United States Department of the Interior

FISH AND WILDLIFE SERVICE
334 Parsley Boulevard
Cheyenne, Wyoming 82007

In Reply Refer to:
FWS/R6/ES/2026-0073145

Memorandum

To: Superintendent, Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway, National Park Service, Moose, Wyoming

TYLER ABBOTT Digitally signed by TYLER ABBOTT Date: 2026.07.20 16:50:27 -06'00'

From: Field Supervisor, Wyoming Ecological Services Field Office, U.S. Fish and Wildlife Service, Cheyenne, Wyoming

Subject: Biological Opinion for the Effects on the Grizzly Bear from the Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway Proposed Amendment to the Moose-Wilson Corridor Comprehensive Management Plan Located in Teton County, Wyoming

This document transmits the biological opinion (BO) of the U.S. Fish and Wildlife Service (Service) based on our review of the effects on the grizzly bear (*Ursus arctos horribilis*) from the National Park Service's (NPS) proposed Amended Moose-Wilson Corridor Comprehensive Management Plan (Project) in Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway (GTNP) located in Teton County, Wyoming. The request for formal consultation pursuant to section 7(a)(2) of the Endangered Species Act of 1973, as amended (ESA; 16 U.S.C. 1531 *et seq.*) was received on April 21, 2026, along with a biological assessment (BA) and supporting files.

The GTNP determined that the Project 'may affect but is not likely to adversely affect' the Canada lynx (*Lynx canadensis*), the North American wolverine (*Gulo gulo luscus*), the yellow-billed cuckoo (*Coccyzus americanus*), and the whitebark pine (*Pinus albicaulis*). It also determined the Project is 'not likely to jeopardize the continued existence' of the monarch butterfly (*Danaus plexippus*) or the Suckley's cuckoo bumble bee (*Bombus suckleyi*), and 'will not destroy or adversely modify' designated Canada lynx critical habitat. The Service concurs with the 'may affect but is not likely to adversely affect' determinations for the Canada lynx, the North American wolverine, the yellow-billed cuckoo, and the whitebark pine, and the determination that the Project 'will not destroy or adversely modify' designated Canada lynx critical habitat. Concurrence is based on our understanding of the proposed Project, which includes information provided in the 2026 BA. This concludes informal consultation for the above-mentioned species and critical habitat for the proposed Project.

The attached BO is based on information provided in the 2026 BA, the 2016 Environmental Impact Statement (EIS) and Record of Decision, the 2020 Amendment of the Moose-Wilson Corridor Draft Comprehensive Management/EIS Project BA and associated BO, the 2024 Bike

Safety Bypass Route BA and associated concurrence letter, the 2024 email conversations of May 12, 18 and 29, and June 5, 2026, with GTNP staff, field investigations, peer-reviewed scientific literature, and the best available scientific data. Information contained in this BO builds upon previous consultations for the Moose-Wilson Corridor EIS, including those finalized by the Service for the NPS on June 6, 2016, and December 11, 2020. Literature cited in this BO is not a complete bibliography of all literature available on the species of concern, pathway or roadway construction projects and their effects, or on other subjects considered in this opinion. A complete decision file of this consultation is available at the Wyoming Ecological Services Field Office.

We appreciate your efforts to ensure the conservation of endangered, threatened, proposed and candidate species. If you have questions regarding this letter or your responsibilities under the ESA, please contact Heather O'Brien of my office at heather_obrien@fws.gov or by phone at (307) 204-9140.

Attachment: Biological Opinion for the Effects on the Grizzly Bear from the Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway Proposed Amendment to the Moose-Wilson Corridor Comprehensive Management Plan Located in Teton County, Wyoming

cc: National Park Service, Superintendent, Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway, Moose, WY (chip_jenkins@nps.gov)
National Park Service, Wildlife Biologist, Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway, Moose, WY (john_a_stephenson@nps.gov)
National Park Service, Vegetation Ecology and Management Branch Chief, Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway, Moose, WY (laura_jones@nps.gov)
Wyoming Game and Fish Department, Statewide Habitat Protection Program, Cheyenne, WY (wgfd.hpp@wyo.gov)

BIOLOGICAL OPINION

for the

Effects on the Grizzly Bear from the Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway Proposed Amendment to the Moose-Wilson Corridor Comprehensive Management Plan/EIS Located in Teton County, Wyoming

U.S. Fish and Wildlife Service Reference Number 2026-0073145

Prepared by: U.S. Fish and Wildlife Service
Wyoming Ecological Services Field Office
July 20, 2026

Issued by: TYLER ABBOTT Digitally signed by TYLER ABBOTT Date: 2026.07.20 16:54:57 -06'00'

Tyler A. Abbott, Field Supervisor

BIOLOGICAL OPINION

1. INTRODUCTION

The U.S. Fish and Wildlife Service (Service) has completed this biological opinion (BO) in response to our review of the effects on the grizzly bear (*Ursus arctos horribilis*) from the National Park Service's (NPS) proposed Amendment to the Moose-Wilson Corridor Comprehensive Management Plan/EIS (Project) for Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway (GTNP) located in Teton County, Wyoming. The request for formal consultation pursuant to section 7(a)(2) of the Endangered Species Act of 1973, as amended (ESA; 16 U.S.C. 1531 *et seq.*) was received on April 21, 2026, with the biological assessment (BA).

Regulations direct the Service to evaluate whether a proposed action is likely to jeopardize the continued existence of threatened or endangered species. This BO is based on information regarding direct, indirect, and cumulative effects of the action; conditions forming the environmental baseline; and the species' ecological status. Based on the analysis presented in the BA, it is the Service's biological opinion that the effects associated with the proposed action are likely to adversely affect but are not likely to jeopardize the continued existence of the grizzly bear.

This BO is based on information provided in the 2026 BA, the 2016 Environmental Impact Statement (EIS) and Record of Decision (ROD), the 2020 Amendment of the Moose-Wilson Corridor Draft Comprehensive Management/EIS Project BA and associated BO, the 2024 Bike Safety Bypass Route BA and associated concurrence letter, the 2024 email conversations of May 12, 18, and 29, and June 5, 2026 with GTNP staff, field investigations, peer-reviewed scientific literature, and the best available scientific data. This BO includes updates to sections discussing the status of the species and the environmental baseline of the action area. Information contained in this BO builds upon previous consultations for the Moose-Wilson Corridor EIS, including those finalized by the Service for the NPS on June 6, 2016, and December 11, 2020. Literature cited in this BO is not a complete bibliography of all literature available on the species of concern, pathway or roadway construction projects, their effects, or on other subjects considered in this opinion. A complete decision file of this consultation is available at the Wyoming Ecological Services Field Office.

2. DESCRIPTION OF THE PROPOSED ACTION

Regulations implementing the ESA (50 CFR 402.02) define "action" as "all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by federal agencies of the U.S. or upon the high seas." The following is a description of the proposed action. Additional information can be found in the Project BA incorporated here by reference (NPS 2026).

This BO analyzes the proposed amendment by the GTNP of preferred Alternative C and the associated ROD for the 2016 Moose-Wilson Corridor Comprehensive Management/EIS. The 2016 consultation and 2020 amendment analyzed the management, use, and development of the area into the future including time sequencing to distribute visitor use and traffic management of

the Moose-Wilson Road. Those consultations evaluated the reconstruction and paving of unpaved portions of the Moose-Wilson Road, safety features such as speed limits, designated parking turnouts, safety edges, correction of drainage issues, improving road conditions and areas of road widening. Staging and temporary use areas were analyzed as well for the anticipated 3 years of work that would occur daily during daylight hours. Amendments associated with the current Project include construction of a multi-use pathway in the Moose-Wilson Corridor (corridor), realignment of a segment of the Moose-Wilson Road between Sawmill Ponds Overlook and Death Canyon Road, and reclamation of the original road segment associated with the realignment (Figure 1). These modifications were previously described in Alternative D of the EIS and are currently proposed with minor refinements as the Project.

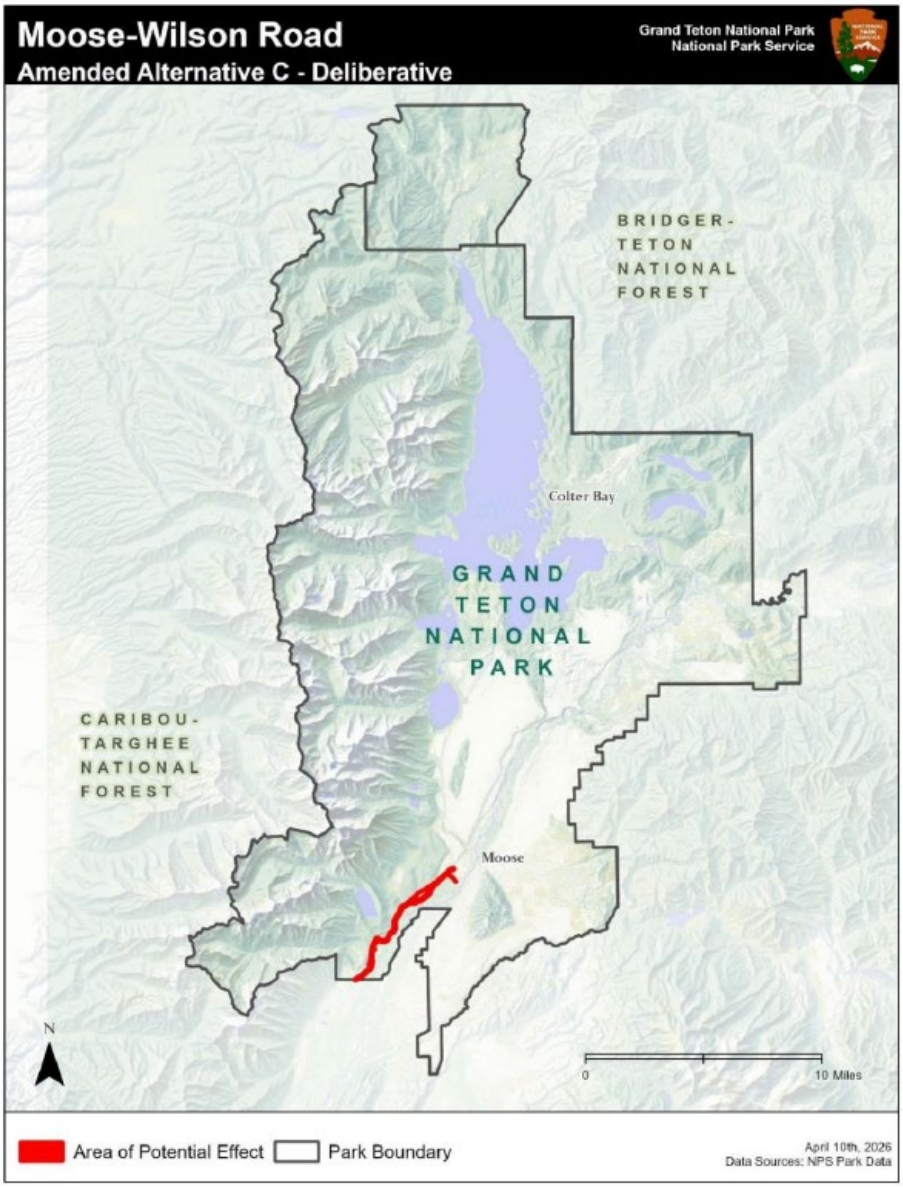

Figure 1. Location of the Amended Selected Action of the Moose-Wilson Corridor Comprehensive Management Plan/EIS Project area in Grand Teton National Park (NPS 2026).

