

National Park Service
U.S. Department of the Interior

Glacier National Park
Waterton-Glacier International Peace Park
Montana



FINDING OF NO SIGNIFICANT IMPACT MANY GLACIER WILDLIFE VIEWING PLAN

Background

In compliance with the National Environmental Policy Act, the National Park Service (NPS) prepared an environmental assessment (EA) to examine alternatives and environmental impacts for a wildlife viewing plan along the Many Glacier Road.

Nestled between rugged mountains and characterized by glaciers, pristine waters, and a dynamic landscape, the Many Glacier Valley is one of the most valuable places in the park for wildlife. The valley contains outstanding, diverse, and highly productive habitat year round, from subalpine climax forests and riparian woodlands to shrublands, fescue grasslands, and herbaceous wetlands. Each of these habitat types supports numerous species of wildlife. Three major drainages converge here, forming a crossroads between ancient travel corridors used by bighorn sheep, mountain goats, grizzly bears and other species as they make seasonal movements across the landscape.

The Many Glacier Road, which provides visitors with access to the area, bisects the heart of the valley. During the busy summer months, traffic flows steadily along the road as visitors make their way to accommodations and recreational sites. The road also bisects the travel corridors of grizzly and black bears, Rocky Mountain bighorn sheep, and other wildlife. Several wildlife species use the road corridor and are often seen in close proximity. It is not unusual for visitors to see whitetail deer, bighorn sheep, mountain goats, moose, and black and grizzly bears along the roadside.

Seeing a wild animal up close can be a thrilling experience and provide valuable interpretive and educational experiences and opportunities for visitors. But hazardous conditions arise for both people and wildlife when visitors park their vehicles in the roadway, block traffic, leave their cars, and approach wild animals too closely. Such occurrences are known to happen on a daily or even hourly basis during the peak visitor season. Animals in these situations become overly habituated to vehicles and people and the chances of vehicle-animal collisions, dangerous human-animal interactions, or an animal obtaining a food reward are increased. Additionally, these animal "jams" create dangerous conditions for pedestrians.

An oftentimes congested roadway, frequent animal "jams" that block traffic and stress or displace animals, inadequate parking availability, and the potential for wildlife to become overly familiar with people has resulted in the need to better protect wildlife and improve the visitor experience. In consideration of natural wildlife travel patterns combined with recognition of the optimal places for visitors to see animals, the park has developed a plan that protects wildlife travel corridors and provides visitors with the exceptional wildlife viewing opportunities that make Many Glacier one of the most popular and memorable destinations in the park. Upon

implementation, this plan will enhance the wildlife viewing experience for visitors, provide better protection for wildlife, improve parking availability for visitors, reduce impacts to vegetation along the road, and improve traffic and visitor safety.

Selection of the Preferred Alternative

Alternative B is the National Park Service's preferred alternative because it best meets project objectives to:

- Provide park visitors with quality wildlife viewing opportunities along the Many Glacier Road corridor.
- Reduce the potential for habituation of wildlife.
- Protect wildlife road crossings and travel routes along the Many Glacier Road corridor.
- Provide park visitors with educational information on wildlife natural history, management, and preservation.
- Provide visitors with improved parking availability along the road.
- Reduce vegetation damage through better delineation of parking and viewing areas; restore disturbed sites.

Visitor Education. Alternative B will include an expansion of the interpretive and educational program. Watchable Wildlife messages will be provided to visitors and a wayside exhibit/pavilion just outside the entrance station will orient visitors to the philosophy of Watchable Wildlife and appropriate human behavior when encountering wildlife. Interpretive exhibits will be installed at several pullouts and other possible locations. Exhibits will include information on wildlife behavior, ecology, and natural histories; wildlife management issues and appropriate wildlife viewing behavior; wildlife travel patterns and the importance of travel corridors and connectivity between protected and non-protected areas; and the relationship between climate change and wildlife distribution. A major focus of the interpretive effort will be to provide education to visitors about displacement, habituation, and other consequences of approaching wildlife too closely. Concepts such as different temperaments and stress tolerances of individual animals and overt reaction distance (the distance at which an animal overtly reacts to the presence of people) will be introduced. Interpretive messages will be displayed at several locations along the road and within campgrounds, including concession and visitor facilities. A roving interpretive van and Park Rangers will travel the road to provide onsite interpretation, help facilitate viewing, and provide spotting scopes. The number of spotting scopes will depend upon available funding.

Pullouts. Under Alternative B, 4 existing designated pullouts along the Many Glacier Road will be enlarged and/or otherwise improved, including paving or striping to delineate parking spaces (Figure1; Table 1).

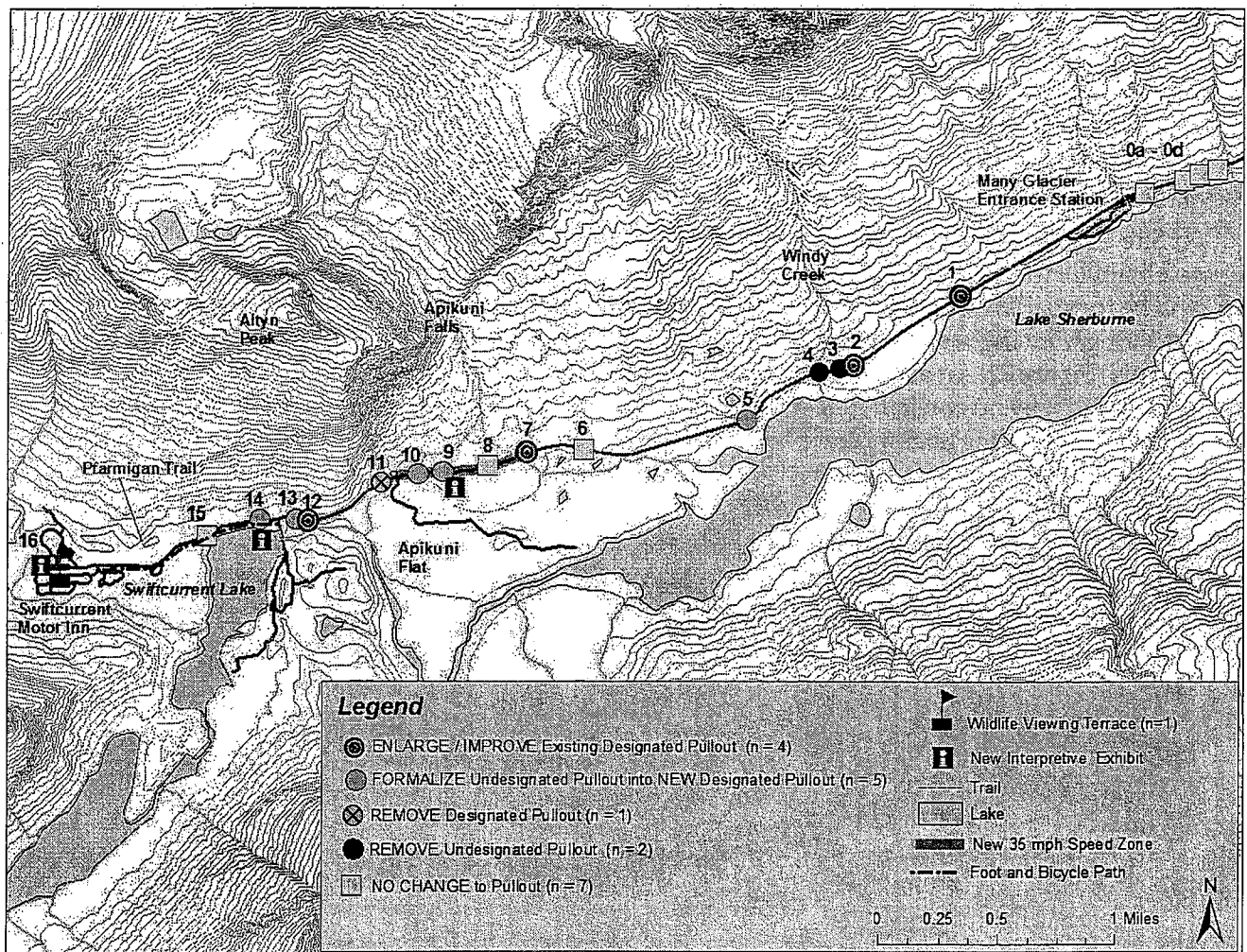


Figure 1. Changes along the Many Glacier Road Corridor under Alternative B, including a wildlife viewing area at Swiftcurrent Motor Inn parking lot.

Five undesignated pullouts that have developed over time from off-road parking will be formalized into new pullouts. The EA originally identified 4 undesignated pullouts for formalization. But after several commenters suggested shifting Site 9 to the west to take better advantage of viewing opportunities near Sheep Curve, the NPS decided to retain Site 9 and develop an additional pullout at Site 10 east of the sewer pond service road (Figure 1; Table 1). Sites 9 and 10 both consist of two undesignated gravel pullouts on either side of the road and have unobstructed views of the meadow. The pullouts at Sites 9 and 10 will be enlarged and formalized, with parking available on both sides of the road. At Site 10, a wildlife interpretive exhibit will be installed and a short trail (approximately 100 feet) into the meadow will be constructed. (The addition of the pullout at Site 10 has changed the site number for the next site to the west, Sheep Curve; Sheep Curve was Site 10 in the EA but is now Site 11. This change is shown in Figure 1 and is also explained in the Text Changes section of the errata sheets at the end of this FONSI.)

One designated and two undesignated pullouts will be removed. The pullouts at Sites 3 and 4 have developed over time from off-road vehicle parking and will be removed because they are too close to a heavily used wildlife crossing at Windy Creek. The pullout at Sheep Curve (Site 11;

formerly Site 10) will be removed because it is located at an important animal crossing and is on a curve with limited visibility. The EA originally proposed constructing a new pullout (formerly Site 11) approximately 0.1 mile west of Sheep Curve. But after further analysis and public comment, the park has decided not to construct a new pullout at this location in order to better protect the wildlife crossing corridor at Sheep Curve as well as potential crossing areas to the west.

At Site 14 just west of the Many Glacier Hotel T intersection, the road will be slightly realigned to eliminate the pullout on the north side of the road. The pullout on the south side of the road will be formalized into a single, larger pullout with space for seven to ten vehicles. A central gathering/viewing area will be developed where people can get out of their vehicles and set up tripods (Figure 2). An at-grade, unroofed, light on the land observation terrace on the lake side of the road may be constructed at this site in the future. Such a terrace would be accessible and may include seating and spotting scopes.

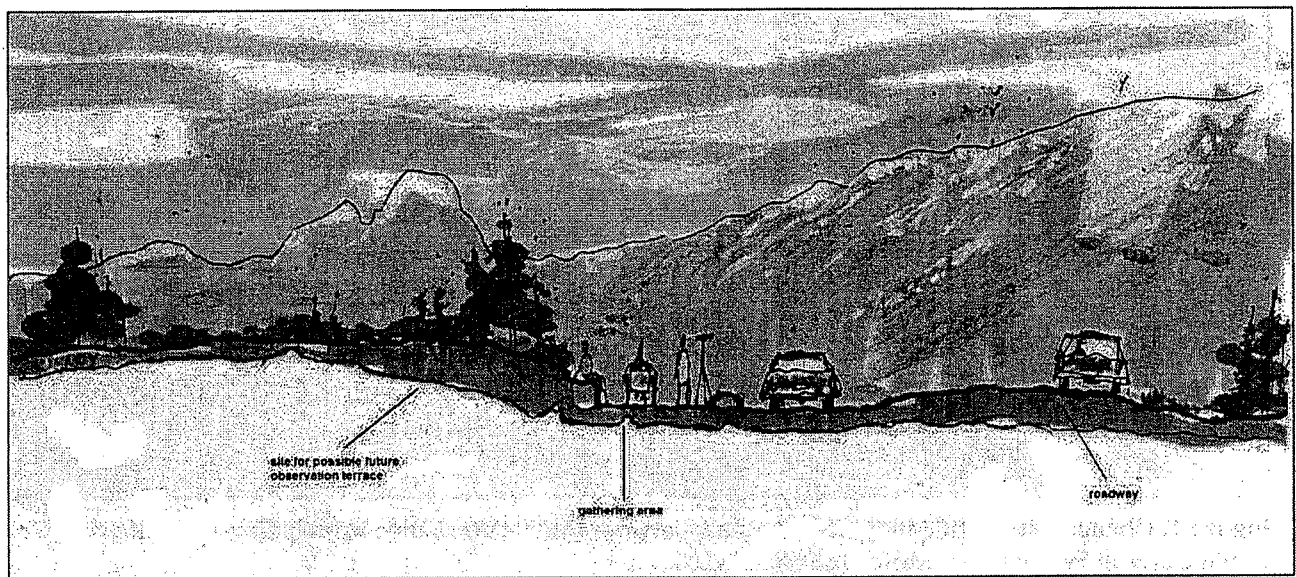


Figure 2. Conceptual illustration of a gathering/viewing area at Site 14 overlooking Swiftcurrent Lake, west of the Many Glacier Hotel T intersection.

