

CERTIFIED FOR PUBLICATION

**IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA
THIRD APPELLATE DISTRICT
(Sacramento)**

CENTER FOR BIOLOGICAL DIVERSITY,	C055059
Plaintiff and Respondent,	(Super. Ct. No. 05CS00233)
v.	
CALIFORNIA FISH AND GAME COMMISSION,	
Defendant and Appellant.	

APPEAL from a judgment of the Superior Court of Sacramento County, Lloyd G. Connelly, Judge. Affirmed.

Edmund G. Brown, Jr., Attorney General, Thomas Greene, Chief Assistant Attorney General, Mary E. Hackenbracht, Senior Assistant Attorney General, William D. Cunningham, Deputy Attorney General, for Defendant and Appellant.

Chatten-Brown & Carstens, Jan Chatten-Brown and Amy Minter; Center for Biological Diversity, Kassia R. Siegel for Plaintiff and Respondent.

In this case we decide that the California Fish and Game Commission (the Commission) erred in rejecting at the threshold a petition to add the California tiger salamander¹ to the

¹ References to "salamander" or "salamanders" are to the California tiger salamander (*Ambystoma californiense*) species.

Commission's list of endangered species, under the California Endangered Species Act (CESA). (Fish & G. Code, § 2050 et seq.)² Under CESA a petition for listing must be accepted for consideration if it is supported by sufficient information to lead a reasonable person to conclude there is a substantial possibility the requested listing could occur. (§ 2074.2; *Natural Resources Defense Council v. Fish & Game Com.* (1994) 28 Cal.App.4th 1104, 1108-1109 (*Natural Resources Defense Council*).) The information in the administrative record shows the salamander species does not breed prolifically, is vulnerable to several significant threats, has lost most of its original habitat, and has been displaced by a hybrid from a significant portion of its range. The Commission's criticism of parts of this showing is not sufficient to support its finding that a reasonable person would conclude there is no substantial possibility that listing could occur.

The petition was brought by the Center for Biological Diversity (the Center). The Commission rejected the petition, finding it does not provide sufficient information to indicate that any CESA listing may be warranted. The trial court granted the Center's request for a writ of mandate, overturning the rejection decision and directing the Commission to enter a new decision accepting the species as a candidate for listing pursuant to section 2074.2, subdivision (a)(2). The Commission

² Undesignated statutory references are to the Fish and Game Code.

appeals from the judgment, contending the trial court erred in overturning its rejection of the petition. Finding no prejudicial error, we shall affirm the judgment.

FACTUAL AND PROCEDURAL BACKGROUND

When a petition for listing a species as endangered³ or threatened⁴ is submitted under the CESA, it must be referred to the Department of Fish and Game (the Department). (§ 2073.) The Department evaluates the petition and other relevant information and submits its written evaluation report to the Commission, with a recommendation on whether the petition should be accepted for consideration or summarily rejected.⁵

³ “‘Endangered species’ means a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which 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, overexploitation, predation, competition, or disease. . . .” (§ 2062.)

⁴ “‘Threatened species’ means a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. . . .” (§ 2067.)

⁵ If a petition for listing is accepted for consideration, the Department is required to undertake a review of the status of the species. (§ 2074.6.) The species is added to the list of “candidate species.” (§§ 2068, 2074.2.) Candidate species are generally protected, inter alia, from taking (e.g., killing). (§§ 2080, 2084-2085.) The Commission notifies affected and interested parties to solicit data and comments. (§ 2074.4.) The Department prepares a written report for the Commission within 12 months concerning listing based on the best scientific information available. (§ 2074.6.) The Commission then schedules the petition for consideration at a meeting where a

(§ 2073.5.) Our account of the information concerning the petition and the Department's recommendations is taken from the Department's written evaluation report (hereafter the Department Report), supplemented by the transcript of the hearing and written submissions.

