

FOR PUBLICATION
UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

NATIONAL WILDLIFE FEDERATION;
IDAHO WILDLIFE FEDERATION;
WASHINGTON WILDLIFE FEDERATION;
SIERRA CLUB; TROUT UNLIMITED;
PACIFIC COAST FEDERATION OF
FISHERMEN'S ASSOCIATIONS;
INSTITUTE FOR FISHERIES RESOURCES;
IDAHO RIVERS UNITED; IDAHO
STEELHEAD AND SALMON UNITED;
NORTHWEST SPORT FISHING
INDUSTRY ASSOCIATION, SALMON FOR
ALL; COLUMBIA RIVERKEEPER; NW
ENERGY COALITION; FEDERATION OF
FLY FISHERS; AMERICAN RIVERS,
INC.,

Plaintiffs-Appellees,

v.

NATIONAL MARINE FISHERIES
SERVICE; UNITED STATES ARMY
CORPS OF ENGINEERS; U.S.
BUREAU OF RECLAMATION,

Defendants,

FRANKLIN COUNTY FARM BUREAU
FEDERATION; GRANT COUNTY FARM
BOARD FEDERATION; WASHINGTON
FARM BUREAU FEDERATION;
STATE OF IDAHO; CLARKSON GOLF
& COUNTRY CLUB,

Defendants-Intervenors,

No. 05-35569

D.C. No.
CV-01-00640-JAR

and

NORTHWEST IRRIGATION UTILITIES;
PUBLIC POWER COUNCIL; PACIFIC
NORTHWEST GENERATING
COOPERATIVE; BPA CUSTOMER
GROUP,

*Defendants-Intervenors-
Appellants,*

v.

STATE OF OREGON,

*Plaintiff-Intervenor-
Appellee.*

NATIONAL WILDLIFE FEDERATION;
IDAHO WILDLIFE FEDERATION;
WASHINGTON WILDLIFE FEDERATION;
SIERRA CLUB; TROUT UNLIMITED;
PACIFIC COAST FEDERATION OF
FISHERMEN'S ASSOCIATIONS;
INSTITUTE FOR FISHERIES RESOURCES;
IDAHO RIVERS UNITED; IDAHO
STEELHEAD AND SALMON UNITED;
NORTHWEST SPORT FISHING
INDUSTRY ASSOCIATION, SALMON FOR
ALL; COLUMBIA RIVERKEEPER; NW
ENERGY COALITION; FEDERATION OF
FLY FISHERS; AMERICAN RIVERS,
INC.,

Plaintiffs-Appellees,

v.

No. 05-35646
D.C. No.
CV-01-00640-JAR

NATIONAL MARINE FISHERIES
SERVICE; UNITED STATES ARMY
CORPS OF ENGINEERS; U.S.
BUREAU OF RECLAMATION,

Defendants,

NORTHWEST IRRIGATION UTILITIES;
PUBLIC POWER COUNCIL; PACIFIC
NORTHWEST GENERATING
COOPERATIVE; BPA CUSTOMER
GROUP; FRANKLIN COUNTY FARM
BUREAU FEDERATION; GRANT
COUNTY FARM BOARD FEDERATION;
WASHINGTON FARM BUREAU
FEDERATION; CLARKSON GOLF &
COUNTRY CLUB,

Defendants-Intervenors,

and

STATE OF IDAHO,

*Defendant-Intervenor-
Appellant,*

v.

STATE OF OREGON,

*Plaintiff-Intervenor-
Appellee.*

NATIONAL WILDLIFE FEDERATION;
IDAHO WILDLIFE FEDERATION;
WASHINGTON WILDLIFE FEDERATION;
SIERRA CLUB; TROUT UNLIMITED;
PACIFIC COAST FEDERATION OF
FISHERMEN'S ASSOCIATIONS;
INSTITUTE FOR FISHERIES RESOURCES;
IDAHO RIVERS UNITED; IDAHO
STEELHEAD AND SALMON UNITED;
NORTHWEST SPORT FISHING
INDUSTRY ASSOCIATION, SALMON FOR
ALL; COLUMBIA RIVERKEEPER; NW
ENERGY COALITION; FEDERATION OF
FLY FISHERS; AMERICAN RIVERS,
INC.,

Plaintiffs-Appellees,

v.

