental and commuting expenses could be less than the rental and commuting costs incurred by employees who choose to find their own housing outside the park (as supported by a recent survey of comparable rentals in Cut Bank, which were higher than park housing rates [High Plains Realty, 2014]). Renting on the private market also often comes with a 6-month lease agreement and deposit, which are not required with NPS housing. Additionally, seasonal employment does not usually meet year-round living expenses, and the project would not interfere with the ability of seasonal employees to pursue other income opportunities. For all of the above reasons, adverse socioeconomic impacts on seasonal employees would be negligible.

~~There would be no appreciable change to socioeconomics under either alternative.~~ The project would also not change visitor numbers, and park concession operations and local businesses would not be impacted. There could be small increases in gasoline sales in the local community due to more employees commuting to work, but not to the extent that business revenue would be noticeably affected. There could be some decrease in rental and real estate income to the local community but these opportunities have historically been minimal. Providing additional year-round housing for up to four people at the East Glacier NPS developed area could possibly augment business revenues in the nearby community, but is not expected to measurably increase business revenues.

In summary, there would be an overall socioeconomic benefit to park employees by providing appropriate, functional, and affordable housing and no or not measurable impacts on concession operations and local businesses. There would be adverse socioeconomic impacts on some, primarily seasonal, employees, but these impacts would be negligible due to the park's efforts to keep commuting at a minimum by offering employees housing near their duty station whenever possible, the small percentage of park staff who would be affected by commuting, and the fact that the cost

of commuting expenses would not undermine the overall financial benefit of employment with the park.

p. 5, paragraph 4: under Special Status Species, Bull Trout, in Impact Topics Dismissed from Further Analysis

Some portions of the Swiftcurrent drainage in the Many Glacier Valley have recently been designated as **Proposed Designated** Critical Habitat (USFWS 2010), but they do not include reaches in the vicinity of the Swiftcurrent project area.

p. 6, paragraph 8: under Climate Change in Impact Topics Dismissed from Further Analysis

Any new GHG emissions would be ~~very small~~ **too slight to quantify** relative to those produced from visitor highway transportation within the park, and would make a negligible contribution to the park's overall emissions profile.

p. 6, paragraph 7: addition to Natural Soundscapes under Impact Topics Dismissed from Further Analysis

Employee commuting would be kept to as low a level as possible and noise from additional traffic would be too slight to quantify relative to that from existing traffic. Any increase in human-caused noise would therefore be negligible.

p. 10, paragraph 1: under Alternative B – Construct Replacement Housing at Swiftcurrent and at the East Glacier NPS Developed Area (Proposed Action and NPS Preferred), Swiftcurrent, in Alternatives

Housing at Swiftcurrent would provide quarters for at least 18 and up to 36 seasonal employees, depending on the number of employees assigned to each unit. **The park would offer housing at Swiftcurrent to employees working at Many Glacier or to employees without daily commutes (such as trail crews travelling to the backcountry for extended periods) whenever possible. Employees with duty stations outside of Many Glacier (such as St. Mary) may be housed at Swiftcurrent if other housing options near their duty station are not available. Lower graded employees would be given preference for housing near their duty station whenever possible.** Housing would be available during the summer season, approximately 4.5 months per year, with access dependent on wildlife closures and weather.

p. 10, paragraph 3: under Alternative B – Construct Replacement Housing at Swiftcurrent and at the East Glacier NPS Developed Area (Proposed Action and NPS Preferred), East Glacier, in Alternatives

New housing at East Glacier would provide quarters for at least two and up to four employees, and would be available year-round. **As with Swiftcurrent, the park would offer housing at East Glacier to employees with nearby duty stations or to employees without daily commutes whenever possible; lower graded employees would be given preference for housing near their duty station whenever possible.**

p. 10, paragraph 4: under Alternative B – Construct Replacement Housing at Swiftcurrent and at the East Glacier NPS Developed Area (Proposed Action and NPS Preferred), in Alternatives

Construction would take an estimated **total of six months** for each building **(the fourplex and eightplex at Swiftcurrent and the duplex at East Glacier)**, with construction possibly occurring over non-consecutive months.

p. 11, additional mitigation measures for Park Operations and Socioeconomics

Park Operations and Socioeconomics

- **Employees would be offered housing near their duty stations whenever possible, and lower graded employees would be given preference for housing near their duty stations whenever possible.**

p. 11. additional mitigation measures under Historic Structures and Cultural Landscapes