Information adduced concerning the petitioned listing

The California tiger salamander species occurs only in California. The species is a member of the mole salamander family with six genetically distinct units in California. The species occurred historically in or near long-lasting vernal pools in the Central Valley and low-elevation foothills of the Sierra Nevada and Coast Range from Colusa County south to Tulare and Santa Barbara Counties. To avoid drying out, salamanders spend most of their life in the occupied or recently deserted burrows of small mammals, California ground squirrels, valley pocket gophers, and voles. Although the species still occurs within many areas of its historic range, natural breeding wetland and adjacent dry land habitat within the historical range has been significantly reduced and fragmented. Vernal pool complexes are the most important type of habitat for breeding. Approximately 75 to 80 percent of historical vernal pool landscapes statewide have been lost. Salamander populations largely remain only in the higher-elevation areas at

final decision is made on whether the species meets the requirements for listing or not. (§§ 2075, 2075.5.)

the margin of their ecological requirements, because much of the low-elevation valley habitat has been eliminated.

Until the fall rains begin, adult salamanders reside underground in small mammal burrows. The start of the fall rains, usually between October and November, initiates the onset of nocturnal migrations to pools to breed. Salamanders will generally not move to ponds to breed if weather conditions are unfavorable (e.g., drought, atypical timing of rainfall). Larval salamanders eat aquatic invertebrates, snails and tadpoles. Juvenile and adult salamanders feed on aquatic and terrestrial invertebrates. Both natural and artificial ponds (e.g., stock ponds) are used by salamanders for breeding. However, many artificial ponds contain introduced fishes and bullfrogs. Thus, salamanders are generally restricted to large vernal pools as the most important breeding habitat.

At the Commission hearing, Dr. Brad Shaffer⁶ gave two additional reasons why vernal pools are "by far and away the best breeding sites." First, they are very stable terrain features, with lifetimes of hundreds of thousands of years. And second, they support a better, higher quality prey base, a community of invertebrates that salamanders evolved with.

After adults breed, they return to the dry land habitat. When the pools begin to dry, metamorphosed juveniles migrate to

⁶ Dr. Shaffer is an ecology professor at University of California, Davis, and the leading research expert on salamanders.

the dry land habitat to live and to estivate, the summer analog of hibernation. Most, 95 percent, of the adults disperse to within 1,500 feet, and 95 percent of subadults to within approximately 2,100 feet, of the breeding pond.

At the Commission hearing, Dr. Shaffer said this degree of dispersal demonstrated the need for significant areas of terrestrial habitat. He said that, in order to protect a healthy intact breeding population, it was necessary to preserve hundreds of acres of terrestrial habitat around each breeding site. He said that one study, reported in a reputable scientific journal, had conducted a computer simulation about the effects of the size of terrestrial habitat surrounding a medium-size vernal pool, of which there are not too many left, on the stability of the salamander population. The simulation used all the known breeding biology information about salamanders. It found that as surrounding habitat was reduced, the population became smaller and more at risk. At 1,500 feet, roughly a quarter of a mile, the population would eventually dwindle to 10 breeding females. At 1,000 feet, the number is one breeding female. At 650 feet, the number is zero.

The Department Report concluded the primary threat to salamanders is destruction and modification of habitat due to a variety of causes. A lesser threat is competition for food from, and predation by, nonnative animals, including the nonnative bullfrog and nonnative predatory fishes, especially in ponds that persist for more than two years (e.g., stock ponds).

Unless introductions of these nonnative species are curtailed and existing populations are actively removed, their continued presence likely precludes salamander use of these habitats.

Another serious threat is hybridization with the nonnative "waterdog," an eastern tiger salamander formerly imported into California as live fish bait and now established as wild populations in various locations.⁷ Hybrid or pure nonnative tiger salamanders are widespread among known localities of salamanders in the Central Coast and Bay Area populations. Acreages of potentially suitable habitat in these two populations threatened by hybridization constitute 60 percent of the potentially suitable habitat range-wide. At the Commission hearing, Dr. Shaffer said that in one of the two big blocks of habitat left--Santa Clara, Monterey, San Benito, to northern San Luis Obispo Counties--"for all intents and purposes, every salamander is a hybrid." Lesser threats may also include diseases, contaminants, and agricultural practices.

