

FOR PUBLICATION
UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

WESTLANDS WATER DISTRICT; SAN
LUIS & DELTA-MENDOTA WATER
AUTHORITY,

Plaintiffs-Appellees,

v.

UNITED STATES DEPARTMENT OF THE
INTERIOR; GALE A. NORTON,
Secretary U.S. Department of the
Interior; UNITED STATES BUREAU OF
RECLAMATION; ELUID MARTINEZ,
Commissioner of the U.S. Bureau
of Reclamation; LESTER A. SNOW,
Regional Director of the U.S.
Department of the Interior, Bureau
of Reclamation, Mid-Pacific
Region; UNITED STATES
DEPARTMENT OF FISH AND WILDLIFE;
JAMIE RAPPAPORT CLARK, Director
of the U.S. Fish and Wildlife
Service; MICHAEL SPEAR,
Operations Manager of the
California/Nevada Operations
Office, U.S. Fish and Wildlife
Service, Pacific Region; UNITED
STATES DEPARTMENT OF COMMERCE;
DONALD EVANS, Secretary, United
States Department of Commerce;
NATIONAL MARINE FISHERIES
SERVICE; PENELOPE DALTON,

No. 03-15194

D.C. No.

CV-00-07124-OWW

Assistant Administrator for
Fisheries at Commerce; REBECCA
LENT, Dr., Regional Administrator
of the U.S. Marine Fisheries
Service,

Defendants,

YUOK TRIBE,

Defendant-Intervenor,

and

HOOPA VALLEY TRIBE,

*Defendant-Intervenor-
Appellant,*

v.

SACRAMENTO MUNICIPAL UTILITY
DISTRICT; NORTHERN CALIFORNIA
POWER ASSOCIATION,

*Plaintiffs-Intervenors-
Appellees.*

WESTLANDS WATER DISTRICT; SAN
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STATES DEPARTMENT OF COMMERCE;
DONALD EVANS, Secretary, United
States Department of Commerce;
NATIONAL MARINE FISHERIES
SERVICE; PENELOPE DALTON,

No. 03-15289

D.C. No.

CV-00-07124-OWW

Assistant Administrator for
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of the U.S. Marine Fisheries
Service,

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and

YUOK TRIBE; HOOPA VALLEY
TRIBE,

Defendants-Intervenors,

v.

SACRAMENTO MUNICIPAL UTILITY
DISTRICT; NORTHERN CALIFORNIA
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No. 03-15291

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STATES DEPARTMENT OF COMMERCE;
DONALD EVANS, Secretary, United
States Department of Commerce;
NATIONAL MARINE FISHERIES
SERVICE; PENELOPE DALTON,

No. 03-15737

D.C. No.
CV-00-07124-OWW

OPINION

Assistant Administrator for
Fisheries at Commerce; REBECCA
LENT, Dr., Regional Administrator
of the U.S. Marine Fisheries
Service,

Defendants-Appellees,

YUROK TRIBE,

*Defendant-Intervenor-
Appellant,*

and

HOOPA VALLEY TRIBE,

Defendant-Intervenor,

v.

SACRAMENTO MUNICIPAL UTILITY
DISTRICT; NORTHERN CALIFORNIA
POWER ASSOCIATION,

*Plaintiffs-Intervenors-
Appellees.*

Appeal from the United States District Court
for the Eastern District of California
Oliver W. Wanger, District Judge, Presiding

Argued and Submitted
February 9, 2004—San Francisco, California

Filed July 13, 2004

Before: Alfred T. Goodwin, A. Wallace Tashima, and
Richard R. Clifton, Circuit Judges.

Opinion by Judge Goodwin

COUNSEL

Katherine Barton, Department of Justice, for the federal defendants-appellants/appellees.

Thomas Schlosser, Morisset, Schlosser, Jozwiak & McGaw, Seattle, Washington, for defendant-intervenors-appellants/appellees Hoopa Valley Tribe.

Scott W. Williams, Alexander, Berkey, Williams & Weathers, Berkeley, California, for defendant-intervenor-appellant/cross-appellee Yurok Tribe.

Eric N. Robinson, Daniel J. O'Hanlon, Kronick, Moskovitz, Tiedemann & Girard, Sacramento, for plaintiffs-appellees/cross-appellants water agencies.

Kelly L. Drumm, Brian S. Haughton, Barg Coffin Lewis & Trapp, San Francisco, California, for plaintiff-intervenor/appellee Northern California Power Agency.

Sally Magnani Knox, Deputy Attorney General, Oakland, California, for amicus curiae People of the State of California.

OPINION

GOODWIN, Circuit Judge:

For forty years, most of the Trinity River's water has been diverted to the Sacramento River basin. Congress mandated that some of that water be returned to the Trinity River in order to revive its chinook salmon, coho salmon, and steelhead trout populations, which have been decimated by the decades of reduced water flows. California municipal water agencies and power districts ("Plaintiffs") challenged the plan to redirect Trinity River water, arguing that the procedural requirements of the National Environmental Policy Act, 42 U.S.C. § 4321 *et seq.* (1970) ("NEPA"), and the Endangered Species Act, 16 U.S.C. § 1531 *et seq.* (1973) ("ESA"), were not met.

Ruling on cross-motions for summary judgment, the district court enjoined parts of the restoration program devised by federal agencies and the Hoopa Valley Tribe ("Hoopa Valley"), mandated that non-flow restoration measures be implemented, and ordered the federal agencies to supplement their Environmental Impact Statement ("EIS") to cover issues neglected or inadequately addressed in previous studies.

We affirm in part and reverse in part. We reverse the conclusion that the scope of the EIS and the range of alternatives considered therein was unreasonable. We reverse the district court's injunctive orders to supplement the EIS to address the issues raised on appeal. We affirm the district court's ruling that two of the mitigation measures insisted upon by the Fish and Wildlife Service ("FWS") and the National Marine Fisheries Service ("NMFS") in their biological opinions exceeded

the statutory authority for such opinions. Lastly, we reject the three claims raised by Plaintiffs on cross-appeal and affirm the remainder of the judgment.

BACKGROUND

The Trinity River originates in northwest California. It runs southward to Trinity Dam, forming Trinity Reservoir. South of the dam, it flows 112 miles westward and its waters join those of the Klamath River at a confluence 44 miles upstream of the Pacific Ocean. The Trinity River was long known for its abundant fishery¹ resources, which include anadromous² species of chinook salmon, coho salmon, and steelhead trout. Plentiful runs of these fish sustained Hoopa Valley and the Yurok Tribe (“Yurok”; collectively “the Tribes”) from before non-Indian settlement, as well as numerous canneries in the early twentieth century.

The Trinity River Division (“TRD”) is a part of the Central Valley Project (“CVP”), an extensive system of dams, tunnels, canals, and reservoirs that stores and regulates water for California’s Central Valley. The CVP supplies two hundred water districts, providing water for about thirty million people, irrigating California’s most productive agricultural region and generating electricity at nine powerplants. The TRD impounds the Trinity River initially at Trinity Dam, behind which water accumulates to form the approximately 2,448,000 acre-foot (“AF”)³ Trinity Reservoir. A second dam

¹“The term ‘fishery’ refers to: ‘(A) one or more stocks of fish which can be treated as a unit for purposes of conservation and management and which are identified on the basis of geographical, scientific, technical, recreational and economic characteristics; and (B) any fishing for such stocks.’” *Greenpeace Action v. Franklin*, 14 F.3d 1324, 1327 (9th Cir. 1992) (quoting 16 U.S.C. § 1802(8) (1988)).

