

**FOR PUBLICATION**  
**UNITED STATES COURT OF APPEALS**  
**FOR THE NINTH CIRCUIT**

PIT RIVER TRIBE; NATIVE  
COALITION FOR MEDICINE LAKE  
HIGHLANDS DEFENSE; MOUNT  
SHASTA BIOREGIONAL ECOLOGY  
CENTER,

*Plaintiffs-Appellants,*

v.

UNITED STATES FOREST SERVICE;  
ADVISORY COUNCIL ON HISTORIC  
PRESERVATION; UNITED STATES  
BUREAU OF LAND MANAGEMENT;  
CALPINE CORPORATION,

*Defendants-Appellees.*

No. 04-15746

D.C. No.  
CV-02-01314-DFL

OPINION

Appeal from the United States District Court  
for the Eastern District of California  
David F. Levi, District Judge, Presiding

Argued and Submitted  
February 14, 2006—San Francisco, California

Filed November 6, 2006

Before: J. Clifford Wallace, Sidney R. Thomas, and  
Kim McLane Wardlaw, Circuit Judges.

Opinion by Judge Wallace

**COUNSEL**

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**OPINION**

WALLACE, Circuit Judge:

The Pit River Tribe, the Native Coalition for Medicine Lake Highlands Defense, and the Mount Shasta Bioregional Ecology Center (collectively Pit River) appeal from the district court's summary judgment on their claims against the Bureau of Land Management, the United States Forest Service, and the Department of the Interior (collectively agencies). Pit River alleges that the procedures followed by the agencies in extending certain leases in the Medicine Lake Highlands, and the subsequent approval of a geothermal plant to be built there, violated the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), the National Forest Management Act (NFMA), and the Administrative Procedure Act (APA). Pit River also contends that the agencies violated their fiduciary obligations to Native American tribes. We have jurisdiction pursuant to 28 U.S.C. § 1291. We conclude that the agencies did not take a "hard look" at the environmental consequences of the 1998 lease extensions and never adequately considered the no-action alternative. We therefore reverse.

**I.**

Medicine Lake and the highlands surrounding it are of great spiritual significance to the Pit River Tribe and to the other Native American tribes in the region. Although the highlands are within the Pit River Tribe's ancestral homelands, they are not part of the tribe's reservation. Tribe members, however, consider the region sacred and continue to use numerous important spiritual and cultural sites within the highlands.

This litigation concerns the efforts of Calpine Corporation (Calpine),<sup>1</sup> a California power company, to develop a geother-

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<sup>1</sup>Calpine, a nominal defendant in this litigation, recently sought Chapter 11 bankruptcy protection. That process does not affect this appeal.

mal power plant at Fourmile Hill near Medicine Lake. The Geothermal Steam Act of 1970, 30 U.S.C. §§ 1001-1025 (2005) (as amended), allows the Secretary of the Interior to “issue leases for the development and utilization of geothermal steam” on federal land and in national forests. *Id.* § 1002. Pursuant to the Geothermal Steam Act in effect at the time, the federal government designated the general area of the Medicine Lake Highlands as the Glass Mountain Known Geothermal Resource Area (Resource Area).

In 1973, the Department of the Interior issued a programmatic environmental impact statement (EIS) considering how to implement the Geothermal Steam Act nationwide (1973 EIS). Except for three California locations not at issue in this litigation, the 1973 EIS did not address the environmental implications of geothermal development in particular locations. Rather, the 1973 EIS provided for tiered environmental review because of the wide geographical distribution of potentially affected lands. “Specific details will be identified, evaluated, and described in the environmental analysis record prepared for each lease area prior to any leasing action.”

The 1973 EIS repeatedly discussed the interplay between NEPA and the Geothermal Steam Act, admitting that issuing geothermal leases “may constitute major Federal action significantly affecting the quality of the human environment,” thus requiring the preparation of subsequent EISs under NEPA. That EIS further provided that “[w]here the interdisciplinary evaluations or studies of any lease program reveal that a particular activity may constitute major Federal action significantly affecting the human environment, . . . an environmental statement will be prepared and circulated in accordance with Section 102(2)(c) of the National Environmental Policy Act.” The 1973 EIS stated that, in addition to review of leasing decisions, “[p]rior to the construction of power plants and transmission lines, and possibly of by-product water and mineral extraction facilities, further environmental evaluation will be made. If there are significant

potentially adverse environmental impacts not previously considered, an additional environmental statement may be necessary.”

Subsequently, in April 1981, the Bureau of Land Management (Bureau) and the Forest Service released an environmental assessment (1981 EA) for “casual use” exploration of the Resource Area. The stated purpose of the EA was “to decide whether to allow geothermal leasing and casual use exploration on approximately 266,800 acres of National Forest land in the Medicine Lake Planning Unit, and an adjacent 26,750 acres.” The EA stated that “[o]ne of the Management Directives in the Land Management Plan [was] to provide for geothermal development where it is compatible with other uses,” and recommended leasing “in all areas with special stipulations applied to sensitive areas.” It contained no discussion of the cultural or tribal impacts of the proposed leasing.

The 1981 EA acknowledged that, in general, “[a] decision to lease carries with it the right to develop a discovered resource, subject to the limitations of the lease.” It also made clear that “[t]he details of future exploration and development cannot be evaluated prior to leasing,” and that “[f]urther analysis will be required for the later stages of exploration and, if a resource is discovered, development.” The 1981 EA observed that “[a]t each step in the process there are numerous environmental safeguards required by the system, including EAs or EISs, and public participation.” In an appendix to the 1981 EA, the EA made clear that several staged EAs or EISs would be required to proceed to subsequent phases of the project.

In 1984, the Bureau and the Forest Service jointly issued a Supplemented Environmental Assessment for leasing activity in the Medicine Lake area (1984 EA). While the 1981 EA focused on casual use exploration, the 1984 EA explicitly addressed “the exploration, development and production phases of the geothermal program,” with an eye to “deciding

which lands should be leased and what measures are required to protect valuable resources.” The 1984 EA also required “[t]he lessee [to] file an operating plan for subsequent activities in exploration, development, and operation of the lease. Each operating plan will require an additional environmental analysis and approval. Additional site-specific conditions are then required before the lessee can begin activities.” The document was tiered to the 1973 EIS and specifically incorporated its evaluation of geothermal exploration, development effects, and related issues.

