FOR PUBLICATION

UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

NATIONAL WILDLIFE FEDERATION; SIERRA CLUB; IDAHO RIVERS UNITED, INC.; AMERICAN RIVERS; PACIFIC COAST FEDERATION OF FISHERMEN'S ASSOCIATIONS; INSTITUTE FOR FISHERIES RESOURCES; WASHINGTON WILDLIFE FEDERATION; IDAHO WILDLIFE FEDERATION,
Plaintiffs-Appellants,

v.

UNITED STATES ARMY CORPS OF ENGINEERS,
Defendant-Appellee,

INLAND PORTS AND NAVIGATION GROUP, Port of Lewiston, Idaho; Port of Whitman County, Washington; Port of Morrow, Oregon; Shaver Transportation Co., et al.; POTLATCH CORPORATION; COLUMBIA RIVER ALLIANCE; NORTHWEST PULP & PAPER ASSOCIATION; NORTHWEST IRRIGATION UTILITIES, INC.,
Defendants-Intervenors-Appellees,

v.

NEZ PERCE TRIBE OF IDAHO,
Plaintiff-Intervenor.

No. 03-35235

D.C. No.
CV-99-00442-FR

NATIONAL WILDLIFE FEDERATION; SIERRA CLUB; IDAHO RIVERS UNITED, INC.; AMERICAN RIVERS; PACIFIC COAST FEDERATION OF FISHERMEN'S ASSOCIATIONS; INSTITUTE FOR FISHERIES RESOURCES; WASHINGTON WILDLIFE FEDERATION; IDAHO WILDLIFE FEDERATION,
Plaintiffs,

v.

UNITED STATES ARMY CORPS OF ENGINEERS,
Defendant-Appellee,

INLAND PORTS AND NAVIGATION GROUP, Port of Lewiston, Idaho; Port of Whitman County, Washington; Port of Morrow, Oregon; Shaver Transportation Co., et al.; POTLATCH CORPORATION; COLUMBIA RIVER ALLIANCE; NORTHWEST PULP & PAPER ASSOCIATION; NORTHWEST IRRIGATION UTILITIES, INC.,
Defendants-Intervenors-Appellees,

v.

NEZ PERCE TRIBE OF IDAHO,
Plaintiff-Intervenor-Appellant.

No. 03-35237
D.C. No. CV-99-00442-FR
OPINION

Appeal from the United States District Court
for the District of Oregon
Helen J. Frye, District Judge, Presiding

Argued and Submitted
June 8, 2004—Seattle, Washington

Filed October 4, 2004

Before: Melvin Brunetti, M. Margaret McKeown, and Ronald M. Gould, Circuit Judges.

Opinion by Judge Gould;
Dissent by Judge McKeown

COUNSEL

Kristen L. Boyles, Earthjustice, Seattle, Washington, for the plaintiffs-appellants.

David Cummings, Nez Perce Tribe Office of Legal Counsel, Lapwai, Idaho, for the plaintiff-intervenor-appellant.

Sylvia Quast, United States Department of Justice, Washington, D.C., for the defendant-appellee.

Laurie K. Beale, Stoel Rives, Seattle, Washington, for the defendants-intervenors-appellees.

OPINION

GOULD, Circuit Judge:

We must decide whether the United States Army Corps of Engineers (Corps) has met its obligation to comply with state water quality standards, as required by the Clean Water Act.

Appellants National Wildlife Federation, Sierra Club, Idaho Rivers United, Inc., American Rivers, Pacific Coast Federation of Fishermen's Associations, Institute for Fisheries Resources, Washington Wildlife Federation, and Idaho Wildlife Federation (collectively referred to as "NWF") filed suit in the United States District Court for the District of Oregon, claiming that the Corps's issuance of a May 2001 "Record of Consultation and Statement of Decision" (2001 ROD), regarding the Corps's operation of four dams on the lower Snake River in the State of Washington, was arbitrary and capricious and contrary to law in violation of the Administrative Procedure Act (APA). The lawsuit claimed that the Corps had violated the APA because the 2001 ROD did not address properly the Corps's obligations to comply with the State of Washington's water quality standards for temperature, as required by the Clean Water Act's incorporation of state water quality law. The district court concluded that the 2001 ROD was not arbitrary and capricious or contrary to law, and granted summary judgment to the Corps. We have jurisdiction on appeal under 28 U.S.C. § 1291, and affirm.

I

The Corps operates the Federal Columbia River Power System, a hydroelectric power project in Montana, Idaho, Oregon, and Washington, which provides about seventy-five percent of the electric power used by the Pacific Northwest region of the United States. Pacific Northwest Region, Bureau of Reclamation, *available at* http://www.usbr.gov/pn/programs/fcrps/. The electric power generated by the Federal Columbia River Power System is marketed by the Bonneville Power Administration. Four of the dams in this system — the Ice Harbor dam, the Lower Monumental dam, the Little Goose dam, and the Lower Granite dam — are on the lower Snake River[1] in Washington state and are the subject of this

[1]The lower Snake River spans a 140-mile stretch of the Snake River, from its confluence with the Columbia River in the State of Washington to just above Lewiston, Idaho.

lawsuit. Each of these dams was built pursuant to Congressional mandate, The River and Harbor Act of 1945, Pub. L. No. 79-14, § 2, 59 Stat. 10, 16 (1945) (River and Harbor Act), and provides navigation, hydroelectric generation, recreation, and incidental irrigation.[2]

In 1977, Congress amended the Clean Water Act (CWA) to require federal agencies to comply with state water quality standards. 33 U.S.C. § 1323. Thus, for the four dams that are the subject of this lawsuit, the Corps must comply with water quality standards promulgated by the State of Washington.[3]

The State of Washington designated the lower Snake River suitable for the aquatic life use of "Noncore Salmon/Trout," defined as "[s]almon and trout spawning, noncore rearing, and migration." Wash. Admin. Code § 173-201A-600 & 602.[4]

---

[2]*See* Pertinent Data, Walla Walla District Projects, *available at* http://www.nww.usace.army.mil/html/pub/pertdata/pdata.htm.

[3]The Clean Water Act also permits the President of the United States to exempt an agency from complying with state water quality standards if he deems it appropriate. 33 U.S.C. § 1323(a). No exemption was sought or received in this case.

[4]The Washington State Department of Ecology has the authority to promulgate water quality standards to carry out the provisions of Chapter 90 of the Washington Revised Code. Wash. Rev. Code § 90.48.035. Washington Revised Code section 90.48.010 recites the "public policy" of the state of Washington to "maintain the highest possible standards to ensure the purity of all waters of the state . . . ." This statutory policy statement also provides:

> the state of Washington in recognition of the federal government's interest in the quality of the navigable waters of the United States, of which certain portions thereof are within the jurisdictional limits of this state, proclaims a public policy of working cooperatively with the federal government in a joint effort to extinguish the sources of water quality degradation, while at the same time preserving and vigorously exercising state powers to ensure that present and future standards of water quality within the state shall be determined by the citizenry, through and by the efforts of state government, of the state of Washington.

Washington state also promulgated a temperature standard for the lower Snake River:

> Temperature shall not exceed a 1-DMax of 20.0ºC due to human activities. When natural conditions exceed a 1-DMax of 20.0ºC, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3ºC; nor shall such temperature increases, at any time, exceed t=34/(T+9).