²Anadromous: “Migrating up rivers from the sea to breed in fresh water, as salmon do.” *Webster’s II New Riverside Univ. Dictionary* 104 (1994).

³One acre-foot of water is equal to the amount of water it would take to fill an acre to a foot-deep level—approximately 326,000 gallons. An average household uses between one-half and one acre-foot of water in a year. Trinity River Flow Evaluation Study (“TRFES”) at *xxix*.

at Lewiston regulates water releases to the original Trinity River. Water can also be diverted via the Clear Creek Tunnel to the Sacramento River Basin. The hydroelectric generators at Trinity Dam, Clear Creek Dam, and Clear Creek Tunnel supply power to CVP contractors. Just south of Lewiston Dam, the Trinity River Fish Hatchery operates to mitigate the fishery damage caused by the TRD.

In 1955, Congress authorized the construction of the TRD as part of the CVP. Pub. L. No. 69-386 (1955). Studies of the Trinity River led Congress to the conclusion that “surplus” water could be diverted to the Central Valley without harming the fishery of the Trinity and Klamath Rivers. Record of Decision (“ROD”) at 4 (citing H.R. Rep. No. 602, 84th Cong., 1st Sess. 4-5 (1955); S. Rep. No. 1154, 84 Cong., 1st Sess. 5 (1955)). Section 2 of the 1955 law ordered the Secretary of the Interior (“Secretary”) to take necessary measures to protect the fishery and wildlife resources of the Trinity River Basin. *Westlands Water Dist. v. Dep’t of the Interior*, 275 F. Supp. 2d 1157, 1169 (E.D. Cal. 2002) [hereinafter Order].⁴

Construction of the TRD was completed in 1963 and full operation began in 1964. From 1964 to 1997, an average of 988,000 AF/year, about 68% of the river’s flow, was diverted to the Central Valley. During the first years of operation, however, diversions were much higher—over the first ten years an average of 88% of the river’s flow, or about 1,277,400 AF/year was diverted. By the early 1970s, the salmonid populations had noticeably declined, and several government bodies were formed specifically to study and address the fishery damage caused by the TRD. *See* TRFES at 8.

⁴This appeal arises from the Memorandum Decision and Order Re: Cross-Motions for Summary Judgment, issued by the district court on December 10, 2002. The district court filed a second unpublished Order disposing of post-judgment motions on April 7, 2003, which will be referred to herein as “Order II.”

The anadromous salmon and steelhead require a varied river environment to support survival and growth in different life stages. Salmon and steelhead lay their eggs in the gravel riverbeds of freshwater rivers and tributaries. The eggs incubate in the protected spaces between the riverbed rocks, and newly-hatched fish spend weeks in the gravel interstices before emerging as small, fully-formed fish. Young fish require shallow, low-velocity water found near gently sloping banks or in backwater areas. Later in their juvenile growth, the fish come to prefer the higher velocity water found in the runs and the deeper, cooler pools forming the main parts of a river. Depending on the species, juvenile fish may spend months or even years in freshwater before migrating to the ocean. Fish wintering in the rivers require habitats with unsedimented gravel and low water velocities. Changes in water temperatures, lengths of daylight periods, and flow signal the appropriate times for fish to begin smoltification, the physiological process necessary for surviving in saltwater. Full water flows facilitate downmigration to the ocean. The fish grow to full adulthood in the ocean before making their way upriver, sometimes traveling a hundred miles or more to spawn.

Before the TRD was completed, large water flows from the yearly spring meltoff naturally removed riverside vegetation and maintained a dynamic river channel: a meandering, shallow channel free to move and change its course within a generally unvegetated floodplain. The straight parts of the river flowed quickly and kept sediment from settling in the interstices of riverbed gravel; riverbends slowed water velocities and created protected pools of still, cool waters. In its natural state, the Trinity River provided the varied water temperatures and velocities, the unclogged riverbed gravel, the seasonal flows to assist upriver and downriver migration, and the protection from predators that the salmon and other anadromous fish require.

The TRD radically altered the Trinity River environment, destroying or degrading river habitats that supported once-

abundant fish populations. The TRD dams blocked 109 miles of upstream habitat previously used by salmon and steelhead for spawning and rearing. Low water flows imposed what was essentially extreme drought conditions for more than thirty years. Without the large spring melt-off flows, heavy vegetation grew on the banks, narrowing the river channels, making the banks steeper, and preventing the river channel from changing shape. Water velocities under these conditions became faster and more uniform, with fewer shallow areas adjoining the banks and pools. Decreased flows also meant that fine sediment trapped in the spaces between the riverbed rocks was not flushed away, spoiling spawning grounds by decreasing oxygen flows to eggs and trapping young fish. Releases from the dams affected water temperature—water was too hot during the winter months, owing to the lack of flow, and too cold during the summer because water is released from lower, cooler parts of Trinity Reservoir. Unseasonable temperatures signaled the fish to migrate to the ocean at the wrong times, or failed to trigger smoltification.

A 1978 FWS study determined that an annual flow regime of 340,000 AF/year would be necessary to rehabilitate and support a healthy habitat for natural fishery production in the Trinity River. TRFES at 9. In 1980, the FWS estimated that the Trinity River fish population suffered a reduction of 60% to 80%, and fishery habitat loss of 80% to 90%. ROD at 5. The Secretary subsequently directed FWS to complete a 12-year flow evaluation study assessing habitat restoration efforts and making recommendations for further measures. *Id.*

In response to the steadily deteriorating condition of the Trinity River, Congress passed a series of laws to speed its restoration.⁵ The 1984 Trinity River Basin Fish and Wildlife Management Act (the “1984 Act”) directed the Secretary to

⁵The first such statute was the Trinity River Stream Rectification Act of 1980, Pub. L. No. 96-335, which sought to limit detrimental sand deposits from Grass Valley Creek. It is not at issue in this case.

“implement a basin-wide fish and wildlife management program in order to achieve the long-term goal of restoring fish and wildlife populations in the Trinity River Basin to a level approximating that which existed immediately before the start of the construction of the Trinity River division.”⁶ Pub. L. No. 98-541, 98 Stat. 2721 (1984).

The 1992 Central Valley Project Improvement Act (“CVPIA”), Pub. L. 102-575, 106 Stat. 4714 (1992), confirmed Congress’ commitment to restoring and protecting the fish and wildlife habitats of the Central Valley and Trinity River Basins. The CVPIA ordered that the TRFES, initiated by the Secretary in 1981, be completed by September 30, 1996. CVPIA § 3406(b)(23)(A). Implementation of the TRFES’s flow recommendations would begin once the Secretary and Hoopa Valley concurred in the recommendations. *Id.* at § 3406(b)(23)(B). Congress set a minimum flow release from Trinity Dam at 340,000 AF/year pending completion and implementation of the TRFES flow recommendations. *Id.* at § 3406(b)(23).

