

By the Board, Chairman Morgan, Vice Chairman Clyburn, and Commissioner Burkes.

Vernon A. Williams,

Secretary.

[FR Doc. 99-12334 Filed 5-14-99; 8:45 am]

BILLING CODE 4915-00-P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants: 12-month Finding on Petitions To Change the Status of Grizzly Bear Populations in the Selkirk Area in Idaho and Washington and the Cabinet-Yaak Area of Montana and Idaho From Threatened to Endangered

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of 12-month petition finding.

SUMMARY: We find that reclassification of grizzly bears (*Ursus arctos horribilis*) in the combined Cabinet-Yaak/Selkirk recovery zones of Idaho, Montana, and Washington from threatened to endangered status is warranted but precluded by work on other higher priority species.

DATES: The finding announced in this document was approved on April 20, 1999.

ADDRESSES: You may send questions or comments concerning this finding to U.S. Fish and Wildlife Service, Grizzly Bear Recovery Coordinator, University Hall 309, University of Montana, Missoula, Montana 59812. You may inspect the petition, finding, and supporting data by appointment during normal business hours at the above office.

FOR FURTHER INFORMATION CONTACT: Dr. Christopher Servheen, Grizzly Bear Recovery Coordinator (see **ADDRESSES** section) at telephone (406) 243-4903.

SUPPLEMENTARY INFORMATION:

Background

Section 4(b)(3)(B) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act), requires that for any petition to revise the Lists of Endangered and Threatened Wildlife and Plants that contains substantial scientific and commercial information, we make a finding within 12 months of the receipt of the petition on whether the petitioned action is—(a) not warranted, (b) warranted, or (c) warranted but precluded from immediate proposal by other pending

proposals of higher priority. When a petition to list a species is found to be warranted but precluded, the species is designated a candidate species. A candidate species is a taxon for which we have on file sufficient information to support issuance of a proposed listing rule. Section 4(b)(3)(C) requires that a petition for which we find the requested action to be warranted but precluded be treated as though it has been resubmitted on the date of such finding; a subsequent finding is to be made on such a petition within 12 months of the initial or previous finding. Notices of such 12-month findings are to be published promptly in the **Federal Register**. The finding reported here is a finding on a petitioned action for which we have made previous 12-month findings.

On February 4, 1991, the Fund for Animals, Inc., petitioned us to reclassify the grizzly bear from threatened to endangered in the Selkirk ecosystem of Idaho and Washington; the Cabinet-Yaak ecosystem of Montana and Idaho; the Yellowstone ecosystem of Montana, Wyoming, and Idaho; and the Northern Continental Divide ecosystem of Montana. We received a second petition dated January 16, 1991, from Mr. D.C. Carlton on January 28, 1991, that requested us to reclassify the grizzly bear from threatened to endangered in the Selkirk ecosystem of Idaho and Washington; the Cabinet-Yaak ecosystem of Montana and Idaho; and the North Cascades ecosystem of Washington. We issued a finding of not warranted for reclassification in the Yellowstone and Northern Continental Divide ecosystems on April 20, 1992 (57 FR 14372-14374). We made a positive 90-day finding for the Selkirk and Cabinet-Yaak ecosystems and initiated a status review in the same notice. We issued a 12-month finding of warranted but precluded for the Cabinet-Yaak ecosystem on February 12, 1993 (58 FR 8250), and again on June 4, 1998 (63 FR 30453). We issued a not warranted finding for the Selkirk ecosystem on February 12, 1993 (58 FR 8250). A lawsuit was subsequently filed challenging our not warranted finding for the Selkirk ecosystem. In 1995, the court remanded the case so that we could provide additional information and analysis regarding the finding (*Carlton v. Babbitt*, 900 F. Supp. 526, 531-34, 537-38 (District Court of Washington, DC 1995)).

The court found that we had adequately addressed issues relating to any "present or threatened destruction, modification, or curtailment of habitat or range." However, additional information was requested on

overutilization, particularly trends of human-caused mortality. The court requested more information on the relationship between regulatory mechanisms and human-caused mortality, and additional analysis of survivorship and reproductive rates. The court also expressed concerns about the discussion of population connectivity between bears in Canada and the United States. We responded to the court with Supplementary Information for the Court regarding the Not Warranted Petition Finding for the Selkirk Grizzly Bear Population (March 15, 1996).

On October 28, 1998, the court remanded the matter back to us because we had not established that the Selkirk population could sustain the current rate of human-caused mortality, that present regulatory mechanisms were adequate, that the Selkirk population was not endangered simply by virtue of size, and that Canadian habitat would continue to be available to the Selkirk population. On January 21, 1999, we requested additional time to respond to the remand in order to evaluate the Selkirk population in light of our recent policy defining distinct population segments.

We have reviewed our previous findings on the Selkirk population in light of the court's ruling. Based on this reevaluation of the Selkirk population's status, and consideration of our policy on distinct vertebrate population segments, which was adopted after the 1993 petition findings, we believe that it may be appropriate to pursue a change in the listing of the grizzly bear which would recognize the Selkirk recovery zone and the Cabinet-Yaak recovery zone as one distinct population segment. In this finding, we will review the information that has led us to consider such a change because much of this information has direct relevance to the court's concerns about issues not adequately addressed in our previous finding on the Selkirk population. We will consider formally recognizing a distinct population segment that would encompass both the Selkirk and Cabinet-Yaak recovery zones in the near future.

Distinct Population Segments

In conjunction with the National Marine Fisheries Service, we adopted a new policy regarding Recognition of Distinct Vertebrate Population Segments under the Endangered Species Act on February 7, 1996 (61 FR 4722-4725). This policy clarifies interpretation of the phrase "distinct population segment of any species of vertebrate fish or wildlife" for the purposes of listing,

delisting, and reclassifying species under the Endangered Species Act. This policy has not previously been applied to the Selkirk or Cabinet-Yaak grizzly bear populations.

This policy directs that three elements are to be considered in a decision regarding status of a possible distinct population segment as endangered or threatened. These include:

1. The discreteness of the population segment in relation to the remainder of the species to which it belongs;
2. The significance of the population segment to the species to which it belongs; and
3. The population segment's conservation status in relation to the Endangered Species Act's standards for listing.

