U.S. FISH AND WILDLIFE SERVICE SPECIES ASSESSMENT FORM:

12-Month Finding on a Petition from the State of Montana to Establish and Delist a Northern Continental Divide Ecosystem Distinct Population Segment of the Grizzly Bear in the Lower-48 States

SCIENTIFIC NAME: Ursus arctos horribilis

COMMON NAME: Grizzly bear

ANIMAL GROUP AND FAMILY

Group: Mammals

Order: Carnivora

Family: Ursidae

LEAD REGION: Mountain-Prairie Region – Region 6

LEAD REGION CONTACT: Marjorie Nelson, Assistant Regional Director, marjorie nelson@fws.gov

LEAD FIELD OFFICE CONTACT: Hilary Cooley, Grizzly Bear Recovery Coordinator, 406–243–4903; hilary cooley@fws.gov

DATE INFORMATION CURRENT AS OF: October 31, 2024

STATUS/ACTION

X Distinct Population Segment (DPS) petitioned for delisting, which we have determined is not a listable entity

Petition Information:

X Petitioned; Date petition received: December 17, 2021
90-day "substantial" finding FR publication date; citation: 88 FR 7658, February 6, 2023
PREVIOUS FEDERAL ACTIONS:

Below, we summarize the previous Federal actions for the grizzly bear that are most relevant to this finding. Please see the species status assessment (SSA) report for a detailed account of the previous Federal actions (Service 2024, pp. 74–76).

The grizzly bear is currently listed as a threatened species in the lower-48 States (40 FR 31734, July 28, 1975). On March 30, 2021, we completed a 5-year status review for the grizzly bear in the lower-48 States in which we concluded that the listed entity should retain its status as a threatened species under the Endangered Species Act (Act) (Service 2021, entire). On December 17, 2021, we received a petition from the State of Montana (petitioner) to revise the listed entity of grizzly bear under the Endangered Species Act (Act). The petition requested that we: (1) establish a Northern Continental Divide Ecosystem (NCDE) distinct population segment (DPS); and (2) remove it ("delist") from the Federal List of Threatened and Endangered Wildlife (List), asserting that the NCDE DPS does not meet the definition of an endangered or threatened species. On February 6, 2023, we published a 90-day finding (88 FR 7658) that the petition contained substantial information indicating establishing and delisting a NCDE DPS may be warranted. Since that time, we continued to collect the best scientific and commercial data available on the species, which we incorporated into two updates to the SSA report, first in 2022 with the latest monitoring information and again in 2024 with additional updates to our assessment of current and future conditions (Service 2022 and 2024, in their entirety). This document, along with our Federal Register notice, constitutes our 12-month finding on the December 17, 2021, petition to establish and delist a NCDE DPS of grizzly bear under the Act.

DISTINCT POPULATION SEGMENT – Listable Entity Determination

Under the Act, the term "species" includes any subspecies of fish or wildlife or plants, and any DPS of any species of vertebrate fish or wildlife which interbreeds when mature (16 U.S.C. 1532(16)). Congress has instructed the Secretary to exercise this authority with regard to DPSs sparingly and only when the biological evidence indicates that such action is warranted. In determining whether to recognize the petitioned DPS as a valid listable entity, we must base our decision on the best scientific and commercial data available. Additionally, we must provide transparency in application of the Act's definition of a species through careful review and analysis of all the relevant data.

In their December 17, 2021, petition, the petitioner requested that we:

- (1) Establish a NCDE Grizzly Bear (*Ursus arctos horribilis*) DPS in the State of Montana; and
- (2) Revise the List of Endangered and Threatened Wildlife under the Act by removing the NCDE grizzly bear DPS.

We address these petitioned actions in order, below.

1. Establish a NCDE DPS

The petitioner first requests that we establish a DPS for the NCDE (petitioned DPS). Specifically, the petitioner requests that we establish a NCDE DPS within the geographic

boundaries described below and displayed in Figure 1, below, as the polygon outlined in red. In addition, we summarize information provided by the petitioner and our analysis of discreteness and significance below.