Grand Teton National Park is adding the following actions not previously analyzed or fully described as part of the preferred Alternative C of the 2016 EIS and ROD for the Moose-Wilson Corridor Comprehensive Management Plan as components of the Project:

Multi-use Pathway Construction

A multi-use pathway (pathway) for non-motorized pedestrian and bicycle traffic is proposed for construction within the corridor from the Granite Canyon Entrance Station to the Moose Entrance Station. The pathway would generally follow a route parallel to, and within 150 feet of, the Moose-Wilson Road but would break away to parallel the Levee Access Road and share the Laurance S. Rockefeller (LSR) Preserve access road along one segment. The pathway would also deviate from the Moose-Wilson Road in several additional locations due to dense vegetation, difficult topography, and cultural resource protections. The 6.95-mile pathway footprint would consist of a 10-foot-wide paved surface with a 2.5-foot shoulder on both sides and would have a total disturbance width of 20 feet. There is no associated fencing included in the description of this component of the proposed Project. Additional brushing and removal of vegetation may be applied in some segments to increase sight distances and improve overall safety for pathway users. Public access would be allowed from two hours after sunrise to one hour before sunset, daily, to avoid peak foraging times for grizzly bears. The pathway would be generally closed during the winter months, but open for visitor use if the pathway surface is clear of snow and ice.

Moose-Wilson Road Realignment

The Project also proposes to reroute the segment of the Moose-Wilson Road north of the Death Canyon Road to the Sawmill Ponds Overlook. The rerouted segment would traverse upland sagebrush habitats, replacing the existing route which passes through a wetland complex with high-quality grizzly bear forage. The proposed pathway would follow the same realignment, routing recreationalists through more open sagebrush habitat. The construction footprint for the road realignment would include a 22-foot-wide 2-lane paved roadway with 2.5-foot shoulder on both sides with a total right-of-way disturbance width of 40 feet. There is no associated fencing included in the description of this component of the Project. Three 80-foot-long parking pullouts would also be constructed between Wittmer Junction and the Sawmill Ponds Overlook, creating an additional 0.11 acres of paved surface and 0.22 acres of disturbance. Speed limits on the Moose-Wilson Road, including rerouted segments that are a component of the Project, will be posted as 20 mph.

Reclamation of Abandoned Road Segment

Reclamation of the road segment abandoned by the proposed Project would involve removal of road materials and restoration of native vegetation. Overall, 1.6 miles, encompassing a total of 5.24 acres, of existing road surface would be reclaimed. As a result, 2.9 acres of wetland habitat will be restored in the Death Canyon Road to Sawmill Ponds Overlook area.

Construction equipment for Project activities would include bulldozers, rollers, graders, front end loaders, dump trucks, skid steers, and hand tools. Construction materials would largely be transported from offsite locations that have not yet been determined, and the Project would utilize 2 acres of existing disturbance for temporary staging and storing of equipment and

materials. Construction of the pathway and road realignment would take place daily between 7am and 7pm, from May through October of 2029 and 2030. Reclamation of the original road base in realigned areas would follow in 2031 utilizing the same daily and seasonal timing for activities. Overall, the Project would result in a permanent loss of 14.9 acres of sagebrush, riparian, and mixed forest habitat, with an additional 7.9 acres of temporary disturbance within the corridor.

Conservation Measures

To avoid and minimize adverse effects to grizzly bears, GTNP will implement the following conservation measures for the Project:

1. All Project activities must comply with the GTNP Superintendent's Compendium (2026 and as updated) regulations related to food storage and GTNP recommended best management practices for living and working in bear country. Bear attractants include food, drinks, garbage, cooking utensils, dirty/soiled pots/pans/plates, stoves, grills (charcoal or gas), empty or full coolers, storage containers with food or previously holding food (except approved bear resistant canisters), beverage containers, pet food/bowls, and any odorous item that may attract a bear.
2. At all times in all locations, all bear attractants must be attended to. All unattended attractants must be stored securely inside a building, a bear-resistant food storage locker (if available), in a hard-sided vehicle with doors locked and windows closed, in an Interagency Grizzly Bear Committee (IGBC)-approved bear-resistant canister(s); or disposed of properly in an IGBC-approved bear-resistant garbage receptacle. Backpacks and/or daypacks containing unsecured attractants (*i.e.*, not in a canister) must not be left unattended.
3. Staff and construction personnel are required to carry bear spray in the field.
4. All human-bear conflicts must be reported to Teton Interagency Dispatch Center immediately (307-739-3301). All bear sightings must be reported to the GTNP Bear Biologist within 24 hours (307) 739-3485.
5. Install signage about grizzly bear habitat use to increase human awareness and encourage responsible behavior.
6. Implement an annual spring seasonal closure of the pathway in elk parturition range based on habitat and wildlife conditions to minimize potential human-wildlife conflicts associated with bear activity during elk calving.
7. As needed, based on berry crop production and phenology, implement an annual fall seasonal closure of the pathway to minimize potential human-wildlife conflicts associated with bear activity during peak foraging periods. Conditions for closure will focus on when the ripening of berry crops begin. During documented crop failure or minimal activity, a closure will not be enacted.
8. During winter months when conditions indicate grizzly bears are hibernating, GTNP may choose to open the pathway for public use when it is clear of snow and ice.
9. Allow daily public use of the pathway to begin 2 hours after sunrise and to end one hour before sunset.

The 2016 Moose-Wilson Corridor Comprehensive Management Plan/EIS contains conservation measures that also apply to the proposed Project. To further minimize impacts to grizzly bears in the corridor, GTNP will continue to adhere to the following additional measures:

1. All personnel working on the Project must attend a briefing on proper food/attractant storage and bear safety presented by a qualified member of the GTNP bear management team. Contact the GTNP Bear Management Office at least one week prior to the desired start date to schedule a briefing.
2. Provide for proper storage and disposal of materials that may be toxic to bears. All potentially toxic attractants, including petroleum products, must be stored or disposed of in such a way that they are not available to bears.
3. Construction debris must be separated from human food garbage and disposed of in dumpsters that can be closed at night. No open dumpsters are allowed.
4. To the degree possible, construction work will be scheduled during the months when grizzly bears are less likely to be present along the Moose-Wilson Road.
5. When possible, plan the timing of construction activities to avoid the section of road between Sawmill Ponds Overlook and Death Canyon Road from September 1 to October 15, when bears are most active.
6. To the extent practicable, projects occurring in occupied grizzly bear habitat outside of the Primary Conservation Area (PCA) will conform to standards outlined in the *Final Conservation Strategy for the Grizzly Bear in the Greater Yellowstone Area* (Service 2003).
7. Equipment, materials, and supplies in the staging area(s) will be secured by hard-sided storage containers.
8. Work will be temporarily halted if grizzly bears approach within 100 yards of an unfenced work area. Workers will allow the bear(s) to pass through the work area before starting or resuming mobilization, construction, or demobilization activities.
9. All grizzly bear sightings will be reported to bear management staff immediately. Any undesirable human/bear encounter will be reported to Teton Dispatch immediately.
10. As necessary, institute temporary closures of the Moose-Wilson Road to public access, including pedestrians, bicycles, and vehicles, when grizzly bears are foraging along the road. The GTNP regulations prohibit approaching bears closer than 100 yards and the closure of the road is authorized if bears are observed foraging along the road.
11. Inform visitors about the possible presence of bears and manage visitor actions to prevent them from feeding bears or approaching too close.

Analytical Framework for Jeopardy

In accordance with regulation (89 FR 24268 [April 5, 2024]; 51 FR 19926 [June 3, 1986]), the jeopardy determination in this BO relies on the following four components:

1. The *Status of the Species*, which evaluates the species' current range-wide condition relative to its reproduction, numbers, and distribution; the factors responsible for that condition; its survival and recovery needs; and explains if the species' current range-wide population is likely to persist while retaining the potential for recovery or is not viable.

2. The *Environmental Baseline*, which evaluates the current condition of the species in the action area relative to its reproduction, numbers, and distribution absent the consequences of the proposed action; the factors responsible for that condition; and the relationship of the action area to the survival and recovery of the species.

3. The *Effects of the Action*, which evaluates the direct and indirect effects on the species caused by the proposed action, including the effects of other activities that are interrelated or interdependent that will be added to the environmental baseline; and how those impacts are likely to influence the survival and recovery role of the action area for the species.

4. *Cumulative Effects,* which evaluates the effects of future, non-federal activities reasonably certain to occur in the action area on the species, and how those impacts are likely to influence the survival and recovery role of the action area for the species.

In accordance with policy and regulation, the jeopardy determination is made by evaluating the effects of the proposed federal action in the context of the species' current range-wide status, taking into account any cumulative effects, to determine if implementation of the proposed action is likely to cause an appreciable reduction in the likelihood of both the survival and recovery of the species in the wild. The key to making this finding is clearly establishing the role of the action area in the conservation of the species as a whole, and how the effects of the proposed action, taken together with cumulative effects, are likely to alter that role and the continued existence (*i.e*., survival) of the species.

3. STATUS OF THE SPECIES

Regulatory Status

The grizzly bear was listed as a threatened species under the ESA in the lower-48 states on July 28, 1975, due to habitat loss, overutilization, and other human-induced threats. Efforts to delist the GYE grizzly population began with a proposed distinct population segment (DPS) in 2005, culminating in a final rule to delist in 2007; however, this was vacated by the Federal District Court in 2009, with concerns about regulatory mechanisms and the impact of declining whitebark pine. The 9th Circuit Court of Appeals later upheld the need to address whitebark pine (*Pinus albicaulis*) threats, prompting further research. Subsequent attempts to delist the GYE population occurred in 2016 and 2017, but the Federal District Court for Montana vacated the 2017 delisting in 2018, resulting in the GYE grizzly bear remaining listed as threatened under the ESA.

Species Description

The grizzly bear population in the GYE is monitored within several key geographic boundaries: the Recovery Zone (RZ), Demographic Monitoring Area (DMA), and bear management units (BMU) (Figure 2). The RZ, as identified in the 1993 Grizzly Bear Recovery Plan, is the core area intended for population recovery efforts and is large enough to support a viable grizzly bear population. The DMA, formalized in the 2017 Recovery Plan Supplement, is surveyed annually to estimate population size within the RZ. The RZ contains 18 BMUs, which are divided into 40

subunits and are designed to approximate the home range of female grizzly bears. The BMUs and subunits are used to track habitat security and evaluate seasonal food availability for grizzly bears, supporting recovery and monitoring efforts (Service 2022; ICST 2016).

