

Chapter 3 Habitat Standards and Monitoring

Background

Habitat standards and monitoring protocol in this Conservation Strategy identify provisions that Federal and State land managers throughout the GYE are committed to for habitat preservation of a recovered GYE grizzly bear population. Between 1986 and the initial 2007 delisting of the GYE grizzly bear population, grizzly bear habitat in the GYE was managed under standards and guidelines established by the Interagency Grizzly Bear Committee (IGBC 1986) and specified in National Forest and National Park management plans. Acknowledging that humans are the primary agent of grizzly bear mortalities, a principal objective of the IGBC was to improve survival rates by implementing management strategies that minimized anthropogenic influences and grizzly bear-human conflicts. The IGBC measures implemented inside the Grizzly Bear Recovery Zone (GBRZ) led to improved management of garbage and food attractants, reduced sheep grazing, and restrictions on motorized access and human development. These standards and guidelines that were imposed upon public lands were instrumental in the recovery of the grizzly bear in the GYE throughout the mid-1980s and into the 1990s.

The subsequent 1993 Grizzly Bear Recovery Plan (USFWS 1993) required the preservation and monitoring of habitat necessary to support a recovered population. This led to the development of more explicit and measurable habitat criteria to be applied inside the GBRZ, as per the Recovery Plan Supplement: Habitat-based Recovery Criteria for the Greater Yellowstone Ecosystem (USFWS 2007c). To satisfy this requirement, measurable habitat criteria were established that called for no net loss of secure habitat with respect to 1998 conditions. These criteria were embraced and incorporated into the draft Conservation Strategy and released for public comment in 2000. Analysis of public comments and new information was used to establish the final habitat standards for a recovered GYE population as identified in the 2007 Conservation Strategy (USFWS 2007a) and appended in a supplement to the Recovery Plan (USFWS 2007c). This 2016 revision of the Conservation Strategy includes some changes to the 2007 document that help clarify habitat standards as they pertain to the 1998 baseline.

Clarifying language to the application rules was inserted where necessary to provide better direction for application of these standards on a local project level. Some modifications in habitat monitoring protocols have been made and are documented in this chapter and Appendix E. Upon delisting of the GYE population, the GBRZ will be referred to as the Primary Conservation Area (PCA) to reflect the shift from managing for recovery to one of conservation.

Since 1998, visitor use in National Park lands and surrounding federal public lands has increased significantly. During this time there was a significant increase in grizzly bear numbers and occupied range such that there are more bears in more places. Adherence to the habitat standards and its associated sideboards to human activities has contributed to the successful recovery of the GYE grizzly bear population. However, the habitat standards associated with the 1998 baseline and the administrative mandates to manage for increased visitation have not kept pace with the recent changes in a manner that allows land managers to responsibly accommodate the current, and likely future, increase in visitor use. For example, the steady increase in visitor numbers may necessitate more administrative infrastructure to strategically manage the impacts of more people on the landscape while ensuring the continued protection of grizzly bears and their habitat. Therefore, it is necessary to reconsider the role and responsibility for stewardship and resource management of public lands inside the PCA and throughout the GYE. Specifically, how could future modifications to the 1998 baseline standards be designed so that increased visitation can be addressed without threatening the habitat and population gains that have been secured? As such, the 2016 Conservation Strategy proposed a multi-agency effort be conducted to determine the best long-term solutions for alleviating administrative pressures associated with increased visitation. Any management changes proposed in this effort were to be evaluated in a cooperative and meaningful manner with full consideration to long-term consequences. Proposed modifications will minimize deviations to the 1998 baseline. A multi-agency planning group was established to complete this re-evaluation effort on or before the end of calendar year 2018. Managers extended this date and discussion, with agreement by U. S. Fish and Wildlife Service.

