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May 1, 2016

Public Comments Processing,  
Attn: Docket No. FWS-R6-ES-2016-0042,  
United States Fish and Wildlife Service,  
MS: BPHC,  
5275 Leesburg Pike,  
Falls Church, Virginia 22041-3803

*Re: United States Fish and Wildlife Service Proposal to Remove the Greater Yellowstone Ecosystem Population of Grizzly Bears from the List of Endangered and Threatened Wildlife under the Endangered Species Act*

Dear Sir/Madam:

The United States Fish and Wildlife Service's ("Service") proposed rule to revise the List of Endangered and Threatened Wildlife<sup>1</sup> and remove the Greater Yellowstone Ecosystem's (GYE)<sup>2</sup> population of grizzly bears (*Ursus arctos horribilis*) is inconsistent with the best available scientific and commercial data, and extant federal law. For three reasons, the Service is urged to reconsider the proposed rule. First, the scientific and commercial data that the Service relied upon in issuing the proposed rule overlooks conflicting data about the grizzly bear's actual population in GYE. Second, even if the Service's optimistic assessment of GYE's current grizzly bear population is accurate, the proposed rule fails to adequately account for the effects of climate change on whitebark pine seed availability, a major component of GYE grizzly bears' diet. Third, the proposed rule gives improper weight to existing regulatory mechanisms that would provide habitat protection for grizzly bears. In sum, GYE grizzly bears continue to face

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<sup>1</sup> This comment does not challenge the Secretary of the Interior's authority to make changes to the List of Endangered and Threatened Wildlife under the Endangered Species Act. 16 U.S.C. § 1533(c) (2012).

<sup>2</sup> Service defines the GYE to include: "Yellowstone National Park and Grand Teton National Park ... which includes portions of three States: Wyoming, Montana, and Idaho. At more than 90,000 sq km (34,750 sq mi), it is one of the largest nearly intact temperate-zone ecosystems on Earth." Removing the Greater Yellowstone Ecosystem Population of Grizzly Bears From the Federal List of Endangered and Threatened Wildlife, 80 Fed. Reg. 13,174, 13,226 (Mar. 11, 2016) (to be codified at 50 C.F.R. pt. 17) [hereinafter *Grizzly Bear Proposed ESA Delisting*]. This comment uses "GYE" to refer to the same area.

threats to their existence that warrant reconsideration of the proposed rule and continuation of the bear's status as a endangered or threatened species under the Endangered Species Act (ESA).

#### 1. Conflicting Data About the Grizzly Bear's Population Size in GYE

The Service relies on the Fcoy and Chao-2 population estimators to conclude that the GYE grizzly bear population has grown to 674 individuals in 2002-2014,<sup>3</sup> from a historic low of 136 individuals in 1975.<sup>4</sup> The Service's data conclude that the GYE grizzly bear population increased at a rate between 4.2 and 7.6 percent per year between 1983-2002, and that population growth slowed and leveled off between 2002-2011 (between 0.3 and 2.2 percent growth).<sup>5</sup> Because the Service acknowledges that it considers "estimates of population trend to be the *ultimate metric* to assess cumulative impacts to the [GYE grizzly bear] population," the accuracy of the Service's population estimate undergirds the entirety of its analysis.<sup>6</sup> Therefore, because the Service interprets the GYE grizzly bear's population to have increased and now stabilized, the Service believes removal from the List of Endangered and Threatened Wildlife is warranted.<sup>7</sup>

The Service's presentation of these data is misleading because the proposed rule entirely fails to account for dissenting views in the scientific community about the validity of the Fcoy and Chao-2 population estimators. In 2014, population biologists Daniel F. Doak and Kerry Cutler published a letter in a peer-reviewed scientific journal outlining the limitations of the Fcoy and Chao-2 population estimators in accurately predicting the current population size of GYE grizzly bears.<sup>8</sup> Doak and Cutler argue that the Fcoy estimator may reveal a growing grizzly bear population because of researchers' rising search efforts, and differences in the "sightability" of

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<sup>3</sup> *Id.* at 13,188.

<sup>4</sup> *Id.* at 13,181.

<sup>5</sup> *Id.* at 13,187.

<sup>6</sup> *Id.* at 13, 219 (emphasis added).

<sup>7</sup> *Id.* at 13, 221.