Wash. Admin. Code § 173-201A-602.[5] Washington state regulations also required that "[e]xisting and designated uses [of waters] must be maintained and protected. No degradation may be allowed that would interfere with, or become injurious to, existing or designated uses . . . ." Wash. Admin. Code § 173-201A-310.

These temperature standards are significant because water temperature affects the viability of salmon and steelhead fish in the Snake River. Water temperature affects both the biological productivity of streams and fish migration. In support of its motion for summary judgment, NWF submitted to the dis-

---

Id.

The above cited water quality provisions of the Washington Administrative Code applying to the lower Snake River were originally codified in Washington Administrative Code § 173-201(A)-130. Section 173-201(A)-130 was repealed effective August 1, 2003, *see* Washington State Register 03-14-129 Order 02-14 (filed July 1, 2003), but is identical in its recodified form at Washington Administrative Code § 173-201A-602.

[5]Washington regulations define "1-DMax" as "the highest water temperature reached on any given day." Wash. Admin. Code § 173-201A-020. Further, "t" represents in the equation listed the maximum permissible temperature increase, and "T" represents the "background temperature as measured at a point or points unaffected by the discharge and representative of the highest ambient water temperature in the vicinity of the discharge." Wash. Admin. Code § 173-201A-200(c)(ii)(A).

trict court the declaration of Dale McCullough, Senior Fishery Scientist for the Columbia River InterTribal Fish Commission. McCullough testified that "excessive water temperatures can decrease growth, increase mortality, increase the incidence and virulence of disease, increase competition with warm water fish, increase the predation rate on smolts, and increase the toxicity of many chemical substances." During the summer months, the optimal temperature range for salmon migration is between ten and twenty degrees Celsius. The Corps does not contest that water temperature significantly affects the viability of fish in the lower Snake River.

Water temperature increases resulting from the lower Snake River dams in question were the subject of extensive discussion among the federal and state agencies involved with the Federal Columbia River Power System. As early as 1994, it was the position of the State of Washington Department of Fish and Wildlife that "[f]ederal . . . hydropower projects on the mainstem Columbia and Snake rivers have consistently violated state water quality standards for temperature . . . ." Letter of James R. Nielsen, Washington Department of Fish and Wildlife, to Eric Schlorff, Washington Department of Ecology, of 8/11/1994, at 2. In a 1996 letter to the Corps, EPA staff said that "lower Snake River temperatures have recently exceeded federally approved State [of Washington] water quality temperature standards of 20.0ºC," and that "[s]easonal maximum water temperatures above permissible limits have been documented for a number of years . . . ." Letter of EPA to Gen. Russell L. Furhman, United States Army Corps of Engineers, of 8/12/1996, at 1. While we do not recount all of the inter-agency discussions in the administrative record regarding Federal Columbia River Power System operations and water temperature, the correspondence above is representative of the discussions concerning temperature exceedences in the lower Snake River that took place between state and federal agencies. The Corps does not contest that such discussions took place.

In 1995, the National Marine Fisheries Service (NMFS) issued a "biological opinion"[6] concluding that modifications to Federal Columbia River Power System operations were needed to ensure long-term survival of salmon stocks in the Snake River that were protected by the Endangered Species Act (ESA). The Corps adopted the recommendations of the 1995 NMFS biological opinion in a 1995 Record of Decision (1995 ROD). In 1997 and 1998, NMFS issued a supplemental biological opinion recommending further actions to the Corps. The Corps adopted these recommendations in a 1998 Record of Decision (1998 ROD).[7]

On March 31, 1999, NWF filed this lawsuit, contending that the Corps's 1995 and 1998 RODs were arbitrary and capricious and contrary to law, in violation of the Administrative Procedure Act, 5 U.S.C. § 551 *et seq.*, in that they did not address properly the Corps's obligation to comply with state water quality requirements for temperature, as required by the CWA.[8] The district court denied the parties' cross motions for summary judgment and ordered supplemental briefing. *Nat'l Wildlife Fed'n v. United States Army Corps of Eng'rs*, 92 F.

[6]The Endangered Species Act, as it applies here to protection of anadromous fish, requires federal agencies to work with NMFS to ensure that an agency's actions do not jeopardize an ESA-protected species or adversely modify their critical habitat. 16 U.S.C. § 1536(a)-(b). After formal consultations, triggered when an agency action might affect an ESA-listed species, NMFS evaluates the effects of the proposed action on species survival and modification of critical habitat in a "biological opinion." 16 U.S.C. § 1356(b). If NMFS concludes that an agency's action may jeopardize the survival of species protected by the ESA, or adversely modify a species' critical habitat, NMFS may recommend a "reasonable and prudent alternative" to the agency's proposed action. 16 U.S.C. § 1536(b)(3)(A).

[7]NMFS subsequently issued a new biological opinion on December 21, 2000, (2000 BiOp) that superseded the previous biological opinions.

[8]NWF's complaint also alleged that the 1995 and 1998 RODs did not address adequately the issue of the level of total dissolved gas in the lower Snake River. However, the parties no longer contest this issue and it is not before us on appeal.

Supp. 2d 1072, 1084 (D. Or. 2000) ("*NWF I*").[9] After the parties completed supplemental briefing, the district court issued an opinion on February 16, 2001, holding that the Corps had not addressed adequately in the 1995 and 1998 RODs the issue of the Corps's obligation to comply with the CWA. *Nat'l Wildlife Fed'n v. United States Army Corps of Eng'rs*, 132 F. Supp. 2d 876 (D. Or. 2001) ("*NWF II*"). The district court remanded the CWA issue to the Corps for further consideration. *Id.* at 895.

In May 2001, the Corps issued the 2001 ROD, in which the Corps acknowledged that "[t]he construction and existence of the dams may contribute to a shift in the temperature regime of the [Snake] [R]iver."[10] The Corps said it would take additional steps, consistent with the recommendations in the NMFS 2000 BiOp, to improve its operations for compliance with state water quality standards:

> [T]he Corps has implemented several actions to help alleviate adverse water temperature conditions in the Columbia River Basin. Selective withdrawal systems to release water from one or more specific depths . . . are present at Libby and Dworshak dams. Operation of Dworshak dam for flow augmentation for juvenile fish in the summer months has also aided in reducing water temperatures in the lower Snake River.

[9]The district court also granted motions to intervene by the Nez Perce Tribe on the side of NWF and by the Potlatch Corporation, Northwest Pulp and Paper Association, Columbia River Alliance, and Inland Ports and Navigation Group (collectively "Potlatch") on the side of the Corps. *NWF I*, 92 F. Supp. 2d at 1074. These groups are also parties in this appeal. The Nez Perce Tribe appears as an Intervenor-Appellant, and Potlatch appears as Intervenors-Appellees.

[10]On this issue, temperature modeling results suggested that the presence of the dams, by creating an impoundment of water, created a "thermal inertia effect." The result of this effect was that water temperature remained cooler later into the spring months, and remained warmer later into the fall months.

Other than the steps mentioned above, however, the Corps said that it "did not have reliable information . . . that any structural modification of [lower Snake River dams] would reduce water temperature in the reservoirs or have a significant effect on temperature water quality standard exceedences." The Corps concluded:

> the operation of the mainstem Corps dams . . . on the Snake and Columbia [R]ivers has no significant impact on water temperatures. Based on this information, we conclude that the operation of the Corps dams is not causing temperature exceedences and . . . there are no operational changes that we can undertake to significantly decrease river water temperatures.

