Grizzly Bear & Over Snow Vehicle Use Summary

General Overview of Over Snow Vehicle Use Impacts to Grizzly Bear

The following excerpt is from the Biological Opinion on the Revised Forest Plan for the Idaho Panhandle National Forests (USFWS 2013):

"Effects on Denning Habitat. The potential for disturbance to denning grizzly bears on the IPNF does exist but is probably low due to the low probability of a direct encounter of a snowmobile to a den and even in that unlikely case, the excellent insulative properties of snow to mitigate noise. Typical high-use snowmobile areas and potential den sites have a limited likelihood of overlap. This is because grizzly bears generally den in either timbered habitat or very steep slopes, including the slopes of open basins (USFWS 2010, p. 26). Most of the heavy snowmobile use occurs on trails, roads, or open basins, and meadows – although some snowmobile riders use steep open basins for "high marking", in which case there is potential for direct overlap between denning habitat and steep open slopes favored for "high marking" by snowmobiles (ibid). However, most denning habitat - except for "high-marking" areas - is less favorable for snowmobile use and as such there is a reduced chance of adverse overlap between grizzly bear den sites and snowmobile traffic (ibid).

Therefore, there is a low likelihood that some grizzly bears in the CYE (Cabinet-Yaak Ecosystem) and SE (Selkirk Ecosystem) may be affected during the denning season, but the Service believes that the magnitude of impacts during this time in both the recovery zone and BORZ would be insignificant and unlikely to adversely affect grizzly bears.

Effects on Emerging Females with Cubs of the Year. Disturbance from snowmobiles may adversely affect grizzly bears shortly before or after den emergence of a female with cubs. Females and their cubs remain in the den site area for several weeks after emergence from dens (Mace and Waller 1997, p. 37). Females with cubs have high energetic needs, and cubs have limited mobility for several weeks after leaving the den. Disturbance levels that cause a female to prematurely leave the den in spring or move from the den area could impair the fitness of the female and safety of the cubs. If cubs attempt to follow their mother, they will likely experience decreased fitness and the family group may be pushed to less suitable habitat. To date, litter abandonment by grizzlies due to snowmobiling activity has not been documented in the lower 48 States (Hegg 2010, p. 26-27; C. Servheen 2010 pers. comm. as cited In USFWS 2011b) nor has other measurable or detectible adverse effects on grizzly bears from snowmobile use been substantiated (Mace and Waller 1997, p. 41; USFS 2006, pp.3-263 3-373). Based on a sample size of 10 bears, radio-collared female bears with cubs in the CYE emerged between the third week of April and third week of May (W. Kasworm 02/21/2013 pers. comm.). In the SE, den emergence dates have not been identified (W. Wakkinen 07/01/2013 pers. comm.), but are likely similar to those in the CYE given the similarity in weather patterns between the two recovery zones (Wakkinen and Kaworm 2004, p. 61). The active bear year in the SE is described as beginning on April 1."

Relevant Forest Wide Goals

- GOAL-WL-01. The IPNF manages wildlife habitat through a variety of methods (e.g., vegetation alteration, prescribed burning, invasive species treatments, etc.) to promote the diversity of

species and communities and to contribute toward the recovery of threatened and endangered terrestrial wildlife species.

Relevant Forest Wide Desired Conditions

- FW-DC-WL-01. Nests and den sites and other birthing and rearing areas for terrestrial threatened, endangered, proposed, or sensitive species are relatively free of human disturbance during the period they are active at these sites. Individual animals that establish nests and den sites near areas of pre-existing human use are assumed to be accepting of that existing level of human use at the time the animals establish occupancy.
- FW-DC-WL-02. A forestwide system of large remote areas is available to accommodate species requiring large home ranges and low disturbances, such as some wide-ranging carnivores (e.g., grizzly bear).
- FW-DC-WL-03. Recovery of the terrestrial threatened and endangered species is the long-term desired condition. Foraging, denning, rearing, and security habitat is available for occupation. Populations trend toward recovery through cooperation and coordination with USFWS, state agencies, other federal agencies, tribes, and interested groups.
- FW-DC-WL-04. All grizzly BMUs have low levels of disturbance to facilitate denning activities, spring use, limit displacement, and reduce human/bear conflicts and potential bear mortality. Spring, summer, and fall forage is available for the grizzly bear.
- FW-DC-WL-05. Recovery of the grizzly bear is promoted by motorized access management within the IPNF portion of the Cabinet-Yaak and Selkirk recovery zones.

Relevant Forest Wide Standards

- FW-STD-WL-04. No grooming of snowmobile routes in grizzly bear core habitat after April 1 of each year.

Relevant Forest Wide Guidelines

- FW-GDL-WL-01. Grizzly Bear. Management activities should avoid or minimize disturbance in areas of predicted denning habitat during spring emergence (April 1 through May 1).

Relevant Lower Kootenai Geographic Area Desired Conditions

- GA-DC-WL-LK-03. Low levels of human disturbance allows for denning activities of wide-ranging carnivores that are sensitive to human disturbance (e.g., grizzly bear) in the upper elevations of Northwest Peaks and the Selkirk Mountains. Areas in the Selkirk Mountain range with low levels of disturbance are used by mountain goat and woodland caribou during the winter.

Relevant Pend Oreille Geographic Area Desired Conditions

- GA-DC-WL-PO-02. Low levels of human disturbance allows for denning activities of wide-ranging carnivores that are sensitive to human disturbance (e.g., grizzly bear)in the Scotchman Peaks and Selkirk Mountain ranges. Undisturbed conditions are retained for mountain goat winter use on NFS lands on the east face of Lake Pend Oreille and in the Scotchman Peaks areas.

Relevant Priest Geographic Area Desired Conditions

- GA-DC-WL-PR-02. Low levels of human disturbance allows for denning activities of wide-ranging carnivores that are sensitive to human disturbance (e.g., grizzly bear). Areas with low levels of disturbance are available for use by woodland caribou throughout the year.

Available GIS DATA

Grizzly Bear Management Units (BMU) - This coverage includes the BMU polygons for the Cabinet-Yaak Ecosystem, the portion of the Northern Continental Divide Ecosystem BMU that resides on the Kootenai NF, and the Selkirks Ecosystem**.** On the IPNF there are two recovery zones: The Cabinet Yaak and the Selkirk Recovery Zones.

Grizzly Bear Predicted Denning Habitat - Grizzly bear denning habitat was modeled separately for the two ecosystems using local research data.

Grizzly Bear Core Habitat - An area of secure habitat within a BMU that contains no motorized travel routes or high use non-motorized trails during the non-denning season.

Additional Relevant Information

Bear Year -The active bear year is from April 1 to November 15 in the Selkirk Recovery Zone and April 1 to November 30 in the Cabinet-Yaak Recovery Zone. Spring is from April 1 to June 15.

Grizzly Bear Core Habitat - An area of secure habitat within a BMU that contains no motorized travel routes or high use non-motorized trails during the non-denning season and is more than 0.31 miles (500 meters) from a drivable road. Core areas do not include any gated roads but may contain roads that are impassible due to vegetation or constructed barriers. Core areas strive to contain the full range of seasonal habitats that are available in the BMU.