<sup>8</sup> Daniel F. Doak & Kerry Cutler, *Re-Evaluating Evidence for Past Population Trends and Predicted Dynamics of Yellowstone Grizzly Bears*, 7 CONSERVATION LETTERS 312, 314 (2014).

bears, rather than an increasing grizzly bear population.<sup>9</sup> In other words, Doak and Cutler explain the reportedly growing grizzly bear population as a result of increasing human knowledge of bear habitats, and increasing bear search operations, rather than an increase in actual GYE grizzly bear population.<sup>10</sup> The Chao-2 population estimator is similarly vulnerable, because it is “sensitive to heterogeneity in sighting probabilities, as well as the amount of effort that is expended for the observation process each year.”<sup>11</sup> Doak and Cutler conclude that the methodological problems with these population estimators has resulted in “overly high population growth estimates ... for grizzlies,” and that “more care is needed in making inferences about population trends, especially when these results are being used in a direct policy context.”<sup>12</sup>

Doak and Cutler’s research is entirely omitted from the Service’s proposed rule. Given the potentially stark implications that an incorrect GYE grizzly bear population estimate could have on the need to remove the GYE grizzly bear from the List of Endangered and Threatened Wildlife, the Service should, at the very least, account for Doak and Cutler’s argument. At best, the Service’s failure to address Doak and Cutler’s argument makes the proposed rule incomplete; at worst, the omission could undermine the proposed rule’s conclusions about the threats to the GYE grizzly bear population. Certainty around the GYE grizzly bear population would allow the Service to better tailor the proposed rule to protect GYE grizzly bears for future generations.

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<sup>9</sup> *Id.*

<sup>10</sup> *Id.* at 319.

<sup>11</sup> *Id.* at 314.

<sup>12</sup> *Id.* at 319, 320.

## 2. The Effects of Climate Change on Whitebark Pine Seed Availability

Although the Service's proposed rule identifies several ways climate change may impact GYE grizzly bears, it does not grant these concerns the credit they deserve. GYE grizzly bears depend on four key foods for survival: whitebark pine seeds (*Pinus albicus*), army cutworm moths, winter killed-ungulates (bison and elk), and spawning cutthroat trout.<sup>13</sup> These four food sources may all face threats from climate change.<sup>14</sup> Threats to whitebark pine seeds are particularly significant because whitebark pine seeds are "known to have an influence on grizzly bear mortality risk and reproduction."<sup>15</sup> As the Service acknowledges, whitebark pine is currently under threat from three sources attributed to climate change: white pine blister rust, mountain pine beetles, and fire suppression.<sup>16</sup> In years when whitebark pine seed availability is low, "grizzly bear-human conflicts may increase as bears use lower elevation, [i.e.] less secure habitat within their home ranges."<sup>17</sup> This finding is significant because elsewhere in the proposed rule the Service concedes that "the primary factor affecting grizzly bears at both the individual and population level is excessive human-caused mortality."<sup>18</sup> The proposed rule cites evidence suggesting that sixty-six percent of the 290 known grizzly bear mortalities that occurred between 1980-2002 were human-caused.<sup>19</sup> Therefore, if the availability of whitebark pine seeds continues to be low, humans and grizzly bears are more likely to come into contact, and bears may be killed in higher numbers than the Service has anticipated.

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<sup>13</sup> *Grizzly Bear Proposed ESA Delisting*, *supra* note 2, at 13,212. See also David J. Matson & Troy Merrill, *Extirpations of Grizzly Bears in the Contiguous United States, 1850-2000*, 17 CONSERVATION BIOLOGY 1123, 1133 (2002).

<sup>14</sup> Mike Kauffman, Comment, *Through the Looking Glass: The Delisting of the Yellowstone Grizzly*, 44 IDAHO L. REV. 213, 244 (2007).

<sup>15</sup> *Grizzly Bear Proposed ESA Delisting*, *supra* note 2, at 13,212.

<sup>16</sup> *Id.* at 13, 213.

<sup>17</sup> *Id.*

<sup>18</sup> *Id.* at 13,178.

<sup>19</sup> *Id.* at 13,205.

Premature grizzly bear mortality poses a significant risk that the GYE grizzly bear population will decline. Because grizzly bears have “one of the slowest reproductive rates amongst terrestrial mammals ... it may take a female grizzly bear [ten] or more years to replace herself in a population.”<sup>20</sup> If increased grizzly bear-human conflicts cause increased grizzly bear mortality, it is possible that GYE grizzly bears will not be able to reproduce quickly enough to keep their population stable. Plunging GYE grizzly bear populations would deplete the diversity of their gene pool and cause genetic problems due to inbreeding.<sup>21</sup> Genetic problems may ultimately destroy the GYE grizzly bear population.