In 2017, a multi-agency technical team was tasked with recommending changes to the standards and application rules for managers' consideration. The most significant recommendation is to apply a "footprint" approach to identify and manage areas of concentrated human use associated with developed sites that were previously listed and counted as points on the landscape, regardless of areal extent. The application rules for habitat standards in this updated document spell out how new infrastructure may be authorized to manage the effects of increased visitation. Refer to Appendix E for a complete discussion on the methods and rationale for the footprint approach.

The final revision document and all future revisions to the Habitat Chapter must be agreeable to each of the affected federal land management agencies represented on the YGCC, including the National Park Service, U.S. Forest Service, Bureau of Land Management, as well as the U.S. Fish and Wildlife Service.

Introduction

The overall objective for habitat management inside the PCA is to reduce access-related disturbances and human-caused mortalities by maintaining or improving habitat with respect to 1998 conditions while maintaining options for resource management activities at approximately the same level as existed in 1998. Habitat standards apply to Federal lands inside the PCA and identify three factors that must be maintained at, or improved upon with respect to conditions existing in 1998: (1) secure habitat, (2) number and capacity of developed sites, and (3) number and acreage of active commercial livestock grazing allotments. All three of these factors are linked to human activities that affect grizzly bear mortality and displacement. These three standards apply to public lands within the PCA, the area where past recovery efforts and present habitat conservation measures are primarily focused. The PCA accounts for approximately 34% of the GYE grizzly bear's occupied range as estimated from methods of Bjornlie et al. 2014 (Figure 6). The 1998 baseline for habitat standards was selected because studies showed (and recently affirmed) that the GYE grizzly bear population was increasing annually at a robust rate of 4.2 to 7.6 percent between 1983 and 2001 (Harris et al. 2006, 2007, IGBST 2012). Habitat conditions in 1998 were considered representative of this time period since levels of secure

habitat and developed sites inside the PCA had remained relatively constant in the 10 years preceding 1998 and beyond (USDA 2004). Hence, conditions in 1998 are believed to have supported and contributed to the population growth observed during 1983–2001. Habitat standards, as they apply to the 1998 baseline, impose measurable side boards on allowed levels of human activity inside the PCA and establish a clear benchmark against which future improvements and impacts of habitat can be measured.

