

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

**12-Month Finding on a Petition from the State of Wyoming to Establish and Delist a
Greater Yellowstone 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: August 27, 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: January 21, 2022
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 11, 2016, we proposed to establish and delist a Greater Yellowstone Ecosystem (GYE) distinct population segment (DPS) (81 FR 13173). On June 30, 2017, we finalized the rule to establish the GYE DPS and remove it from the Federal List of Threatened and Endangered Wildlife (List) due to recovery (82 FR 30502). However, in 2018, the U.S. District of Montana vacated and remanded the 2017 delisting rule, putting the GYE grizzly bear population back on the List (as threatened) as part of the lower-48 States listed entity. As a result, there is currently no DPS for the GYE on the List.

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 January 21, 2022, we received a petition from the State of Wyoming (petitioner) to revise the listed entity of grizzly bear under the Act. The petition requested that we: (1) establish a GYE DPS; and (2) remove it from the List (“delist”), asserting that the GYE DPS did 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 GYE 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 species assessment form, along with our Federal Register notice, constitutes our 12-month finding on the January 21, 2022, petition to establish and delist a GYE 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 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 January 10, 2022, petition, the petitioner requested that we:

- (1) Establish a GYE Grizzly Bear (*Ursus arctos horribilis*) DPS in the States of Wyoming, Idaho and Montana as a species that is neither a threatened species nor an endangered species under the Act; and
- (2) Revise the List of Endangered and Threatened Wildlife under the Act by removing the GYE grizzly bear DPS.

Throughout the petition, the petitioner cites to our vacated June 30, 2017, final rule (82 FR 30502). We address these petitioned actions in order, below.

1. Establish a GYE DPS

The petitioner first requests that we establish a DPS for the GYE (GYE DPS). Specifically, the petitioner requests that we establish a GYE DPS within the same geographic boundary that we established as a DPS in our 2017 final rule, which was subsequently vacated. The petitioner did not provide a new geographic delineation for the GYE DPS and instead incorporated by reference the boundary for the GYE DPS that we described in 2017 (hereafter, 2017 GYE DPS). With text cited directly from our final rule (June 30, 2017, 82 FR 30633), the petitioner defines the boundaries for the GYE grizzly bear DPS as:

“...that portion of Idaho that is east of Interstate Highway 15 and north of U.S. Highway 30; that portion of Montana that is east of Interstate Highway 15 and south of Interstate Highway 90; that portion of Wyoming south of Interstate Highway 90, west of Interstate Highway 25, Wyoming State Highway 220, and U.S. Highway 287 south of Three Forks (at the 220 and 287 intersection), and north of Interstate Highway 80 and U.S. Highway 30.”

The 2017 GYE DPS boundary is displayed in Figure 1, below, as the polygon outlined in red. Other than incorporating by reference our application of the DPS Policy and finding from the 2017 final rule that the GYE population qualified as a DPS, the petitioner did not provide additional information as to why the petitioned population is a valid DPS. The petitioner provided no additional information regarding the discreteness or significance of the 2017 GYE DPS or any other potential population segments. We summarize our analysis from the vacated 2017 final rule below.

In our vacated final rule to establish and delist the GYE DPS of grizzly bears (June 30, 2017, 82 FR 30516), we determined that the GYE grizzly bear population was a DPS, as it was discrete from other grizzly bear populations and significant to the remainder of the taxon (i.e., *Ursus arctos horribilis*). Based on the information available in 2017, we found that the GYE population was discrete because it was markedly, physically separated from other grizzly bear populations and that the GYE grizzly bear population was significant due to persistence in an ecological setting unique for the taxon and because the loss of this population would result in a significant gap in the range of the taxon. Therefore, in 2017, we determined that because the GYE grizzly bear population was both discrete and significant, it constituted a valid DPS.