The enlargement, development, and removal of pullouts will occur as funding allows and may be incorporated into road rehabilitation as part of the Park Roads/Federal Highway Program administered by the Federal Highway Administration (FHWA), anticipated to begin in 2014. This plan only addresses those pullouts that provide wildlife viewing opportunities or will be removed because they place people too close to wildlife. During the FHWA road project, other pullouts and widened road shoulders not addressed in this plan may be formalized and/or paved, retained as gravel pullouts, or curbed. Any above ground power lines may also be buried during road rehabilitation.

Visitor Travel. The EA originally proposed reducing the speed limit from 45 mph to 35 mph between the entrance station and the Many Glacier Hotel T intersection. The speed limit is already 35 mph between Sheep Curve and the Hotel T (this correction is included in the attached Errata Sheet), and the NPS has since determined that reducing the speed limit to 35 mph along the straightaway between the entrance station and Apikuni Creek would not benefit wildlife or visitors. After reviewing public comment and further discussions with law

enforcement rangers, the speed limit will be reduced to 35 mph between the Poia Lake and Apikuni Mtn. trailhead (Site 7) and Sheep Curve (approximately). The existing 35 mph speed zone west of Sheep Curve (Site 11), the 25 mph speed zone west of the Many Glacier Hotel T intersection, and the 15 mph speed zone west of the campground will not change.

Also under Alternative B, a foot and bicycle path will be formalized along the widened road shoulder between the Many Glacier Hotel T intersection and the Swiftcurrent parking lot.

Wildlife Viewing Area at Swiftcurrent Motor Inn Parking Lot

A formal wildlife viewing area will be developed at the Swiftcurrent Motor Inn parking lot island. This will provide a readily identifiable place for visitors to gather, set up spotting scopes, and view wildlife without being disturbed by traffic or crowded by parked vehicles.

The at grade terrace shown in Design I will be built (Figure 3). The terrace will run along the length of the median with a central, widthwise walkway and a crosswalk to the Swiftcurrent Motor Inn entrance. Six to eight parking spaces will likely be lost from the median; lost parking will be recovered at the south side of the lot and at the Iceberg Lake/Ptarmigan Trailhead, and motorcycle parking will be designated. Interpretive materials, such as a kiosk, will provide information on wildlife, the history of the site, and area orientation. The terrace will be a minimum of 8 feet wide and will be raised a few inches off the ground to allow for water drainage. To facilitate wildlife viewing from locations in the parking lot other than the median, rangers, interpretive staff, and VIPs will use movable cones or a similar method to cordon off other areas as needed, depending on the best location and vantage point. The cost estimate for Design I is \$79,505.00 (2010 Class C estimate). The Glacier National Park Fund, a park partner, will fund construction of the wildlife observation terrace from donations.

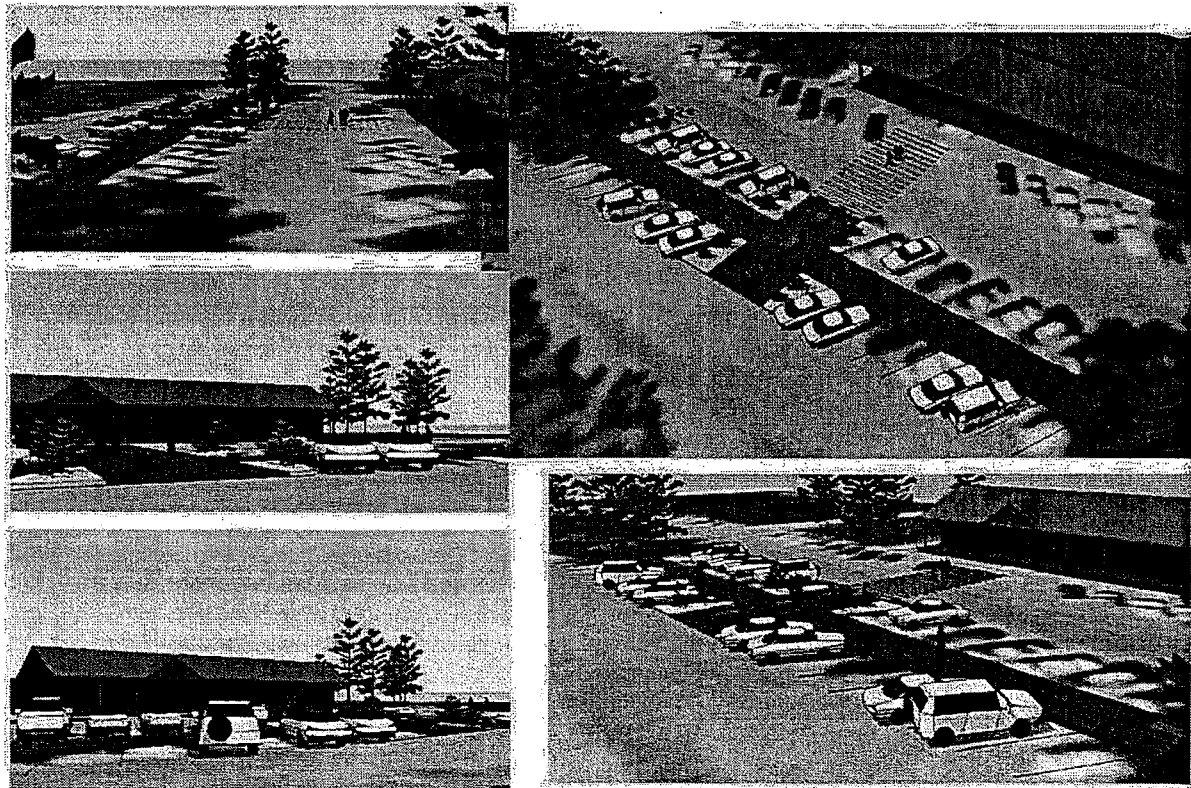


Figure 3. Design I, an at grade wildlife observation terrace at Swiftcurrent Motor Inn parking lot.

Table 1. Alternative B (Preferred) for the Many Glacier Wildlife Viewing Plan.

Site Number and Location (mileages are approximate)	Site Description	Alternative B Preferred
Site 0a – 0d 0.1 miles east of entrance station on lake side of road.	Four paved pullouts just east of the Many Glacier entrance station. There is an existing wayside exhibit at the 3 rd pullout east of the entrance.	The existing interpretive exhibit will be improved to include information on viewing wildlife. Additional exhibit(s) may be installed.
Site 1 East of Windy Flats, 0.8 miles west of entrance station on lake side of road.	A paved designated pullout within 100 feet of Lake Sherburne. A neighboring wildlife corridor offers good opportunities to see animals; trees provide cover for wildlife crossing the road.	The existing pullout will be enlarged to accommodate more parking.
Site 2 Windy Flats, 1.3 miles west of entrance station on lake side of road.	A paved designated pullout located at the west end of Windy Flats, with excellent wildlife viewing opportunities.	The existing pullout will be lengthened in both directions to accommodate more parking.
Site 3 1.4 miles west of entrance station on lake side of road.	An informal widened road shoulder that has developed into an undesignated pullout from off-road parking. This site abuts a well established wildlife crossing area.	The undesignated pullout will be removed because it places visitors and wildlife in close proximity. The enlargement of Site 2 will recover some of the lost parking.
Site 4 Windy Creek bridge, 1.5 miles west of entrance station on lake side of road.	Informal gravel pullouts and widened shoulders on both sides of the road, east and west of the bridge that have developed over time from off-road parking. Windy Creek is an important wildlife crossing area.	These undesignated pullouts on either side of the bridge will be removed because they place visitors and wildlife in close proximity. The site will be restored with native vegetation.
Site 5 1.8 miles west of entrance station on lake side of road.	An undesignated gravel pullout that has developed over time and is used mostly by fishermen to access Lake Sherburne.	This informal pullout will be paved and formalized into a new designated pullout with delineated parking spaces.
Site 6 2.6 miles west of the entrance station on the lake side of the road.	A paved designated pullout along a straightaway that is not located within any known wildlife crossing areas.	No changes related to wildlife viewing will be made to this pullout.
Site 7 2.8 miles west of entrance station across road from lake.	A designated paved pullout and parking area at the Poia Lake and Apikuni Mtn. Trailhead. A lack of marked parking spaces causes parking concerns.	This pullout will be enlarged and striping will be added to delineate parking.
Site 8 3.0 miles west of entrance station across road from lake.	An informal widened road shoulder that has developed over time from off-road parking.	No changes related to wildlife viewing will be made to this site.
Site 9 3.2 miles west of entrance station on both sides of the road.	A widened road shoulder and undesignated gravel pullout that has developed over time from off-road parking. A neighboring wildlife corridor offers good opportunities to see wildlife.	This undesignated parking area will be formalized and enlarged into two new designated pullouts on both sides of the road.

Table 1 *continued*. Alternative B (Preferred) for the Many Glacier Wildlife Viewing Plan.

Site Number and Location (mileages are approximate)	Site Description	Alternative B Preferred
Site 10 3.3 miles (approximately) west of entrance station on both sides of the road	Widened road shoulders that have developed over time from off-road parking.	This undesignated parking area will be formalized and enlarged into two new designated pullouts on both sides of the road. A short trail (approximately 100 feet) to Apikuni Flat will be constructed and a wildlife interpretive exhibit will be installed.
Site 11 (formerly 10) Sheep Curve, 3.5 miles west of entrance station on lake side of road.	A paved, formal pullout currently blocked off with barrier rock. The pullout is at an important wildlife crossing and places visitors and wildlife too close to each other. The pullout is also on a curve and presents a potential traffic and pedestrian safety hazard.	The pullout at Sheep Curve will be removed because of its location at a wildlife crossing and due to traffic safety concerns. The area will be revegetated with native vegetation.
Site 12 3.8 miles west of entrance station on the lake side of road.	A designated paved pullout that offers scenic views and good opportunities to see wildlife.	This pullout will be slightly enlarged because of favorable wildlife viewing opportunities.
Site 13 3.9 miles west of entrance station on the lake side of the road.	A small undesignated gravel pullout east of the Hotel T-intersection.	This pullout will be paved and formalized into a new designated pullout.
Site 14 4.0 miles west of entrance station on both sides of the road, just west of the Many Glacier Hotel T intersection.	Two widened shoulders on both sides of the road that have developed into undesignated pullouts from off-road parking. Poor sightlines present a hazard to pedestrians crossing the road. Site 14 is an excellent wildlife viewing area with good views of slopes above the road and a neighboring wildlife corridor.	The informal pullout on the north side of the road will be removed through realignment of the road to the north. The pullout on the south side of the road will be enlarged and paved, with space for 7 to 10 vehicles. The new designated pullout will include a central gathering area for wildlife viewing, and an interpretive wildlife viewing exhibit will be installed.
Site 15 4.3 miles west of entrance station on lake side of road.	A paved designated pullout between two neighboring wildlife corridors with an existing wildlife interpretive exhibit.	No changes related to wildlife viewing will be made to this pullout.
Site 16 Swiftcurrent Motor Inn Parking Lot	The Many Glacier Road dead-ends at the Swiftcurrent Motor Inn Parking lot. Excellent views of surrounding mountain slopes offer very good wildlife viewing opportunities.	An accessible, formal wildlife observation area at the parking lot median will be developed, accompanied by an interpretive exhibit. Orientation to the Iceberg Lake Trailhead will be improved. Parking spaces lost from the median will be recovered at the trailhead and along the south edge of the parking lot.

Mitigation Measures

The following mitigation measures were developed to minimize the degree and/or severity of adverse effects and will be implemented during construction of the action alternative, as needed:

Wildlife, Threatened, Endangered Species, and Species of Concern

- Construction will not occur between the third weekend of November and the third

weekend of April when the Many Glacier Road is closed to public vehicles for wildlife security.

- Construction personnel will be orientated on appropriate behavior in the presence of wildlife and on proper storage of food, garbage and other attractants.
- If construction, enlargement, or removal of pullouts occurs at night, work zones will be no longer than 1300 feet and will be separated by 2600 feet to allow room for grizzly bears, lynx, and other wildlife to cross the road without substantially altering their travel routes.
- Construction activity (including that necessary to remove, enlarge, or develop new pullouts) that is within 800 meters of an active golden eagle nest will only occur between one hour after sunrise and one hour before sunset during the nesting period (April 1 – August 1, subject to site-specific conditions and the recommendations of Park biologists). Noise above that of normal traffic sounds will be avoided during the nesting period.
- During construction, hauling trucks will be required to observe a 25 mph speed limit.
- Surveys for rare plants, such as *Botrychium* and pink corydalis, will be conducted prior to project implementation in areas where ground disturbance or paving will occur. Rare plant populations will be avoided.

Visual Resources

- Developments will be designed to blend with the environment.
- Appropriate, natural colors and vegetative screening will be incorporated into the design.

Historic Structures

- The design of pullouts and the wildlife observation areas will be in conformance with the Secretary of the Interior's Standards for the Treatment of Historic Properties.