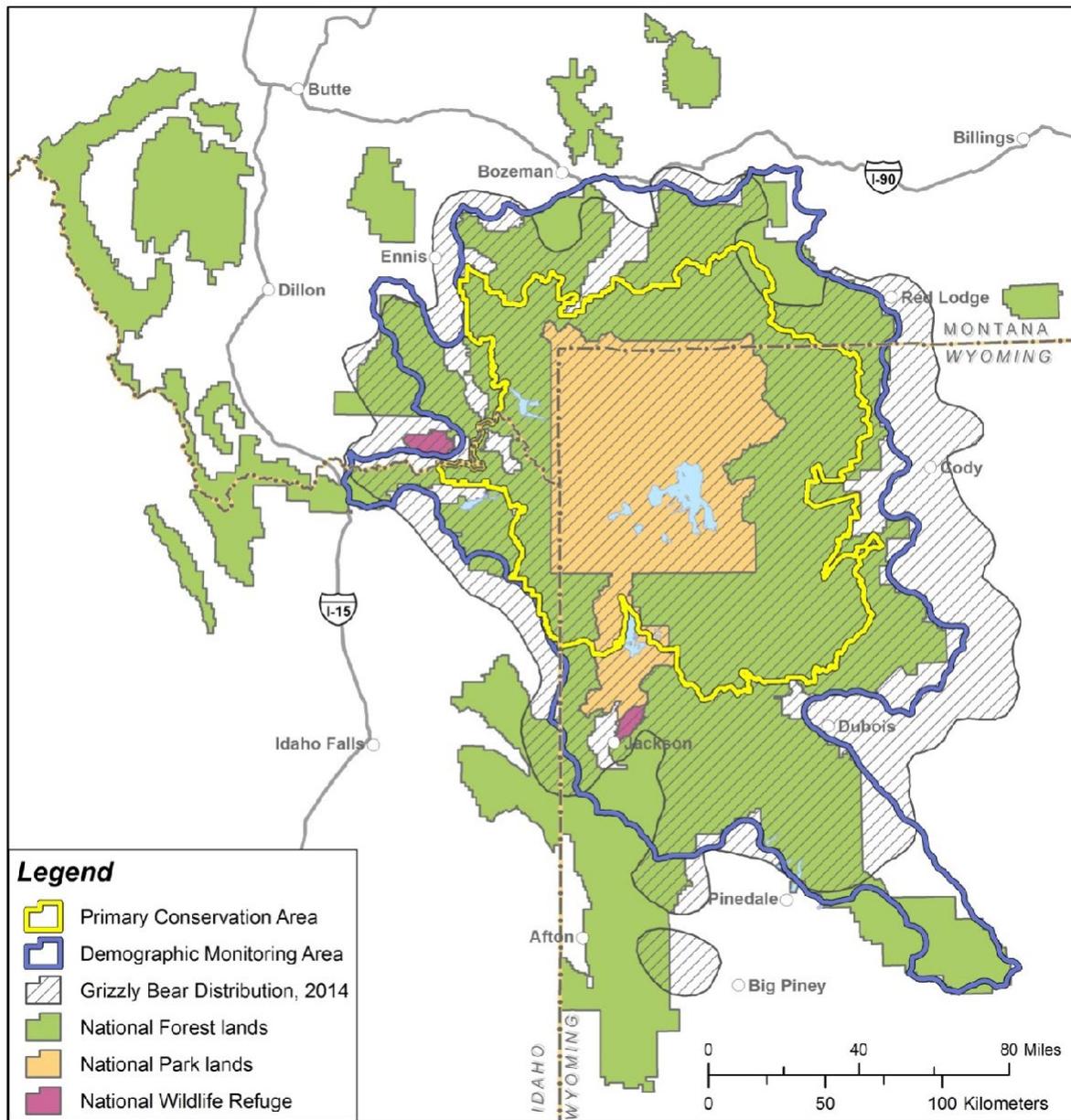
To facilitate management of habitat throughout the PCA, the area inside the PCA is divided into 18 distinct bear management units (BMUs) and 40 subunits (Figure 2). BMU boundaries were delineated to approximate the average lifetime range of an adult female grizzly bear in the GYE. Each BMU was further subdivided into one or more subunits comparable in size to the average annual home range of an adult female grizzly bear. Monitoring habitat at a subunit scale provides greater spatial resolution and proved to be better suited for analyzing habitat use patterns and ensuring good distribution of bear habitat throughout the PCA (USDA 1985).

Hence, conditions pertaining to secure habitat and developed site standards are measured and compared against 1998 levels for each of the 40 bear management subunits within the PCA. To date, habitat-based criteria throughout the PCA have been successfully maintained at, or improved upon, 1998 levels for all 40 subunits. Adherence to these standards ensures that sufficient habitat for the GYE grizzly bear will continue to be available into the foreseeable future. Habitat standards in this document are subject to revision based on the best available science and will be reviewed and updated as necessary.

In addition to mandatory habitat standards, several other habitat parameters will be monitored and evaluated to determine the overall condition of habitat for grizzly bears in the PCA. These additional monitoring items include productivity or grizzly bear use of the following foods: (1) ungulates, (2) cutthroat trout, (3) army cutworm moths, and (4) whitebark pine seeds. Information on monitoring protocols for these items is found in subsequent sections of this chapter.

Agencies responsible for management of grizzly bear habitat in the GYE are committed to continue collecting the necessary information to evaluate adherence to habitat standards and monitoring protocols throughout the PCA. The habitat standards and monitoring requirements in this Conservation Strategy have been incorporated into National Forest plans, National Park compendiums, and BLM plans.

Figure 6. Federal lands comprising the Greater Yellowstone Ecosystem (GYE), the Primary Conservation Area (PCA), the Demographic Monitoring Area (DMA), and current (2006–2020) grizzly bear occupied range as estimated based on techniques described in Bjornlie et al. (2014).



