

## 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 June 24, 2009, meeting in Woodland, California, set aside its June 27, 2008, written findings in support of its decision to reject the petition filed by the Center for Biological Diversity to list the American pika (*Ochotona princeps*) as a threatened species. The Commission reconsidered the petition and rejected it 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 October 1, 2009, meeting in Woodland, California, the Commission adopted findings outlining the reasons for its rejection of the petition.

NOTICE IS ALSO GIVEN that, at its April 7, 2010, meeting in Monterey, California, the Commission adopted the following findings outlining the reasons for its rejection of the petition and which supersede the findings adopted at the October 1, 2009 meeting.

### 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 Fish and Game Code Section 2073.5.

**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 meeting. The Commission took comments on the petition and the Department's evaluation.

Because of the additional information submitted by CBD, the Commission continued its 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.

**August 19, 2008.** CBD filed a Petition for Writ of Mandate in San Francisco Superior Court challenging the Commission's decision to reject the petition.

**May 11, 2009.** San Francisco Superior Court Judge Peter Busch issued a writ of mandate directing the Commission to set aside its June 27, 2008 findings rejecting the petition to list the American pika and reconsider its action in light of the court's judgment.

**May 19, 2009.** The Commission office received a 17-page letter from CBD requesting that the Commission take into account the information in the letter when reconsidering the petition.

**June 24, 2009.** The Commission considered the petition and took additional comments related to it. At this meeting, the Commission set aside its June 27, 2008 written findings in support of its decision to reject the petition. At this meeting, the Commission also reconsidered and rejected the petition without prejudice, 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. At this meeting, the Commission also decided and announced that any additional evidence submitted by CBD, including its May 19, 2009 letter, should be submitted to the Commission as part of any new petition CBD chooses to submit.

**October 1, 2009.** The Commission adopted findings outlining the reasons for its rejection of the petition.

## II STATUTORY REQUIREMENTS

A species is endangered under CESA (Fish and Game Code § 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.

Non-emergency listings involve a two-step process. First, the Commission "accepts" a petition to list the species, which immediately triggers regulatory protections by establishing the species as a candidate for listing and triggers up to a twelve-month study by the Department of the species' status. (Fish & G. Code, §§ 2074.2, 2074.6.) 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 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).)

Within ten days of receipt by the Commission, a petition is forwarded to the Department for analysis. (Fish & G. Code, § 2073.) Within 90 days of receipt, the Department submits to the Commission an evaluation report of the petition and other available information (Fish & G. Code, § 2073.5), including a recommendation on whether the petitioned action may be 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 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.4<sup>th</sup> 1104 (*NRDC* case). 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...." (*Id.*, at p. 1125.) This "substantial possibility" standard is more demanding than the "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. (*Id.*, at p. 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 p. 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.

In *Center for Biological Diversity v. California Fish and Game Commission* (2008) 166 Cal.App.4th 597, the court acknowledged that "the Commission is the finder of fact in the first instance in evaluating the information in the record." (*Id.*, at p. 611, citing *NRDC, supra*, 28 Cal.App.4th at p. 1125.) The court explained:

[T]he standard, at this threshold in the listing process, requires only that a substantial possibility of listing could be found by an objective, reasonable person. The Commission is not free to choose between conflicting inferences on subordinate issues and thereafter rely upon those choices in assessing how a reasonable person would view the listing decision. Its decision turns not on rationally based doubt about listing, but on the absence of any substantial possibility that the species could be listed after the requisite review of the status of the species by the Department[.]

(*Ibid.*) Thus, without choosing between conflicting inferences, the Commission must objectively evaluate and weigh the information both for and against the listing action and determine whether there is a substantial possibility that the listing could occur. (*Id.*, at p. 612.)

### III REASONS 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 prior to its April 10, 2008 meeting regarding the petition are considered part of the record.

In order to accept this petition, the Commission is required to determine that it has sufficient information to persuade a reasonable person that there is a substantial possibility that listing of the American pika could occur. Guided by the *NRDC* and *Center for Biological Diversity* cases, the Commission must objectively weigh and evaluate all evidence.

Fish and Game Code Section 2072.3 lists several informational categories to be evaluated in determining whether a petition should be accepted. The petition and record as a whole were insufficient to demonstrate that the listing action could occur.

The informational deficiencies and categories of information described in 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 near-annual surveys have occurred within or near Bodie State Historic Park (Nichols, personal communication to Gustafson, 2007), these surveys are not sufficient to conclude that listing of this subspecies may be warranted. Among its deficiencies, the survey results are not reported in the Population Status portion of the petition, the methodology and survey site selection is not adequately described, the information presented has not been independently verified, confirmed or peer-reviewed, and the scope and context of the surveys in relation to the entire Bodie Hills area is unclear, particularly since Dr. Nichols still observed pikas in Bodie State Historic Park.

The petition does not describe the overall geographic range of the pika in California or the geographic range of any of the five subspecies found in the State. The petition provides no information on the distribution of the pika within its California geographic range, other than to say that elevations of historic populations [in California] ranged from 1370 [meters] to 3700 [meters]. The petition provides no information or description on any overall trend in the size or distribution of populations of the pika in California or of populations of four of the five subspecies occurring in the State.

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, and the petition does not contain sufficient information about the American pika throughout all or a significant portion of its range in California. Parameters to describe abundance, density, recruitment and population trends are unknown or unavailable. Further, the petition's statement that populations were lost from multiple low-elevation sites in Yosemite was not justified, according to a key researcher in the Yosemite National Park pika study, who stated that pika populations appeared healthy (Patton, personal communication).

Petitioner asserts 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, petitioner argues 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.

Petitioner described potential broad scale effects of climate change on wildlife and plant communities of the Sierra Nevada ecoregion, and has 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 of 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 adequately demonstrate that pika distribution in California has contracted (or is contracting) upslope. Moreover, the petition does not show 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, and without providing sufficient information about this ecoregion in California. 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 does not believe that the decline of some pika populations in the Great Basin constitutes sufficient information to create a substantial possibility that listing pikas within the Sierra Nevada ecoregion in California may be warranted.

Fish and Game Code Section 2072.3 clearly states that the petition must provide information about species' abundance and population trend. This information must be about the species in California. Although some may suggest that pikas are difficult to survey, it is worth noting that, in addition to the population trend data available from the Great Basin, abundance and population trend information is available for other subspecies of pika in Alaska and China. This petition is clearly deficient in that it fails to provide 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 also impacts 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, petitioner implicitly assumes 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 empirical data and a comparison of 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 does not provide sufficient information for the Commission to determine that there is a substantial possibility that the listing of pikas could occur.

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 and evaluated all information and inferences for and against accepting the petition, including 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 the record, the Commission has determined that the petition and overall record provides insufficient evidence to persuade an objective, reasonable person that the petitioned action may be warranted. (Fish & G. Code § 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 degree and immediacy of threat for the Commission to adequately assess the threat and find that an objective, reasonable person would conclude there was a substantial possibility that listing the species could occur. The petition is rejected without prejudice to CBD submitting a new petition based on all available information about the status of the American pika in California.

Fish and Game Commission

Dated: April 7, 2010

John Carlson Jr.,  
Executive Director