The FWS and Hoopa Valley collaborated in writing the TRFES. The completed study, released in June 1999, recommended a comprehensive strategy to rehabilitate the Trinity River and recreate an environment resembling the natural pre-TRD habitat. This required increased flows of varying volumes to maintain a river environment that would support different salmon and steelhead trout life stages and encourage natural fish production—one with the proper riverbed shape, vegetation growth, water velocities, water temperatures, and gravel unclogged by sand and fine sediment. The TRFES rec-

⁶Congress amended the 1984 Act in 1996, charging that fishery restoration should include not only “returning adult anadromous fish spawners,” but also “the ability of dependent tribal, commercial, and sport fisheries to participate fully, through enhanced in-river and ocean harvest opportunities, in the benefits of restoration.” Trinity River Fish and Wildlife Management Reauthorization Act of 1995 § 2, Pub. L. No. 104-143, 110 Stat. 1338 (1996).

ommended a permanent increase of flows depending on the water-year class, ranging from 368,900 AF/year in “Critically Dry” years to 815,200 AF/year in “Extremely Wet” years.⁷ TRFES at 229-30. Under the TRFES flow regime, water would be released at different rates during the course of the year to replicate the large water flows caused by the spring melt and naturally low flows during the summer and winter months. TRFES at xxx-xxxi. The TRFES also recommended the use of non-flow measures, such as the mechanical removal of vegetation on the banks, the reshaping of the riverbed and banks, and the placement of appropriately sized gravel, to promote and sustain natural salmonid production. *Id.* at 230.

NEPA requires that federal agencies analyze the environmental effects of proposed actions, publish the results of their study in the form of a draft EIS, and receive and respond to public comments. Compliance with California environmental laws also requires an environmental review; the Department of the Interior (“Interior”) initiated an Environmental Impact Report (“EIR”) concurrently with the EIS to comply with the California Environmental Quality Act, Cal. Pub. Res. Code § 21000 *et seq.*

In October 1999, a team of federal, state, and tribal officials released a draft EIS/EIR (“DEIS”).⁸ The DEIS considered alternatives for restoring the Trinity River fishery and evaluated their environmental consequences, ultimately recommending that the TRFES’s plan be carried out. In October 2000, the NMFS and FWS issued formal Biological Opinions (“BioOps”) recognizing the potential effects on area fisheries and discussing reasonable and prudent measures (“RPMs”) to

⁷Five water year classes are used to describe the availability of water from year to year: Critically Dry, Dry, Normal, Wet, and Extremely Wet.

⁸Interior appointed the FWS to serve as lead agency for the DEIS/EIR. Trinity County, the Bureau of Reclamation, and Hoopa Valley served as co-leads. DEIS 1-25. This group of agencies will sometimes be referred to as “the EIS team.”

minimize or avoid harmful effects. The agencies issued a final EIS/EIR (“FEIS”) in November 2000.

Hoopa Valley concurred in the TRFES recommendations and the Department of the Interior issued a Record of Decision (“ROD”) on December 19, 2000, ordering the implementation of the alternative recommended in the FEIS.

PROCEDURAL HISTORY

This suit commenced in December 2000, when Westlands Water District (“Westlands”) filed suit against Interior, other federal agencies, and various federal officials alleging violations of the ESA and NEPA. After Bruce Babbitt, Secretary of the Interior, and Hoopa Valley signed the ROD, Westlands, this time joined by the San Luis and Delta-Mendota Water Authority and the San Benito County Water District (collectively, the “water agencies”), filed an amended complaint. Yurok intervened as a defendant, and the Northern California Power Agency (“NCPA”) and the Sacramento Municipal Utility District (“SMUD”) intervened as plaintiffs.

In March 2001, the district court issued a preliminary injunction limiting flow releases to 368,600 AF/year but otherwise allowing for the implementation of the ROD’s restoration plan. In March 2002, the district court granted the Tribes’ motion to modify the preliminary injunction to allow for increased releases, authorizing the release of 468,600 AF for the 2002 water year. The court also vacated the stay and moved the case forward for disposition on the merits.

Subsequently, all parties filed cross-motions for summary judgment. The district court’s Order held that NEPA applied to the implementation of the TRFES flow recommendations, and that the EIS team improperly narrowed the Statement of Purpose and Need and failed to consider a reasonable range of alternatives in its study. The district court ordered Interior and Hoopa Valley to submit a supplemental EIS (“SEIS”) to

address further alternatives and to discuss certain mitigation measures suggested in the NMFS and FWS BioOps. Additionally, the district court set aside one provision in each of the BioOps. All non-flow measures of the ROD were ordered implemented. Order, 275 F. Supp. 2d at 1235-36. This appeal followed.

On April 7, 2003, the district court filed a second Memorandum Decision and Order, granting the government's motion to extend the deadline for completing the SEIS to July 9, 2004. *See generally* Order II. The court also granted Hoopa Valley's motion to modify the injunction to allow for additional releases of up to 50,000 AF for the 2003 water year. Order II at 73. In April of this year, this court granted Hoopa Valley's motion to stay the injunction, permitting the release of 647,000 AF for the 2004 year, the flow level appropriate for a Normal water year.

ANALYSIS

I. Standards of Review

We review de novo a district court's summary judgment ruling regarding an EIS's compliance with NEPA and the ESA. *Okanogan Highlands Alliance v. Williams*, 236 F.3d 468, 472 (9th Cir. 2000). De novo review "means we view the case from the same position as the district court." *Sierra Club v. Babbitt*, 63 F.3d 1502, 1507 (9th Cir. 1995) (citing *Nevada Land Action Ass'n v. United States Forest Serv.*, 8 F.3d 713, 716 (9th Cir. 1993)). NEPA and ESA compliance is reviewed under the Administrative Procedure Act, 5 U.S.C. § 706 *et seq.* *Turtle Island Restoration Network v. Nat'l Marine Fisheries Serv.*, 340 F.3d 969, 973 (9th Cir. 2003); *Morongo Band of Mission Indians v. Fed. Aviation Admin.*, 161 F.3d 569, 573 (9th Cir. 1998). An agency decision may be set aside if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(a)(2); *Turtle Island*, 340 F.3d at 973.

NEPA “does not mandate particular results, but simply describes the necessary process that an agency must follow in issuing an EIS.” *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989). A court must avoid passing judgment on the substance of an agency’s decision. Its focus must be on ensuring that agencies took a “hard look” at the environmental consequences of their decisions. *Id.* at 350. In other words, a reviewing court “must consider whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment. This inquiry must be searching and careful, but the ultimate standard of review is a narrow one.” *Morongo*, 161 F.3d at 573 (quoting *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 378 (1989)).

II. Reasonable Range of Alternatives

[1] The regulations implementing NEPA require that an EIS must consider and assess the environmental consequences of the proposed action and reasonable alternatives to the action. 40 C.F.R. § 1502.14. Consideration of alternatives is “the heart of the environmental impact statement.” *Id.* An agency preparing an EIS must specify the underlying purpose and need for the proposed action. 40 C.F.R. § 1502.13. *City of Carmel-by-the-Sea v. Dep’t of Transp.*, 123 F.3d 1142 (9th Cir. 1995), provides courts with a framework for analyzing the range of alternatives discussed by an EIS. “The stated goal of a project necessarily dictates the range of ‘reasonable’ alternatives and an agency cannot define its objectives in unreasonably narrow terms.” *Id.* at 1155 (citing *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 192 (D.C. Cir. 1991)). “Project alternatives derive from an [EIS’s] ‘Purpose and Need’ section.” *Id.* Thus, a court begins by determining whether or not the Purpose and Need Statement was reasonable. *Id.*; see also *Friends of Southeast’s Future v. Morrison*, 153 F.3d 1059, 1066-67 (9th Cir. 1998).