Outside the PCA, grizzly bears have expanded into adjacent areas considered biologically suitable and socially acceptable, as per direction in the State and Tribal management plans (Appendices H, I, J, and N). The key to successful management of grizzly bears outside the PCA is a sustainable balance that accommodates the needs of grizzly bears along with the competing demands of human use. As such, an important management objective for areas outside the PCA is to maintain existing resource management and recreational uses and allow agencies to respond to demonstrated problems with appropriate management actions.

Approximately 83 percent of suitable habitat outside the PCA occurs on federally owned land and about 98 percent of that suitable habitat is occupied by grizzly bears (Figure 6). Most lands outside the PCA are under Forest Service management and the majority of those lands will remain as relatively secure habitat due to land designations. The Forest Service manages 76 percent (17,292 sq km (6,676 sq mi)) of suitable habitat outside of the PCA, of which nearly 71 percent (12,396 sq km (4,786 sq mi)) is relatively secure because they are congressionally designated as Wilderness, Wilderness Study Area, or Inventoried Roadless Area. These designations provide regulatory mechanisms outside of this Conservation Strategy that minimize impacts to secure grizzly bear habitat. A flexible management strategy is crucial for promoting acceptance and tolerance for grizzly bears as they continue to expand into suitable habitat outside the PCA. Standards and guidelines for other wildlife species identified in National Forest and Park management plans indirectly provide additional habitat management direction for bears outside the PCA.

State grizzly bear management plans for Idaho, Montana, and Wyoming recommend and encourage land management agencies to maintain or improve habitats important to grizzly bears and to monitor habitat conditions outside the PCA. These three states acknowledge the importance of secure habitat (see secure habitat definition below), motorized access management, and road density issues related to the survival of grizzly bears and other wildlife. Consequently, levels of secure habitat are monitored on federal lands outside the PCA. Land management agencies work cooperatively with state wildlife agencies to meet identified population and habitat goals for grizzly bears in the GYE. The process of implementing state and federal grizzly bear management is coordinated by the YGCC representing all respective

land management agencies in the GYE (see Chapter 6 Implementation and Evaluation).

Habitat Standards inside the Primary Conservation Area

Human activity is the primary factor negatively impacting availability and security of grizzly bear habitat in the GYE. The relationship between bears and habitat is extremely complex and difficult to quantify. However, unfettered human activity is known to result in displacement and mortality of grizzly bears and was a significant contributing factor leading to listing the grizzly bear in the conterminous U.S. as a Threatened species in 1975. Restrictions in human activities due to management practices implemented by the IGBC in the mid-1980s correlate strongly with the steady increase in the GYE grizzly bear population observed between 1983 and 2001.

Habitat standards formalized in this document impose measurable sideboards on levels of road development, construction of developed sites, and livestock allotments allowed on Federal lands inside the PCA, thereby reducing opportunities for grizzly bear-human conflicts, habitat disturbance, and displacement of grizzly bears from valuable habitat.

Habitat standards identified in this document address three key factors related to human activity (motorized access, site development, and commercial livestock grazing) and specifically call for no net loss in secure habitat inside the PCA from what existed in 1998 (Appendix E). Adequate secure habitat is essential to the survival and reproductive success of grizzly bears.

It is the goal of habitat management agencies to maintain or improve habitat conditions throughout the PCA at or above 1998 levels, as measured per bear management subunit. These levels of secure habitat have been maintained and will continue to be maintained, and improved on where possible, for the foreseeable future. Potential impacts to grizzly bears and their habitat resulting from federal activities occurring inside the PCA will be evaluated and mitigated using the criteria and standards in this Conservation Strategy in coordination with state wildlife agencies.

Corrections to the 1998 habitat measurements comprising the baseline (Appendix E) may be

made for errors of omission when based on new and well documented information substantiating the existence and status of anthropomorphic features (i.e., motorized routes, developed sites, or livestock allotments) that were not properly accounted for in the 1998 baseline. When verified, legitimate corrections to the baseline will be tracked and reported and will constitute new baseline habitat levels against which future change will be measured.

