

SUPREME COURT OF CALIFORNIA

**Ebbetts Pass Forest Watch v. California Department of Forestry &
Fire Protection**

43 Cal. 4th 936 (2008) · No. S143689 · Decided May 22, 2008

OPINION

WERDEGAR, J.

43 Cal. 4th 936 (2008) EBBETTS PASS FOREST WATCH et al., Plaintiffs and Appellants, v. CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION, Defendant and Respondent; SIERRA PACIFIC INDUSTRIES, Real Party in Interest and Respondent. No. S143689. Supreme Court of California. May 22, 2008. *940 Michael W. Graf; Law Offices of Thomas N. Lippe and Thomas N. Lippe for Plaintiffs and Appellants.

MacKenzie & Albritton and James A. Heard for Sierra Club and Sierra Nevada Forest Protection Campaign as Amici Curiae on behalf of Plaintiffs and Appellants. Law Offices of J. William Yeates, J. William Yeates, Keith G. Wagner and Jason R. Flanders for California Native Plant Society as Amicus Curiae on behalf of Plaintiffs and Appellants. Bill Lockyer and Edmund G. Brown, Jr., Attorneys General, Tom Greene, Chief Assistant Attorney General, Mary E. Hackenbracht, Assistant Attorney General, Charles W. Getz IV, Gordon Burns and William Jenkins, Deputy Attorneys General, for Defendant and Respondent.

Morrison & Foerster, Edgar B. Washburn, Christopher J. Carr, Shona L. Armstrong, William M. Sloan; Jay-Allen Eisen Law Corporation, Jay-Allen Eisen, C. Athena Roussos; Dun & Martinek, David H. Dun and David E. Martinek for Real Party in Interest and Respondent. Meriem L. Hubbard and Damien M. Schiff for Pacific Legal Foundation as Amicus Curiae on behalf of Real Party in Interest and Respondent.

Michele Dias for California Forestry Association as Amicus Curiae on behalf of Real Party in Interest and Respondent. OPINION WERDEGAR, J. Real party in interest Sierra Pacific Industries (Sierra Pacific) submitted, and defendant California Department of Forestry and Fire Protection (CDF) approved, three timber harvest plans for the logging of trees on private land in the Sierra Nevada mountains.

Two conservation groups, Ebbetts Pass Forest Watch and the Central Sierra Environmental Resource Center (plaintiffs), sought a writ of mandate to overturn the approvals, contending, inter alia, that CDF had not followed the law (i.e., the Z'berg-Nejedly Forest Practice Act of 1973, Pub. Resources Code, § 4511 et seq. (Forest Practice Act); its implementing regulations (Cal.

Code Regs., tit. 14, § 896 et seq.) (Forest Practice Rules); and the California Environmental Quality Act, Pub. Resources Code, § 21000 et seq. (CEQA)) in selecting geographic areas for assessing the cumulative impacts of logging on two *941 animal species (the California spotted owl and the Pacific fisher) and in analyzing the effects of Sierra Pacific's possible use of herbicides after logging.

The Court of Appeal, agreeing with these contentions, reversed the superior court's denial of the petition. On review of the Court of Appeal decision, we conclude CDF did not err legally in the manner claimed. **FACTUAL AND PROCEDURAL BACKGROUND** In the three disputed timber harvest plans (hereafter referred to as plans or THP's), Sierra Pacific proposes to harvest timber on three areas of its land: Cedar Flat, Curry, and Base Camp, all located in Tuolumne County.

The Cedar Flat THP proposes to harvest 534 acres of conifers, black oak, and shrub species. The Curry and Base Camp THP's cover 441 and 394 acres of timberland, respectively. In harvesting the sites, Sierra Pacific proposes to predominantly use certain types of "even-aged" management, in which most or all of a stand's trees are logged at the same time. These include clear cutting, "variable retention-group," and "variable retention-dispersed" methods.

The latter two methods involve retaining a few trees (four to eight per acre) in each stand. The sites harvested by these methods would then be prepared for replanting by a combination of mechanical means and burning, and replanted with conifers.

The replanting process might include the use of herbicides. (Details on the plans' discussion of herbicide use are included in the analysis of that issue, post.) Analysis of the impacts on the California spotted owl and Pacific fisher is contained primarily in the plans' discussion of cumulative impacts on biological resources.

For this discussion, as for the discussion of cumulative impacts on other resources, the THP's purport to employ geographic areas previously designated as state planning watersheds. The planning watershed used for the Cedar Flat THP is an area of 10,140 acres, that for the Curry THP is 7,688 acres, and the Base Camp THP uses two planning watersheds of 7,212 acres and 18,618 acres in size.

(Details on the plans' choice of cumulative-impacts assessment areas for wildlife are included in the analysis of that issue, post.) With respect to the California spotted owl, the THP's conclude that Sierra Pacific's past, current, and planned future logging "is unlikely to cause short or long-term significant adverse effects on the habitat available" for the subspecies.

Similarly, the THP's predict that Sierra Pacific's planned logging practices will improve habitat for the Pacific fisher and hence are unlikely to cause them significant adverse effects.[1] *942 After receiving and responding to public comments on the three THP's, CDF approved them in April

2002. Plaintiffs petitioned the superior court for a writ of mandate, asking that CDF be ordered to withdraw its approvals.

The superior court denied the petition, finding that "[CDF has] not acted in excess of [its] jurisdiction in approving the subject timber harvest plans; and [¶] [CDF's] approval of the subject timber harvest plans is supported by [its] findings and [its] findings are supported by substantial evidence in light of the whole record."