Boundaries of Potential DPS

As set forth by the petitioner, the petitioned DPS boundary occurs entirely within the State of Montana and is as follows: The northern boundary whose northwestern point lies in the middle of Lake Koocanusa at the U.S.-Canada border and follows the international border east until its intersection with Montana Highway (MT) 16. The eastern boundary follows MT-16 from the Canadian border south until the intersection with Interstate (I) 94 near Glendive, Montana. The southern border follows I-94 west from Glendive until the intersection with I-90 where it continues east to St. Regis, Montana. The western boundary, following Zone 1, then continues north along MT-135 from its intersection with I-90 until the junction with MT-200; follows MT-200 north until the junction with Secondary State Highway (S) 382; continues north on S-382 until the junction with MT-28; follows MT-28 north to junction with Hubbart Dam Road (vicinity of Niarada, Montana); follows Hubbart Dam Road north until junction with U.S. Highway (US) 2; continues east on US-2 to junction with Flathead county road, RD#543; follows Flathead County RD#543 north to the junction with USFS RD#538; continues north on USFS RD#538 to junction with USFS RD#538B; heads north on USFS RD#538B until the junction with USFS RD#113; heads west on USFS RD#113, over Brush Pass, onto Kootenai USFS RD#113; continues on USFS RD#113 north to junction with USFS RD#36; follows USFS RD#36 north to where it crosses the Tobacco Bears Outside Recovery Zone (BORZ) boundary (lat: 48.499, long: -114.966); follows the Tobacco BORZ boundary northwest up to the ridgeline; continues west along the ridgeline that has Davis Mountain and Warland Peak; and heads northward (lat: 48.523, long: -115.218) off the hydrologic divide to the Lake Koocanusa inlet, following the Tobacco BORZ boundary. In the inlet, the petitioned DPS boundary continues into the middle of Lake Koocanusa between the eastern and west shores until it meets the northern boundary at the United States/Canada border (see petitioned DPS boundary in Figure 1).

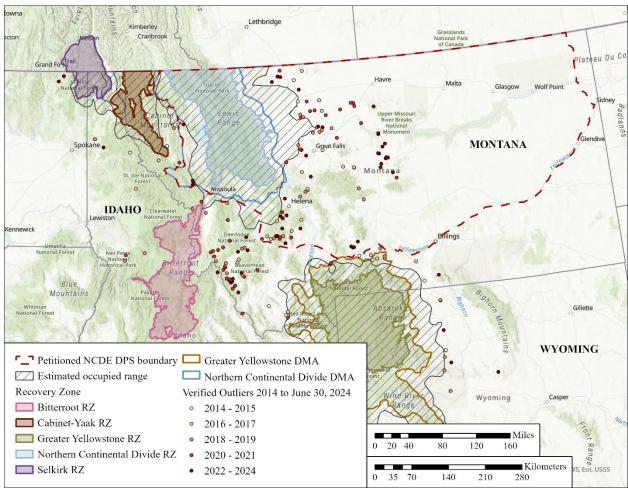


Figure 1. Estimated occupied range of grizzly bears in the NCDE (2008–2022 data; Costello et al. 2023, p. 14), Greater Yellowstone Ecosystem (2008–2022 data; Delllinger et al. 2023, p. 23), Cabinet-Yaak Ecosystem (2000–2022 data; Kasworm et al. 2024a, in prep.), and Selkirk Ecosystem (2000–2022 data; Kasworm et al. 2024b, in prep.), and verified grizzly bear outlier observations (point observations outside of estimated occupied range) between the ecosystems based on data from January 2017 through June 2024. Red polygon represents the boundary of the NCDE DPS requested by the petitioner in their December 17, 2021, petition.

Background

Since the time of the original listing under the Act in 1975, grizzly bear populations in the lower-48 States, including the NCDE population, have expanded, both in terms of population size and range and now occupy approximately 6 percent of their historical range in the lower-48 States (Figure 1, above; Haroldson et al. 2021, p. 164). As of 2023, researchers estimated at least 2,314 individuals in the lower-48 States, including 1,163 in the NCDE demographic monitoring area

(DMA)¹ (Costello et al. 2024, *in prep.*; Gould et al. 2024, *in prep.*; Kasworm et al. 2024a, *in prep.*; Kasworm et al. 2024b, *in prep.*).