A. EIS's Statement of Purpose and Need

In its decision and order on the parties' cross-motions for summary judgment, the district court found that the EIS preparers improperly narrowed the geographic scope of the EIS Statement of Purpose and Need.⁹ The only issue the federal agencies raise on appeal is this characterization of the Statement of Purpose and Need as improperly narrow in its geographic scope.

1. Legal standard

Courts have "afforded agencies considerable discretion to define the purpose and need of a project." *Id.* at 1066 (citing *City of Angoon v. Hodel*, 803 F.2d 1016 (9th Cir. 1986)). Preparing an EIS "necessarily calls for judgment, and that judgment is the agency's." *Lathan v. Brinegar*, 506 F.2d 677, 693 (9th Cir. 1974). However, this discretion is not unlimited. *Id.* Courts evaluate a Statement of Purpose and Need under a reasonableness standard. *Friends of Southeast*, 153 F.3d at 1066-67. Where an action is taken pursuant to a specific statute, the statutory objectives of the project serve as a guide by which to determine the reasonableness of objectives outlined in an EIS. *City of New York v. United States Dep't of Transp.*, 715 F.2d 732, 743 (2d Cir. 1983).

⁹Hoopla Valley Tribe objects to the statement in the district court's first order that the Statement of Purpose and Need was flawed in part because it failed to consider the 1984 Act's "additional statutory goals of improving not only the mainstem, but also tributaries and the south fork, and *balancing competing CVP uses.*" Order, 275 F. Supp. 2d at 121 (emphasis added). The district court correctly clarified this statement later by stating that Interior was not required to balance the interests of other CVP users. Order II at 40.

2. Analysis

- a. Whether the Statement of Purpose and Need was unreasonably narrow in geographically limiting the scope of the EIS

The Statement of Purpose and Need reads, in full:

The purpose of the proposed action is to restore and maintain the natural production of anadromous fish on the Trinity River mainstem downstream of Lewiston Dam.

The need for this action results from Congress' (1) mandate that diversions of water from the Trinity River to the CVP not be detrimental to Trinity River fish and wildlife resources; (2) finding that construction and operation of the TRD has contributed to detrimental effects to habitat and has resulted in drastic reductions in anadromous fish populations; (3) finding that restoration of depleted stocks of naturally produced anadromous fish is critical to the dependent tribal, commercial, and sport fisheries; and (4) confirmation of the federal trust responsibility to protect tribal fishery resources affected by the TRD.

DEIS 1-4.

[2] The legislation directing the restoration of Trinity River fishery is not limited to the mainstem. The 1984 Act directs federal agencies to restore the anadromous fish populations of the entire Trinity River basin, including the "tributaries of such river below Lewiston Dam and [] the south fork of such river." P.L. 98-541 § 2(a)(1)(B). The 1992 CVPIA explicitly incorporates these directives, contemplating that enactment of its terms would benefit all parts of the Trinity River below Lewiston Dam. CVPIA § 3406(b)(23) (directing an instream

release of water to “meet the fishery restoration goals of the Act of October 24, 1984, Public Law 98-541 . . .”).

[3] In specifically limiting its goals to the Trinity River mainstem, the Statement of Purpose and Need does not follow the letter of the statutes. However, this does not make the Statement of Purpose and Need “arbitrary or capricious” so as to invalidate it under NEPA. *Carmel*, 123 F.3d at 1156. Restoring the fishery in the mainstem is a central, primary part of restoring the fishery in the basin as a whole. Second Declaration of Robert F. Franklin RE: Water Year 2003 (“While use of tributary habitat has been documented, the vast majority of production occurs in the mainstem.”). The federal agencies were within their discretion in focusing the EIS on mainstem rehabilitation as a part of promoting fishery basin-wide.

- b. Whether the Statement of Purpose and Need was unreasonably narrow so as to limit consideration of non-flow measures

The district court’s holding about the geographic scope of the Statement of Purpose and Need misses Plaintiffs’ more relevant objection. In their response letters to the DEIS and their appellate briefs, Plaintiffs indicate that their objection to the EIS’s Statement of Purpose and Need is that it is “biased with the sole objective to increase flows” to the exclusion of non-flow measures, as well as that it ignored other federal obligations. FEIS Response to Letter from NCPA at D3-2518; FEIS Response to Letter from SMUD at D3-2585-86.

The proper inquiry is framed earlier in the district court’s order: “The ultimate NEPA issue centers on whether the intentional narrowing of the EIS purpose to concentrate on increased water flows and channel rehabilitation prevented the decision-maker and the Court from assessing the utility of a variable flow alternative that uses non-flow measures . . .” Order, 275 F. Supp. 2d at 1209. Because the Statement of

Purpose and Need does not improperly foreclose consideration of any possible restoration measures, we reverse any part of the district court's Order disapproving of the Statement.

First, nothing about the language of the Statement of Purpose and Need limits consideration of non-flow measures. Second, the focus on habitat as the best way to restore naturally producing salmon and steelhead was well within the discretion of the EIS team and was not arbitrary or capricious. *Carmel*, 123 F.3d at 1156. The CVPIA "give[s] first priority to measures which protect and restore natural channel and riparian habitat values." § 3406(b)(1)(A). The 1996 amendments to the 1984 Act state that the Trinity River Hatchery should be managed to "best serve its purpose of mitigation of fish habitat loss above Lewiston Dam, while not impairing efforts to restore and maintain naturally reproducing anadromous fish stocks within the basin." Pub. L. 104-143 § 3(c), 110 Stat. 1339 (1996).

The water agencies point to correspondence in the record to support their argument that the agencies improperly avoided consideration of the non-flow restoration measures by unduly narrowing the scope of the Statement of Purpose and Need. The lead agencies properly determined that the discretion given to EIS authors allowed for a purpose that focused on the instream habitat as the best way to help natural fishery production, with "less attention" given to "[o]ther factors such as hatcheries, harvest, predation and upland sediment control."

Third, as discussed below, non-flow measures were considered. The alternatives considered all have non-flow measure components. The TRFES, EIS, and ROD included thorough discussions of non-flow measures that, complementing flow minimums, would improve the river habitat. The fact that flow was a major part of the EIS's alternatives was a

reflection of Congress's mandate that Interior set "permanent instream fishery flow requirements." CVPIA § 3406(b)(23)(A).

[4] The Statement of Purpose and Need reasonably defined the objectives of the project; the preparers did not arbitrarily or capriciously narrow the scope of the Statement.

B. EIS's Range of Alternatives

1. Legal Standard

[5] An agency issuing an EIS must "[r]igorously explore and objectively evaluate all reasonable alternatives," "[i]nclude reasonable alternatives not within the jurisdiction of the lead agency," and "[i]dentify the agency's preferred alternative." 40 C.F.R. § 1502.14(a), (c), (e). "The existence of a viable but unexamined alternative renders an environmental impact statement inadequate." *Morongo*, 161 F.3d at 575 (internal quotations and citations omitted).

We review an EIS's range of alternatives under the "rule of reason." *Carmel*, 123 F.3d at 1155. Under the rule of reason, the EIS "need not consider an infinite range of alternatives, only reasonable or feasible ones." *Id.* (citing 40 C.F.R. § 1502.14(a)-(c)). Nor is an agency required to undertake a "separate analysis of alternatives which are not significantly distinguishable from alternatives actually considered, or which have substantially similar consequences." *Headwaters, Inc. v. Bureau of Land Mgmt.*, 914 F.2d 1174, 1181 (9th Cir. 1990) (citing *N. Plains Res. Council v. Lujan*, 874 F.2d 661, 666 (9th Cir. 1989)).