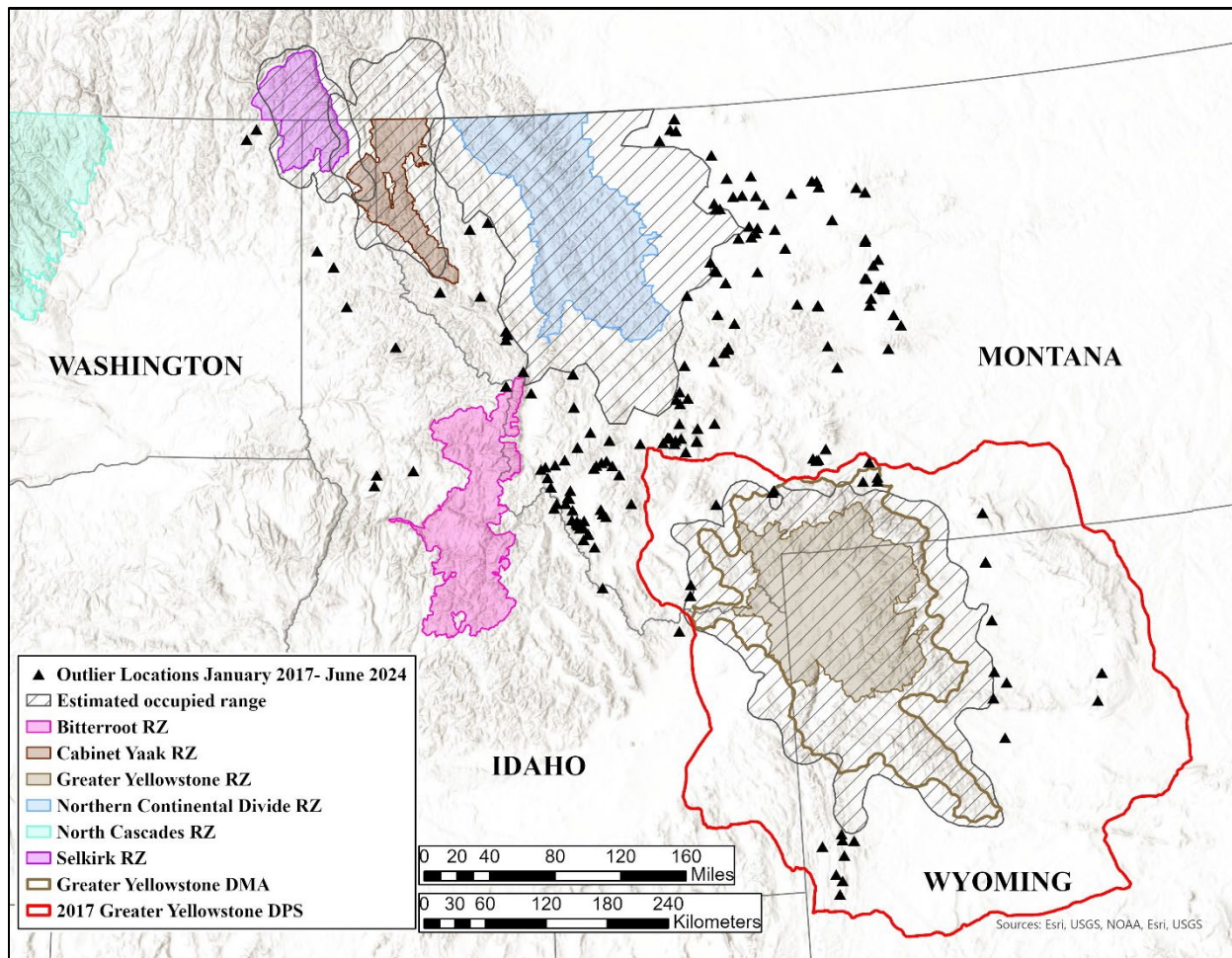


Figure 1. Estimated occupied range of grizzly bears in the NCDE (2008–2022 data; Costello et al. 2023, p. 14), GYE (2008–2022 data; Dellinger et al. 2023, p. 23), Cabinet Yaak Ecosystem (2000–2022 data; Kasworm et al. 2024a, in prep.), and Selkirk Ecosystem (2000–2022 data; Kasworm et al. 2024b, in prep.), and verified grizzly bear outlier observations between the ecosystems based on data from January 2017 through June 2024. Red polygon represents the boundary of the GYE DPS requested by the petitioner from the June 30, 2017, vacated final rule (82 FR 30516).