Discreteness of the Selkirk and Cabinet-Yaak Grizzly Bear Populations

A population may be considered discrete if it satisfies either of the following conditions:

1. It is markedly separated from other populations of the same taxon as a consequence of physical, physiological, ecological, or behavioral factors. Quantitative measures of genetic or morphological discontinuity may provide evidence of this separation.
2. It is delimited by international governmental boundaries within which differences in control of exploitation, management of habitat, conservation status, or regulatory mechanisms exist that are significant in light of section 4(a)(1)(D) of the Endangered Species Act.

Forty-four grizzly bears were captured and collared from 1983 to 1998 in both the Canadian and United States portions of the Selkirk recovery zone (Wakkinen and Johnson 1997, Wakkinen, pers. comm. 1998). Eighteen of those 44 bears (41 percent) had portions of their home ranges in both the United States and Canada. Four marked bears (9 percent) have made significant moves outside the recovery zone. Two of these bears moved west of the recovery zone. One was an adult male (tag 1049) that denned west of the Salmo River in British Columbia during 1989. In 1995 a subadult male (tag 1023) moved west of the Pend Oreille River in Washington. Three of these bears have moved east of the recovery zone into the Canadian Purcell Mountains just north of the Cabinet-Yaak recovery zone. In 1994 an adult male (tag 13) was captured at a livestock depredation site in the Canadian portion of the Selkirk recovery zone and relocated about 32 kilometers (20 miles) north within the recovery zone. Later in 1994 the same bear was killed east of Kootenay Lake in the

Purcell Mountains. In 1996 a subadult male (tag 1022) that was originally captured in the United States portion of the recovery zone was killed east of Kootenay Lake in the Purcell Mountains. In 1998 another subadult male (tag 1023) that was captured in the United States portion of the Selkirk recovery zone was killed on the east side of the Purcell Mountains. This was the same animal that moved west of the recovery zone in 1995. All of these animals were identified by ear tags remaining from original captures inside the recovery zone.

Ten of 20 bears (50 percent) captured south of the international boundary in the Yaak study area of northwest Montana and northern Idaho were monitored crossing into Canada between 1987 and 1998 (Kasworm and Servheen 1995, Kasworm, pers. comm.). No bears were captured during limited trapping efforts in British Columbia. Four of these animals were adult males that spent portions of the spring breeding season in Canada during various years between 1987 and 1998. One of these males, captured in the United States, was observed courting an adult female whose home range occurs largely in Canada. Another adult female whose home range occurs largely in the United States was observed in association with two different adult males in Canada and subsequently produced a litter of cubs. Furthermore, two adult males (tag 134 and 128) originally captured in the United States were monitored up to 32 kilometers (20 miles) north of the border and north of the Moyie River in the Purcell Mountains during breeding season of 1987 and 1992 (10 percent of all captured bears).

Monitoring of grizzly bears in the Selkirk and Cabinet-Yaak recovery zones has shown movement and mingling of approximately 7–10 percent of marked animals from each recovery zone in the Purcell Mountains of southern British Columbia east of Kootenay Lake and northwest of the Moyie River. This area is about 32–80 kilometers (20–50 miles) north of the juncture of the State boundaries of Idaho and Montana and the international border with Canada. Movements were documented on repeated occasions even with small sample sizes. These percentages of marked animals must be viewed as minimum numbers. Knowledge of these movements was obtained because the eartags were recovered at the time of death. Other bears originally tagged in the Selkirk or Yaak study areas may be present in the southern Purcell Mountains, but have not been detected.

They must be captured or killed and reported to determine presence of ear tags. Research and associated marking of animals has occurred within the recovery zones and therefore can document movements out of the recovery zones. Documenting movements from the Purcell Mountains into either recovery zone could only be accomplished by marking animals in the former area. However, the fact that movements have been observed out of recovery zones, where bear population densities are likely lower, suggests that movements into the recovery zones are likely. These monitoring results and observations support population connectivity among the Selkirk and Cabinet-Yaak recovery zones and Canadian populations north and west of the Moyie River and east of Kootenay Lake. Habitat in the Purcell Mountains is continuous north from the international boundary for at least 240 kilometers (150 miles) before reaching the Trans-Canada Highway near Revelstoke, British Columbia. The Purcell Mountains are bounded on the west by Kootenay Lake and the community of Nelson and to the east by the Kootenay and Columbia River valleys with the communities of Cranbrook and Kimberly. The west side also is bounded by Highways 95 and 93 and associated developments from the international boundary 240 kilometers (150 miles) north to the junction with Trans-Canada Highway 1 near Golden, British Columbia. Population estimates for this area range from 446–577, depending upon the amount of area included northwest of Kootenay Lake (Simpson *et al.* 1995).

Another potential area of linkage of these two recovery zones exists between the southeastern edge of the Selkirk recovery zone and the western edge of the Cabinet-Yaak recovery zone. Less than 16 airline kilometers (10 airline miles) separate the recovery zones in an area 24 kilometers (15 miles) south of Bonners Ferry, Idaho. This area was identified in the grizzly bear recovery plan as a potential linkage zone and will be evaluated as part of recovery plan linkage zone analysis which is scheduled for completion in late 1999. The area has a mixed ownership consisting of Federal, State, corporate, and other private entities, and includes Highway 95. No grizzly bears have yet been detected crossing this area between recovery zones, but given the low density of grizzly bears in the area, and no radio collared bears in the immediate vicinity, detection is not likely.

Potential connections to other grizzly bear recovery zones from the combined Selkirk/Cabinet-Yaak recovery zones

could include the Northern Continental Divide, North Cascades, Yellowstone, and Bitterroot recovery zones. Since 1975, more than 500 grizzly bears have been radio-collared for monitoring in all ecosystems except the Bitterroot and the North Cascades. Not a single bear has been monitored moving between any of these recovery zones (Servheen 1998). The most likely connection from the combined Selkirk/Cabinet-Yaak area to other recovery zones would be with the Northern Continental Divide because it is the nearest neighbor. Numerous bears have been captured and marked through research efforts in the Northern Continental Divide recovery zone within the United States and directly north in British Columbia. Most notably these efforts have occurred in the North Fork of the Flathead River in the United States and British Columbia, the East Slopes Grizzly Bear study centered around Banff and Jasper National Parks, and the West Slopes study centered around Golden, British Columbia. None of these efforts have documented bears crossing from their study areas into the Purcell Mountains south of Golden, British Columbia, which is about 240 kilometers (150 miles) north of the international boundary (McLellan 1999, Gibeau 1999). Several instances of bears crossing Highway 1 within Canada's Glacier National Park have been documented, but this activity also is about 282 kilometers (175 miles) north of the international boundary in the Purcell Mountain range. These data suggest that Northern Continental Divide grizzly bear populations are likely distinct from the Purcell Mountains for at least 240 kilometers (150 miles) into British Columbia.