The choice of alternatives is "bounded by some notion of feasibility" and an agency is not required to consider "remote and speculative" alternatives. *Vt. Yankee Nuclear Power Corp. v. Natural Res. Def. Council, Inc.*, 435 U.S. 519, 551 (1978). The "range of alternatives that must be considered in

the EIS need not extend beyond those reasonably related to the purposes of the project.” *Laguna Greenbelt, Inc. v. Dep’t of Transp.*, 42 F.3d 517, 524 (9th Cir. 1994) (citing *City of Angoon*, 803 F.2d at 1021-22); *see also Headwaters*, 914 F.2d at 1180 (An agency is not required to “consider alternatives which are infeasible, ineffective, or inconsistent with the basic policy objectives for the management of the area.”). “The touchstone for our inquiry is whether an EIS’s selection and discussion of alternatives fosters informed decision-making and informed public participation.” *Calif. v. Block*, 690 F.2d 753, 767 (9th Cir. 1982).

2. Analysis

a. Alternatives Considered

The EIS fully analyzed six proposed alternatives: the Maximum Flow Alternative, the Flow Evaluation Alternative, the Percent Inflow Alternative, the Mechanical Restoration Alternative, the No Action Alternative, and the State Permit Alternative. The first four were determined reasonable to meet the purposes and needs of the project.

The main difference between the six reasonable alternatives is the volume of yearly instream flow to the Trinity River. In addition, all of the alternatives incorporate non-flow habitat rehabilitation and fishery management measures to aid the recovery of the Trinity River’s fishery. The district court ordered that all non-flow measures be implemented. 275 F. Supp. 2d at 1236.

The No Action Alternative maintains the status quo, leaving instream flow to the Trinity River at the 340,000 AF/year level prescribed by CVPIA § 3406(b)(23). Water operations, or diversions to the Sacramento River via the Clear Creek Tunnel and Whiskeytown Reservoir, would continue to operate under existing water quality standards, Biological Opinions, and policies governing exports to the Sacramento River.

Current watershed protection programs, including land management, road decommissioning and rehabilitation,¹⁰ and erosion control measures, as well as the acquisition of key parcels of land in the Trinity River basin, would continue. Habitat management, including twenty-seven channel rehabilitation projects,¹¹ the mechanical placement of spawning gravel, and the dredging of sediment control ponds would also continue. DEIS 2.1.2. Fish population management, consisting of harvesting limitations and hatchery production levels, would rely on current policies.¹²

The State Permit Alternative reduces flows to 120,500 AF/year, the flow level set by Congress in 1955 as the minimum release to the Trinity River. Under this alternative, more water would be diverted to the Sacramento River, and no habitat management would occur except for gravel placement. Current watershed protection and fish population management policies would continue.

The Mechanical Restoration Alternative, like the No Action Alternative, maintains instream flow levels at 340,000 AF/year, but would incorporate significant additional watershed protection measures to limit sediment inputs into the mainstem Trinity River. The Mechanical Restoration Alternative would focus on and accelerate the road decommissioning, road maintenance, and road rehabilitation measures proposed under the No Action Alternative. In addition to the habitat rehabilitation sites currently in existence, the Mechanical Res-

¹⁰Road decommissioning consists of removing culverts, out-sloping, and removing roads that cannot be maintained. Rehabilitation of roads consists of resurfacing roads or replacing culverts.

¹¹Channel rehabilitation involves the mechanical removal of riparian sand berms and reconstruction of the kind of gently sloping, unvegetated river bank natural to the pre-TRD Trinity River.

¹²The Trinity River Hatchery annually releases 3,000,000 chinook smolts (fish that have already undergone smoltification) and 2,600,000 yearlings.

toration Alternative contemplates removing riverbank vegetation and mechanically maintaining natural floodplain features at forty-seven locations.

The Percent Inflow Alternative bases weekly releases on the previous week's inflow into Trinity Reservoir—approximately 40 percent of the inflow would be released to the mainstem. Yearly releases would range between 165,000 AF/year in Critically Dry years to 978,000 AF/year in Extremely Wet years. Like the Mechanical Restoration Alternative, forty-seven new habitat rehabilitation sites would be constructed, but these and existing rehabilitation projects would not be mechanically maintained. Instead, the sites would depend on water flow alone to sustain the riverbed habitat. Fish population management would be the same as in the No Action Alternative.

The Flow Evaluation Alternative is based on recommendations made by the FWS and Hoopa Valley in the TRFES. Yearly flows would range between 369,000 AF/year in Critically Dry years to 815,000 AF/year in Extremely Wet years. All other efforts would be the same as in the Percent Inflow Alternative. The Flow Evaluation Alternative also includes an adaptive management program, a systematic program of continually monitoring the river habitat, reviewing the effectiveness of restoration measures, and updating management actions.

The Maximum Flow Alternative would release all of the Trinity Reservoir inflows into Trinity River. Flows would range from 463,000 AF/year in Critically Dry years to 2,146,000 AF/year in Extremely Wet years. Because the amount of flow would, on its own, rehabilitate and maintain the river's environment, current habitat rehabilitation projects would not be mechanically maintained and no new projects would be constructed. Fish population measures currently in place would continue.

In addition to these fully considered alternatives, the EIS briefly considered and rejected eight alternatives: 1) the removal of Trinity and Lewiston Dams; 2) fishery rehabilitation solely through harvest management; 3) construction of “fish ladders,” or fish passages around the dams; 4) trucking fish around the dams; 5) predator control; 6) increased hatchery production; 7) increasing the flexibility of Trinity Dam operation by pumping water from the Sacramento River to Trinity Reservoir; and 8) increasing flows to Trinity River below Douglas City by redirecting water from a Trinity River fork upstream of the Reservoir.

b. Whether the Range of Alternatives Considered Was Reasonable

The plaintiff water agencies argue that the alternatives considered were inadequate because they failed to consider flow options along with other non-flow measures, such as watershed protection measures and an adaptive management program. This contention is unsupported by the record. Non-flow measures, including watershed protection, habitat rehabilitation, and population management via harvest limitations and hatchery operations, are a part of each alternative considered.

The water agencies further argue that the EIS failed to consider ways of integrating non-flow alternatives that would allow for reduced flow volumes. This argument also fails. The Mechanical Restoration Alternative contemplates exactly what the Water Agencies argue was missing in the EIS: aggressive non-flow measures that would rehabilitate and maintain a healthy river habitat while relying on the minimum flow level set by Congress in the CVPIA. The Percent Inflow Alternative and the Flow Evaluation Alternative both incorporate existing and new non-flow measures into an analysis which allow for flows that vary from year to year but are far below Trinity River inflows to the Reservoir.

The record shows that the EIS team considered and directly responded to suggestions that non-flow measures be aug-

mented to allow corresponding decreases in instream flow. FEIS Thematic Response “Alternatives Recommended by Commentators: Additional Mechanical Restoration and Alternative Flow Schedules” at D2-35-38. The FEIS includes a direct response to SMUD’s suggested Integrated Management Alternative. *Id.* at D2-37-38. Although the water agencies argue that the EIS fails to consider integrating hatchery management and predator control as a part of restoration, the EIS clearly considers increased hatchery production. DEIS 2.2.6. The EIS team also responded to commentators who urged predator control as a non-flow measure. FEIS Thematic Response “Role of the Trinity River Hatchery” at D2-49-51; FEIS Thematic Response “Predator Control as a Means for Increasing Population” at D2-53. The EIS dismisses these means, concluding that they would not help with natural salmonid production, a valid and central focus of the restoration plan. *See* CVPIA § 3406(a)(1) (directing Interior to develop a plan to ensure the “natural production of anadromous fish in Central Valley rivers”).