NWF filed an amended complaint on August 24, 2001, challenging the 2001 ROD. In its amended complaint, NWF contended that the 2001 ROD was arbitrary and capricious and contrary to law, in violation of the APA, because the 2001 ROD failed to address adequately the issue of exceedences of state water temperature standards. On cross motions for summary judgment, the district court on January 9, 2003 granted the Corps's motion for summary judgment and denied NWF's motion for summary judgment. The district court concluded that the 2001 ROD implemented "each of the specific operational actions prescribed in the NMFS 2000 BiOp intended to reduce water temperatures," that the 2001 ROD evaluated properly the Corps's obligation to comply with state water quality standards as required by the CWA, and that "[t]here [was] no evidence in the record that the measures adopted in the [2001] ROD to reduce water temperatures in order to comply with the Endangered Species Act [were] not consistent with the Corps's obligations under the Clean Water Act to mitigate temperature exceedences." The district court concluded that the 2001 ROD did not violate the APA.

NWF timely appealed on March 7, 2003, and the Nez Perce Tribe timely appealed on March 6, 2003. We consolidated the two appeals on April 15, 2003, and we have jurisdiction under 28 U.S.C. § 1291 and 5 U.S.C. § 704.[11]

II

Our review of agency action is governed by the APA. Under the APA, we may set aside agency action only if it was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." *Wilderness Soc'y v. United States Fish & Wildlife Serv.*, 353 F.3d 1051, 1059 (9th Cir. 2003) (en banc). The standard is a narrow one, and we may not substitute our judgment for that of the agency. *Envtl. Def. Ctr., Inc. v. EPA*, 344 F.3d 832, 858 n.36 (9th Cir. 2003). However, "the agency must articulate a rational connection between the facts found and the conclusions made." *Id.* The United States Supreme Court has determined an agency determination to be arbitrary and capricious

> if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.

[11]Potlatch contends that neither we nor the district court have subject matter jurisdiction over this case, on the theory that the APA does not confer jurisdiction on the federal courts to review the Corps's compliance with state water quality standards. We reject this argument because we have held previously that the APA provides a jurisdictional basis for judicial review of a federal agency's compliance with state water quality standards. *Idaho Sporting Cong. v. Thomas*, 137 F.3d 1146, 1153 (9th Cir. 1998) ("Under the Clean Water Act, all federal agencies must comply with state water quality standards . . . . Judicial review of this requirement is available under the Administrative Procedure Act."). The Corps makes no challenge regarding the existence of subject matter jurisdiction.

Motor Vehicle Mfrs. Ass'n, Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983).

A reviewing court must review the administrative record before the agency at the time the agency made its decision. *Southwest Ctr. for Biological Diversity v. United States Forest Serv.*, 100 F.3d 1443, 1450 (9th Cir. 1996). The district court's decision to grant summary judgment is reviewed de novo. *Keystone Land & Dev. Co. v. Xerox Corp.*, 353 F.3d 1070, 1073 (9th Cir. 2003). Further, "[w]e may affirm on any ground supported by the record even if it differs from the rationale of the district court." *Martinez-Villareal v. Lewis*, 80 F.3d 1301, 1305 (9th Cir. 1996).

III

NWF and the Nez Perce Tribe argue that the district court erred in concluding that the Corps satisfied its obligations under the CWA because the Corps adopted all of the water quality recommendations listed in the 2000 BiOp. The district court, in concluding that the 2001 ROD was not arbitrary and capricious or contrary to law, relied heavily on the fact that the Corps had adopted all steps recommended in the NMFS 2000 BiOp to reduce water temperature. The district court noted that "[t]here are no measures to reduce water temperatures recommended in the Reasonable and Prudent Alternative of the NMFS 2000 BiOp that are not adopted by the . . . [2001] ROD," and that "the measures set forth by the NMFS 2000 BiOp to reduce water temperatures are consistent with the Corps' obligations under the Clean Water Act." The district court acknowledged that "the Corps was not free . . . to comply with the Endangered Species Act without considering its legal obligations under the Clean Water Act." However, the district court concluded that "this is not an enforcement action under the Clean Water Act. This action does not encompass additional measures the Corps could take to mitigate temperature exceedences which are not required for compliance with the biological opinions."

[1] The district court's reasoning was in part erroneous because the Corps's adoption of the recommended measures in the 2000 BiOp did not necessarily mean that the Corps had complied with all its obligations under the CWA.[12] The 2000 BiOp did not address specifically the Corps's duty to comply with the CWA. Rather, the 2000 BiOp was completed to address the Corps's duty to comply with the ESA. *See generally* 16 U.S.C. § 1536(a)-(b). As Appendix B to the 2000 BiOp noted,

> [t]he overlap of the statutory purpose [of the ESA and CWA] is extensive, however, there remain additional actions that are appropriate in a water quality plan but which are nonessential for the survival and recovery of the listed species and thus are not required components of the ESA [Reasonable and Prudent Alternatives]. Further, the water quality plan is likely to require lengthy study and implementation *exceeding the duration of this biological opinion.*

(emphasis added). That the Corps may have complied with the ESA by adopting the recommendations in the 2000 BiOp did not necessarily mean that the Corps complied with the CWA. Stated another way, the Corps's compliance with the ESA did not mean that it complied with the CWA. The Corps conceded this point in its response brief before us.

[2] In its opinion, the district court recognized that the

[12]In a separate lawsuit, another district court in the United States District Court for the District of Oregon, on May 7, 2003, held that the 2000 BiOp referred to by the district court in this case violated the Endangered Species Act. *Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv*. (D. Or. No. 01-640). On July 1, 2003, that district court issued an order permitting the 2000 BiOp to remain in place while the matter was on remand to the National Marine Fisheries Service. On May 13, 2004, that district court granted NMFS's motion to extend the deadline to complete a revised BiOp to November 30, 2004. These developments do not affect this appeal.

Corps's compliance with the ESA and CWA were analytically separate issues: "[t]he ROD recognizes that there are *additional* measures to reduce water temperatures that may be required by the Clean Water Act and addressed in an appropriate water quality plan but not essential for the survival and recovery of the [ESA] listed species" (emphasis added). The Corps's full compliance with the recommended steps outlined in the 2000 BiOp did not necessarily mean that the Corps fulfilled its obligations under the CWA. An independent analysis of the Corps's compliance with the requirements of the CWA is required. We hold that the district court erred in its reasoning in this regard.

IV

We proceed in our analysis to consider NWF's contention that the Corps's conclusions in its 2001 ROD were arbitrary and capricious and contrary to law. First, NWF contends that the 2001 ROD was arbitrary and capricious and contrary to law when it concluded that there was nothing more the Corps could do to reduce water temperature in the lower Snake River. Second, NWF contends that the 2001 ROD was arbitrary and capricious and contrary to law when it concluded that the Corps's operation of the four dams on the lower Snake River did not cause temperature exceedences. We address each contention in turn, evaluating the Corps's conclusions based on the administrative record as it existed at the time the Corps issued the 2001 ROD. *Southwest Ctr. for Biological Diversity v. United States Forest Serv.*, 100 F.3d 1443, 1450 (9th Cir. 1996) ("Judicial review of an agency decision typically focuses on the administrative record in existence at the time of the decision . . . .").