A recent assessment of grizzly bear populations in the British Columbia region of the North Cascades indicates that the population is relatively isolated from other populations in British Columbia (Gyug 1998). There were no known populations of grizzly bears immediately to the east and only occasional sightings west and north. The North Cascades appear to be at least 80 kilometers (50 miles) from any relatively continuous grizzly bear population.

The information presented above indicates that movement occurs and a genetic link possibly exists among grizzly bear populations in the Selkirk and Cabinet-Yaak recovery zones. This connection appears to occur within British Columbia and within 32 kilometers (20 miles) of the international boundary. Separately the Selkirk and Cabinet-Yaak grizzly bear recovery zones do not appear to satisfy the first distinct population segment

condition for discreteness because they are not markedly separated as evidenced by bear movements. However, the Selkirk and Cabinet-Yaak recovery zones do appear to be markedly separated from Northern Continental Divide, North Cascades, Yellowstone, and Bitterroot recovery zones. Because of the presence of the international boundary, it may be more appropriate in this situation to base discreteness on the second discreteness condition. Reasons are detailed in the analysis of the five listing factors. We find that the Selkirk and Cabinet-Yaak recovery zones are not discrete from one another, but are discrete from the Northern Continental Divide, North Cascades, Yellowstone, and Bitterroot recovery zones.

Significance of the Selkirk and Cabinet-Yaak Grizzly Bear Populations

If a population segment is considered discrete under one or more of the above conditions, its biological and ecological significance will be considered in light of congressional guidance (see Senate Report 151, 96th Congress, 1st Session) that the authority to list distinct population segments be used "sparingly" while encouraging the conservation of genetic diversity. In carrying out this examination, we will consider available scientific evidence of the discrete population segment's importance to the taxon to which it belongs. This consideration may include, but is not limited to the following:

1. Persistence of the discrete population segment in an ecological setting unusual or unique for the taxon,
2. Evidence that loss of the discrete population segment would result in a significant gap in the range of a taxon,
3. Evidence that the discrete population segment represents the only surviving natural occurrence of a taxon that may be more abundant elsewhere as an introduced population outside its historic range, or
4. Evidence that the discrete population segment differs markedly from other populations of this species in its genetic characteristics.

Both the Selkirk and Cabinet-Yaak recovery zones could be considered a unique ecological setting, because they contain low elevation inland habitat for grizzly bears. Along the Yaak River and on the east side of the Selkirk Mountains significant portions of the recovery zone occur in areas between 610 meters (2,000 feet) and 1,220 meters (4,000 feet) in elevation. In both the Yellowstone and Northern Continental Divide recovery zones most habitat is well above 1,220 meters (4,000 feet) in elevation. These low elevations and the Pacific maritime climate of the Cabinet-

Yaak and Selkirks produce a wet, dense forest dominated largely by cedar and hemlock. These habitat types are either limited or lacking in the Yellowstone and Northern Continental Divide recovery areas and represent an unusual ecological setting for inland grizzly bear populations.

A combined Selkirk/Cabinet-Yaak recovery zone would encompass at least 9,320 square-kilometers (3,600 square-miles) of the 98,420 square-kilometers (38,000 square-miles) of grizzly bear habitat in the United States. This is about 9.5 percent of currently designated habitat, but likely represents a much larger fraction when compared to currently occupied habitat. The North Cascades and Bitterroot recovery zones encompass at least 38,590 square-kilometers (14,900 square-miles), but there appear to be no bears remaining in the Bitterroot and less than 20 animals are believed to exist in the North Cascades. Only the Yellowstone and Northern Continental Divide recovery zones hold populations in excess of 100 animals. In this regard, the combined Selkirk/Cabinet-Yaak becomes one of only three recovery areas that hold a significant populations of bears. Loss of this population would create a significant gap in the range of a species that already exists as only 2 percent of its former numbers and on only 2 percent of its original range in the 48 conterminous States. Based on these factors, we find that these combined recovery zones are significant. Therefore, for the remainder of this notice we will address the combined Selkirk/Cabinet-Yaak recovery zone.

Status of the Selkirk/Cabinet-Yaak Grizzly Bear Recovery Zones

Section 4 of the Endangered Species Act and regulations (50 CFR part 424) promulgated to implement the listing provisions of the Endangered Species Act set forth the procedures for adding species to the Federal lists. A species may be determined to be endangered or threatened due to one or more of the five factors described in section 4(a)(1). These factors and their application to the Selkirk and Cabinet-Yaak populations of grizzly bears are as follows:

A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

The 1975 listing of the grizzly bear identified a substantial decrease in the range of the species in the conterminous 48 States and stated that timbering and other practices have resulted in an increase in access road and trail construction into formerly inaccessible

areas. Increased access has made bears susceptible to legal hunters, illegal poachers, human-bear conflicts, and livestock-bear conflicts. Since 1975, habitat protection measures have focused on providing secure habitat for bears that lessens opportunity for human-caused mortality.

The United States portion of the Selkirk recovery zone is approximately 80 percent Federal, 15 percent State, and 5 percent private lands. The Cabinet-Yaak recovery zone is approximately 90 percent Federal, 5 percent State, and 5 percent private lands. The Kootenai, Idaho Panhandle, Colville, and Lolo National Forests administer Federal lands within one or both of these recovery zones. However, the Kootenai and Idaho Panhandle National Forests alone administer over 85 percent of these Federal lands. In 1992, 420 square-kilometers (162 square-miles) of habitat was added to the Selkirk recovery zone in the United States. The area was added because of frequent use by radio-collared bears during spring (Wakkinen and Zager 1992). Most of that land is under jurisdiction of the U.S. Forest Service with some State of Idaho land and some private land. In 1997, the Kootenai National Forest completed a land exchange in which 8,670 hectares (21,422 acres) of land owned by Plum Creek Timber Company were placed in public ownership. Almost all of this land was within the Cabinet-Yaak grizzly bear recovery zone. In the British Columbia portion of the Selkirk recovery zone, about 65 percent is crown land (public) and 35 percent is private. The portion of British Columbia directly north of the Cabinet-Yaak is largely crown land with the exception of the Moyie and Kootenay River valleys.