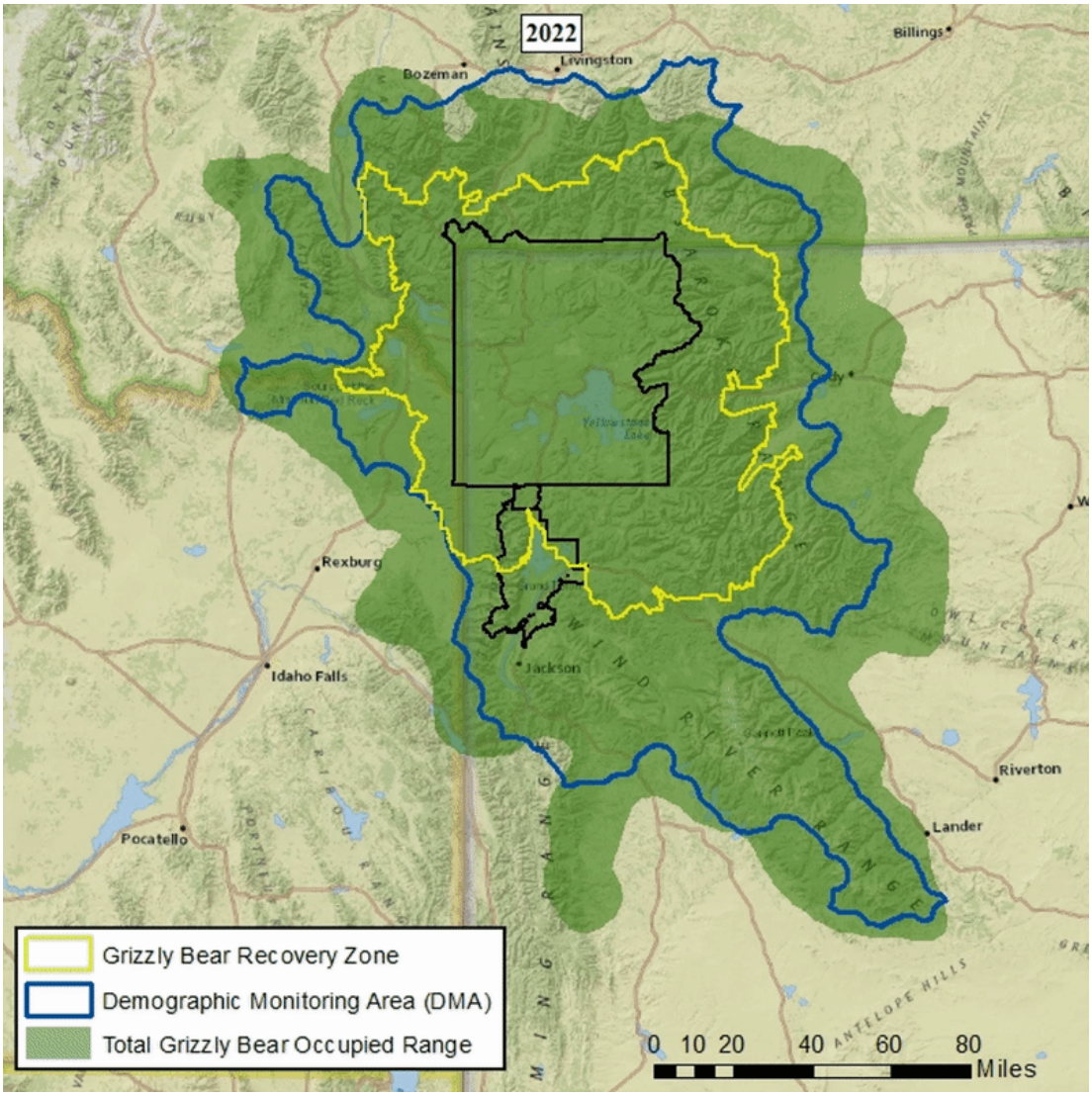

Figure 2. The 2022 distribution of grizzly bear in and around the Greater Yellowstone Ecosystem recovery zone, the demographic monitoring area and the administrative boundaries of both the Yellowstone and Grand Teton National Parks (Dellinger *et al*. 2023).

Grizzly bears in the GYE exhibit a highly varied diet, acting as opportunistic omnivores, consuming both plants and animals. Meat forms a substantial part of their diet, including hunting ungulates, scavenging carcasses, digging for small mammals, and eating fish and insects, with ungulates being particularly important during spring and fall (Knight *et al.* 1984; Craighead and Mitchell 1982). Army cutworm moths (*Euxoa auxiliaris*) are a crucial high-fat food source for some GYE bears, especially during fall hibernation preparation, with individuals consuming up to 40,000 moths daily in peak periods (Mattson *et al.* 1991; Bjornlie and Haroldson 2001; Nunlist *et al.* 2023; White *et al.* 1999). Whitebark pine seeds also serve as an important seasonal

resource when available, though their significance has decreased in recent years due to declining yields; in low-seed years, bears adapt by increasing meat intake and relying on alternative foods (Service 2022). This adaptability demonstrates grizzly bears' ability to utilize diverse food sources throughout their range, depending on seasonal and environmental availability.

Distribution

Historically, the grizzly bear inhabited much of the western United States, central Mexico, western Canada, and most of Alaska, with about 50,000 bears in the lower-48 states (Service 2022). Their population sharply declined after European settlement, falling to under two percent of their original range by the 1930s. When listed as threatened under the ESA in 1975, only 700–800 remained in the lower-48 states.

The 1993 Grizzly Bear Recovery Plan and the 2017 Supplement designated six RZ's; Northern Continental Divide Ecosystem (NCDE), GYE, Cabinet-Yaak Ecosystem (CYE), Selkirk Ecosystem (SE), Bitterroot Ecosystem (BE), and North Cascade Ecosystems (NCE; Service 1993; 2017; Figure 3). Currently, grizzly bears primarily exist in four of those ecosystems (NCDE, GYE, CYE, SE) and occupy approximately six percent of their historical range in the lower-48 states (Service 2022). There are currently no known populations in the NCE or BE, although solitary bears have been documented near these ecosystems.

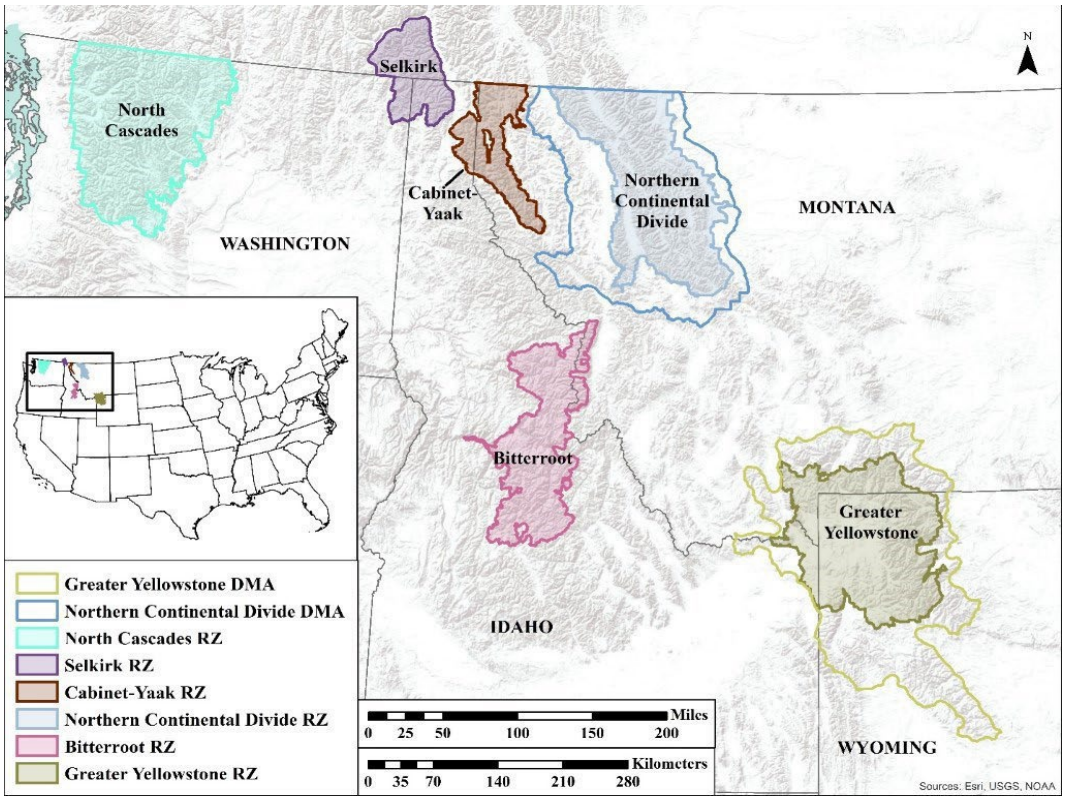

Figure 3. The six grizzly bear recovery zones and demographic monitoring areas in the lower-48 states (Service 2022).

Population Dynamics

In 2023, the grizzly bear population in the GYE reached 1,030 and now occupies 97 percent of the DMA (46,984 km²). Their range has tripled since the 1980s and grew at four percent annually between 1990–2018, but population growth is now stable due to near saturation (Service 2022). Both the Service's 2017 Recovery Plan Supplement and the Interagency Grizzly Bear Committee's (IGBC) Conservation Strategy (2024) focus on habitat security and grazing, however the IGBC Conservation Strategy is specific to if delisting occurs. Recovery criteria for the GYE grizzly bear require at least 500 bears, 48 females with cubs in the DMA, occupation of 16 of 18 BMUs with no two adjacent unoccupied for six years, and maintenance of a model-estimated population size (Service 2017). These benchmarks have been met: 1,030 bears (87 females with cubs) in 2023, all BMUs occupied, and mortality rates below established limits. Habitat management aims to minimize disturbances and human-caused deaths while maintaining secure habitat (contiguous land more than 500 meters from roads, with core areas of at least 2,500 acres) and resource management at 1998 levels.

Threats

Human Activities

In Wyoming, grizzly bear conflicts arise when bears interact with people and property, resulting in damage, injury, or death outside of legal hunting or management actions. Bear survival declines as human presence increases, with bears quickly habituating to humans and seeking anthropogenic foods, which leads to more conflicts. These incidents become more frequent when natural food sources are scarce, such as during droughts, causing bears to roam further and encounter humans more often (Gunther *et al.* 2004; Service 2022). As grizzly bear range expands, conflicts also occur farther from recovery zones (Interagency Grizzly Bear Study Team 2024). While conflict numbers remain steady in established habitats, they increase where bears expand their distribution (IGBST 2024). The Wyoming Game and Fish Department (WGFD) works to reduce livestock conflicts through education, research, and coordination with federal agencies on bear relocation and removal after evaluation (IGBST 2024).

Excessive human-caused mortality by European settlers and subsequent Euro-Americans, including "indiscriminate illegal killing" and management removals, was the primary factor contributing to grizzly bear decline during the 19th and 20th centuries (Service 2024). Human-caused mortality—especially from hunter encounters and self-defense shootings as an example—remains a threat to grizzly bear recovery in the lower-48 states. Although grizzly bears are federally protected under the ESA and killing them is generally prohibited, legal exceptions are granted for self-defense. Many incidents occur when hunters inadvertently trigger a bear's defensive aggression. Increased recreation in RZs raises the likelihood of surprise encounters over carcasses or personal space, contributing to conflict. Grizzly bears' low reproductive rates mean even minor increases in human-caused mortality can significantly impact population stability and connectivity between recovery ecosystems.

Human-grizzly bear interactions have increased in the GYE, due in part to increasing human use and development, increasing bear numbers, and the expanding range of bears. Mortalities resulting from human-grizzly bear interactions comprised approximately 78.4 percent of known grizzly bear mortalities from 2018-2023 (IGBST 2018-2024). Table 1 summarizes the 1,006

known and probable mortalities of independent-aged grizzly bears from 1997 to 2024 in the GYE (IGBST 1997-2026). Some mortality, including human-caused mortality, is unavoidable in a dynamic system where bears inhabit large areas of diverse habitat with overlapping uses. However, malicious killings, defense of human life or property, and accidental deaths (vehicle strike, electrocution, misidentification) can be minimized and prevented with education and by securing attractants.

Cause of Mortality	**Number of Bear Mortalities**	**Percent of Total Mortality**
Natural	80	8.0
Anthropogenic Site Conflicts	253	25.1
Self-Defense	193	19.2
Illegal	39	3.9
Mistaken ID	17	1.7
Livestock Depredation Removal	199	19.8
Accidental / Roadkill	84	8.3
Humane Removal	4	0.4
Unknown	137	13.6
Total	1,006	100

Table 1. Known and probable grizzly bear mortalities of independent age males and females in the Greater Yellowstone Ecosystem between 1997 and 2024 (IGBST 1997-2026).

