



July 25, 2023

VIA EMAIL AND CERTIFIED MAIL

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RE: Supplemental Notice of Endangered Species Act Violations Over Unlawful Denial of Listing the Bridled Darter as an Endangered or Threatened Species

Dear Secretary Haaland, Director Williams, and Southeast Region Director Miranda-Castro:

This letter supplements our April 7, 2021 letter notifying the Secretary of the Interior (“Secretary”) and the U.S. Fish and Wildlife Service (“Service”) of violations of the Endangered Species Act (“ESA”) in denying listing protections for the bridled darter (*Percina kusha*).<sup>1</sup>

Our first letter informed the Service that it had violated the ESA by failing to follow the best available science, ignoring clear threats to the species’ survival and the lack of regulatory measures to address the threats, relying on false uncertainty, truncating how far into the future impacts were considered, and failing to properly consider whether the bridled darter is endangered or threatened in a significant portion of its range. This letter notifies the Service of additional ESA violations, including the Service’s unlawful reliance on the species’ persistence throughout its range while ignoring the uncertainty about its population abundance, arbitrarily minimizing the foreseeable future timeframe to only 20 years, ignoring the Service’s own analysis of future scenarios in which the agency predicted that it is likely that up to three populations will be extirpated, and failing to determine whether existing regulatory mechanisms are sufficient to protect the bridled darter from threats throughout its range.

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<sup>1</sup> U.S. Fish and Wildlife Service, 12 Month Finding on Petitions to List the Holiday Darter, Trispot Darter, and Bridled Darter, 82 Fed. Reg. 41,683 (Oct. 4, 2017).

## **STATUTORY FRAMEWORK**

The ESA is “the most comprehensive legislation for the preservation of endangered species ever enacted by any nation.”<sup>2</sup> It is intended to protect and recover species that the Service determines to be “endangered” or “threatened.”<sup>3</sup> The Service must list a species as “endangered” if it determines the species is “in danger of extinction throughout all or a significant portion of its range.”<sup>4</sup> The Service must list a species as “threatened” if it is “likely to become an endangered species within the foreseeable future in all or a significant portion of its range.”<sup>5</sup> The ESA defines “species” to include “subspecies” and “distinct population segments of any species of vertebrate fish or wildlife which interbreeds when mature.”<sup>6</sup>

Section 4 of the ESA permits interested parties to petition the Service to list species.<sup>7</sup> Upon receipt of a listing petition, the Service must make an initial finding within 90 days as to whether the petition presents “substantial information indicating that the petitioned action may be warranted,” and, if so, it must publish the finding and conduct a full scientific review of the species’ status.<sup>8</sup> The Service has 12 months from the date the petition is submitted to either issue a proposed regulation listing the species, make a “warranted, but precluded” finding, or issue a “not warranted” finding (thus, rejecting the petition).<sup>9</sup>

The Service must consider five factors when determining whether listing is warranted:

- (A) the present or threatened destruction, modification, or curtailment of a species’ habitat or range;
- (B) overutilization for commercial, recreational, scientific, or educational purposes;
- (C) predation or disease;
- (D) the inadequacy of existing regulatory mechanisms; and
- (E) other manmade or natural factors affecting the species’ continued existence.<sup>10</sup>

If the Service determines that a species meets the definition of “endangered” or “threatened” because of *any one or a combination* of these five factors, the Service must list the species.<sup>11</sup> The Service must evaluate these factors and make its listing determination “solely on the basis of the best scientific and commercial data available.”<sup>12</sup>

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<sup>2</sup> *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 180 (1978).

<sup>3</sup> 16 U.S.C. § 1533(a).

<sup>4</sup> *Id.* § 1532(6).

<sup>5</sup> *Id.* § 1532(20).

<sup>6</sup> *Id.* § 1532(16).

<sup>7</sup> *Id.* § 1533(b)(3)(A).

<sup>8</sup> *Id.*

<sup>9</sup> *Id.* § 1533(b)(3)(B).

<sup>10</sup> *Id.* § 1533(a)(1).