Unlike the 1973 EIS or the 1981 EA, the 1984 EA considered the possible effects of development on the cultural, recreational, and spiritual significance of certain features in the Medicine Lake area. For example, although the 1984 EA acknowledged that “[n]atural attractions could be impaired by construction and development so as to lose their recreational appeal,” it suggested that “geothermal production could become an attraction itself.”

The document stated that the area remained culturally significant to modern-day Native Americans. The discussion of the area’s modern-day cultural significance read, in its entirety, as follows:

The modern Native American peoples who have cultural traditions extending back to the prehistoric period, continue to use resources found in the study area in an effort to preserve their cultural identities. These resources not only include tangible materials such as food and ceremonial items but some natural features of the landscape have spiritual significance as well. These areas have not yet been completely recorded, nor are they likely ever to be. Some general areas of spiritual significance known to be of concern to local Native Americans include: Mt. Shasta, Black Fox Mountain, Little Black Fox Mountain, Medicine Lake, Medicine Mountain and

various other peaks, mountains and springs. The American Indian Religious Freedom Act of 1979[ ] requires ongoing consultation with local Native American organizations and individuals during all phases of land-surface altering activities for protection of the sites and areas important to the preservation of these cultural traditions.

The 1984 EA also discussed the historical significance of the area: “Although no sites in the study area are currently on the National Register of Historic Places, many have been judged eligible and several are in the process of being nominated. Nomination and/or acceptance is, however, no obstacle to a site’s removal by scientific excavation.”

The 1984 EA’s entire discussion of the effects of the proposed leasing on cultural and historical resources is as follows:

Any ground surface-disturbing activity within the boundaries of a prehistoric, protohistoric or historic site will disturb and/or destroy the patterning of surface and subsurface artifacts and features from which archaeologists infer past human behavior and construct a record of past human lifeways. Any landscape altering activities have the potential to adversely affect the spiritual significance of natural features important to Native American groups.

To address these and other potential impacts, the 1984 EA included a table of mitigating measures. The table indicated that some of the measures would be required as lease stipulations, while others would be analyzed further at the plan of operation stage. The sole mitigation measure listed for the impact on the “spiritual significance of landscape features” was “[c]onsultation with local Native American groups.” The 1984 EA optimistically concluded that such consultation would be “100% effective” as a mitigation measure. Never-

theless, three pages later, the 1984 EA contained an alternate finding in a listing of “Unavoidable Adverse Impacts”:

Cultural Resources. It is possible that geothermal development will alter the character of the landscape, or certain features of the landscape, to such an extent as to adversely affect those tangible and intangible qualities that Native American groups feel are of spiritual significance. Continuous consultation with Native American groups throughout all phases of the development process, from exploration through design and actual development, *may* succeed in minimizing such conflicts.

With regard to the impact on historical sites, the 1984 EA remarked that “[t]he BLM provides a copy of all [proposed plans of operation] to the State Historic Preservation Officer (SHPO). The SHPO is asked to provide comments on each proposal.”

The Bureau and the Forest Service subsequently mailed the 1984 EA to approximately one hundred individuals and organizations who were known to have been interested in the project. It is uncertain whether the 1984 EA was mailed to Pit River. The Bureau received only four letters in response, none of which was from Pit River.

Following the 1984 EA, the BLM committed itself to leasing 41,500 acres in the Resource Area in a Record of Decision (ROD) adopted in 1985. The ROD stated that numerous environmental concerns, including “that cultural resources be protected and that local Native American groups be consulted,” would be “addressed at the Plan of Operation review stage.” It then concluded “that with application of appropriate mitigation, geothermal development can take place in this area without significant adverse impacts. The potential economic and energy benefits from this relatively clean resource are expected to outweigh any residual adverse impacts.” On Janu-



ary 22, 1985, the Bureau's California director approved the leasing, concluding that "this action will result in no significant impacts to the human environment and, therefore, . . . an EIS is not necessary."

In June 1988, the Bureau entered into the leases at issue in this case, CA 21924 and CA 21926, without undertaking any further environmental or cultural impacts analysis. The lessee was Calpine's predecessor in interest, Freeport-McMoran Resource Partners Limited Partnership. The leases were for an initial term of ten years effective June 1, 1988.<sup>2</sup> Both leases granted the lessee

the exclusive right to drill for, extract, produce, remove, utilize, sell, and dispose of the geothermal resources in the lands described in item 3 together with the right to build and maintain necessary improvements thereupon, for a primary term of 10 years. Rights granted are subject to applicable laws, the terms, conditions, and attached stipulations of this lease, the Secretary of the Interior's regulations and formal orders in effect as of lease issuance and, when not inconsistent with lease rights granted or specific provisions of this lease, regulations and formal orders hereafter promulgated.

Both leases contained two additional stipulations:

1. Existing water in stock tanks, ponds, lakes, reservoirs, springs, creeks or streams is not available for use in any activity unless specifically permitted by the Forest Supervisor, except where the lessee has water rights or the authorized use of such water rights. Access for wildlife at all natural water sources appropriated for

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<sup>2</sup>Freeport-McMoran designated Calpine its agent for exploration in 1994 and assigned the leases to Calpine in 1996.

operational uses, must be provided. No surface disturbance is allowed within 700 feet of streams, lakes, ponds, springs, wet meadows or other water sources unless specifically permitted by the Forest Supervisor.

2. No surface-disturbing activities will be allowed on the following described lands, unless the lessee can demonstrate to the satisfaction of the Forest Service and the Bureau of Land Management through an appropriate Plan of Operation or permit application that unacceptable environmental impacts will not occur to areas with exceptional visual qualities. [Description of affected sections for respective lease areas]

In addition, CA 21926 contained a third stipulation:

3. No surface-disturbing activities will be permitted from April 1 to August 30, unless the lessee can demonstrate to the satisfaction of the Forest Service and the Bureau of Land Management through an appropriate Plan of Operation or permit application that unacceptable environmental impacts will not occur to Goshawk nesting habitat in [specific sections of the parcel].

