

Executive Summary

Proposed Revisions to the Habitat Directives

in the

Conservation Strategy for the Grizzly Bear

in the Greater Yellowstone Ecosystem

Original Document Approved: March, 2007

Proposed Revisions: November, 2015

Prepared by: Dan Tyers¹ and Lisa Landenburger²

¹GYE Grizzly Bear Habitat Coordinator

²GIS Grizzly Bear Database Coordinator

U. S. Forest Service

Bozeman, MT 59715

Forward

The Conservation Strategy for the Grizzly Bear in the Greater Yellowstone Ecosystem (GYE) is the operative document for managing the Yellowstone grizzly bear population and its habitat when the population is no longer provided Federal protection as a Threatened Species under the Endangered Species Act. The Strategy is not a static document, but rather is subject to revision according to adaptive management principles. The original Conservation Strategy document was formalized in March of 2007 when the Yellowstone grizzly bear population was first delisted. Subsequent court actions placed the Yellowstone grizzly bear back under Federal protection in 2009. Presently, the U.S. Fish and Wildlife Service (USFWS) has determined that the grizzly bear population in the GYE is recovered and consequently is moving forward with a proposal to once again delist the Yellowstone grizzly bear. Concurrent with the USFWS delisting proposal, a draft version of the revised Conservation Strategy will also be released for public review. Proposed revisions to the 2007 Conservation Strategy document include some minor changes to Chapter 3 that help a) clarify habitat standards as they pertain to the 1998 baseline, b) provide clarifying language of application rules to provide better direction for implementing these habitat standards on a local project level, and c) changes in habitat monitoring protocol. Additionally, the body of text in Chapter 3 has been updated where appropriate to incorporate more recent research findings. No substantive changes in the content of habitat standards have been proposed under this revision. This document herein summarizes the content of proposed changes to habitat monitoring protocol and habitat application rules found in Chapter 3 of the revised Conservation Strategy.

Contents

Introduction	iii
Cumulative Effects Model (CEM)	1
Exceptions to 1998 Secure Habitat Baseline.....	1
Seasonal Open Motorized Access Route Density (OMARD)	2
Tracking Grazing Allotments	2
Definition of Developed Sites	2
Dispersed Campsites as Mitigation.....	3
Plans of Operation vs. Mining Claims	3
Roads acquired via Land Exchange	4
Power Lines and Utility Corridors	4
Monitoring Major Food Groups.....	4
Monitoring Hunter Numbers	5
Monitoring Private Land Development	5

Introduction

In order to formalize the revisions that are being proposed to habitat management provisions in Chapter 3 of the Conservation Strategy, a number of steps must be taken. First and foremost, the revisions must be properly vetted so that all signatories to the revised Conservation Strategy are well informed of the proposed revisions. The Conservation Strategy requires signatures from the following agency personnel:

- ✓ Three Regional Foresters of Northern, Rocky Mountain, and Intermountain Regions
- ✓ Three State Directors of Idaho, Montana, and Wyoming Wildlife agencies
- ✓ Director of National Park Service, Intermountain Region
- ✓ Regional Chief Biologist of the Central Region, USGS Biological Resources Division
- ✓ Three State Directors of Bureau of Land Management for Idaho, Montana, and Wyoming
- ✓ Two Regional Directors (Regions 1 and 6) of U.S. Fish and Wildlife Service

In order to provide the proper legal authorities for implementing the habitat directives identified in the Conservation Strategy, the revised standards and application rules pertaining to habitat management must be effectively incorporated directly into the legal plans of the 5 National Forests and 2 National Parks within the Greater Yellowstone Ecosystem via the Forest Plan Amendment and the Superintendents Compendia respectively. Mechanisms must therefore be determined and put in place to make this happen in a timely manner. Finally, by approving the Conservation Strategy and its revisions, the Forest Service regional foresters in regions 1, 2, and 4 agree to add the grizzly bear to their sensitive species lists immediately upon ESA delisting of the species. Therefore the designation of the grizzly bear as a regionally sensitive species must be formally promulgated throughout the Forest Service directives system and special orders. This document herein summarizes the primary proposed revisions to habitat management directives identified in Chapter 3 of the Conservation Strategy.

Cumulative Effects Model (CEM)

Current Status:

Currently the Cumulative Effects Model (CEM) is the required analytic tool for evaluating local project impacts on grizzly bear habitat.

Proposed Revision:

Replace the CEM with the Motorized Access Tool.