Vegetation

- Glacier National Park's Best Management Practices will be implemented to minimize the extent of impacts.
 - Disturbance to vegetation will be avoided as much as possible and contained to as small a footprint as possible while meeting project objectives.
- Natural design features will be used to minimize visual impacts and to aid in creating suitable site conditions for revegetation. For example, boulders may be used to retain slopes.
- Selected native trees and shrubs will be retained to provide screening around disturbed areas.
- A restoration analysis will be completed to decide if revegetation is necessary throughout the life of the project. If it is determined to be necessary, the following mitigation measures will apply:
 - Soil amendments, mulches, and organic matter will be applied and other measures will be taken as appropriate to facilitate revegetation.
 - Native species from genetic stocks originating in the park will be utilized for revegetation seeding and planting efforts. Plant species density, abundance, and diversity will be restored as nearly as possible to prior conditions for non-woody species.
- Vegetation cover will be monitored and evaluated and contingency and maintenance plans will be developed if vegetation cover is not similar to original ground cover.

- Noxious weed control measures will be conducted and noxious weed populations will be controlled in the vicinity of the project area to minimize transport of invasive weeds to other locations.
- Gravel and topsoil sources will be inspected and the use of material currently supporting invasive exotic plants will be avoided.
- Construction vehicles will be inspected and cleaned prior to entering the park to prevent the import of noxious weeds from tires and mud on the vehicles.
- Periodic inspections and spot controls will be used to prevent noxious weed establishment. If noxious weeds invade an area, an integrated noxious weed management process will be implemented to selectively combine management techniques to control the particular noxious weed species.

Soils

- Glacier National Park's Best Management Practices will be implemented to minimize the extent of impacts.
 - Disturbance to the ground will be avoided as much as possible and contained to as small a footprint as possible while meeting project objectives.
- Soils will be salvaged and appropriate storage and replacement practices will be implemented.
- Erosion control measures that provide for soil stability and prevent movement of soils into waterways will be implemented.
- Disturbed ground surface soils will be scarified to decompact the soil.
- Soils will be replanted with native vegetation to prevent erosion.

Alternatives Considered

The EA evaluated two alternatives: No Action and the Preferred. Under the no action alternative, the park would have maintained existing designated pullouts and re-opened the Sheep Curve pullout. The park would have continued to provide limited interpretive and educational information on wildlife viewing for visitors, and interpretive and educational outreach under the existing Watchable Wildlife Program initiated in 2008 would have continued. Existing speed limits would have remained in place.

The EA evaluated two design options for the wildlife viewing area at Swiftcurrent Motor Inn parking lot: Design I (Figure 3) and Design II (Figure 4). Design II included two platforms raised above grade along the median centerline. Both platforms would have had stair steps at the outside ends and accessible ramps originating from the center of the median. Eight to ten parking spaces would have been lost from the median. The 2010 Class C cost estimate for Design II was \$399,102.00.

The action alternative with Design I is the preferred alternative, as described in the previous section.

Other alternatives were also considered but dismissed, including permanently or intermittently reopening the Sheep Curve pullout, closing the Many Glacier Road to private vehicles, elevated viewing platforms at Apikuni Flat and the Swiftcurrent Nature Trail, and four design options for the wildlife viewing area at Swiftcurrent Motor Inn parking lot (Figures 5-8).

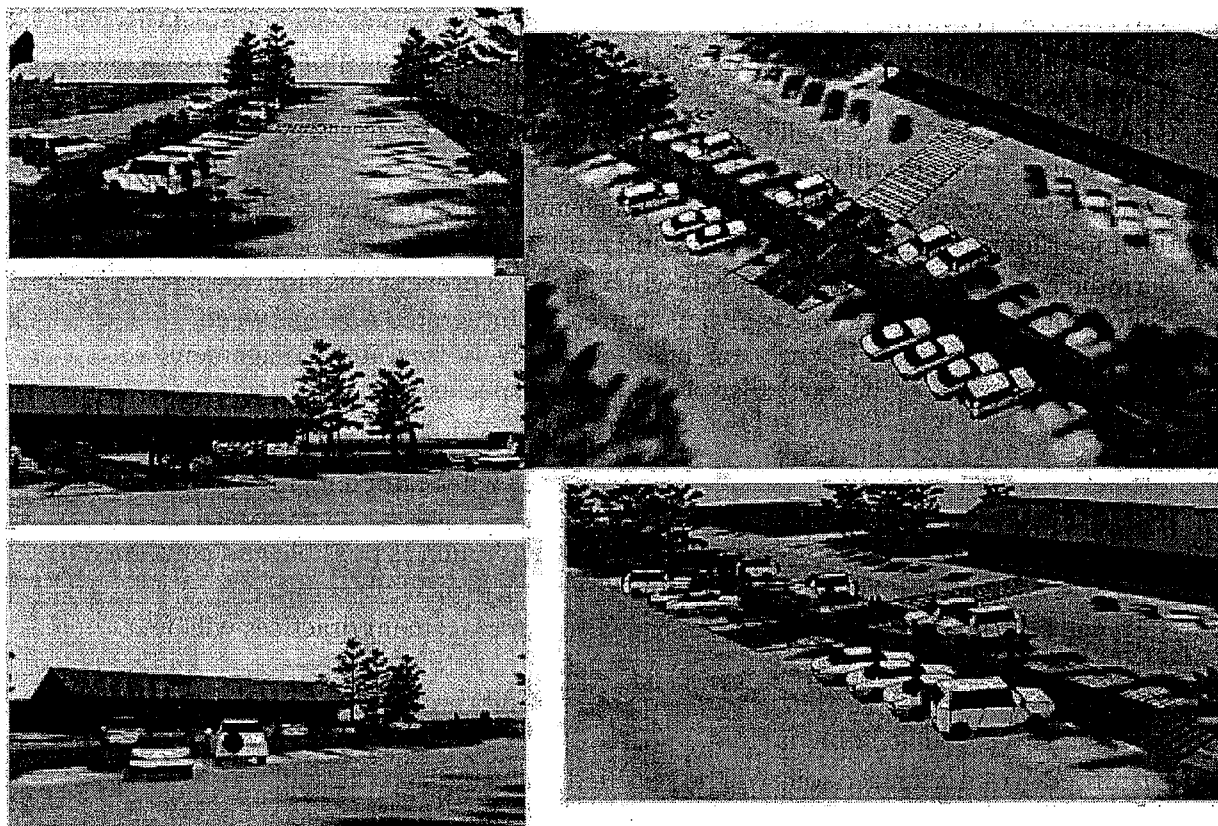


Figure 4. Design II, two elevated viewing platforms.

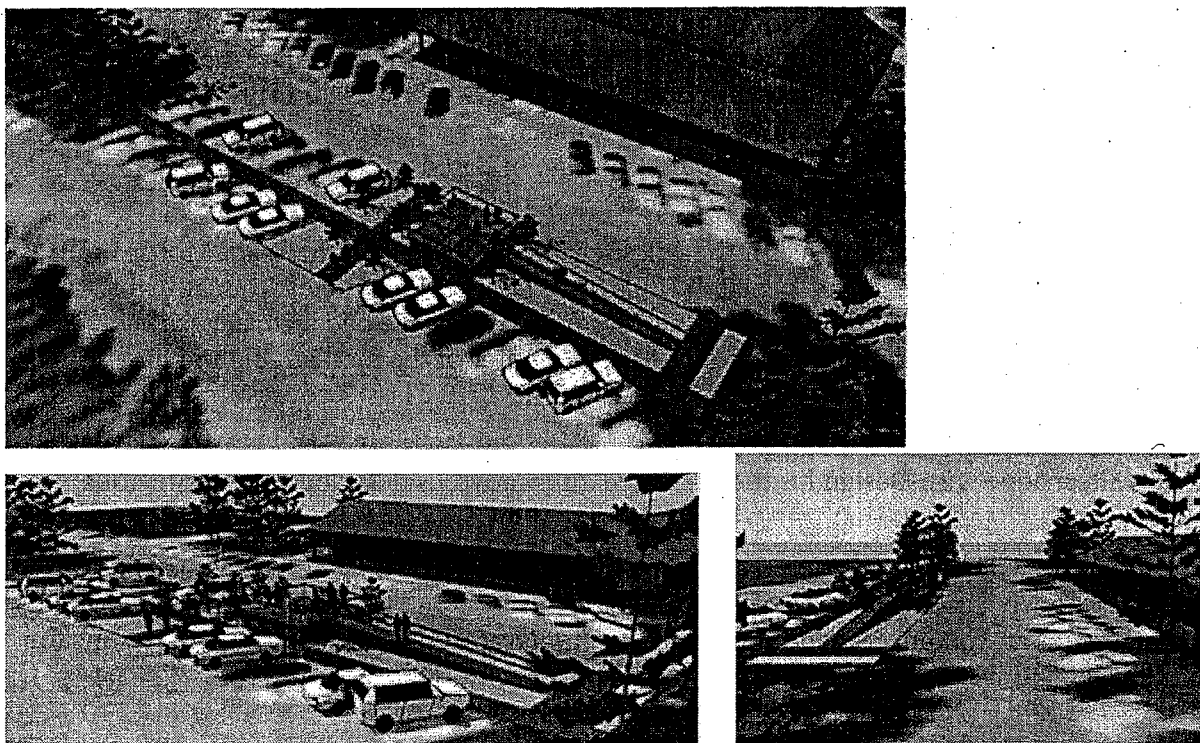


Figure 5. Wildlife Viewing Platform Option A, considered but dismissed.

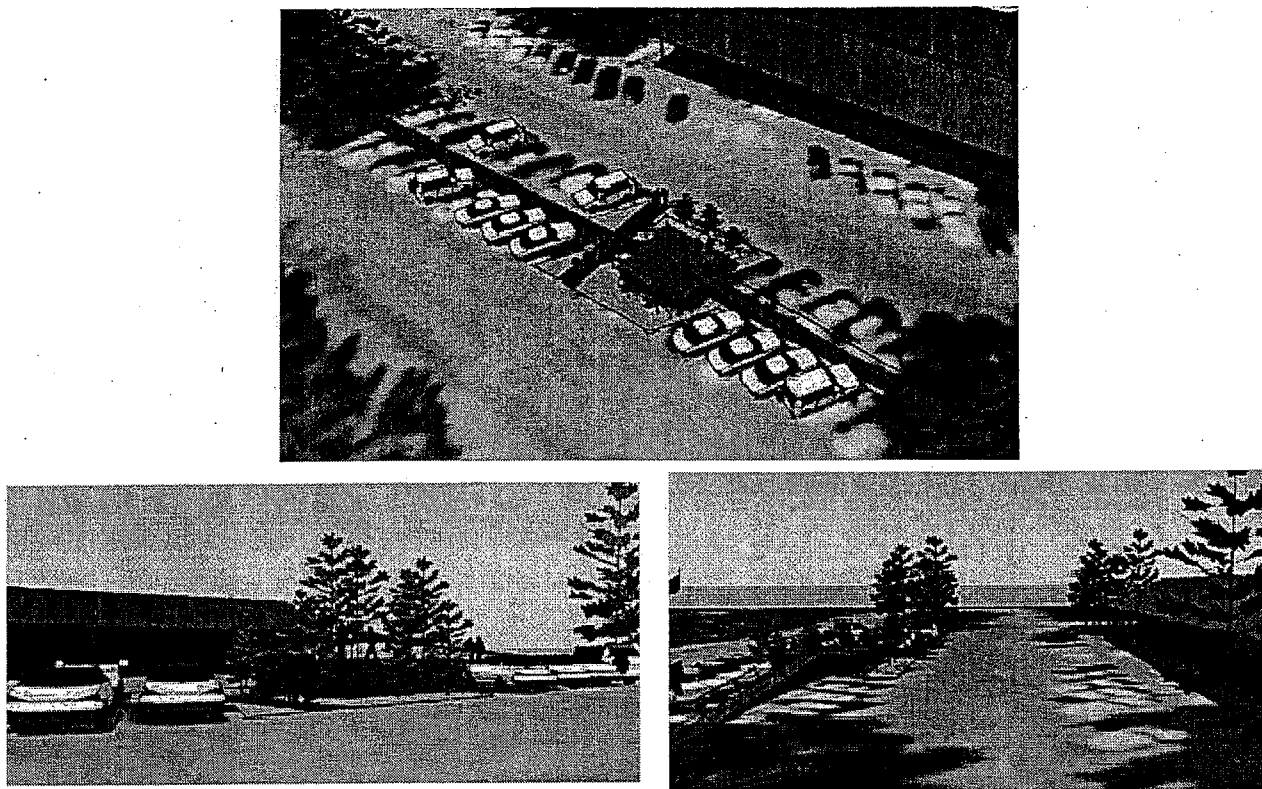


Figure 6. Wildlife Viewing Platform Option B, considered but dismissed.