Two large silver and copper mines have been proposed within the Cabinet Mountains. In 1993 the Kootenai National Forest issued an approval to Noranda Minerals Corporation for the Montanore project, but there has been no construction at the site. This mine is projected to operate for 16 years and to extract 18,000 metric tons (20,000 short tons) of ore per day. Asarco's Rock Creek Mine proposal is currently being analyzed with a decision expected in 1999. If approved it would operate for about 30 years, extracting 9,000 metric tons (10,000 short tons) of ore per day. These mine sites are about 10 kilometers (6 miles) apart with one on each side of the Cabinet Mountains Wilderness (Kootenai National Forest 1998).

Access management in the form of restrictions on motorized vehicle use of some roads originated in the late 1970s on the National Forests within the

Selkirk and Cabinet-Yaak recovery zones. Most road restrictions have been accomplished with gates or permanent barriers. Gates have been used in cases where restrictions are seasonal to protect specific habitat at critical times of the year or in areas that are scheduled for additional timber management. Recently land managers have begun obliterating some roads and returning the land to its natural contour (Idaho Panhandle National Forest 1998, Kootenai National Forest 1998).

Three ranger districts on the Idaho Panhandle National Forest administer portions of the Selkirk and Cabinet-Yaak recovery zones. Thirty-eight percent of the 4627 kilometers (2,876 miles) of system roads on these districts have some form of restricted access (Idaho Panhandle National Forest 1998). The Kootenai National Forest has 57 percent of its 12,000 kilometers (7,460 miles) of roads under some form of restricted access (Kootenai National Forest 1998). Most of these restrictions occur in grizzly bear habitat. Access management has been monitored through Forest Plan criteria that measure Habitat Effectiveness. These criteria are applied on subunits of the recovery zone known as Bear Management Units (BMUs) which were expected to be about 260 square-kilometers (100 square-miles) and contain all seasonal ranges necessary for an adult female grizzly bear. A criterion defined in the Kootenai Forest Plan is that 70 percent or greater of the BMU will be effective habitat. The criterion defined in the Idaho Panhandle Forest Plan is that 181 square-kilometers (70 square-miles) or greater of the BMU will be effective habitat. Effective habitat is defined as area outside the zone of influence (0.25 mile) of activities on open roads, active timber sales, or active mining operations. In 1990, 9 of 21 BMUs in the Cabinet-Yaak were below standard and 2 of 7 BMUs were below standard in the Selkirk recovery zone. In 1997, 7 of 21 BMUs in the Cabinet-Yaak was below standard and 1 of 8 BMUs was below standard in the Selkirk recovery zone (Kootenai National Forest 1998, Idaho Panhandle National Forest 1998). Cabinet-Yaak BMUs not meeting the criterion varied from 57-68 percent effective habitat. The BMU not meeting the standard in the Selkirks was at 179 square-kilometers (69 square-miles).

Access management also has been addressed by an interagency task force that produced recommendations to standardize definitions and methods (Interagency Grizzly Bear Committee 1994). This report identified three parameters that are recommended as part of access management. These

parameters are total motorized route density, open motorized route density, and core area. Total motorized route density includes open and restricted roads and motorized trails. Open motorized route density includes roads and trails open to public motorized use. Both parameters are displayed as a percentage of the analysis area in a defined density category (e.g., 20 percent greater than 3.2 kilometers per square kilometer (2.0 miles per square mile)). Core area is the percentage of the analysis area that contains no motorized travel routes or any restricted roads upon which administrative use may occur. Core areas may contain roads that are impassible due to permanent barriers or vegetation. The report recommended that for each recovery zone specific criteria be developed for route densities and core areas based on female grizzly bears monitored in the recovery zone, other research results, and social or other management considerations.

The interagency group of managers for the Selkirk and Cabinet-Yaak recovery zones are adopting new interim access rules during 1999 (Interagency Grizzly Bear Committee 1998). The interim period will extend for 3 years. Existing Forest Plan standards will remain in place during the interim period, but additional goals will be developed taking into account monitoring results from collared bears (Wakkinen and Kasworm 1997). Additional goals relating to cores were adopted for a subset of BMUs determined by a priority ranking based on sightings of grizzly bears, sightings of female bears with young, and grizzly bear mortality. Priority 1 BMUs would have a goal of 55 percent core area during the interim period. In place of specific goals for open and total motorized route densities in priority 1 BMUs, the committee of managers adopted a policy of no net increase in either of these parameters for the interim period. The policy for BMUs not designated priority 1 includes no net decrease in cores and no net increase in open and total motorized route densities. Seventeen of 32 BMUs were designated priority 1 and will be subject to the new goals. The committee of managers requested additional analysis during the interim period. The report analyzing results from collared bears was not able to integrate habitat quality with road effects because habitat data was not yet available (Wakkinen and Kasworm 1997). Habitat quality data will be developed and integrated into additional analysis of roads on grizzly bears during the interim period.

Forestry, mining, recreation, and road building also affect grizzly bear habitat

in British Columbia. In 1995 the British Columbia provincial government developed a grizzly bear conservation strategy (British Columbia Ministry of Environment, Lands, and Parks 1995). The strategy's mandate is to ensure the continued existence of grizzly bears and their habitats for future generations. The strategy has four goals:

1. To maintain in perpetuity the heterozygosity and abundance of grizzly bears and the ecosystems.
2. To improve the management of grizzly bears and their interactions with humans.
3. To increase public knowledge of grizzly bears and their management.
4. To increase international cooperation in management and research of grizzly bears.

A major goal of the British Columbia Grizzly Bear Conservation Strategy is to ensure effective, enhanced protection and management of habitat through land use planning processes, new protected areas, and the Forest Practices Code. Many of these processes are ongoing, and have not had the opportunity to achieve the stated goals of grizzly bear habitat protection.

Canadian coordination and cooperation have been strengthened through participation in the Interagency Grizzly Bear Committee composed of State and Federal branches of the United States government with jurisdiction over management of grizzly bears and their habitat. We have a scientific representative on the British Columbia Grizzly Bear Scientific Advisory Committee, which makes recommendations directly to the Minister of Environment concerning grizzly bear policy and management. This committee is composed of government and independent grizzly bear scientists from Canada and a scientific representative from the United States (U.S. Fish and Wildlife Service Grizzly Bear Recovery Coordinator) who review all aspects of grizzly bear management and research policy in British Columbia.