Limited scientific data is available on the abundance of individual populations of salamanders, and there is no comprehensive, range-wide population estimate.⁸ The difficulty

⁷ Since February 2001, it has been illegal to use as bait or to possess waterdogs anywhere in California. (Cal. Code Regs., tit. 14, § 4.00, subd. (e), Register 2001, No. 9 (Mar. 2, 2001) p. 7, operative Feb. 27, 2001.) This regulation change was made by the Fish and Game Commission to protect salamanders from hybridization by further spread of waterdogs.

⁸ There is only one long-term study directly addressing population decline. After analysis of seven years of data

of estimating total population size has been documented by several researchers. Counts of adults appearing at breeding ponds each year do not necessarily reflect true variation in actual adult population size of long-lived salamanders. Salamanders may skip breeding in unfavorable years or switch breeding sites regularly. These factors led the Department to the conclusion that, absent long-term monitoring data produced by a scientifically designed study, attempting to estimate the total population size range-wide is not appropriate. The Department does not believe the number of salamanders can be accurately estimated, or that such estimates are essential to a determination that they may be in serious danger of extinction.

The Central California Tiger Salamander Coalition (the Coalition), an opponent of the petition, opined that data shows that there are over 500,000 adult salamanders and noted that the

(1992-1998) at a single breeding pond in Monterey County, it concluded that fewer than half of breeding salamanders returned to breed a second time. Adults are usually four to five years old when they breed for the first time. An individual salamander can live for 10 or more years, but adults do not breed every year. To maintain the population of this pond, survival from metamorphosis to breeding would have to be over 18 percent. However, the researchers' highest survival estimate was less than 5 percent; they concluded that this population was doomed to local extinction. Researchers cautioned that conclusions about population stability based on one pond are premature. However, their calculated demographic parameters are consistent with those of the eastern species of mole salamanders. The Department believes that results, observations, and conclusions obtained at one site may not apply to other sites and cannot be used to represent or predict long-term population trends.

number of known locations for salamanders has increased in recent years. The Department Report replied that earlier studies indicated that the average number of salamanders was nearer to 63.5 per site, resulting in an estimate of less than 50,000 individuals statewide.

Malcolm Sproul, with the environmental planning consulting firm of LSA Associates, Inc. (LSA), explained the Coalition's population claim at the Commission hearing. LSA estimated that each known salamander location has an average of over 1,000 salamanders by counting as an adult every salamander after metamorphosis from the larval stage. Multiplied by the known salamander locations, this definition results in a population as high as 700,000 to 800,000.

Dr. Shaffer responded to the Coalition's population claim at the Commission's hearing, as follows. From a demographic perspective, the important population number is the number of breeding females.⁹ Applying a demographer's statistic called the "harmonic mean" to a very representative sample of 10 ponds, studied over a three-year period, produces a figure of 12.6 females per active breeding pond. The figure that Sproul used for known salamander locations, 711 ponds, is a mix of healthy, breeding ponds and also locations where one dead salamander was

⁹ Dr. Shaffer explained that about half of the juvenile salamanders each year die. If you began with 500,000 first-year metamorphosed salamanders, by their fifth year you would have 15,625 capable of breeding, or 7,313 breeding females.

found on a road and recorded as an observation. The Department had estimated that two-thirds of the 711 sites, or 474 to 475, are healthy breeding ponds. About a quarter of these are nonnative hybrid salamander sites. With these discounts, Shaffer estimated the number of breeding female salamanders is 4,479.

Given the lack of both historical and current data about abundance range-wide, that salamanders spend most of their life underground, and that only a fraction migrate to breed every year, the Department Report recommends that existing trend studies should be used to assess the status of the species. Some 75 to 80 percent of historical vernal pool habitat has been lost, and at the current rate of loss, the amount would shrink to 12 percent of the historical total by the year 2044. As of 1994, based on both verified museum records and verified sighting data, numerous populations of salamanders have been extirpated (i.e., no longer exist in a specific location).

For amphibians, local population dynamics and connectivity of populations are the foundation of the species' conservation. Maintenance of connected local populations is critical because pond-breeding amphibian populations vary widely in size, have episodic recruitment, are subject to local extinction, and depend on recolonization. Inter-pond dispersal (i.e., connectivity) of salamanders is impeded where barriers like roads and urban development occur.