- The two-story eightplex at Swiftcurrent would be located near (north of) housing built in the 1990s, near buildings of similar mass and scale. The duplex at East Glacier would be located in the maintenance yard behind the district's main features and near existing buildings of similar mass and scale.
- With the exception of some overlap at the northwest corner, the new infrastructure would be located outside the boundary of the Swiftcurrent Ranger Station Historic District.
- The existing west entry to the Swiftcurrent Loop Road (from the campground) would be closed, and the original north entry to the Swiftcurrent Ranger Station Historic District would be restored to its historic condition and reopened.
- Both historic districts would be photographically documented using National Register digital photography standards before and after construction. Photo prints and digital files would be archived in Glacier National Park's archives.
- Glacier National Park would continue to seek funding for preparation of Cultural Landscape Reports for both historic districts.

p. 12. 6th bullet under Wildlife, Habitat, and Threatened Wildlife Species in Mitigation Measures

Hours of outside construction would be limited to between 8 am and 5 pm 1 hour after sunrise and 1 hour before sunset. There would be no hourly limits on interior construction.

p. 12. additional mitigation measure under Natural Soundscapes and Air Quality

- Whenever possible, employees would be offered housing near their duty areas to reduce commuting and associated greenhouse gas emissions.

p. 13. additional mitigation measure under Archeological and Ethnographic Resources

- Excavation would be monitored by an archeologist; if cultural resources are discovered, excavation would cease immediately and the park's Cultural Resources staff would be notified. Due to the possible presence of an historic maintenance dump site beneath the compound, the East Glacier project area would be surveyed prior to ground disturbing activities. If cultural data recovery is necessary, ground disturbing activities would cease until the data is recovered.

p. 14. Table 1. Row 8 under Alternatives Considered and Dismissed

Install additional RV pads at St. Mary for employees who want to bring a personal RV.	Relying on additional RV pads to meet all east side housing needs would not be practical because only employees with personal RVs could be housed.
---	--

p. 21. paragraph 3: under Park Operations, Impacts of Alternative B, in Affected Environment and Environmental Consequences

Alternative B could also adversely affect morale for employees faced with longer commutes (approximately 21 miles between St. Mary and Swiftcurrent; approximately 30 miles or more between St. Mary and East Glacier) to their duty station. Some seasonal employees living at St. Mary have also raised concerns about a disrupted sense of community from moving away from friends and a familiar place if they are asked to live elsewhere. Construction activity would temporarily disrupt housing communities in Swiftcurrent and East Glacier for an estimated total of six months for each structure (with construction months possibly occurring non-consecutively); changes to the neighborhood from the addition of new buildings, new residents, and increased activity would be permanent, but only noticeable to employees housed at Swiftcurrent and East Glacier prior to the addition of the new residences. These concerns could

Construct Park Housing at East Glacier and Swiftcurrent Developed Areas

discourage some long-time seasonal employees from returning, which would temporarily impact park operations that have benefitted from their skills and experience. **As part of the proposed action, the park would offer housing at Swiftcurrent and East Glacier to employees with duty stations nearby whenever possible, or to employees without daily commutes (such as trail crews travelling to the backcountry for extended periods). Lower graded employees would also be given preference for housing near their duty station whenever possible. These measures combined with the overall benefit from improved housing would minimize negative impacts to park operations such that, aside from a temporary adjustment period due to new commuting schedules and logistics for some employees, but overall, park operations are expected to would continue normally.**

p. 22, paragraph 1: under Park Operations, Impacts of Alternative B, Conclusion, in Affected Environment and Environmental Consequences

New housing at Swiftcurrent and East Glacier would directly benefit housing operations on the east side of the park by relieving over-crowded living conditions and providing safe, functional, reliable housing. Mission critical park operations would benefit, as the new housing would support the workforce they depend upon and would have positive effects on employee morale. There could be temporary adverse effects to park operations as employees adjust to commutes and changes to residential communities, but overall park operations are expected to continue normally. Cumulatively, the preferred alternative would increase beneficial impacts to housing and park operations. **As part of the proposed action, the park would offer housing at Swiftcurrent and East Glacier to employees with duty stations nearby whenever possible, or to employees without daily commutes (such as trail crews travelling to the backcountry for extended periods). Lower graded employees would also be given preference for housing near their duty station whenever possible. These measures combined with the overall benefit from improved housing would minimize negative impacts to park operations such that, aside from a temporary adjustment period due to new commuting schedules and logistics for some employees, overall park operations would continue normally.**

p. 26, paragraph 2: under Historic Structures and Cultural Landscapes, Impacts of Alternative B, East Glacier Ranger Station Historic District, in Affected Environment and Environmental Consequences