A

In the 2001 ROD, the Corps concluded that "there are no operational changes that we can undertake to significantly decrease river water temperatures." NWF contends that this

conclusion is arbitrary and capricious and contrary to law, and argues that the administrative record disclosed additional steps the Corps could have taken to decrease water temperature on the lower Snake River.

NWF first refers to the 1995 Columbia River System Operation Review, Final Environmental Impact Statement (1995 EIS) prepared by the Bureau of Reclamation, the Corps, and the Bonneville Power Administration. This document was prepared pursuant to the requirements of the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 *et seq.*, with the purpose of "consider[ing] changes in Columbia River system operations and the effect of those changes on users of the system and the environment." In analyzing alternatives to operating the dams on the Columbia River, the 1995 EIS determined that the "natural river operation" method of operating the dams on the Columbia River System "would exceed of [sic] the 17.2ºC water temperature threshold the least of all alternative [sic]." In other words, the 1995 EIS said that the "natural river operation" method would least cause temperature exceedences. The "natural river operation" method was described in the 1995 EIS as

> aid[ing] juvenile salmon migration by drawing down reservoirs (to increase the velocity of water) at four lower Snake River projects. [This method] reflects operations after the installation of new outlets in the lower Snake River dams, permitting the lower (sic) of reservoirs approximately 100 feet (30 m) to near original riverbed levels. This operation could not be implemented for a number of years, because it requires major structural modifications to the dams.

1995 EIS at 4-18.

NWF contends that the 1995 EIS establishes that the Corps could have adopted a "natural river operation" method of operating the Corps's dams to reduce temperature excee-

dences, and that the failure of the Corps to adopt this method of operation in the 2001 ROD rendered it arbitrary and capricious and contrary to law. We disagree for several reasons. First, the 1995 EIS itself did not recommend full adoption of the "natural river operation" method. The 1995 EIS concluded that, because of concerns about increased sediment pollution[13] resulting from the "natural river operation" method, "a combination of alternatives built around the natural river option [was] more likely to be best for water quality. Any such combination would need to take into account impacts to other water users as well." 1995 EIS, Water Quality Appendix, at viii. The 1995 EIS concluded that, for fish that lived in the reservoirs, the "natural river operation" method "would substantially disrupt resident fish habitat, spawning, and food supply." Thus, the 1995 EIS concluded that the "natural river operation" method alone was not the ideal way of operating the dams.

Second, the 1995 EIS acknowledged that the "natural river operation" method was not a "cure all" to the problem of temperature exceedences on the Snake River. To this effect, the 1995 EIS determined that "the ability to remedy existing and future water quality problems by altering system operations is limited. None of the alternatives evaluated would completely control water temperature . . . ." *Id.* at vii. The 1995 EIS acknowledged that "[m]any of the alternatives calling for drastic changes in water flow and circulation patterns could affect existing federal permits issued under [National Pollutant Discharge Elimination System Permitting Program] and the Clean Water Act." *Id.* Thus, there was a substantial question as to whether adoption of the "natural river operation" method would be feasible, given potential problems of compliance with other statutes. Further, the 1995 EIS noted that

[13]The 1995 EIS said that the "natural river operation" method could "increase turbidity, and nutrients and contaminants concentration in the lower Snake River and further downstream for some period of time." 1995 EIS, Water Quality Appendix, at viii.

"[a]ll alternatives call for some spill and, hence, would continue to cause high dissolved gas saturation levels." *Id.*

Third, the "natural river operation" method involved significant structural and operational changes to the dams, the viability of which was unclear in light of the Congressional purpose of constructing the dams in part for power generation.[14] The 1995 EIS described the "natural river operation" method as "permitting the lower (sic) of reservoirs approximately 100 feet (30 m) to near original riverbed levels." *Id.* at 4-18. While NWF contends that this "natural river operation" is merely a method of operation, as opposed to a fundamental change in the workings of the dam, this method of operation would lower water levels in the reservoirs to "near original riverbed levels." This method of operation would have essentially negated the water impoundment function of the dams, as the 1995 EIS acknowledged that the method "would eliminate hydroelectric generation at several projects; turbines would be taken out of service or hydraulic head would be severely reduced," and that "[r]etail power rates could go up between 2.5 and 2.8 percent." The 1995 EIS also concluded that the "natural river operation" method would have "render[ed] the navigation system in the lower Snake River unusable at certain times of the year." The 1995 EIS estimated the costs of implementing the physical changes required for the "natural river operation" method as anywhere between $570 million to $4.1 billion and taking up to fifteen years.

[3] Given that the 1995 EIS did not recommend the adoption of the "natural river operation" method, that the viability of adopting the method was unclear in light of the enormous

[14]In the text of the River and Harbor Act, Congress explained the purpose of constructing dams on the Snake River as "providing slack water navigation and irrigation . . . ." Pub. L. No. 79-14, § 2, 59 Stat. 10, 16 (1945). Congress also intended that electric power would be generated by the dams, as it explained that "surplus electric energy generated at the dams authorized in this item shall be delivered to the Secretary of the Interior . . . ." *Id.*

costs (potentially as much as four billion dollars) as well as Congress's purpose in creating the dams, and that the adoption of the method could have created problems with the Corps's compliance with other laws, we conclude that the Corps was not arbitrary and capricious, and did not act contrary to law, in declining to adopt the "natural river operation" method. Where scientific and technical expertise is necessarily involved in agency decision-making, especially in the context of prediction (here, of how various methods of dam operations would affect water temperatures), the Supreme Court has held that a reviewing court must be highly deferential to the judgment of the agency. *Baltimore Gas and Elec. Co. v. Natural Res. Def. Council, Inc.*, 462 U.S. 87, 103 (1983). ("When examining this kind of scientific determination, as opposed to simple findings of fact, a reviewing court must generally be at its most deferential."). We adhere to the Court's instruction and conclude that the Corps was not arbitrary and capricious, and did not act contrary to law, in this regard.

NWF also points to a March 10, 1999, e-mail transmittal and attachment as evidence that the Corps could have taken additional steps to decrease water temperature on the lower Snake River. The e-mail transmittal was circulated to members of a CWA compliance workgroup comprised of staff from EPA, the Bonneville Power Administration, the Corps, and the National Oceanic and Atmospheric Administration, regarding an ongoing effort to discuss CWA issues and contained an attachment. The attachment was a memo marked "DRAFT" that contained a list of potential operational changes to the Federal Columbia River Power System relating to temperature.

This correspondence does not persuade us that the Corps's conclusions in the 2001 ROD were arbitrary and capricious or contrary to law. First, the e-mail was an informal communication between staff at the four designated federal agencies. The attachment to the e-mail was a compilation of ideas from an

inter-agency meeting on Federal Columbia River Power System operations and CWA compliance, and the e-mail transmittal noted that "[t]he attached DRAFT attempts to categorize our brainstorm into policy, structures, studies and operations" (capitalization in original). The e-mail transmittal also solicited a written explanation of each of the ideas presented by the meeting participants, and asked participants to "[t]hink about the categories and recommendations, and come prepared to suggest additions, deletions, and recategorizations." This set of recommendations was a work in progress, and the recommendations had not been finalized. Further, the attachment memo acknowledged that full compliance with state water quality standards was unlikely, and that "except for dam drawdown, it is unlikely that even the most aggressive . . . temperature abatement projects will fully meet water quality criteria at all times in all places."