The most recent estimate of occupied range for the NCDE grizzly bears from 2022 was 55,652 square kilometers (km²) (21,487 square miles (mi²)), more than a two-fold increase from the estimated 27,381 km² (10,572 mi²) of the early 1980s occupied range (Costello et al. 2023, p. 13; MFWP, unpublished data). The 2022 NCDE occupied range includes 93 percent of the DMA (Figure 1, above; MFWP, unpublished data). The petitioner reports that 36 percent of the 2018 grizzly bear occupied range was outside of the DMA (Costello and Roberts 2019, p. 10), with a greater proportion of occupied range occurring on private land. Additionally, the petitioner points to a distribution map with verified outlier observations beyond current estimated occupied range.

New information supports the petitioner's claim that the NCDE population has increased in size and distribution, so much so that grizzly bears have expanded their occupied range and verified outliers are occurring beyond the western and southern boundary of the petitioned DPS (Figure 1, above). From 2014 to 2022, estimated occupied range in the NCDE increased by 21 percent, averaging 5 percent every 2 years (MFWP, unpublished data). As a result, the distance between the occupied range in the NCDE and that of other ecosystems, including the Greater Yellowstone Ecosystem (GYE), Cabinet-Yaak Ecosystem (CYE), and Bitterroot Ecosystem (BE), has decreased and continues to shrink. Models indicate that the NCDE estimated occupied range overlaps with the CYE, although no genetic or demographic connectivity has been documented. In addition, models indicate that the estimated occupied ranges of the GYE and NCDE populations are currently only 98 kilometers (61 miles) apart, within grizzly bear dispersal distance (Figure 1, above) (Service 2024, p. 54).

The 2022 estimated occupied range of the NCDE population of grizzly bear extends beyond the western and southern boundaries of the petitioned DPS (Figure 1, above). From 2020 to 2022, occupied range in the NCDE increased by 11 percent (Costello et al. 2023, p. 13). We expect this trend to increase over time under current management, including protections of the Act. Further, as the populations in the NCDE, GYE, CYE, and SE expand, individual grizzly bears are dispersing into new areas outside the estimated occupied range (Figure 1, above). Since 2014, there have been 213 verified observations of grizzly bears outside of current estimated occupied range in the lower-48 States. Most of these observations have been verified through tracks or photographs; however, occasionally DNA (e.g., hair) is collected. Genetic studies have confirmed that at least 14 grizzly bears originating from the NCDE population have dispersed beyond the boundary of the petitioned DPS, including 7 radio-collared individuals (MFWP, unpublished data). Four of these individuals are known to have emigrated from the NCDE to the CYE, however, no gene flow is known to have occurred as of 2022 (Kasworm et al. 2024a, *in*

¹ The demographic monitoring area (DMA) includes and surrounds the recovery zone and is the area in which mortality limits apply for the NCDE.

prep.). These occurrences outside of areas considered occupied range are becoming increasingly common (Figure 1, above). In most cases, the source population is unknown; however, given the close proximity to the NCDE, it is likely that a number of these observations were of grizzly bears originating from the NCDE population. The locations of these verified observations reveal the leading edges of grizzly bear range expansion within and between ecosystems (Costello et al. 2023, pp. 13-17; Dellinger et al. 2023, pp. 22-23). Given grizzly bear population growth and range expansion over the last several years, we anticipate continued range expansion and dispersal events under current management and conservation measures, including the protections of the Act, such that natural connectivity between the NCDE and other grizzly bear populations in the lower-48 States, including the GYE and CYE, will likely occur in the near future (Service 2024, p. 54). In addition, we anticipate that dispersing bears from the NCDE will re-establish a population in the Bitterroot Ecosystem (BE) in the next 15 to 20 years (MFWP, unpublished data). The estimated occupied range for the NCDE grizzly bear population is less than 5 km (3 mi) from the Bitterroot recovery zone and a subadult female dispersed to within 5 km (3 mi) of the BE in 2022. This information indicates that the grizzly bear population has expanded beyond the boundary of the petitioned DPS and continues to expand.

To summarize, information provided by the petitioner and the best scientific and commercial data available indicate that grizzly bear abundance, distribution, and dispersal have increased, and grizzly bears have expanded beyond the petitioned DPS boundary. As a result, the petitioned DPS is not based on the best scientific and commercial data available and is obsolete. As populations have grown and expanded, estimated occupied range has expanded beyond the petitioned DPS boundary. In addition, grizzly bears have dispersed beyond the petitioned NCDE DPS boundary, often into areas considered to be previously unoccupied.