Negative visual effects would be minimal, however, since the new building would be placed in the maintenance yard behind the district's main features and next to the equipment shop, which is the district's largest building.

p. 30, paragraph 3: under Wildlife, Impacts of Alternative B, in Affected Environment and Environmental Consequences

With potentially more employees commuting from Swiftcurrent to duty stations outside of Many Glacier, traffic on the Many Glacier Road could increase, putting wildlife at a greater risk of injury or mortality from motor vehicles. Depending on how many employees ~~are required~~ **need** to commute, **the worst case scenario could increase** traffic on the road ~~could increase~~ by up to 72 one-way vehicle trips per day, five days a week, perhaps more. **However, a traffic increase of this level is not expected because housing would be offered near employees' duty stations whenever possible, as described in the preferred alternative.**

p. 31, paragraph 4: under Wildlife, Impacts of Alternative B, Conclusion, in Affected Environment and Environmental Consequences

Construction activity, an increased number of residents in the Swiftcurrent housing area, and **the potential for increased traffic on the Many Glacier Road due to some commuting employees would result in some disturbance and displacement effects to wildlife.**

p. 35, paragraph 5; under Canada Lynx and Grizzly Bears, Impacts of Alternative B, Canada Lynx, in Affected Environment and Environmental Consequences

Prohibiting construction activity to between the hours of 8 a.m. and 5 p.m. **1 hour after sunrise and 1 hour before sunset** and other measures to protect the connectivity area (such as prohibiting staging or other construction activity within the area and clearly marking the boundary during construction) would minimize impacts to lynx and critical lynx habitat such that the wildlife connectivity area would be preserved for lynx use as much as possible.

p. 36, paragraph 1; under Canada Lynx and Grizzly Bears, Impacts of Alternative B, Canada Lynx, in Affected Environment and Environmental Consequences

As a result, lynx would not be forced to **move** around on the landscape to avoid human activity, and would expend less energy at a critical time of the year when they are recovering from the stress of winter.

p. 43, addition to References section of the EA.

High Plains Realty. 2014. Private rental market housing comparables for Cut Bank, MT. Copies on file at Glacier National Park Headquarters, Housing Management Office, West Glacier, MT.

RESPONSES TO COMMENTS

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.

Eleven letters received during public review of the EA contained comments that were considered substantive or otherwise warranted a response; comments are addressed below.

- 1. Comment:** A number of commenters raised concerns about safety hazards associated with commuting. Concerns included long commutes; driving into the sun (early blinding sunlight); the poor condition of the Many Glacier Road; winding, narrow roads; rock and debris slides; slippery roads during icy or snowy conditions; livestock and wildlife; precipitous drops with no guard rail; sharing the road with distracted visitors and/or reckless drivers; slow-moving vehicles; and a dangerous intersection with poor visibility at Babb; among others. Several commenters cited the Montana Department of Transportation "Level of Service Safety 4" category for US 89 and State Highway 49 (routes between St. Mary, Many Glacier, and East Glacier) as within the state's highest hazard and accident rating, and asserted that the "commute safety" issue was not "adequately addressed" in the EA. One commenter stated that the Level of Service Safety 4 category is "representative of an 80% or greater accident experience compared to the average experience on Montana highways with similar roadway conditions and AADT ('Average Annual Daily Traffic')."

Response: *The potential hazards associated with travelling roads on the east side of the park (and on the west side) are not in dispute. Except for a response to a scoping comment on the issue (see Appendix A of the EA, under Alternatives, Suggestions, and Concerns from Public Scoping, Comment 1), the hazards associated with commuting were not addressed in the EA for the following reasons:*

Safety in the context of commuting is beyond the scope of the project. Some positions hired at Glacier have required occupancy and those employees will be provided housing at their duty station and will not commute. Other positions hired do not require the employee to live on site, but the NPS offers housing when it is available. Housing for these employees may involve a commute, but accepting employment and the conditions associated with it (including commuting) is the employee's choice. Commuting from a residence to an assigned duty station occurs outside

an employee's duty hours, and the NPS lacks authority to address safety issues in the context of commuting during personal time. Because the NPS is not responsible for safety issues that are exclusive to off-duty hours, safety was excluded as an impact topic (neither retained nor dismissed from further analysis).