Neither lease contained any other stipulation or restriction related to the use of the leasehold. The agencies did not complete an EA or EIS, or consult with the interested tribes, before issuing the leases.

Little activity occurred during the initial lease term. In 1994, the Bureau authorized two exploration core holes for lease CA 21926. Calpine later proceeded with one temperature gradient core hole in the fall of 1994, and received approval to deepen the hole in April 1995.

In 1995, Calpine submitted a plan of operations for a proposed Fourmile Hill Geothermal Exploration Project (Exploration Plan) on the leased parcels, in the same general location as the later-proposed power plant. The agencies conducted a NEPA review and distributed an EA for public comment in December 1995. The EA was sent to the Pit River Tribe. The agencies received little public comment and no comment from the Pit River Tribe. The agencies issued a Finding of No Significant Impact and approved the project in April 1996.

Meanwhile, in September 1995, Calpine submitted a plan of utilization for the power plant project at issue in this litigation: the Fourmile Hill Geothermal Development Project (Fourmile Hill Plant). The proposed 49.9 megawatt plant was to be located approximately three miles northwest of Medicine Lake. The power plant itself would cover ten and a half acres of land. The project would also involve construction of five production well pads, each covering approximately two and a half acres. The power plant and well field would disturb about fifty acres of land. The bulk of the surface-disturbing activity, some 338.8 acres, would be related to the construction of a 230-kilovolt transmission line, in a 125-foot-wide corridor, to carry the power produced at the Fourmile Hill Plant to an existing transmission line operated by the Bonneville Power Administration, located twenty-four miles away. After three years of construction, the plant would be expected to generate electricity for forty-five years before being decommissioned.

The agencies began preparing an EIS for the Fourmile Hill Plant in June 1996, sending a notification letter to over 750 potentially interested agencies, groups, and members of the public. Eventually, the agencies engaged in consultations with tribes, including the Pit River Tribe. They also commissioned an ethnographic report to consult local tribes “to identify cultural resources located in the area of the Fourmile Hill [plant].” A draft form of the Ethnographic Report was completed by December 1996. In July 1997, the agencies issued

a draft EIS for the Fourmile Hill Plant. The draft EIS received much criticism from the public, including criticism from Pit River.

In May 1998, the Bureau extended Calpine's leases for another five years. It appears that no environmental review was conducted with respect to this extension.

In September 1998, the agencies issued a final EIS for the Fourmile Hill Plant (1998 EIS). The 1998 EIS considered various options for routing the transmission line. Alternatives to the proposed structure and operations were considered earlier in the environmental review. While the 1998 EIS mentioned the "no action" alternative of denying the project entirely, it was rejected because it "would not meet the purpose and need for the proposed action." The 1998 EIS defined the purpose and need of the project as follows:

The purpose of the Fourmile Hill Geothermal Project is *to develop the geothermal resource on Calpine's Federal geothermal leases* in order to economically produce and deliver electrical energy to the Bonneville Power Administration (BPA) and others. The need for the project was stated by the U.S. Geothermal Steam Act of 1970, the Geothermal Energy Research, Development, and Demonstration Act of 1974, the Federal Land Policy and Management Act (FLPMA) of 1976, and the Energy Policy Act of 1992. The proposed project is consistent with these Federal regulations which seek to foster and encourage private enterprise in the development of alternative energy resources.

The 1998 EIS maintained that all of the alternatives considered would have significant adverse effects on "traditional cultural values" and "traditional cultural uses." The alternative chosen was found to "have the least overall effect on the environment . . . because it would . . . [m]inimize effects to

traditional cultural values and uses (specifically, to avoid effects near Medicine Lake and Timber Mountain).”

In July 1999, the Keeper of the National Register of Historic Places determined that the Medicine Lake caldera was eligible for listing in the National Register. The report also called for further studies on the eligibility of other areas in the region. Also in July 1999, a briefing paper recommended that the Fourmile Hill Plant project be denied because no mitigation could offset the significant impact to “the very nature and intrinsic value of the Medicine Lake area.” The paper also stated: “There is no mitigation that can offset the significant impact, which was a premise under which the leases were held.” However, the paper pointed out that “OGC and DOI Solicitors advised that denial of the Projects would be a taking of private property rights associated with the lease.”

The agencies issued a ROD approving the Fourmile Hill Plant on May 31, 2000. The ROD stated that Calpine had been issued “federal leases for the right to develop the geothermal resource on federal lands,” and that this “vested property interest” superceded an Executive Order on Indian Sacred Sites. As part of the mitigation efforts, the Bureau “plac[ed] a moratorium on further geothermal development in the [Resource Area] for a minimum of five years until an analysis of actual impacts of geothermal development can be completed by the authorizing agencies.” Based on the moratorium, the Bureau suspended operations and production in multiple leases in the Resource Area.

Pit River appealed the ROD to the Interior Board of Land Appeals and the Regional Forester for the Pacific Southwest Region. Both appeals were denied in their entirety.

While the appeals were pending, the Bureau unilaterally lifted the moratorium on further development of the Resource Area. The decision stated that “the energy situation in the country, and particularly in the West, ha[d] changed.” The

agency did not provide an opportunity for public review or comment.

In May 2002, the Bureau extended Calpine's leases for another forty years. No additional environmental analysis was undertaken in connection with this extension. The following month, Pit River initiated this litigation in the Eastern District of California, alleging various statutory violations throughout the leasing and development process. The district court entered summary judgment for the agencies on all claims on February 17, 2004. *Pit River Tribe v. Bureau of Land Management*, 306 F. Supp. 2d 929 (E.D. Cal. 2004).