NATIONAL MARINE FISHERIES
SERVICE; UNITED STATES ARMY
CORPS OF ENGINEERS; U.S.
BUREAU OF RECLAMATION,

Defendants-Appellants,

and

NORTHWEST IRRIGATION UTILITIES;
PUBLIC POWER COUNCIL; PACIFIC
NORTHWEST GENERATING
COOPERATIVE; BPA CUSTOMER
GROUP; FRANKLIN COUNTY FARM
BUREAU FEDERATION; GRANT
COUNTY FARM BOARD FEDERATION;

No. 05-35570

D.C. No.
CV-01-00640-JAR

AMENDED
OPINION

WASHINGTON FARM BUREAU
FEDERATION; STATE OF IDAHO;
CLARKSON GOLF & COUNTRY CLUB,
Defendants-Intervenors,

v.

STATE OF OREGON,
*Plaintiff-Intervenor-
Appellee.*

Appeal from the United States District Court
for the District of Oregon
James A. Redden, District Judge, Presiding

Argued and Submitted
July 13, 2005—Seattle, Washington

Filed July 26, 2005
Amended September 1, 2005

Before: A. Wallace Tashima, Sidney R. Thomas, and
Richard A. Paez, Circuit Judges.

Per Curiam Opinion

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OPINION

PER CURIAM:

The defendants appeal the district court's grant of a preliminary injunction, based on a violation of the Endangered Species Act (or "ESA"), 16 U.S.C. §§ 1531-1544, requiring the United States to pass a specified amount of water through the spillgates of four dams on the Snake River, and one dam on the Columbia River during the summer months of 2005, rather than passing the water through turbines for power generation. We affirm in part and remand in part.

I

The Columbia River is the fourth largest river on the North American continent. It drains approximately 259,000 square miles, including territory in seven states and one Canadian

province. It flows for more than 1,200 miles from the base of the Canadian Rockies to the Pacific Ocean. As part of the cycle of life in the Columbia River system, every year hundreds of thousands of salmon and steelhead travel up and down the river and its tributaries, hatching in fresh water, migrating downstream to the sea to achieve adulthood, and then returning upstream to spawn. The Snake River is the Columbia River's main tributary.

As part of the modern cycle of life in the Columbia River System, each year brings litigation to the federal courts of the Northwest over the operation of the Federal Columbia River Power System ("FCRPS" or "Columbia River System")¹ and, in particular, the effects of system operation on the anadromous salmon and steelhead protected by the Endangered Species Act.

No one disputes that the wild Pacific salmon population has significantly decreased; indeed, in recent years, salmon runs have declined to a small percentage of their historic abundance. There are now thirteen species of Columbia, Snake, and Willamette River salmon and steelhead that are protected by the Endangered Species Act.² The district court found in this case that "the listed species are in serious decline and not

¹The FCRPS consists of 14 sets of dams and related facilities: Bonneville, The Dales, John Day, and McNary dams in the lower Columbia River Basin; Chief Joseph, Grand Coulee, Libby, Hungry Horse, and Albeni Falls dams in the upper Columbia River Basin; and Ice Harbor, Lower Monumental, Little Goose, Lower Granite, and Dworshak Dams in the lower Snake River Basin. The United States Bureau of Reclamation manages the Grand Coulee and Hungry Horse dams; the remainder are managed by the United States Army Corps of Engineers.

²Snake River Chinook salmon (fall-run); Snake River Chinook salmon (spring/summer-run); Snake River sockeye salmon; Upper Columbia River steelhead; Snake River Basin steelhead; Lower Columbia River coho salmon; Lower Columbia River steelhead; Middle Columbia River steelhead; Upper Willamette River steelhead; Lower Columbia River Chinook salmon; Upper Willamette River Chinook salmon; Upper Columbia River Chinook salmon (spring-run); and Columbia River chum salmon.

evidencing signs of recovery.” Each of the thirteen affected stocks migrate at different times of the year to different parts of the Columbia Basin. For example, Upper Columbia spring Chinook adults return to their spawning grounds in the spring of each year; Snake River fall Chinook adults return to the Snake River Basin in the fall. Juveniles of these stocks generally migrate seaward between mid-April and early September. The spring and summer Chinook, steelhead, and sockeye salmon migrate as yearling juveniles in the spring. Subyearling fall Chinook migrate down the river during the mid-to-late summer. Some salmon migrate downstream after spending a year in fresh water; others migrate the same year.