Moreover, commuting is a common aspect of employment, the potential hazards associated with commuting on the east side of the park are not uncommon for rural and remote areas, and the project will not result in an unusual or unreasonable level of commuting. Commuting in the park, including on the east side, is not new. Since the removal of the trailers, employees with housing in St. Mary have commuted to Swiftcurrent and vice-versa. The park will offer employees housing near their duty station whenever possible such that all employees living in the new housing will not necessarily need to commute.

Safety in the context of commuting was also not analyzed in the EA because, while potential risks are always present with highway travel, an accident will not be a direct result of the project and/or is too indefinite, speculative, or unpredictable to be a reasonably foreseeable effect. (The Council on Environmental Quality [CEQ] NEPA Regulations 40 Code of Federal Regulations [CFR], 1508.8 defines effects as "Direct effects, which are caused by the action and occur at the same time and place", and "Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.")

2. **Comment:** A number of commenters raised concerns about the potential for increased costs to lower graded employees as a result of commuting. These concerns are fairly comprehensively described in the following comment:

"Using the federal mileage reimbursement rates, which takes into account the cost of gas and wear and tear on a car, an employee living in East Glacier and commuting to St. Mary incurs \$648/month (\$0.54 per mile at 30 miles, 2 times per day, 5 days per week, 4 weeks per month) if they are going by the shortest route possible over Looking Glass Pass, a dangerous road that is often closed in the early season, and can close periodically throughout the summer due to road sloughing (unstable glacial moraine), rock/mud/debris slides, snow and other unsafe road conditions. Has an evaluation been done of how many days per summer season that an employee would likely have to drive on the next shortest alternative route, because Looking Glass Pass (Hwy 49) was not open, a road which no jurisdiction claims ownership and maintenance of? Per month, the alternative (through Browning and taking the Starr School route (~43 miles) which would cost an employee \$929 per month (\$0.54 per mile at 43 miles, 2 times per day, 5 days per week, 4 weeks per month). If private housing rentals in the St. Mary area are in the \$750/month range, it does not appear that the East Glacier housing would be much, if any, of a cost savings to a seasonal employee, or could even be a greater expense, when you add park service rental costs to commute costs.

A similar evaluation of the Many Glacier to St. Mary commute also shows high commute cost: \$454/month (\$0.54 per mile at 21 miles, 2 times per day, 5 days per week, 4 weeks per month). With the horrific condition of the Many Glacier Road, the actual wear and tear cost on a car could be assumed to be even higher than accounted for by the federal mileage allowance. Add to this cost the cost of the NPS housing rental, and the economic cost to an employee is a significant burden.

This cost burden would fall on low-graded seasonal employees - GS-03 to GS-07, with the primary impacts on those employees in the GS-03 to GS-05 range. The EA states 'the increase in living expenses would not undermine the overall financial benefit of employment with the park [...] Also, seasonal employment does not usually meet year-round living expenses, and seasonal employees have the ability to pursue other income opportunities for the remaining months of the

year.' Has research or surveys been conducted to back up this conclusion? Subtracting the commute costs outlined above, as well as other living expenses (groceries, rent, etc) from a seasonal employee's salary would be a substantial burden. From my experience as a seasonal in both Many Glacier and at Two Medicine, many seasonals are in school, and this income would actually be the primary, if not sole, source of yearly income. For those who are out of school and "have the ability to pursue other income opportunities for the remaining months of the year," those income opportunities are often the lowest paid positions - very little seasonal work is paid well, and many employees who work seasonally work the winter in unskilled labor positions at winter seasonal operations such as ski resorts."

