# 90-DAY FINDING PETITION REVIEW FORM

## LISTING AS A THREATENED OR AN ENDANGERED SPECIES

**Federal Docket No. FWS-R6-ES-2021-0106**

**90-DAY FINDING ON TWO PETITIONS TO LIST GRAY WOLVES (*CANIS LUPUS*) IN THE WESTERN UNITED STATES AS AN ENDANGERED OR THREATENED "DISTINCT POPULATION SEGMENT" UNDER THE ENDANGERED SPECIES ACT**

**Petitioned action being requested**:

- ☒ List as an endangered or a threatened species
- ☐ Reclassify (uplist) from a threatened species to an endangered species
- ☐ Other

**Petitioned entity**:

- ☐ Species
- ☐ Subspecies
- ☒ DPS of vertebrates of a non-listed species

**Background**

Section 4(b)(3)(A) of the Endangered Species Act (Act) requires that we make a finding on whether a petition to list, delist, uplist (reclassify the species from a threatened species to an endangered species), or downlist (reclassify the species from an endangered species to a threatened species) a species presents substantial scientific or commercial information indicating that the petitioned action may be warranted. Our standard for substantial scientific or commercial information within the Code of Federal Regulations (CFR) with regard to a 90-day petition finding is "credible scientific or commercial information in support of the petition's claims such that a reasonable person conducting an impartial scientific review would conclude that the action proposed in the petition may be warranted" (50 CFR § 424.14(h)(i)).

**Petition History**

On June 1, 2021, we received a petition (dated May 26, 2021) from Center for Biological Diversity, the Humane Society of the United States, Humane Society Legislative Fund, and the Sierra Club, requesting that the gray wolf in the Northern Rocky Mountains be listed as a threatened species or an endangered species under the Act. The petition clearly identified itself as such and included the requisite identification information for the petitioners, required at 50 CFR 424.14(c). The petitioners additionally requested that the Service immediately protect gray wolves in the Northern Rockies with its emergency listing authority under 16 U.S.C. § 1533(b)(7). Because the Act does not provide for petitions to emergency list, we are considering it as a petition to list the gray wolf in the Northern Rocky Mountains. We will refer to this petition as the first petition.

On July 29, 2021 we received a new petition from Western Watersheds Project and seventy other organizations requesting that the gray wolf in western North America be listed as an endangered species under the Act. The petition clearly identified itself as such and included the requisite identification information for the petitioners, required at 50 CFR 424.14(c). Western Watersheds Project filed an Addendum to their petition on August 10, 2021. We will refer to this petition as the second petition.

This finding addresses both petitions.

**Evaluation of Two Petitions to List Gray Wolves in the Western United States as an Endangered or Threatened Species Under the Act**

*Species and Range*

Gray wolf in the western United States (population of [*Canis lupus*])
Historical range: Western United States, except southwest
Current range: CA, CO, ID, MT, OR, WA, WY
The gray wolf is a recognized species by the Integrated Taxonomic Information System

Do the petitions identify an entity that may be eligible for listing as a threatened species or endangered species (i.e., is the entity a species, subspecies, or DPS)?

☒Yes
☐No

The first petition includes two alternatives for listing a Distinct Population Segment (DPS) of the gray wolf in a portion of its range that encompasses the Northern Rocky Mountains and excludes the range of the listed Mexican gray wolf (*C. l. baileyi*): (1) a Northern Rocky Mountains DPS, or (2) a Western DPS. The second petition includes one alternative for listing a DPS of the gray wolf in the western United States in a portion of its range that excludes the range of the listed Mexican gray wolf. This proposed DPS is similar to the Western DPS proposed in the first petition, but also includes northern Arizona.

*Listable Entity Evaluation*

When evaluating a petition, we must consider whether the petitioned entity may be a listable entity under the Act, i.e., a species, a subspecies, or a potential DPS of a vertebrate species or subspecies. The evaluation of the taxonomic status of a species, subspecies, or DPS centers on whether the information presented in the petition reaches the substantial information threshold. Substantial information is that amount of information that would lead a reasonable person to believe that the requested action may be warranted. It is not within our purview to determine taxonomic status in a 90-day petition evaluation, but rather to evaluate information submitted by the petitioners to determine whether the information indicates the petitioned entity *may be* a "listable entity" under the Act. We will not expand the scope of our evaluation beyond the petitioned entity, including various combinations of a distinct population segment (DPS).