The document referred to by NWF was preliminary and not the official view of any agency. *Cruz v. Brock*, 778 F.2d 62, 64 (1st Cir. 1985) ("We see nothing unreasonable, arbitrary, or capricious in the Department of Labor having relied upon official census data and joint estimates, while disregarding preliminary, less official data."). The memo did not provide formal recommendations to the Corps regarding Federal Columbia River Power System operations. It would be inappropriate to fault the Corps for not adopting operational changes to the lower Snake River dams, where the changes had not been formally proposed to the Corps or even finalized by those making the recommendations. This document was, by its own terms, a "brainstorm."[15]

[15]The well-stated dissent of our colleague offers a different perspective, and argues in substance that we have inverted the burden of proof by relying on "an absence of conclusive opposing evidence, even when no supporting evidence exists." Dissent at 14234. We disagree. The Corps's conclusion that it could do nothing more to comply with Washington water quality standards, as incorporated by the CWA, is rationally connected to evidence in the administrative record, which shows that water

[4] We conclude that the Corps was not arbitrary and capricious and did not act contrary to law in concluding that there were no further steps it could take to reduce temperature exceedences in the lower Snake River.

---

temperature exceedences are natural and that some exceedences inevitably occur as a result of the existence of the dams. That such exceedences occur in nature without human intervention is suggested by the EPA's 1999 EIS and permits a reasonable inference that the Corps activity is not causing temperature exceedences. The 1999 EIS thus supports the Corps's conclusion that altering its actions will not eliminate temperature exceedences under state water quality standards. The administrative record further supports the Corps's contention that temperature exceedences are caused by the very existence of the dams. *See* discussion *infra* Part IV.B. So any operational method short of removing the dams, or opening the water flow to a point of frustrating the intended purpose of the dams, will not be likely to prevent the water temperature exceedences. Moreover, in its 1995 EIS, the Corps evaluated system operation strategies (SOSs) to lower temperature exceedences, including flow augmentation, stable storage operations, and drawdown operations. These proved to have little effect on the occurrence of higher temperatures and they bolstered the Corps's rational conclusion that there is nothing the Corps could do to eliminate all temperature exceedences.

The dissent urges that evidence of operational alternatives is "of limited utility" because it focuses on compliance with the ESA, not the CWA. Dissent at 14234, 14238. While compliance with the ESA cannot substitute for compliance with the CWA, *see* discussion *supra* Part III, we disagree that the underlying record evidence of SOSs has no relevance to the CWA issue. Instead, this evidence is sufficient to support the Corps's conclusion that its operational activities cannot eliminate the occasional occurrence of water temperature exceedences.

The standard of review under the APA requires some degree of deference to the agency's conclusions on the issues relating to dam operations that pose no simple solution. Our affirmance of the district court here settles the issue of deferential APA review of the Corps's 2001 ROD to decide whether it was arbitrary and capricious, an abuse of discretion, or not in accord with law. Our decision does not once for all settle every contentious issue between environmentalists, Indian nations, industry, the relevant federal agencies, and other interested parties who have a stake in the proper operation of the dams on the Snake River as part of the Federal Columbia River Power System.

B

NWF next contends that the 2001 ROD was arbitrary and capricious and contrary to law in concluding that the Corps's operation of the dams on the lower Snake River did not cause water temperature exceedences. In the 2001 ROD, the Corps concluded that "the operation of the mainstem Corps Dams . . . on the Snake and Columbia rivers has no significant impact on water temperatures." NWF contends that evidence in the administrative record establishes that the Corps's operation of dams on the lower Snake River causes temperature exceedences. NWF also challenges the Corps's attempt to distinguish between existence and operation of the dams on the Snake River with regard to temperature exceedences.

We again turn to the administrative record before the Corps when it reached the conclusion that the Corps's operation of the dams on the lower Snake River did not cause water temperature exceedences. *Southwest Ctr.*, 100 F.3d at 1450. At the time the Corps issued the 2001 ROD, the most comprehensive study detailing the relationship between water temperature and the existence and operation of the Corps's dams was a December 1999, "Lower Snake River Juvenile Salmon Migration Feasibility Study — Draft Feasibility Report/ Environmental Impact Statement" (1999 EIS).[16] The 1999 EIS concluded generally that "water temperatures above 20ºC (68º F) . . . commonly occurred prior to impoundment conditions,"[17] and that "[t]he existing impounded system also tended to

[16]In support of its arguments, NWF refers us to the "Final Lower Snake River Juvenile Salmon Migration Feasibility Report/Environmental Impact Statement," issued in February 2002. This document was released after the 2001 ROD, which was issued in May 2001. We cannot rely on information available only after the Corps's issuance of the 2001 ROD in evaluating whether the 2001 ROD was arbitrary and capricious or contrary to law. *Southwest Ctr.*, 100 F.3d at 1450 ("[P]ost-decision information . . . may not be advanced as a new rationalization either for sustaining or attacking an agency's decision.").

[17]"Impoundment conditions" refers to existence of the dams.

warm more slowly in the spring and cool slower in the fall due to the larger volume of water and larger heat capacity of the impoundments compared to the free-flowing system."

In the 1999 EIS, staff from the EPA and the Corps had studied detailed temperature modeling showing how varied techniques of dam operation would affect water temperature. The possibilities reviewed were: (1) maintaining current operations, (2) maximum transportation of juvenile fish, (3) major system improvements, and (4) permanent breaching of the dams.

The 1999 EIS used three different temperature modeling techniques to predict how the differing methods of dam operations would affect water temperature, and the three models reported differing results. The first model, prepared by Normandeau Associates, Inc., concluded that if the dams were breached,

> [w]ater temperatures would likely warm up faster early in the season and be higher, but cool down faster in the early fall. Water temperatures would drop to 59°F at the end of the summer approximately [fifteen] days earlier than under impounded conditions. For high [water] flow years, water temperature would drop to 59°F at the end of summer approximately [five] days earlier than under impounded conditions.

The second model, prepared by the EPA, stated that the presence of the dams played a significant role in increasing the magnitude and duration of water temperature exceedences in the Snake River. The EPA temperature model concluded that the dam breaching alternative "would produce fewer temperature threshold exceedences greater than 68°F than under the current operating conditions." The EPA model also predicted that "stream water temperatures [would] exceed 68°F at the confluence with the Columbia River one to six percent

of the year under a natural river scenario compared with six to eleven percent of the year with the dams in place."

A third temperature model, prepared by the Pacific Northwest Laboratory, concluded:

> Reservoirs decrease the water temperature variability by keeping water cooler later in the spring and warmer later in the fall compared to the natural river condition. Variability in water temperatures is much greater under the natural river drawdown scenario during the peak growing season (June through September).

The parties draw different conclusions from the temperature modeling results described above. NWF contends that the EPA model establishes conclusively that the Corps's operations of the dams result in temperature exceedences. The Corps disagrees, arguing that these temperature models generally support the Corps's conclusion that the existence of the dams causes temperature exceedences (in terms of creating a "temperature shift"), not dam operation.