Response: *The EA acknowledges that employees who commute may be adversely affected by the cost of commuting expenses, and that the impacts will likely be most felt by lower graded seasonal employees. Impacts to socioeconomics were addressed and dismissed from further analysis on p. 5 of the EA, under Impact Topics Dismissed from Further Analysis. The issue was mistakenly included under the topic of Environmental Justice, and the discussion has been moved to Socioeconomics (see Text Change, p. 5, Environmental Justice and Socioeconomics under Impact Topics Dismissed from Further Analysis). The adverse effects of commuting are also acknowledged in the EA in the analysis of impacts to park operations (see p. 21 of the EA, Impacts of Alternative B in Affected Environment and Environmental Consequences, under Park Operations). See also the Response to Comment 1.*

Socioeconomic impacts were dismissed from further analysis because the impacts will be small in scale (there will be no community-level effects), and because the project will result in an overall benefit to park employees by providing appropriate housing. Additionally, the impacts are also not linked to natural or physical environmental effects—CEQ NEPA regulations state that social or economic impacts alone are not intended to require preparation of an EIS (section 1508.14); social and economic impacts of the action must be evaluated when they are interrelated with natural or physical environmental effects.

Incurring costs associated with commuting is a common aspect of employment for many workers (including NPS employees) at all pay levels. The park recognizes, however, that seasonal employment often comes with economic challenges. Text changes have been made on pp. 5, 10, 11, 12, 21, 22 and 30 of the EA to clarify that employees will be housed near their duty station whenever possible; lower graded employees will also be given preference for housing near their duty station whenever possible (see Text Changes, above). Required occupants will be housed at their duty stations.

3. **Comment:** A number of commenters suggested other alternative locations or approaches for housing, including "construction techniques that are used regularly in flood prone areas" or housing built off the ground with carports beneath the structures; building housing at Rising Sun; building housing at the 1913 Ranger Station; building on high ground near current housing; purchasing land in St. Mary; commuter vans; and more room for employee RVs at St. Mary.

Response: *These suggestions were considered and dismissed in the EA on Table 1, pp. 13-15, as well as in Appendix A, Alternatives, Suggestions, and Concerns from Public Scoping.*

4. **Comment:** "Does this mean that some St Mary/Logan Pass staff will have to make a daily commute from Many Glacier or Two Med?."

Response: *Park housing managers consider employee duty stations when offering housing, and will make every effort to offer employees housing near their duty station (i.e. employees with duty stations at St. Mary will be housed in remaining housing at St. Mary whenever possible; employees with duty stations at Many Glacier will be housed at Swiftcurrent whenever possible;*

etc.). Depending on operational needs and staffing levels, for example, as well as other variables, some employees who desire housing in the park may need to commute between St. Mary and Swiftcurrent or (less likely) East Glacier. Employees with duty stations at Logan Pass will not be housed in Swiftcurrent or East Glacier except under exceptional circumstances. As is currently the case, employees stationed at Logan Pass will drive a government vehicle (or ride as a passenger) on government time to the pass from St. Mary.

5. **Comment:** "Housing in Many Glacier should support IN-VALLEY staffing needs, which are deficient under current operations. Summer visitor demand exceeds operational support capacity. Visitor experience and resource management is suffering as a result. In my estimation, management will be forced to address the operational deficiency in Many Glacier in the coming years. When this day comes, will management approve more housing to be built?"

Response: *New housing at Swiftcurrent will support staffing needs in Many Glacier. While future housing is beyond the scope of this project, the new housing at Swiftcurrent and East Glacier is intended to address housing issues on the east side of the park, including the deficit at Many Glacier. The new housing may also be used to house employees with duty stations at St. Mary, but housing managers will make every effort to offer housing that is near an employee's duty station.*

6. **Comment:** "Areas that have already been sacrificed for human use should be used for these projects."

Response: *The new housing will be constructed within existing developed areas.*

7. **Comment:** "Only two alternatives are provided in the impact analysis: one action alternative and a no-action alternative. This appears to be pre-decisional, because it leaves the park with only one choice – build the housing proposed or go without adequate housing for staff (which the park states is [sic] non-tenable situation). This is not an adequate range of fully considered, reasonable alternatives."