<sup>11</sup> *Id.*; 50 C.F.R. § 424.11(c); *see also Fed’n of Fly fishers v. Daley*, 131 F. Supp. 2d 1158, 1164 (N.D. Cal. 2000) (“These factors are listed in the disjunctive; any one or combination can be sufficient for a finding that a particular species is endangered or threatened.”).

<sup>12</sup> 16 U.S.C. § 1533(b)(1)(A).

## **ENDANGERED SPECIES ACT VIOLATIONS**

### **I. The Service violated Section 4 of the ESA by failing to follow the best available science.**

In finding the bridled darter “not warranted” for listing, the Service violated section 4 of the ESA by failing to rely solely on the best available scientific information and data. Instead, the Service relied on unsupported claims about the bridled darter’s continued persistence in historically occupied watersheds and the absence of population data for the species. As a result, the Service ignored the data showing that the bridled darter’s occupied habitat has been reduced 33 to 66 percent and that the bridled darter faces increasing threats from urbanization, loss of riparian areas, decreased water quality, severity of climate events, reduced connectivity, and other threats.<sup>13</sup> By denying protections based on current persistence, ignoring historic and ongoing threats to the species’ existence, the Service failed to rely on the best available scientific data regarding the current and future condition of the bridled darter.

By wrongly claiming that the bridled darter “continues to persist across its range,” the Service ignored evidence of likely extirpations within the foreseeable future. According to the SSA—the Service’s compilation of the best available science on the species—every population of bridled darter demonstrates low resiliency, redundancy, and representation—the metrics by which the Service determines whether the species is likely to persist.<sup>14</sup> The SSA details pervasive water quality issues, reduced connectivity, urbanization, agricultural threats, and severe climate events such as storms and droughts as threats contributing to the bridled darter’s low viability.<sup>15</sup> Many of these threats are expected to continue or increase in severity, further reducing the bridled darter’s viability and causing extirpations of at least two populations.<sup>16</sup> Already, the bridled darter’s abundance has been meaningfully reduced as habitat conditions worsen across its range.<sup>17</sup> The Service failed to explain how the bridled darter can be expected to persist despite the continued and likely increased threats, demonstrated by the best available scientific data.

As for the Service’s determination that data does not indicate a declining trend in abundance, the scientific literature cited by the Service does not conclude that the bridled darter’s trend in abundance is or is not declining. The uncertainty or the absence of data cannot support the implication that the bridled darter’s abundance is not declining.<sup>18</sup> As the Service itself acknowledged in the SSA, “[t]he inconsistent survey methodology and lack of standard collection records [] creates uncertainty in any analysis of trends or the ability to compare data across years.”<sup>19</sup> In fact, the only trend indicated by the literature is that the bridled darter’s occupancy extent has been shrinking across most watersheds within its range.<sup>20</sup> Further, the SSA

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<sup>13</sup> 82 Fed. Reg. 46183 (Oct. 4, 2017).

<sup>14</sup> *Id.* at 4.

<sup>15</sup> *Id.* at 17-24.

<sup>16</sup> *Id.* at 46, 57, 67.

<sup>17</sup> *Id.* at 3

<sup>18</sup> *Tucson Herpetological Soc’y v. Salazar*, 566 F.3d 870, 879 (9th Cir. 2009) (“If the science on population size and trends is underdeveloped and unclear, the Secretary cannot reasonably infer that the absence of evidence of population decline equates to evidence of persistence.”).

<sup>19</sup> 82 Fed. Reg. 46183 (Oct. 4, 2017).

<sup>20</sup> Species Status Assessment at 3.

notes that abundance may be overestimated due to inconsistencies in survey methodology and qualitative abundance measurements.<sup>21</sup> Because the best scientific or commercial data available does not show whether the bridled darter's abundance is stable or declining, the Service cannot rely on the presumption that the species is not declining to support its not-warranted finding.

Although the bridled darter presently occurs in all historically occupied watersheds, population data is minimal and narrow in scope, and what little data there is shows that the species' occupied habitat is shrinking as threats increase and that the threats and resulting degraded habitat conditions are expected to worsen.