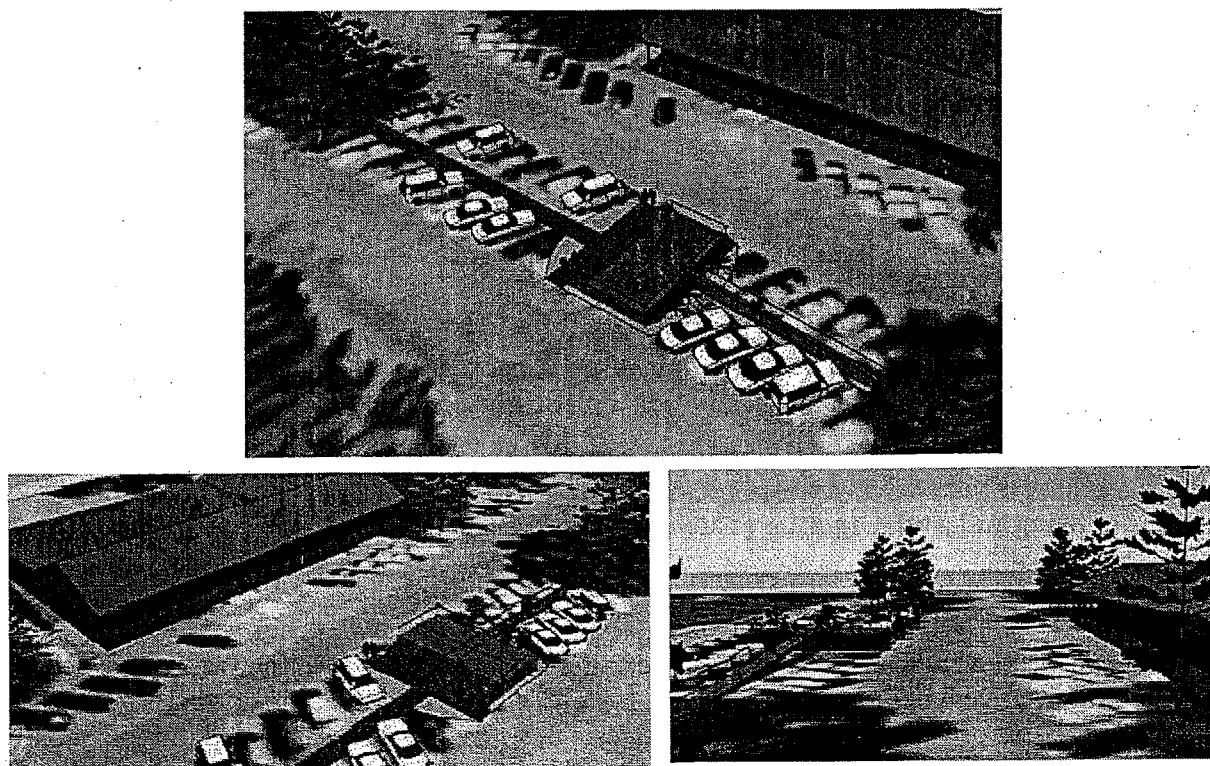


Figure 7. Wildlife Viewing Platform Option C, considered but dismissed.

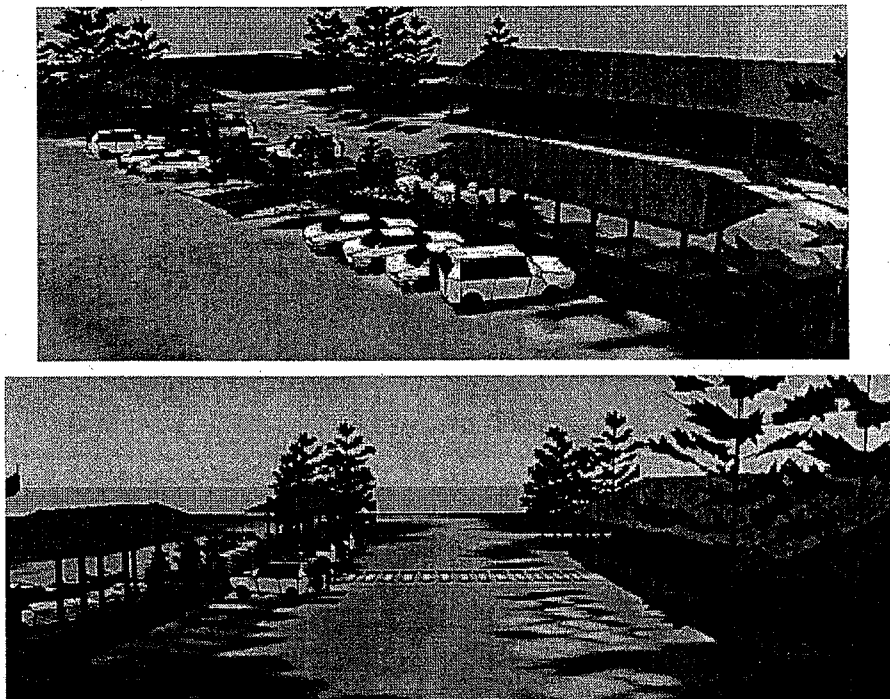


Figure 8. Wildlife Viewing Platform Option D, considered but dismissed.

Environmentally Preferred Alternative

Alternative B is the environmentally preferred alternative. The environmentally preferred alternative is determined by the six criteria suggested in §101 of the National Environmental Policy Act. According to these criteria, the environmentally preferred alternative should:

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

Alternative B is the environmentally preferred alternative because it best addresses five of the six criteria. Alternative B best addresses criteria 1-4, as well as criterion 6. Criterion 5 is not directly applicable to this project. Alternative B best meets the NPS trustee role as a steward of GNP's natural resources. Successful implementation of this project will reduce disruption of naturally occurring wildlife travel patterns, enabling numerous species of wildlife to continue to use the

Many Glacier landscape in a way that most closely resembles historic patterns. The plan will also minimize disturbance to native plant communities and soils. Protecting this area through implementation of Alternative B seeks to maintain the maximum productivity and diversity of the natural system, as well as its role in ecosystem processes. The reduction of hazards to human safety and the development of prime wildlife viewing opportunities under Alternative B will provide for a safe and enjoyable visitor experience. Traditional recreational experiences and values will be preserved through successful implementation of the plan as viewing wildlife in their natural environment unimpeded by human activity is one of the primary values of the project.

Why the Preferred Alternative Will Not Have a Significant Effect on the Human Environment

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

Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial: Disturbances during construction of the preferred alternative will have adverse, short-term and site-specific impacts to wildlife, threatened and endangered species, and species of concern. Impacts will be negligible to moderate for wildlife, grizzly bears, Canada lynx, gray wolves, wolverine, and fisher, and minor to moderate for golden eagles and bighorn sheep. The preferred alternative will have short and long-term beneficial impacts to wildlife, threatened and endangered species, and species of concern due to reduced risk of displacement, disturbance, collisions with motor vehicles, excessive habituation, food conditioning, and conflict with people. Beneficial impacts will be minor to moderate, site-specific and local for wildlife, grizzly bears and bighorn sheep, and negligible to minor and site-specific for Canada lynx, gray wolves, wolverine, and fisher. Under Section 7, the determination for grizzly bears, Canada lynx, and gray wolves is "may affect, not likely to adversely affect." Surveys for sensitive plants will be conducted prior to construction and populations of sensitive plants will be avoided. Impacts to vascular plants, especially moonwort, will be negligible to minor, adverse, long-term, and site-specific, but possibly beneficial if re-colonization occurs in disturbed areas.

There will be negligible to moderate, adverse, long-term and site-specific impacts to visual resources from changes that are apparent but compatible with the overall appearance of each site. Impacts to visitor use and experience will be moderate, beneficial long-term, and site-specific and local due to enhanced wildlife viewing and educational opportunities, improved parking availability, and improved orientation to the Iceberg/Ptarmigan Trailhead. Minor adverse, site-specific, and long-term impacts to visitor use will occur from the loss of the pullout at Sheep Curve and some parking spaces at the Swiftcurrent Motor Inn parking lot median. There will be minor adverse, long-term, and both site-specific and local impacts to historic structures from alterations to pullouts along the Many Glacier Road and the construction of a viewing area at the Swiftcurrent Motor Inn parking lot. Impacts to vegetation and soils will be minor, adverse, short and long-term and site-specific from the removal of vegetation from undisturbed sites, but redirecting visitor use onto surfaced areas will have minor beneficial, long-term impacts.

Because the impacts from the preferred alternative will not be greater than moderate, there will be no significant effect.

Degree of effect on public health or safety: The preferred alternative will have an overall

beneficial effect on public health and safety. There will be fewer hazards from traffic congestion, pedestrians on the roadway, excessive speed, and poor visibility. Several enlarged and/or formalized pullouts will further improve traffic and pedestrian safety, and the removal of pullouts that abut naturally occurring wildlife crossings will reduce the potential for dangerous animal/human conflicts. The effect on public health or safety will not be significant because the impacts will not be greater than moderate.

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 Many Glacier Valley provides connectivity between several primary wildlife travel corridors and is made up of diverse and productive habitat types that support numerous species of wildlife year-round. The project area contains habitat for federally and state listed species (grizzly bear, Canada lynx, gray wolf, golden eagle, wolverine, fisher, and Rocky Mountain bighorn sheep). The Many Glacier Hotel and the Swiftcurrent Auto Camp historic districts are National Register listed and eligible properties within the Area of Potential Effect for the project. Contributing to the historic significance of the Many Glacier Hotel Historic District is the Many Glacier Road. The park recently completed an amendment to the Many Glacier Hotel Historic District, which added the Many Glacier Road from Babb to the Hotel. The Montana State Historic Preservation Officer has concurred in the eligibility of the road. The preferred alternative will have beneficial impacts on park lands, ecologically critically areas, and historic structures as described above, but will not impact prime farmlands, wetlands, or rivers. There will be no significant effect since the impacts will not be greater than moderate.

Degree to which effects on the quality of the human environment are likely to be highly controversial: Throughout the environmental analysis process, the proposal to develop a wildlife viewing plan was not highly controversial. The most controversial aspect of the plan was the proposed removal of the pullout at Sheep Curve, as this area has been a traditionally popular wildlife viewing location for several years. During public review, the park received two comments opposing removal of the pullout and one comment asking if pedestrian access could be allowed. But the majority of the comments were supportive of the overall plan, and the park does not anticipate much future controversy over removal of the Sheep Curve pullout nor with the impact determinations as stated in the EA. The Wildlife Viewing Plan is not a major federal action and will not result in significant impacts.

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

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration: The preferred alternative is not expected to set a precedent for future actions with significant effects, nor does it represent a decision in principle about a future consideration.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. 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 environmental assessment and were no greater than moderate. Therefore, there will be no significant cumulative impacts.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources: There will be minor adverse, long-term, and both site-specific and local impacts to historic structures from alterations to pullouts along the Many Glacier Road and the construction of a viewing area at the Swiftcurrent Motor Inn parking lot. An email dated September 24, 2010 from the Montana State Historic Preservation Office declined official comment until more complete drawings and specifications are available. Because the projects would be planned in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties*, a finding of no adverse effect is expected. Design and construction specifications will be submitted to the SHPO for review in order to complete Section 106 consultation. If during the course of design, an unavoidable adverse effect is determined, the NPS would continue consultation with the Montana State Historic Preservation Office and the Advisory Council on Historic Preservation to determine mitigation requirements. The NPS also would re-evaluate whether additional NEPA compliance is required.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat: Disturbances during construction of the preferred alternative will have adverse, short-term and site-specific impacts to threatened and endangered species. Impacts will be negligible to moderate for grizzly bears, Canada lynx, and gray wolves. The preferred alternative will have short and long-term beneficial impacts to threatened and endangered species due to reduced risk of displacement, disturbance, collisions with motor vehicles, excessive habituation, food conditioning, and conflict with people. Beneficial impacts will be minor to moderate, site-specific and local for grizzly bears, and negligible to minor and site-specific for Canada lynx and gray wolves. Under Section 7, the determination for grizzly bears, Canada lynx, and gray wolves is "may affect, not likely to adversely affect." A letter dated October 14, 2010 from the U.S. Fish and Wildlife Service concurred with GNP's determination that the project *may affect but is not likely to adversely affect* Canada lynx, grizzly bears, or gray wolves. Because no impacts will be greater than moderate, there will be no significant effect from the preferred alternative.

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

Impairment

National Park Service's *Management Policies* 2006 require analysis of potential effects to determine whether or not actions would impair park resources (NPS 2006). The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, 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, actions that would adversely affect park resources and values.

However, the laws do give the National Park Service the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a

park, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the National Park Service the management discretion to allow certain impacts within parks, that discretion is limited by the statutory requirement that the National Park Service must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. The prohibited impairment is an impact that, in the professional judgment of the responsible National Park Service manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of these resources or values. An impact to any park resource or value may, but does not necessarily, constitute impairment, but an impact would be more likely to constitute impairment when there is a major or severe adverse effect upon 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 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 findings are not necessary for visitor use and experience, socioeconomics, public health and safety, environmental justice, land use, and park operations, because impairment findings relate back to park resources 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 wildlife, threatened and endangered species and species of concern, visual resources, historic structures, vegetation, and soils.