Rationale:

- ✓ The CEM relies on obsolete spatial data formats no longer supported by the software industry. Underlying source code of the model would need to be completely rewritten to accommodate current spatial (GIS) data formats. This is especially problematic due to the lack of technical documentation of the underlying CEM algorithms.
- ✓ The CEM is high maintenance and highly technical and complex making it difficult for a biologist to execute and interpret results.
- ✓ The CEM runs only inside the Grizzly Bear Recovery Zone (GBRZ).
- ✓ Numerous numerical coefficients built into the model were subjectively assigned without any ground-truthing or documentation, thus making it difficult to update as the bear population expands, or as broad landscape changes occur (i.e., fire, timber harvest).
- ✓ Spatial GIS data layers that feed into the model are woefully out-of-date and no longer reflect current ground conditions, with no mechanism for update.
- ✓ The Motorized Access Model is a user-friendly geoprocessing tool that uses current data formats to evaluate project impacts on habitat both inside and outside the GBRZ. It serves as a reliable replacement for the CEM.

Exceptions to 1998 Secure Habitat Baseline

Current Status:

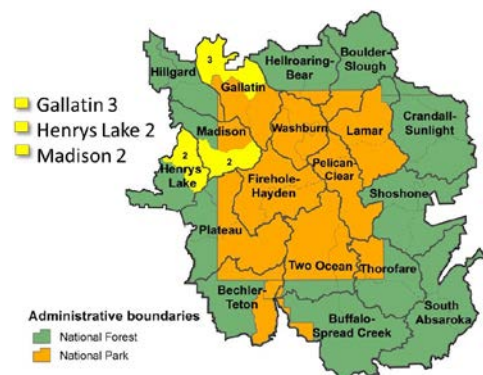
The current Strategy requires that the percentage of secure habitat in each bear management subunit be maintained at or above 1998 levels.

Proposed Revision:

For the 3 subunits identified as in need of improvement, establish new baseline at levels attained by the Gallatin National Forest 2006 Travel Plan Implementation.

Rationale:

This revision satisfies the original intent of the 2007 Conservation Strategy. Current Travel Plan levels of secure habitat for these 3 subunits mark an improvement from 1998 conditions, and will hence constitute a new baseline against which all future change will be measured.



Seasonal Open Motorized Access Route Density (OMARD)

Current Status:

Open Motorized Access Route Density (OMARD) is a measure of the density of motorized routes open to the public for 1 or more days during the grizzly bear non-denning season. Currently OMARD is monitored for two distinct non-denning seasons (*Season1* = Mar 1 – Jul 15; *Season2* = Jul 16 – Nov 30)

Proposed Revision:

Monitor OMARD singularly for the entire non-denning grizzly bear season (Mar 1 – Nov 30).

Rationale:

Timing of route closures on National Forest lands throughout the ecosystem rarely correspond exactly with grizzly bear seasons. Most roads are open for a period that overlap portions of both seasons and thereby contribute to both season 1 and season 2 OMARD. Consequently, in most subunits, there is very little, if any difference between OMARD for seasons 1 and 2. It is more practical and efficient to monitor OMARD as a single measure for the entire non-denning portion of the year.

Tracking Grazing Allotments

Current Status:

Currently the habitat standard for commercial grazing allotments requires that the total number of allotments inside the Grizzly Bear Recovery Zone (GBRZ) be maintained at or below 1998 levels.

Proposed Revision:

It is proposed that we require that the total acreage as well as the total number of allotments inside the GBRZ be maintained at or below 1998 levels.

Rationale:

Acreage is a more meaningful metric since it accounts for the actual footprint of potential disturbance on the ground due to livestock grazing. Furthermore, a single grazing allotment can be split into multiple allotments without changing the net acreage of disturbance. Likewise, two or more allotments can be merged, and yet the potential for disturbance remains the same. Merging and splitting is often conducted for mere administrative purposes and results in no measurable difference on the ground. However, a change in boundary may result in increased acreage of grazed lands, and hence this change in affected acreage should be tracked as part of the 1998 baseline for livestock allotments inside the recovery zone.

Definition of Developed Sites

Current Status:

Currently there is no clear definition for Developed Sites established in the Conservation Strategy.

Proposed Revision:

The following definition has been proposed for a developed site:

“Developed sites refer to those sites or facilities on public land with features intended to accommodate administrative and public recreational use. Such sites typically are identified or advertised via visitor maps or information displays 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 administration and management of public lands. Administrative sites are a subset of 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.”*

Rationale:

The Strategy requires that developed sites inside the GBRZ be maintained at or below 1998 levels. In order to meet this requirement it is imperative to clearly define what constitutes a developed site so that they are accurately tracked and evaluated with respect to the 1998 baseline.

Dispersed Campsites as Mitigation

Current Status:

A current application rule for implementing the Developed Sites Standard states:

*“**Consolidation and/or elimination of dispersed campsites are considered adequate mitigation for increases in human capacity at developed campgrounds if the new site capacity is equivalent to the dispersed camping eliminated.”***

Proposed Revision:

Add the following language to the above application rule:

“... and if future overnight use of the dispersed site(s) is definitively curtailed.”

Rationale:

This additional clause is to emphasize that a reasonable effort must be made to monitor and ensure that overnight use is completely and effectively eliminated at the dispersed sites that have been closed for mitigation purposes.