To interpret and implement the DPS provisions of the Act, the Service and the National Oceanic and Atmospheric Administration published in the *Federal Register* the Policy Regarding the Recognition of Distinct Vertebrate Population Segments Under the Endangered Species Act on February 7, 1996 (61 FR 4722) (DPS Policy). Under the DPS Policy, we consider three elements: (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 Act's standards for listing, delisting, or reclassification. The Policy requires that a population segment meet both the discreteness and significance elements to be considered a valid DPS (i.e., a valid listable entity) and only then may we consider whether the DPS warrants listing under the Act. We proceed to evaluate whether the petitioned DPS, constitutes a valid DPS for the purposes of this finding.

Discreteness of the Petitioned DPS

Under our DPS Policy, a population segment of a vertebrate species may be considered discrete if it satisfies either of the following two 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); or (2) it is delimited by international governmental boundaries within which significant 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 Act. In determining whether the test for discreteness has been met under the DPS policy, we allow but do not require genetic evidence to be used.

The petitioner asserts that the petitioned DPS is "bounded by an international border, by a large reservoir (Lake Koocanusa) on the west, by large valleys containing a busily travelled interstate highway on the south, and by areas essentially devoid of grizzly bears on the east." In addition, the petitioner asserts that the petitioned DPS is markedly separated from other populations, and that the occasional interchange of individuals that has occurred between the NCDE and other grizzly bear populations does not undermine discreteness under the DPS Policy.

Although the DPS Policy does not require absolute separation of one population from another, (82 FR 30502, June 30, 2017, p. 30518), the standard for discreteness must allow us to distinguish between the DPS and other members of the species for purposes of administering and enforcing the Act (61 FR 4722, February 7, 1996, p. 4724). As summarized above, the best scientific and commercial data available indicate that the estimated occupied range of the grizzly bear population in the NCDE has expanded steadily in the past decade. The GYE and CYE populations have also expanded their range and these populations are increasingly closer in proximity to the NCDE population. Grizzly bears have dispersed beyond the boundaries of the petitioned DPS and the NCDE population has expanded to such an extent that it is not markedly separate from other populations of the taxon. Due to the NCDE's ongoing population growth and range expansion, which is expected to continue in the future under current management, including the protections of the Act, we do not consider the petitioned DPS to be discrete due to physical factors. Because grizzly bears within the boundaries of the petitioned DPS are not markedly separated from other populations of the taxon, the petitioned DPS does not meet the discreteness element in the DPS Policy. Therefore, the petitioned NCDE DPS is not discrete under the DPS policy. Therefore, in accordance with the DPS Policy, we do not proceed to evaluate its significance or conservation status under the Act (61 FR 4722, February 7, 1996, p. 4725).

Because both elements of discreteness and significance are required for an entity to be considered a valid DPS and therefore a listable entity, we have determined that grizzly bears in the petitioned DPS do not, on their own, represent a valid DPS (i.e., a valid listable entity under the Act).

Revise the List of Endangered and Threatened Wildlife under the Act by removing the petitioned NCDE DPS

Because we have determined that the petitioned DPS is not a valid listable entity, we do not evaluate whether it warrants delisting under the Act.

FINDING

Our review of the best scientific and commercial data available indicates that the grizzly bear population in the NCDE has expanded beyond the petitioned DPS boundary. Grizzly bears will likely continue to expand beyond the petitioned DPS boundary, as ongoing, rangewide conservation efforts, including the protections of the Act, help improve population health and connectivity. Based on the latest scientific information regarding grizzly bear abundance, distribution, and ongoing range expansion, the petitioned entity does not describe a discrete population. Therefore, grizzly bears in the petitioned entity do not, on their own, represent a valid DPS (i.e., a valid listable entity under the Act). Accordingly, we find that the petitioned action to recognize and delist an NCDE DPS is not warranted.