## II.

We review the district court's summary judgment de novo, applying the same standards that applied in the district court. *Westlands Water Dist. v. U.S. Dep't of Interior*, 376 F.3d 853, 865 (9th Cir. 2004). Judicial review of agency decisions under NEPA, NHPA, and NFMA is provided by the APA, which maintains that an agency action may be overturned only when it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A); *see Ecology Ctr., Inc. v. Austin*, 430 F.3d 1057, 1062 (9th Cir. 2005) ("Our review of agency actions challenged under NFMA and NEPA is governed by the judicial review provisions of the Administrative Procedure Act. Under the APA, we review to determine if the agency's actions were arbitrary, capricious, an abuse of discretion, or otherwise contrary to law" (internal quotation and citations omitted)); *Morongo Band of Mission Indians v. FAA*, 161 F.3d 569, 573 (9th Cir. 1998) ("Decisions regarding NHPA . . . are similarly reviewed under the arbitrary and capricious standard"). "Because this is a record review case, we may direct that summary judgment be granted to either party based upon our de novo review of the administrative record." *Ecology Ctr.*, 430 F.3d at 1062 (internal quotation marks and citation omitted).

### III.

We must answer two threshold questions before reaching the merits of Pit River's claims regarding the 1998 lease extensions. First, we must consider whether Pit River has Article III standing to raise the claims. Second, we must decide whether the 2005 amendments to the Geothermal Steam Act affected the justiciability of the claims. *See* Energy Policy Act of 2005, Pub. L. No. 109-58, §§ 231(1), (2), 119 Stat. 594, amending 30 U.S.C. § 1005(g). We address these issues in turn.

#### A.

[1] The Supreme Court has identified three constitutional standing requirements: the plaintiff must have suffered an “injury in fact,” the injury must be fairly traceable to the conduct of the defendant, and the plaintiff must establish that a favorable federal court decision would be likely to redress the injury. *See Bennett v. Spear*, 520 U.S. 154, 167 (1997). Pit River relies on procedural harms to assert standing. The agencies argue that Pit River does not satisfy the first or third part of this test and consequently lacks standing.

[2] The agencies initially argue that Pit River did not suffer an injury in fact. “To satisfy the injury in fact requirement, a plaintiff asserting a procedural injury must show that the procedures in question are designed to protect some threatened concrete interest of his that is the ultimate basis of his standing.” *Beeman v. TDI Managed Care Servs., Inc.*, 449 F.3d 1035, 1038 (9th Cir. 2006), *quoting Citizens for Better Forestry v. USDA*, 341 F.3d 961, 969 (9th Cir. 2003). “[E]nvironmental plaintiffs adequately allege injury in fact when they aver that they use the affected area and are persons ‘for whom the aesthetic and recreational values of the area will be lessened’ by the challenged activity.” *Friends of the Earth, Inc. v. Laidlaw Env'tl. Servs., Inc.*, 528 U.S. 167, 183

(2000), *quoting Sierra Club v. Morton*, 405 U.S. 727, 735 (1972).

[3] The first sentence of the 1996 draft ethnographic report commissioned by the agencies reads: “Previous research has indicated that the Medicine Lake Highland and Timber Mountain areas have long been recognized by non-tribal scholars as traditional cultural properties of . . . the Pit River Nation . . .” Pit River states that it has used the lands in question for cultural and religious ceremonies “for countless generations.” Pit River has adequately demonstrated an injury in fact for standing purposes.

“Once a plaintiff has established an injury in fact under NEPA, the causation and redressability requirements are relaxed.” *Cantrell v. City of Long Beach*, 241 F.3d 674, 682 (9th Cir. 2001). “[T]he members must show only that they have a procedural right that, if exercised, *could* protect their concrete interests . . . .” *Defenders of Wildlife v. EPA*, 420 F.3d 946, 957 (9th Cir. 2005) (emphasis in original).

[4] The agencies do not challenge the second part of the test. In any event, we conclude that the harm Pit River complains of is fairly traceable to the agencies’ conduct. The agencies do contend, however, that Pit River’s challenge to the 1998 lease extensions is no longer justiciable because the extensions were supplanted by the 2002 lease extensions and are thus not redressable. We conclude that the lease extensions do not foreclose our ability to provide effective relief, as “the relief [Pit River] has requested will remedy its harm.” *Ocean Advocates v. U.S. Army Corps of Eng’rs*, 402 F.3d 846, 860 (9th Cir. 2005) (as amended). “The procedural injury would be redressed if the [agencies] followed proper procedures.” *Beeman*, 449 F.3d at 1040. If we hold that the environmental review was inadequate, “the agenc[ies] would have to correct the decision-making process . . . .” *Columbia Basin Land Prot. Ass’n v. Schlesinger*, 643 F.2d 585, 591 n.1 (9th Cir. 1981). We could therefore invalidate the leases as of



1998, thus nullifying the 2002 extensions, or we could enjoin any surface-disturbing activity until the agencies comply fully with NEPA and other statutes. *See Conner v. Burford*, 848 F.2d 1441, 1462 (9th Cir. 1988) (as amended) (enjoining surface-disturbing activity). Thus, Pit River can still receive effective relief from this court.

[5] The agencies' final argument about redressability is that the preparation of the 1998 EIS forecloses relief on Pit River's claims. In Part IV.B. of this opinion we reject that argument. Accordingly, Pit River has Article III standing.

#### B.

[6] In 2005, Congress amended the Geothermal Steam Act. *See* Energy Policy Act of 2005, Pub. L. No. 109-58, §§ 231(1), (2), 119 Stat. 594, amending 30 U.S.C. § 1005(g). The amendments to the Act restrict the Bureau's discretion to deny geothermal lease extensions. Because these amendments potentially render this appeal moot, we ordered supplemental briefing on the effect of the amendments.

[7] "A case becomes moot whenever it 'loses its character as a present, live controversy of the kind that must exist if we are to avoid advisory opinions on abstract propositions of law.' " *Cantrell*, 241 F.3d at 678, *quoting Hall v. Beals*, 396 U.S. 45, 48 (1969). The relevant "question is whether there can be any effective relief." *Id.* (internal quotations and citation omitted).

Before August 8, 2005, the portion of the Act regarding five-year lease extensions stated:

Any geothermal lease issued pursuant to this chapter for land on which, or for which under an approved cooperative or unit plan of development or operation, geothermal steam has not been produced or utilized in commercial quantities by the end of its

primary term, or by the end of any extension provided by subsection (c) of this section, *may* be extended for successive 5-year periods . . . .