*Evaluation of the Gray Wolf Petitioned Entities as Distinct Population Segments*

To interpret and implement the DPS provisions of the Act, the Service and the National Oceanic and Atmospheric Administration published the Policy Regarding the Recognition of Distinct Vertebrate Population Segments Under the Endangered Species Act in the Federal Register on February 7, 1996 (61 FR 4722) (DPS Policy). Under the DPS Policy, three elements are considered in the decision regarding the establishment and classification of a population of a vertebrate species as a possible DPS: (1) The discreteness of a 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. Both discreteness and significance are used to determine whether the population segment constitutes a valid DPS. If it does, then the population segment's conservation status is used to consider whether that DPS warrants listing.

*Discreteness and Significance*

Under the DPS policy, a population segment of a vertebrate species may be considered discrete if it satisfies either one 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); or (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 Act.

Under the DPS policy, a discrete population segment of a vertebrate species may be considered significant if there is: (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 the 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 historical range; or (4) evidence that the discrete population segment differs markedly from other populations of the species in its genetic characteristics.

Alternative 1: This petitioned alternative is comprised of a single entity that may be eligible for listing. The information provided in the first petition is identified below.

- DPS – Northern Rocky Mountains gray wolf (population of [*Canis lupus*])

  Historical range: ID, MT, WY, OR, WA, UT
  Current range: ID, MT, WY, OR, WA

  Discreteness:
  - The first petition claims there are differences in exploitation, regulatory mechanisms and conservation status between the United States and Canada. Petitioners cite the gray wolf reclassification rule (68 FR 15804, April 1, 2003) and the Western Great Lakes delisting rule (76 FR 81,666, 81,672, December 28, 2011).
  - The first petition claims the Northern Rocky Mountains DPS is markedly separate from gray wolves in the Cascades and Sierra Nevada mountain ranges

of California, Oregon, and Washington based on habitat modeling showing ecological barriers (Carroll *et al.* 2006).
    - The first petition claims the Northern Rocky Mountains DPS is markedly separate from gray wolves in the Midwest by vast areas of non-habitat. Petitioners cite the Western Great Lakes delisting rule (76 FR 81,672, December 28, 2011).
    - The first petition claims the Northern Rocky Mountains DPS is markedly separate from gray wolves in the Southern Rocky Mountains by the Red Desert and dry plains of southwestern and central Wyoming and by extensive areas of agriculture and human development across southern Idaho. Petitioners note that wolves have occasionally dispersed from the Northern Rocky Mountains into this region, but that DPS policy does not require absolute isolation (no citations).

Significance:

- The first petition claims the Northern Rocky Mountains DPS is significant for the reasons described in the Service's 2009 delisting rule (74 FR 15,123, 15,129; April 2, 2009) for this same entity. Those reasons include: (1) Persistence of the discrete population segment in an ecological setting unusual or unique for the taxon, and (2) evidence that loss of the discrete population segment would result in a significant gap in the range of the taxon.

Alternative 2: This petitioned alternative is comprised of a single entity that may be eligible for listing. The information provided in the first and second petitions is identified below.

- DPS – Western gray wolf (population of [*Canis lupus*])

  Historical range: CA, CO, ID, MT, NV, OR, UT, WA, and WY
  Current range: CA, CO, ID, MT, OR, WA, WY (the second petition also included northern Arizona as part of a Western DPS)

  Discreteness:
    - The first petition claims there are differences in exploitation, regulatory mechanisms and conservation status between the United States and Canada. Petitioners cite the gray wolf reclassification rule (68 FR 15804, April 1, 2003) and the Western Great Lakes delisting rule (76 FR 81,666, 81,672, December 28, 2011).
    - Both petitions claim the Western DPS is markedly separate from gray wolves in the eastern United States due to large areas of unoccupied habitat separating the two entities. The first petition cites the gray wolf reclassification rule (68 FR 15804, April 1, 2003) and the lower 48 delisting rule (85 FR 69,789, November 3, 2020). The second petition cites Geffen *et al*. 2004 (not provided), Mladenoff *et al*. 1999, and Oakleaf *et al*. 2006.
    - The first petition claims the Western DPS is markedly separate from Mexican gray wolves due to physiological, ecological, and behavioral factors that prompted separately listing the Mexican gray wolf subspecies and cites the Mexican gray wolf reclassification rule (80 FR 2488-01, January 16, 2015).

