

90-DAY FINDING PETITION REVIEW FORM

LISTING AS A THREATENED OR AN ENDANGERED SPECIES

Federal Docket No. FWS-R8-ES-2023-0256

90-DAY FINDING ON A PETITION TO LIST THE TECOPA BIRD'S BEAK (*Chloropyron tecopense*) UNDER THE ENDANGERED SPECIES ACT AS A THREATENED OR ENDANGERED SPECIES

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

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 regulations provide that, for a petition to meet the “substantial scientific or commercial information” standard, we must determine in the 90-day petition finding that the petition includes “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)(1)(i)).

The Act and our regulations are clear that the responsibility is squarely on the petitioner to present the requisite level of information to meet the substantial information test to demonstrate that the petitioned action may be warranted. This means that the petitioner must not only present credible information that threats may be present; they also need to present credible information concerning a species’ documented or likely response to that threat, and that the species’ response is to such a level that listing or uplisting may be warranted. Where the petitioner has failed to do so, we should make a not-substantial finding on the petition -- we should not augment their petition with our own knowledge or other information we are aware of. If we are aware of species that may be in danger of extinction, we should undertake a status review on our own accord, regardless of the receipt of a petition.

Our regulations further state that we will consider whether a petition presents a complete and balanced representation of the relevant facts when making our finding of whether a petition presents substantial information that the requested action may be warranted. Thus, if we find that a petition cherry-picked information, ignored relevant and readily available information, and presented a biased and incomplete representation of facts, we should consider whether the petition has met the requirement to present substantial information (see instructions below for more information).

We note that designating critical habitat is not a petitionable action under the Act. Petitions to designate critical habitat (for species without existing critical habitat) are reviewed under the Administrative Procedure Act and are not addressed here. See 50 C.F.R. § 424.14(j). To the maximum extent prudent and determinable, any proposed critical habitat will be addressed concurrently with a proposed rule to list a species, if applicable.

Petition History

On September 26, 2023, we received a petition from the Center for Biological Diversity, requesting that Tecopa bird's beak (*Chloropyron tecopense*) be listed as a threatened species or an endangered species and critical habitat be designated for this species under the Act. The petition clearly identified itself as such and included the requisite identification information for the petitioner, required at 50 CFR 424.14(c). This finding addresses the petition.

Evaluation of a Petition to List the Tecopa bird's beak as an Endangered or Threatened Species Under the Act

Species and Range

Does the petition present substantial information that the petitioned entity may be a listable entity (i.e., a species, subspecies, or distinct population segment)?

Yes

No

Tecopa bird's beak (*Chloropyron tecopense*)

Historical range: Esmeralda and Nye Counties in Nevada, Inyo and San Bernardino Counties in California

Current range: Esmeralda and Nye Counties in Nevada, Inyo County in California

The petition references Munz and Roos (1950) which first described the species. Tecopa bird's beak is a recognized species by the Integrated Taxonomic Information System (<http://itis.gov>).

Statutory and Regulatory Standards for Evaluation of the Petition

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 the 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 Petition

When evaluating a petition, we assess the information in the petition and the sources that it includes as references. While we 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, we do not use readily available information to bolster the petition, should the petitioner fail to provide substantial information, because the Act requires that we make a finding as to whether the petition itself presents substantial information indicating that the petitioned action may be warranted. Our implementing regulations at 50 CFR 424.14(h)(1)(i) state that 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 that the petition supports with 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 petition, 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 consider existing regulatory mechanisms in conjunction with each relevant claim presented in the petition.

To complete our analysis for a 90-day finding on a petition to list or uplist, we first identify the claims in the petition that are supported by credible information indicating that a potential threat is occurring or is likely to occur within the species' range. After identifying the claims that are supported by credible information that a threat is occurring or likely to occur, we next determine whether the petition has presented credible information that those threats affect the species at a population or species level, after taking into account any mitigating actions or conditions that may ameliorate those threats, such that the petitioned action may be warranted. If we find that the petition does not present substantial information that the petitioned action may be warranted based on the information provided regarding the status and trends of the species or on one or more factors, we consider the cumulative impact of all of the threats that are supported by credible information.