[5] We are not persuaded that the EPA model establishes that the Corps's operation of the dams cause temperature exceedences in the lower Snake River. The conclusions of the EPA model were all premised on a comparison between water temperatures with the dams in place and with the dams removed, and not based on a comparison of various operational methods of the dams. NWF's own arguments in its opening brief, characterizing the results of the EPA model, are revealing in that the arguments are premised on the removal of the dams:

> [T]he four dams cause temperatures in the lower Snake River to exceed twenty degrees Celsius on a greater number of days and to a greater extent *than would occur without the dams* . . . . [u]nder the sec-

> ond scenario, the model determines the thermal regime of the lower Snake River *with the four dams removed* . . . . [t]he extent by which water temperature exceeds the twenty degree Celsius standard drops from 1.8 degrees Celsius with the dams in place in scenario one to 1.2 degrees Celsius *with the dams removed in scenario two* . . . . According to the EPA Assessment, if the dams had not been in place, the temperature would have exceed twenty degrees Celsius for only fifty-two days, enabling far more fish to avoid detrimentally high water temperatures.

(emphasis added). We cannot agree with NWF's contention that the EPA study establishes that it is the Corps's operations of the dams that is causing temperature exceedences on the lower Snake River. To the contrary, the EPA study supports the Corps's contention that it is the existence of the dams that is causing temperature exceedences.

[6] Determining what causes temperature exceedences on the lower Snake River is a difficult question, in light of the undisputed conclusion of the 1999 EIS that "water temperatures [in the lower Snake River] above 20ºC (68ºF) also commonly occurred prior to impoundment conditions." It is also plain from the 1999 EIS that we deal here with a problem requiring complex scientific analysis and skilled expertise of the Corps and other relevant agencies. In conducting our analysis, we emphasize that in the context of this APA § 706(2)(A) challenge, our review is limited to whether the agency's decision was arbitrary and capricious or contrary to law.[18] The administrative record is voluminous, and contains a great mass of data and expert evaluation. The United States Supreme Court has held that "[w]hen specialists express conflicting views an agency must have discretion to rely on the reasonable opinions of its own qualified experts even if, as an

[18]NWF did not contend that the Corps's actions were an abuse of discretion.

original matter, a court might find contrary views more persuasive." *Marsh v. Oregon Nat. Res. Council*, 490 U.S. 360, 378 (1989). The Court also explained that while a reviewing court's evaluation of agency action is "searching and careful," "the ultimate standard of review is a narrow one." *Id.* (internal quotation marks omitted). Here, where the issue in question is highly scientific and the Corps has unique expertise, we give substantial deference to the Corps's judgment. *Baltimore Gas and Elec. Co. v. Natural Res. Def. Council, Inc.*, 462 U.S. 87, 103 (1983) ("When examining this kind of scientific determination, as opposed to simple findings of fact, a reviewing court must generally be at its most deferential.").[19] On the administrative record here presented, we determine that the Corps's conclusion that its operations of dams on the lower Snake River are not causing temperature exceedences was not arbitrary and capricious or contrary to law.

NWF contends that the 2001 ROD was arbitrary and capricious and contrary to law because it distinguished between the Corps's *operation* of the dams and the *existence* of the dams. NWF argues that, even if it could be shown that the existence of the dams is the sole cause of temperature exceedences, the Corps would still be in violation of the CWA because there is no legal distinction between exceedences caused by existence of the dams as opposed to the operation of the dams.

[7] We disagree. The CWA's directive to federal agencies requiring compliance with state water standards must be con-

[19]In support of its contention on this point, NWF also refers to a September 2002 draft EPA report on temperature effects of dams on the lower Snake River. We cannot consider this report because it was issued well after the Corps issued its ROD. *Southwest Ctr.*, 100 F.3d at 1450 ("Judicial review of an agency decision typically focuses on the administrative record in existence at the time of the decision . . . ."). Even if we were to consider this report, we would not find it persuasive. First, we note that the report is a preliminary draft and does not reflect the final views of the EPA. Second, the report says what the Corps has already conceded, that the dams cause a temperature shift in the lower Snake River.

strued *in pari materia* with the River Harbor Act's directive that the dams be built in the first instance. We thus adhere to the maxim that "when two statutes are capable of coexistence, it is the duty of the courts . . . to regard each as effective." *Radzanower v. Touche Ross & Co.*, 426 U.S. 148, 155 (1976) (quoting *Morton v. Mancari*, 417 U.S. 535, 551 (1974)). Applying this reasoning, a more sensible interpretation of the CWA is that discretionary operations of the dams, consistent with the statutory regime established by Congress, should comply with state water law standards. Where the Corps has concluded reasonably that the sole cause of the temperature exceedences is the existence of the dams and not any discretionary method of operating the dams, we do not interpret the compliance provision of the CWA as requiring that the dams authorized by Congress be removed.

[8] Here, NWF has not argued, and we would not be persuaded, that the CWA provision requiring federal agencies to comply with state water quality standards functioned as a repeal of the Congressional legislation that authorized the construction of the four dams in question. The United States Supreme Court has held that there are two categories of repeal by implication:

> (1) where provisions in the two acts are in irreconcilable conflict, the later act to the extent of the conflict constitutes an implied repeal of the earlier one; and (2) if the later act covers the whole subject of the earlier one and is clearly intended as a substitute, it will operate similarly as a repeal of the earlier act. But, in either case, the intention of the legislature to repeal must be clear and manifest . . . .

Radzanower, 426 U.S. at 154 (internal quotation marks omitted). In either case, "the intention of the legislature to repeal must be clear and manifest." *Id.* Here, Congress expressed no "clear and manifest" intention to repeal the River Harbor Act. The CWA is not in "irreconcilable conflict" with the River

and Harbor Act, and the CWA does not cover the whole subject of the River and Harbor Act.

[9] We cannot agree with NWF's argument that the occurrence of a temperature exceedence, even if necessarily caused by the existence of the dams and the Corps's operation of the dams consistent with the purposes stated by Congress, renders the Corps in violation of the CWA. If state regulatory exceedences occur as a result of water impoundment required for operation of the federal dams, despite good-faith and diligent efforts of the Corps to do all that is feasible to avoid such exceedences, then we do not believe such an exceedence can be construed as a violation of the CWA.

[10] It is well-settled that our scope of review under APA § 706(2)(A) is limited to agency action. *Alaska Dept. of Envtl. Conservation v. EPA*, 124 S. Ct. 983, 1006 (2004) (explaining scope of review under APA § 706(2)(A) as "whether the *[a]gency's* action is arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law") (emphasis added) (internal quotation marks omitted). Stated another way, our review here is limited to the decisions as set forth in the 2001 ROD and the manner in which the Corps reached those decisions. Our review of the Corps's conclusions in the 2001 ROD does not extend to Congress's decision to create these dams almost sixty years ago, which of course was not within the discretion of the Corps. We cannot determine that the Corps was arbitrary and capricious, or acted contrary to law, in not taking action that would nullify the purpose of the federal dams, including forgoing water impoundment and power generation, in practical effect similar to removing the dams, where the Corps had no power to take such an action.