Application rules specific to each habitat standard provide additional direction on how these standards are to be implemented at a Federal project level. The following habitat standards and application rules apply to all Federal lands inside the PCA.

Secure Habitat Standard

The Secure Habitat Standard requires that inside the PCA the percentage of secure habitat within each bear management subunit must be maintained at or above levels that existed in 1998 (Appendix E). The sole exception to the 1998 secure habitat baseline applies to the three subunits identified in the 2007 Conservation Strategy as in need of improvement above 1998 levels (Gallatin #3, Henrys Lake #2, and Madison #2). These three subunits must be maintained at or above levels attained from full implementation of the 2006 Gallatin National Forest Travel Management Plan (Appendix E). Authorized Federal projects that result in temporary or permanent changes to secure habitat are allowed per the Application Rules identified below.

Secure habitat is defined as any contiguous area ≥ 10 acres in size and more than 500 m from an open or gated motorized access route (road or trail), prescribed footprint of a developed site or recurring low level helicopter line during the non-denning period (March 1 – November 30). Gated routes that are closed year- round to public motorized use but remain accessible to administrative personnel are still considered motorized access routes, and hence, detract from secure grizzly bear habitat.

Decommissioned routes that are permanently and effectively closed to the public and administrative staff do not count against this standard. Lakes larger than 2.6 sq km (1 sq mi) in

spatial extent are excluded from secure habitat calculations. Specific activities allowed in secure habitat that do not violate standards or count as motorized access route are listed below.

Developed sites are areas of focused visitor and/or administrative activity with associated infrastructure that similarly detract from secure grizzly bear habitat; they are addressed further in the next section of this chapter. For the purposes of this chapter, secure habitat is correlated with key habitat components, such as foods, cover, space, arrangement of habitat types, and the ability of grizzly bears to move between them. For the purposes of describing habitat management and conservation in this chapter, secure habitat has no direct link to discretionary mortality. Any potential population and conflict management activities are distinctly separate components of this Conservation Strategy and addressed in other chapters.

Application Rules for Permanent Changes in Secure Habitat

Permanent changes to secure habitat are allowed inside the PCA when associated with an authorized Federal project involving construction of new motorized routes (i.e., roads or trails), reconstruction of existing motorized routes, or opening of a previously decommissioned route if, and only if, the following conditions are met:

- Any loss in secure habitat below baseline levels is replaced by restoring secure habitat of equivalent quality and quantity (e.g., through decommissioning) in the same bear management subunit. Habitat quality must be assessed based on the best collective scientific understanding of grizzly bear habitat ecology and the rationale for all mitigation measures must be fully documented.
- Replacement habitat must be in place before project implementation or concurrent with project development as an integral part of the project plan. Replacement habitat must remain in place for a minimum of 10 years before it can be subsequently replaced and mitigated for per application rules (this duration is based on the approximate generation time of a female grizzly bear, or the time it takes to replace herself in the population).
- For those subunits identified as in need of improvement above 1998 levels (Gallatin #3, Madison #2, and Henry's Lake #2), secure habitat will be maintained at or above levels

associated with full implementation of the 2006 Gallatin National Forest Travel Management Plan (see Appendix E).

- For activities based on statutory rights, such as access to private lands under the Alaska National Interest Lands Conservation (ANILCA) or the 1872 General Mining Law, where permanent reductions in secure habitat cannot be replaced within the affected subunit, then secure habitat will be compensated at a commensurate level at or above the baseline in the nearest possible subunit. In these rare situations, subsequent changes to secure habitat in the two affected subunits constitute permanent changes to the baseline.
- Honor existing oil and gas or other mineral leases. Proposed Applications for Permit to Drill (APDs) and operating plans within those leases would strive to meet the application rules for changes to secure habitat. New leases, APDs, and operating plans must meet the secure habitat and developed site standards.
- Motorized routes on private land that post-date 1998 are not counted against this standard. However, for motorized roads or trails acquired through land exchanges or acquisition that are desirable to maintain for public use, mitigation is strongly recommended.
- Emergency repairs, replacements, or realignments of existing primary or secondary roads, power lines, utilities systems, and/or associated infrastructure may be made adjacent to existing roads, power lines, utilities systems, and/or infrastructure when repair or replacement within existing alignments is not feasible (e.g., due to new knowledge of geology, soils, or engineering standards as well as geologic events such as landslides or emergence of new thermal features).