Changing Food Resources

Grizzly bears in the GYE have a highly varied diet, consuming over 266 plant and animal species, but their food resources face significant challenges. Key sources such as Yellowstone cutthroat trout (*Oncorhynchus clarkii bouvieri*) have declined drastically due to factors like invasive lake trout (*Salvelinus namaycush*), drought, and disease, though recent lake trout removal efforts may support trout recovery. Army cutworm moths, another high-energy food, are only accessible to about a quarter of the population and may be affected by climate change. Whitebark pine seeds, historically important, are threatened by disease and beetle infestations, and their availability is inconsistent. Despite these disruptions, grizzly bears have shown adaptability by shifting their diet, notably increasing meat consumption following the decline of certain food sources, demonstrating resilience in the face of changing environmental conditions (IGBST 2013).

Climate Change

Climate change is expected to cause both seasonal and geographic shifts in the availability of grizzly bear food resources (Prevéy *et al.* 2020; Rodriguez *et al*. 2007; Roberts *et al*. 2014). Despite the variable climate, the mountainous areas of the GYE generally offer the necessary habitat features for grizzly bear survival. However, climate change may alter grizzly bear habitat by reducing snowpack, potentially shortening the denning period, changing denning schedules, and influencing fire regimes (Service 2024). Documented changes in plant communities include species shifting their ranges northward and upward in elevation due to environmental pressures

(Walther *et al*. 2005) and increased pine beetle outbreaks (Bentz *et al*. 2010). Studies in Alberta, Canada have found that warmer temperatures and earlier snowmelt are linked to improved food availability for grizzly bears (Nielsen *et al*. 2013).

Habitat Fragmentation and Isolation

Habitat fragmentation poses a major challenge for large carnivores that depend on extensive, diverse vegetative and topographic environments (Servheen 1986). For grizzly bears, the loss and fragmentation of habitat is especially critical for their continued survival. Fragmentation not only disrupts connectivity between habitats but is also linked to increased human-caused mortality, including vehicle strikes, management removals, habitat alteration, road construction, and development or expansion projects (Kortello *et al*. 2019). Since grizzly bears occur at low population densities, disperse slowly, and are particularly susceptible to human-related mortality, habitat fragmentation is likely to affect populations near urban areas or rural developments associated with highways (Service 2022).

The GYE grizzly bear population's isolation was recognized as a threat at the time of its listing in 1975. The 1993 Grizzly Bear Recovery Plan did not require connectivity between populations for recovery, instead it focused on establishing self-sustaining populations (Service 2024). Grizzly bear conservation would benefit from genetic exchange and improved connectivity between populations. Self-sustaining populations rely on adequate effective population size and genetic diversity (*e.g*., allelic richness, heterozygosity, inbreeding rate). The IGBST monitors these and other indicators of genetic health (such as reproduction and survival) for the GYE grizzly bear population. Data show that from 1982 to 2007, inbreeding rates remained extremely low and effective population size increased, significantly reducing the risk of negative impacts from population isolation in the short term (Kamath *et al.* 2015). This trend is likely due to substantial growth in the GYE grizzly population over the same period (Service 2024).

Recently, wildlife managers have taken direct measures to counteract the genetic isolation affecting grizzly bears in the GYE. In July 2024, officials from Montana and Wyoming translocated two subadult grizzly bears—a male and a female—from the NCDE in northwest Montana into the GYE. The male was released at Yellowstone Lake's south end, and the female at the Blackrock Creek drainage near Dubois, Wyoming. These actions, reflecting a broader commitment by state leadership to maintain genetic diversity, involved selecting bears without prior human conflict and equipping them with GPS collars for monitoring. By late 2024 and early 2025, both bears had settled into the RZ, with biologists confirming successful navigation and den establishment for hibernation.

4. RECENT SECTION 7 CONSULTATIONS

Within GTNP, the following consultations have been completed and are incorporated as part of the Environmental Baseline for subsequent consultations.

- [06E13000-2016-F-0064] Moose-Wilson Corridor Draft Comprehensive Management Plan/EIS Project – formal consultation for the effects of the preferred Alternative C on grizzly bear, Canada lynx, and gray wolf.

- [06E13000-2016-F-0064a] Amendment of the Moose-Wilson Corridor Project – formal consultation for the effects on grizzly bear and Canada lynx from amendments to the preferred Alternative C of the Moose-Wilson Corridor Project. The BO analyzed effects to newly listed species (yellow-billed cuckoo and North American wolverine) and effects on grizzly bear and Canada lynx from the proposed additional road widening, parking lot expansion, building improvement, and construction staging areas not described in the June 2016 BO, for a duration of four years (2021-2025).
- [2023-0031497] Special Use Permits for Ongoing Livestock Grazing – formal programmatic consultation for the effects of ongoing livestock grazing in GTNP on grizzly bear, with incidental take of 1 grizzly bear.
- [2023-0041564] Fire Management Plan- formal programmatic consultation for the effects on whitebark pine from the impacts of fire management activities utilized throughout GTNP over ten years (2026-2036).
- [2024-0099561] Two-Year Pilot of Moose-Wilson Road Cyclist Bypass – informal consultation for the effects on Canada lynx, grizzly bear, yellow-billed cuckoo, and wolverine of a pilot study allowing bicyclists to utilize a 1.5-mile bypass of the Moose-Wilson Road. The consultation reviewed potential impacts of seasonal cyclist use from July 1 – August 15 over a two-year period (2024-2025).

5. ENVIRONMENTAL BASELINE

Regulations implementing the ESA (50 CFR 402.02) define the environmental baseline as the condition of the listed species or its designated critical habitat in the action area, without the consequences to the listed species or designated critical habitat caused by the proposed action. The environmental baseline includes the past and present impacts of all federal, state, or private actions and other human activities in the action area, the anticipated impacts of all proposed federal projects in the action that have already undergone formal or early section 7 consultation, and the impact of state or private actions which are contemporaneous with the consultation in process. The impacts to listed species or designated critical habitat from federal agency activities or existing federal agency facilities that are not within the agency's discretion to modify are part of the environmental baseline.

Action Area

The action area is defined at 50 CFR 402.02 as "all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action." The Service has determined the action area for the Project is the area within a 7.5-mile buffer of the Project footprint, based on distances traveled by grizzly bears to food sources described by Craighead and Mitchell (1982). The current best available science suggests that the direct and indirect impacts to grizzly bears in the GYE are captured within the 7.5-mile buffer. Threats to grizzly bears within the action area are the same as those discussed in the Status of the Species. Other factors with the potential to affect individuals or their habitat in the action area include hunting of other species, illegal shooting of grizzly bears (intentional or as a result of misidentification), recreation, vehicle collision, forestry practices, livestock grazing, mortality from defense of human life or property, and impacts related to diseases in deer, elk, moose and other cervids.

The Project is within occupied grizzly bear habitat in the DMA and is approximately 12 miles south of the GYE RZ (Bjornlie *et al*. 2014) (Figure 4). The action area for the Project is approximately 178,190 acres and extends to within 4.15 miles of the GYE RZ. Areas within the GYE RZ are actively managed for grizzly bear recovery and habitat security. The DMA is an area where population size, mortality, and distribution are monitored to understand the overall health of the GYE population. According to 2024 survey data, 28 percent of the grizzly bear range is now outside the DMA boundary, illustrating that bears continue to expand into previously unoccupied habitats on the edge of their current distribution. Grizzly bear presence is not actively discouraged outside the DMA and bears are expected to disperse through and gradually reoccupy some suitable habitats between the GYE and the NCDE RZs (Figure 3). Because conservation of grizzly bears would benefit from genetic exchange and connectivity between populations, non-conflict grizzly bears outside the DMA are not captured or removed unless there are documented conflicts or threats to human safety. In this way, the entirety of the occupied grizzly bear area in and around the GYE is managed with emphasis on conflict prevention and response.

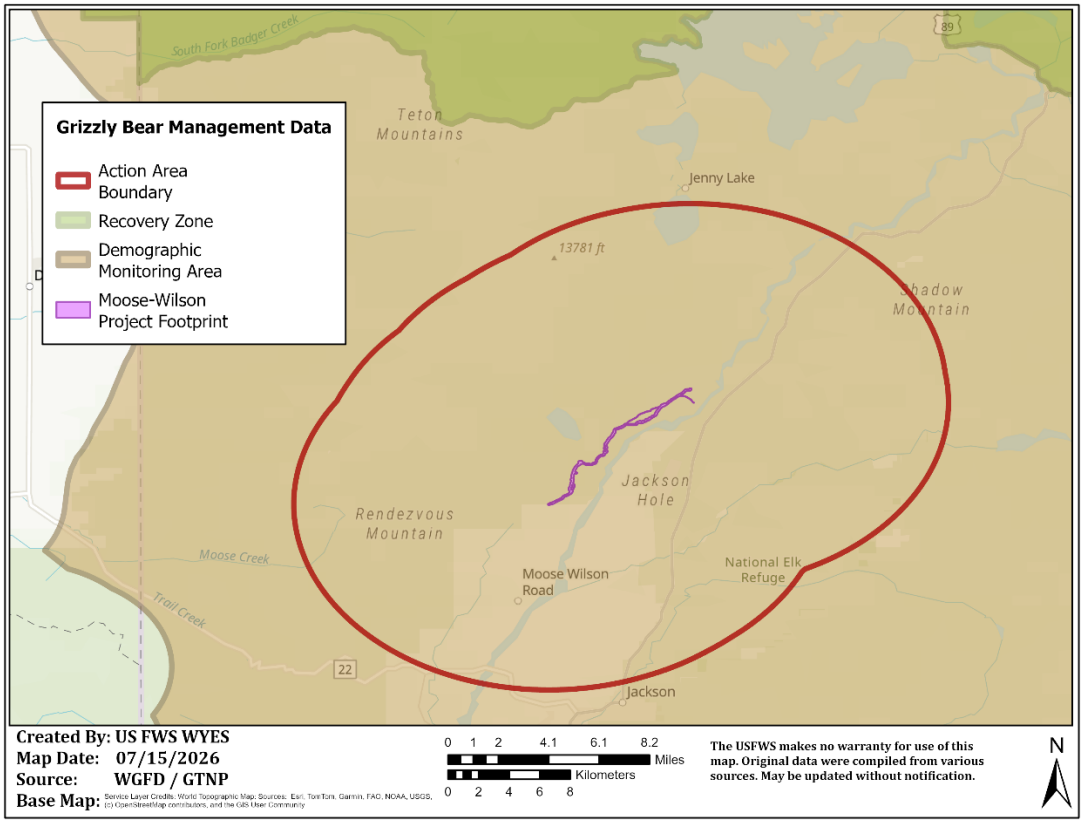

Figure 4. Action area (red boundary) for the Amended Selected Action of the Moose-Wilson Corridor Comprehensive Management Plan/EIS Project (NPS 2026).

Grizzly bears are widespread across the region and are regularly observed within the action area for the Project. Active and adaptive management has enabled recovery and stability for the species within the GYE. All recovery criteria for the GYE grizzly bear population, including within GTNP, have been met (Service 2023). Large roadless areas in the GYE maintain secure

habitat and support grizzly bear recovery. Successful management of human-caused mortality has kept long-term mortality rates for independent-age females, males, and young below GYE recovery thresholds (van Manen and Haroldson 2020; Service 2023).

Status and Factors Affecting Grizzly Bear within the Action Area

Land Uses and Management

The corridor encompasses about 10,300 acres in the southwest corner of GTNP (Figure 4). The corridor is bordered roughly by the Teton Range to the west, the Snake River to the east, the Teton Park Road to the north, and GTNP's boundary to the south. The area represents GTNP's major ecological communities and includes mixed forests, sagebrush flats, wet meadows, wetlands, lakes, rivers, and ponds, and associated diverse native plant, fish, and wildlife populations. Habitat within the action area provides abundant, widely distributed food and cover for grizzly bears during the late spring, summer, and fall.