Response: *Department of the Interior (DOI) NEPA Regulations 43 Code of Federal Regulations (CFR) Part 46, section 46.420(b) defines reasonable alternatives as "alternatives that are technically and economically practical or feasible and meet the purpose and need of the proposed action." Section 46.420(c) describes the range of alternatives as "all reasonable alternatives," as well as "alternatives that are eliminated from detailed study." The purpose and need of the action is to provide needed housing for NPS employees and begin implementing a decision in the park's 1999 GMP to relocate NPS infrastructure off the Divide Creek floodplain (see the Purpose and Need section of the EA). The EA process identified only one action alternative that meets the purpose and need of the project and is also technically and economically feasible. Legal, policy, and life-safety prohibitions on building infrastructure in the Divide Creek floodplain and the infeasibility of establishing housing outside the park led to the dismissal of other alternatives (see Alternatives Considered and Dismissed on pp. 13-15 of the EA).*

8. **Comment:** "It will be very hard to retain good employees in the St Mary area. Many will likely find the combination of the commute stress, commute hazards, and cost of the commute to be a significant disincentive for return employment. The few employees that have had to undertake this commute in the past have either found housing near their work area in a future season, relocated their work area, or not returned. Has documented research been conducted regarding retention ability of employees who have had to undertake this commute? Given my knowledge of seasonal staff on the east side of Glacier (having been a seasonal in the park for 7 years), St. Mary will likely suffer an extremely high turn-over rate of seasonal employees. Has a cost-benefit

analysis been conducted on lost work productivity and loss of institutional knowledge that high turn-over would cause?”

Response: *The EA considers both the beneficial and adverse effects to park operations, and acknowledges that concerns pertaining to commuting could discourage some seasonal employees from returning (see Impacts of Alternative B in the Affected Environment and Environmental Consequences chapter of the EA, under Park Operations, p. 21). But, adequate housing will benefit employee retention and morale, thereby benefitting east side park operations.*

9. **Comment:** “Has the impact to wildlife outside park boundaries been researched and adequately considered, in terms of risk that animals such as the endangered Grizzly Bear will be injured or killed by commuting employees? Impact that the physical structures pose has been considered, but it does not appear the risk to wildlife from commuters, especially commuters who are traveling in the early morning and late evening, when wildlife is most active and is most difficult to see, has been considered.”

Response: *The EA acknowledges an increased risk of mortality or injury to wildlife with potentially more employees commuting along the Many Glacier Road (see Impacts of Alternative B in the Affected Environment and Environmental Consequences chapter of the EA, under Wildlife, p. 30). As with the Many Glacier Road, the increased level of risk to wildlife on roads outside the park will be small relative to that associated with existing traffic volumes. Also, because the park will attempt to house employees near their duty stations whenever possible, commuting is not anticipated to reach a level that will measurably affect wildlife outside the park.*

10. **Comment:** “Has the cumulative impact of greenhouse gas emissions, as well as resource use and waste, been considered? Assuming an average of 50 miles per day per commuter (36 possible), 5 days a week over 16 weeks (4 month season), gives 144,000 additional miles driven by park employees each year.”

Response: *The EA addresses impacts associated with increased greenhouse gas (GHG) emissions on p. 6, under Impact Topics Dismissed from Further Analysis. As noted in this section of the EA, any new GHG emissions resulting from the proposed action will be too slight to quantify relative to those produced from visitor highway transportation within the park, and will make a negligible contribution to the park’s overall emissions profile. A cumulative impact is defined as the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions (40 CFR 1508.7). In terms of GHG, because the incremental impact of the proposed action will be too slight to quantify, the proposed action will not add to or in any way alter the cumulative impacts that have resulted from other past, present, and reasonably foreseeable future actions. Therefore, a discussion of cumulative impacts was determined not to be warranted for this topic.*

11. **Comment:** “Noise effects of an additional 144,000 miles driven by vehicles on roads both in and outside the park boundary is [sic] not a temporary negative impact to the natural soundscape, but the EA does not consider the cumulative effect of commuters on the natural soundscape.”

Response: *The EA addresses impacts to natural soundscapes on p. 6, under Impact Topics Dismissed from Further Analysis. Employee commuting will be kept to as low a level as possible and noise from additional traffic will be too slight to quantify relative to that from existing traffic. Any increase in human-caused noise will therefore be negligible. As noted in the response above, a cumulative impact is defined as the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such*

other actions (40 CFR 1508.7). As with GHG emissions, because the incremental impact of the proposed action on natural soundscapes will be too slight to quantify, the proposed action will not add to or in any way alter the cumulative impacts that have resulted from other past, present, and reasonably foreseeable future actions. Therefore, a discussion of cumulative impacts was determined not to be warranted for this topic.