30 U.S.C. § 1005(g)(1) (repealed Aug. 8, 2005) (emphasis added).

The amended Act provides as follows:

(2) Initial extension. The Secretary *shall* extend the primary term of a geothermal lease for 5 years if, for each year after the 10th year of the lease—

(A) the Secretary determined under subsection (b) that the lessee satisfied the work commitment requirements that applied to the lease for that year; or

(B) the lessee paid in annual payments [sic] accordance with subsection (c).

(3) Additional extension. The Secretary *shall* extend the primary term of a geothermal lease (after an initial extension under paragraph (2)) for an additional 5 years if, for each year of the initial extension under paragraph (2), the Secretary determined under subsection (b) that the lessee satisfied the minimum work requirements that applied to the lease for that year.

30 U.S.C. § 1005(a) (2005) (emphasis added).

[8] By changing “may” to “shall,” the statute eliminated the Bureau’s discretion in extending geothermal leases, provided that certain conditions are met by the lessees. NEPA’s EIS requirements apply only to discretionary federal decisions. *See Dep’t of Transp. v. Pub. Citizen*, 541 U.S. 752, 768

(2004). Accordingly, if the statute's effect is retroactive, effective relief to Pit River would be foreclosed.

In *Landgraf v. USI Film Products*, 511 U.S. 244 (1994), the Supreme Court considered whether to apply the Civil Rights Act of 1991, enacted while *Landgraf* was on appeal, to a cause of action that arose before the statute. The Court discussed in general terms when a statute should be given retroactive effect:

When a case implicates a federal statute enacted after the events in suit, the court's first task is to determine whether Congress has expressly prescribed the statute's proper reach. If Congress has done so, of course, there is no need to resort to judicial default rules. When, however, the statute contains no such express command, the court must determine whether the new statute would have retroactive effect, *i.e.*, whether it would impair rights a party possessed when he acted, increase a party's liability for past conduct, or impose new duties with respect to transactions already completed. If the statute would operate retroactively, our traditional presumption teaches that it does not govern absent clear congressional intent favoring such a result.

*Id.* at 280.

[9] Applying *Landgraf* to the 2005 geothermal amendments, we conclude that we should not apply the statute retroactively. The Energy Policy Act does not expressly state whether the statute is to be applied retroactively. The sole reference to potential retroactive application orders the Secretary to create "transition rules for leases issued before . . . enactment of this subsection . . . ." 30 U.S.C. § 1005(d) (2005). These transition rules have not yet been issued. Moving to the second half of the *Landgraf* analysis, we conclude that retroactive application of the statute would impose new duties on

Calpine, such as new minimum work or payment requirements. *Landgraf* makes clear that such retroactive operation is heavily disfavored.

[10] Therefore, the 2005 amendments have not rendered this case moot. We proceed to the merits of Pit River's claims.

#### IV.

Because the statute of limitations has run, Pit River does not challenge the 1988 leasing decisions. Rather, Pit River argues that the agencies violated NEPA, NHMA, and their fiduciary trust obligations to the Pit River Tribe by failing to undertake any environmental review before extending the leases in 1998. The agencies respond that the 1973 EIS, the 1981 EA, and the 1984 EA were sufficient to cover the lease extension. In the alternative, the agencies argue that we cannot provide effective relief because of the preparation of the 1998 EIS.

##### A.

[11] "NEPA requires that a federal agency consider every significant aspect of the environmental impact of a proposed action and inform the public that it has indeed considered environmental concerns in its decisionmaking process." *Earth Island Inst. v. U.S. Forest Serv.*, 442 F.3d 1147, 1153-54 (9th Cir. 2006) (internal quotation marks and citation omitted). The reviewing court must ensure that the agency took a "hard look" at the environmental consequences of its decision. *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976). The statute dictates procedural safeguards rather than a certain result. *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 371 (1989); *Salmon River Concerned Citizens v. Robertson*, 32 F.3d 1346, 1355-56 (9th Cir. 1994). Because the statute is procedural in nature, we "will set aside agency actions that are adopted 'without observance of procedure required by

law.’ ” *Natural Res. Def. Council v. U.S. Forest Serv.*, 421 F.3d 797, 810 n.27 (9th Cir. 2005), *quoting* 5 U.S.C. § 706(2)(D). Pit River argues that the agencies were required to prepare an EIS before issuing the 1998 lease extensions to Calpine.

In *Conner*, federal agencies sold oil and gas leases on 1,300,000 acres of national forest land in Montana. After undertaking EAs, the agencies issued findings of no significant impact, meaning that EISs were not required at the leasing stage. 848 F.2d at 1443. The Bureau then sold over 700 leases for oil and gas exploration. Leases were of two basic types. Some of the leases contained “no surface occupancy” (NSO) stipulations, which, on their face, seemed to prohibit the lessees from using the surface of the leased land without specific approval from the Bureau. Other leases contained standard stipulations authorizing “the government to impose reasonable conditions on drilling, construction, and other surface-disturbing activities;” however, unlike the NSO stipulations, they did not appear to allow the government “to preclude such activities altogether.” *Id.* at 1444.

The central issue in *Conner* was “whether the sale of any of the . . . leases . . . constituted an irreversible and irretrievable commitment of federal forest land . . . that could have a significant impact on the environment.” *Id.* at 1446. We held that, in the case of the non-NSO leases, it did constitute such a commitment: “[T]he non-NSO leases . . . do not reserve to the government the absolute right to prevent all surface-disturbing activity.” *Id.* at 1449. We continued:

[A]fter the lease is sold the government no longer has the ability to prohibit potentially significant inroads on the environment. By relinquishing the “no action” alternative without the preparation of an EIS, the government subverts NEPA’s goal of insuring that federal agencies infuse in project planning a thorough consideration of environmental values. The

“heart” of the EIS — the consideration of reasonable alternatives to the proposed action — requires federal agencies to consider seriously the “no action” alternative before approving a project with significant environmental effects. That analysis would serve no purpose if at the time the EIS is finally prepared, the option is no longer available.

*Id.* at 1451 (citation omitted).