The majority of public lands within the action area are managed for recreation, resource protection, and multiple use by the NPS and USFS. Private lands encompass a smaller proportion of the action area and are mainly comprised of ski resort properties and residential developments. Lands managed by the NPS and USFS provide a variety of popular visitor activities including hiking, sightseeing, photography, skiing, and horseback riding. Established trails systems are present in the corridor that provide visitor access to adjacent areas of GTNP. Other ongoing activities in the action area include infrastructure work (*e.g.*, roads, trails, irrigation, communication, and utilities maintenance and construction), forest management and fuels reduction, hunting, and camping. In general, recreational uses on public lands are balanced with management goals of protecting unique habitats, maintaining healthy forests, conserving wildlife, and maintaining species diversity.

The Moose-Wilson Road is one of two road-based transportation routes in the corridor, extending 7.1 miles from the GTNP Granite Canyon Entrance at the south end to the Teton Park Road at Moose at the north end. The road serves as the primary access route to several key visitor destinations in the area, including Death Canyon and Granite Canyon Trailheads, the LSR Preserve, the White Grass Ranch and Murie Ranch Historic Districts, and the Sawmill Ponds Overlook. It is open seasonally from May through October and provides a rustic, slow-driving experience for visitors looking for scenery and wildlife viewing opportunities.

While the main purpose of the Moose-Wilson Road is motorized recreational use, non-motorized recreation also occurs along the roadway. Bicyclists currently utilize the Moose-Wilson Road, and many motorists stop along the route and exit their vehicles to view and photograph wildlife and scenery. Road density is a key metric for bear health, with increased human access generally raising mortality and stress for grizzly bears. Roadless areas protect core habitats and provide secure areas for bears displaced by human presence and activity. Grizzly bear secure core and secure habitat are defined as contiguous areas more than 500 meters from roads (Service 2024). Secure core areas are at least 2,500 acres, and secure habitat within these areas are at least 10 acres (Service 2024). Preserving roadless areas adjacent to spaces containing roads, trails, and other human activity provides the opportunity for grizzly bears to escape interaction and ensures a balance between human land use and the survival needs of grizzly bears.

While recreational activities occurring in the action area provide public enjoyment, they also present risks for human-grizzly bear conflicts. Defensive encounters between grizzly bears and the public sometimes occur where recreation overlaps with bear habitat, where bears have acclimated to human presence, and where attractants are improperly secured. Improper food storage can lead to food conditioned bears and scenarios where relocation or lethal removal of individuals is necessary for the sake of public safety. For these reasons, food storage and trash regulations, public education and outreach, and enforcement by GTNP staff are integral to NPS and USFS operations to protect both grizzly bears and people.

Many federal and non-federal activities can disturb grizzly bears, increase their stress, or reduce foraging and reproductive success. These activities can cause short- or long-term habitat changes that disrupt grizzly bear behavior. Recent studies show bear detections decline by 50 percent at 267 meters from human-used trails, highlighting the negative impacts the multi-use pathway component of the Project may have on grizzly bears (Thompson *et al*. 2025). The proposed road realignment and ongoing maintenance of the pathway may also alter or remove vegetation, downed logs, root wads, or boulders used by grizzly bears for food, cover, and denning. Habitat changes and human presence may also affect prey distribution and availability.

Conflicts, Relocations, and Mortalities

Even when conservation measures are implemented, some situations still result in human-grizzly bear conflicts that require relocation or removal of bears to protect property and ensure human safety. Female bears in the GYE receive additional management consideration, and while removal may be recommended, each decision to remove a conflict grizzly is made after thoughtful consideration with relocations or other management actions preferred over removal, especially for female bears. This approach to grizzly bear management is distinctive among listed species. Setting a limit on female grizzly bear mortalities could restrict necessary management decisions, such as removing a conflict female bear under certain circumstances (*e.g*., repeated depredations or poor body condition), even if mortality across the GYE is well below established thresholds. Not placing a limit allows the Service and WGFD maximum flexibility to manage conflict bears as needed.

To assess the baseline and impact of grizzly bear conflicts, data collected by WGFD and GTNP from 2011 to 2025 was reviewed, focusing on conflict type and frequency (Figures 5 and 6). Over the 15-year analysis period, 115 conflicts were documented within the action area for the Project. There were six documented grizzly bear mortalities, including one vehicle strike, one self-defense mortality associated with an elk hunter, and four management removals. To avoid future confrontations, elk hunting was discontinued in GTNP following the self-defense incident. The majority of grizzly bear conflicts were associated with unsecured attractants and food rewards (66%), property damage (19%), general encounters (11%), and uncategorized conflicts (3%) making up a smaller proportion of the total. The total number of conflicts per year ranged from zero to 37, with a markedly higher number of incidents recorded from 2019-2021 (Figure 6). No incidents of non-lethal injury to grizzly bears resulting from conflicts were documented during the analysis period.

Four of the six grizzly bear mortalities in the action area were management removals, and all occurred in 2021. All four bears had caused repeated property damage while accessing

unsecured food rewards, with three occurring on private property and one accessing food on both private and GTNP properties. Two of the removals were identified as subadult males, one was an adult male, and one was an adult female. None of the management removals were associated with direct human-bear encounters resulting from recreational activities in the action area.

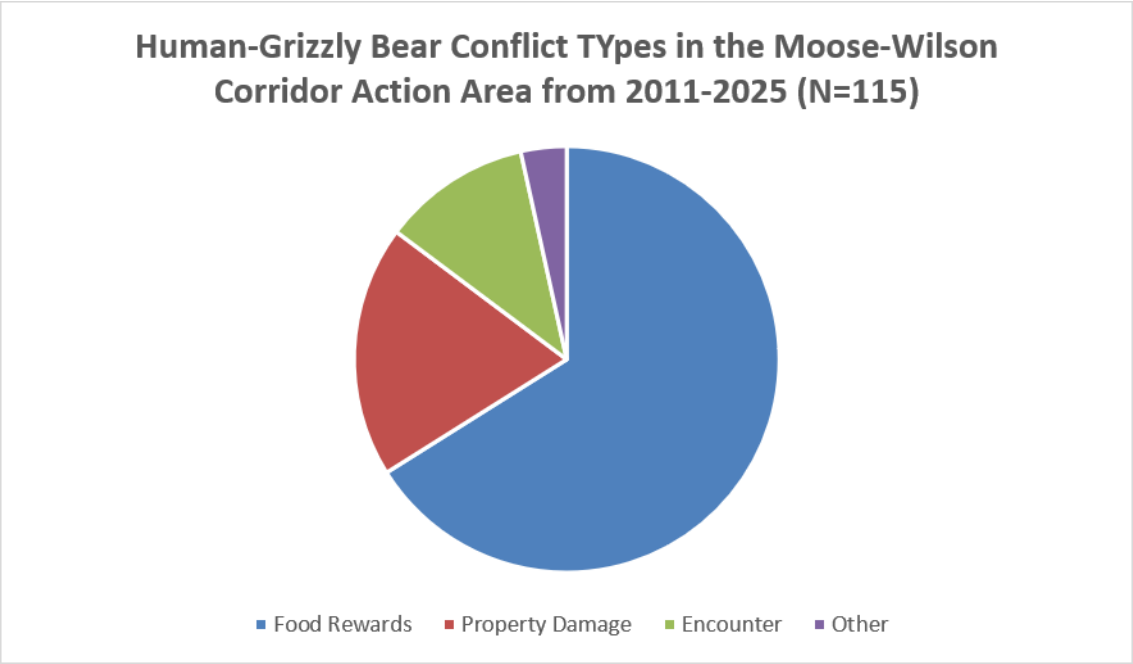

Figure 5. Human-grizzly bear conflict types documented in the Moose-Wilson Corridor action area from 2011-2015 (WGFD 2026; GTNP 2026).

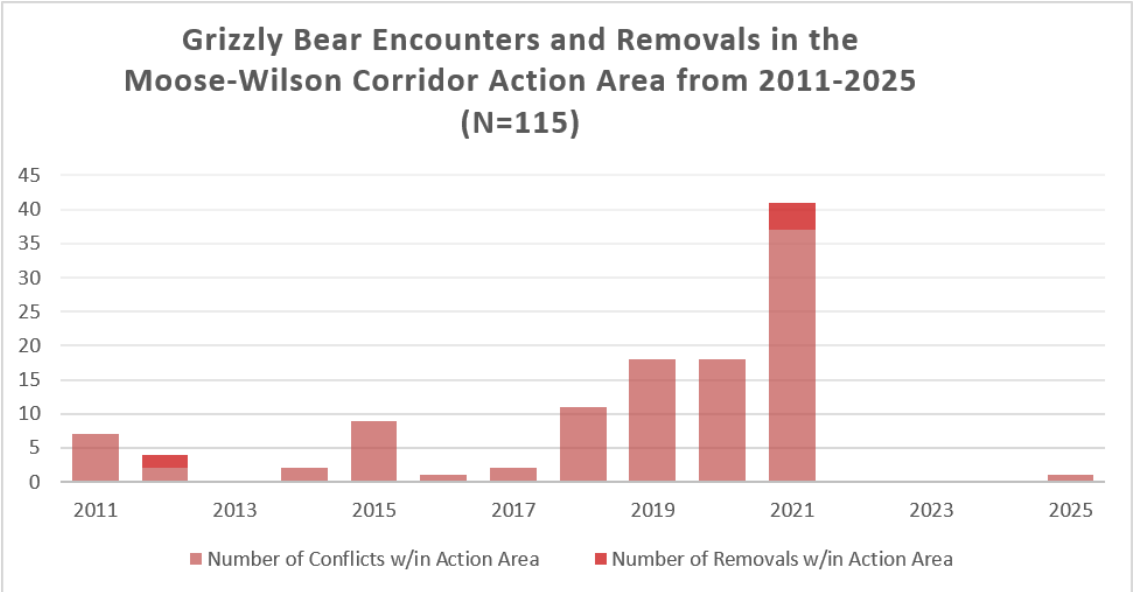

Figure 6. Annual total grizzly bear conflicts and removals documented within the Moose-Wilson Corridor action area from 2011-2025 (WGFD 2026; GTNP 2026).

After thorough consideration, the Service is not including a limit on incidental take specific to female bears in this BO for several reasons: (1) female mortalities in the GYE remain below threshold; (2) only one female bear removal related to conflicts within GTNP occurred in the 15-year time frame analyzed; (3) the GYE grizzly bear population has exceeded recovery criteria for decades, with an estimated 1,050 bears in the DMA; (4) female bears have established territories as a result of population expansion; (5) other recreational activities in GTNP have coincided with population recovery; (6) female bears are carefully managed, with each removal decision made in coordination with the Service and WGFD; and (7) not including a limit on female take provides flexibility to safely manage conflict bears while maintaining a stable or growing population. The Service receives reports from GTNP, and annual coordination occurs between agencies. If female grizzly bear mortality resulting from the Project is higher than anticipated and is assessed as having an impact on population recovery, the Service and GTNP will reevaluate and consider the inclusion of a limit on incidental take specific to female bears.

6. EFFECTS OF THE ACTION

In accordance with 50 CFR 402.02, effects of the action are the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action, that will be added to the environmental baseline. Indirect effects are those that are caused by the proposed action and are later in time but still are reasonably certain to occur. Interrelated actions are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are those that have no independent utility apart from the action under consideration.

Effects of the action are a reasonable prediction of the likely reaction of, and biological effect to, individuals of a species to the environmental changes brought about by implementation of the chosen proposed action. It is not an exploration of alternatives to the proposed action. As with any prediction of a species' response to environmental impacts, there are many uncertainties associated with it. The prediction must be a reasoned prediction that is informed by science (if available). But because scientific literature reports on the results of controlled experiments and purposefully restricts its findings to the conditions and circumstances of the study, its findings can only be used to inform a predicted result from a future proposed action—it cannot determine the outcome with certainty. Therefore, additional information from observations on other species, from other environments, and based on the professional judgment of biologists familiar with the species, also plays a role in arriving at a reasoned prediction.