Significance:

- The first petition claims the Western DPS is significant for reasons provided in the Service's 2003 final reclassification rule (68 FR 15818-15819; April 1, 2003). The first petition also claims wolves in the western United States are separate reservoirs of diversity that differ from wolves in the eastern United States. Moreover, loss of the Western DPS would result in a large gap in current gray wolf distribution in the lower 48 United States.
- The first petition claims that wolves in the Western DPS persist in a unique ecological setting compared to wolves in Canada and the eastern United States due to the wide variety of cover types and fire regimes that are uncommon elsewhere. Petitioners cite Snyder (1991) and Innes (2010).
- The first petition claims that wolves in the Western DPS differ markedly from other wolf populations in genetic characteristics. Petitioners cite Tomiya and Meachen (2018).
- The first petition claims that wolves in the Western DPS are significant because each of the three encompassed regions—Northern Rocky Mountains, West Coast, and Southern Rocky Mountains—are individually significant. Petitioners cite Bennet 1994; McNab and Avers 1995; Miller *et al*. 2003; Carroll *et al.* 2006; McNab *et al*. 2007; 74 FR, 15,129, April 2, 2009; Defenders of Wildlife 2006 and 2013; vonHoldt *et al*. 2011; Stronen *et al*. 2014; Weiss *et al*. 2014; California Dept. of Fish and Wildlife 2016b; Wolf and Ripple 2018.
- The second petition claims that a Western DPS is significant because it occupies a large portion of the gray wolf's geographic range including the westernmost and southernmost extent of the range in the coterminous United States and includes numerous ecosystems.

We will further evaluate the validity of these DPS options during our 12-month status assessment.

*Statutory and Regulatory Standards for Evaluation of the Petitions*

Section 4 of the Act (16 U.S.C. 1533) and its implementing regulations (50 CFR part 424) set forth the procedures for determining whether a species is an "endangered species" or a "threatened species." The Act defines an endangered species as a species that is "in danger of extinction throughout all or a significant portion of its range," and a "threatened species" as a species that is "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." The Act requires that we determine whether any species is an "endangered species" or a "threatened species" because of any of the following factors:

(A) The present or threatened destruction, modification, or curtailment of its habitat or range;
(B) Overutilization for commercial, recreational, scientific, or educational purposes;
(C) Disease or predation;
(D) The inadequacy of existing regulatory mechanisms; or
(E) Other natural or manmade factors affecting its continued existence.

These factors represent broad categories of natural or human-caused actions or conditions that could have an effect on a species' continued existence. In evaluating these actions and conditions, we look for those that may have a negative effect on individuals of the species, as well

as other actions or conditions that may ameliorate any negative effects or may have positive effects.

In accordance with 50 CFR 424.14(d), the Service's determination as to whether a petition provides substantial scientific or commercial information indicating that the petitioned action may be warranted will depend in part on the degree to which the petition includes the following types of information: (1) Information on current population status and trends and estimates of current population sizes and distributions, both in captivity and the wild, if available; (2) Identification of the factors under section 4(a)(1) of the Act that may affect the species and where these factors are acting upon the species; (3) Whether and to what extent any or all of the factors alone or in combination identified in section 4(a)(1) of the Act may cause the species to be an endangered species or threatened species (i.e., the species is currently in danger of extinction or is likely to become so within the foreseeable future), and, if so, how high in magnitude and how imminent the threats to the species and its habitat are; (4) Information on adequacy of regulatory protections and effectiveness of conservation activities by States as well as other parties, that have been initiated or that are ongoing, that may protect the species or its habitat; and (5) A complete, balanced representation of the relevant facts, including information that may contradict claims in the petition.