Thus, in failing to rely on the best available scientific information and data about the current status and likely future condition of the bridled darter and its habitat, the Service's determination that the bridled darter is not endangered or threatened to become endangered in the foreseeable future violates this fundamental requirement of section 4 of the ESA.

## II. The Service Ignored and Contradicted Its Own Conclusions about the Foreseeable Future.

The Service contradicted its own predictions that the bridled darter is likely to be endangered in the foreseeable future and used an arbitrary timeframe of 20 years for its analysis by unlawfully asserting scientific uncertainty.

The ESA requires the Service to list a species as "threatened" if it "is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."<sup>22</sup> In 2009, the Department of Interior Solicitor issued a guidance interpreting the phrase "foreseeable future," concluding that the agency "has broad discretion with respect to what constitutes the foreseeable future...as long as the rationale is articulated."<sup>23</sup> The guidance clarified, however, that the appropriate timeframe for what is foreseeable may vary based on the species and the threats it faces, and so "the Secretary should not use an arbitrary 'default' time period that is either absolute (*e.g.*, 25 years) or based solely on the generation time of the species at issue."<sup>24</sup> The guidance also explicitly cautions against basing the foreseeable future timeframe on the species' generation time alone.<sup>25</sup>

As with abundance data, the Service similarly cannot rely on assertions of uncertainty. Courts have consistently held that the best available science standard "does not require that [the Service] act only when it can justify its decision with absolute confidence."<sup>26</sup> Rather, "[e]ven if the available scientific and commercial data were quite inconclusive, [the Service] may—indeed must—still rely on it."<sup>27</sup> Requiring the best available science, as opposed to scientific certainty,

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<sup>21</sup> *Id.* at 69.

<sup>22</sup> 16 U.S.C. § 1532(20).

<sup>23</sup> Office of the Solicitor, The Meaning of "Foreseeable Future" in Section 3(20) of the Endangered Species Act, M-37021 at 13-14 (Jan. 16, 2009).

<sup>24</sup> *Id.* at 14.

<sup>25</sup> *Id.* at 14-15.

<sup>26</sup> *Ariz. Cattle Growers' Ass'n v. Salazar*, 606 F.3d 1160, 1164 (9th Cir. 2010), *cert denied*, 131 S. Ct. 1471 (2011).

<sup>27</sup> *Sw. Ctr. For Biological Diversity v. Babbitt*, 215 F.3d 57, 60 (D.C. Cir. 2000).

“is in keeping with congressional intent” that the Service “take preventive measures *before* a species is ‘conclusively’ headed for extinction.”<sup>28</sup>

Here, the Service’s “not warranted” finding entirely ignored its own predictions of future scenarios detailed in the SSA. In the SSA, the Service described three plausible future scenarios, considering variations in urbanization and climate change, to predict “the range of likely viability outcomes that the bridled darter will exhibit by the end of 2070”—a foreseeable future timeframe of 50 years.<sup>29</sup> Indeed, the SSA goes as far as determining the confidence of the “Status Quo” and “Worst Case” scenarios as both being “likely” (70 to 90 percent certainty) to occur in the next 50 years. The Service based these confidence determinations on the Intergovernmental Panel on Climate Change reports, urbanization future models, and its own determinations for how the species will respond to these different conditions.<sup>30</sup>

The Service’s “not warranted” finding only considered the Status Quo scenario despite it being as likely to occur as the Worst Case scenario, in which the Service predicted a 250 percent increase in urbanization with little-to-no conservation measures implemented.<sup>31</sup> Carbon emissions are expected to increase above 2017 levels, leading to a higher probability in catastrophic weather events impacting the bridled darter.<sup>32</sup> Under this scenario, three of the current six populations are expected to be extirpated.<sup>33</sup> The resiliency, redundancy, and representation of the surviving populations will be severely reduced due to population losses and habitat loss contracting the range to its most extreme upstream reaches.<sup>34</sup> The Service did not attempt to explain why this situation, which it determined to be “likely” to occur in 50 years, did not warrant listing the bridled darter as endangered or threatened.