[12] *Bob Marshall Alliance v. Hodel*, 852 F.2d 1223 (9th Cir. 1988), involved similar oil and gas leases in another Montana National Forest. As in *Conner*, the Bureau issued several leases, some of which had NSO stipulations and some of which did not. All of the leases contained “threatened or endangered species” stipulations, stating that “surface-disturbing activity may be restricted if it would have a detrimental effect on endangered or threatened species.” *Id.* at 1226. The district court granted summary judgment to plaintiffs, holding, among other things, that “the agencies violated NEPA by failing to give meaningful consideration to the no-leasing alternative.” *Id.* We affirmed, reiterating our recent holding in *Conner*: “[S]ale of the . . . leases required preparation of an EIS unless the lease ‘absolutely prohibits surface disturbance in the absence of specific government approval.’ ” *Id.* at 1227, quoting *Conner*, 848 F.2d at 1447 n.15.

[13] In contrast, an EIS is not required in cases where the government has not irretrievably committed resources. In *Friends of Southeast’s Future v. Morrison*, 153 F.3d 1059 (9th Cir. 1998), we held that an EIS was not required where the agency retained the ultimate right to decide how much timber was to be harvested. *Id.* at 1063-64.

[14] We must therefore resolve whether the leases and lease extensions at issue in this litigation reserve to the agencies the right to preclude surface-disturbing activity altogether. The 1988 leases and the 1998 lease extensions grant

the lessee “the exclusive right to drill for, extract, produce, remove, utilize, sell, and dispose of the geothermal resources in the [leased] lands.” They do not reserve to the agencies an absolute right to deny exploitation of those resources. All that is reserved to the agencies is the right to limit development in accordance with general statutory and regulatory requirements, and, critically, “when not inconsistent with lease rights granted,” with later regulations and orders. While specific stipulations attached to the leases provide some absolute limits on surface-disturbing activities, these stipulations only cover select sections of the lease parcels or certain periods of the year.

The agencies have consistently interpreted this lease language as a grant to Calpine of an absolute right to develop, subject only to procedural regulatory restrictions. A 1999 agency briefing paper stated that the Bureau and Forest Service Supervisors were “strongly considering selection of the No Action Alternative” for the projects in the Medicine Lake area. According to the briefing paper, Department of the Interior Solicitors advised that “denial of the Projects would be a taking of private property rights associated with the leases. . . . The decision makers *would like to have the authority* to deny the geothermal Projects, which may require compensation to the leaseholders for the taking.” This language implies that the decision makers *did not* have the authority to deny the projects.

Similarly, the ROD for the Fourmile Hill Plant’s explicit discussion of what were viewed as Calpine’s vested property rights supports the conclusion that the agencies viewed the leases as granting an absolute right to develop. The ROD analyzed the project’s compliance with Executive Order 13007, entitled Indian Sacred Sites, and concluded that the leases rendered the executive order without effect. In other words, although adverse effects to sacred sites had not been avoided, denial of the project was not possible without also denying Calpine its vested rights as a leaseholder.

This view of the leases is consistent with the earlier EISs and EAs prepared by the agencies. The 1973 EIS on geothermal energy “recognized that the issuance of geothermal leases . . . may constitute major Federal action significantly affecting the quality of the human environment,” thus necessitating further EISs. Similarly, the 1981 EA declared that “[a] decision to lease carries with it the right to develop a discovered resource, subject to the limitations of the lease. . . . Further analysis will be required for the later stages of exploration and, if a resource is discovered, development.” The 1985 ROD, in turn, stated that development within a conditional no surface occupancy zone “will be permitted if [the agencies] so concur. However, there is no guarantee to the lessee that proposed operations will be found to be feasible within those [NSO] areas . . . . There are, however, areas . . . where the [NSO] stipulations do not apply.”

“A comprehensive programmatic impact statement generally obviates the need for a subsequent site-specific or project-specific impact statement, unless new and significant environmental impacts arise that were not previously considered.” *Salmon River*, 32 F.3d at 1356. However, the 1973 EIS does not adequately address the potential impacts of leasing; in fact, we have already held as much in *Sierra Club v. Hathaway*, 579 F.2d 1162 (9th Cir. 1978). There, the plaintiffs sought an injunction to stop the government’s issuance of “casual use” geothermal exploration leases, contending that the 1973 EIS was insufficient. Casual use exploration “involves practices which do not ordinarily lead to any appreciable disturbance or damage to lands, resources, and improvements.” *Id.* at 1165. We held that a supplemental EIS was unnecessary at that stage, affirming the district court’s denial of an injunction, because the casual use leases did not constitute “irreversible and irretrievable commitments” of specific resources to development. *Id.* at 1168. However, our ruling also depended on our conclusion that it was unlikely “that the BLM and the USGS will permit the leasing program to proceed into its advanced phases without fully considering



their obligation to comply with the EIS requirements of NEPA.” *Id.* at 1167.

The 1981 and 1984 EAs are also insufficient. They did not consider the impacts of actual geothermal development, but only of leases and casual use exploration; the actual leases later granted, purportedly based on those EAs, are inconsistent with their terms. We held in *Salmon River* that “when an impact statement is prepared, site-specific impacts need not be fully evaluated until a ‘critical decision’ has been made to act on site development.” 32 F.3d at 1357. Once a critical decision is made, though, any vague prior programmatic statements are no longer enough. The lease language, and the agencies’ interpretation of the lease language, make clear that the “critical decisions” here occurred when the agencies extended absolute development rights in 1988 and again in 1998.

The agencies urge that the 1998 lease extensions merely preserved the status quo and do not require separate assessment. “Discretionary agency action that does not alter the status quo does not require an EIS.” *Nat’l Wildlife Fed’n v. Espy*, 45 F.3d 1337, 1344 (9th Cir. 1995). “In other words, an EIS is not required in order to leave nature alone.” *Kootenai Tribe of Idaho v. Veneman*, 313 F.3d 1094, 1114 (9th Cir. 2002) (internal quotation marks and citation omitted). Because Pit River did not challenge the 1988 leases, the agencies argue that they were free to do as they wished in 1998.