The primary focus of the present lawsuit is the survival of the fall juvenile Chinook salmon and steelhead migrating downstream to the Pacific Ocean. These fish must pass a number of FCRPS dams on their journey to the sea and suffer a very high mortality rate in doing so, sometimes as high as 92%. As the fish migrate downstream, they first encounter reservoirs behind the dams, which slows their progress and exposes them to predatory fish, such as the northern pikeminnow. After passage through each dam’s reservoir, the juvenile salmon and steelhead must pass each dam. There are four main methods by which salmon may navigate the Columbia and Snake River hydroelectric projects while migrating from upriver areas to the ocean: (1) spill over the dams; (2) passage through turbines; (3) in-river bypass systems; and (4) transportation bypass systems. Of these options, passage through turbines unquestionably causes the highest mortality rate. Historically, spill has been considered to cause the lowest mortality. However, spill must be carefully managed to avoid gas supersaturation, which is harmful to the fish.³

³Falling water over the dam increases the amount of atmospheric gases that are dissolved in the water. If the level of dissolved atmospheric gases is too high, fish can experience “gas bubble trauma,” which is similar to the “bends” experienced by human divers who return to the surface too quickly.

Each dam in the migration corridor of the mainstream Snake and Columbia rivers has a bypass system. At some dams, the bypass consists of screens in front of the turbine intakes that divert the salmon and steelhead into a passageway through the dam and downstream. At others, the bypass system diverts the fish into barges for transportation around the dam.

The operation of the Columbia River System is complex. The Army Corps of Engineers and the Bureau of Reclamation manage the dams for multi-purpose operations; the Bonneville Power Administration manages federal power generated from the dams; and the Federal Energy Regulatory Commission plays a number of roles, including licensing of non-federal hydro-power projects. Although the focus of this litigation is the effect of Columbia River System operation on endangered species, in the day-to-day operation, federal agencies must manage the system to deliver needed power and water to Northwest consumers.

States also have an influence on the Columbia River System, directly in their governance of water diversions from the river, and indirectly through their own fish and wildlife conservation programs. The operation of the Columbia River System is also impacted by treaties with a number of federally recognized Indian Tribes, which reserve to the tribes certain fishing rights that are affected by the management of the FCRPS.⁴

⁴See, e.g., *Treaty with the Nez Percés*, 12 Stat. 957, Art. 3 (June 11, 1855); *Treaty with the Tribes of the Middle Oregon (Confederated Tribes of the Warm Springs Reservation of Oregon)*, 12 Stat. 963 (June 25, 1855); *Treaty with the Yakima*, 12 Stat. 951 (June 9, 1855); *Treaty with the Wallawalla, Cayuse, et al. (Confederated Tribes of the Umatilla Indian Reservation)*, 12 Stat. 945 (June 9, 1855). In their amici brief, the treaty tribes support the position of the National Wildlife Federation in this action.

In the last several decades, the management of the Columbia River System has been strongly influenced by the Endangered Species Act, which requires federal agencies to, in consultation with what is known as the “consulting agency,” conserve species listed under the ESA. The ESA requires federal agencies to “insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [designated critical] habitat. . . .” 15 U.S.C. § 1536(a)(2). To ensure that the agency would meet its substantive ESA duties, the ESA imposes a procedural consultation duty whenever a federal action may affect an ESA-listed species. *Thomas v. Peterson*, 753 F.2d 754, 763 (9th Cir. 1985). To that end, the agency planning the action, usually known as the “action agency,” must consult with the consulting agency. This process is known as a “Section 7” consultation. The process is usually initiated by a formal written request by the action agency to the consulting agency. After consultation and analysis, the consulting agency then prepares a biological opinion. See generally *Ariz. Cattle Growers’ Ass’n v. United States Fish & Wildlife Serv.*, 273 F.3d 1229, 1239 (9th Cir. 2001).