Application Rules for Temporary Changes in Secure Habitat

Temporary reductions in secure habitat below baseline levels inside the PCA are allowed when associated with authorized Federal projects. Project activities should be concentrated in space and time to minimize disturbance. The following conditions must be met for temporary projects:

- Only one project affecting secure habitat may be active within a given bear management subunit at any one time.
- Total acreage of secure habitat affected within a given BMU does not exceed 1 percent of the acreage in the largest subunit within that BMU. The acreage of a project that counts against the 1 percent limit (i.e., the amount of secure habitat affected) is measured as the acreage within the 500-meter buffer around any temporary motorized access route or low-level helicopter flight line that intrudes into existing secure habitat.
- Use of project roads will be limited to administrative purposes associated with project activities. Project implementation shall not reduce secure habitat below baseline levels for more than 4 consecutive years. The collective set of project roads that affect secure habitat below baseline levels shall be closed to all motorized travel after 3 years. Project roads shall be decommissioned such that secure habitat is restored within 1 year after road closure.

Activities Allowed in Secure Habitat

The following activities are allowed in secure habitat inside the PCA without violating the standard:

- Activities that do not require route construction or reconstruction, re-opening of a permanently closed road, or recurring low-level helicopter flight lines.
- Helicopter use for short term (no more than 2 days in the duration of a project), or at higher elevations (> 500 m above ground level with no landing). Aircraft used in emergency firefighting are allowed.
- Non-wheeled, over-the-snow use (i.e., snow machines) is allowed unless new research identifies a threat. Conflicts associated with winter-use activities that develop either during denning or after den emergence in the spring can be addressed with local area restrictions.

- Access to power lines and/or utility corridors for occasional and necessary maintenance service and other administrative activities that do not require new route construction and is used only for administrative purposes related to power line/utility maintenance.
- Project activities (e.g., temporary road construction and maintenance, or use of recurring low-level helicopter flights) that occur during the grizzly bear denning season between December 1 and February 28.
- Construction of temporary work camps that operate outside the denning season for highway construction, fire/emergency response, or other critically needed maintenance projects are exempt from mitigation if food storage orders and best management practices are followed.

Developed Site Standard

The Developed Site Standard requires that on Federal lands inside the PCA, the number of developed sites and their capacity for overnight visitor use must be maintained at or below the 1998 levels (Appendix E), with limited exceptions per the application rules.

Developed sites refer to those sites or facilities on public land with features intended to accommodate administrative needs and public recreational use. Such sites typically are identified or advertised via visitor maps, information displays, or administrative personnel as discernable destination sites promoted by the agency. Developed sites are often associated with human activities that may disrupt grizzly bear use of habitat or have attractants that potentially lead to increased human-bear conflicts. Research has demonstrated that, while developed areas may be associated with human attractants (e.g. garbage), they also generally cause bears to avoid or spend less time in these areas. Because developed areas are not managed for grizzly bear occupation, they are considered ‘non-secure’ habitat and measurably detract from secure habitat calculations. Examples of developed sites include, but are not limited to: campgrounds, picnic areas, trailheads, boat launches, rental cabins, summer homes, lodges, service stations, restaurants, visitor centers, and administrative sites. **Administrative sites** are those sites or facilities constructed for use primarily by government employees and their cooperators/partners

(e.g., concessioners, permittees, cooperating agencies) to facilitate the administrations and management of public lands. Administrative sites are counted towards developed sites. Examples include: administrative headquarters, ranger stations, patrol cabins, park entrances, environmental education centers, employee and concessioner housing, and other facilities supporting government operations. **Dispersed sites**, in contrast to developed or administrative sites, are those not associated with a developed site, such as a front-country campground. These sites are typically characterized as having minimal to no human infrastructure and may include primitive road access. Dispersed sites are not counted toward developed sites.