The committee was recently critical of the government of British Columbia regarding commitment and timely implementation of the Grizzly Bear Conservation Strategy (British Columbia Grizzly Bear Scientific Advisory Committee 1998). In the 1998 report card issued by the committee, 18 grades were given—1 "A," 2 "B's," 5 "C's," 4 "D's," and 6 "F's." Grades of "A" and "B" were given for international liaison, bear viewing, and education. Most habitat protection grades were F's, and the key area of funding also received an F. Two major criticisms were that "no Grizzly Bear Management Areas have been established to ensure benchmark, linkage and core areas are delineated

and that the Identified Wildlife Management Strategy has not been implemented to protect critical habitats of grizzly bear under the Forest Practices Code."

The provincial ministry has responded to these criticisms and recently released the Identified Wildlife Management Strategy as part of the Forest Practices Code (British Columbia Ministry of Environment, Lands, and Parks 1998a).

The Forest Practices Code was recently updated with specific prescriptions for grizzly bear habitat under the Identified Wildlife Management Strategy (Forest Practices Code 1999). It should be noted that these prescriptions have not yet been applied because they are new (February 1999) and will require monitoring to determine their effectiveness in protecting grizzly bear habitat on crown lands. However, it is useful to examine what is proposed to be protected under this body of regulation. Wildlife Habitat Areas (WHAs) will be established based on grizzly bear population and habitat objectives consistent with the Grizzly Bear Conservation Strategy. These WHAs will fall into two categories—security and foraging. Security WHAs are intended to maintain ecological integrity of critical habitat patches and to ensure security of the bears using these patches. Foraging WHAs attempt to compensate for habitat alteration, degradation, or loss of important areas in landscape units by maintaining habitat values in other areas. They also may be established to maintain security, thermal cover, or linkage among important habitats. Priority for WHA establishment will be in districts adjoining United States grizzly bear habitat along the international boundary. These are areas where the British Columbia government has identified the conservation status of these populations as threatened. This designation should not be confused with the United States designation as "threatened" under the Endangered Species Act, rather it is a provincial method for identifying populations that may be threatened with decline. Specific objectives for security WHA's include no road or trail building and no forestry practices unless they are designed to restore or enhance degraded habitat. Specific objectives for foraging WHA's include timber harvest without roading, deactivation of nonpermanent roads after harvest, practices other than clearcutting to maintain cover, and practices that stimulate regrowth of forage species for bears.

Other recent additions to the Forest Practices Code include

recommendations for higher level planning at the level of grizzly bear population units which are currently being delineated (Forest Practices Code 1999). These recommendations are not mandatory and may be modified based on the capability of the land to support grizzly bears, current condition or effectiveness of the habitat, status of the grizzly bear population, and other resource objectives. Some recommendations made include—minimize open road densities to 0.6 kilometer per square kilometer (0.36 mile per square mile) of habitat, deactivate and revegetate temporary roads, consider closing access in subbasins of important grizzly bear valleys for 50 years after timber management, and schedule forestry activities to avoid displacing bears from preferred habitat during periods of seasonal use. If these recommendations are implemented, they could represent a step toward significant habitat protection measures for grizzly bears in British Columbia.

The British Columbia Protected Area Strategy seeks to enlarge the area of the province set aside in parks and protected areas from 7–12 percent by the year 2000. Protected areas include national parks, provincial parks, and other designations that are quite similar to the United States wilderness designation. British Columbia has increased the amount of area in protected areas from 6.8 percent of the province in 1990 to 10.6 percent of the province in 1997 and appears to be within reach of their goal of 12 percent by the year 2000 (British Columbia Ministry of Environment, Lands, and Parks 1998b). The goal of 12 percent protected areas has been applied to the entire province and there are some regions within the province that may have more or less than the goal. The province was divided into 11 ecoprovinces and 112 subunits known as ecosections. The ecoprovince just north of the Selkirk, Cabinet-Yaak, and Northern Continental Divide recovery zones is referenced as the Southern Interior Mountains. The percentage of protected areas in this region has increased from 11.3 percent in 1990 to 16.1 percent in 1997. The subunit that comprises the Selkirk recovery zone (Southern Columbia Mountains) has increased from 0.3 percent in 1991 to 6.4 percent in 1997 and the subunit directly north of the Cabinet-Yaak recovery zone (McGillivray Range) has increased from 0.1 percent in 1991 to 1.3 percent in 1997.

Habitat protection measures implemented in the United States portion of the Selkirk and Cabinet-Yaak

recovery areas since listing in 1975 have improved and protected grizzly bear habitat. However, several large mines in Montana, if approved, may threaten bears, and access standards established by the U.S. Forest Service and the Service have not been met in their entirety. In British Columbia, habitat protection is not controlled by the Endangered Species Act and Canada has no similar legislation, although the British Columbia Grizzly Bear Conservation Strategy is an important step toward grizzly bear conservation. Habitat modification in Canada, particularly in the linkage zone, could isolate populations. We will begin discussions to reevaluate the existing recovery zone line in Canada and determine if additional linkages may be beneficial to grizzly bear conservation. We will continue to monitor and make recommendations regarding grizzly bear conservation strategies within British Columbia.

At this point in time, we feel that protective measures have not achieved desired goals for habitat protection in either the United States or Canada. Because this may pose a significant threat to the grizzly bear population in the Selkirk/Cabinet-Yaak recovery zone, endangered status for that population is warranted.

B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

An assessment of overutilization should consider current grizzly bear population size and mortality occurring within the Selkirk/Cabinet-Yaak recovery zone.

Population Size

In the Selkirk recovery zone, Wielgus *et al.* (1994) estimated densities of 3.65 bears per 260 square-kilometers (100 square-miles) of the 873-square kilometer (337-square mile) United States study area and 6.03 bears per 260 square-kilometers (100 square-miles) of the 816-square kilometer (315-square mile) Canadian study area. This results in population estimates of 12 bears in the United States study area and 19 bears in the Canadian study area. The Selkirk recovery zone encompasses 5,069 square-kilometers (1,957 square-miles), of which 2,800 square-kilometers (1,081 square-miles) are in the United States and 2,269 square-kilometers (876 square-miles) are in Canada. These study areas represent only 33 percent of the recovery zone. Application of the study area densities to the entire recovery zone would not be appropriate because the study areas were selected in part because they were believed to hold

the highest densities of bears on their respective sides of the border. However, grizzly bears do occur on lands outside the study area. Sightings of grizzly bears have occurred in all 10 subunits of the United States portion of the recovery zone and sightings of females with young have occurred in 8 of 10 of those same subunits from 1994–1997 (Wakkinen and Johnson 1996, Interagency Grizzly Bear Committee 1998). The Wielgus United States study area was the equivalent of only three of those subunits. Over one-half of United States and Canadian mortality has occurred outside the study area boundaries.