**Evaluation of Information in the Petitions**

When evaluating a petition, we assess the information in the petition and may use any readily available information (e.g., in our files or published literature that we are aware of) to determine the credibility of the information presented in the petition. Our implementing regulations at 50 CFR 424.14(h)(i) state conclusions drawn in the petition without the support of credible scientific or commercial information will not be considered "substantial information." "Credible scientific or commercial information" may include all types of data, such as peer-reviewed literature, gray literature, traditional ecological knowledge, etc. Thus, we first must determine whether the information provided in the petition is credible. In other words, the Service must evaluate whether the information in the petition is substantiated and not mere speculation or opinion. Any claims that are not supported by credible scientific or commercial information do not constitute substantial information and will not be further evaluated. Next, we determine whether the conclusions drawn in the petition are reasonable (i.e., actually supported by that credible information).

After identifying the claims in the petitions that are supported by credible information, we consider those claims in the context of the factors in section 4(a)(1) of the Act. When evaluating information presented in the petitions, we consider factor D in light of the other factors, not independently. In other words, we consider whether the petition presents substantial information indicating that existing regulatory mechanisms may be inadequate to address the magnitude or imminence of threats identified in the petition related to the other four factors; therefore, we can consider factor D only after we have determined that the petition has presented substantial information that the species may warrant listing due to those other factors.

To complete our analysis for a 90-day petition finding: (1) we identify the claims in the petition that are supported by credible information indicating that there is a potential threat and it is occurring or is likely to occur within the species' range; and (2) we determine if any one of

those threats affects the species at a population or species level after taking into account any mitigating actions or conditions that may ameliorate those threats. If we find that the petition does not present substantial information that the petitioned action may be warranted based on one or more factors, we consider the cumulative impact of all of the threats that are supported by credible information. Based on these steps, we then draw our conclusion and petition finding based on the standard for 90-day findings, which is whether the petition presents "credible scientific or commercial information in support of the petition's claims such that a reasonable person conducting an impartial scientific review would conclude that the action proposed in the petition may be warranted."

*Previous Federal Actions*

In 2011, the Service reissued the 2009 rule that removed gray wolves in the NRM, with the exception of Wyoming, from the List of Endangered and Threatened Species (74 FR 15123, April 2, 2009; 76 FR 25590, May 5, 2011). Gray wolves in Wyoming were removed from the List of Endangered and Threatened Species in 2017 when the Service reissued the 2012 final rule that delisted wolves in Wyoming (77 FR 55530, September 10, 2012; 82 FR 20284, May 1, 2017). In 2020, we removed the listed gray wolf entities in the lower 48 United States and Mexico, except for the Mexican gray wolf, from the List of Endangered and Threatened Wildlife (85 FR 69778, Nov. 3, 2020).

At the time they were delisted, the recovery goal for gray wolves in the Northern Rocky Mountains was 30 or more breeding pairs comprising at least 300 wolves equitably distributed among Montana, Idaho, and Wyoming for 3 consecutive years, with genetic exchange between subpopulations. To provide a buffer above these minimum recovery levels, each of the three states was to manage for at least 15 breeding pairs and 150 wolves in mid-winter (77 FR 55538, September. 10, 2012; 74 FR 15132, April 2, 2009). The post delisting monitoring plan sets forth scenarios that could lead the Service to initiate a status review and analysis of threats to determine whether relisting is warranted: (1) If the wolf population in Idaho, Montana, or Wyoming falls below the minimum recovery level of 10 breeding pairs and 100 wolves at the end of any one year; (2) if the portion of the wolf population in Montana, Idaho, or Wyoming falls below 15 breeding pairs or 150 wolves at the end of the year in any one of those States for 3 consecutive years; or (3) if a change in State law or management objectives would significantly increase the threat to the wolf population. A fourth scenario, specific to Wyoming, provides that the Service could initiate a status review if the wolf population in Wyoming, excluding Yellowstone National Park and the Wind River Indian Reservation, falls below 10 breeding pairs and 100 wolves at the end of the year for 3 consecutive years.

During the 5-year post-delisting monitoring period for wolves in Idaho and Montana, which ended in 2016, the Service reviewed the status of the wolf population annually and evaluated regulatory changes that had the potential to increase threats to wolves in each state. Wyoming is currently in the final year of its 5-year post-delisting monitoring period. The Service has reviewed the status of Wyoming's wolf population over the past 4 years and completed on-the-

spot reviews to evaluate the potential effects of any regulatory changes on Wyoming's wolf population. In these reviews we concluded that wolf populations have remained robust under state management and that regulations designed and implemented to increase take did not significantly threaten the recovered status of wolf populations in Idaho, Montana, or Wyoming during the post-delisting monitoring periods. Since 2016, when the post-delisting monitoring period ended in Idaho and Montana, wolf populations have remained stable to slightly increasing in both States despite relaxation of hunting regulations (85 FR 69800–69803, November 3, 2020).

