

## Chapter 3 Habitat Standards and Monitoring

### Habitat Standards ~~i~~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 Yellowstone grizzly bear population that was observed between 1983 and 2001. Habitat standards formalized in this document impose measurable sideboards on levels of human activity 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

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secure habitat is essential to the survival and reproductive success of grizzly bears, particularly adult females.

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 will be evaluated and mitigated using the criteria and standards in this Conservation Strategy in coordination with state wildlife agencies.

Omissions to the 1998 habitat measurements comprising the baseline (Appendix E) may be corrected for 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

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above levels attained from the 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 must follow the Application Rules identified below.

**Secure habitat** is defined as any contiguous area  $\geq 10$  acres in size and more than 500 m from an open or gated motorized access route (road or trail) 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. There are activities allowed in secure habitat (see below) that do not violate standards or impact the configuration of motorized access routes. Decommissioned routes that are permanently and effectively closed to the public and administrative staff do not count against this standard. Lakes larger than  $1.6 \text{ km}^2$  ( $1 \text{ mi}^2$ ) in spatial extent are excluded from secure habitat calculations.

*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

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mitigated for per application rules (this duration is based on the 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.

*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

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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 concern. 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 that does not require new route construction and is used only for administrative

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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.

### Developed Site Standard

The Developed Site Standard requires that on Federal lands inside the PCA, the number and capacity for human use of developed sites must be maintained at or below the 1998 levels (Appendix E). Projects that propose a change in the number or capacity of developed sites must follow the Application Rules specified below.

**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. 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 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, federal employee 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 no permanent agency-constructed features, have minimal to no site modifications, and may include primitive road access. Dispersed sites are not counted toward developed sites.

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**Commented [KM5]:** One option may be to break this down into major developed site and minor developed sites, or developed complexes vs. developed sites. Likely determined through an acreage criteria (e.g., a developed complex is greater than X acres). Major developed sites would be large developed complexes like Old Faithful, Mammoth, etc. Then allow some expansion or exceedence of the 1998 baseline only in major developed sites since that will have the smallest impact on bear habitat.

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Since 1998, visitor use in YNP and surrounding public lands has increased significantly, necessitating the need for additional infrastructure to responsibly accommodate the increased and likely future increases in visitor use. Development in or immediately adjacent to major developed sites such as Old Faithful, Mammoth, and Canyon Village is necessary to accommodate increased infrastructure needs. Because major developed areas do not represent suitable habitat for bears, a slight increase to the footprint or capacity of major developments may have minimal to no impact on the GYE grizzly bear population. As such, it is acceptable to consider in the future a slight increase to the footprint of major developed sites to accommodate increased infrastructure needs while minimizing impacts to higher priority habitats. Additionally, the current method for tracking and monitoring developed sites has been identified as in need of improvement. Currently, developed sites are tracked as point features with no measurable footprint. New methods for measuring and tracking developed sites that more accurately reflect their impact (i.e., areal extent and capacity of human use) will be established by the agencies during the 5-year review of the Conservation Strategy. Potential changes to the 1998 baseline that will accommodate needed additional infrastructure will be considered at this time. Any resulting modifications will minimize deviations to the 1998 developed sites baseline and be released for full public comment.

#### Application Rules

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

- Construction of new sites will be mitigated for within that subunit to offset any increase in the number of developed sites and/or capacity for human use, habitat loss, and increased access to surrounding habitats.
- Mitigation of detrimental impacts will occur within the affected subunit and adequately compensate for the type and extent of impacts. Mitigation measures will be in place before implementation of the project or included as an integral part of completion of the project.
- Consolidation and/or elimination of dispersed campsites is considered adequate mitigation for increases in human capacity at developed campgrounds if the new campsite capacity is less than or equivalent to that of the dispersed camping eliminated and if future overnight use of the dispersed site(s) is definitively curtailed.
- Conversion of uncontrolled dispersed campsites to a minor day-use site is allowed if there is a net benefit to both human and bear safety and if the dispersed site(s) can be modified in such a way that future over-night use of the site is definitively curtailed.

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**Commented [FJK7]:** NPS Comment: So if we need to build a new restaurant to keep pace with increasing visitation, is use of bear-proof dumpsters adequate mitigation for that?

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Such modification of site-use would not contribute to an increase in baseline developed sites.

- Expansion (in capacity and acreage) of existing administrative sites is exempt from mitigation if such developments are deemed necessary for enhancement of public land management and other viable alternatives are not available. Temporary construction of work camps for highway construction or other major maintenance projects are exempt from human capacity mitigation if other viable alternatives are not available. Food storage structures and management must be in place and all other factors resulting in potential detrimental impacts to grizzly bears will be mitigated as identified for other developed sites.
- Modifications to existing developed sites that reduce resource damage, detrimental environmental impacts, and/or the potential for grizzly bear conflicts are allowed (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, detrimental environmental impacts, and/or the potential for grizzly bear conflicts are allowed (e.g., installing bear-resistant storage structures and limiting parking expansion). Such modifications do not require mitigation as long as they are not permanent or irretrievable.
- Changes to existing non-administrative developed sites on public land or new sites are acceptable as long as these changes or new developments: 1) do not increase the number of overnight use sites and/or result in increased overnight human presence at existing sites; 2) are for the purpose of visitor safety, environmental protection, or enhanced visitor services such as outhouses, picnic sites, parking areas, or interpretive displays; and 3) that appropriate sanitation and human-bear conflict minimization efforts are associated with any such changes or enhancements
- For activities based in statutory rights (e.g., 1872 General Mining Law, Americans with

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*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.

- Honor existing oil and gas and other mineral leases. For proposed *Applications for Permit to Drill* (APDs) and operating plans within those leases, the Forest Service should, to the fullest extent of their regulatory authority, strive to meet the developed site standard and satisfy application rules for changes in secure habitat. New leases, APDs, and operating plans must meet the developed site standard and satisfy application rules for changes in secure habitat.
- 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.