These data indicate that there are additional bears living outside the Wielgus *et al.* (1994) study area boundaries. We conservatively estimate that grizzly bear density outside the study area might be much smaller, possibly 25 percent of the study area density estimated by Wielgus *et al.* (1994). Applying 25 percent of these density estimates to their respective portions of the recovery zone outside the study area results in eight additional bears in Canada and seven additional bears in the United States. Combining this estimate of 15 bears outside the study areas with the estimate of 31 within the study areas results in a conservative population estimate of 46 for the entire Selkirk recovery zone.

In the case of the Cabinet-Yaak recovery zone, separate population estimates were made for the Cabinet Mountains and the Yaak River drainage. The Cabinet Mountains lie south of the Yaak River drainage and contain about 60 percent of the recovery zone. In the Cabinet Mountains the population was estimated to be 15 bears or fewer in 1988 (Kasworm and Manley 1988). There is insufficient data to dramatically change that estimate, but since then the population was augmented with four young females, and there have been sightings of individual bears in 6 of 10 BMU's that make up the Cabinet Mountains, with sightings of females with young in 4 BMU's since the completion of transplants (Kasworm *et al.* 1998, Interagency Grizzly Bear Committee 1998). The Yaak River drainage adjoins grizzly bear habitat in British Columbia and contains about 40 percent of the recovery zone. In the Yaak, unduplicated counts of bears over 3-year intervals and total counts for the period of 1989–1998 indicate a minimum population of 21–27 animals (Kasworm 1999a). Based on these data, the population of the Cabinet-Yaak recovery zone can be conservatively estimated at 30–40 grizzly bears.

Mortality

In our 1996 submission to the court, we failed to include three mortalities in 1993 and 1995, and we have received information on additional mortalities from the British Columbia Fish and Wildlife Branch and Idaho Department of Fish and Game from 1982 through 1998. We analyzed mortality summaries from both the Cabinet-Yaak and the Selkirks, including mortalities of bears within the recovery zone, as well as bears captured within the recovery zone that subsequently died outside the recovery zone. We included three mortalities that occurred well outside the recovery zone to provide a conservative estimate of mortality rates. Total known mortality for the Selkirks was 34, and known human-caused mortality was 26 from 1982–1998. Total known mortality for the Cabinet-Yaak was 14 and known human-caused mortality was 10 from 1982–1998. The known human-caused mortality rate was 1.53 deaths per year in the Selkirks and 0.59 deaths per year in the Cabinet-Yaak. The grizzly bear recovery plan (U.S. Fish and Wildlife Service 1993) estimated that known human-caused mortality represented 67 percent of total human-caused mortality. Recent research indicates that known human-caused mortality may represent only 50 percent of total human-caused mortality in the northern grizzly bear recovery zones (McLellan *et al.* in press). However, it should be noted that the authors determined this proportion on the basis of radio-collared bears whose mortality would not have been known without the collars. Therefore, application of this correction factor to known human-caused mortality should recognize that mortality determined because of a radio collar should not have the correction factor included. Five of 26 human-caused mortalities from the Selkirk recovery zone were located on the basis of radio telemetry. Two of the 10 mortalities from the Cabinet-Yaak recovery zone were located on the basis of radio telemetry. Applying the 50 percent correction factor to the remaining known human-caused mortalities results in a total estimate of 47 mortalities for the Selkirks and 18 for the Cabinet-Yaak from 1982–1998. Average annual mortality would be 2.76 for the Selkirks and 1.06 for the Cabinet-Yaak. Based upon a population size of 46 for the Selkirks, the annual known and unknown human-caused mortality rate is 6.0 percent for 1982–1998. Based upon a population size of 30–40 for the Cabinet-Yaak, the annual known and unknown mortality rate would be 2.7–3.5 percent. Combining the human-

caused mortality data from both recovery zones results in average annual mortality of 3.82 bears per year. Based on a combined population of 76–86, the annual known and unknown human-caused mortality rate would be 4.4–5.0 percent. Four mortalities within the British Columbia portion of the Selkirk recovery zone were legal kills during the grizzly bear hunting season. This hunting season was closed in 1995.

The grizzly bear recovery plan cites a modeling procedure by Harris (1986) that estimated grizzly bear populations could sustain a 6 percent rate of human-caused mortality. The use of this model on smaller populations than those modeled by Harris (approximately 450) has been debated. This model considered an isolated population where no ingress or egress is possible. Though populations in the Selkirk/Cabinet-Yaak recovery zone are well below this level even when combined, radio monitoring data indicates there is egress from these populations to a common area and therefore these populations are connected to a much larger population extending north into British Columbia. This population has been estimated to be 446–577 (Simpson *et al.* 1995), not including either of the recovery zones, and may be much larger based upon ingress and egress with other British Columbia grizzly bear populations. Ingress and egress also improve population viability by providing sources of repopulation in the event of stochastic events that might radically depress the population, such as weather patterns dramatically affecting food supplies for several consecutive years. The Harris (1986) model further stated that human-caused mortality of females should not exceed 30 percent of the total. Human-caused female mortality was 26 percent for the Selkirks and 33 percent for the Cabinet-Yaak (see Table 1). Combining data from both recovery zones results in female mortality at 28 percent.