Isolation of habitats reduces the ability of a single population to recover from a catastrophic extinction event by recolonization from a nearby population. Due to the dynamic nature of amphibian populations, dispersal is an important factor in maintaining viable populations across large areas. Pond isolation is significant to population persistence within landscapes fragmented by barriers to dispersal such as roads, railroads, and croplands. Less than half of individual salamanders return to breed a second time, so recolonization potential seems less than that of other amphibians with high reproductive output. Habitat fragmentation can also impact gene flow among remaining interbreeding populations, putting the genetic vigor and therefore viability of the entire species ultimately at risk. The Department Report concludes there is evidence of significant loss and fragmentation of known salamander habitat.

Human population growth is a threat because salamander habitat destruction and fragmentation results from housing, business, agriculture and associated infrastructure. The petition documents population growth forecasts of 16 percent and higher for the counties within the salamanders' range. However, it does not indicate where this growth will occur within each county relative to known salamander habitat. The Department produced its own maps showing where projected growth will occur based on county general plans relative to salamander occurrence and remaining habitat. Based on these maps, the Department

Report concludes that effects from growth will be significant primarily in the western portion of the Bay Area and Central Valley populations, northern portion of the Central Valley population, and northeastern portion of the Southern San Joaquin population.

The Coalition representatives argued that the Center had not shown that the habitat loss had been severe enough to warrant listing salamanders as an endangered species. They conceded that the discovery of additional known salamander sites did not indicate a growing population. However, they argued that it shows that salamanders are more pervasive in the potential habitat, thus more secure, than previously thought.

They asserted that information on potential future development from general plans for cities and counties contained within the salamanders' range shows urbanization really is not a threat of extinction. Over 90 percent of the salamanders' remaining potential habitat, 3.9 million acres, and 85 percent of the known salamander locations, are not threatened by planned urban development. Approximately 220 of the locations are preserved in public ownership or by other restrictions, e.g., a mitigation bank, owned by a conservation organization or protected by a conservation easement. Approximately 330 other known locations are designated for nonurban use, primarily grazing land.¹⁰ The majority of the anticipated losses are going

¹⁰ On the subject of conversion of grazing land to more intensive agricultural uses, the Coalition asserted conversion is likely

to be around the existing urban areas. Moreover, as to the locations threatened, review under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21050 et seq.), local land use planning, federal wetlands, and federal endangered species restrictions would require some mitigation.

The petition states that the federal Endangered Species Act of 1973 (FESA) (16 U.S.C. § 1531 et seq.) is inadequate to protect non-listed populations of salamanders even when they inhabit waters with FESA-listed species, and that preservation of aquatic habitat does not address the dry land habitat that salamanders require.¹¹ However, the Department Report notes that subsequent to submission of the petition, all populations of salamanders have been federally listed. Despite this observation, the Department Report does not address whether the federal listing of salamanders could suffice to prevent endangerment. It only comments that the Department agrees that existing federally listed species do not provide adequate protection to the salamanders' upland habitat.

to decrease and that even if such conversion continues at present rates for the next 25 years, less than 4 percent of the potentially suitable salamander habitat would be converted.

¹¹ The Center requests judicial notice of certain orders in litigation in the federal court concerning listing under FESA. Only one of the orders is supplied. We deny the request as to the other orders on the ground the Center has not provided sufficient information to enable this court to take judicial notice. (See Evid. Code, § 453.) As to the order that is supplied, its relevancy is not apparent and we deny that part of the request for judicial notice on that ground. (See *People ex rel. Lockyer v. Shamrock Foods Co.* (2000) 24 Cal.4th 415, 422, fn. 2.)

At the hearing the Department spokesperson was asked to address the effect of federal listing. She replied as follows. At present there were 177 jointly listed species. Joint listing brings more creativity and resources, including funding, to bear on solutions to recovery and conservation actions. State standards like full mitigation are, in some instances, more restrictive than FESA. The Department has "biologists in the field actually more available to work with people than typically the federal government is."

Robert Uram, on behalf of the Coalition, asserted that the federal listing of salamanders eliminated the need for state listing. He said that the protection under the federal act provides greater emphasis on habitat protection than CESA.