*Claims That Are Supported by Credible Information*

We first assess whether the claims in the petitions are supported by credible information (i.e., whether there is credible information that the threat is occurring or is likely to occur and that the species may be exposed to the threat) (Table 1). If there is credible information that the threat is occurring or is likely to occur and that the species may be exposed to it, we then assess whether that information reasonably indicates the presence of negative effects to one or more populations. If there are no population-level effects, our analysis of that individual threat presented in the petitions is complete, although we may analyze that threat later if we evaluate cumulative effects. If the credible information about the particular threat does indicate population-level effects, we assess the extent to which the credible information in the petitions indicates that the threat is having, or is likely to have, a negative effect on the species as a whole, such that listing may be warranted.

If, for any one threat, we find that there is credible information indicating that the threat is having or is likely to have a negative effect on the petitioned entity as a whole, we can stop and make a positive, "substantial information" finding. We would then evaluate all of the threats in detail based on the best scientific and commercial data available when we conduct the status assessment and make the 12-month finding. If we do not find substantial information indicating that any one threat is having an impact at the species level, we analyze the cumulative effects of all of the threats.

TABLE 1: Assessment of the credibility of scientific and commercial information in the petitions and the extent to which claims supported by credible scientific or commercial information in the petitions corroborates the presence of negative impacts to populations, or the species.

| **Threat or Activity** | **Exposure (Populations/Species). Are the Claims in the Petitions Supported by Credible Scientific and Commercial Information? Do the petitions support the claim that there is a potential threat and it is occurring or is likely to occur within the range of the species?** | **Response (Populations/Species). Do the Claims and the Supporting Information Indicate the Presence or Likely Presence of Negative Effects to One or More Populations and if so, to the petitioned entity as a Whole? Yes or No. Explain and Describe Below.** |
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| Overutilization from human-caused mortality of wolves in Idaho and Montana (Factor B) | Yes. The petitions claim that human-caused mortality may increase in the future. Both petitions claim that recently enacted legislation in Idaho (Senate Bill 1211) and Montana (Senate Bills 267 and 314; House Bills 224 and 225) will result in "drastically reduced wolf populations" in those two States. Idaho Senate Bill 1211 expands means of take to include: trapping and snaring on private property year-round, hunting from all-terrain vehicles, baiting, night hunting, no bag limit, hiring of private contractors, and increased funding to the Idaho Wolf Depredation Control Board. The Idaho legislation amended current State law that guides wolf management. The new Idaho legislation has been incorporated into current wolf harvest regulations for the 2021–2022 season, which began on July 1, 2021. These actions increase the potential negative effects to wolves in Idaho. The Montana bills include measures such as: increased bag limits, use of baits, hunting on private land at night, using artificial light or night vision, expanding the trapping season by four weeks, permitting use of snares, and reimbursements for costs incurred in hunting and trapping wolves. The Montana legislation provided | Yes. The petitions claim that high rates of human-caused mortality are a significant threat to most wolf populations (Bruskotter *et al.* 2014; Creel *et al.* 2015). High rates of human-caused mortality may result in an additive (direct mortality beyond what would occur naturally) or super-additive (indirect mortality resulting from direct mortality of individual wolves beyond what would occur naturally) effect of mortality in some wolf populations (Murray *et al*. 2010; Creel and Rotella 2010). The first petition claims that high rates of mortality can disrupt the social dynamics of packs, especially if one or both breeders are lost, which may affect evolutionary important social patterns in wolves, may increase the adoption of unrelated wolves into disrupted packs, and may affect breeding opportunities and reproductive success (Brainered *et al*. 2008; Rutledge *et al*. 2010; Ausband *et al*. 2015; Borg *et al*. 2015; Ausband *et al*. 2017). The first petition also claims that high rates of harvest may result in increased stress that could affect reproductive success and overall fitness, thus increasing the risk of localized extinction (Bryan *et al*. 2014). The first petition cites several studies that suggest mortality rates of 30% or less are necessary to sustain wolf populations (Adams *et al.* 2008; Creel and Rotella 2010; Sparkman *et al*. 2011; Vucetich 2012). The second petition claims that legal wolf removal is correlated with increased poaching (Chapron and Treves 2016; Santiago-Avila *et al*. 2020). The most recent wolf population estimates (1,556 |