Effects on grizzly bears from human activities have been evaluated since their listing approximately a half-century ago. The factors and conditions impacting grizzly bears within their listed range are the same as those experienced by grizzly bears in the GYE and the action area. While all effects to grizzly bears from pathway and road use may not be fully understood, many are known and can be evaluated. Discussed in depth in the Status of the Species subsection on the threats to grizzly bears, grizzly bear conflicts are highly variable and influenced by many factors such as changes in grizzly bear distribution and density, the presence of individual bears, abundance and availability of natural foods, weather and weather patterns, and many other factors (IGBST 2023). The frequency and location of human-grizzly bear conflicts may also be influenced by the availability of unsecured attractants, seasonal and daily presence of GTNP visitors, density and types of visitor use, and other factors (IGBST 2024).

Based on the best available scientific information, past consultations for projects within the Moose-Wilson Corridor, information from similar proposed actions, and information for the current proposed action, grizzly bears may be affected in several ways due to construction activities and subsequent changes in visitor use within the Moose-Wilson corridor. In order to assess direct and indirect effects of the Project, its interrelated and interdependent activities must be defined. Interrelated activities are those that are part of the larger action and depend on it for its justification, including reclamation of the road realignment. Interdependent activities are those which have no independent utility apart from the Project, including pull-outs along the realignment and staging or temporary use areas. Direct effects include habitat loss, fragmentation and degradation from the relocation of the Moose-Wilson Road, and the addition of the multi-use pathway. Additionally, grizzly bears may avoid the area during construction activities due to noise and human presence. Direct injury or mortality could also occur as a result of temporary increased vehicle use during construction and reclamation activities. Indirect effects which occur later in time include ongoing habitat degradation from introduced invasive plants, avoidance or displacement of grizzly bears from the road and pathway due to noise and human presence, as well as the effects of food conditioning on grizzly bears and potential hazing, relocations, and removals that follow. Several effects could be considered both direct and indirect depending on specific parts of the proposed action such as habitat loss. Direct habitat loss will occur within the footprint of the Moose-Wilson Road realignment, while indirect habitat loss will occur if invasive plants become established in adjacent areas and displace preferred foraging or cover for grizzly bears.

Overall, direct and indirect effects to bears can be grouped into the following categories: (1) displacement of individual bears due to fragmentation, alteration, or removal of habitat; (2) change in the quality of habitat and availability of food; (3) potential injury or mortality resulting from vehicle collisions; and (4) change in the frequency of human/grizzly bear encounters that may require relocation or removal of conflict bears (Service 2016). Effects related to these categories, direct and indirect impacts to grizzly bears relative to the Project, and conservation measures by which GTNP will address the extent of impacts are discussed below.

Displacement and Fragmentation

The action area and construction footprint for the Project overlap habitats frequented by grizzly bears, particularly from the LSR Preserve north to the Moose Entrance Station where abundant forage is available in late summer and fall. Grizzly bears tend to flee in response to human activity, including from road and pathway use, which can result in a loss of effective habitat. Avoidance behaviors that displace grizzly bears can result from road and pathway construction activities in the short term, or from ongoing use of roads and pathways in the long term. Grizzly bears in Yellowstone National Park were found to avoid areas within 500 meters of roads in spring and summer and within 300 meters of recreation areas, with a greater likelihood of avoidance during daytime hours when human presence was greatest (IGBC 1998; Coleman *et al.* 2013). Construction noise and activity could temporarily alter bear activity in the Project area over multiple construction seasons, with some bears being displaced from otherwise useable habitat. Spatial and temporal displacement of grizzly bears from habitats adjacent to roads and pathways can result in increased energetic costs and decreased nutritional take. Avoidance

behavior, vigilance for humans, and modified habitat use patterns can lessen foraging efficiency, increase intraspecific competition for resources, and may reduce habitat effectiveness (Kasworm and Manley 1990; Hood and Parker 2001).

Grizzly bears in the action area, especially those whose home ranges overlap with the Project, are likely acclimated to a level of human use and disturbance from the existing Moose-Wilson Road. However, the proposed Project includes construction of the road realignment segment, construction of the pathway, reclamation of the old segment of Moose-Wilson Road, and use of both the road and pathway into the future. Construction activities are anticipated through 2030, and reclamation activities are anticipated through 2031. While activities associated with the general management and use of the corridor have been in progress since 2016, the Project will be additive to existing disturbance occurring in the action area. Bears in proximity to the Project will be impacted by noise from construction and reclamation activities for the next five years, and noise from both pathway users and vehicles along the road will occur into the future. Some bears may temporarily avoid construction and reclamation work areas and return when activities conclude, while others may be permanently displaced. To reduce impacts to bears present in the Project area during construction and reclamation, activities will pause when bears are within 100 yards so they may pass through unfenced work areas, and work will only resume after their departure. Additionally, GTNP will be notified by contractors of any bear sightings during construction and restoration activities.

Non-motorized pathways can have similar effects on bears as roads, though the magnitude of those effects can vary. The presence of both the pathway and road corridors would generally have more impact on grizzly bears than one route via additional habitat loss, fragmentation, and human use (MacHutchon 2014). However, the effect of fragmentation is also influenced by the distance between the two linear corridors, with a greater amount of habitat affected in areas where the pathway is further away from the road. In areas where the pathway and road prisms separate, their zones of influence also separate, increasing the impacted area overall. Where the road and pathway are close together, the habitat in between will likely be rendered unsuitable for bear use. Nevertheless, co-locating the pathway with established roads wherever feasible will minimize habitat fragmentation and consolidate human activity within the corridor. In areas where the road and pathway diverge, the habitat in between will provide less security for bears. To minimize effects related to this issue, GTNP will limit the pathway to pedestrian and bicycle use, reducing the associated level of noise and human activity.

Roads and pathways can also contribute to habitat fragmentation when they limit wildlife activity, for example where road density or high use act as barriers to grizzly bear movement (MacHutchon and Proctor 2015). Loss of cover from ongoing disturbance, reduced vegetation along rights-of-way, human presence along linear corridors, and traffic or user volume may all contribute to avoidance-related habitat fragmentation. When grizzly bear dispersal is limited or precluded, population fragmentation and isolation may occur, reducing demographic or genetic exchange (Proctor *et al*. 2005). The addition of the multi-use pathway will expand the distance between habitat and cover on either side of the combined road and pathway, thus increasing fragmentation of habitats used by grizzly bears. While these Project components may reduce the risk for human-bear conflict, they may also reduce the ability for bears to safely cross from one habitat area to another.

Avoidance of roads and associated traffic by grizzly bears may occur less frequently at night when traffic and human presence are reduced (Waller and Servheen 1999). Previous research has shown grizzly bears may adopt crepuscular and nocturnal activity patterns in response to human activity, or other times when humans are absent (Gibeau *et al.* 2002; Martin *et al.* 2010; Coleman *et al.* 2013; Elmeligi 2016). Avoidance behaviors appear to be more prevalent in adult grizzly bears compared to subadults, though grizzly bears may be influenced to forage near roads and pathways if high-quality forage is present (Waller and Servheen 1999; Donelon 2004; Elmeligi 2016). To minimize the impacts of avoidance behavior by grizzly bears, construction activities for the Project will be timed to coincide with daylight hours, enabling grizzly bears to still use the area at night when construction activities cease. After construction and reclamation is achieved, pathway use will also be limited to 2 hours after sunrise until an hour before sunset not only for human safety but also to allow for wildlife use.

Changes in Forage Quality and Availability

The action area contains abundant shrubs and other important food sources, particularly in early summer during elk parturition and in late summer and fall when berries are plentiful. Other important foods found in the action area include a variety of forbs (*e.g.*, clover, horsetail, dandelion), graminoids (*e.g.*, bluegrass, bluejoint reedgrass, sedges), and insects such as ants and grubs (MacHutchon 2014). Some forage areas may be directly destroyed by Project construction or may indirectly become less accessible to grizzly bears due to increased human presence. Changes in the distribution of prey species such as elk may also occur in response to changes in forage and increased human presence along the Project corridor. Avoidance of human activity within the area both during and after construction may reduce the total amount of habitat available within a grizzly bear home range, forcing individuals to travel further to find habitat and potentially creating resource competition with other bears. Females with cubs are more likely to avoid human presence, foregoing access to forage that may be present in adjacent habitats (Gibeau *et al.* 2002). These displaced females with cubs also risk encounters with infanticidal adult males, and cub survival may be reduced when they must travel further with females between forage patches (Gibeau *et al*. 2002).

Conversely, bears may be attracted to the area if nonnative or native forage plants such as dandelion, grasses, chokecherry, serviceberry, or black hawthorn are present in rights-of-way following construction (MacHutchon 2014). High-quality forage may entice bears to roadsides, and bears may acclimate to human presence to take advantage of forage resources, putting them at greater risk of injury or mortality from vehicle strikes or human-bear conflicts (MacHutchon and Proctor 2015). Roadside bears may also spend more time being vigilant or they may need to flee human presence more frequently. These behaviors reduce foraging efficiency while expending extra energy (McLellan and Shackleton 1988). By minimizing construction disturbance and reclaiming road and pathway shoulders with native plants that are not preferred forage for grizzly bears, GTNP will discourage the presence of bears near the road and pathway corridors. Pathway closures implemented during early summer will reduce the likelihood of conflicts with bears feeding on calves during parturition, and closures implemented in late summer would reduce the likelihood of conflicts with bears foraging on berries within the corridor.

As part of the Project, over 2.9 acres of wetland habitat will be reclaimed where a segment of the Moose-Wilson Road was located. While rerouting this road segment will enable grizzly bears to utilize the wetland and associated vegetation for foraging and cover, it may take several years for the area to recover after reclamation is complete. Bears may or may not increase use in the wetland depending upon reclamation success of forage and security cover. While improved line of sight along the road segment and pathway in uplands will provide improved visitor safety, it may also become a source of disturbance if visitors congregate on the pathway to observe bears in adjacent habitat. Signage and education for GTNP visitors regarding grizzly bear presence in the area should encourage responsible behavior.

Injury or Mortality from Vehicles

Road and pathway construction and their subsequent use by GTNP visitors may adversely affect grizzly bears where the routes overlap grizzly bear habitat. Direct impacts can include habitat loss and degradation from construction, and injury or mortality of bears struck by vehicles. Roads with relatively high traffic volume and speed limits increase the mortality risk to grizzly bears within occupied habitat. In Yellowstone National Park, vehicle speed was the primary factor influencing wildlife-vehicle collisions (Gunther 1998). Since 2005, GTNP has documented 8 mortalities, 4 injuries, and one unconfirmed vehicle mortality, and 18 vehicle strike reports where mortality and species of bear were unconfirmed (NPS 2026). All known vehicle-grizzly bear collisions occurred on GTNP roads where the speed limit is 45 mph or greater. Subadults may be more susceptible to injury or mortality from vehicles as they have not yet learned to associate roads with dangerous situations (Mattson 1990; McLellan and Shackleton 1988). With a speed-limit of 20 miles per hour, the risk of vehicle-grizzly bear collisions is reduced on the Moose-Wilson Road.

Transporting source materials (sand, gravel, blacktop) from offsite would temporarily increase traffic volume between source sites and the Project area. This increase could result in higher risk of injury or death of grizzly bears along transport routes, especially on roads with speed limits above 45 mph. Vehicles associated with transport of construction materials for the Project would likely increase the traffic volume on a portion of Highway 89/191, including the portion where one vehicle strike mortality was recorded in 2012. Sites for source materials have yet to be determined by GTNP for the Project; consequently, the potential impacts associated with this component of Project activity cannot be analyzed as a part of this consultation. Once identified, GTNP may need to consult further with the Service to address the effects of processing and transporting of Project materials on grizzly bears and other listed species.