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 impairment is based on

whether an action would have **major (or significant)** effects. The following analysis evaluates whether or not the applicable resources carried forward in this document would be impaired by the preferred alternative.

Fundamental resources and values for Glacier National Park are identified in the General Management Plan as derived from the park's enabling legislation. Of the impact topics carried forward in this environmental assessment, only wildlife, threatened and endangered species and species of concern, visual resources, historic structures, vegetation, and soils are considered necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park; are key to the natural or cultural integrity of the park; and/or are identified as a goal in the park's General Management Plan or other relevant NPS planning document.

- **Wildlife.** Glacier National Park was established to protect natural and cultural resources and the park's wildlife contribute to GNP's significance as one of the most ecologically intact areas in the temperate regions of the world. This project will cause temporary disturbance to wildlife during the construction of viewing areas, a short trail to the meadow at Apikuni Flat, and the development or removal of pullouts along the Many Glacier Road. Using the above criteria, wildlife are necessary to fulfill the purposes for which the park was established; are key to the natural integrity of the park and opportunity for enjoyment of the park; and are identified as being significant in park planning documents. Although wildlife is a significant resource at the park, the preferred alternative will only result in negligible to moderate, short-term, site-specific adverse impacts to wildlife; therefore, there will be no impairment to wildlife.
- **Threatened and Endangered and Species of Concern.** Glacier National Park was established to protect natural and cultural resources. The park's threatened and endangered species and species of concern contribute to GNP's significance as one of the most ecologically intact areas in the temperate regions of the world. This project will temporarily disturb threatened and endangered species and species of concern during the construction of viewing areas, a short trail to the meadow at Apikuni Flat, and the development or removal of pullouts along the road. Using the above criteria, threatened and endangered species and species of concern are key to the natural integrity of the park and the larger region and opportunity for enjoyment of the park and are identified as being significant in park planning documents. Although threatened and endangered species and species of concern are a significant resource at the park, the preferred alternative will only result in negligible to moderate, short-term, site-specific adverse impacts to threatened and endangered species and species of concern; therefore, there will be no impairment to threatened and endangered species and species of concern.
- **Visual Resources.** Glacier National Park was established to provide opportunities to experience, understand, appreciate, and enjoy the park, and much of GNP's significance is attributable to the park's visual resources, including spectacular scenery, unimpaired viewsheds, and the natural, cultural and historic landscape. This project involves alterations to the appearance of the Swiftcurrent Motor Inn parking lot and pullouts along the Many Glacier Road, and will include a small but noticeable trail to the meadow at Apikuni Flat. Using the above criteria, visual resources are necessary to fulfill the purposes for which the park was established; are key to the natural and cultural integrity of the park and opportunity for enjoyment of the park; and are identified as being significant in park planning documents. Although visual resources are a significant resource at the park, the preferred alternative will only result in negligible to moderate,

long-term, site-specific adverse impacts to visual resources; therefore, there will be no impairment to visual resources.

- **Historic Structures.** Glacier National Park was established to protect natural and cultural resources, and the park's historic structures chronicle the long, diverse, and significant history of human activities. This project involves the alteration of pullouts along the Many Glacier Road, which is a national register property, contributes to the historic significance of the Many Glacier Hotel Historic District, and the development of a viewing area outside the boundaries of the Many Glacier Hotel Historic District and the Swiftcurrent Auto Camp Historic District. Using the above criteria, historic structures are necessary to fulfill the purposes for which the park was established; are key to the natural integrity of the park and opportunity for enjoyment of the park; and are identified as being significant in park planning documents. Although historic structures are a significant resource at the park, the preferred alternative will only result in minor, long-term, site-specific and local adverse impacts to historic structures; therefore, there will be no impairment to historic structures.
- **Vegetation and Soils.** Glacier National Park was established to protect natural and cultural resources, and the park's vegetation and soils contribute to GNP's significance as one of the most ecologically intact areas in the temperate regions of the world and to GNP's long and significant geologic history. This project involves the disturbance of vegetation and soils at pullouts along the Many Glacier Road, at Apikuni Flat, and at the Swiftcurrent Motor Inn parking lot median. Using the above criteria, vegetation and soils are necessary to fulfill the purposes for which the park was established; are key to the natural integrity of the park and opportunity for enjoyment of the park; and are identified as being significant in park planning documents. Although vegetation and soils are significant resources at the park, the preferred alternative will only result in minor, long-term, site-specific adverse impacts to vegetation and soils; therefore, there will be no impairment to vegetation and soils.

In addition, mitigation measures for these resources will further lessen the degree of impact to and help promote the protection of these resources. For wildlife and threatened and endangered species and species of concern, construction will not occur between the third weekend of November and the third weekend of April when the Many Glacier Road is closed to public vehicles; construction personnel will be orientated on proper storage of food, garbage, and other attractants; nighttime work zones will be no longer than 1300 feet and will be separated by 2600 feet; construction activity within 800 meters of an active golden eagle nest will only occur between one hour after sunrise and one hour before sunset during the nesting period; hauling trucks will be required to observe a 25 mph speed limit; surveys for rare plants will be conducted prior to implementation in areas where ground disturbance or paving will occur; and rare plants populations will be avoided. For visual resources, developments will be designed to blend with the environment and appropriate, natural colors and vegetative screening will be incorporated into the design. For historic structures, the design of the pullouts and the observation areas will be in conformance with the Secretary of the Interior's Standards for the Treatment of Historic Properties. For vegetation and soils, Glacier National Park's Best Management Practices will be implemented to minimize the extent of impacts; disturbance to the ground will be avoided as much as possible and contained to a as small a footprint as possible; natural design features will be used; selected native trees and shrubs will be retained; a restoration analysis will be completed; if necessary, soil amendments will be applied and native species from genetic stocks originating in the park will be utilized for revegetation; vegetation

cover will be monitored and maintenance plans will be developed if necessary; noxious weed control measures will be implemented; gravel and topsoil sources will be inspected; construction vehicles will be inspected and cleaned; soils will be salvaged and appropriate storage and replacement practices will be implemented; erosion control measures will be implemented; disturbed ground surface soils will be scarified to decompact the soil; and soils will be replanted with native vegetation.

In conclusion, as guided by this analysis, good science and scholarship, advice from subject matter experts and others who have relevant knowledge and experience, and the results of public involvement activities, it is the Superintendent's professional judgment that there will be no impairment of park resources and values from implementation of the preferred alternative.

Public Involvement

The environmental assessment was made available for public review and comment during a 30-day period ending October 16, 2010. The announcement was also posted on the National Park Service's public comment website. Letters were sent to recipients on the park's EA mailing list and various federal, state, and local agencies, including the U.S. Fish and Wildlife Service (USFWS), Montana Fish, Wildlife and Parks, the Montana State Historic Preservation Officer (MTSHPO), the Advisory Council for Historic Preservation (ACHP), the Blackfeet Tribal Business Council, and the Confederated Salish and Kootenai Tribe.

Fifteen comment letters and one phone call were received on the plan as proposed in the EA, and six members of the public attended a public meeting in St. Mary. Most comments expressed support for all or part of the plan; two commenters were opposed to the plan based on their belief that no action is necessary. Several comments included suggestions for alternative means of implementing various aspects of the plan, including the development or removal of pullouts, the location of a wildlife viewing area at the Swiftcurrent Motor Inn parking lot, the speed limit, visitor education, and the trail between Swiftcurrent parking lot and the Many Glacier Hotel T intersection. Other comments expressed concern for potential impacts to wildlife and visitor use and experience. These suggestions and concerns are addressed in the Errata Sheets and Responses to Substantive Comments attached to this FONSI. One suggestion for the establishment of "no idle" zones along the road was inadvertently left out of the EA and is included in the attached Errata Sheet.

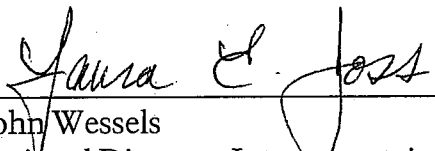
Comments were also received from the U.S. Fish and Wildlife Service, the Montana State Historic Preservation Office, and the National Parks Conservation Association in addition to individual members of the public. Substantive comments and responses are attached. The U.S. Fish and Wildlife Service concurred on October 14, 2010 with the park's Biological Assessment and "may affect, not likely to adversely affect" determination for grizzly bears, Canada lynx, and gray wolves. The Montana State Historic Preservation Office sent an email dated September 24, 2010 declining official comment until more complete drawings and specifications are available.

Conclusion

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

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

Approved:

for 

John Wessels
Regional Director, Intermountain Region

5/25/11
Date

ERRATA SHEETS

MANY GLACIER WILDLIFE VIEWING PLAN

ENVIRONMENTAL ASSESSMENT

GLACIER NATIONAL PARK

According to NPS policy, substantive comments are those that 1) question the accuracy of the information in the EA, 2) question the adequacy of the environmental analysis, 3) present reasonable alternatives that were not presented in the EA, or 4) cause changes or revisions in the proposal. Some substantive comments may result in changes to the text of the EA, in which case, they are addressed in the *Text Changes* section of the Errata Sheets. Other substantive comments may require a more thorough explanatory response and are addressed in the *Responses to Substantive Comments* Section.

Text Changes

Italicized and underlined text indicates the section in the EA that has been corrected or altered. Strikeout is used to show text that has been struck from the EA. Bold text is used to show new text, text that replaces stricken text, or to describe changes to the text.

p. i, Summary.

This alternative would include the enlargement and/or improvement of heavily used pullouts in popular wildlife viewing areas; the formalization of some undesignated pullouts to designated pullouts; **and the removal of pullouts that are too close to wildlife crossings;**~~and the development of a new pullout.~~

A short trail would be constructed to the meadow at Apikuni Flat, a foot and bicycle path would be formalized between the Many Glacier Hotel T intersection and the Swiftcurrent parking lot, additional educational and interpretive resources would be provided, and the speed limit from ~~the entrance station to the Hotel T intersection~~ **the Apikuni Mtn./Poia Lake Trailhead (Pullout 7)** to the service road just east of Sheep Curve would be reduced from 45 mph to 35 mph.

p. 12, Impact Topics Dismissed from Further Analysis, Threatened and Endangered Species and Species of Concern. Meltwater Lednian Stonefly (*Lednia tumana*). **The meltwater stonefly was recently listed as a Candidate species with the USFWS and is also a state listed Species of Concern. The stonefly inhabits alpine streams associated with glaciers, snowfields, or springs (Muhlfeld et al. 2011). The proposed project would not occur within or near stonefly habitat, and there would be no impacts to the species. The meltwater stonefly is therefore dismissed from further analysis.**

p. 16, Alternative B. This alternative would include the enlargement and/or improvement of heavily used pullouts in popular wildlife viewing areas; the conversion of some undesignated pullouts to designated pullouts; and the removal of pullouts that are too close to wildlife crossing areas;~~and the development of a new pullout.~~

pp. 16-17, Alternative B. Construction for the proposed plan would occur between the third weekend of April and the third weekend of November (when the road is open to public vehicles); construction would not occur outside this timeframe **and, if possible, would be scheduled during the summer months in order to minimize impacts to wildlife.**

p. 17, Alternative B, Pullouts. Under Alternative B, four existing designated pullouts along the Many Glacier Road would be enlarged and/or otherwise improved, including paving or striping to delineate parking spaces, and 4 undesigned pullouts five undesigned pullouts that have developed over time from off-road parking would be formalized into new designated pullouts (Figure2; Table 1).

p. 17, Alternative B, Pullouts.