The Service also directly contradicted the Solicitor’s guidance by arbitrarily using a “default” 20-year “foreseeable future” timeframe for the bridled darter based on claimed scientific uncertainty. 20 years falls far short of the Service’s own 50-year “likely” predictions regarding climate change and urbanization and how the bridled darter will respond to these varied conditions.<sup>35</sup>

Without explaining why it was ignoring its own scientific predictions about the foreseeable future for the bridled darter, the Service truncated the foreseeable future in the “not warranted” finding based instead on the bridled darter’s short life span (2 to 3 years) and claimed “lack of evidence of threats directly impacting the species creat[ing] uncertainty when predicting the species’ response to threats into the future.”<sup>36</sup> The Service asserted that “[f]orecasting beyond

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<sup>28</sup> *Defenders of Wildlife v. Babbitt*, 958 F. Supp. 670, 679-80 (D.C. Cir. 2000).

<sup>29</sup> Species Status Assessment at 46.

<sup>30</sup> *Id.* at 46-47, 70.

<sup>31</sup> *Id.* at 46.

<sup>32</sup> *Id.* at 64.

<sup>33</sup> *Id.*

<sup>34</sup> *Id.* at 68.

<sup>35</sup> *Id.* at 46.

<sup>36</sup> 82 Fed. Reg. 46183 (Oct. 4, 2017).

eight to ten generations would be speculative” and that there is not “robust population data that could predict how the bridled darter may respond to threats beyond a 20-year timeframe.”<sup>37</sup>

As such, the Service’s finding that the bridled darter is not likely to become endangered in the foreseeable future is arbitrary and capricious and in violation of the ESA.

III. The Service Failed to Determine Whether Existing Regulatory Mechanisms Are Adequate to Protect the Bridled Darter.

The Service also failed to determine whether existing regulatory mechanisms are adequate to protect the bridled darter. The Service failed to meaningfully explain how federal public land management practices by the U.S. Forest Service are adequate to protect the bridled darter, given its vulnerability to stochastic events and expected reduction or extirpation in downstream habitats. To determine whether a species is endangered or threatened, the Service must consider “the inadequacy of existing regulatory mechanisms.”<sup>38</sup>

Here, the Service concluded that the Forest Service’s land management practices in the upstream-most reaches of the bridled darter’s range in the headwaters of the Etowah and Conasauga will “benefit the species” such that it is able to persist in upstream portions of its range.<sup>39</sup> However, the Service failed to explain how federal land management upstream can be expected to protect the bridled darter from habitat loss and population declines in downstream habitats that face the greatest threats from urbanization and agriculture. Despite these significant and unabated downstream risks, the Service concluded that because the bridled darter will persist in only the furthest upstream, protected portions of its range, listing was not warranted.

As a species with naturally small and isolated populations, the bridled darter is inherently vulnerable to stochastic events. As climate change increases the likelihood and severity of extreme weather events, the risk of extinction is even greater. The Service failed to explain how when resigning the bridled darter to only a few populations in a heavily constricted range, relying on the Forest Service’s land management practices could adequately protect the species from endangerment when its downstream populations will likely be severely reduced or extirpated, and the remaining populations even more vulnerable to severe weather, changing climate conditions, and other stochastic events.

Thus, in failing to consider whether regulatory measures are adequate to protect the bridled darter, the Service has further violated section 4 of the ESA.

**CONCLUSION**

If the Service does not remedy the violations of the ESA outlined in this letter, as well as those described in our April 7, 2021 letter, the Center intends to pursue legal action.

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<sup>37</sup> *Id.*

<sup>38</sup> 16 U.S.C. § 1533(a)(1)(D).

<sup>39</sup> 82 Fed. Reg. 46183 (Oct. 4, 2017).

Please contact me if you would like to discuss this matter.

Sincerely,

A handwritten signature in black ink, reading "Margaret E. Townsend". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

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