After evaluating the petition and the credible information it provides in support of these claims, we make a 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." Our evaluation assesses the extent to which the credible information in the petition indicates that a reasonable person would conclude that the petitioned action may be warranted.

Claims Addressing Threats

We first assess whether the petition supported its claims with credible information (i.e., whether the petition has presented 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 the supporting information indicates that the threat is occurring or is likely to occur in the future and that the species may be exposed to it, we then assess whether the petition presented credible information that reasonably indicates the presence of negative effects on the species as a whole.

If the petition did not present credible information indicating population-level effects, our analysis of that individual threat presented in the petition is complete, as there would be no species-level effects; we may then analyze that threat later if we need to evaluate cumulative effects. If the credible information about the particular threat indicates species-level effects, our analysis of that individual threat presented in the petition is complete. If the credible information about the particular threat does not indicate species-level effects but does indicate population-level effects,

we assess the extent to which the credible information in the petition indicates that the scale of the effects of that threat are such that a reasonable person would conclude that listing or uplisting may be warranted.

If we find that there is credible information indicating that threats are having or are likely to have a negative effect on the species as a whole, such that a reasonable person would conclude that listing may be warranted, 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. A positive 90-day petition finding does not indicate that the petitioned action is warranted. Such a finding indicates only that the petition presents substantial information that the petitioned action may be warranted and that a full review should occur.

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

<p>Threat or Activity</p>	<p>Exposure. Is the claim of the threat in the petition supported by credible scientific and commercial information? Does the petition support the claim that there is a potential threat and it is occurring or is likely to occur within the range of the species? If no, explain. If yes, include brief summary statement and citations to the credible information.</p>	<p>Response (Populations/Species). Do the claims and the supporting information indicate negative effects such that listing or uplisting may be warranted? Yes or no. Explain and describe below.</p>
<p>Hydrological alteration and groundwater extraction from agriculture and exurban sprawl (Factor A)</p>	<p>Yes. The petition presents credible information that hydrological alteration and groundwater extraction is occurring and presents threats to groundwater quantity and quality (Rohde et al. 2020, p. 4; NDWR 2023a, entire; Halford & Jackson 2020, p. 108) within the species’ range and within locations where the species is likely to occur. The petition claims that groundwater drawdown in or near Tecopa bird’s beak habitat is due to overpumping for agricultural and exurban use (Halford & Jackson 2020, p. 2, 108). There are eight locations that currently support Tecopa bird’s beak; three of which occur in Fish Lake Valley in NV and five that occur in the Amargosa River Basin in CA and NV.</p> <p>The petition claims that groundwater extraction rates in the Fish Lake Valley hydrographic basin exceed the annual rate of recharge (Esmeralda County 2022, pp. 48, 50) that have resulted in over 75 feet of cumulative drawdown. The petition claims that most of the groundwater extracted in the Fish Lake Valley is pumped for agricultural irrigation (NDWR 2019, p. 8), and this has altered Tecopa bird’s beak habitat (Rush & Katzer 1973, p. 49). The petition claims that groundwater monitoring shows that multiple</p>	<p>Yes. The petition presents credible information about potential negative population-level effects (such as occurrence extirpation) due to decreased shallow groundwater availability throughout the species range. The petition claims that hydrological alteration and groundwater extraction for agricultural and exurban use may have negative effects on groundwater quantity, which may reduce or eliminate Tecopa bird’s beak habitat by removing the shallow groundwater necessary to sustain its habitat (Rohde et al. 2020, p. 4).</p> <p>The petition presents credible information that this species is entirely reliant on the sustained availability of shallow groundwater and is vulnerable to localized extinction when these habitats experience hydrological changes caused by groundwater extraction and other disturbances (Fraga et al. 2023, p. 19). As localized hydrology has changed, localized occurrences of Tecopa bird’s beak have become extirpated, as documented in one occurrence in Tecopa Hot Springs where road construction diverted groundwater availability from part of a population (Fraga et al. 2023, p. 19).</p> <p>The petition presents credible information that existing conservation efforts and regulatory mechanisms may be inadequate to ameliorate this threat. The Tecopa bird’s beak is found almost entirely on Federal lands including public lands managed by the Bureau of Land Management (BLM) and Ash Meadows National Wildlife Refuge. It also occurs on land managed by the California Department of Fish</p>