In *Espy*, the government took title to a ranch from a delinquent borrower and subsequently sold the ranch. The new owners continued to graze cattle on the land. We held that the title transfer was not subject to NEPA because cattle had grazed on the land before the title transfer. *Espy*, 45 F.3d at 1343-44. In *Kootenai Tribe*, though, we held that the Forest Service’s plan to reduce human intervention in national forests altered the status quo. We held that NEPA applied and

that the initiative required an EIS. *Kootenai Tribe*, 313 F.3d at 1115.

We conclude that the situation presented here is different from the “continued use” scenario in *Espy*. Without the affirmative re-extension of the 1988 leases, Calpine would have retained no rights at all to the leased property and would not have been able to go forward with the Fourmile Hill Plant. The status quo before the 1998 extensions was that Calpine owned rights to produce geothermal steam valid through May 31, 1998, after which Calpine owned nothing. Instead of preserving the status quo, the lease extensions gave Calpine an extra five years to develop the land and the possibility of obtaining a future lease extension of up to forty years.

[15] Like the original 1988 leases, the 1998 extensions of Calpine’s leases did not reserve to the agencies the absolute right to deny development and did not merely preserve the status quo. Under NEPA and our case law, the agencies were required to complete an environmental impact statement before extending the leases. This obligation was not satisfied by the earlier environmental reviews.

## B.

Calpine urges that any deficiency in the environmental review before the 1998 lease extensions has been rendered moot by the preparation of the 1998 EIS for the Fourmile Hill Plant. The district court held that the preparation of the 1998 EIS “mooted” the claim, because preparation of the EIS was the relief sought by Pit River. *Pit River Tribe*, 306 F. Supp. 2d at 945-46. The issue is actually one of standing rather than mootness, because the EIS was completed before the beginning of this litigation. *See Friends of the Earth*, 528 U.S. at 189-90 (describing difference between standing and mootness). The question is whether “the relief [Pit River] has requested will remedy its harm.” *Ocean Advocates*, 402 F.3d at 860.

NEPA requires that federal agencies include a detailed statement of “alternatives to the proposed action” in any recommendation or report on actions significantly affecting the quality of the human environment. 42 U.S.C. § 4332(2)(C)(iii). Additionally, the statute mandates that the agencies “study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.” *Id.* § 4332(2)(E). The “alternatives” section is “the heart of the environmental impact statement.” 40 C.F.R. § 1502.14. “The consideration of alternatives requirement . . . guarantee[s] that agency decisionmakers have before them and take into proper account all possible approaches to a particular project (*including total abandonment of the project*) which would alter the environmental impact and the cost-benefit balance.” *Bob Marshall Alliance*, 852 F.2d at 1228 (internal quotation marks, punctuation, and citation omitted) (emphasis in original).

“The purpose of an EIS is to apprise decisionmakers of the disruptive environmental effects that may flow from their decisions at a time when they retain a maximum range of options.” *Conner*, 848 F.2d at 1446 (internal quotation marks, punctuation, and citation omitted). We have already concluded that the agencies should have prepared an EIS at the time of the 1998 lease extensions. To allow the later 1998 EIS to compensate for the nonexistent earlier review would violate both federal regulations and our case law.

[16] Federal regulations explicitly, and repeatedly, require that environmental review be timely. “Agencies shall integrate the NEPA process with other planning at the earliest possible time to insure that planning and decisions reflect environmental values, to avoid delays later in the process, and to head off potential conflicts.” 40 C.F.R. § 1501.2 (2005). Similarly, regulations mandate that an environmental impact statement be commenced “as close as possible to the time the agency is developing or is presented with a proposal.” 40

C.F.R. § 1502.5 (2005). “The statement shall be prepared early enough so that it can serve practically as an important contribution to the decisionmaking process and will not be used to rationalize or justify decisions already made.” *Id.*; see also 40 C.F.R. § 1502.2(g) (2005) (“Environmental impact statements shall serve as the means of assessing the environmental impact of proposed agency actions, rather than justifying decisions already made”).

[17] Consistent with these regulations, we have repeatedly held that dilatory or ex post facto environmental review cannot cure an initial failure to undertake environmental review. In *Save the Yaak Committee v. Block*, the Forest Service began construction of a section of a road without preparation of an EA, and belatedly completed an EA two years later. 840 F.2d 714, 716-17 (9th Cir. 1988). We cited the federal regulations in holding that the preparation of the EA and other environmental documents was untimely. “The rationale behind this rule is that inflexibility may occur if delay in preparing an EIS is allowed: After major investment of both time and money, it is likely that more environmental harm will be tolerated.” *Id.* at 718 (internal quotation marks and citations omitted). We held that the agencies’ failure to comply with NEPA’s timing requirements “seriously imped[ed] the degree to which their planning and decisions could reflect environmental values.” *Id.* at 718-19.

We reached a similar conclusion in *Metcalf v. Daley*, 214 F.3d 1135 (9th Cir. 2000). In that case, the Makah Tribe sought approval to resume the hunting of gray whales. The hunting of gray whales was regulated by the International Convention for the Regulation of Whaling, to which the United States was a party. Government agencies entered into two written agreements with the Makah to support the Makah’s proposal. *Id.* at 1139. Soon thereafter, the agencies issued a final EA and a Finding of No Significant Impact. *Id.* at 1140. The agencies thus did prepare an EA, undertake environmental review, and issue a FONSI, “but they did so after

already having signed two agreements binding them to support the Tribe's proposal." *Id.* at 1142. On the same day as the release of the FONSI, the plaintiffs brought suit, alleging violation of NEPA and other statutes in supporting the Makah's proposal without first undertaking environmental review. *Id.* at 1140. We agreed, holding that the agencies had made an "irreversible and irretrievable commitment of resources" prior to environmental review. *Id.* at 1143.

[18] In the present case, there is even less reason than there was in *Metcalf* or in *Save the Yaak* to hold that the later review cured the earlier failure. In *Metcalf*, the later review actually addressed the issue of whether the government should support the Makah's proposal. Here, on the contrary, the tardy EIS did not address the issue that should have been addressed in 1988 and 1998: whether the land in question should be leased at all.

