

CALIFORNIA FISH AND GAME COMMISSION NOTICE OF FINDINGS

NOTICE IS HEREBY GIVEN that, pursuant to the provisions of Fish and Game Code Section 2074.2, the California Fish and Game Commission, at its April 10, 2008, meeting in Bodega Bay, rejected the petition filed by the Center for Biological Diversity to list the American pika (*Ochotona princeps*) as a threatened species based on a finding that the petition did not provide sufficient information to indicate that the petitioned action may be warranted. At this meeting, the Commission also announced its intention to ratify its findings.

NOTICE IS ALSO GIVEN that, at its June 27, 2008, formal meeting in Upland, the Commission adopted the following formal findings outlining the reasons for the rejection of the petition.

I BACKGROUND

August 22, 2007. The Commission office received a petition from the Center for Biological Diversity (CBD) to list the American pika as threatened under the California Endangered Species Act (CESA).

August 30, 2007. The Commission office referred the petition to the Department of Fish and Game (Department) for review and analysis pursuant to Section 2073.5 of the Fish and Game Code.

September 10, 2007. The Commission submitted a notice of receipt of the petition, for publication in the California Regulatory Notice Register, as well as for mailing to interested and affected parties.

September 13, 2007. The Department submitted a written request for a 30-day extension to evaluate the petition.

October 12, 2007. The Commission approved the Department's request for a 30-day extension to evaluate the petition.

December 21, 2007. The Department submitted its written evaluation of the petition.

February 7, 2008. The Commission announced receipt of the Department's evaluation of the petition to list the American pika as threatened and indicated its intent to consider the petition, the Department's evaluation, and public comments at the March 6-7, 2008 meeting.

March 4, 2008. The Commission office received a 25-page letter from CBD in rebuttal to the Department's evaluation. Six additional exhibits were appended to this letter.

March 7, 2008. The Department discussed its evaluation of the petition at the Commission's March meeting. The Commission took comments on the petition and the Department's evaluation. Because of the additional information submitted by CBD, the Commission continued consideration of the petition to the April 10-11 meeting in Bodega Bay.

April 8, 2008. The Commission office received an e-mail message from Mr. Brian Nowicki of CBD, with four attachments pertaining to the American pika.

April 10, 2008. The Commission considered the petition and took additional comments related to it and the Department's evaluation. At this meeting the Commission rejected the petition, finding that it did not contain sufficient information to indicate the petitioned action may be warranted. Staff was directed to prepare a draft statement of Commission findings pursuant to Fish and Game Code Section 2074.2.

II STATUTORY REQUIREMENTS

A species is endangered under CESA (Fish and Game Code Section 2050 et seq.), if it "is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, over exploitation, predation, competition, or disease." (Fish & G. Code, § 2062.) A species is threatened under CESA if it is "not presently threatened with extinction [but] is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by [CESA]..." (Fish & G. Code, § 2067.) Responsibility for deciding whether a species should be listed as endangered or threatened rests with the Commission (Fish & G. Code, § 2070).

California law does not define what constitutes a "serious danger" to a species, nor does it describe what constitutes a "significant portion" of a species' range. The Commission makes the determination as to whether a species currently faces a serious danger of extinction throughout a significant portion of its range, (or for a listing as threatened whether such a future threat is likely) on a case-by-case basis after evaluating and weighing all the biological and management information before it. This approach is consistent with the process followed by federal agencies in deciding whether to list species under the Federal Endangered Species Act (16 U.S.C. § 1531 et seq).

Non-emergency listings involve a two-step process. First, the Commission "accepts" a petition to list the species, which immediately involves regulatory protections by establishing the species as a candidate for listing and triggers a year-long study by the Department of the species' status (Fish & G. Code, §§ 2074.2, 2074.6, and 2084). Second, the Commission considers the Department's status report and information provided by other parties and makes a final decision to formally list the species as endangered or threatened (Fish & G. Code, § 2075.5).

To be accepted by the Commission, a petition to list a species under CESA must include sufficient scientific information that the listing may be warranted. (Fish & G. Code, § 2072.3, Cal. Code Regs., tit. 14, § 670.1, subds. (d) and (e)). The petition must also include information regarding the species' population trend, range, distribution, abundance and life history; factors affecting the species' ability to survive and reproduce; the degree and immediacy of the threat to the species; the impact of existing management efforts; suggestions for future management of the species; the availability and sources of information about the species; information about the kind of habitat necessary for survival of the species; and a detailed distribution map (Fish & G. Code, § 2072.3, Cal. Code Regs., tit. 14, §670.1, subd. (d)(1)).