The consulting agency evaluates the effects of the proposed action on the survival of species and any potential destruction or adverse modification of critical habitat in a biological opinion, 16 U.S.C. § 1536(b), based on “the best scientific and commercial data available,” *id.* at § 1536(a)(2). The biological opinion includes a summary of the information upon which the opinion is based, a discussion of the effects of the action on listed species or critical habitat, and the consulting agency’s opinion on “whether the action is likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat. . . .” 50 C.F.R. § 402.14(h). In making its jeopardy determination, the consulting agency evaluates “the current status of the listed species or critical habitat,” the “effects of the action,” and “cumulative effects.” 50 C.F.R. § 402.14(g)(2)-(3). “Effects

of the action” include both direct and indirect effects of an action that will be added to the “environmental baseline.” 50 C.F.R. § 402.02. The environmental baseline includes “the past and present impacts of all Federal, State or private actions and other human activities in the action area” and “the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation.” *Id.*

If the biological opinion concludes that jeopardy is not likely and that there will not be adverse modification of critical habitat, or that there is a “reasonable and prudent alternative” to the agency action that avoids jeopardy and adverse modification and that the incidental taking of endangered or threatened species will not violate section 7(a)(2), the consulting agency can issue an “Incidental Take Statement” which, if followed, exempts the action agency from the prohibition on takings⁵ found in Section 9 of the ESA. 16 U.S.C. § 1536(b)(4); *Aluminum Co. of America v. Administrator, Bonneville Power Administration*, 175 F.3d 1156, 1159 (9th Cir. 1999).

If the consulting agency concludes that an action agency’s action may jeopardize the survival of species protected by the ESA, or adversely modify a species’ critical habitat, the action must be modified. *Id.* The consulting agency may recommend a “reasonable and prudent alternative” to the agency’s proposed action. *Id.* at § 1536(b)(3)(A).

The issuance of a biological opinion is considered a final agency action, and therefore subject to judicial review. *Bennett v. Spear*, 520 U.S. 154, 178 (1997); *Ariz. Cattle Growers’ Ass’n*, 273 F.3d at 1235.

⁵“The term ‘take’ means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” 16 U.S.C. § 1532(19).

The Endangered Species Act, as it applies here to protection of anadromous fish, requires action agencies to consult the agency formerly known as the National Marine Fisheries Service of the National Oceanic and Atmospheric Administration (“NMFS”),⁶ 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).

Snake River fall Chinook salmon were listed as threatened species in 1992. In 1993, NMFS issued a biological opinion concluding that FCRPS operations would not jeopardize the listed species. The district court held that NMFS’s action in issuing the 1993 biological opinion was arbitrary and capricious. *Idaho Dep’t of Fish & Game v. Nat’l Marine Fisheries Serv.*, 850 F. Supp. 886, 900 (D. Or. 1994). The district court found that NMFS had failed to give an adequate explanation for several of the key assumptions that went into its jeopardy analysis. This decision was vacated on appeal as moot because NMFS had issued a subsequent biological opinion. *Idaho Dep’t of Fish & Game v. Nat’l Marine Fisheries Serv.*, 56 F.3d 1071, 1075 (9th Cir. 1995). After further litigation and agency action not directly relevant to this case, NMFS issued a new biological opinion on December 21, 2000, (the “2000 BiOp”) that superseded the previous biological opinions.

In its 2000 BiOp, NMFS determined that the continued operation of FCRPS as proposed by the action agencies would jeopardize eight listed salmon and steelhead species; specifically, NMFS found that the “effects of the proposed or continuing action, the effects of the environmental baseline, and any cumulative effects, and considering measures for survival and recovery specific to other life stages” would leave the eight species with too low a likelihood of survival and potential for

⁶The agency has now been renamed “NOAA Fisheries.” Because many of the documents refer to the agency by its former name, it shall be referenced as “NMFS” throughout this opinion for convenience of reference.

population recovery. NMFS thus developed reasonable and prudent alternatives to the proposed operation and analyzed whether these alternatives, in conjunction with the environmental baseline and cumulative effects, would avoid jeopardizing the species. NMFS found these alternatives insufficient. NMFS therefore assessed whether the additional impact of off-site mitigation activities unrelated to FCRPS operations, including hatchery and habitat initiatives, would avoid jeopardy, and found that it did.