[11] The Supreme Court has recognized that the creation of dams is a matter of policy that is within the province of Congress, not the courts. In *Oklahoma ex rel. Phillips v. Guy F. Atkinson Co.*, 313 U.S. 508 (1941), the Court rejected a con-

stitutional challenge to the construction of a reservoir. There, the Court held that the decision to build a reservoir,

> raise[s] not constitutional issues but questions of policy. They relate to the wisdom, need, and effectiveness of a particular project. They are therefore questions for the Congress not the courts. For us to inquire whether this reservoir will effect a substantial reduction in the lower Mississippi floods would be to exercise a legislative judgment based on a complexity of engineering data. It is for Congress alone to decide whether a particular project, by itself or as part of a more comprehensive scheme, will have such a beneficial effect on the arteries of interstate commerce as to warrant it. That determination is legislative in character.

Oklahoma ex rel. Phillips, 313 U.S. at 527. We have also recognized generally Congress's power to regulate navigable waters. *Boone v. United States*, 944 F.2d 1489, 1493 (9th Cir. 1991) ("This expansion of the power to regulate navigable waters parallels, and is coextensive with, the expansion of the power to regulate commerce generally."). These cases underscore that Congress's decision to build the four dams on the lower Snake River was a matter of policy, and Congress alone in its legislative function must determine if the dams are to remain in the face of the Corps's recognition that the existence of the dams causes some temperature shift in the lower Snake River.

It must be acknowledged that this is a difficult case, because it appears that the very existence of the dams, and consequent water impoundment, may cause some temperature exceedences beyond those that occur naturally. And we have found no precedent squarely on point in the federal circuits addressing the issue of compliance with state regulatory law, incorporated generally by the CWA, when its specific application would frustrate the Congressional purposes in authoriz-

ing the dams. Finding no directly applicable precedent from the United States Supreme Court, our circuit, or our sister circuits, we determine that this case is controlled by the general principles of law that we have reviewed. These include that the CWA, with its provision for state water quality law compliance, must be read in the context of the River and Harbor Act authorizing the dams on navigable waters for federal purposes, and that in matters intensely scientific it is an important part of the judicial function to defer to agency expertise.

V

The United States Supreme Court recently observed in resolving an APA action that "[t]he principal purpose of the APA limitations . . . is to protect agencies from undue judicial interference with their lawful discretion, and to avoid judicial entanglement in abstract policy disagreements which courts lack both expertise and information to resolve." *See Norton v. S. Utah Wilderness Alliance*, 124 S.Ct. 2373, 2381 (2004). We are presented with a technical issue that requires scientific expertise. Our judicial role is not to second-guess the decisions of the agency, but to determine whether, on the administrative record, the agency's actions were arbitrary and capricious, an abuse of discretion, or contrary to law.

[12] Because the Corps's conclusions in the 2001 ROD were supported by the administrative record, we conclude that the Corps's conclusion that its operations of the dams on the lower Snake River, as opposed to the existence of the dams themselves, did not contribute to temperature exceedences was not arbitrary and capricious. Nor can the Corps's decision be viewed as contrary to law, in light of Congress's mandate for the creation of the dams. It may be that the existence of the dams, with impoundment of water used to generate power and for irrigation, inescapably causes some temperature variation that exceeds Washington state law temperature standards. But we cannot reasonably interpret the Clean Water Act to provide a remedy for such circumstance when the evidence in

the Corps's administrative record supports the Corps's conclusion that its operations of the dams have not contributed to any exceedences, and the record also supports the Corps's view that there are no additional feasible steps it could take to decrease water temperatures on the lower Snake River, consistent with the mandate of Congress to build the dams and Congress's purposes for them.

The judgment of the district court is **AFFIRMED.**

McKEOWN, Circuit Judge, dissenting:

Once the majority frames this case as a choice between compliance with the Clean Water Act ("CWA") and tearing down the dams along the Snake and Columbia Rivers, the question answers itself. The trouble is that this formulation misstates the actual legal issue: whether evidence in the record supports the United States Army Corps of Engineers' ("Corps") decision that the *sole* cause of temperature exceedences is the existence—and not operation—of the dams, and that, therefore, the Corps bears no obligation to comply with the CWA.

Even talking about removal of the dams is a lightning rod that we need not strike. Compliance with the CWA and the continued presence of the dams are not mutually exclusive options. But, in an effort to sidestep the CWA, the Corps hides behind removal of the dams and simply defaults on the real issue—compliance with water quality standards. Because the record is devoid of evidence addressing operational alternatives aimed at CWA compliance, the Corps' decision does not comply with the Administrative Procedure Act ("APA"). I respectfully dissent because, in my view, the Corps' failure to tackle the CWA issue head-on requires remand.

The Corps' decision is deficient in two respects. First, even where the studies in the record discuss water temperature

exceedences, the studies generally presuppose that the only options are either having a dam or not having a dam. This binary decision tree ignores the consideration that dam operations—and not just the existence of the dams—impact water temperatures, thereby setting up the Corps' too-convenient conclusion that there are no measures it can undertake to comply with the CWA. The record does not, however, support the conclusion that the options are simply take-it-or-leave-it because it contains little investigation into operational alternatives addressing the CWA. Put another way, the Corps' presumption about the causes of water quality violations forecloses any meaningful consideration of its options.

Second, the scant evidence regarding operational alternatives is of limited utility because it does not address the right question. The studies purportedly supporting the Corps' decision all focus specifically on compliance with the Endangered Species Act ("ESA"), not the CWA. The problem is that there is not a perfect overlap between requirements under the CWA and the ESA. As a consequence, the Corps benchmarks its CWA compliance under the ESA, which is the wrong statutory reference. Without any assurance that the Corps considered the universe of operational alternatives appropriate for CWA compliance, there is no rational basis for the Corps' conclusion that efforts to reduce water temperatures would be futile. *See Envtl. Def. Ctr., Inc. v. Envtl. Protection Agency*, 344 F.3d 832, 858 n.36 (9th Cir. 2003) (noting that an agency decision violates the APA if there is no rational connection between the decision and the facts in the record).

In upholding the Corps' decision, the majority inverts a fundamental principle of review under the APA. Rather than requiring a rational connection between the agency decision and the evidence in the record, the majority allows an agency decision to stand simply because it perceives an absence of conclusive opposing evidence, even when no supporting evidence exists. The majority also improperly places the burden on the National Wildlife Federation to uncover contrary evi-

dence when the APA makes clear that it is the agency's responsibility to consider evidence in the record and proceed on a rational and reasoned basis. *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 378 (1989). Such logic eviscerates the APA's function of ensuring that agency actions are based on rational and reasoned decision-making.

Under the APA's familiar standard of review, the Corps' decision regarding compliance with state water quality standards will not be reversed unless the action is arbitrary, capricious, an abuse of discretion, or otherwise contrary to law. 5 U.S.C. § 706(2); *see also Lands Council v. Powell*, ___ F.3d ___ (9th Cir. 2004); *Or. Natural Res. Council v. United States Forest Serv.*, 834 F.2d 842, 851-52 (9th Cir. 1987) (holding that claims of federal agency violations of state water quality standards under the CWA are reviewed under the APA). An agency decision is arbitrary and capricious if it fails to "articulate a rational connection between the facts found and the conclusions made." *Envtl. Def. Ctr.*, 344 F.3d at 858 n.36; *see also Natural Res. Def. Council v. United States Dep't of Interior*, 113 F.3d 1121, 1123-24 (9th Cir. 1997). "This standard necessitates a judicial examination of the disputed decision's rationale and surrounding circumstances in order to carry out the demand that courts ensure that agency decisions are founded on a reasoned evaluation of the relevant factors." *Desert Citizens Against Pollution v. Bisson*, 231 F.3d 1172, 1180 (9th Cir. 2000) (internal quotation marks omitted) (quoting *Marsh*, 490 U.S. at 378).