The Commission's decision and findings

The Commission voted three to two to reject the petition on the ground that it provides insufficient information to indicate that listing may be warranted. On December 2, 2004, the Commission adopted a statement of findings explaining its decision. The findings, in the main, consist of criticisms of the sufficiency of the petition and supporting information. A summary of the Commission's findings follows.

There is insufficient information on population trends for salamanders. Studies finding a dramatic decline in population surveyed only a very limited portion of the total range or used questionable sampling methods, providing a species population status report that is potentially inaccurate and misleading.

The best available data for range-wide status assessment is the Coalition's information, which provides credible evidence that the salamander population trend is not necessarily declining. The increase in identified localities or sites may reflect a larger than expected population, or an increase in the population.

Reliance on loss of "native" wetland habitat is unpersuasive because the petition fails to provide credible information that salamanders presently or historically occupy much of this hypothetical or presumptive habitat. Little or no evidence was presented by the Center actually correlating salamanders within the actual "habitat" allegedly being impacted.

The petition provides no actual data on population abundance. Instead, the petition relies on an inference that the massive documented decrease in the potential habitat has caused overall population decline. It also states that there are difficulties involved in estimating population numbers. Anecdotal information cannot be used to accurately establish abundance or population trends. Absent an accurate assessment of the historic or current population of a species, any determination of threat to the species would be speculation.

The Center claims the species cannot now be found in much of its hypothetical range and appears pushed into narrow bands of habitat. However, without an accurate assessment of the current population abundance, it is difficult, if not

impossible, to establish population trends for that species, and any determination of threat to the species is purely guesswork.

Historical data in particular is unavailable for many species. Gaps in information are not necessarily fatal to a petition to list a species, provided the Commission at this point in the process can discern, despite the factual uncertainties, a substantial possibility that the species is in serious danger of extinction. But the information about habitat loss was not compelling enough to overcome the other deficiencies in the data and analysis presented by the Center.

Section 2072.3 provides that "Petitions shall include information regarding . . . the degree and immediacy of threat, [and] the impact of existing management efforts" ¹² The petition lacks sufficient information on both of these components.

The federal listing, other federally listed species with overlapping critical habitat, recently approved habitat conservation plans, the Federal Clean Water Act, California's

¹² Section 2072.3 is as follows: "To be accepted, a petition shall, at a minimum, include sufficient scientific information that a petitioned action may be warranted. Petitions shall include information regarding the population trend, range, distribution, abundance, and life history of a species, the factors affecting the ability of the population to survive and reproduce, the degree and immediacy of the threat, the impact of existing management efforts, suggestions for future management, and the availability and sources of information. The petition shall also include information regarding the kind of habitat necessary for species survival, a detailed distribution map, and any other factors that the petitioner deems relevant."

Porter-Cologne Act and CEQA have the effect of reducing threats to salamanders. Although there may be some reason for concern, the petition provides insufficient evidence to persuade the Commission that the petitioned action may be warranted. [This ends our summary of the Commission's findings.]

Proceedings in the trial court

On February 28, 2005, the Center filed the petition for writ of mandate in the superior court initiating this action. On September 15, 2006, the matter came on for hearing and was submitted. On December 14, 2006, the trial court issued a detailed ruling explaining its view that the administrative record lacked sufficient evidence to support the Commission's decision rejecting the petition. A summary of the trial court's ruling follows.

The Commission's findings discounting the petition's allegations of a declining trend in the salamander population misstate the objective of the 1993 Shaffer study, which was an examination of the extent of the salamanders' range, and disregard the other studies discussed in the petition and the Department Report, which find a decline in population. The United States Fish and Wildlife Service's (USFWS) regulatory listing of salamander populations in the administrative record was based on peer-reviewed scientific studies and analyses concluding that salamander populations and habitat have declined. Nothing in the record suggests that these scientific studies, analyses and conclusions are scientifically flawed.

The Commission's findings discounting the petition's allegations of salamander habitat loss to development activities mischaracterize or omit relevant evidence and analysis. Research cited in the petition documents the destruction and fragmentation of habitat relative to urban development. Figures in the Department Report represent this research graphically, showing the relationship between "known" locations or occurrences to existing urban areas, locations of identified future planned growth, and locations of existing intensive agriculture.