Population Trend

Application of new computer modeling techniques allows calculation of finite rate of increase of the population (λ) with a confidence interval (Hovey and McLellan 1996, Mace and Waller 1998). Though not a specific recovery criterion, this information is available for both recovery zones. Calculation of the rate is based upon survival and reproduction of female radio-collared bears. Specific parameters used include—adult female survival, subadult female survival, yearling survival, cub survival, age at first parturition, reproductive rate, and maximum age of reproduction. Specific

methods followed those described by Mace and Waller (1998). The estimated finite rate of increase (λ) from 1983–1998 was 1.023 (95 percent confidence interval = 0.917–1.124) for the Selkirks and 1.100 (0.971–1.177) for the Cabinet-Yaak (Wakkinen and Kasworm 1999). Bear years of monitoring information available for these calculations were 85.3 for the Selkirks and 56.0 for the Cabinet-Yaak. These estimates equate to an annual exponential rate of increase (r) of 2.3 percent for the Selkirks and 9.5 percent for the Cabinet-Yaak. Confidence intervals do encompass 1.0 or a stable population, and we are unable to conclude that these rates statistically reflect an increasing population. Furthermore, sensitivity testing of the modeling results suggests that the addition of one additional subadult female mortality in the Selkirk radio collar sample could push these rates into decline with a projected $\lambda = 0.974$ (0.855–1.105). The annual exponential rate of increase (r) in this case would be –2.6 percent. However, the previous calculation of rates with these techniques for the Selkirks from 1983–1994 produced a $\lambda = 0.976$ and from 1983 to 1996 produced a $\lambda = 0.994$ (Servheen *et al.* 1995 and Wakkinen 1996). Combining the samples from the Cabinet-Yaak and the Selkirks for 1983 to 1998 produced an intermediate $\lambda = 1.059$ (0.985–1.126) in which the confidence interval still includes 1.0.

Grizzly bear populations in the Selkirk/Cabinet-Yaak recovery zone appear to be responding to protective measures that reduce mortality. Population trends are inconclusive, but it does not appear that reclassification is warranted because of overutilization alone, as long as habitat connectivity in Canada is maintained. Should populations show decline because of increased mortality we will reconsider our position on this factor.

C. Disease or Predation

This factor was not identified as a threat to grizzly bears in the original listing. The recovery plan indicates that parasites and disease do not appear to be significant causes of natural mortality among bears (Jonkel and Cowan 1971, Kistchinskii 1972, Mundy and Flook 1973, Rogers and Rogers 1976). Research in Alaskan grizzly bears has shown previous exposure by some grizzly bears to rangiferine brucellosis and leptospirosis, though impacts to populations are unknown (Zarnke 1983). The most common internal parasite noted in grizzly bears is *Trichinella* for which 62 percent of grizzly bears tested positive from 1969–1981 (Greer 1982). Effects of these levels

of incidence are unknown but monitoring will continue.

Mortality summaries from the Yellowstone Ecosystem for 1959–1987 did not identify disease as a significant factor resulting in mortality (Craighead *et al.* 1988). Only 1 of 477 known mortalities was attributed to disease or parasites. Thirty-eight mortalities could not be identified by cause and some of these may have been related to disease or parasites, but these factors do not appear to be significant causes of mortality affecting Yellowstone grizzly bears. Mortality summaries from the Selkirk/Cabinet-Yaak recovery zone indicate natural mortality accounted for 17 percent of total known mortality.

The Montana Department of Fish, Wildlife, and Parks operates a Wildlife Laboratory at Bozeman. One of the Laboratory's objectives is to necropsy wildlife specimens suspected of being diseased, parasitized, or dying of unknown causes, to identify the cause of death (Aune and Schladweiler 1995). Tissue samples are examined by Veterinary Pathologists at the State Diagnostic Laboratory. Though disease was not considered a threat at the time of listing, we will continue to have dead grizzly bears processed through a laboratory to determine cause of death and to maintain baseline information on diseases and parasites occurring in grizzly bears. This action will serve to continue monitoring of these agents as potential mortality sources. If disease is later determined to be a threat, we will evaluate and adopt specific measures to control the spread of any disease agent and treat infected animals, where such measures are possible. These measures will depend on the disease agent identified.

Mortality of grizzly bears through predation has been mostly attributed to conspecifics (Interagency Grizzly Bear Committee 1987). Predation was commonly associated with adult males killing smaller individuals. Seventeen percent of all known mortality from the Selkirk/Cabinet-Yaak recovery zone was of natural causes, some portion of which may have been related to predation by conspecifics. Monitoring of this factor will continue, but disease and predation do not appear to be limiting the population.

D. The Inadequacy of Existing Regulatory Mechanisms

As a threatened species, the grizzly bear receives protection under the Endangered Species Act from illegal take. All Federal actions in grizzly bear habitat undergo biological evaluations and consultation under section 7 of the Act. The State of Idaho receives section

6 funding under the Act to assist grizzly bear research and management. We have further assisted these research projects by providing personnel to capture and radio-collar bears which have been the source of most information about these animals in the Selkirk recovery zone. We maintain staff located within the Cabinet-Yaak recovery zone to assist with management and conduct research to monitor survivorship, movement patterns, and reproductive success.

The U.S. Forest Service administers public lands that account for 80–90 percent of these recovery zones. We review forest management plans and individual actions on the forest under section 7 of the Act. All plans have habitat protection measures specifically identified for grizzly bears known as the Interagency Grizzly Bear Guidelines (1986). Individual Forest Plan standards most commonly apply to motorized vehicle access management, but also protect movement corridors and cover for bears. New Forest Plans being drafted by the U.S. Forest Service will undergo similar review.

The States of Idaho, Montana, and Washington have maintained closed hunting seasons for grizzly bears since the animal was listed in 1975. British Columbia closed the hunting season in the Selkirk recovery zone in 1995 and the area directly north of the Cabinet-Yaak recovery zone in the 1970s.

Almost half of the existing Selkirk recovery zone and all of the identified linkage with the Cabinet-Yaak recovery zone is in Canada. Legally mandated habitat protection measures such as those described in the United States are absent or only recently being implemented in Canada such that their effectiveness cannot be judged at this time (see discussion under Factor A).

Ursus arctos horribilis is included in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The CITES is an international treaty established to prevent international trade that may be detrimental to the survival of plants and animals. A CITES export permit must be issued by the exporting country before an Appendix II species may be shipped. A CITES permit may not be issued if the export will be detrimental to the survival of the species or if the specimens were not legally acquired. However, CITES does not itself regulate take or domestic trade.

E. Other Natural or Manmade Factors Affecting its Continued Existence

Grizzly bears in the combined Selkirk/Cabinet-Yaak recovery zone number less than 100 animals and

because of these low numbers are more vulnerable to environmental events such as floods, droughts, or fires.

Grizzly bears tend to live at low densities and have large annual ranges that enable them to survive catastrophic events occurring in a portion of their range. Grizzly bears as a species have evolved under these conditions at low densities. The fires within the Yellowstone recovery zone in 1988 burned approximately 485,600 hectares (1.2 million acres). Two of 38 radio-collared grizzly bears were missing after the fires and were initially presumed to have been killed. However, subsequent capture activities in the area produced one of the missing animals (Blanchard and Knight 1990, Haroldson, pers. comm.). The remaining missing animal was a female with cubs of the year.