To date, no grizzly bear collisions have been documented on the Moose-Wilson Road, which has a low posted speed limit. Continued control of speed limits on the road will reduce the likelihood of collisions between vehicles and bears. Reseeding road and pathway shoulders with unpalatable native vegetation, brushing and thinning of roadside vegetation, and prompt removal of ungulate carcasses along the road and pathway will also discourage the presence of grizzly bears in the corridor.

The Project also includes rerouting a portion of the Moose-Wilson Road and proposed pathway out of wetland habitats between the Death Canyon Road and Sawmill Ponds Overlook into open upland habitat consisting of mixed sagebrush grassland. Rerouting the segment will result in

restoration of 2.9 acres of wetland habitat, repairing foraging and security habitat while redirecting visitor use to more open upland habitats. Relocation of the road and pathway in this segment of the Project should also reduce vehicle collision risks for grizzly bears, as driver line of sight will increase and presence of bears will decrease.

Human/Grizzly Bear Encounters

More often than vehicle collisions, direct grizzly bear injury and mortality frequently occurs as a result of intentional (self-defense, defense-of-kill, poaching) or unintentional (mistaken identity) shootings (Lamb *et al*. 2016). Roads, trails, and pathways facilitate access for large numbers of people both within their established routes and dispersed into adjacent grizzly bear habitat, increasing the risk of human-bear conflicts and human-caused mortality (Neilson *et al.* 2004; McLellan 2015; Proctor *et al*. 2018). One study recorded 74 percent of human-caused grizzly bear mortalities occurred within 500 meters of a road (Kasworm *et al.* 2018). Grizzly bears are especially vulnerable to human-caused mortality in the spring and fall, when food resources are limited and bears are responding to high nutritional needs before and after denning. In these cases, bears may venture closer to human use areas seeking high-quality forage.

The addition of a pathway in the Moose-Wilson corridor will increase human presence and the risk of grizzly bear encounters with visitors, hikers, and cyclists, as the corridor traverses areas used by elk for calving in the spring and shrub habitats capable of high berry production in the fall. While some bears may avoid the area or change the timing of their use to avoid human presence, other bears may become habituated to human activity and continue to use habitats in the pathway and road corridors. Some bears may become more willing to tolerate roads and human presence where use patterns are predictable or less invasive, but tolerance over time can lead to habituation and subsequent safety issues for both humans and grizzly bears (Cristescu *et al*. 2016).

Vegetation along segments of the pathway may create reduced visibility, increasing the chances of a surprise human-bear encounter. Although brushing of vegetation will improve line of sight for both grizzly bears and pathway users, cyclists traveling quietly and at high speeds will still be particularly at risk of a surprise encounter which could result in defensive grizzly bear behavior. Substantial human safety concerns will still exist, most notably in forested habitats and areas where sight distances are limited by terrain and vegetation. This risk increases the chances of bears being injured, removed by managers, or shot by visitors in defense of life and property as GTNP staff are unlikely to have the capacity to patrol both the pathway and the Moose-Wilson Road to monitor for foraging bears. To minimize conflicts with crepuscular and nocturnal bears utilizing habitats in the corridor, GTNP will enact daily closures of the pathway from one hour before sunset to 2 hours after sunrise. While this provides opportunity for bears to access habitats and avoid human presence, foraging efficiency may still be reduced at night (Wielgus *et al.* 2002). Temporary closures of the pathway will also be initiated during spring and early summer if elk parturition is observed drawing bears to the area, and in late summer and early fall in years when berry production attracts grizzly bears to the corridor.

GTNP staff and volunteers regularly educate and remind visitors about proper food storage in grizzly bear habitat, issuing citations and fines for violations when necessary. Visitors utilizing the Moose-Wilson Road and pathway that practice improper food storage can create additional

risks and increase the potential for human-grizzly bear conflicts. Monitoring by GTNP staff and volunteers to keep visitors from feeding or approaching bears already occurs on the Moose-Wilson Road, and temporary closures will be enacted when bears are observed to minimize the potential for conflicts. Outreach efforts and signage regarding GTNP rules and regulations will also aid in minimizing conflicts. Still, the potential for human-bear encounters remains an issue that will increase in the corridor with the addition of a multi-use pathway.

The proposed road realignment between the Death Canyon Road and Sawmill Ponds overlook would improve access for bears to use the riparian corridor for foraging and daily movements. Relocation of this road segment into upland sagebrush habitats will reduce human presence in the riparian corridor, which contains a high-quality forage and vegetative cover favored by grizzly bears. Education and outreach efforts for multi-use pathway users would provide additional learning opportunities about grizzly bears and how they utilize habitats in the area. Lastly, co-locating the pathway adjacent to the Moose-Wilson Road will minimize the impacts of habitat fragmentation and reduce the likelihood of surprise human-bear encounters that may be more likely to occur if the pathway were isolated.

7. CUMULATIVE EFFECTS

Cumulative effects are those "effects of future state or private activities, not involving federal activities, that are reasonably certain to occur within the action area" considered in this BO (50 CFR 402.02). Within the action area, cumulative effects to grizzly bear may include the loss and degradation of habitat from private land development, loss and degradation of habitat from increased recreation and road development/use, oil and gas leasing, and other activities on public lands, increased bear mortality associated with hunter-grizzly bear conflicts or misidentification, malicious killings, mortality related to black bear baiting, vehicle mortalities, and the potential loss of food sources due to introduced exotic organism spread and establishment (Reinhart *et al*. 2000). Food sources that may be reduced include: 1) white bark pine seeds, due to the decline of individuals from white-pine blister rust, pine beetle and fire, 2) cutthroat trout in Yellowstone Lake, due to introduced exotic lake trout which have reduced the cutthroat population, and 3) ungulates, from the spread of brucellosis and chronic wasting disease which may cause reductions in ungulate densities (Reinhart *et. al*. 2000; Cheville *et al*. 1998).

The Service is not aware of any future state, tribal, local, or private actions that are reasonably certain to occur within the action area at this time other than the ongoing actions mentioned above; therefore, no discernible cumulative effects are anticipated. No new future non-federal activities are known that would contribute additional negative cumulative effects to the grizzly bear are anticipated within the action area. Private lands in and adjacent to the action area may be developed for residential or business use. The human population in the area may experience continued growth during the next decade. As more people use private land and adjoining federal land for homes, recreation, or business, the challenge to accommodate those uses in ways that continue to protect the grizzly bear population increases. In general, mortality from vehicle collision, unsecured attractants, livestock grazing, agriculture, self-defense, hunting related and mistaken identity mortalities are all ongoing activities that impact grizzly bears on federal, state and private land. Overall, the GYE population has continued to increase in number and distribution throughout the years even in the presence of these factors (van Manen and Haroldson 2020).

8. CONCLUSION

Regulations direct the Service to evaluate whether a proposed action is likely to jeopardize the continued existence of threatened or endangered species. The continued existence of a listed species depends upon the fate of the populations that comprise them and the continued existence of a population is determined by the fate of individuals that comprise the population. That is, the abundance, reproduction, and distribution of a given species depends upon the collective performance of populations within the geographic extent of the species in the wild. Population performance is typically measured by rates of increase or decrease and is derived as a function of an individual's ability to live, die, grow, mature, and reproduce.

After reviewing the BA, the current status of the grizzly bear, the environmental baseline for the action area, sources of information incorporated by reference, the proposed action including the commitment to implement the conservation measures, and the cumulative effects, it is the Service 's biological opinion that the effects of the Amended Selected Action of the Moose-Wilson Corridor Comprehensive Management Plan/EIS, as proposed, is not likely to jeopardize the continued existence of the grizzly bear. Although some level of incidental take of grizzly bears is anticipated primarily due to human-bear conflicts and the need to address human health and safety, it is the Service's opinion that the proposed action would not appreciably reduce the likelihood of survival and recovery of grizzly bears.

The Service has reached this conclusion by considering the following:

1. The grizzly bear population within the GYE has increased and exceeded the GYE RZ goals established in the Grizzly Bear Recovery Plan (Service 1993; 2017; 2023). The most recent assessment of the GYE grizzly bear population in 2024 estimated 1,050 grizzly bears (IGBST 2026). The range expansion of the grizzly bear beyond the GYE RZ and DMA was simultaneous with other federal activities as described in the Environmental Baseline section, and with ongoing recreational activity on NPS-managed lands. Therefore, historic and ongoing activities like the proposed Project should have no discernible effect on overall population trends or recovery. An impact to less than one half of one percent of grizzly bears outside the GYE RZ population from the construction and subsequent visitor use of the Project over the ten years analyzed by this consultation would not impact the increasing population trajectory.

2. The NPS will implement conservation measures for the grizzly bear to minimize impacts from the construction, maintenance, and long-term use of Project roads and pathways. The GTNP is committed to minimizing impacts to grizzly bears within the action area by working with construction crews and GTNP visitors to cooperatively modify access to the multi-use pathway to resolve conflicts to the extent practicable. Additionally, the NPS provides educational information to contractors, their employees, and visitors regarding personal safety measures and proper behavior in occupied grizzly bear habitat. These conservation measures are intended to reduce the potential for grizzly bear-human conflicts.

3. The anticipated level of grizzly bear mortality caused by the Project falls within the scope of the demographic recovery criterion annual mortality limits designed to maintain the

population within the DMA around the model averaged population estimate (Service 2017). The anticipated level of mortality that could occur would not appreciably reduce the overall population, reproduction, or distribution of grizzly bears in the DMA. Implementation of the Project would not cause decline of the grizzly bear population within the DMA or result in jeopardy to the species at a range-wide scale.

No critical habitat has been designated for the grizzly bear; therefore, none would be affected. The conclusions of this BO are based on full implementation of the Project as described in the Description of the Proposed Action section of this document, including any conservation measures that were incorporated into the Project design.

9. INCIDENTAL TAKE STATEMENT

Section 9 of the ESA and federal regulations pursuant to section 4(d) of the ESA prohibit the take of endangered and threatened species, respectively, without special exemption. Take of a listed species defined in section 3 of the ESA means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. "Harm" is further defined (50 CFR 17.3) as an act which actually kills or injures wildlife and which may include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. "Harass" is defined (50 CFR 17.3) as intentional or negligent act or omission which creates the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. "Incidental take" is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the ESA provided that such taking is in compliance with the terms and conditions of this incidental take statement.

The reasonable and prudent measures, along with the implementing terms and conditions, later in this document, are non-discretionary and must be undertaken by the NPS as appropriate, for the exemption in section 7(o)(2) to apply. The NPS has a continuing duty to regulate the activity covered by this incidental take statement. If the NPS 1) fails to assume and implement the terms and conditions or 2) fails to require the GTNP to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. To monitor the impact of incidental take, the NPS and GTNP must report the progress of the action and its impact on the species as specified in the incidental take statement [50 CFR 402.14(i)(3)].

10. AMOUNT OR EXTENT OF TAKE

The Service anticipates four grizzly bears will be taken between 2026-2035 as a result of the proposed action. The incidental take is expected to be in the form of direct mortality resulting from human-bear conflicts or encounters. The following provides estimates of take and corresponding rationale for activities associated with the proposed Project.

Although the intentional act of lethally removing conflict grizzly bears in accordance with the species-specific rule is an exception to the take prohibition (50 CFR 17.40(b)(1)(i)(C)), the exception does not preclude development of a biological opinion. As described in the Effects of the Action section, the Service anticipates take in the form of harm (injury and death) from management removal (killing) of grizzly bears as a consequence of human-bear conflicts and/or human safety issues in habitats occupied by grizzly bears. Based on records of grizzly bear mortality in the action area since 2011 and conservation measures to be implemented by GTNP, the Service does not anticipate any grizzly bear take (*e.g.*, injury or death) will result from construction activities associated with the Project. Grizzly bear mortalities in the action area not associated with Project activities are part of the environmental baseline and do not require coverage by this incidental take statement.