Since the time of the original listing in 1975 and our June 30, 2017, vacated designation of the 2017 GYE DPS (82 FR 30516), the abundance, distribution, and dispersal of bears within and surrounding the GYE has increased (Figure 1, above). Since 1975, grizzly bear populations in the lower-48 States, including the GYE 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 (Haroldson et al. 2021, p. 164). As of 2023, it was estimated that there were at least 2,314 individuals in the lower-48 States, including 1,030 in the GYE demographic monitoring area (DMA) (Costello et al. 2024, in prep.; Gould et al. 2024, in prep.; Kasworm et al. 2024a, in prep.; Kasworm et al. 2024b, in prep.).

In their arguments to support delisting, the petitioner indicates that the GYE grizzly bear population's range has expanded. The most recent estimate of occupied range for GYE grizzly bears from 2022 was 70,100 square kilometers (km²) (27,065 square miles (mi²)), a more than

four-fold increase from the estimated 16,160 km² (6,239 mi²) of the 1970s occupied range (Dellinger et al. 2023, p. 23; IGBST unpublished data). The 2022 GYE occupied range includes 97.9 percent of the DMA and 98.7 percent of the suitable habitat area (USFWS 2013, entire; IGBST, unpublished data). The petitioner asserts that 30.6 percent of the 2020 grizzly bear occupied range was outside of the DMA (Bjornlie and Haroldson 2021, p. 24), into a more human-dominated landscape of private lands, agricultural practices, and developed areas. The petitioner provides maps of the grizzly bear occupied range in 1990, 2000, 2010, and 2020, to demonstrate the expansion of occupied range in the GYE during this period. Additionally, the petitioner asserts that from 1990 to 2020, the area of private lands within GYE grizzly bear occupied range increased from just over 600 to over 12,000 km² (231 to 4,633 mi²), an area 20 percent larger than Yellowstone and Grand Teton National Parks and the John D. Rockefeller Parkway combined (Bjornlie and Haroldson 2021, p. 24).

New information supports the petitioner's claim that the GYE population has increased in size and distribution, so much so that grizzly bears have dispersed and expanded beyond the western boundary of the 2017 GYE DPS (Figure 1). The occupied range of the grizzly bear in both the GYE and the Northern Continental Divide Ecosystem (NCDE) located to the north of the GYE, has steadily expanded over time. From 2016 to 2022, occupied range in the GYE increased by 4 percent (Dellinger et al. 2023, pp. 22–23) and the NCDE increased by 19 percent (Costello et al. 2023, p. 13). As a result, the distance between these occupied ranges has decreased and continues to shrink. Models indicate that the GYE and NCDE are currently only 98 kilometers (61 miles) apart, within grizzly bear dispersal distance (Figure 1) (Service 2024, p. 54).