The large home ranges of grizzly bears, particularly males, enhance genetic diversity in the population by enabling males to mate with numerous females. In the Cabinet-Yaak recovery zone a male bear had a home range of over 2,850 square-kilometers (1,100 square-miles) from 1987–1992 (Kasworm and Servheen 1995). This same animal was seen with a female grizzly bear late in the breeding season of 1992, after having been monitored 64 kilometers (40 miles) northwest in the southern Purcell Mountains of British Columbia for 2 weeks early in the breeding season. Grizzly bears have a promiscuous mating system. A single radio-collared adult female from the Cabinet-Yaak was observed over a period of 8 years with at least four different males prior to producing four litters of cubs, with more than one male present during at least two of those breeding seasons (Kasworm 1999b). Though we do not know that all these males successfully mated with this female, these observations indicate the ability of female bears even in this small population to have several mates. Recent genetic studies have determined that cubs from the same litter may have different fathers (Craighead *et al.* 1998).

These evolutionary strategies allow grizzly bears to exist at low population density and maintain genetic diversity. However, linkage zone loss, as discussed under Factor A, may have a significant impact on bears in the United States by isolating the relatively small population in the Selkirk/Cabinet-Yaak, disrupting gene flow between the two zones and making the bears more vulnerable to random events.

High-speed highways are an important factor in grizzly bear habitat that can affect habitat use and cause direct mortality. Highway reconstruction or expansion can lead to

further fragmentation of grizzly bear habitat. These projects also can provide opportunities to improve crossing opportunities for grizzly bears and other forms of wildlife. There are several examples of radio-collared grizzly bears crossing existing major highways in the Selkirk/Cabinet-Yaak recovery zone, specifically Highways 200, 56, and 92 in the United States portion of the recovery zone and Highways 3 and 3A in British Columbia. We do not have similar information for Highway 2 or Highway 95, but bear populations adjacent to those highways are low and there are currently no radio-collared bears in close proximity to those highways. We have begun a study of high-speed highways on the periphery of Glacier National Park. Results from that study may prove useful in identifying impacts related to grizzly bears and making recommendations on future highway design and construction to maintain crossing opportunities. We are specifically concerned about increasing traffic levels and future improvements to the highway system such as creation of additional lanes for traffic. We will have an opportunity to monitor these activities within the United States through section 7 review of all Federal actions while these populations remain listed under the Endangered Species Act.

By virtue of the small population in the Selkirk/Cabinet-Yaak recovery zone and low reproductive rate of bears in general, we find that the Selkirk/Cabinet-Yaak recovery zone warrants endangered status.

Finding

We have carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by this recovery zone. Based on this evaluation, we find that the grizzly bears in the combined Selkirk/Cabinet-Yaak recovery zone are in danger of extinction due to—(1) habitat alteration and human intrusion into grizzly bear habitat, and (2) a small population facing potential isolation by activities across the border in Canada. Cumulative impacts of recreation, timber harvest, mining, and other forest uses with associated road construction have reduced the amount of effective habitat for grizzly bears. Access management plans have the potential to reduce this threat, but have not been fully implemented. New regulatory mechanisms are being proposed in Canada, but we have no basis to judge their likelihood of implementation and effectiveness at this time. We will continue to work with Canada to ensure

that the existing linkage zone in Canada is maintained.

Prior to this notice, we reviewed the status of the finding on the Cabinet-Yaak population in September 1992, March 1996, and June 1998. In these reviews, we determined that the threats to the grizzly bear populations in the Cabinet-Yaak ecosystem remained of high magnitude and of a nonimminent nature and that a listing priority of 6 for the petitioned reclassification remained appropriate.

On December 6, 1996, we adopted a listing priority guidance for Fiscal Year 1997 (61 FR 64475) and this guidance was extended on October 23, 1997. Final listing priority guidance for Fiscal Year 1998 and Fiscal Year 1999 was published in the **Federal Register** on May 8, 1998 (63 FR 25502). Both the Fiscal Year 1997 and 1998/1999 guidance described a multi-tiered listing approach that assigns relative priorities to listing actions to be carried out under section 4 of the Endangered Species Act. This guidance supplements, but does not replace the 1983 listing priority guidelines.

Grizzly bear reclassification from threatened to endangered status in the Selkirk/Cabinet-Yaak recovery zone falls into Tier 2 under Fiscal Year 1998 and 1999 guidance. Determinations and

processing of proposed listings to add new species to the lists of threatened and endangered species receives higher priority than reclassifications of already listed species. Because we must devote listing funds to addressing high priority candidate species, preparation of a proposed rule to reclassify the grizzly bear in the Selkirk/Cabinet-Yaak recovery zone is warranted but precluded by higher listing priorities.

The Notice of Review of Plant and Animal Taxa published in the **Federal Register** on September 19, 1997 (62 FR 49397), provided a discussion of the expeditious progress made in the past year on listing decisions and findings on recycled petitions throughout all regions of the Service. In that publication, we provided notice of review of 18 recycled petitions and described our progress in completing final listing actions for 152 taxa, proposed listing actions for 23 taxa, and a proposed delisting action for 1 taxa.

Since publication of the 12-month finding on the Cabinet-Yaak ecosystem in 1993, we have made expeditious progress in making listing decisions on 19 candidate species in the Mountain-Prairie Region (Region 6). At the present time, there are an additional 16 candidate species with listing priority numbers of 1-5 in Region 6. These

listing priority numbers are higher than the listing priority number of 6 currently given to reclassification of the grizzly bear in the North Cascades and the Cabinet-Yaak ecosystems.

We affirm that the Selkirk/Cabinet-Yaak recovery zone of grizzly bears continues to face threats of high magnitude that are nonimminent, and, therefore, are assigned a listing priority of 6. Work on species with a listing priority of 6 is precluded by work on species of a higher priority.

References Cited

A complete list of references cited in this notice is available upon request from the Grizzly Bear Recovery Coordinator (see **ADDRESSES** section).

Author: The primary author of this document is Wayne Kasworm (see **ADDRESSES** section).

Authority

The authority for this action is the Endangered Species Act of 1973 as amended (16 U.S.C. 1531 *et seq.*).

Dated: May 6, 1999.

Jamie Rappaport Clark,

Director, Fish and Wildlife Service.

[FR Doc. 99-12318 Filed 5-14-99; 8:45 am]

BILLING CODE 4310-55-P