Pathway use by visitors and associated activities have the potential for adverse effects to grizzly bears (*e.g.*, displacement, habituation, increased exposure to other potential sources of mortalities, etc.) as described in the Effects of the Action section. However, the regulations and definitions at 50 CFR 402.02 instruct the Service to consider indirect effects of a proposed action that are reasonably certain to occur. While the Service recognizes that grizzly bears may be displaced, may have altered behavior (habituation or food conditioning), may be killed in defense of life or property, and other potential adverse effects that meet the definition of incidental take, they are not all reasonably certain to occur. Therefore, the Service will not identify a specific level of incidental take attributable to these other potential adverse effects.

Conflicts and subsequent management relocations and removals continue to occur in the GYE, and it is incumbent upon the Service to identify a level of take that is reasonably certain to occur as a result of the proposed Project. The Service believes a trend in conflicts and removals can be cyclical in nature and occurrence due to an expanding population of grizzly bears, dispersing individuals seeking available home ranges, year-to-year fluctuations in forage availability, and changes in human presence and use within available habitats. Consequently, the Service believes the action area will continue to experience conflicts which may result in the continued need for management removals over the term of the Project.

Based on population trends and data documenting past conflicts and removals, the Service has calculated an estimate for incidental take for the following ten years (2026-2035) that may result from human-bear encounters and conflicts (Gould 2025a, 2025b; IGBST 2026). First, the Service calculated the average annual number of management removals and associated standard deviation using grizzly bear mortality data recorded within the action area provided by WGFD and GTNP from 2011-2025. This average annual removal rate (0.27 bears) was then multiplied by ten to account for the 10-year period covered by this BO (2026-2035), and one standard deviation was added, rounding to the nearest integer (*i.e.*, 3.7 rounded to 4 bears). This estimate of four bears over the next 10 years accounts for natural variability and unpredictability in human-bear encounters and conflicts. The approach for calculating the number of removals was developed while recognizing that human-bear conflicts and subsequent removals have not reflected an upward trend in the action area; however, the number of conflicts, relocations, and removals within the surrounding action area may increase as a consequence of activities associated with the Project. An incidental take of four grizzly bears within the next ten years (2026-2035) allows for the growth of recreational opportunities in GTNP while implementing

avoidance and minimization measures and providing the flexibility needed to address situations where management actions may be necessary. The Service recommends annual check-ins and coordination to monitor the amount of incidental take and to ensure the trajectory or trends in documented incidental take are, and will likely remain, within the bounds of the estimate. Should annual check-ins indicate the need to consider unexpected removals or short-term trends in removal rates, communication with the Service can initiate a review. Continuing dialogue and transparency among the Service, GTNP, and WGFD is essential to implementing sound management of human recreational use as it relates to grizzly bear presence in the action area.

11. EFFECT OF THE TAKE

We have determined that the level of anticipated take will not likely result in jeopardy to the grizzly bear. The action area is adjacent (4.15 miles south) to the larger GYE grizzly bear RZ which has a growth rate of three percent, as observed by bears continuing to expand into areas outside of the GYE RZ and DMA (IGBST 2026). The overall population density in the GYE was 1,050 in 2024 (IGBST 2026). The anticipated level of grizzly bear mortality resulting from the Project should occur within the limits and scope of the demographic recovery criterion for the population size, annual mortality limits for independent females, independent males, and dependent young. Activities associated with Project construction and subsequent recreational use by park visitors could result in changes to the grizzly bear population, reproduction, and distribution in the action area over the following ten years. The level of mortality that could occur because of ongoing Project construction and subsequent recreational use, however, will not appreciably reduce the overall population, reproduction, and distribution of grizzly bears in the GYE or across its listed range, nor will it preclude recovery of the species. Therefore, authorization of the Project will not jeopardize the continued existence of the grizzly bear. Risks to visitor safety may be of greater relevance however, as the potential for human-bear conflicts and encounters associated with the Project are expected to be high.

12. REASONABLE AND PRUDENT MEASURES AND TERMS AND CONDITIONS

All conservation measures including avoidance and minimization measures, biological and compliance monitoring, and reporting measures are incorporated herein by reference as reasonable and prudent measures and terms and conditions to address the incidental take of grizzly bears.

The following reasonable and prudent measures (RPMs) are necessary and appropriate to minimize take of grizzly bears:

R&PM 1. Ensure implementation of all conservation measures identified and committed to as part of the action (outlined above in Description of Proposed Action and more fully described throughout the BA).

R&PM 2. Ensure direct habitat disturbance does not exceed that discussed in the BA. Through minimization and monitoring of direct habitat disturbance, indirect disturbance to grizzly bears will also be minimized.

R&PM 3. Minimize the potential for human-caused mortality to grizzly bears.

R&PM 4. Manage roadside vegetation and linkage corridors in a manner that will facilitate safe crossing of roads and pathways by grizzly bears.

Terms and Conditions

To be exempt from the prohibitions of section 9 of the ESA, the NPS must comply with the following terms and conditions (TCs), which implement the reasonable and prudent measures described above and outline required reporting/monitoring requirements. The terms and conditions described below are non-discretionary.

TC1. If any grizzly bear activity is documented in the Project vicinity during construction (200 meters on either side of the road corridor) staff biologists shall be notified and consulted regarding work stoppage and site-specific use restrictions (*e.g*., removal of carrion from activity area, flaggers removed from area, *etc*.)

TC2. Where trees and other woody vegetation must be cleared along the road edge, designs shall create an irregular forest edge and preserve as many large trees on the edge of the disturbed area as possible to minimize habitat fragmentation and facilitate grizzly bear crossings.

TC3. Carrion shall be removed from the road and pathway corridors prior to opening of the road in the spring and thereafter as soon as any carrion is discovered. A system to monitor for carcasses shall be developed and implemented. This monitoring program shall be implemented beginning with the initial opening of the pathway each spring and terminate when the pathway is closed in the fall.

TC4. To facilitate early identification of incidental take and evaluate the adequacy of existing mechanisms to minimize incidental take of grizzly bears associated with the Moose-Wilson Road and associated multi-use pathway, GTNP shall immediately consult informally with the Service should the level of incidental take approach the anticipated limit.

TC5. Control traffic and parking to minimize negative impacts to grizzly bear activity, including road, turnout, and parking lot maintenance and active enforcement of the current speed limits.

TC6. To monitor the impacts of visitors utilizing the Moose-Wilson corridor, GTNP will, in coordination with the Service, review the effectiveness of GTNPs Conservation Measures and other management efforts outlined in the BA as they apply to visitor activities in the Moose-Wilson corridor and describe the progress of the proposed action, including impacts to grizzly bear. See Appendix A for reporting template.

This process shall consider:

(1) adverse effects resulting from visitor activities, including grizzly bear conflicts and resolutions for all visitor activities within the Moose-Wilson corridor;
(2) when and if the level of anticipated incidental take is approached, and;
(3) when and if the level of anticipated take is reached.

TC7. If a grizzly bear is injured or killed within the Moose-Wilson corridor as a result of activities associated with the Project, GTNP will coordinate with the Service regarding the adequacy of existing mechanisms to minimize additional take and reinitiate formal consultation if necessary.

Disposition of Dead or Injured Listed Species

Upon locating a dead, injured, or sick listed species initial notification must be made to a Service Law Enforcement Office (307-332-2159 / 307-527-7604) within three working days of its finding. Written notification must be made within five calendar days and include the date, time, and location of the animal, a photograph if possible, and any other pertinent information. The notification shall be sent to the Law Enforcement Office with a copy to this office. Care must be taken in handling sick or injured animals to ensure effective treatment and care, and in handling dead specimens to preserve the biological material in the best possible state.

13. CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the ESA directs federal agencies to utilize their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

CR 1. Continue to educate contractors and park visitors about their responsibilities related to conservation of grizzly bears, protected status of the grizzly bear, the potential occurrence of grizzly bears along the road and pathway corridor, the risks of working and recreating in occupied bear habitat, the need for heightened awareness of bears, appropriate personal safety measures, and proper behavior in bear country.

CR 2. Where possible, avoid or minimize recreational use in important grizzly habitat components such as riparian areas, travel corridors, drainages, and berry stands.

For the Service to be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations. The Service also requests GTNP to provide a summary of the effects of the Project by April 1 of each year.

14. REINITIATION NOTICE

This concludes formal consultation on the Amended Selected Action of the Moose-Wilson Corridor Comprehensive Management Plan/EIS Project. As provided in 50 CFR 402.16, reinitiation of consultation is required where discretionary federal agency involvement or control over the action has been retained (or is authorized by law) and if: 1) the amount or extent of incidental take is exceeded, 2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion, 3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this biological opinion or written concurrence, or 4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

By monitoring conflicts and incidental take as it occurs, the NPS and the Service maintain the ability to amend, supplement or revise the BO before the take limit is exceeded. By initiating consultation in one of these ways, before one of the above reinitiation triggers is met, the NPS and the Service can address issues without disrupting the proposed action. At the end of the term of this BO (2026 to 2035), a new biological assessment may be necessary, and the Service advises the NPS to continue to prepare its biological assessments in advance to ensure adequate time for discussions, development of draft documents for review, comment, and final signatures. Requests for re-initiation, or questions regarding re-initiation, should be directed to the Wyoming Ecological Services Field Office via email at WyomingES@fws.gov or at the following address:

Field Supervisor, U.S. Fish and Wildlife Service
Wyoming Ecological Services Field Office
334 Parsley Boulevard
Cheyenne, Wyoming 82007

Please refer to the consultation number 2026-0073145 in future correspondence concerning this project. Should you require further assistance or if you have any questions please contact Heather O'Brien at heather_obrien@fws.gov or by phone at (307) 204-9140.

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APPENDIX A.

USFWS BIOLOGICAL OPINION TERMS AND CONDITIONS REPORTING TEMPLATE

Last updated: April 2, 2026

Report Date (mm/dd/yyyy):
Date Biological Opinion Issued by USFWS (mm/dd/yyyy):
Formal Consultation #: 2026-0073145
Project Name: National Park Service Amended Selected Action of the Moose-Wilson Corridor Comprehensive Management Plan/EIS (2026-2035) for Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway in Teton County, Wyoming

Report Submitted by:

Agency: National Park Service, Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway
Contact Name:
Phone #: **Email**:

Calendar Year(s) of Report (*e.g.*, 2026):

Incidental Take (IT) for Each species:

Species Name	Amount of Incidental Take (IT)			
	Amount IT in Biological Opinion	Total Amount IT in Year(s)	Amount IT for Current Year	Total (additive) IT for Project
Grizzly Bear	4			

(1) **Brief description and date of each lethal take for reporting year** (*e.g.*, 1 adult male grizzly bear lethally removed on 7/15/23 from Moose-Wilson pathway for habituation and risk to public safety):

(2) **Brief description and date of each non-lethal take for reporting year** (*e.g.*, 1 adult female with cubs-of-year relocated on 8/1/23 from Moose-Wilson corridor for vehicle damage and feeding on unsecured human food):

(3) **Brief description of activities completed under Terms and Conditions** (*e.g.*, completed inspections of 20 outfitter and guide permitted activities or facilities and documented two Food Storage Order violations):

(4) **Identify which Conservation Measures** (from Proposed Action section of the Biological Opinion) **unable to implement and brief description of reasoning**:

(5) **Additional information** (*e.g.*, unforeseen events, new behaviors, new or emerging conflicts, large landscape changes, etc.):