In the June 30, 2017, final rule, we stated that the DPS Policy does not require absolute separation of one population from another, and occasional interchange does not undermine the discreteness of potential DPSs (82 FR 30502, p. 30518). While we still agree with this statement, the 2022 estimated occupied range of the GYE population now extends beyond the 2017 GYE DPS western boundary. We expect this trend to increase over time. Further, as the populations expand, individual grizzly bears are dispersing into new areas outside the estimated occupied range (Figure 1, above). Since 2017, there have been 190 verified observations of grizzly bears outside of the current estimated occupied range of grizzly bears populations in the lower-48 States. We also noted in our June 30, 2017, final rule that, “no grizzly bears originating from the GYE have been suspected or confirmed beyond the borders of the GYE grizzly bear DPS” (80 FR 30517). Today, genetic studies have confirmed that at least two grizzly bears originating from the GYE population have dispersed beyond the 2017 GYE DPS border (IGBST, unpublished data). We have also verified 86 observations of grizzly bears outside of the 2017 GYE DPS boundaries and within potential connectivity pathways to the NCDE (NCDE Management Zone 2 (NCDE Subcommittee 2018)) and to the Bitterroot Ecosystem (BE) (Sells et al. 2023, p. 6). These occurrences outside of areas considered occupied range are becoming increasingly common, particularly in areas immediately to the north and west of the 2017 GYE DPS (Figure 1, above). In most cases, the source population is unknown; however, given the close proximity to the GYE, it is likely that a number of these observations were grizzly bears originating from the GYE population. The locations of these verified observations reveal the leading edges of grizzly bear expansion within and between ecosystems (Dellinger et al. 2023,

pp. 22–23). Given the increasing trend of population growth and expansion over the last 7 years, we anticipate range expansion and dispersal events to continue under current management, including protections of the Act, such that natural connectivity between the NCDE and GYE will likely occur in the near future (Service 2024, p. 54). This information indicates that the grizzly bear population has expanded beyond the boundary of the 2017 GYE 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 2017 GYE DPS boundary. As a result, the petitioned DPS identified in 2017 is no longer based on the best scientific and commercial data available and is obsolete. As populations have grown and expanded, grizzly bears have dispersed beyond the 2017 GYE 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. Additionally, congressional guidance is to use DPS authority “sparingly and only when the biological evidence indicates that such action is warranted.” Given that we originally established the 2017 GYE DPS, we proceed to evaluate whether the petitioned entity, the 2017 GYE DPS, constitutes a valid DPS for the purposes of this finding.

Discreteness of the 2017 GYE 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.

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 GYE has expanded since 2017. The range of the NCDE population has also expanded and the two populations are increasingly closer in proximity. Due to this expansion, which is expected to continue in the future under current management, including the protections of the Act, we no longer consider the 2017 GYE DPS to be discrete, as grizzly bears have dispersed and expanded to such an extent that it is not markedly separate from other members of the taxon. Because grizzly bears within the boundaries of the 2017 GYE DPS described by the petitioner are not markedly separated from other populations of the taxon, it does not meet the discreteness element in the DPS Policy as a consequence of physical, physiological, ecological, or behavioral factors (61 FR 4722, February 7, 1996). 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.

2. Revise the List of Endangered and Threatened Wildlife under the Act by removing the petitioned GYE DPS

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

FINDING

Our review of the best scientific and commercial data available indicates that the grizzly bear population in the GYE population has expanded beyond the petitioned DPS boundary that we established in 2017 and was subsequently vacated. Grizzly bears will likely continue to expand beyond the 2017 GYE 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 abundance, distribution, and trends, the petitioned entity does not describe a valid DPS. 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 establish and delist the GYE 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 in a rulemaking expected 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.



January 3, 2025

Martha Williams,
Director,
U.S. Fish and Wildlife Service

LITERATURE CITED

- Bjornlie, D. D., and M. A. Haroldson. 2021. Grizzly bear occupied range in the Greater Yellowstone Ecosystem, 1990–2020. Page 24–27 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, 2020. U.S. Geological Survey, Bozeman, 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, 2023. U. S. Geological Survey, Bozeman, Montana, USA.
- Gould, M. J., F. T. van Manen, and M. A. Haroldson. 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, 2022. 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.
- Northern Continental Divide Ecosystem (NCDE) Subcommittee. 2018. Conservation strategy for the grizzly bear in the Northern Continental Divide Ecosystem.
- Sells, S. N., C. M. Costello, P. M. Lukacs, L. L. Roberts, and M. A. Vinks. 2023. Predicted connectivity pathways between grizzly bear ecosystems in Western Montana. Biological

Conservation 284:e110199.

- U.S. Fish and Wildlife Service (Service). 1993. Grizzly bear recovery plan. 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.