The Court of Appeal reversed. The court held, first, that the plans' cumulative-impact analysis regarding the California spotted owl and Pacific fisher failed to comply with a regulatory direction that "[b]iological assessment areas will vary with the species being evaluated and its habitat" (Cal. Code Regs., tit. 14, § 952.9, Technical Rule Addendum No. 2, appen. factor C [biological resources]) and that in approving the THP's despite this defect, CDF prejudicially abused its discretion.

Second, the Court of Appeal held that, contrary to statements in the THP's and by CDF, Sierra Pacific's possible use of herbicides in replanting the logged areas was "reasonably foreseeable and thus part of the activity constituting the project covered by each THP," that CDF therefore was obliged to assess the impacts of herbicide use, and that CDF also prejudicially erred by misdescribing the state program regulating herbicide use.

The Court of Appeal directed the superior court to grant the mandate petition and order CDF to rescind its approval of the THP's. We granted Sierra Pacific's and CDF's petitions for review.

DISCUSSION I. Review of Cumulative-impacts Analysis Under CEQA and the Forest Practice Act (1) "Timber harvesting operations in this state must be conducted in accordance with the provisions of the Forest Practice Act.

The Act was intended to create and maintain a comprehensive system for regulating timber harvesting in order to achieve two goals: (1) to ensure that "[w]here feasible, the productivity of timberlands is restored, enhanced, and maintained"; and (2) to ensure that "[t]he goal of maximum sustained production of high-quality timber products is achieved while giving consideration to values relating to recreation, watershed, wildlife, range and forage, fisheries,... and aesthetic enjoyment." (Pub.

Resources Code,[2] § 4513.) The Act vests in the *943 [State Board of Forestry and Fire Protection] the obligation to adopt forest practice rules and regulations specific to the various forest districts of the state in order "to assure the continuous growing and harvesting of commercial forest tree species and to protect the soil, air, fish, and wildlife, and water resources, including, but not limited to, streams, lakes, and estuaries." (§ 4551.)" (Sierra Club v. State Bd. of Forestry (1994) 7 Cal. 4th 1215, 1226 [32 Cal. Rptr.

2d 19, 876 P.2d 505] (Sierra Club).) (2) The Forest Practice Act requires timber owners or operators on private land to submit a timber harvest plan specific to the site and planned logging activity to CDF for approval before harvesting. (§§ 4581-4582.5.) Timber harvest plans are available to the public and to public agencies for review and comment, and CDF's notice of approval must include a written response to significant environmental issues raised by commenters. (§ 4582.6; Cal. Code Regs., tit.

14, § 1037.8; *Environmental Protection Information Center, Inc. v. Johnson* (1985) 170 Cal. App. 3d 604, 611-612 [216 Cal. Rptr. 502].) (3) CDF's approval of timber operations is generally subject to CEQA, but under section 21080.5, the Forest Practice Act's regulatory scheme has been certified for exemption from CEQA's requirements for preparation of an environmental impact report (EIR) before approval of a project.

(*Sierra Club, supra*, 7 Cal.4th at p. 1230.) "Under the terms of section 21080.5, subdivision (c), that certification expressly exempts the timber harvesting plan process from the provisions of chapters 3 and 4 and section 21167 of CEQA. (§ 21080.5, subd. (c).) Chapters 3 and 4 deal, in large part, with the various requirements of an EIR at both the state level (chapter 3) and the local level (chapter 4).

Section 21167 sets forth the time within which an action challenging a public agency's decision under the provisions of CEQA must be filed." (*Ibid.*) (4) Serving as the functional equivalent of an EIR, a timber harvest plan must "provide public and governmental decisionmakers with detailed information on the project's likely effect on the environment, describe ways of minimizing any significant impacts, point out mitigation measures, and identify any alternatives that are less environmentally destructive."

(*County of Santa Cruz v. State Bd. of Forestry* (1998) 64 Cal. App. 4th 826, 830 [75 Cal. Rptr. 2d 393].) As in the preparation of an EIR, a timber harvest plan must consider cumulative impacts from the subject harvest together with other operations.

The Forest Practice Act's implementing regulations, the Forest Practice Rules (Cal. Code Regs., tit. 14, § 896 et seq.), adopt the CEQA regulations' definition of "cumulative impacts" from related projects: "the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably *944 foreseeable probable future projects.

Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." (Cal. Code Regs., tit. 14, § 895.1; see *id.*, § 15355.) The Forest Practice Rules further provide that "[c]umulative impacts shall be assessed based upon the methodology described in Board Technical Rule Addendum Number 2... and shall be guided by standards of practicality and reasonableness.

The... plan submitter's duties under this section shall be limited to closely related past, present and reasonably foreseeable probable future projects within the same ownership and to matters of public record. The Director shall supplement the information provided by the... plan submitter when necessary to insure that all relevant information is considered."

(Cal. Code Regs., tit. 14, § 898.) In turn, Technical Rule Addendum No. 2 (found in the Forest Practice Rules at Cal. Code Regs., tit. 14, foll. § 952.9) (Technical Rule Addendum No. 2) provides in part: "The [preparer of a timber harvest plan] shall establish and briefly describe the geographic assessment area within or surrounding the plan for each resource subject to be assessed and shall briefly explain the rationale for establishing the resource area.

This shall be a narrative description and shall be shown on a map where a map adds clarity to the assessment." The addendum's appendix further provides, "Biological assessment areas will vary with the species being evaluated and its habitat." (Technical Rule Addendum No. 2, appen. factor C.) CDF's approval of timber operations is subject to CEQA's standard of judicial review. (§§ 21168, 21168.5; Sierra Club, supra, 7 Cal.4th at pp. 1235-1236.)

Under that standard, "the courts' inquiry `shall extend only to whether there was a prejudicial abuse of discretion.' [Citation.] Such an abuse is established `if the agency has not proceeded in a manner required by law or if the determination or decision is not supported by substantial evidence.'" (Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova (2007) 40 Cal. 4th 412, 426 [53 Cal. Rptr.