The Commission's finding that threat to survival cannot be found without accurate population abundance data ignores the Department's analysis that negative salamander population trends can be and have been reliably estimated from locality records without historical or current range-wide population abundance estimates. Scientific literature indicates that information about past distribution from historical occurrence data can be used to infer a decline in distributions from historical and projected loss of habitat. The USFWS used similar peer-reviewed analytical methodology based on threats to habitat associated with known salamander occurrences to determine population decline and threat to survival.

The Commission's findings relied upon the Coalition's population abundance data without regard to the significant doubts about the data's scientific value raised in the Department Report. The Commission found that the Coalition's

range-wide population data provided credible evidence that the salamander population is not endangered throughout all or a significant portion of its range. The Commission took no account of criticisms of this information by the Department and the USFWS and credited it over peer-reviewed analyses of population decline.

The Commission's findings related to the degree and immediacy of threat to salamander survival ignore the considerable evidence in the administrative record of threats posed to salamander survival by hybridization with nonnative salamanders imported into California as fish bait and the threat to survival from nonnative predator species such as bullfrogs and mosquito fish.

The Commission's findings regarding the reduction of threats to salamander survival by existing regulatory mechanisms do not take into account the information and analysis in the administrative record of inadequacies in the protections afforded to the salamander and its habitat by the regulatory mechanisms. State policy is advanced by the joint efforts and resources of the Department and the USFWS in developing and implementing actions for the recovery of the species. [This ends the summary of the trial court's ruling.]

The Commission appeals from the ensuing judgment issuing a peremptory writ directing the Commission to grant the Center's petition to list salamanders as a candidate species. (§ 2068.)

DISCUSSION

The Commission contends that the trial court erred in various respects in its ruling and in criticizing the Commission's administrative findings and supporting reasoning. The Commission argues that some of the trial court's criticism is unfair, unwarranted, or immaterial and shows the trial court mistook the standard of review. The Center argues the trial court's criticism of the Commission's findings is warranted and that evidence in favor of listing salamanders as endangered is overwhelming.

The question is whether the Commission's decision is supported by substantial evidence. The trial court was governed by that test. As we must answer the same question as the trial court, we focus on the findings of the Commission rather than the ruling of the trial court. (See 2 Cal. Admin. Mandamus (Cont.Ed.Bar 3d ed. 2008) §§ 16.51-16.56, pp. 639-643.) The Commission made various subordinate findings, identifying perceived deficiencies in the showing in favor of accepting the petition and endorsing the showing in opposition. However, the critical question is not whether these subordinate findings have any merit. It is rather, whether they warrant the ultimate, statutory finding required to reject the petition.

The standard for accepting a petition for consideration is: "sufficient information to indicate that the petitioned action may be warranted." (§ 2074.2, subd. (a)(2).) As we explained in *Natural Resources Defense Council, supra*, 28 Cal.App.4th at

page 1119, "the term 'sufficient information' in section 2074.2 means that amount of information, when considered with the Department's written report and the comments received, that would lead a reasonable person to conclude the petitioned action may be warranted." The phrase "may be warranted" "is appropriately characterized as a 'substantial possibility that listing could occur.'" (*Natural Resources Defense Council, supra*, at p. 1125.) "Substantial possibility," in turn, means something more than the one-sided "reasonable possibility" test for an environmental impact report but does not require that listing be more likely than not. (*Ibid.*)

Here, the petition was rejected at the "for consideration" threshold. The Commission concedes that renders "the substantial evidence rule . . . a little tricky, because the test is substantial evidence of insufficient information, a somewhat convoluted test." The ultimate finding of the Commission is that there is insufficient evidence for the reasonable person¹³ to conclude there is a substantial

¹³ The reasonable person standard is an objective standard. It does not permit the trier of fact to substitute his or her own subjective view for the objective, reasonable person. (See, e.g., *People v. Mendoza* (2007) 42 Cal.4th 686, 702-703.) The Commission may have been misled on this point by the concluding advice given to it by counsel for the Department:

"So in the cases when it says a real--information sufficient to convince a reasonable person--*that would be you*--that there--that there exists information that indicates that the petition to action may be warranted, what they expect you to look at is: Is there a real chance, based on what you know now, that there's going to be a listing decision--*that you're going*

possibility that listing could occur. We look to the information adduced as a whole to determine whether that ultimate finding can be upheld as within the range of discretion accorded to the Commission. (See generally *City of Sacramento v. Drew* (1989) 207 Cal.App.3d 1287, 1297-1298.)¹⁴

The Commission's decision must be upheld, if all the information, including information detracting from an inference that salamanders are threatened or endangered, does not clearly weigh in favor of finding the statutory "candidate species" standard is met. If the balance is unclear, we defer to the Commission. However, if the information clearly would lead a

to be convinced at the end of it that a listing decision is appropriate?" (Italics added.)

¹⁴ "Very little of general significance can be said about discretion. 'The discretion of a trial judge is not a whimsical, uncontrolled power, but a legal discretion, which is subject to the limitations of legal principles governing the subject of its action, and to reversal on appeal where no reasonable basis for the action is shown. [Citation.]'" (*Westside Community for Independent Living, Inc. v. Obledo* (1983) 33 Cal.3d 348, 355, [quoting] 6 Witkin, Cal. Procedure (2d ed. 1971) Appeal, § 244[, p. 4235].) The scope of discretion always resides in the particular law being applied, i.e., in the 'legal principles governing the subject of [the] action' Action that transgresses the confines of the applicable principles of law is outside the scope of discretion and we call such action an 'abuse' of discretion. (See *Hurtado* [*v. Statewide Home Loan Co.* (1985)] 167 Cal.App.3d [1019,] 1022.) If the trial court is mistaken about the scope of its discretion, the mistaken position may be 'reasonable', i.e., one as to which reasonable judges could differ. (See, e.g., the majority and dissenting opinions in *Baggett v. Gates* [(1982)] 32 Cal.3d 128.) But if the trial court acts in accord with its mistaken view the action is nonetheless error; it is wrong on the law." (*City of Sacramento v. Drew, supra*, 207 Cal.App.3d at pp. 1297-1298.)

reasonable person to conclude that there is a substantial possibility that listing could occur, rejection of the petition is outside the Commission's range of discretion under section 2074.2.

The Commission argues that its decision must be upheld if the record provides "substantial evidence to support a rationally based doubt . . . [¶] . . . regarding a serious threat of extinction." That argument is unpersuasive. The Commission is the finder of fact in the first instance in evaluating the information in the record. (*Natural Resources Defense Council, supra*, 28 Cal.App.4th at p. 1125.) However, the 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 under section 2074.6.

As appears, the information supporting the petition presents a *prima facie* showing that the California tiger salamander species is a threatened or endangered species within the meaning of CESA. The points raised by the Commission, concerning the strength of the information in favor of the

petition, would not lead the objective, reasonable person to conclude there is no substantial possibility that listing could occur.

The information supporting the petition is largely derived from scientific evidence drawn from peer-reviewed journal articles and the testimony of the chief scientific researcher of the species. It is uncontroverted that this is a species that takes a long time to reach sexual maturity, is subject to a great deal of attrition along the way, does not breed prolifically, and is subject to wide population fluctuation and local extirpation through episodic natural droughts. California is a state where significant human population growth and attendant development has long been a constant. The maps produced by the Department show that projected population growth will likely encroach further on some of the range of the salamanders' remaining available habitat. The loss of a majority of the natural breeding habitat sites and fragmentation of the remaining habitat, in these circumstances, affords a strong inference of threat or endangerment. Dr. Shaffer's plausible estimate of less than 5,000 breeding female salamanders in the state, for a species with these breeding characteristics, enhances the strength of this inference.

The range of one of the two largest populations of the six genetically distinct units has been effectively hybridized. This independently affords a strong inference of threat or endangerment by competition from the nonnative eastern tiger

salamander species. (See generally *California Forestry Assn. v. California Fish & Game Commission* (2007) 156 Cal.App.4th 1535, 1546-1551.)

These inferences provide a prima facie showing that the salamander species is threatened or endangered "throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, . . . [or] competition" (§ 2062.) That is to say, if Commission members were to choose to draw the available inferences from this information in support of listing the species as endangered or threatened in a proceeding under section 2075.5, we see no basis for judicial intervention to overturn that decision.