[6] The district court erred in holding that the range of alternatives was unreasonable under NEPA. The district court held that although Interior could reject certain non-flow measures as stand-alone solutions to restoration, the EIS still failed to satisfy NEPA by not considering certain non-flow measures as integrated parts of a restoration plan. This holding fails to give Interior the discretion due agencies under NEPA. “Deference to an agency’s technical expertise and experience is particularly warranted with respect to questions involving . . . scientific matters.” *United States v. Alpine Land and Reservoir Co.*, 887 F.2d 207, 213 (9th Cir. 1989). Here, the EIS team determined that certain measures, such as increased hatchery production, would be ineffective or even detrimental to the goal of restoring a naturally producing salmonid population. DEIS 2.2.6. It found that lower flow alternatives that relied more heavily on non-flow measures could not sustain a fish-friendly river habitat. FEIS at D2-36. Achieving a sustainable natural river habitat was an appropri-

ate goal and the “first priority” of the TRFES. CVPIA § 3402(b)(1)(A). “[I]t would turn NEPA on its head to interpret the statute to require that [an agency] conduct in-depth analyses of . . . alternatives that are inconsistent with the [agency’s] policy objectives.” *Kootenai Tribe v. Veneman*, 313 F.3d 1094, 1122 (9th Cir. 2002).

The district court also found fault in the EIS’s failure to consider more “mid-range alternatives” with reduced flow. Order, 275 F. Supp. 2d at 147. The district court determined that although the EIS purported to have fully analyzed six alternatives, in actuality, it only considered three: the Maximum Flow Alternative (all inflows released); the Flow Evaluation Alternative (mid-range alternative) and the Mechanical Restoration Alternative (minimum flow release). *Id.* The court concluded that the range of alternatives included only “two extreme endpoints and one mid-range alternative, which preordained the selection.” *Id.*

The fact that the Mechanical Restoration Alternative used the minimum flow dictated by the CVPIA did not make it an unrealistic alternative. The No Action Alternative was also realistic, although the EIS team ultimately determined it was lacking. The Flow Evaluation and Percent Inflow Alternatives presented two mid-range alternatives. The fact that the EIS did not consider other mid-range alternatives, such as the Integrated Management Plan, proposed by the water agencies, does not make the range of alternatives unreasonable. The FEIS responded to the Integrated Management Plan and the EIS is not deficient because the EIS team did not fully analyze the SMUD’s proposed plan with its specific combination of flow and non-flow measures.

The EIS was not required to consider more mid-range alternatives to comply with NEPA. NEPA does not require the EIS to have considered every conceivable permutation of flow and non-flow measures. *See Vt. Yankee*, 435 U.S. at 551 (“Common sense also teaches us that the ‘detailed statement

of alternatives’ cannot be found wanting simply because the agency failed to include every alternative device thought and conceivable by the mind of man.”); *cf. Headwaters*, 914 F.2d at 1181 (stating that an agency need not undertake a “separate analysis of alternatives which are not significantly distinguishable from alternatives actually considered, or which have substantially similar consequences”) (citing *N. Plains*, 874 F.2d at 666).

The “touchstone” for courts reviewing challenges to an EIS under NEPA “is whether an EIS’s selection and discussion of alternatives fosters informed decision-making and informed public participation.” *Block*, 690 F.2d at 767 (citing *Save Lake Wash. v. Frank*, 641 F.2d 1330, 1334 (9th Cir. 1981)). Here, there was a thorough public debate about many different flow and non-flow combinations. Commentators posited alternatives that incorporated more non-flow measures so as to lower instream flows, and the EIS team responded.

[7] We reverse the district court’s holding that the range of alternatives considered in the EIS is unreasonable. The construction of the Statement of Purpose and Need was reasonable in light of the governing statutes. The range of alternatives considered achieved the goals intended by NEPA: open, thorough public discussion promoting informed decision-making. The EIS considered several realistic, reasonable options before settling on the Preferred Alternative. Its review of alternatives satisfies the rule of reason.

III. Supplemental EIS

The district court ordered the EIS team to issue an SEIS on the grounds that measures suggested to mitigate the environmental impact of the Preferred Alternative did not receive the public vetting demanded by NEPA. Hoopa Valley challenges this order specifically in regard to certain RPMs in the NMFS and FWS BioOps and the Preferred Alternative’s impact on California’s power system reliability. Hoopa Valley argues

that the issues in question were sufficiently explored in the DEIS and that no significantly new circumstances or information emerged after DEIS publication to compel the issuance of an SEIS.

We reverse the district court's holding as to the NMFS BioOp concerning the use of auxiliary bypass outlets to mitigate the Preferred Alternative's impact on Sacramento River temperatures, as well as the holding demanding further discussion of the California energy crisis for the reasons stated below. Because we affirm the district court's holding setting aside the FWS BioOp RPM, *see infra* at section IV.A.1, there is no need to discuss this RPM's inclusion in an SEIS. As a result, no SEIS is required for any of these issues.

A. Legal Standard

NEPA's "action-forcing" requirements are intended to serve two broad goals. First, Congress intended that an agency, "in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts." *Robertson*, 490 U.S. at 349. Second, the publication of the EIS informs the public of potential environmental impacts and "provides a springboard for public comment." *Id.*

[8] To meet these goals, an EIS must include "a detailed discussion of possible mitigation measures." *Id.* at 351; 40 C.F.R. §§ 1502.14(f), 1502.16(h). An agency must discuss mitigation measures "in sufficient detail to ensure that environmental consequences have been fairly evaluated A mere listing . . . is insufficient." *Neighbors of Cuddy Mountain v. United States Forest Serv.*, 137 F.3d 1372, 1380 (9th Cir. 1998) (internal quotations and citations omitted). Doing so helps to ensure that the agency has taken a "hard look" at the environmental consequences of its proposed action. *Robertson*, 490 U.S. at 352. However, an agency is not required to formulate and adopt a complete mitigation plan. *Id.*

[9] When new information emerges after the circulation and public comment period of the DEIS, it may be validly included in the FEIS without recirculation. An agency “need not supplement an EIS every time new information comes to light after the EIS is finalized.” *Marsh*, 490 U.S. at 373. Supplemental EISs are required when “[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.” 40 C.F.R. § 1502.9(c)(1)(ii). An SEIS is required if a new proposal “will have a significant impact on the environment in a manner not previously evaluated and considered.” *S. Trenton Residents Against 29 v. Fed. Highway Admin.*, 176 F.3d 658, 663 (3d Cir. 1999). An agency decision not to issue a SEIS is reviewed under an arbitrary and capricious standard. *Friends of the Clearwater v. Dombeck*, 222 F.3d 552, 556 (9th Cir. 2000).

B. Analysis

1. NMFS BioOp RPM

We reverse the district court’s holding as to the NMFS BioOp RPM concerning the use of auxiliary bypass outlets to mitigate the Preferred Alternative’s impact on Sacramento River temperatures.