3d 821, 150 P.3d 709], fn. omitted (Vineyard Area Citizens).) "Judicial review of these two types of error differs significantly: While we determine de novo whether the agency has employed the correct procedures, `scrupulously enforc[ing] all legislatively mandated CEQA requirements' [citation], we accord greater deference to the agency's substantive factual conclusions.

In reviewing for substantial evidence, the reviewing court `may not set aside an agency's approval of an EIR on the ground that an opposite conclusion would have been equally or more reasonable,' for, on factual questions, our task `is not to weigh conflicting evidence and determine who has the better argument.'" (Id. at p. 435.) *945 With this background in mind, we turn to plaintiffs' challenges to the cumulative-impacts analysis set forth in the THP's.

II. Geographic Scope of Sierra Pacific's and CDF's Cumulative-impacts Analysis Plaintiffs' core contention, and the sole ground on which the Court of Appeal held the plans' discussion of cumulative impacts deficient, is that the THP's fail to follow the methodology of Technical Rule Addendum No. 2 in particular the statement in the appendix to the addendum, which plaintiffs and the lower court read as a mandatory command, that "[b]iological assessment areas will vary with the species being evaluated and its habitat."

(Cal. Code Regs., tit. 14, foll. § 952.9.) That procedural error, plaintiffs contend, resulted in CDF's failing to consider and disclose key information concerning the cumulative impacts of Sierra Pacific's logging in the Sierra Nevada on the habitat of the California spotted owl and Pacific fisher.

In a formalistic sense, plaintiffs are correct. The Cedar Flat THP (which, as did the lower court and all the parties, we discuss as representative of all three THP's) states flatly: "The Biological [cumulative-impacts assessment area] selected is the same as the Watershed Assessment Area, which is defined as the state planning watershed Upper Griswold Creek."

Nowhere in its discussion of cumulative impacts on the California spotted owl or the Pacific fisher does the Cedar Flat THP expressly designate by such name a different "cumulative-impacts assessment area" for either species. Focusing very technically on the plans' explicit designation of cumulative-impacts assessment areas, then, one must agree they do not "vary with the species being evaluated and its habitat."

When one reads the THP's for substance, however, a different picture emerges. While the THP's do not formally designate assessment areas larger than the state planning watersheds, the THP's, as well as CDF's responses to comments on them, actually discuss potential cumulative impacts on the California spotted owl and Pacific fisher over areas of the Sierra Nevada much more extensive than the designated planning watersheds.

Indeed, the thrust of the plans' discussion is that Sierra Pacific's program of even-aged logging and plantation management throughout its Sierra Nevada forests will not adversely affect, and in some respects will improve, habitat for the discussed species.

We illustrate the point below with reference to the Cedar Flat THP and CDF's response to comments on it. Immediately after introducing the state planning watershed as its chosen cumulative-impacts assessment area, the Cedar Flat THP expressly expands *946 the scope of analysis to "the Sierra Nevada Region" in order "[t]o assess the potential cumulative effects on wildlife that may have a current range large enough to extend beyond the Cal Planning Watershed."

The Cedar Flat THP discusses federal planning efforts for the Sierra Nevada, observing that with regard to California spotted owl habitat the federal plans appear to assume "that the constraining factor on owl populations is the presence of appropriate large tree nesting habitat" associated with mature forests. It then outlines Sierra Pacific's disagreement with the thesis that spotted owl populations require retention of mature forests.

The company's data show nest trees have an average diameter of only 34 inches. Sierra Pacific's even-aged silviculture program for its Sierra Nevada forests, the Cedar Flat THP asserts, will

increase the average tree diameter from 17 to 32 inches, retain larger trees and snags in streamside protection zones, and increase forest edge habitat for species the spotted owl preys upon.

The Cedar Flat THP's spotted owl discussion elaborates on these points. It begins by noting there are no known nests within the proposed harvest units, but three historical sites within the assessment area; the plan provides for buffer zones around any nests within 500 feet of a harvest area.

The discussion then asserts, citing studies, that logging in the Sierra Nevada has not measurably disrupted spotted owl habitat or populations: "Demographic studies of the California spotted owl do not demonstrate that forest management activities have caused a measurable decrease in habitat quality.... [¶] There is no empirical evidence of a reduction in numbers or distribution of California spotted owls.

California spotted owls are widely distributed throughout most of the conifer zone. California spotted owls may be more abundant in some areas of the Sierra Nevada than they were 100 years ago.... [¶] Apparently, even though the total amount of old-growth forest has been markedly reduced in the Sierra Nevada during the past century, enough very old trees remain today, widely distributed, that the owls do not exhibit major gaps in their distribution that can be clearly attributed to logging."

The Cedar Flat THP's spotted owl discussion then turns to "Area of Concern 5," an area in the northwest part of the Stanislaus National Forest identified by the United States Forest Service as having large private inholdings and unknown spotted owl densities, and as one of several areas "where future problems may be greatest if the owl's status in the Sierra Nevada were to deteriorate."

According to the United States Forest Service, Area of Concern 5, like several others, is "characterized by habitat fragmentation that decreases the density of owl pairs, makes successful dispersal [i.e., movement of young owls to new habitat areas] more difficult, and reduces the likelihood of quick replacement of owls in vacated habitat."

The Cedar Flat THP acknowledges that the proposed logging would occur within Area of Concern 5, but asserts that "this area has and will continue to have stand types that are *947 known to provide foraging, dispersal and nesting for California spotted owls.

The current distribution of harvest and retained intervening stands provides habitat distributions similar to those predicted to be successful in [a published study's] study area.... [S]ite specific mitigation will prevent any reduction in the density of owl pairs and will not increase the difficulty of dispersing between territories."