Plaintiff National Wildlife Federation (“NWF”) brought this present action challenging the 2000 BiOp in U.S. District Court for the District of Oregon. The district court concluded that the 2000 BiOp was invalid because to reach its jeopardy determination, NMFS improperly relied on off-site federal mitigation actions that had not undergone Section 7 consultation, and thus were not properly included in the environmental baseline,⁷ and on non-federal mitigation actions that were not reasonably certain to occur, and thus were not properly included in cumulative effects. *Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Servs.*, 254 F. Supp. 2d 1196, 1211-12 (D. Or. 2003). The district court remanded to provide NMFS an opportunity to correct the 2000 BiOp. *Id.* at 1215.

Rather than correct the 2000 BiOp, NMFS issued an entirely new biological opinion on November 30, 2004 (the “2004 BiOp”), which formed the basis of the federal agencies’ operating plans for the FCRPS during the summer of 2005. In the 2004 BiOp, NMFS conducted a jeopardy analysis which utilized the novel approach of including in the environmental baseline the existing FCRPS, the nondiscretionary

⁷The 2004 BiOp concluded that NMFS could not distinguish the effects of the discretionary and nondiscretionary FCRPS operations, and therefore created a hypothetical “reference operation” to which it compared the discretionary proposed action. The reference operation was developed to “maximize fish benefits” and it “overestimates the beneficial effects that the Action Agencies can actually achieve.” 2004 BiOp at 5-6.

dam operations, and all past and present impacts from discretionary operations. As opposed to assessing whether the salmon and steelhead would be jeopardized by the aggregate of the proposed agency action, the environmental baseline, cumulative effects, and current status of the species, NMFS instead evaluated whether the proposed agency action, consisting of only the proposed discretionary operation of the FCRPS, would have no net effect on a species when compared to the environmental baseline. By using this comparative approach rather than the aggregate approach, NMFS was able to conclude that the proposed action would not jeopardize the continued existence of any listed species or destroy or adversely modify critical habitat for three of these species.

NWF and the State of Oregon challenged the following aspects of 2004 BiOp, specifically and as relevant to this appeal: (1) the segregation of the existing FCRPS, the non-discretionary dam operations, and all past and present impacts of discretionary operations from the proposed discretionary operations; (2) the basic analytical framework NMFS employed to come to its no-jeopardy and critical habitat determinations; and (3) the critical habitat determinations which plaintiffs alleged did not analyze what habitat conditions are necessary for recovery.⁸

The district court granted summary judgment for NWF and Oregon, holding that NMFS had violated the ESA in the issuance of its 2004 BiOp. The district court found the 2004 BiOp legally insufficient for four independent reasons:

- The opinion failed to conduct a jeopardy analysis

⁸The State of Oregon supports the substantive position of NWF, but takes no position on the preliminary injunction. The State of Washington supports NWF's position that the 2004 BiOp is invalid, but opposes the preliminary injunction remedy. The States of Idaho and Nebraska support the federal government's position on both the merits and the preliminary injunction remedy.

on the basis of all elements of the proposed action, including the so-called non-discretionary operations of the dams;

- The opinion failed to use an aggregation of the impacts from the proposed action, the environmental baseline, and the cumulative impacts as the basis for the jeopardy analysis;
- The opinion's critical habitat determination was flawed because it failed to determine separately whether the proposed action would destroy or adversely modify critical habitat necessary for the recovery as well as survival of the listed species; and
- The opinion's jeopardy analysis failed to address both recovery and survival of the listed species.

The order granting summary judgment to the plaintiffs "invalidated" the 2004 BiOp. However, the district court specified that its summary judgment order was not final or appealable. Following the district court's decision to invalidate the 2004 BiOp, NWF moved for a preliminary injunction requiring NMFS to: (1) withdraw the 2004 BiOp; (2) comply with and implement all of the reasonable and prudent alternative mitigation actions described in the 2000 BiOp (with certain exceptions); (3) as to the 2005 summer flow, decrease the water particle travel time by 10% in specified areas; and (4) provide water spill over specified dams during the summer of 2005.