The Service’s proposed rule does not adequately address the issue of decreased availability of whitebark pine seed due to climate change. The proposed rule concludes that although whitebark pine seed depletion could have a negative impact on the GYE grizzly bear population, GYE grizzly bears will have access to a secure habitat where they can search for alternate food sources.<sup>22</sup> The Service’s conclusion that GYE grizzly bears will simply adapt and search for alternate food sources is unduly optimistic because the effects of climate change—most notably, the reduction in snowpack levels—have the potential to wipe out other food sources for GYE grizzly bears.<sup>23</sup> For example, reduced snowpack may change vegetative food distributions, meaning that potential prey species (ungulates) spend more time in the vicinity of humans.<sup>24</sup> If prey animals reside close to humans, increased human-grizzly bear conflict is likely. As previously noted, increased grizzly bear-human conflict likely results increased grizzly bear mortality. Therefore, although grizzly bears are a “generalist species” that is “able to live in a

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<sup>20</sup> *Id.* at 13,177.

<sup>21</sup> Todd Wilkinson, *What’s Next for Yellowstone’s Grizzlies?*, NAT’L GEOGRAPHIC (Oct. 1, 2015, 12:00PM), <http://news.nationalgeographic.com/2015/10/151001-grizzly-bears-animals-science-conservation-nation/>.

<sup>22</sup> *Grizzly Bear Proposed ESA Delisting*, *supra* note 2, at 13,215.

<sup>23</sup> *Id.* at 13,217.

<sup>24</sup> *Id.*

variety of habitats and eat a wide array of foods,” climate change could rapidly impact the stability of the GYE grizzly bear population in a permanent and irreversible way.<sup>25</sup> Given that the purpose of the Endangered Species Act is “to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved,” the Service’s proposed rule undermines the Act’s express purpose.<sup>26</sup>

### 3. Existing Regulatory Mechanisms Fail to Protect GYE Grizzly Bears

The Service’s proposed rule includes an evaluation of whether existing regulatory mechanisms adequately protect GYE grizzly bears.<sup>27</sup> The proposed rule concludes that “legally enforceable mechanisms would be in place if this proposed rule is finalized ... including the National Park’s Superintendent’s Compendiums, the [United States] Forest Service Amendment for Grizzly Bear Habitat Conservation for the GYE National Forests, the Wind River Reservation Regulations, and State Fish and Game Commission laws and regulation.”<sup>28</sup> Unfortunately, the Service overlooks Supreme Court precedent that undermines this conclusion. In *Norton v. Southern Utah Wilderness Alliance*, the Court held that land use plans (similar to the GYE management plans that the Service references) do not prescribe agency actions, but instead are mere general “statement[s] of priorities ... [to] guide[] and constrain[] actions.”<sup>29</sup>

Because these management plans are legally unenforceable as a matter of federal law, the Service should not be allowed to consider them “adequate regulatory mechanisms” under the Endangered Species Act.<sup>30</sup> Citizens suits that attempt to force the Service to follow these plans would fail. Thus, if the Service chooses not to follow its GYE grizzly bear management plans at

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<sup>25</sup> *Id.* at 13,178.

<sup>26</sup> 16 U.S.C. § 1531(b) (2012).

<sup>27</sup> *Grizzly Bear Proposed ESA Delisting*, *supra* note 2, at 13,208.

<sup>28</sup> *Id.* at 13,211.

<sup>29</sup> *Norton v. Southern Utah Wilderness Alliance*, 542 U.S. 55, 71 (2004).

<sup>30</sup> Andrew B. Erickson, *Grizzly Bear Recovery, Whitebark Pine, and Adequate Regulatory Mechanisms under the Endangered Species Act*, 42 ENVTL. L. 943, 968-73 (2012).

some point in the future, a federal remedy does not exist.<sup>31</sup> In effect, the Service is free to act with impunity to destroy grizzly bears and their habitats across the GYE should they chose to do so. Such unfettered control over GYE grizzly bear management presents the Service with a serious conflict of interest. It cannot objectively assess whether regulatory mechanisms are in place to protect GYE grizzly bears. The proposed rule does not reveal this conflict of interest. To remedy this problem, the Service should fully disclose its inability to neutrally assess whether adequate regulatory mechanisms exist, and consider whether a solution to this problem is possible.

### Conclusion

This comment conclusively demonstrates that the proposal to remove GYE grizzly bears from the List of Endangered and Threatened Wildlife needs further consideration. At a minimum, the Service should be open to the possibility that their estimate of GYE grizzly bears is erroneous. However, even if the Service's estimate is correct, the proposed rule does not adequately account for the potentially devastating effect of climate change on the GYE grizzly bear population. Finally, existing regulatory mechanisms that protect GYE grizzly bears are unenforceable as a matter of law, and thus the proposed rule gives the Service unfettered control to destroy GYE grizzly bears and their habitats. For these reasons, I urge the Service to reconsider its proposed rule to remove the GYE grizzly bear from the List of Endangered and Threatened Wildlife.

Yours sincerely,

Claire J. Hunter  
/s/Claire J. Hunter

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<sup>31</sup> *Id.* at 968.