Plans of Operation vs. Mining Claims

Current Status:

A current application rule for implementing the Developed Sites Standard states:

*“**Activities based in statutory rights, such as oil and gas leases and mining claims under the 1872 General Mining Law are also tracked . . .**”*

Proposed Revision:

Revise the language to the above application rule as follows:

*“**Activities base in statutory rights, such as oil and gas leases and mining Plans of Operation under the 1872 General Mining Law are also tracked . . .**”*

Rationale:

This revision is proposed as a correction to an obvious error in the current language of the Conservation strategy. Under the 1998 baseline for Developed Sites, mining *Plans of Operation* as opposed to mining *claims* are tracked and counted toward the number of developed sites. A single Plan of Operation can encompass hundreds of individual mining claims, most of which are never acted upon.

Roads acquired via Land Exchange

Current Status:

Roads acquired via Land Exchange are not currently addressed in the application rules for implementing the Secure Habitat Standard.

Proposed Revision:

Add the following application rule:

“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 acquisitions that are desirable to maintain for public use, mitigation is strongly encouraged”.

Rationale:

Land exchanges on National Forest lands inside the GBRZ can result in the acquisition of motorized routes that potentially diminish secure habitat below the baseline threshold. The above application rule was added to address these unique situations. The requirement to mitigate for acquired roads is deliberately avoided in this added language, but instead is strongly encouraged. The rationale being that an agency should not be discouraged from acquiring new land that will be better managed under public ownership with restrictions on future increases in motorized access and development.

Power Lines and Utility Corridors

Current Status:

Power Lines and Utility Corridors are not currently addressed in the application rules for implementing the Secure Habitat Standard.

Proposed Revision:

Add the following application rule:

“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 purposes related to power line/utility maintenance is allowed in secure habitat.”

Rationale:

The above application rule was added to address the issue of administrative routes that exist for the exclusive purpose of power line and/or utility maintenance purposes. These routes are closed to the public, and it is assumed that occasional maintenance procedures conducted by administrative personnel does not pose a measurable risk of grizzly bear displacement or mortality.

Monitoring Major Food Groups

Current Status:

The current Strategy requires that 4 ‘Major’ food groups for the grizzly bear be monitored annually. These food groups include 1) army cutworm moths, 2) cutthroat trout, 3) winter-killed ungulate, and 4) whitebark pine seeds.

Proposed Revision:

The following modifications to the current language are proposed:

1. Change the defining word for these food groups from ‘Major’ to ‘High-Caloric’.
2. Change the requirement for annual monitoring to “will be monitored and reported annually as long as budgetary constraints allow”.

Rationale:

1. It is thought that the word ‘**Major**’ misleads the public into thinking these are the only food sources important to grizzly bears and consequently perpetuates the false perception that a decline in any one of these food sources poses a serious threat to the long-term survival of the Yellowstone grizzly bear. Recent food synthesis research by the Interagency Grizzly Bear Study Team confirms that grizzly bears are opportunistic omnivores who have evolved highly versatile foraging strategies allowing them to shift diets among numerous food sources, depending on what is available spatially and temporally. It is proposed to modify the current language to a more measured and accurate phrase ‘**High-Caloric**’.
2. Because budget allocations may not always be available for annual monitoring, the proposed revision is to avoid a requirement that cannot always be met. Instead, it is explicitly stated that these food groups will continue to be monitored and reported annually “**as long as budgetary constraints allow**”.

Monitoring Hunter Numbers***Current Status:***

The current Strategy requires that the number of hunters recreating in the GBRZ be monitored annually.

Proposed Revision:

Change the emphasis from **number of hunters** to the **number of hunting-related conflicts and mortalities**.

Rationale:

Measuring the number of hunting related conflicts & mortalities (opposed to the number of hunters) provide a more meaningful metric for assessing impacts on grizzly bears. Hunting related conflicts and mortalities have been and will continue to be closely monitored and reported by IGBST on an annual basis. Annual hunter numbers are tracked and can be obtained through the State wildlife agencies.

Monitoring Private Land Development***Current Status:***

The current Strategy contains some vague language regarding monitoring of human development on private land throughout the ecosystem. Specifically it states the following:

1. A need exists to develop a protocol to categorize private lands and report changes so that grizzly bear/human conflicts can be minimized on private lands.
2. The objective is to direct management efforts, conservation actions by private organizations, and outreach efforts to the public in areas where private lands are being developed.
3. The protocol should provide a qualitative and quantitative system for classifying the potential of private land parcels as productive and secure grizzly bear habitat.

Proposed Revision:

Delete this brief section in the Conservation Strategy.

Rationale:

The task of categorizing private lands is vague and presents monitoring challenges that are not feasible and could potentially exceed the authority of state or federal governments. Alternatives exist to collaborate with and help direct NGO efforts for habitat conservation on private lands.