The ESA was enacted to prevent the extinction of fish, wildlife, and plant species. *Turtle Island*, 340 F.3d at 973. The responsibility for administering and enforcing the ESA falls to the NMFS for marine life and the FWS for terrestrial life. *Id.* at 973-74. The ESA provides that a federal agency must consult with the FWS or NMFS to ensure that any proposed action “is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species.” 16 U.S.C. § 1536(a)(2).

After consultation, the FWS or NMFS issues a BioOp, and if it concludes that the proposed action is not likely to jeopard-

dize an endangered species but will possibly result in the “incidental taking” of individuals of that species, the BioOp must include an analysis of “the impact of such incidental taking” and “reasonable and prudent measures that the Secretary considers necessary or appropriate to minimize” any impact the action may have. 16 U.S.C. § 1536(b)(4)(C)(i), (ii).

Here, the FWS and NMFS issued BioOps with non-discretionary RPMs. Interior determined that the RPMs did not present significant new information or circumstances requiring an SEIS and recirculation. FEIS Thematic Response “Requests for Recirculation” at D2-71–D2-72. However, the NCPA points to evidence in the record that Interior was aware that the BioOps proposed significant changes that would require recirculation of the EIS. The Tribes do not contest this evidence in their briefs.

a. NMFS BioOp RPM

The NMFS RPM requires the Bureau of Reclamation¹³ and FWS to work with the Upper Sacramento River Temperature Task Group “to develop temperature control plans that provide for compliance with temperature objectives in both the Trinity and Sacramento Rivers.” The RPM states that Interior must be prepared to use the auxiliary bypass outlets on Trinity Dam to reduce Sacramento River temperatures “as needed.” The district court held that the DEIS failed to analyze the impact of the RPM on power generation, and that the FEIS provided insufficient analysis of the new, significant changes demanded by the RPM. Order, 275 F. Supp. 2d at 1198. Plaintiffs argue that this holding must be affirmed.

The RPM does not present a significant new circumstance

¹³The Bureau of Reclamation is the Department of Interior branch charged with managing, developing and protecting the water resources of the American west. It manages the CVP, and thus the TRD, and as noted above, was one of the co-leads on the EIS.

that required recirculation of the EIS. The use of the auxiliary bypass outlets has always been an option for dealing with temperature fluxes in the rivers. The FEIS notes that Reclamation has used the auxiliary bypasses in the past when needed “to protect Trinity River and Sacramento River fisheries from adverse water temperatures.” FEIS Thematic Response “Powerplant Bypass” at D2-79.

Even if the RPM did present a new circumstance, the EIS considered both the temperature and power generation impacts of using the auxiliary bypass outlets. The DEIS discusses the effect of the alternatives on Sacramento River temperature and the possibility of using the Trinity Dam auxiliary bypass outlets. It suggests the specific mitigation measure suggested by the RPM: using the auxiliary bypass outlets as an intervention tool to keep Sacramento River temperatures at an appropriate level. DEIS 3-149–3-150. The impact of the Preferred Alternative on the Sacramento River temperatures and fishery is discussed in DEIS sections 3.5.1 and 3.10. DEIS 3-172–3-178; DEIS 3-10. The FEIS concludes that auxiliary bypass use will not have a significant effect on Sacramento River temperatures or chinook salmon mortality.

A technical appendix to the DEIS acknowledged that the use of the auxiliary bypass outlets would have a detrimental effect on the TRD’s power generation capacity. Technical Appendix A, Temperature Analysis of Proposed Trinity River Fish and Wildlife Restoration Flow Alternatives Using the Better Model, Section 4.2.4 “Low Level Auxiliary Bypass Release from Trinity Dam” at 10-11. The FEIS Thematic Responses carry a thorough modeling and discussion of the effects of bypassing Trinity Dam. FEIS Thematic Response “Powerplant Bypass” at D2-82—D2-90. In addition, the FEIS specifically addresses the effects of the NMFS RPM on the Trinity Reservoir and River and on the power supply. *Id.* at D2-81 (discussing the loss of Trinity Power Plant generation capacity).

[10] The analysis undertaken in the EIS was sufficient to show that Interior took a “hard look” at the consequences of using Trinity Dam auxiliary bypasses as recommended by the RPM. Acknowledgment of the power generating capacity appears in the DEIS, and when prompted by public comment, the EIS team responded with further analysis in the FEIS Thematic Response. This exchange evinces that the NEPA goals of public participation and informed decision-making occurred. Although the potential for using the auxiliary bypasses would hamper power generation, the EIS demonstrates that the EIS team considered this effect. The decision to not circulate an SEIS was not arbitrary or capricious.

2. Preferred Alternative’s Effect on Power Reliability

Hoopa Valley argues that the impact of the Preferred Alternative on California’s power supply was adequately analyzed in the DEIS and FEIS, and that the California energy crisis did not pose a “significant new circumstance” that compelled the issuance of an SEIS.

The circulated DEIS had a significant discussion of the effects of the different alternatives on the power supply in California. DEIS 3-335-3-351 (Section 3.10 “Power Resources”); DEIS App. F (“Power Resources”). The DEIS did not, however, take the California energy crisis into account, as the crisis had not yet occurred at the time of DEIS publication. Order, 275 F. Supp. 2d at 1198 (noting that the DEIS was published in October 1999, with the public comment period closing on January 20, 2000; the crisis hit in the summer of 2000). On August 23, 2000, the Department of Energy sent a letter to Interior pointing out that the Trinity River EIS assessed energy production impacts “with the assumption that long-term power system reliability would not be a concern.”

Neither the EIS nor the ROD fully discuss the energy crisis in their additional reviews of the alternatives’ impacts on

power resources. A Thematic Response in the FEIS generally addresses CVP power generation in relation to total generation in California and the economic impacts of the alternatives. FEIS D2-91–D2-101. The ROD mentioned the energy crisis in providing that “operating criteria will be established to allow [the Department of Energy] to respond to any emergency situations . . . including exceptions for responding to various emergency situations consistent with Presidential Memorandum dated August 3, 2000, directing federal agencies to work with California to develop procedures governing the use of backup power generation in power shortage emergencies.” ROD at 22.

[11] An SEIS is not necessary to address power generation since the California power crisis. Interior determined that the impact of the Preferred Alternative on California’s power reliability was insignificant. This determination is supported by the record. According to the FEIS Thematic Response, “Power Analysis,” TRD power generation accounts for approximately 1% of total California power demand. FEIS D2-91. According to the ROD, the Preferred Alternative would result in an average TRD power generation reduction of six percent, “which equates to a reduction in the statewide electrical energy supply of approximately one tenth of one percent.” ROD at 21. In an internal response to the August 23, 2000, Department of Energy letter, Interior noted that the decrease in power generation “would result in an average decrease of 0.041% in an average water year.” As the district court stated, “supplemental analysis would likely [show] . . . that CVP power supply impacts are not significant [because] the California power shortages were, in some measure, caused by fraud and market manipulation.” Order, 275 F. Supp. 2d at 1202. California’s *amicus* brief, contending that the discussion in the EIS was sufficient in all regards, provides compelling support for finding that no SEIS is required on this issue, as the California government has expertise and knowledge about the California energy crisis and ensuring power reliability.

[12] Interior determined that power generation losses resulting from the Preferred Alternative were a very small fraction of overall California power generation, and that, in light of this determination, the California energy crisis did not present a significant new circumstance. The decision to not circulate an SEIS for more discussion of the possible consequences of the Preferred Alternative on California power generation was not arbitrary or capricious.