[19] The 1998 EIS simply did not consider the no-action alternative. The stated purpose of the project was "to develop the geothermal resource on Calpine's Federal Geothermal Leases CA21924 and CA21926 to economically produce and deliver electrical energy to BPA and others." The 1998 EIS, in its "alternatives" section, specifically stated that the only alternatives under consideration were those "[l]ocated on the Calpine Federal geothermal leases." The sole mention of the no action alternative stated that it "would not meet the purpose and need for the proposed action." The 1998 EIS failed to take the requisite "hard look" at whether the leases should have been extended; it therefore cannot possibly remedy the earlier violation. To allow the 1998 EIS to cure the earlier violation would mean using the EIS "to rationalize or justify [a] decision[ ] already made," although the EIS does not even address that earlier decision. *See Save the Yaak*, 840 F.2d at 718, *quoting* 40 C.F.R. § 1502.5.

In *West v. Secretary of the Department of Transportation*, when discussing mootness, we reiterated that if completion of

the challenged action were sufficient to moot a NEPA claim, an agency “could merely ignore the requirements of NEPA, build its structures before a case gets to court, and then hide behind the mootness doctrine. Such a result is not acceptable.” 206 F.3d 920, 925 (9th Cir. 2000) (internal quotation marks, citation, and emphasis omitted). Similarly, an agency does not satisfy NEPA by ignoring the statute at the critical stage, committing resources to development, and eventually completing an EIS—however lengthy and exhaustive—that simply asserts that the fundamental decision to develop has already been made.

[20] Because the 1998 EIS was premised on the notion that the leases were valid and granted development rights to Calpine, the 1998 EIS cannot substitute for an EIS evaluating the decision to extend the underlying lease rights as an initial matter. The agencies never took the requisite “hard look” at whether the Medicine Lake Highlands should be developed for energy at all. By the time the agencies completed the 1998 EIS, “the die already had been cast. The ‘point of commitment’ to this proposal”— the extension of the leases— “clearly had come and gone.” *Metcalf*, 214 F.3d at 1144. Accordingly, in spite of the 1998 EIS, we hold that the 1998 lease extensions—and the entire Fourmile Hill Plant approval process for development of the invalid lease rights—violated NEPA.

## V.

Pit River also argues that the agencies violated NHPA by failing to identify traditional cultural properties on the leaseholds before issuing or extending the leases. The district court found that the preparation of the 1998 EIS provided all the relief sought on these claims. *See Pit River Tribe*, 306 F. Supp. 2d at 945-46. In the alternative, the district court held that the lease extensions were not subject to NHPA because they did not change the status quo. *Id.* at 946 n.10.

[21] “The NHPA involves a series of measures designed to encourage preservation of sites and structures of historic, architectural, or cultural significance.” *San Carlos Apache Tribe v. United States*, 417 F.3d 1091, 1093-94 (9th Cir. 2005) (internal quotation marks and citation omitted). To this end, the statute “requires a federal agency to ‘take into account the effect of [any] undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register.’ ” *Morongo Band of Mission Indians v. FAA*, 161 F.3d 569, 581 (9th Cir. 1998), *quoting* 16 U.S.C. § 470(f). “When an undertaking may affect properties of historic value to an Indian tribe on non-Indian lands, the consulting parties shall afford such tribe the opportunity to participate as interested persons.” *Muckleshoot Indian Tribe v. U.S. Forest Serv.*, 177 F.3d 800, 806 (9th Cir. 1999), *quoting* 36 C.F.R. § 800.1(c)(2)(iii). The effort must be “initiated early in the undertaking’s planning, so that a broad range of alternatives may be considered during the planning process for the undertaking.” 36 C.F.R. § 800.1(c). “NHPA is similar to NEPA except that it requires consideration of historic sites, rather than the environment.” *United States v. 0.95 Acres of Land*, 994 F.2d 696, 698 (9th Cir. 1993).

[22] It is undisputed that no consultation or consideration of historical sites occurred in connection with the lease extensions, although NHPA consultation did occur in the Fourmile Hill Plant approval process. The agencies defend the lack of NHPA analysis on the same grounds that they defended their lack of NEPA analysis: that no analysis was required, and, in the alternative, that the later analysis cured the earlier failure. For the reasons discussed above, we hold that the extension of the leases was a federal undertaking requiring review. Similarly, the later NHPA review cannot cure the earlier violation, because it did not deal with the question of whether the land should have been leased at all. Consequently, we hold that the agencies violated NHPA by failing to complete the necessary review before extending the leases.

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**VI.**

Pit River contends that the agencies violated their fiduciary duty to the Pit River Tribe by failing to protect the Tribe's interests during the development process. The district court held that the agencies fully satisfied their fiduciary duty because they "did not violate any statutes during the approval process for Fourmile Hill." *Pit River Tribe*, 306 F. Supp. 2d at 950.

[23] "The federal government owes a fiduciary obligation to all Indian tribes as a class." *Inter Tribal Council of Ariz., Inc. v. Babbitt*, 51 F.3d 199, 203 (9th Cir. 1995). We have held that agencies must at least show "compliance with general regulations and statutes not specifically aimed at protecting Indian tribes." *Morongo Band*, 161 F.3d at 574. Because we conclude that the agencies violated both NEPA and NHPA during the leasing and approval process, it follows that the agencies violated their minimum fiduciary duty to the Pit River Tribe when they violated the statutes. We therefore need not reach any of the other fiduciary duty arguments raised by Pit River. In particular, we do not reach the question of whether the fiduciary obligations of federal agencies to Indian nations might require more.

**VII.**

[24] The agencies violated their duties under NEPA and NHPA and their fiduciary duty to the Pit River Tribe by failing to complete an environmental impact statement before extending Calpine's leases in 1998. Hence, both the five-year lease extensions and the subsequent forty-year extensions must be undone. The rest of the project approval process, including the 1998 EIS, was premised on Calpine's possession of a valid right to develop the land and therefore must be set aside. We do not reach Pit River's three claims based on agency actions subsequent to the 1998 lease extensions: the agency decisions in 2000, the NFMA claims, and the APA



claim related to the rescission of the development moratorium.

[25] We reverse the district court's summary judgment in favor of the agencies, and direct the district court to enter summary judgment in favor of Pit River consistent with this opinion.

**REVERSED.**