With this standard in mind, I turn to the Corps' 2001 Record of Decision ("ROD"). The Corps drafted the 2001 ROD in response to the district court's prior decision that its 1998 ROD failed to respond adequately to the CWA.[1] *Nat'l*

[1]Prefacing the ROD, the Corps wrote: "Having found that the administrative record did not establish that the Corps considered all relevant factors in making the [prior] Record of Decision, the court ordered the Corps to issue a new decision to replace the 1998 Record of Decision which addresses compliance with its legal obligations under the Clean Water Act."

Wildlife Fed'n v. United States Army Corps of Eng'rs, 132 F. Supp. 2d 876, 890 (D. Or. 2001). Since the time the Corps drafted the 1998 ROD, the additions to the record that discuss water temperature are studies that address fish survival with respect to the ESA.[2] The majority and I agree that the district court improperly determined that the Corps solved its earlier failure to address the CWA by relying on its compliance efforts under the ESA. Maj. op. 14216. Water quality compliance is a substantively different issue than the survival of salmon and steelhead fish, and, despite areas of overlap, an effort to comply with one is not a substitute for compliance with the other. The question, then, is whether the ESA studies, or any other evidence in the record, provide a rational basis for the Corps' decision that its activities are not captured by the CWA and that, consequently, it does not need to do anything to lower water temperatures.

After reviewing the data referenced in the Corps' ROD, I cannot agree that the Corps' decision is rationally connected to the factual record. Missing in the record is any evidence that the Corps' operation of the dams is *not* one of the causes of temperature exceedences—which is the decision we are reviewing. The studies in the record—both before and after the 1998 ROD—analyzed water temperature exceedences in comparison to water temperatures without the dams, or analyzed alternative practices without the CWA in mind. Because the record does not include discussion of dam operations vis-a-vis the CWA, the record cannot be read to support the claim that operations are irrelevant to CWA compliance.

The majority points to the EPA's 1999 study of temperatures in the Columbia River as a foundation for the Court's

[2]The major additions to the administrative record include a 1999 study of water temperatures in the Columbia River conducted by the Environmental Protection Agency ("EPA"), and a later 1999 environmental impact statement ("EIS") addressing the way the dams along the Lower Snake River affect certain fish species.

decision. Important to the majority's analysis, the EPA study looked at water temperatures relative to the temperatures if the dams did not exist or were removed entirely, leading the majority to conclude that the study supports the Corps' "contention that it is the existence of the dams that is causing temperature exceedences" as opposed to the operation of the dams. Maj. op. 14227. The EPA study cannot, however, serve as the critical basis for the Corps' decision because the study simply does not address the relationship between dam operation methods and the water temperature. The data from the EPA study, like the data from all the studies in the record, merely indicate a fact the Corps readily concedes: there is a causal link between the water temperature exceedences and the existence of the dams.[3] But the Corps stopped short in its analysis. It is arbitrary to infer that just because the mere existence of the dams affects water temperatures, somehow the operation of the dams does not also affect water temperatures.

Under the Corps' circular reasoning, it need not consider operational alternatives because the existence of the dams causes exceedences, and because the existence of the dams causes exceedences, no operational alternatives are possible, and it need not investigate them. This myopic vision of its options—keep the dams or tear them down—leads to the Corps' speculative conclusion that it cannot undertake any operational changes to reduce water temperature exceedences because, under the Corps' understanding, why investigate

[3]The author of the EPA's 1999 study concluded that the dams operated by the Corps significantly increase the magnitude and duration of water temperature exceedences in the Snake River, observing "In the Snake River, with the dams in place, duration of exceedance is relatively high at the starting point . . . , but nearly doubles [down the river] . . . [and without the dams] the analysis predicts that the mean duration of exceedance [down the river] is approximately 63% of that when the dams are in place." The Corps acknowledged and accepted the EPA's conclusions in its 1999 Lower Snake River EIS. Remarkably, the Corps does not dispute that the dams contribute to the duration and magnitude of temperatures exceeding the limits allowed under Washington's water quality standards.

operational alternatives if it already knows the dams' existence is the sole cause of water temperature exceedences? The result is that the Corps ruled out alternative operational measures without ever investigating the CWA question. The Corps' approach can only be described as an illogical leap, hardly a basis to pass muster under the APA.

Importantly, the various studies' discussion of alternatives to the current dam operation method are of limited use in answering the CWA question because the studies were drafted for a very different purpose—to promote salmon recovery under the ESA. The authors of the various EISs gave only secondary consideration to the CWA, and only to the extent that this concern arose from efforts to comply with the ESA, such as lowering water temperature enough for fish viability. Because of this focus, the environmental surveys only explored alternatives that promote fish survival and did not discuss in any detail questions related to the Corps' obligations under the CWA.

There is no way of knowing from the record whether the operational alternatives the Corps considered in its effort to preserve fish represent the proper range of operational alternatives for CWA compliance. In turn, there is thus no way of knowing whether there are operational changes the Corps can undertake to ameliorate water temperatures for purposes of the CWA, even if those efforts are less attractive for purposes of the ESA. To be sure, the APA does not require the Corps to conduct a study premised solely on the CWA. What the APA does require is rational decision-making, which in turn demands that the Corps demonstrate consideration of its CWA obligations and actions specific to compliance with that statute.

I also disagree with the majority's insistence that requiring more from the Corps would repeal other statutes, such as those that provide for the construction and maintenance of the dams. This interpretation assumes that compliance is possible

only if the dams cease to exist. This interpretation rests on the same speculation that puts the Corps' conclusions on shaky ground. As discussed above, the record does not establish that the only way the Corps can comply with the CWA is if it tears down the dams. The options are so starkly limited because the record upon which the Corps based its decision suffers from a gap in data and analysis, a gap resulting from its singular focus on one option—the removal of the dams. The Corps' blunt analysis hides fair consideration of positive intermediate steps, setting up a false Hobson's choice between compliance and evisceration of other legislation. The point is that without some investigation into operational alternatives for CWA purposes, we do not know the extent to which operational alternatives impact water temperatures, nor do we know whether those alternatives could be practically implemented.

The majority's attempt to whittle down evidence presented by National Wildlife—rather than discuss evidence supporting the agency decision—loses sight of the APA test, which requires an affirmative showing of evidence supporting a decision, not a negative absence of evidence approach. I do not dispute the majority's rejection of certain operational alternatives, such as the natural river method; certainly, the Corps has discretion to interpret data and rely on its own qualified experts. *See Marsh*, 490 U.S. at 378. But that issue is a red herring. The real issue is whether the Corps fulfilled its obligation under the APA of demonstrating a rational connection between its decision and evidence in the record. *Envtl. Def. Ctr.*, 344 F.3d at 858 n.36. Without record evidence linking the CWA standards to the Corps' conclusions, notably the lack of evidence regarding the CWA and the impact of dam operations or the viability of dam operation alternatives, I conclude that the Corps' decisions cannot pass APA scrutiny. I respectfully dissent.