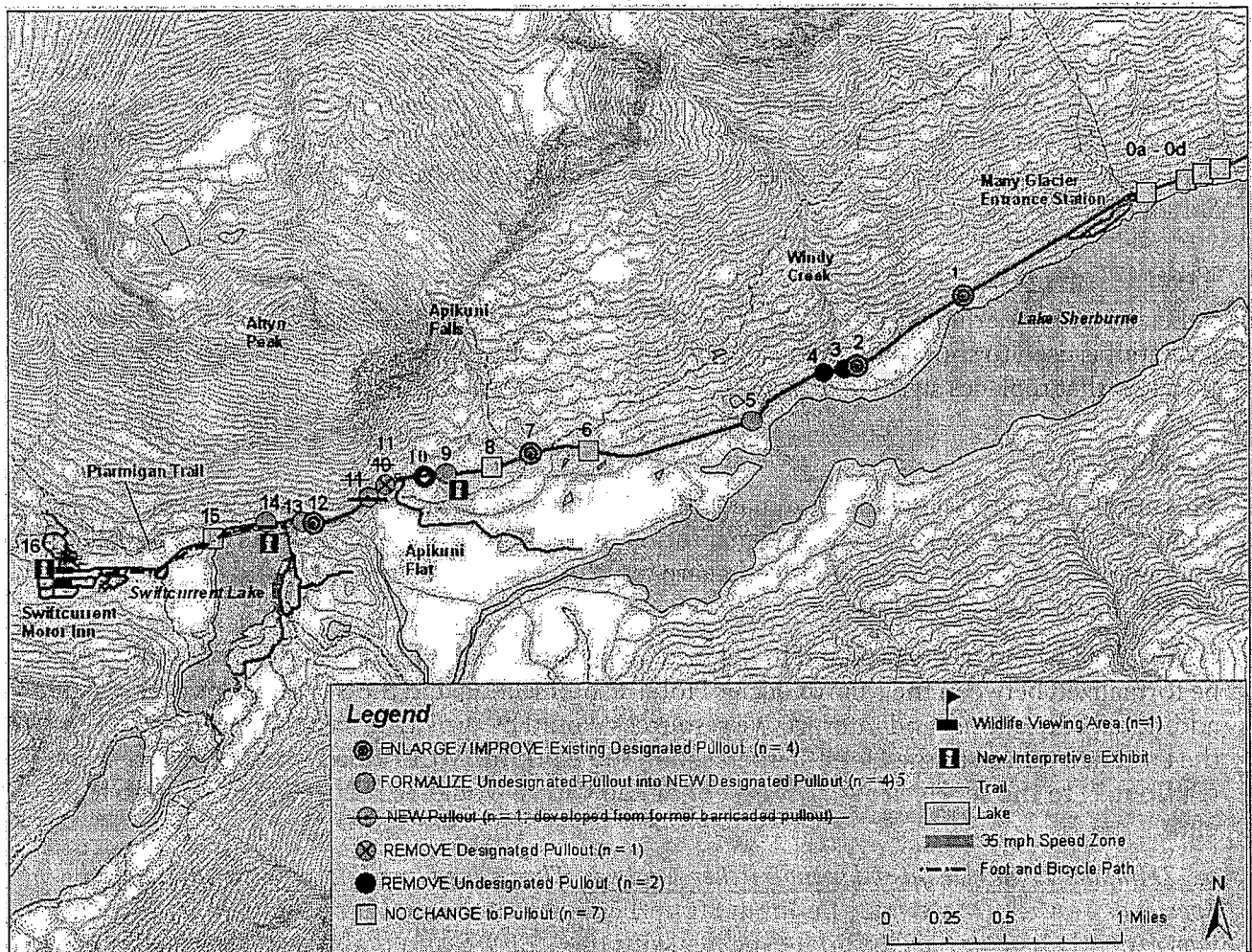


Figure 2. Proposed changes along the Many Glacier Road Corridor, including a wildlife viewing area at Swiftcurrent Motor Inn parking lot. (See also finalized map on p. 3 of this FONSI)

pp. 17-18, Alternative B, Pullouts. The pullout at Sheep Curve (Site 10/11) would be removed because it is located at a well-used and important animal crossing, putting visitors and wildlife too close to each other.

p. 18, Alternative B, Pullouts. A new pullout would be developed approximately 0.1 mile west of Sheep Curve at Site 11 (Figure 2; Table 1). Site 11 is a former gravel pullout that has been blocked off to parking for some time. Under the preferred alternative, this pullout would be re-opened and developed into a new designated pullout. Development of the pullout may require some additional slope stabilization and would involve the removal of vegetation that has grown back at the site.

p. 18, Alternative B, Pullouts. The pullouts at Apikuni Flat (Sites 9 and 10) and west of the Many Glacier Hotel T intersection overlooking Swiftcurrent Lake (Site 14) are ~~two of~~ among the best places along the road to view wildlife. Currently, Sites 9 and 10 each consists of two informal, undesignated gravel pullouts on both sides of the road. These pullouts overlook Apikuni Flat, where unobstructed views give visitors the opportunity to observe a number of different animal species that may use the meadow. Under the preferred alternative, the pullouts at Sites 9 and 10 would be enlarged and formalized, with parking available on both sides of the road, and a short trail (approximately 100 feet) to the meadow would be constructed.

p. 18, Alternative B, Pullouts. A central gathering/viewing area would be developed in association with the pullout (Figure 3), where people could get out of their vehicles to observe the scenery and wildlife and set up tripods without having to move onto the roadway. An at-grade, unroofed, light on the land observation terrace on the lake side of the road could be constructed at this site in the future. Such a terrace would be accessible and could include seating and spotting scopes.

p. 18, Alternative B, Visitor Education. Informational material about wildlife viewing would be available at the Many Glacier Entrance Station, and wildlife interpretive exhibits would be installed at several pullouts and other possible locations such as the picnic area.

p. 18, Alternative B, Visitor Education. Alternative B would include an expansion of the interpretive and educational program. Informational material about wildlife viewing would be available at the Many Glacier Entrance Station, and wildlife interpretive exhibits would be installed at several pullouts. Exhibits would include information on wildlife behavior, ecology, and natural histories; wildlife management issues and appropriate wildlife viewing behavior; wildlife travel patterns and the importance of wildlife corridors beyond the boundaries of protected areas; and the relationship between climate change and wildlife distribution. A roving interpretive van and Park Rangers would travel the road to provide onsite interpretation, help facilitate viewing, and provide spotting scopes. The number of spotting scopes would depend upon available funding.

A major focus of the interpretive effort would be to provide education to visitors on displacement, habituation, and other consequences of approaching wildlife too closely. Concepts such as different temperaments and stress tolerances of individual animals and overt reaction distance (the distance at which an animal overtly reacts to the presence of people) would be introduced. The presentation would be theoretical but could also include examples of negative effects to individual animals and wildlife populations that are directly attributable to human caused disturbances. Watchable Wildlife messages would be provided to visitors to the Many Glacier area. A major wayside exhibit/pavilion just outside the entrance station would orient visitors to the philosophy of Watchable Wildlife and appropriate human behavior when encountering wildlife. This information may also be included in a brochure provided to all visitors arriving at the entrance station. Literature from other parks where wildlife viewing is popular, including Waterton Lakes National Park in Canada, would be reviewed during the development of interpretive messages. Interpretive messages would be displayed at several locations along the road and within campgrounds, including concession and visitor facilities. A new section specifically addressing wildlife viewing would be added to the park's Comprehensive Interpretive Plan.

pp. 18-19, Alternative B, Visitor Travel. The preferred alternative would reduce the speed limit from 45 mph to 35 mph between the entrance station and the Many Glacier Hotel T intersection

(approximately) the Apikuni Mtn./Poia Lake Trailhead (Pullout 7) and the service road just east of Sheep Curve to improve traffic and pedestrian safety and reduce the risk of collisions between vehicles and wildlife (Figure 2).

pp. 19-21, Alternative B, Wildlife Viewing Area at Swiftcurrent Motor Inn Parking Lot. To facilitate wildlife viewing from locations other than the median, rangers, interpretive staff, and VIPs would use movable cones or a similar method to cordon off alternate areas as needed, depending on the best location and vantage point.

p. 20-21 Alternative B, Wildlife Viewing Area at Swiftcurrent Motor Inn Parking Lot, Designs I and II. Interpretive features, including a possible kiosk, would provide information on wildlife, the history of the site, and area orientation, and could include a permanent spotting scope.

pp. 23-24, Table 2. Alternative A (No Action) and Alternative B (Preferred) for the Many Glacier Wildlife Viewing Plan.

Site Number and Location (mileages are approximate)	Site Description	Alternative A No Action	Alternative B Preferred
Site 9 3.2 miles west of entrance station on both sides of the road.	A widened road shoulder and undesignated gravel pullout that has developed over time from off-road parking. A neighboring wildlife corridor offers good opportunities to see wildlife.	No action.	This undesignated parking area would be formalized and enlarged into two new designated pullouts on both sides of the road. A short trail to Apikuni Flat would be constructed and a wildlife interpretive exhibit would be installed.
Site 10 3.3 miles (approximately) west of entrance station on both sides of the road	Widened road shoulders that have developed over time from off-road parking.	No action.	This undesignated parking area would be formalized and enlarged into two new designated pullouts on both sides of the road. A short trail (approximately 100 feet) to Apikuni Flat would be constructed and a wildlife interpretive exhibit would be installed.
Site 11 Sheep Curve, 3.5 miles west of entrance station on lake side of road.	A paved, formal pullout currently blocked off with barrier rock. The pullout is at an important wildlife crossing and places visitors and wildlife too close to each other. The pullout is also on a curve and presents a potential traffic and pedestrian safety hazard.	No action.	The pullout at Sheep Curve would be removed because of its location at a wildlife crossing and due to traffic safety concerns. Sheep Curve would be restored with native vegetation.
Site 11 3.6 miles west of the entrance station on the lake side of the road.	An old gravel pullout that was likely part of the historic road design but has been blocked off for several years. The site is approx. 0.1 mile west of Sheep Curve and provides good views of the lake and areas used by wildlife.	No action.	This former pullout would be re-developed and formalized into a new designated pullout.

p. 25, Alternatives Considered, Mitigation measures, Wildlife, Threatened, Endangered Species and Species of Concern.

- Construction activity (including that necessary to remove, enlarge, or develop new

pullouts) that is within 800 meters of an active golden eagle nest would only occur between one hour after sunrise and one hour before sunset during the nesting period (April 1 – August 1, subject to site-specific conditions and the recommendations of Park biologists). Noise above that of normal traffic sounds would be avoided during the nesting period.

p. 25, Alternatives Considered, Mitigation measures, Visual Resources.

- Appropriate, natural colors and vegetative screening would be incorporated into the design.

p. 25, Alternatives Considered, Mitigation measures, Vegetation.

- Natural design features would be used to minimize visual impacts and to aid in creating suitable site conditions for revegetation. For example, boulders may be used to retain slopes.
- Selected native trees and shrubs would be retained to provide screening around disturbed areas.

p. 25, Alternatives Considered, Mitigation measures, Vegetation.

- ~~A vegetation management plan would be prepared for the entire project. (Note: this item has been struck because the measure stating that “a restoration analysis would be completed to decide if revegetation is necessary” describes the same mitigation.~~

p. 26, Alternatives and Suggestions Considered and Dismissed. Both permanently and intermittently reopening the Sheep Curve pullout was suggested. Sheep Curve places visitors in very close proximity to a wildlife road crossing, compromising the safety of visitors and the security of wildlife. Reopening Sheep Curve is considered under the no action alternative. ~~A new pullout west of Sheep’s Curve is proposed under the Preferred Alternative.~~ Intermittently opening Sheep Curve was dismissed because it would be difficult to implement consistently, and because it would confer small benefits that would not outweigh costs. Another suggestion was made to close Sheep Curve to foot traffic. This was dismissed due to the impracticality of closing any section of the road to people who may be hiking or walking the Many Glacier Road.

pp. 26-27, Alternatives and Suggestions Considered and Dismissed. A suggestion was made to establish no-idling zones along the road for soundscape preservation and to preserve air quality. This suggestion was considered and dismissed because no-idling zones are very difficult to enforce. However, the park will consider providing park-wide educational information on idling, emissions, and the adverse impacts to air quality and the natural soundscape to encourage less vehicle idling.

pp. 27-28, Alternatives and Suggestions Considered and Dismissed. Five Four other design options were also considered but dismissed. For all five four of these options, the platform height would be approximately three feet.

The following text changes are ideas received during the public comment period for the EA that have been added to the EA, p. 26, Alternatives and Suggestions Considered and Dismissed. These comments are also addressed in the Responses to Substantive Comments section of these errata sheets.

Develop a formal wildlife viewing area in the southeast corner of the Swiftcurrent parking lot using 2-3 parking spaces instead of the center median. The southeast corner of the Swiftcurrent parking lot is a popular viewing location with a good vantage point of the ravine at the base of the Mt. Henkel, where bears are often observed. Providing a

formalized viewing area in this location was seriously considered but was finally dismissed because of limited space for interpretive exhibits, potential disturbance of visitors at the campground, and because it would require removal of vegetative screening between the campground and the parking lot, causing additional disturbance to campers. However, this comment underscored the fact that there is no single location in the parking lot that consistently offers the best vantage point to view wildlife. Therefore, to provide for safe wildlife viewing from other locations in the parking lot, park rangers, interpretive staff, and VIPs would use movable cones or a similar method to cordon off alternate areas as needed.

Develop a scaled-down formal viewing area with a small exhibit that would require the removal of only two parking spaces. The objective of a viewing terrace at Swiftcurrent parking lot is to provide a place for many visitors to gather, set up spotting scopes, and view wildlife without being disturbed by traffic or crowded by parked vehicles. A smaller, scaled-down viewing area has been dismissed because it would not meet this objective.

Extend the viewing portion of the median into the vegetated portion to provide more room for wildlife viewing without removing parking spaces. This option was considered but dismissed because it would cause an adverse impact to the design of the historic district, would require unnecessary removal of vegetation, and would not address crowding from parked vehicles.

Develop a viewing area in the Many Glacier Hotel parking lot or at the top of the trail that leads from the hotel to the parking lot. A formal viewing area at this location was considered but dismissed since the site receives a comparatively low level of use, there are no issues with crowding from parked vehicles, there would be no impacts to vegetation due to the rocky terrain, and the site is often too windy for spotting scopes.