Finally, the Cedar Flat THP articulates Sierra Pacific's broadest scientific claim, that the cumulative effect of logging and planting under the company's silviculture program for the entire Sierra Nevada region will be to improve spotted owl habitat by (1) increasing the number of large trees suitable for owl nesting, and (2) increasing the edge habitat (the line between forest and other vegetation types) suitable for species the spotted owl preys upon.

The Cedar Flat THP asserts: "Nest trees of California spotted owls on [Sierra Pacific] forestlands average 34 inches [plus or minus] 12 [inches] in diameter at breast height, at one standard deviation. Trees of this size are common on [Sierra Pacific's] private forest land, currently averaging 9.0 per acre and are expected to increase in both amount and distribution over time as a result of proposed [Sierra Pacific] management practices."

Small mammals on which spotted owls primarily prey "are known to increase in population and distribution in landscapes with periodic disturbance from logging." A study on the closely related northern spotted owl shows that, except for nesting stands, "the most important habitat characteristic is edge with other vegetation types... which produce prey base for the owl, interspersed within the owl's home range."

"The edge effect... will be produced by this harvest and will be maintained under [Sierra Pacific's] long term management.... As discussed in detail in the Alternative Silvicultural section, our management will produce more large trees, and there will be more nesting habitat. With the use of even-aged regeneration systems, we will create interspersed types, which meet this species' edge need.

With our new variable retention policy for the reduction of visual effects of clear cuts we still expect to create increased average tree size and maintenance of the edge effect." As to the Pacific fisher, the Cedar Flat THP's discussion of impacts begins by noting that researchers have been unable to find any fishers north of Yosemite National Park (including the area of the proposed timber harvest); the discussion argues this is probably attributable to topography rather than differences in the availability of large trees.

According to the Cedar Flat THP, studies show fisher den trees in California averaged 33.1 inches in diameter and fisher "rest trees" in the Klamath region averaged 31 inches. "Trees of these sizes are common on [Sierra Pacific's] private forest land... and are expected to increase in both amount and distribution over time as a result of proposed [Sierra Pacific] management practices."

The discussion continues: "Pacific fisher rest tree habitat is likely to remain stable for the foreseeable future and will increase from an average of 20% to over 50% of [Sierra *948 Pacific] lands over the planning horizon....

As discussed in detail in the Alternative Silvicultural section, our management will produce more large trees, thus there will be more resting habitat. With the use of even-aged regeneration systems

there will be interspersed types... required for the habitat needs for a variety of prey species known to be utilized by the Pacific fisher."

The Cedar Flat THP summarizes its cumulative impacts on habitat claim as follows: "Based upon all the available information, including information available in federal studies, the long term impact of [Sierra Pacific's] management practices throughout the Sierras will be to increase the habitat of species utilizing dense forests with a large tree component such as the California spotted owl and the Pacific fisher.

[Sierra Pacific] private forest lands are already in a managed condition. Past selective logging has had an adverse [e]ffect on tree size and conifer volume per acre. These conditions will gradually be reversed over the next 100 years by a management regime designed to increase average tree size and abundance."

In response to a public comment expressing "concern that the THP fails to use a biological assessment area broad enough to account for the impacts of [Sierra Pacific's] logging plans throughout the Sierra Nevada," CDF gave its view that such an assessment would be impractical and incomplete given the variety of land ownership and control in the Sierra Nevada area and the lack of specific information on future activities throughout the region.

CDF then discussed federal regionwide planning efforts, which are commonly premised on an assumption that privately held forest land will not contribute to habitat preservation, and concluded that because Sierra Pacific's even-aged management program was expected (according to the Cedar Flat THP) eventually to improve habitat conditions for the California spotted owl and the Pacific fisher, Sierra Pacific's "contribution is more than was anticipated in the federal... plan."

The parties dispute the standard of review we should apply in determining whether Sierra Pacific and CDF, in choosing a geographic area for analyzing cumulative impacts on the California spotted owl and Pacific fisher, failed to follow the procedures prescribed by the Forest Practice Act and the Forest Practice Rules for preparation and approval of a timber harvest plan.

Plaintiffs contend that we should independently determine, without deference to CDF, whether CDF followed the procedures established by law. Sierra Pacific maintains the choice of a cumulative-impacts assessment area is a substantive decision reviewable only for substantial evidence, while CDF, relying on *Ebbetts Pass Forest Watch v. Department of Forestry & Fire Protection* (2004) 123 Cal. App.

4th 1331, 1350-1351 [20 Cal. Rptr. 3d 808], argues that its *949 decision to accept a timber harvest plan using a particular geographic area for cumulative-impacts assessment should be overturned only if arbitrary or capricious.

To decide the proper standard of review, we must more precisely identify "the nature of the alleged defect" and determine whether it is "predominantly one of improper procedure or a dispute over the facts." (Vineyard Area Citizens, supra, 40 Cal.4th at p. 435.)

As we understand it, plaintiffs' central contention (and the holding of the Court of Appeal below) is that Sierra Pacific, in preparing the THP's (and, implicitly, CDF in approving them), was obligated by the Forest Practice Rules, in particular Technical Rule Addendum No. 2, to follow a set analytical procedure in assessing cumulative impacts on a given species of animal or plant.

In this assertedly mandated procedure, a timber harvest plan's preparer must, for each species, separately identify a geographic area over which impacts will be assessed, discuss related activities occurring or expected to occur in the selected assessment area, and then assess the cumulative impacts of the proposed timber harvest and the related activities on the species.

CDF's fundamental error, plaintiffs argue, was in approving THP's that, in lieu of this procedure, selected a single geographic area for assessment of all cumulative impacts on biological resources. This error, they further argue, resulted in THP's that omitted key information on cumulative impacts over geographic areas larger than the state planning watersheds selected for assessment.