In an effort to ensure accuracy in defining and tracking developed sites that comprise the 1998 baseline for public lands within the PCA, national park and forest units have mapped spatial polygons or ‘footprints’ for specific categories of developed sites, including visitor overnight lodges, developed campgrounds, administrative sites, and major developments.

Developed sites with no authorized footprints are typically isolated point-sources of human activity supporting minimal infrastructure with little to no need of enhancement. Such sites include, but are not limited to, trailheads, backcountry patrol or rental cabins, summer homes, and day-use sites including picnic areas, boat launches, fishing access, and target ranges. The rationale and methodology for footprint delineation, and tables of all sites constituting the 1998 baseline, can be found in Appendix E, tables 5 and 6.

Application Rules for Developed and Dispersed Sites

On Federal lands inside the PCA, changes to developed sites or construction of new developed sites are allowed if the following conditions are met:

- Overnight visitor use does not increase above approved levels that existed in 1998, except that a) a net increase of 10% per footprint in the capacity of visitor overnight use may occur at lodges, guest ranches, and organizational camps that operate under special-use permits on national forest lands, and in national park lodges that are below

the capacity of previously approved capacity (“pillow count”) as outlined in park Master Plans (for example, Master Plan, Yellowstone National Park/Wyoming-Montana-Idaho (National Park Service 1974); and b) an increase in the number of campsites is permitted at developed campgrounds on national forest lands. All new infrastructure must be within the authorized footprints of existing developed sites and best management practices (such as food storage requirements) must be maintained.

- Construction of new visitor day-use sites (e.g., roadside pull-offs, parking areas, restrooms/pit toilets, mass transportation shuttle stops, trailheads, and picnic areas) within primary road corridors as defined in Appendix E (figure 1) is allowed without mitigation if the following conditions are met:
 - 1. new roadside day-use facilities must be contained within 300 meters (approximately 1000 ft) on either side of an existing primary road. The concept of the 300-meter development buffer is not intended as a replacement to addressing the challenges of managing significantly increasing visitation. Rather, it will provide flexibility to accommodate considerations for visitor safety, pristine viewsheds, and other resource protection concerns when placing new day-use facilities.
 - 2. new roadside day-use facilities cannot be constructed within high quality grizzly bear habitat, including riparian areas and wetlands, whitebark pine stands, and habitat adjacent to cutthroat trout spawning streams.
 - 3. managers anticipate that such new sites will be small. They could affect up to but no more than 10% of the existing mapped primary road corridors (measured within each jurisdiction).
 - 4. public transportation sites and its associated utility infrastructure are the only new commercial facilities allowed to be constructed under this application rule.
 - 5. best management practices, including bear-resistant garbage cans, dumpsters, and recycling containers as well as human-bear conflict reduction outreach to visitors must be used both during the construction phase and during the post construction visitor use phase of these facilities.
 - 6. for monitoring purposes, new roadside day-use sites will be reported and documented in the Interagency Grizzly Bear Study Team annual reports.