We are in the process of fully evaluating the latest information regarding the status of the grizzly bear in the lower-48 States and intend to submit a final rule to the Office of the Federal Register by January 31, 2026. This rulemaking is pursuant to a settlement agreement associated with the State of Idaho's petition to delist the grizzly bear in the lower-48 States. That rulemaking, to either remove or revise the currently listed entity of the grizzly bear in the lower-48 States, will fully evaluate the best scientific and commercial data available, which could include potential DPSs, while considering potential population segment's conservation status and Congress's direction to exercise DPSs sparingly and only when the biological evidence indicates that such action is warranted. The trends of increasing distribution and dispersal point to the need for a broader, holistic evaluation at the rangewide level, which will be completed as part of the rulemaking already underway. Consistent with the DPS Policy, that analysis will require careful consideration of the extent to which formerly isolated populations are connected, or likely to be connected, and the need for connectivity to small or isolated populations and unoccupied recovery zones, given the best and most recent biological data available that support a durable recovered grizzly bear in the lower-48 States.

Martha Williams, 03 January 2025

Director,

U.S. Fish and Wildlife Service

LITERATURE CITED

- Costello, C. M., and L. L. Roberts. 2019. Northern Continental Divide Ecosystem grizzly bear monitoring team annual report, 2018. Montana Fish, Wildlife & Parks, Kalispell, Montana, USA.
- Costello, C. M., L. L. Roberts, and M. A. Vinks. 2023. Northern Continental Divide Ecosystem grizzly bear population monitoring annual report, 2022. Montana Fish, Wildlife & Parks, Kalispell, Montana, USA.
- Costello, C. M., L. L. Roberts, and M. A. Vinks. 2024. *In prep*. Northern Continental Divide Ecosystem grizzly bear population monitoring annual report, 2023. Montana Fish, Wildlife & Parks, Kalispell, Montana, USA.
- Dellinger, J. A., B. E. Karabensh, and M. A. Haroldson. 2023. Grizzly bear occupied range in the Greater Yellowstone Ecosystem, 2008-2022. Pages 22-24 in F. T. van Manen, M. A. Haroldson, and B. E. Karabensch, editors. Yellowstone grizzly bear investigations: annual report of the Interagency Grizzly Bear Study Team, 2022. U. S. Geological Survey, Bozeman, Montana, USA.
- Gould, M. J., F. T. van Manen, M. A. Haroldson, J. G. Clapp, J. A. Dellinger, D. Thompson, and C. M. Costello. 2024. Population size and vital rates. *In prep.* in F. T. van Manen, M. A. Haroldson, and B. E. Karabensh, editors. Yellowstone grizzly bear investigations: annual report of the Interagency Grizzly Bear Study Team, 2023. U.S. Geological Survey, Bozeman, Montana, USA.
- Haroldson, M. A., M. Clapham, C. C. Costello, K. A. Gunther, K. C. Kendall, S. D. Miller, K. E. Pigeon, M. E. Proctor, K. D. Rode, C. Servheen, G. B. Stenhouse, and F. T. van Manen. 2021. Brown bear (Ursus arctos; North America). pp. 162–195 in V. Penteriani and M. Melletti, editors. Bears of the World: Ecology, Conservation and Management. Cambridge University Press.
- Kasworm, W. F., T. G. Radandt, J. E. Teisberg, T. Vent, A. Welander, M. Proctor, H. Cooley, and J. K. Fortin-Noreus. 2024a. Cabinet-Yaak grizzly bear recovery area 2023 research and monitoring progress report. U.S. Fish and Wildlife Service, Missoula, Montana, USA.
- Kasworm, W. F., T. G. Radandt, J. E. Teisberg, A. Welander, T. Vent, M. Proctor, H. Cooley, and J. K. Fortin-Noreus. 2024b. Selkirk Mountains grizzly bear recovery area 2023 research and monitoring progress report. U.S. Fish and Wildlife Service, Missoula, Montana, USA.
- U.S. Fish and Wildlife Service. 2021. 5-year status review for grizzly bear in the lower-48 States. Denver, Colorado.
- U.S. Fish and Wildlife Service. 2022. Species status assessment for the Grizzly bear (Ursus

- *arctos horribilis*) in the Lower-48 States. Version 1.2. U.S. Fish and Wildlife Service, Grizzly Bear Recovery Office, Missoula, Montana.
- U.S. Fish and Wildlife Service. 2024. Species status assessment for the Grizzly bear (Ursus arctos horribilis) in the Lower-48 States. Version 2.2. U.S. Fish and Wildlife Service, Grizzly Bear Recovery Office, Missoula, Montana.