We agree with plaintiffs that the question of what analytical procedure is required under the Forest Practice Rules, and whether Sierra Pacific followed that procedure, is a predominantly procedural question on which we exercise our independent legal judgment. Applying that independent judgment, however, we conclude CDF did not violate the law, specifically Technical Rule Addendum No. 2, in approving Sierra Pacific's selection of biological cumulative-impacts assessment areas.

Despite initially designating particular state planning watersheds as the cumulative-impacts assessment areas for all species, the THP's in fact devoted ample discussion to cumulative impacts on the two species at issue, on a much broader geographic scale, up to and including logging on all Sierra Pacific's forest lands in the Sierra Nevada.

The THP's explicitly expanded their scope of view beyond the state planning watersheds to the United States Forest Service's Area of Concern 5 and to the region as a whole in order "[t]o assess the potential cumulative effects on wildlife that may have a current range large enough to extend beyond the Cal Planning Watershed." By doing so, the THP's avoided any violation of the pertinent provision of the Forest Practice Rules (Cal.

Code Regs., tit. 14, § 898) and its associated Technical Rule Addendum No. 2 (id., foll. § 952.9). Moreover, this is not a case in which the key information was scattered around a long, unorganized document, buried in an appendix, or contained *950 only in a separate, inadequately cross-referenced document. (See Vineyard Area Citizens, supra, 40 Cal.4th at p. 442.)

While the THP's did formally designate a single cumulative-impacts assessment area for all biological resources, they clearly and expressly analyzed cumulative impacts on a different, broader scale as to the species at issue here and did so in a reasonably well-organized discussion.

(5) The Court of Appeal broke down the analytical process it believed Technical Rule Addendum No. 2 mandates into seven distinct steps, which it concluded Sierra Pacific had not followed as to the California spotted owl and Pacific fisher.[3] But the regulation directing timber harvest plan preparers to follow the technical addendum also directs them to be "guided by standards of practicality and reasonableness."

(Cal. Code Regs., tit. 14, § 898.) In that light, we believe the technical addendum is properly read to direct that a timber harvest plan's cumulative-impacts assessment be reasonably tailored, in geographic scope as in other respects, to the species under discussion, but not to require rigid adherence to a particular analytical process.

The purpose of requiring a cumulative-impacts analysis in a timber harvest plan under the Forest Practice Act, as in an EIR under CEQA, is to ensure that the public and decision makers receive full information before the project is approved, not to set procedural traps for plan preparers or CDF. Plaintiffs contend the THP's, due to their use of relatively small assessment areas, failed to address the cumulative impacts of logging on dispersal habitat for the California spotted owl.

They urge us to hold this omission, like the omission of information on the presence of old-growth-dependent species in *Sierra Club*, supra, 7 Cal. 4th 1215, was both legally erroneous and presumptively prejudicial. But the two cases are not comparable.

In *Sierra Club*, the State Board of Forestry erred by approving a timber harvest plan despite the applicant's complete refusal to disclose the impacts of its proposed logging on old-growth-dependent species, information explicitly requested by the California Department of Fish and Game. (See *id.* at pp. 1221-1223, 1234, 1236-1237.)

Here, in contrast, the plans discussed the cumulative impact on spotted owl habitat, including habitat needed for population dispersal, over a large geographic area; they failed only to discuss the subject at the level of detail plaintiffs believe is needed to scientifically establish the cumulative *951 impact on spotted owl populations.

The deficiency is thus, at most, one of insufficient evidence to support CDF's findings, an issue outside the scope of our review.[4] (6) The present THP's each separately discussed the habitat needs of the California spotted owl and Pacific fisher and assessed whether the proposed activity, together with closely related logging and silvicultural activities, would cumulatively affect each of those species in an adverse way.

The THP's concluded these activities would not have significant adverse effects because, overall, Sierra Pacific's program of even-aged silviculture in the Sierra Nevada would improve habitat for the two species, a conclusion CDF echoed in response to public comments on the THP's. Whether substantial evidence in the administrative record supports this finding is, as just explained (fn.

4, ante), an issue we do not address. We hold only that this mode of analysis complied with the Forest Practice Rules as to the geographic scope required of a cumulative-impacts assessment.[5] III. Adequacy of Sierra Pacific's and CDF's Analysis of Future Herbicide Use Plaintiffs contend the plans' discussion of potential herbicide use and CDF's response to public comments on this point are legally deficient in a number of respects.

To understand and resolve these claims, we must review the plans' discussion and CDF's response in some detail (again taking the Cedar Flat THP as representative). *952 The Cedar Flat THP's discussion begins by explaining that herbicides are sometimes used within Sierra Pacific's integrated vegetation management program "to prepare a site for burning or planting, minimize resprouting brush, release conifers to grow freely, maintain road access and roadbed integrity, or eliminate exotic invasive weeds."

Whether herbicides will be used for preparation of a particular site, and if so which ones, at what rate, and by what application method cannot be predicted at the time of a timber harvest plan; rather, the decision is made by a licensed pest control adviser at the time of site preparation.

For this reason, Sierra Pacific deems the use of herbicides "entirely too speculative to be considered part of a THP project." Moreover, the Cedar Flat THP asserts, application of herbicides in a lawful manner carries no potential for significant adverse impacts on the environment because "[i]mpacts to target plants are short lived," reinvasion of the site by vegetation is rapid, and "application of herbicides will generally take place only once or twice during the lifetime of a stand."

Despite these assertions, the Cedar Flat THP acknowledges that "there exists a reasonable probability that some form of herbicide may be used to control vegetation post-harvest," and, "[o]ut of a desire to achieve maximum public disclosure," the Cedar Flat THP then enters into a detailed discussion of the herbicides that may be used, their potential impacts, and alternatives to their use.