- 7. the need for and efficacy of this application rule will be assessed 5 years after implementation.
- Construction of new sites that do not meet the exceptions in these application rules (i.e., are outside the polygon/footprints of existing developed areas or road corridors) will be mitigated for , within the same bear management subunit or as close as possible, by closure of another site of comparable human use to offset any increase in the number of developed sites or capacity for human use and restoring secure habitat of equivalent quality and quantity.
- New emergency administrative/maintenance infrastructure is allowed outside of prescribed footprints without mitigation if such construction is necessary to reduce resource damage or potential for human-grizzly bear conflicts or increase visitor safety. Examples of new allowed infrastructure could include replacement or new construction of critically needed water, sewage or electric utilities or the replacement of administrative or visitor infrastructure damaged by natural hazard.
- Construction of new facilities within developed sites and road corridors will be analyzed through the NEPA process to ensure that proposed projects would not have a significant impact on the environment and on grizzly bears and their habitat. Mitigation measures to prevent or to adequately compensate for the type and extent of detrimental impacts will be implemented within the affected subunit and will be in place before implementation of the project or included as an integral part of completion of the project.
- Construction and/or expansion of day-use and administrative sites is allowed within an existing footprint without mitigation. Temporary construction of work camps for highway construction, emergency response (such as fire) or other critically needed maintenance projects are exempt from human capacity mitigation if other viable alternatives are not available. Food storage orders and best management practices must be followed.
- Modifications to existing developed sites/points for which there is no mapped polygon/footprint are permitted when needed to reduce resource damage, detrimental environmental impacts, and/or the potential for grizzly bear conflicts (e.g., installing a vaulted toilet to avoid damage to water resources or installing bear-resistant storage structures to reduce conflict).

- Modifications to dispersed campsites that reduce resource damage and/or the potential for grizzly bear conflicts (e.g., installing bear-resistant storage structures and limiting parking expansion) are allowed without mitigations as long as they are not permanent or irretrievable. The need for and efficacy of this application rule will be assessed 5 years after implementation. Dispersed campsite monitoring is recommended to secure information to make this assessment.
- For activities based in statutory rights (e.g., 1872 General Mining Law, Americans with Disability Act, ANILCA, etc.), if the number of developed sites exceeds the 1998 baseline, the Forest Service will, to the fullest extent of its regulatory authority, reduce developed sites to commensurate levels and mitigate to offset any increases in human capacity, habitat loss, and increased access to surrounding habitat within the affected subunit if possible. In those rare cases where mitigation cannot be accomplished within that subunit, commensurate compensation will be accomplished in the nearest subunit and changes in the two affected subunits become permanent changes to the baseline.
- Developments on private land are not counted against this standard. However, for developed sites acquired through land exchanges or acquisitions that are desirable to maintain, mitigation is strongly encouraged but not required. The rationale behind this is to encourage acquisition and transformation of private land to public ownership since this negates the potential for future development and results in better management for grizzly bears.

Livestock Allotment Standard

The Livestock Allotment Standard requires that on Federal lands inside the PCA, there will be no increase in the number or acreage of active commercial livestock grazing allotments nor an increase in permitted sheep Animal Months (AMs) relative to that which existed in 1998 (Appendix E). Existing sheep allotments will be monitored, evaluated, and phased out as the opportunity arises with willing permittees.

Application Rules

Grazing allotments tracked for purposes of grizzly bear conservation include both vacant and active commercial livestock units for sheep, cattle, and/or horses on Federal lands inside the PCA. **Active** allotments are livestock units with active grazing permits. **Vacant** allotments are those without an active permit, but which may be restocked or grazed periodically by other permittees at the discretion of the land management agency to resolve resource issues or other concerns. Changes in livestock allotments inside the PCA that satisfy the allotment standard may occur if the following conditions are met:

- A vacant allotment may be reissued an active permit resulting in an increase in the number of permitted cattle as long as the number and net acreage of active allotments inside the PCA does not exceed the 1998 baseline. Appropriate analysis by the action agency must be conducted to evaluate impacts on grizzly bears.
- Combining or dividing existing allotments is allowed as long as the net acreage and number of active allotments inside the PCA does not exceed 1998 levels.
- Where chronic grizzly bear conflicts occur on livestock allotments inside the PCA, and an opportunity exists with a willing permittee, alternatives for resolving conflicts may include authorization of a non-use permit, moving livestock to a vacant allotment where there is less likelihood of conflict, or cattle grazing can be phased out on that allotment.