- 12. Comment:** "In combination with the lack of a reasonable range of alternatives, it appears that the EA is inadequate as a final NEPA document, and is incorrect in its FONSI finding. A full EIS is a more appropriate environmental document as a next step."

Response: *The EA did not make a "FONSI finding". Please see response to Comment 7 regarding a reasonable range of alternatives. For a discussion on why there will be no significant impacts (and why an EIS is not necessary), please see the section in this FONSI on Why the Selected Action Will Not Have a Significant Effect on the Human Environment.*

- 13. Comment:** "My winter track surveys clearly show the travel corridor of wildlife through the developed area during the winter from one valley to the next. Swiftcurrent Lake is even more of a barrier during summer months forcing wildlife to choose between the open vegetation and activity of the Many Glacier Hotel or the Government Housing area and Swiftcurrent Picnic area with more vegetation for cover."

It was interesting to see how many tracks used the Swiftcurrent Creek Bridge between the Government Housing and Swiftcurrent Lake even when the creek was frozen. I assume that is because they use it in the summer season. Any tracks found in the Many Glacier Area where [sic] also found traveling through or near the Government Housing Area with the exception of Big Horn Sheep which stayed to the more open terrain near the Many Glacier Hotel and Mountain Goats which remained on the surrounding cliffs. Tracks seen include: Moose, Wolverine, Lynx, Mountain Lion and Wolf.

Because of the lay of the land I'm sure these same animals are using this travel corridor in the summer. Any loss of cover or increase of activity would erode this already busy corridor of humans and wildlife. I feel that housing in the St Mary Area would be a far better choice since the terrain is not as constricting for wildlife travel, besides being the location where the employees who need the housing will be working."

Response: *Winter track survey data was considered during the analysis of impacts to wildlife. However, due to the considerable decrease in human activity and associated disturbances in the Many Glacier Valley and Swiftcurrent area in winter (when the Many Glacier Road is closed to vehicle access), wildlife likely use the landscape differently than in summer, when human activity and vehicle traffic levels are high.*

Appendix: Non-Impairment Finding

National Park Service's *Management Policies, 2006* require analysis of potential effects to determine whether or not actions will 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 park, 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 park's 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; 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 national 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 National Park Service activities in managing the park, visitor activities, or activities undertaken by concessioners, contractors, and others operating in the park. The NPS's threshold for considering whether there could be an 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 relates back to park resources and values, and these impact areas are not generally considered 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, wildlife, Canada lynx and grizzly bears, and vegetation and soils.

Fundamental resources and values for Glacier National Park are discussed in the 1999 *General Management Plan*. All but one of the impact topics (park operations) carried forward in this 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 in the park's general management plan or other relevant NPS planning document.

- **Historic Structures and Cultural Landscapes**—The new residential structures will result in negative effects to the Swiftcurrent Ranger Station and East Glacier Ranger Station Historic Districts and is an adverse effect under Section 106 of the NHPA because the new buildings will be out of mass and scale with existing buildings, add non-contributing elements to the viewshed, and alter landscape characteristics. Building and site design will be as compatible as practicable with the historic architectural characteristics of the historic districts; with the exception of some overlap at the northwest corner, the new infrastructure will be located outside the boundary of the Swiftcurrent Ranger Station Historic District; the two-story eightplex at Swiftcurrent and the duplex at East Glacier will be located near existing buildings of similar mass and scale; parking areas will accommodate no more than a single row of vehicles and will be along existing road segments; the existing west entry to the Swiftcurrent Loop Road (from the campground) will be closed, and the original north entry to the Swiftcurrent Ranger Station Historic District will be restored to its historic condition and reopened; disturbed areas will be restored and revegetated and areas adjacent to the new infrastructure will be landscaped with native vegetation; both historic districts will be photographically documented before and after construction; and Glacier National Park will continue to seek funding for preparation of Cultural Landscape Reports for both historic districts. These design and mitigation measures will ensure that the project does not affect the architectural and historical significance of the districts and their contributing structures, and the integrity of the historic districts will not be affected to the degree that their eligibility for listing in the National Register of Historic Places (NRHP) is affected. Therefore, the Selected Action will not lead to an impairment of historic structures and cultural landscapes.
- **Wildlife**—The Selected Action will adversely impact wildlife due to potential disturbances during the construction period and the addition of more seasonal residents. The project will occur in already developed areas with typically high levels of human activity, however; impacts to wildlife are therefore not expected to increase much beyond existing levels. Impacts will also not affect wildlife species at the population level. The overall development footprint at the Swiftcurrent housing area will increase by approximately 0.6 acre, but will not encroach into the approximately 2-acre wildlife connectivity area immediately east of the project area. During winter, when the Swiftcurrent housing area is not in use and human occupation of the developed area is much reduced, wildlife will be able to utilize surrounding habitat with minimal, if any, human-caused disturbance. An increased risk to wildlife of injury or mortality due to additional traffic on the Many Glacier Road will be small relative to that associated with existing traffic volumes, and will also not lead to population-level effects. Mitigation measures (including attractant storage requirements, restrictions on construction activity to the least sensitive time periods, preservation of the wildlife connectivity area, and revegetation and restoration) will minimize impacts such that animals do not become food conditioned, sensitive early morning and late evening wildlife activity periods are protected, and travel and foraging habitat and vegetative screening for wildlife security are retained. As a result, there will be no impairment to wildlife from the Selected Action.