The Cedar Flat THP asserts that in choosing and applying herbicides Sierra Pacific will comply fully with label restrictions and conditions imposed by the California Department of Pesticide Regulation, which are the product of an extensive registration system and include mandatory measures to minimize any adverse environmental effects. Adherence to these regulations during application of herbicides by a state-licensed pest control operator, the Cedar Flat THP asserts, "should prevent significant effects."

The Cedar Flat THP then discusses in detail four herbicides Sierra Pacific has used in past reforestation projects: atrazine, hexazinone, triclopyr, and glyphosate. Atrazine is toxic to fish and can build up in fish to a small degree; it is only slightly toxic to birds, amphibian eggs, and tadpoles, and has low toxicity to mammals. It is adsorbed by soils, but to different degrees depending on the soil type, and remains active in the soil for several months.

Atrazine dissolves in water and hence should not be applied to water, wetlands, or porous or sandy soil in which it can move easily. Concerns about runoff of atrazine and its buildup in soils "are primarily in areas where atrazine has been used repeatedly on crops that are annually grown."

In forest land applications, however, the herbicide is typically used only once in an 80-year rotation. The Cedar Flat THP concludes use of atrazine in accord with label and other regulatory restrictions would have no significant environmental effects. Similar information on the herbicide's fate in the environment, *953 breakdown products, toxicity, and use restrictions is provided for the other three herbicides; in each case, the Cedar Flat THP concludes that use of the herbicide in reforestation would have no significant adverse environmental effects, assuming all label and other regulatory restrictions are followed.

The Cedar Flat THP then discusses the effect of herbicide use generally on the targeted and untargeted plant species. The purpose of herbicide use in forest lands "is not to eliminate brush, forb and weed species, but rather to give the tree seedlings an opportunity to outgrow the competition." Nontree species resprout from seed or recolonize the site from nearby unharvested areas, the Cedar Flat THP asserts, and plant biodiversity is not adversely affected in the long term.

Finally, the Cedar Flat THP discusses the alternatives to herbicide use. Mechanical treatment is used to prepare a site, and the extent of its effectiveness in a given case helps to determine whether and how much herbicide will also be used. Manual clearing is both infeasible and unpredictable in effect.

The no action alternative is rejected because where herbicide use is indicated, its absence can retard planted conifer growth by 30 to 70 percent, defeating the productivity goal of the project. In response to a public comment that the Cedar Flat THP failed to assess the impacts of herbicide use, CDF observes that under section 21080.5, the Department of Pesticide Regulation's regulatory program is certified for exemption from EIR preparation and its operation is overseen by county agricultural commissioners.

On this basis, CDF asserts that "[a]s CDF is not the regulating authority for herbicide applications on private land we do not have the authority to approve or disapprove any project regarding the use of chemicals."

Because the Department of Pesticide Regulation is the lead agency governing its own certified regulatory program, CDF's response continues, "CDF is barred from repeating the environmental

analysis conducted by" the Department of Pesticide Regulation, and because use of an herbicide in compliance with the restrictions imposed by the Department of Pesticide Regulation "would not have a significant effect on the environment, CDF is not required to analyze the use in the THP."

That said, CDF's response proceeds to an extended consideration of the "cumulative watershed or biological effects" of using any of six herbicides in silviculture. (In addition to the four addressed in the Cedar Flat THP, the response addresses the herbicides 2,4-D and imazapyr.) CDF's discussion repeats to some extent, but also goes beyond that in the Cedar Flat THP.

As to atrazine, for example, the response discusses studies showing exposure to atrazine had adverse developmental effects on two species of frogs (neither native to the Sierra Nevada region). CDF acknowledges the study is "of *954 concern," expresses the opinion that agencies regulating pesticides may wish to increase the restrictions on atrazine's use, but concludes that CDF's ordinary watercourse and lake protection buffer zones and the infrequency of herbicide use in silviculture "would provide protections for water borne amphibians."

As to all of the herbicides that might be used, CDF concludes there is no likelihood of a significant environmental effect. CDF's response also considers in detail the possibility that herbicide use generally is contributing to drops in Sierra Nevada amphibian populations.

The response discusses a report that "attempt[s] to suggest that wind borne agrochemicals in general may be a factor in contributing to the decline of red-legged frogs in the Sierra Nevada," but notes that the studies cited in the report involved insecticides rather than herbicides.

The response discusses several other studies that have suggested a link to insecticides, which may drift from Central Valley farmlands into the Sierra Nevada region. With regard to potential pollution of Sierra Nevada streams and lakes by herbicide use, CDF's response observes that because the Forest Practice Rules mandate protection zones around bodies of water larger than the buffer zones called for on herbicide labels, "herbicide use on forested lands in California probably do[es] not have some of the same impacts to water as herbicide use in agriculture," making results from studies of agricultural use inapplicable.

Plaintiffs contend the Cedar Flat THP and CDF's response are deficient in that they improperly deem herbicide use too speculative for impacts analysis and rely on the Department of Pesticide Regulation's registration of the herbicides as excusing further environmental analysis.

Although some statements in the Cedar Flat THP and CDF's response support plaintiffs' argument, we disagree that the documents actually fail, in these respects, to assess the environmental impacts of Sierra Pacific's possible future herbicide use. Regarding speculativeness and its opposite, foreseeability, the Court of Appeal accurately summarized the law as follows: "[W]hen a proposed act, such as the application of herbicides, is reasonably foreseeable in general terms, the THP must include a general discussion of the act and its possible environmental effects, but need not include

a detailed analysis of specific acts that cannot reasonably be foreseen at the time the THP is prepared."