Redesign the pullout at Site 10 to include removable concrete barriers, parking space, and separation between viewers and wildlife. This approach was considered but dismissed because large congregations of people would still be in close proximity to wildlife that use the Sheep Curve area. Wildlife that prefer to avoid people would be displaced from an important crossing area, and animals that do not avoid the site when people are present could be stressed or put at risk of excessive habituation.

Provide pedestrian access only to Sheep Curve. Previously, vehicles and pedestrians at the Sheep Curve pullout put people in close proximity to wildlife and created an unsafe situation for both people and wildlife. Providing pedestrian access to the area would leave this issue unaddressed. So that bears and other wildlife may cross the road at Sheep Curve without an increased risk of displacement, stress, and habituation, pedestrian access only to area has been dismissed.

Reopen the pullout at Sheep Curve, designate a wildlife viewing corridor along the length of Sheep Curve, mark both ends with stop signs and wildlife viewing corridor signs, and formalize pullouts at either end. Viewing corridors have not proved effective in changing inappropriate behavior in the presence of wildlife. Establishing a viewing corridor in lieu of closing the pullout at Sheep Curve also would not address concerns associated with having people in close proximity to wildlife. Reopening the pullout and designating a viewing corridor along Sheep Curve has therefore been dismissed.

Formalize the foot and bicycle path from the Swiftcurrent parking lot east of Swiftcurrent Lake toward Sheep Curve. The foot and bicycle path would be formalized from

Swiftcurrent to the Hotel T intersection under the preferred alternative. But continuing the path east has been dismissed due to the narrow roadway and steep terrain along the road shoulder.

Reduce the speed limit to 30 mph. A 30 mph speed limit was considered but dismissed after park law enforcement rangers determined that it would not noticeably increase safety and that decreasing the speed limit to 35 mph would be adequate.

Initiate a lower night speed than day speed limit. A lower nighttime speed limit was considered but dismissed because the park's wildlife biologist and law enforcement rangers did not believe it would be necessary or practical.

p. 44, Wildlife, Impacts Analysis of Alternative B - Preferred. Reducing the speed limit from 45 mph to 35 mph between the Apikuni Mtn./Poia Lake Trailhead (Pullout 7) and the service road just east of Sheep Curve could put wildlife at a lower risk of vehicle collisions.

p. 45, Threatened, Endangered, and Species of Concern, Impacts Analysis of Alternative B - Preferred, Grizzly Bears. The proposed speed limit reduction from 45 mph to 35 mph between the Apikuni Mtn./Poia Lake Trailhead (Pullout 7) and the service road just east of Sheep Curve could benefit grizzlies by reducing their risk of injury or mortality from vehicle collisions.

p. 56, Threatened, Endangered, and Species of Concern, Impacts Analysis of Alternative B - Preferred, Lynx. Lynx could, however, benefit from the proposal's reduced speed limit from 45 mph to 35 mph between the Apikuni Mtn./Poia Lake Trailhead (Pullout 7) and the service road just east of Sheep Curve.

p. 56, Threatened, Endangered, and Species of Concern, Impacts Analysis of Alternative B - Preferred, Wolves. Wolves could also benefit from the proposed speed limit reduction between the Apikuni Mtn./Poia Lake Trailhead (Pullout 7) and the service road just east of Sheep Curve from 45 mph to 35 mph, as the risk of injury or mortality from vehicle collisions could be reduced.

p. 57, Threatened, Endangered, and Species of Concern, Impacts Analysis of Alternative B - Preferred, Wolverines. But wolverines could benefit from the proposal's reduced speed limit between the Apikuni Mtn./Poia Lake Trailhead (Pullout 7) and the service road just east of Sheep Curve from 45 mph to 35 mph, as a lower speed limit may decrease the chances of a wolverine being struck by a vehicle.

p. 57, Threatened, Endangered, and Species of Concern, Impacts Analysis of Alternative B - Preferred, Fisher. The reduced speed limit from 45 mph to 35 mph between the Apikuni Mtn./Poia Lake Trailhead (Pullout 7) and the service road just east of Sheep Curve could benefit fishers, however, as the chances of their being struck by a vehicle would be reduced.

pp. 57-58, Threatened, Endangered, and Species of Concern, Impacts Analysis of Alternative B - Preferred, Rocky Mountain Bighorn Sheep The removal of the Sheep Curve pullout would result in less congestion at the crossing, thus giving sheep more room and reducing the potential for them to obtain human food or be displaced. Sheep would still be exposed to high levels of human activity in the area. But ~~shifting the visitor parking and viewing area to the west, as proposed under the preferred alternative,~~ removing the pullout at Sheep Curve would moderate the frequency with which sheep and people are within close range.

p. 58, Threatened, Endangered, and Species of Concern, Impacts Analysis of Alternative B - Preferred, Rocky Mountain Bighorn Sheep. Sheep crossing the Many Glacier Road could be at a reduced risk of injury or mortality from vehicle collisions due to the preferred alternative's

proposed speed limit reduction from 45 mph to 35 mph between the Apikuni Mtn./Poia Lake Trailhead (Pullout 7) and the service road just east of Sheep Curve.

p. 61, Threatened, Endangered, and Species of Concern, Impacts Analysis of Alternative B - Preferred, Conclusion. The preferred alternative would have negligible to minor, beneficial, site-specific, and long-term impacts on Canada lynx, gray wolves, wolverines, and fishers. The proposed speed limit reduction from 45 mph to 35 mph between the Apikuni Mtn./Poia Lake Trailhead (Pullout 7) and the service road just east of Sheep Curve could reduce the risk of injury and mortality from vehicle collisions for these species.

p. 63, Visual Resources, Impacts Analysis of Alternative B - Preferred. The enlargement of four designated pullouts, the formalization of ~~four~~ five undesignated pullouts, and the removal of two informal and one designated pullout would result in no change to the viewshed and distant visual resources that are visible from the road. There would be slight, localized visual changes along the road at twelve sites due to alterations to the size and location of pullouts. The proposed trail to the meadow at Apikuni Flat (Site 9 10) would be a newly visible feature.

p. 63, Visual Resources, Impacts Analysis of Alternative B - Preferred, Conclusion. Impacts on visual resources from the construction of a short trail to the meadow at Apikuni Flat (Site 9 10) would be moderate, adverse, long-term and site-specific as this would introduce a development into an otherwise undeveloped site.

p. 66, Visitor Use and Experience, Impacts Analysis of Alternative B - Preferred. The removal of one designated pullout and two undesignated pullouts would change where visitors pull over, and some visitors would be affected by not being able to stop at Sheep Curve, which has become a traditional stopping area. But the development of a new designated pullout at Site 10 ~~one new pullout west of Sheep Curve~~ would provide a similar experience that is safer for both visitors and wildlife.

p. 66, Visitor Use and Experience, Impacts Analysis of Alternative B - Preferred. The formalized foot and bicycle path along the road shoulder between the Hotel T intersection and the Swiftcurrent parking lot would give hikers and cyclists a designated area along a busy section of road, and the reduced speed limit from 45 mph to 35 mph ~~between the entrance station and the Hotel T intersection (approximately)~~ between the Apikuni Mtn./Poia Lake Trailhead (Pullout 7) and the service road just east of Sheep Curve would improve pedestrian and traffic safety.

p. 67, Visitor Use and Experience, Impacts Analysis of Alternative B - Preferred. Viewing and interpretive opportunities would be especially enhanced at Apikuni Flat (Sites 9 and 10), west of the Hotel T intersection (Site 14), and at the viewing area at the Swiftcurrent Motor Inn parking lot.

p. 68, Visitor Use and Experience, Impacts Analysis of Alternative B - Preferred, Conclusion. Impacts from the removal of the pullout at Sheep Curve would be minor, adverse, site-specific, and long-term because a traditional and popular pullout would no longer be available. But these impacts would be offset by the development of a new designated pullout at Site 10 ~~to the east to the west~~.

p. 71, Cultural Resources, Impact Analysis of Alternative B - Preferred. The proposed plan calls for enlarging four and eliminating one of the historic pullouts and formalizing ~~four~~ five new pullouts where graveled, undesignated pullouts now exist.

p. 71, Cultural Resources, Impact Analysis of Alternative B - Preferred. The short trail to the meadow at Apikuni Flat (Site 9 10) and the viewing area at the Swiftcurrent Motor Inn parking lot would be constructed outside the boundaries of the Many Glacier Hotel Historic District and the Swiftcurrent Auto Camp Historic District.

p. 78, Human Health and Safety, Affected Environment. The Many Glacier Road is currently posted with a 45 mph speed limit between the entrance station and the service road just east of Sheep Curve Many Glacier Hotel T intersection. Some pullouts are located on curves with poor visibility up or down the road. These low-visibility areas combined with the 45 mph speed limit present a hazard to motorists and pedestrians.

p. 78, Human Health and Safety, Impacts Analysis of Alternative A - No Action. The potential for bears and other wildlife to become overly familiar with people or obtain human food would not be addressed. The existing 45 mph speed limit would remain from the entrance station to the service road east of Sheep Curve, presenting risks to pedestrians on the road and to motorists entering and exiting pullouts on curves with low visibility.

p. 79, Human Health and Safety, Impacts Analysis of Alternative A - No Action, Conclusion. Cumulatively, the temporary negligible to minor hazards of construction for past, ongoing, and future actions combined with risks from unsafe parking and traffic conditions, continued close contact with wildlife, and a 45 mph speed limit no change to the speed limit under the no action alternative would be negligible to moderate, site-specific and local, and short and long-term.

p. 79, Human Health and Safety, Impacts Analysis of Alternative B - Preferred. Reducing the speed limit from 45 mph to 35 mph between the entrance station and the Hotel T intersection (approximately) Apikuni Mtn./Poia Lake Trailhead (Pullout 7) and the service road just east of Sheep Curve would improve safety at pullouts with poor visibility and reduce risks to pedestrians.

p. 84, References. Muhlfeld, C. C., J. J. Giersch, F. R. Hauer, G. T. Pederson, G. Luikart, D. P. Peterson, C. C. Downs, D. B. Fagre. 2011. Climate change links fate of glacier and an endemic alpine invertebrate. Climate Change, U.S. DOI 10.1007/s10584-011-0057-1.

p. 88, Appendix A - Impairment. Impairment findings are not necessary for visitor use and experience, socioeconomics, public health and safety, environmental justice, land use, and park operations, because impairment findings relate back to park resources 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 wildlife, threatened and endangered species and species of concern, visual resources, historic structures, vegetation, and soils.

p. 88, Appendix A - Impairment. Fundamental resources and values for Glacier National Park are identified in the General Management Plan as derived from the park's enabling legislation. Of the impact topics carried forward in this environmental assessment, only wildlife, threatened and endangered species and species of concern, visual resources, historic structures, vegetation, and soils are considered necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park; are key to the natural or cultural integrity of the park; and/or are identified as a goal in the park's General Management Plan or other relevant NPS planning document.

Responses to Substantive Comments on the EA

Responses are in bold italics.

1. COMMENT: "In our scoping comments we recommended the establishment of no idle zones in existing and potential vehicle pullout zones... This comment was not addressed in the draft EA."

RESPONSE: *This comment was inadvertently not addressed in the EA, but has been addressed above in the Text Changes section of these errata sheets. No-idling zones are difficult to enforce, but the park will consider providing visitors with educational information on idling, emissions, and the impacts to air quality and natural sounds to encourage less vehicle idling. Educational outreach discouraging idling would not be exclusive to Many Glacier, but would occur on a park-wide basis.*

2. COMMENT: Consider a viewing area in the southeast corner of the Swiftcurrent Motor Inn parking lot. The south side of the parking lot is used for viewing more often than the center median and provides a better view of the ravine at the base of Mt. Henkel, which is a favored feeding area for bears. Only two parking spaces would be lost, the option would be low cost and at grade, and the area could be paved or fenced off. At the center median, the view is often blocked by trees and the Swiftcurrent Motor Inn roof; the viewshed is reduced at the center median, especially for children and people using wheelchairs. When bears are in view at the base of the Mt. Henkel ravine, observers will move to the southeast corner of the parking lot.

RESPONSE: *The value of a viewing area in the southeast corner of the parking lot was well presented, and shifting the viewing terrace to this location was seriously considered. It was dismissed because it would only allow a smaller sized terrace, would disturb visitors at the campground, and would require the removal of vegetative screening between the campground and parking lot to accommodate the use.*

However, recognizing that wildlife viewing takes place in different locations depending on where animals are most visible, the park also considered satellite viewing areas in the southeast and northwest corners in addition to the terrace at the median. A satellite viewing area in the southeast corner was dismissed for the reasons explained above, and satellite viewing areas elsewhere were dismissed because they may not consistently offer the best vantage points; where people gather and set up spotting scopes depends on where the animals are, and visitors often use multiple locations within the parking lot. Satellite viewing areas would also result in more development in front of the Swiftcurrent motor Inn and could increase risks to visitor safety by inviting more pedestrian traffic across the parking lot.