When this degree of information is adduced in support of a petition, an objective, reasonable person clearly would conclude there is a substantial possibility that listing could occur, unless the countervailing information and logic persuasively, wholly undercut some important component of that prima facie showing. This follows from the standard for the Commission's decision. All that is required is a substantial possibility that the requested listing could occur. (*Natural Resources Defense Council, supra*, 28 Cal.App.4th at p. 1109.) A counter showing or argument that raises only a conflicting inference about a portion of the showing in favor of the petition, unless that counter inference is very strong, will not, for an objective, reasonable person, diminish the possibility that listing could occur to an "insubstantial" level.

The information and argument opposing the petition is not sufficient to compellingly undercut the showing supporting the petition. The absence of historic population counts of the species, given its reclusive characteristics, does not greatly diminish the strength of the inferences of threat or endangerment that arise from the showing of habitat loss.¹⁵ (See generally *Center for Biological Diversity v. Morgenweck* (D.Colo. 2004) 351 F.Supp.2d 1137, 1141-1142 [indication that 90 percent of historical habitat of species had been lost was substantial scientific and commercial information indicating that listing as a threatened species under FESA may be warranted].)

The introduction of artificial ponds for grazing purposes into the salamanders' range, which can provide a wetland breeding habitat, lessens the strength of the inference of threat. However, information adduced showing that this breeding habitat is less dependable and less favorable for food than vernal pools, and that it is often unsuitable because of

¹⁵ The strength of inferences from circumstantial evidence varies. "Some circumstantial evidence is very strong, as when you find a trout in the milk." (Henry David Thoreau, Journal, Nov. 11, 1850, 2 Journal of Henry D. Thoreau 94 (Bradford Torrey & Francis H. Allen eds. 1962), quoted in The Oxford Dict. of American Legal Quotations (Fred R. Shapiro ed. 1993) p. 133).) Pointing to an absence of evidence that could provide a stronger inference of population decline, alone, does nothing to diminish the force of the evidence that was provided. That would only undermine the existing showing if the absent evidence was available but was suppressed because it is unfavorable.

predation and competition, significantly attenuates this counter inference.

The recent increase in known sites provides nothing strongly indicating that the overall salamander population is sufficient to survive in the face of the obstacles that threaten the species. The Coalition also provided information that over 90 percent of the salamanders' potential habitat, 3.9 million acres, and 85 percent of the known salamander locations, are not threatened by planned urban development. This too provides nothing strongly indicating that the "unthreatened" portion of the salamander population is sufficient to survive. It also does not address the potential detriment to salamanders of such development in increasing or exacerbating the fragmentation of the present salamander habitats.

The bare fact of listing salamanders under FESA, without detailed information on the recovery and preservation measures showing that they are likely to succeed in forestalling and overcoming the apparent threats to the species, does not strongly counter the prima facie showing. The 177 instances of dual CESA and federal listing of species belies a conclusion that federal listing alone would significantly diminish a substantial possibility that listing could occur. The same is true as to the other recovery and preservation measures upon which the Commission relied.

None of the Commission's findings specifically address the threat of hybridization. Nothing in the record refutes the

inference that there is a significant threat or endangerment by competition from the nonnative waterdog.

In our judgment, the petition, when considered with the Department Report and the comments received, clearly affords sufficient information to indicate that some listing action may be warranted. The Commission acted outside the range of its discretion in denying the petition. This record requires, as a matter of law, a determination granting candidate species status. (§ 2068.) There is no indication that a remand to the Commission for further proceedings could alter that calculus. Accordingly, the trial court did not err in directing the Commission to enter a decision accepting the petition. (See, e.g., *Tripp v. Swoap* (1976) 17 Cal.3d 671, 677, disapproved on a different ground in *Frink v. Prod* (1982) 31 Cal.3d 166, 180.)

DISPOSITION

The judgment is affirmed. (***CERTIFIED FOR PUBLICATION.***)

_____, BUTZ, J.

We concur:

_____, SCOTLAND, P.J.

_____, DAVIS, J.