(See *Vineyard Area Citizens*, supra, 40 Cal.4th at p. 428; *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal. 3d 376, 396, 398-399 [253 Cal. Rptr. 426, 764 P.2d 278].) Whether the preparer of the three THP's and CDF applied the correct legal standard to determine the scope of analysis is a predominantly procedural question we review independently, but the correctness of factual findings predicate to the standard's application (for example, delineation of the circumstances under which a future action is likely to occur) is a predominantly factual matter we review only for substantial evidence.

(*Vineyard Area Citizens*, at p. 435.) *955 As noted above, the Cedar Flat THP expressly acknowledged that "there exists a reasonable probability that some form of herbicide may be used to control vegetation post-harvest."

Moreover, its preparer was able to focus on four particular herbicides Sierra Pacific has used in the past, to which CDF added two others in its own analysis. In light of the Cedar Flat THP's recognition that use of one or more of these herbicides was reasonably foreseeable, the plan incorrectly characterizes herbicide use as "too speculative" for present analysis.

(7) On the other hand, "[a] detailed environmental analysis of every precise use that may conceivably occur is not necessary at this stage." (*Laurel Heights Improvement Assn. v. Regents of University of California*, supra, 47 Cal.3d at p. 398.)

The Cedar Flat THP states: "Decisions about spraying are made after harvest based on conditions on the ground. These conditions include amount of competing vegetation present and its future growth potential, level of moisture retention capability in the specific soil, survival success rates of the planted conifer seedlings, amount of insect or rodent damage, and other factors that are not known at this time."

As noted earlier, the Cedar Flat THP also states that whether and what herbicides are used depends in part on the success of postlogging mechanical site preparation. Where the exact parameters of generally foreseeable future actions cannot confidently be predicted, the full-disclosure goals of CEQA and the Forest Practice Act may nonetheless be met with an analysis that "acknowledges the degree of uncertainty involved, discusses the reasonably foreseeable alternatives... and discloses the significant foreseeable environmental effects of each alternative, as well as mitigation measures to minimize each adverse impact."

(*Vineyard Area Citizens*, supra, 40 Cal.4th at p. 434.) Plaintiffs insist the THP's should have included more detailed, site-specific discussions of potential future herbicide use, focusing on the use of specific herbicides, applied by particular chosen methods, on each of the individual harvest units. They argue that the THP's already contain information on soils, competing vegetation,

climate, and silvicultural methods that could have been used for such site-specific analysis of herbicide impacts.

But plaintiffs do not dispute that the planned logging, mechanical clearing, and the passage of "one to ten years post harvest" until herbicides may be applied could change the conditions on the ground. Applying the substantial evidence standard to this predominantly factual question, we conclude CDF did not abuse its discretion by accepting the plans' finding that the precise parameters of future herbicide use could not be predicted, and hence failing to demand a more detailed, site-specific analysis of impacts and mitigation measures.

(*Accord*, *956 *Ebbetts Pass Forest Watch v. Department of Forestry & Fire Protection*, *supra*, 123 Cal.App.4th at p. 1363.)[6] Regarding the plans' reliance on the Department of Pesticide Regulation's registration of herbicides, we agree with plaintiffs that the fact a sister agency had assessed the environmental effects of various herbicides in general and registered them for use did not excuse CDF from assessing those herbicides' use as part of a particular timber harvest plan.

The court in *Californians for Alternatives to Toxics v. Department of Food & Agriculture* (2005) 136 Cal. App. 4th 1 [38 Cal. Rptr. 3d 638] recently addressed this issue, holding that the existence of the Department of Pesticide Regulation's registration program did not remove the environmental impacts of pesticide use from the proper scope of an EIR on a Department of Food and Agriculture plan to control an agricultural pest: "We acknowledge that DFA's [Department of Food and Agriculture] duty under CEQA to analyze the effects of pesticide use must necessarily take into account the distinct regulatory scheme of the DPR [Department of Pesticide Regulation].

However, sole reliance on DPR's registration of pesticides and its regulatory program, including safety regulations for employees handling pesticides (Cal. Code Regs., tit. 3, § 6720 et seq.), is inadequate to address environmental concerns under CEQA. DFA is responsible for analyzing the environmental impacts of proposed pesticide use under the [pest control plan], notwithstanding that DPR must also register pesticides before they can be used in this state.

DPR's registration does not and cannot account for specific uses of pesticides in the [plan], such as the specific chemicals used, their amounts and frequency of use, specific sensitive areas targeted for application, and the like." (*Id.* at p. 16.)

In registering a pesticide for use in California, the Department of Pesticide Regulation does not necessarily fully assess its use in every application, such as silviculture, where it may bear potential for particular environmental effects, nor does it guarantee that the pesticide's use will never have significant environmental effects.[7] *957 (8) CDF therefore had no grounds to state in its response to public comments that because of the Department of Pesticide Regulation's registration program "we do not have the authority to approve or disapprove any project regarding the use of chemicals."

To the contrary, as the lead agency evaluating timber harvests, CDF has not only the authority but also the duty to approve, disapprove, and impose mitigation measures on timber harvest plans, including measures to address the foreseeable use of herbicides in planned silvicultural operations. (Of course, CDF must regulate herbicide use in a manner consistent with that of the Department of Pesticide Regulation; it could not, for example, approve use in a timber harvest plan of an herbicide its sister agency had disapproved for all uses.)

Nor was CDF correct in concluding that any use of an herbicide in compliance with Department of Pesticide Regulation label restrictions necessarily "would not have a significant effect on the environment." (See *Californians for Alternatives to Toxics v. Department of Food & Agriculture*, supra, 136 Cal.App.4th at p. 17 ["Nor is there legal authority for the proposition that using registered pesticides according to their labels never results in significant adverse effects."]; cf. *Oregon Environmental Council v. Kunzman* (9th Cir.