The center median remains the preferred location for the formal viewing terrace; the median is centrally located, is already frequently used for wildlife viewing, and offers a larger area to accommodate visitors, spotting scopes, and interpretive panels and kiosks. However, the preferred alternative is not intended to prevent use of other viewing areas in the parking lot. To facilitate viewing from locations other than the median, the preferred alternative has been modified to explain that rangers, interpretive staff, and VIPs will use movable cones or a similar method to

cordon off areas as needed, depending on the best location and vantage point. (Please see also the Text Changes section of these errata sheets.)

3. COMMENT: Consider a scaled down formal viewing area with a small exhibit at Swiftcurrent parking lot that would require the removal of only two parking spaces.

RESPONSE: *The median at Swiftcurrent parking lot is one of the most popular wildlife viewing locations in the Many Glacier Road corridor. The objective of the viewing terrace is to provide a place for many visitors to gather, set up spotting scopes, and view wildlife without being disturbed by traffic or crowded by parked vehicles. The viewing experience will be enhanced by interpretive features that provide information on wildlife, the history of the site, and area orientation. These objectives would not be met by a scaled down viewing area. (Please see also the Text Changes section of these errata sheets.)*

4. COMMENT: Instead of removing parking spaces, suggest "widening the median". This "would give adequate room for setting up scopes . . . Widening perhaps twenty feet near the wooded area would be enough and would make it the obvious area for viewing."

RESPONSE: *We assume this comment refers to extending or lengthening the open portion of the median into the vegetated portion. Extending the median would cause an adverse impact to the design of the historic district, would not ameliorate crowding from parked vehicles, and would result in unnecessary removal of vegetation. (Please see also the Text Changes section of these errata sheets.)*

5. COMMENT: Could a permanent scope be included?

RESPONSE: *A permanent scope at the viewing terrace will be considered, and the text of the EA has been changed accordingly (please see the Text Changes section of these errata sheets).*

6. COMMENT: Use the picnic area for formal wildlife viewing and interpretation.

RESPONSE: *The picnic area is already a readily identifiable location for viewing wildlife, where animals on the south slope of Altyn are easily seen and visitors are not crowded by traffic and parked cars. Formalizing the picnic area for wildlife viewing is not necessary to enhance the viewing experience, but an interpretive exhibit at the site will be considered. Please see the text that was added to the EA, p. 18.*

7. COMMENT: Consider a viewing terrace in the Many Glacier Hotel parking lot or at the top of the trail that leads from the hotel to the parking lot.

RESPONSE: *A formalized terrace does not appear to be necessary in this location since there is a comparatively lower level of use, adverse impacts to vegetation are not a concern due to the rocky terrain, and crowding from parked vehicles or traffic is not an issue. The site is also often too windy for spotting scopes. (Please see also the Text Changes section of these errata sheets.)*

8. COMMENT: Redesign the pullout at Site 10 to include removable concrete barriers, parking space, and separation between viewers and wildlife.

RESPONSE: *(Note: Site 10 has been renumbered as Site 11). Redesigning the pullout to keep people on one side of the road would not ameliorate the potential risks to wildlife. Large congregations of people would still be in close proximity to wildlife*

using Sheep Curve, and wildlife would continue to be displaced, stressed, or put at an increased risk of habituation. Please see also the Text Changes section of these errata sheets.

9. COMMENT: Consider providing pedestrian access only to Sheep Curve or to a portion of Sheep Curve.

RESPONSE: The presence of vehicles and pedestrians at the Sheep Curve pullout in the past is what put people in close proximity to wildlife and created an unsafe situation for both wildlife and people. Providing pedestrian access to Sheep Curve would leave this issue unaddressed. Please see also the Text Changes section of these errata sheets.

10. COMMENT: Consider reopening the pullout at Site 10 and making the entire length of Sheep Curve (Sites 9-12) a "wildlife travel corridor". Mark both ends with stop signs and wildlife viewing corridor signs, with designated pullouts at either end at Sites 12 and 10.

RESPONSE: (Note: Site 10 has been renumbered as Site 11). Reopening the pullout at Sheep Curve was considered in the No Action alternative; because Sheep Curve has been identified as part of an important travel route for wildlife, the pullout at Sheep Curve (now Site 11) will be removed. We assume that designating a "wildlife travel corridor" refers to designating a viewing corridor in an area where wildlife naturally and frequently cross the road. While wildlife viewing corridors are a good idea, they have not proved effective in changing inappropriate behavior in the presence of wildlife. Site 12 will be a designated pullout. Since the pullout at Sheep Curve will be removed, stop signs are not necessary. (Please see also the Text Changes section of these errata sheets.)

11. COMMENT: Bears frequently cross midway between the pullouts at Sites 10 and 12; the east corner of Site 12 is near the second most frequently used bear crossing area.

RESPONSE: (Note: Site 10 has been renumbered as Site 11). This area is not likely to be a preferred route for bears due to the steep terrain and reduced vegetative cover. However, the new pullout immediately west of Sheep Curve originally proposed in the EA (Site 11 in the EA) will not be constructed in order to better protect the wildlife crossing at Sheep Curve as well as any possible crossing areas between Sheep Curve and Site 12.

12. COMMENT: Consider shifting the pullout at Site 9 to the west, closer to the sewer pond service road, to provide better views of Sheep Curve.

RESPONSE: After considering this suggestion, the NPS decided to retain Site 9 because the location offers excellent wildlife viewing opportunities at Apikuni Flat. However, to provide views of Sheep Curve, an additional pullout, the new Site 10, will be formalized at an undesignated gravel pullout approximately 0.1 mile west of Site 9. A pullout at the sewer pond service road would place visitors too close to the wildlife crossing area at Sheep Curve; the new pullout will enable visitors to view wildlife at Sheep Curve from an appropriate distance. A pullout at the new Site 10 will also provide more visitors with opportunities to view wildlife at Apikuni Flat. Please see the Text Changes section of these errata sheets, where this change has been added to the description of the preferred alternative.

13. COMMENT: What is the justification for the exhibit and short trail south of the road at Apikuni Flat? What will be interpreted? The short trail will encourage further exploration of the meadow when bears and other wildlife are present.

RESPONSE: *Apikuni Flat provides excellent wildlife viewing opportunities and is among the best places along the road to observe wildlife at a distance that is safe for both visitors and wildlife. Formalizing the pullout will provide an excellent opportunity to interpret wildlife behavior and ecology as well as appropriate viewing behavior. The trail to the meadow will only be 100 feet long (approximately), and will not extend far enough to cause disturbances to bears or other wildlife. The interpretive message at the site will include requests for visitors to stay on the trail.*

14. COMMENT: Consider developing another pullout at the avalanche chute above Swiftcurrent Lake with parking on the south side of the road.

RESPONSE: *We were not able to evaluate this site due to winter road conditions, but we agree that the area could be a suitable location for another viewing pullout. This section of the road will be evaluated during the FHWA road project.*

15. COMMENT: Consider continuing the roadside trail from the Swiftcurrent parking lot to the falls pullout and to Site 11.

RESPONSE: *Continuing the foot and bicycle trail east of the Hotel T is not feasible due to the narrow roadway and steep terrain along the road shoulder. Please see also the Text Changes section of these errata sheets.*

16. COMMENT: Consider reducing the speed limit to 30 mph.

RESPONSE: *After further consultation, park law enforcement rangers determined that decreasing the speed limit to 30 mph would not cause noticeable gains in safety over a 35 mph speed limit. (Please see also the Text Changes section of these errata sheets.)*

17. COMMENT: Consider a lower night speed than day speed limit.

RESPONSE: *A lower nighttime speed limit was considered, but the park's law enforcement rangers and wildlife biologist believed that lowering the speed limit at night would not be practical and is not necessary. (Please see also the Text Changes section of these errata sheets.)*

18. COMMENT: Limit construction to mid-June or mid/late September to reduce impacts to wildlife; construction during July and August would have the least impact to wildlife.

RESPONSE: *Construction will be scheduled during the summer months if possible. Please see also the Text Changes section of these errata sheets.*

19. COMMENT: "The plan addresses additional exhibits and other education but does not provide much detail about the message(s) that will be developed".

RESPONSE: *To implement the wildlife viewing plan, a Watchable Wildlife messaging plan will be developed for new exhibits, publications, and personal services interpretation. Messages will address basic wildlife ecology and behavior, the critical importance of the Many Glacier Valley to wildlife, reasons why the Many Glacier Valley is being managed in this specific way (with comparisons to wildlife viewing programs in other parks), and the NPS mandates for both preservation and*

use. The importance of allowing animals to use natural movement patterns and retain normal feeding behavior will also be addressed, along with human impacts on wildlife such as food conditioning, habituation and how it can occur even when animals show no obvious signs of disturbance, and the dangers associated with closely approaching large animals.

20. COMMENT: Educational information should explain how visitors can influence wildlife behavior and survival.

RESPONSE: This will be a major focus of the Watchable Wildlife interpretive effort. All forms of interpretation (personal and non-personal) will address this topic, including obvious human impacts such as displacing animals by approaching them too closely, and less obvious impacts such as habituation. (Please see the Text Changes section of these errata sheets for additions to the EA on this subject.)

21. COMMENT: Develop an interpretive plan that provides "a broader, more detailed justification for why this plan and these efforts are important to wildlife and the park purpose".

RESPONSE: The park has an approved Comprehensive Interpretive Plan which addresses the overall interpretive program in the Many Glacier Valley. A new section will be developed that specifically addresses Watchable Wildlife programs. This plan will drive development of programs and media. (Please see the Text Changes section of these errata sheets for additions to the EA on this subject.)

22. COMMENT: Focus on improving interpretation and messages to visitors.

RESPONSE: The park concluded from initial scoping that the Watchable Wildlife message needs to be provided prior to or immediately upon visitor arrival to the Many Glacier area. A major wayside exhibit/pavilion will be developed and installed just outside the entrance station. This exhibit will orient visitors to the philosophy of Watchable Wildlife and appropriate human behavior when traveling the corridor and encountering wildlife. This information may also be included in a brochure to be handed out at the entrance to all arriving visitors. (Please see the Text Changes section of these errata sheets for additions to the EA on this subject.)

23. COMMENT: How will the park prevent visitors from stopping their cars in the middle of the road?

RESPONSE: There is no way to prevent people from stopping in the middle of the road except through education and enforcement. The interpretive message will stress the undesirable consequences of this behavior and will encourage visitors to use optimal viewing locations at pullouts. The message will also focus on how stopping close to wildlife encourages an inappropriate level of habituation and can lead to other problems such as food conditioning and vehicle-animal collisions.

24. COMMENT: Consider using text from the Waterton Lakes National Park newspaper on how to view wildlife.

RESPONSE: The Waterton Lakes National Park newspaper and other Parks Canada literature will be reviewed along with information from other areas where wildlife viewing is popular. The park will develop messages that are as universal as possible, as visitors often receive conflicting information from different parks and wildlife viewing areas. But the park's message must also address issues and

conditions that are specific to the Many Glacier Valley. (Please see the Text Changes section of these errata sheets for additions to the EA on this subject.)

25. COMMENT: Consider placing educational signs in restrooms.

RESPONSE: Restrooms are one possible location for interpretive messages, and will be considered along with many other locations along the road, within campgrounds, and at concession facilities, among others. (Please see the Text Changes section of these errata sheets for additions to the EA on this subject.)

26. COMMENT: "...this sentence (p. 18) is a little confusing: 'During road rehabilitation, pullouts and widened road shoulders that are not addressed in the Wildlife Viewing Plan would be either formalized and/or paved, retained as gravel pullouts, or curbed to prevent an increase in size and further impacts to vegetation.' Does that mean the three pullouts designated for removal in this plan could be paved?"

RESPONSE: No. The pullouts slated for removal in this plan are being removed because they place visitors too close to well-used wildlife crossings. The sentence in question refers to pullouts that are "not addressed" by the wildlife viewing plan, as the plan does not address all designated and undesignated pullouts. Actions called for in this plan may be incorporated into upcoming road rehabilitation as part of the Park Roads/ Federal Highway Program administered by the FHWA. Other pullouts and widened road shoulders not addressed under this plan may be addressed during the road rehabilitation project.

27. COMMENT: The Park should not assume that adverse impacts to wildlife have not reached a level that could necessitate closing the Many Glacier Road; "no one knows what impacts have accrued to wildlife from 100 years of human activity in Many Glacier".

RESPONSE: While it is true that all the effects to wildlife from past and ongoing human activity is not entirely understood, certain observable effects, such as food conditioned or habituated behavior, collisions with vehicles, wildlife mortality, and conflicts with humans, do not appear to be occurring at a level that would warrant closure of the Many Glacier Road. Also, current daily traffic volumes along the Many Glacier Road are below that which has been shown to seriously impede grizzly bear crossing behavior.

28. COMMENT: Will interpretive rangers and volunteers be required to use the formal viewing area at Swiftcurrent?

RESPONSE: No. There will be no requirement to use the formalized viewing area at Swiftcurrent. The viewing terrace is being developed to better accommodate the number of visitors that use the median for wildlife viewing and to enhance the viewing experience, but anyone is welcome to view wildlife from other locations and vantage points in the parking lot or along the road.