<p>groundwater flowpaths to Tecopa bird's beak habitat are experiencing declining groundwater levels (NDWR 2023a, 2023b, 2023c, entire).</p> <p>The petition claims that groundwater extraction rates in the Amargosa River Basin are also over-appropriated by 2,744 acre feet per year (DWR 2023d, entire; DWR 2023e, entire; DWR 2023f, entire) and exceeds the recharge rate. The petition claims that these rates are causing significant groundwater drawdown in Tecopa bird's beak habitat in the Amargosa River Basin. The petition claims that, under current pumping trends, declining groundwater levels will dry up significant portions of wetlands at Ash Meadows (Nelson & Jackson 2020, p. 14, 16, 17). The petition claims that, under increased future pumping scenarios, groundwater levels will cumulatively decline by 0.1 to 10 feet below the declines expected under the status quo pumping levels across Tecopa bird's beak habitat in Ash Meadows (Nelson & Jackson 2020, p. 20, 22, 25). The petition also claims that the Shoshone Slough is expected to dry up under the status quo pumping scenarios (Nelson & Jackson 2020, p. 17), leading to the extirpation of Tecopa bird's beak at that occurrence.</p>	<p>and Wildlife. The BLM lists the species as a sensitive species in Nevada (BLM 2017, p. 40) and in California (CNPS 2023), but this designation does not automatically protect the availability of groundwater for Tecopa bird's beak. BLM must consider sensitive species in National Environmental Policy Act documents when evaluating proposed actions (BLM 2008, p. 37), but the responsible official may still authorize impacts to occur. Bird's beak locations on public lands may not be protected from offsite groundwater withdrawals.</p>
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Cumulative Effects of Claims Supported by Credible Information

Because we have found that the petition presented substantial information that one or more threats are having an impact on the species to the point that the species' status may have changed, the petition presents substantial information indicating that the species may warrant listing. 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

In accordance with 50 CFR 424.14 (h)(1)(iii), the "substantial scientific or commercial information" standard must be applied in light of any prior reviews or findings the Services have made on the listing status of the species that is the subject of the petition. We identified the Tecopa bird's beak (formerly *Cordylanthus tecopensis*) as a Category 2 candidate species for listing in the September 30, 1993, Annual Candidate Notice of Review (58 FR 51159). In the February 28, 1996, Annual Candidate Notice of Review (61 FR 7596), we announced our discontinuation of the designation of Category 2 species as candidates, which removed the species from the candidate list. We finalized our decision to discontinue the practice of maintaining a list of Category 2 species on December 5, 1996 (61 FR 64481).

We reviewed the information provided by the petitioners and have determined the petition presented credible information to support impacts to the species as a whole such that the species may warrant listing. The petitioner provided credible information indicating potential threats to Tecopa bird's beak from hydrological alteration and groundwater extraction related to agriculture and exurban sprawl (Factor A). The petitioner also provided credible information that the existing regulatory mechanisms may be inadequate to address that potential threat (Factor D). The petitioners also presented claims about off-road vehicles, non-native ungulate grazing, herbivory, climate change, and invasive species, as well as other potential effects from geothermal power production and mineral exploration and development, as potential threats to Tecopa bird's beak, which we will evaluate during our 12-month finding.

Petition Finding

Substantial Finding:

We reviewed the petition, sources cited in the petition, and other readily available information (within the constraints of the Act and 50 CFR 424.14(h)(1)). We considered the credible information that the petition provided regarding effects of the threats that fall within factors under the Act's section 4(a)(1) as potentially ameliorated or exacerbated by any existing regulatory mechanisms or conservation efforts. Based on our review of the petition and readily available information regarding hydrological alteration and groundwater extraction related to agriculture and exurban sprawl (Factor A), we find that the petition presents substantial scientific or commercial information indicating that listing Tecopa bird's beak (*Chloropyron tecopense*) as a threatened species or an endangered species may be warranted. The petitioners also presented information suggesting off-road vehicles, non-native ungulate grazing, herbivory, climate change, and invasive species, as well as other potential effects from geothermal power production and mineral exploration and development, may be threats to the Tecopa bird's beak. 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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