Upon acceptance by the Commission, a petition is forwarded to the Department for analysis. Within 90 days of receipt, the Department shall submit to the Commission an evaluation report of the petition and other available information (Fish & G. Code, § 2072.3), including a recommendation on whether the petitioned action is warranted. The Department may request and be granted a time extension of up to 30 additional days to submit the evaluation report. After public release of the Department's evaluation report (Fish & G. Code, § 2074), the

Commission will schedule the petition for consideration. In deciding whether it has sufficient information to indicate the listing may be warranted, the Commission is required to consider the petition itself, the Department's written evaluation report, and other comments received about the petitioned action (Fish & G. Code, § 2074.2).

The requisite standard of proof to be used by the Commission in deciding whether listing may be warranted (i.e. whether to accept or reject a petition) was described in *Natural Resources Defense Council v. Fish and Game Commission* (1994) 28 Cal. App.4th 1104. In the *NRDC* case, the court determined that "the section 2074.2 phrase 'petition provides sufficient information to indicate that the petitioned action may be warranted' means that amount of information, when considered in light of the Department's written report and the comments received, that would lead a reasonable person to conclude there is a substantial possibility the requested listing could occur..." (*NRDC*, supra, 28 Cal. App. 4th at page 1125.) This "substantial possibility" standard is more demanding than the low "reasonable possibility" or "fair argument" standard found in the California Environmental Quality Act, but is lower than the legal standard for a preliminary injunction, which would require the Commission to determine that a listing is "more likely than not" to occur. (*Ibid.*)

The *NRDC* court noted that this "substantial possibility" standard involves an exercise of the Commission's discretion and a weighing of evidence for and against listing, in contrast to the fair argument standard that examines evidence on only one side of the issue. (*NRDC*, supra, 28 Cal. App. 4th at page 1125.) As the Court concluded, the decision-making process involves:

...a taking of evidence for and against listing in a public quasi-adjudicatory setting, a weighing of that evidence, and a Commission discretion to determine essentially a question of fact based on that evidence. This process, in other words, contemplates a meaningful opportunity to present evidence contrary to the petition and a meaningful consideration of that evidence." (*Id.* at 1126.)

Therefore, in determining whether listing "may be warranted," the Commission must consider not only the petition and the report prepared on the petition by the Department, but other evidence introduced in the proceedings. The Commission must decide this question in light of the entire record.

III REASON FOR FINDING

This statement of reasons for the finding sets forth an explanation of the basis for the Commission's finding and its rejection of the petition to list the American pika as a threatened species. It is not a comprehensive review of all information considered by the Commission and for the most part does not address evidence that, while relevant to the proposed listing, was not at issue in the Commission's decision. However, all written and oral comments presented to the Commission regarding the petition are considered part of the record.

In order to accept this petition, the Commission is required to determine that it has information to persuade a reasonable person that there is a substantial possibility that the American pika will be listed. As the decision in the NRDC case makes clear, the Commission must critically evaluate and weigh all evidence, and this process does not allow the Commission to resolve all uncertainties in favor of either the proponents or opponents of the listing. The Commission may deal with data gaps by drawing inferences based on available information or by relying on expert opinion that the Commission finds persuasive, but in the end the petition and other information presented to the Commission must affirmatively demonstrate the species meets the criteria for protection as a candidate species.

Fish and Game Code Section 2072.3 provides there are several factors to be considered in determining whether a petition should be accepted. The informational deficiencies and factors of Section 2072.3 most relevant to this finding are:

- (1) Population trend;
- (2) Population abundance; and
- (3) Degree and immediacy of threat.

1. **Population Trend:**
2. **Population Abundance:**

The petition contains minimal information on population abundance, density or trends. The petition reports that "... pika populations have been lost from multiple low-elevation sites in Yosemite National Park during the past 90 years". Otherwise, it reports no information regarding population numbers, except for the White Mountains (*O. p. sheltoni*) subspecies. While it appears that annual surveys recently occurred within Bodie State Historical Park (Nichols, personal communication to Gustafson, 2007), results are not reported in the Population Status portion of the petition.

The Commission finds that the population status of the American pika in California is largely unstudied and unknown. There have been no systematic, comprehensive, rangewide studies of pikas in California. Parameters to describe abundance, density, recruitment and population trends are unknown or unavailable. The petition's statement that populations were lost from multiple low-elevation sites in Yosemite was discredited, based on a statement from a key researcher in the Yosemite National Park pika study that pika populations appeared healthy (Patton, personal communication).