IV. ESA Violations

[13] ESA regulations specify that reasonable and prudent measures “cannot alter the basic design, location, scope, duration, or timing of the action and may involve only minor changes.” 50 C.F.R. § 402.14(I)(2). The question a court considers, then, when reviewing RPMs, is whether they are major or minor changes to the plan. This court “will not upset an agency’s assessment of its obligations under section 7 [of the ESA] unless we determine it to be arbitrary and capricious.” *Greenpeace Action*, 14 F.3d at 1336.

The Tribes challenge the district court’s invalidation of two RPMs: 1) the FWS RPM requiring a plan to mitigate X2 movement; and 2) the NMFS RPM directing that the recommended flow regime be implemented as soon as possible.

A. Analysis

1. FWS RPM

The RPM issued by the FWS concerns the movement of saltwater in the Sacramento Delta as a result of the Preferred Alternative. X2 measures the intrusion of water with a salinity level of two parts per thousand concentration of salt into the Sacramento-San Joaquin Delta. X2 represents the number of kilometers the salt water has moved into the Delta from the Golden Gate Bridge. As fresh water inflows to the Delta decrease, X2 moves eastward into the Delta. The FWS BioOp

mandates that if the Preferred Alternative results in an “upstream (eastward) movement of X2 in any month between February 1 through June 30 of 0.5 km,” Reclamation must implement a plan to “minimize or eliminate such upstream movements.” As the district court noted, implementation of the RPM is nondiscretionary. Order, 275 F. Supp. 2d at 1194.

Mitigating X2 movements potentially requires the reallocation of hundreds of thousands of acre-feet of water (increasing the flow of the Sacramento River to push saltwater further down the delta). According to the DEIS modeling, the X2 level will move more than 0.5 km upstream in 20% of all Junes, and mitigating this movement as ordered by the RPM will require the commitment of 127,000 AF of water.¹⁴ Under the FWS RPM, Reclamation will have to take action to mitigate X2 movement regularly, about once every five years.

[14] We appreciate the complexity of managing Delta water inflows and salinity levels, and that the many different options for mitigating X2 movement diminish the risk that any one river or water supply will bear the full burden of X2 movement mitigation. However, RPMs may involve only minor changes. Redirecting flows in accordance with the RPM will affect wildlife in the Sacramento Delta, the Trinity River, and other waterways, and will likely have broad system-wide effects in the CVP. The X2 RPM mandated new, significant action and cannot be considered to be a minor change to the Preferred Alternative. We affirm the district court’s setting aside of the X2 RPM.

¹⁴According to the DEIS modeling, X2 movement would exceed 0.5 kilometers in 7% of Februarys, at the cost of 173,000 AF; 1 % of Marches, costing 90,000 AF; and 1% of Aprils, costing 310,000 AF. In some years, X2 movement would exceed 0.5 kilometers in multiple months, calling for even more water redirection.

2. NMFS RPM

The NMFS's first RPM states that "The USFWS and Reclamation shall [i]mplement the flow regimes included in the proposed action . . . as soon as possible." NMFS BioOp at 47. The NMFS added a non-discretionary condition: "1.a. Following completion of the Record of Decision addressing the proposed action, Reclamation shall immediately implement the components of the proposed flow schedule . . . equal to or less than 6,000 CFS [cubic feet per second], and implement the entire flow schedule as soon as possible (i.e., after infrastructure modifications are completed)." *Id.* at 48.

[15] The RPM commands Interior to "immediately implement" the Flow Evaluation Alternative's flow schedule. By doing so, it alters the "timing of the action" in violation of ESA's regulations. 50 C.F.R. § 402.14(I)(2). We affirm the district court's decision to set aside this RPM.

V. Contentions on Cross-Appeal

The water agencies bring three issues on cross-appeal. These arguments are not well taken.

A. Remedy

The water agencies challenge the portion of the district court's order implementing the ROD's flow measures for Critically Dry and Dry water-year categories. Order, 275 F. Supp. 2d at 1232. The district court applied a traditional balance of harms analysis to determine that it was appropriate to allow portions of the ROD to be implemented. *Id.* at 1231 (citing *Nat'l Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722, 737 (9th Cir. 2001)); see also *Alaska Wilderness Recreation & Tourism Ass'n v. Morrison*, 67 F.3d 723, 732 (9th Cir. 1995). The court was well within its discretion in weighing the opposing harms to fashion an appropriate remedy. See *Babbitt*, 241 F.3d at 737 & n.18. Having these flow levels in

place will not cause permanent or undue harm and will not prevent or frustrate the implementation of new flow recommendations.

B. Government's Tribal Trust Obligation

As a part of its harms-balancing analysis, the district court concluded that “the government is also in breach of its general and specific independent federal trust obligation to the Hoopa and Yurok Tribes.” Order, 275 F. Supp. 2d at 1232. It also stated that the purpose of the CVPIA § 3406(b)(23) was to “fulfill[] the federal government’s trust obligation to the Indian Tribes.” *Id.* at 1234. These statements are significant in that they provide support for the court’s order implementing portions of the Preferred Alternative as injunctive relief. However, the trust issue was not the necessary or main factor in the district court’s consideration of the issues on the merits. The statements do not constitute a holding on the issue, which was never properly before the district court, and therefore do not compel reversal or vacatur.

C. District Court’s Authorization of Additional Releases

The cross-appellants’ challenge to the district court’s authorization of additional flow releases for the 2003 water year is moot.

VI. Conclusion

We reverse the district court’s holding that the EIS failed to consider a reasonable range of alternatives, and that a supplemental EIS was required to discuss the NMFS’s BioOp requiring mitigation of impacts to Sacramento River temperatures and the effect of the California energy crisis. Because the FWS BioOp RPM involving the mitigation of X2 movement is a major change, and therefore invalid under ESA’s regulations, we affirm the district court’s setting aside of this RPM. Accordingly, we do not reach the issue of NEPA com-

pliance on this RPM and vacate the district court's order to the extent that it may require inclusion of X2 movement in an SEIS. We affirm the district court's holding that set aside the NMFS RPM mandating immediate implementation of a flow regime.

The number and length of the studies on the Trinity River, including the EIS, are staggering, and bear evidence of the years of thorough scrutiny given by the federal agencies to the question of how best to rehabilitate the Trinity River fishery without unduly compromising the interests of others who have claim on Trinity River water. We acknowledge, as the district court highlighted, concerns that the federal agencies actively subverted the NEPA process, but our review of the EIS shows that the public had adequate opportunity to demand full discussion of issues of concern.

Twenty years have passed since Congress passed the first major Act calling for restoration of the Trinity River and rehabilitation of its fish populations, and almost another decade has elapsed since Congress set a minimum flow level for the River to force rehabilitative action. Flow increases to the River have been under study by the Department of the Interior since 1981. “[R]estoration of the Trinity River fishery, and the ESA-listed species that inhabit it . . . are unlawfully long overdue.” Order, 275 F. Supp. 2d at 1232.

As we have disposed of all of the issues ordered to be considered in the SEIS, nothing remains to prevent the full implementation of the ROD, including its complete flow plan for the Trinity River. We remand to the district court for further proceedings not inconsistent with this opinion.

AFFIRMED IN PART, REVERSED IN PART, AND REMANDED.

EACH PARTY TO BEAR ITS OWN COSTS.