1983) 714 F.2d 901, 905 ["the mere fact that a program involves use of substances registered under FIFRA [Federal Insecticide, Fungicide, and Rodenticide Act; 7 U.S.C. § 136 et seq.] does not exempt the program from the requirements of NEPA [National Environmental Policy Act of 1969; 42 U.S.C. § 4321 et seq.]"].) If the Cedar Flat THP and CDF's response to public comments on it had relied entirely on the Department of Pesticide Regulation's regulatory program and did not themselves analyze the significant environmental effects, mitigation measures, and alternatives to herbicide use on the harvested sites, we would agree that CDF failed in its duty to consider and disclose information relevant to its decision.

(*Sierra Club*, supra, 7 Cal.4th at pp. 1233-1234.) But neither the Cedar Flat THP nor CDF's response halted its analysis at that point. Rather, as demonstrated by our earlier summary of the two documents, they both continued with an extensive discussion of potential impacts, mitigation measures, and alternatives to herbicide use. CDF thus did not erroneously rely on the Department of Pesticide Regulation's regulatory program and fail to conduct its own environmental impacts assessment.

(*Accord*, *Ebbetts Pass Forest Watch v. Department of Forestry & Fire Protection*, supra, 123 Cal.App.4th at p. 1362.) Finally, plaintiffs contend CDF's response to public comments on the Cedar Flat THP was inadequate because CDF relied on information not contained in the administrative record, which the Court of Appeal characterized as "information that reveals [Sierra Pacific's] typical pattern of herbicide use, past use data maintained by [the Department of Pesticide Regulation], or documents created by pest control advisers that [Sierra Pacific] has hired in the past."

But, as CDF explains, Sierra Pacific's typical use of herbicides in *958 silviculture is in fact described in the THP's, and the Department of Pesticide Regulation data on past herbicide use that CDF relied upon were identified with particularity. Plaintiffs cite nothing in CEQA or the Forest

Practice Act requiring that source materials available to the public be physically incorporated into a timber harvest plan or official response to comments.

(See Cal. Code Regs., tit. 14, § 15148 ["Preparation of EIRs is dependent upon information from many sources, including engineering project reports and many scientific documents relating to environmental features. These documents should be cited but not included in the EIR."].)

CONCLUSION AND DISPOSITION The three THP's, and CDF's response to public comments on them, do not suffer from the asserted legal flaws plaintiffs identify.

We therefore reverse the judgment of the Court of Appeal and remand the matter to that court for further proceedings consistent with our opinion. Werdegar, J. with George, C. J., Kennard, J., Baxter, J., Chin, J., Moreno, J., and Corrigan, J., concurred. NOTES [1] The California spotted owl is a subspecies of *Strix occidentalis*. Unlike the Northern and Mexican subspecies, it is not federally listed as threatened or endangered.

The Pacific fisher (*Martes pennanti pacifica*), a mammal related to the marten, is also not listed as threatened or endangered, but state and federal agencies have designated it a species of concern. [2] All further unspecified statutory references are to the Public Resources Code.

[3] In summary, the steps were (1) selecting a cumulative-impacts assessment area for each species discussed; (2) describing the area in narrative form; (3) showing the area on a map; (4) explaining why that area was chosen; (5) identifying any past, present, or foreseeable future projects in the area; (6) describing any significant impacts these other projects had or may have on the species; and (7) determining whether together with the proposed timber harvest plan the effects on the species are cumulatively significant.

[4] Plaintiffs argued the lack of substantial evidence to support CDF's no-significant-impact findings in the Court of Appeal, but that court, holding the THP's deficient under Technical Rule Addendum No. 2, did not reach the issue.

The administrative record contains considerable evidence contrary to the plans' claim that Sierra Pacific's even-aged silviculture program will improve habitat for the California spotted owl and Pacific fisher. This included evidence that Pacific fishers and nesting spotted owls prefer old, decadent large trees, as well as dead snags; that even if a given current timber harvest plan leaves some large trees, snags, and downed trees in place, Sierra Pacific's even-aged management program will not predictably produce similar features in the future; and that, as a United States Forest Service study concluded, creating a "network of small, relatively isolated 'islands' of older forest suitable for breeding by spotted owls and separated by a 'sea' of younger, less suitable or unsuitable habitat, is not a workable strategy to assure long-term maintenance of spotted owls."

We have not attempted to weigh the parties' competing factual claims in this case. [5] We decline to separately address plaintiffs' further contentions that the THP's fail to adequately describe their

environmental settings and that CDF's responses to public comments regarding the California spotted owl and Pacific fisher were legally inadequate, as these were not among the issues identified in the petitions for review or answer.

(See Cal. Rules of Court, rule 8.520(b)(3).) To the extent plaintiffs' arguments on these points merely restate their complaint that the THP's err in using a uniform, insufficiently large assessment area for cumulative impacts, however, we reject them for the reasons already stated.

[6] Plaintiffs also maintain the THP's inadequately disclosed the need for stronger mitigation measures to protect aquatic environments and the true impacts of herbicide use on the mix of plants in the forest understory. This contention, closely related to, if not equivalent to, a claim the plans' findings on impacts and mitigation are not supported by substantial evidence, was not addressed by the Court of Appeal or presented in the petitions for review or answer.

For this reason, we decline to address the issue. (See Cal. Rules of Court, rule 8.520(b)(3).) [7] See California Code of Regulations, title 3, section 6158, subdivision (c) (even if the use of a pesticide will unavoidably result in significant adverse impacts, the chemical may be registered if the Department of Pesticide Regulation finds "that anticipated benefits of registration clearly outweigh the risks"); id., section 6432, subdivision (a) (county agricultural commissioner may approve a permit for pesticide use likely to cause "substantial adverse environmental impact" if he or she determines that alternatives and mitigation measures are infeasible); id., section 6426, subdivision (a) (licensed pest control advisers must adopt mitigation measures only where "feasible... reasonable, effective and practical").