Petitioners assert that because of the lack of monitoring information, a rationale for listing should not depend on showing that population status is declining in California. Instead, petitioners argue that global warming poses a threat to the long term survival of pikas in California and listing is justified because:

1. the pika is a unique mammal and extremely vulnerable to high temperatures;
2. upper elevation habitat for California pikas has experienced significant temperature increases, making it less suitable;
3. pika range in California is contracting upslope;
4. a recent study (Beever et al., 2003) reported pika population extirpations at six Oregon and Nevada locations within the Great Basin ecoregion and attributed extirpations to thermal stress from climate change; and
5. pikas in California are threatened by continued habitat alteration due to climate change.

Petitioners described potential broad scale effects of climate change on wildlife and plant communities of the Sierra Nevada ecoregion, and have cited sources to establish the vulnerability of pikas to high temperatures. However, the petition does not discuss the potential for behavioral adaptations in pikas as a method of mitigating at least some anticipated effects of global warming. This is especially relevant because pika populations at lower elevations (such as Bodie State Historical Park) apparently reduce mid-day activity as a means avoiding the heat.

The petition also asserts that upper elevation habitat for California pikas has experienced significant temperature increases and is now less suitable, because pika range in California is contracting upslope. However the petition's evaluation of microhabitat conditions at upper elevation habitat is inadequate, especially subalpine microclimate conditions related to temperature. The petition does not definitively establish that pika distribution in California has contracted (or is contracting) upslope. Moreover, the petition does not establish that upslope habitat in California is significantly limited in its availability or quality, to the extent that an upslope shift in distribution would be expected to constitute a threat to pika populations statewide.

Most important, the petition apparently attempts to use habitat conditions and population trends in the Great Basin ecoregion as proxies to predict the demise of pikas in the Sierra Nevada ecoregion of California. It does so without adequately comparing or contrasting these ecoregions. It is erroneous to assume that because they are adjacent to one another, these ecoregions are similar in terms of pika habitat suitability. Because of the availability of suitable, continuous high-elevation habitat, distribution of pikas along the Sierra Nevadas may be much more continuous than within the Great Basin. The petition fails to acknowledge or discuss this, and the Commission is not persuaded that the decimation of some pika populations in the Great Basin constitutes sufficient information to warrant listing pikas within the Sierra Nevada ecoregion in California.

Fish and Game Code Section 2072.3 clearly states that the petition must provide information about species' abundance and population trend. It is interesting to note that abundance and population trend information is available for other subspecies of pika in Alaska and China. This petition is clearly deficient in providing sufficient scientific information on both population trend and abundance.

3. **Degree and immediacy of threat:**

The lack of population abundance and trend information in the petition compounds the discussion of purported threats to the American pika. Without a reliable population estimate, realistic assessment of the scope of the threat to the species is impossible. Most listings of other species by the Commission were clearly documented by utilizing population size to show dramatic and measurable declines caused by the lack of protections. Some listings of species looked to small population size initially to show the need for immediate protection.

The petition lacks empirical data to describe population trend and abundance. Instead, petitioners implicitly assume that extirpations of pika populations in the Great Basin are predictive of similar occurrences within the Sierra Nevada ecoregion. It is not reasonable to accept such an assumption without a comparison of similarities and differences between the Sierra Nevada and Great Basin ecoregions. Thus, in discussing purported threats to the American pika as a result of climate change, the petition is speculative and fails to persuade the Commission of imminent adverse effects of not listing pikas.

Fish and Game Code Section 2072.3 explicitly requires the presentation of sufficient credible information on the questions of degree and immediacy of threat and the impact of existing management efforts. Section 2072.3 provides that "Petitions shall include information regarding...the degree and immediacy of threat, the impact of existing management efforts..." The petition lacks sufficient information on the degree and immediacy of threat component of the statute under current conditions.

IV
FINAL DETERMINATION BY COMMISSION

The Commission has weighed all the scientific and general evidence in the petition, the Department's written report, and written and oral comments received from members of the public. Based upon that evidence, the Commission has determined that, although there may be some reason for concern, the petition provides insufficient evidence to persuade the Commission that the petitioned action may be warranted (Fish and Game Code Section 2074.2). In making this determination the Commission finds that the petition does not provide sufficient information in the categories of population trend, abundance, and degree and immediacy of threat to find that the petitioned action may be warranted. The Commission also finds that the petition provided insufficient information range-wide regarding population trends and abundance and immediacy of threat for the Commission to adequately assess the threat and conclude that there was a substantial possibility that the species will qualify for listing.

Fish and Game Commission

Dated: June 27, 2008

John Carlson Jr.,
Executive Director