Canada Lynx and Grizzly Bears— The Endangered Species Act (ESA) section 7 determination of effects are “may affect, not likely to adversely affect” for Canada lynx and grizzly bears. The

Selected Action will adversely impact Canada lynx due to disturbances from construction activity and increase residential activity in the Swiftcurrent housing area. The project will not create additional physical fragmentation of critical lynx habitat because the approximately 0.6-acre increase in the development footprint will be confined to relatively small patches of undisturbed ground of little to no habitat value for lynx and will not encroach into the wildlife connectivity area east of the housing complex. Lynx could be displaced from the connectivity area and funneled to other foraging areas and travel corridors, which may expose them to increased risk of predation or interactions with humans. During the core security wildlife period between January 1 and March 31, when vehicle access to the Many Glacier Valley is restricted, lynx will be able to use the wildlife connectivity area without disturbance. Displacement effects are not expected to impact lynx at the population level because lynx in the Many Glacier Valley belong to a parkwide population that utilizes habitat throughout the park. The small, incremental increase in disturbance will not appreciably alter lynx habitat characteristics and prey densities.

There will be little if any change in the degree to which grizzly bears are adversely impacted, since the project will occur within existing developed areas with typically high existing levels of human activity, and because grizzly bears are discouraged from using the project areas (in accordance with the Management Situation 3 designation for developed areas, where grizzly habitat maintenance and improvement are not the highest management considerations, grizzly bear presence is actively discouraged, and any grizzly involved in a grizzly-human conflict is controlled). The risk to grizzlies of human habituation or conflict is low due to bear management practices and food and attractant storage requirements. Other mitigation measures, including restrictions on construction activity to the least sensitive time periods, preservation of the wildlife connectivity area, and revegetation and restoration will further minimize impacts such that sensitive early morning and late evening activity periods for lynx and bears are protected, and travel and foraging habitat and vegetative screening for lynx and bear security are retained. Consequently, there will be no impairment to Canada lynx or grizzly bears as a result of the Selected Action.

- **Vegetation and Soils**—The Selected Action will adversely impact vegetation and soils due to the disturbance of approximately 0.8 acre in the Swiftcurrent housing area. Construction at East Glacier will occur entirely within the previously disturbed parking area, with no new disturbance and no impacts. Impacts at Swiftcurrent will primarily occur on previously disturbed and restored ground, but undisturbed ground and areas where disturbance has not occurred for some time will also be affected. An estimated 25% of the disturbed area will be temporarily impacted by construction activity then revegetated and restored. The loss of 0.6 acre will have less than negligible effects on soils and vegetation because it will occur within an approximately 40-acre developed area that is part of a non-contiguous, 75-acre development footprint along the Many Glacier Valley floor, and because the surrounding Many Glacier Management Area is over 65,000 acres of otherwise largely undeveloped land. Adverse impacts will not affect plant species at the population level because the disturbance will be localized to the building sites and the species affected are present throughout the Swiftcurrent area. No sensitive plants will be affected. Mitigation measures, including demarcating construction activity areas, locating new parking areas along existing roads, salvaging topsoil and native plants, controlling for non-native invasive plants, erosion control, aerating disturbed ground, and revegetation and restoration will minimize trampling effects and the loss of vegetation and restore native vegetation. As a result, the Selected Action will not lead to an impairment of vegetation and soils.

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 Selected Action.