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| | significant discretion to the Fish and Wildlife Commission to determine how best to implement the new legislation into the upcoming hunting and trapping season. Montana Fish, Wildlife and Parks staff have taken the new legislation into consideration and drafted 2021–2022 wolf harvest season recommendations. These recommendations were presented to the Fish and Wildlife Commission in June and a final decision on wolf harvest regulations for the 2021–2022 season will be made in August. | in mid-summer and approximately 900 at the end of 2020 in Idaho and 1,156 in 2019 in Montana) indicate that these two States make up most of the wolf population in a potential Northern Rocky Mountains DPS or Western DPS. The most recent estimates for the remaining states are 327 wolves in Wyoming, 173 in Oregon, 178 in Washington, and three known packs in California. Although we do not know how many additional wolves may be taken as a result of recently enacted legislation in Idaho and Montana, it is reasonable to conclude that mortality rates are likely to increase, which may result in wolf population declines. |

During the 2021 legislative session, the States of Idaho and Montana passed legislation that was signed into law by the Governor of each State. This legislation is intended to increase take and reduce wolf populations in each State. Specifically, the new legislation expands legal methods of take, extends trapping seasons, and increases bag limits for successful hunters and trappers in both States. Additionally, the new Idaho legislation amends existing state statute that directs wolf management in the State. In Montana, the new legislation provides that the Montana Fish and Wildlife Commission will determine how the new legislation will be implemented during the upcoming hunting and trapping season. The new legislation has the potential to increase take of wolves in both Idaho and Montana, thus increasing the potential threat to gray wolves in the Northern Rocky Mountains from overutilization.

We conclude that petitioners have presented credible information supporting their claim that increased human-caused mortality in Idaho and Montana may pose a threat to wolves in those two States, and to the status of the petitioned entities as a whole, such that the species may be threatened or endangered. Therefore, because we have found that the petitions present substantial information that one or more threats is having an impact on the species, the petition presents substantial information indicating that the petitioned action may be warranted. We will evaluate human-caused mortality, and all other potential threats, in detail based on the best scientific and commercial data available when we conduct the status assessment and make the 12-month finding. We do not need to assess cumulative effects at the 90-day finding stage because we will address cumulative effects of all threats in the 12-month finding.

***Evaluation of Information Summary*** - The petitioners present credible and substantial information that human-caused mortality (Factor B) may be a potential threat to the species in Idaho and Montana. These two States currently include approximately 75 percent of gray wolves that would be included in a Northern Rocky Mountains or Western DPS. The petitioners also provide credible information that new regulations in these two States may be inadequate to address this potential threat (Factor D). Therefore, the petitions present substantial information indicating that one or more of the petitioned entities may warrant listing. We will evaluate these and all other potential threats in detail based on the best scientific and commercial data available when we conduct the status assessment and make the 12-month finding.

**Petition Finding**

We reviewed the petitions, sources cited in the petitions, and other readily available information. We considered the factors under section 4(a)(1) and assessed the effects that the threats identified within the factors—as may be ameliorated or exacerbated by any existing regulatory mechanisms or conservation efforts—may have on the species now and in the foreseeable future. Based on our review of the petitions and readily available information regarding human-caused mortality (Factor B) and associated regulatory mechanisms (Factor D), we find that the petitions present substantial scientific or commercial information indicating that petitioned action may be warranted for the gray wolf (*Canis lupus*) in a Northern Rocky Mountains or Western DPS. The petitioners also presented information suggesting that habitat modification due to a reduced prey base (Factor A), disease (Factor C) and loss of genetic diversity caused by isolation and small population size (Factor E) may be threats to the gray wolf.

We will fully evaluate these potential threats during our 12-month status review, pursuant to the Act's requirement to review the best scientific and commercial information available when making that finding.

**Author**

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Matt Hogan
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