The district court, based on its determination that the 2004 BiOp was procedurally and substantively flawed and its finding that the operations of FCRPS strongly contribute to the endangerment of the listed species and will cause irreparable injury if not changed, granted in part the motion for a preliminary injunction. The district court announced its intention to

order the withdrawal of the 2004 BiOp, but declined to do so until after a fall status conference. The court denied the request to order the decrease of water particle travel time by at least 10% in the specified areas. The court granted the request to order summer spills at specified areas in order to avoid irreparable harm to juvenile fall chinook and other listed species. Specifically, the district court ordered the affected agencies to: (1) provide spill from June 20, 2005, through August 31, 2005, of all water in excess of that required for station service, on a 24-hour basis, at the Lower Granite, Little Goose, Lower Monumental, and Ice Harbor Dams on the lower Snake River; and (2) provide spill from July 1, 2005, through August 31, 2005, of all flows above 50,000 cubic feet per second, on a 24-hour basis, at the McNary Dam on the Columbia River.

The district court also held in its order that the respective Records of Consultation and Statements of Decision issued by the Army Corps of Engineers on January 3, 2005, and by the Bureau of Reclamation on January 12, 2005, violated the ESA because they were based on the invalid 2004 BiOp.

The defendants filed an emergency motion for a stay of the injunction order pending appeal. A motions panel denied the defendants' stay motion, but ordered an expedited hearing on the preliminary injunction appeal. Oral argument on the preliminary injunction appeal was held July 13, 2005. The panel expresses its appreciation to the parties for providing extensive briefing on short notice and on an accelerated time schedule.

II

A district court's order with respect to preliminary injunctive relief is subject to limited appellate review, and we will reverse only if the district court "abused its discretion or based its decision on an erroneous legal standard or on clearly erroneous findings of fact." *United States v. Peninsula Com-*

munications, Inc., 287 F.3d 832, 839 (9th Cir. 2002). “Our review is limited and deferential.” *Southwest Voter Registration Educ. Project v. Shelley*, 344 F.3d 914, 918 (9th Cir. 2003) (en banc). In considering a preliminary injunction appeal, we ordinarily do not decide the ultimate merits of the case, but only the temporal rights of the parties until the district court renders judgment on the merits of the case based on a fully developed record. *Gilder v. PGA Tour, Inc.*, 936 F.2d 417, 422 (9th Cir. 1991). Mere disagreement with the district court’s conclusions is not sufficient reason for us to reverse the district court’s decision regarding a preliminary injunction. *Sports Forum, Inc. v. United Press Int’l, Inc.*, 686 F.2d 750, 752 (9th Cir. 1982); *see also Ranchers Cattlemen Action Legal Fund United Stockgrowers of Am. v. United States Dep’t of Agric.* (“R-CALF”), No. 05-35264, slip op. at 8751-52 (9th Cir. Jul. 25, 2005) (setting forth standard of review).

[1] The traditional preliminary injunction analysis does not apply to injunctions issued pursuant to the ESA. *Nat’l Wildlife Fed’n v. Burlington N. R.R., Inc.*, 23 F.3d 1508, 1510 (9th Cir. 1994). “In cases involving the ESA, Congress removed from the courts their traditional equitable discretion in injunction proceedings of balancing the parties’ competing interests.” *Id.* at 1511 (citing *Friends of the Earth v. United States Navy*, 841 F.2d 927, 933 (9th Cir. 1988)). As the Supreme Court has noted, “Congress has spoken in the plainest of words, making it abundantly clear that the balance has been struck in favor of affording endangered species the highest of priorities.” *TVA v. Hill*, 437 U.S. 153, 194 (1978). Accordingly, courts “may not use equity’s scales to strike a different balance.” *Sierra Club v. Marsh*, 816 F.2d 1376, 1383 (9th Cir. 1987); *see also Marbled Murrelet v. Babbitt*, 83 F.3d 1068, 1073 (9th Cir. 1996) (“Congress has determined that under the ESA the balance of hardships always tips sharply in favor of endangered or threatened species.”).

A

[2] Given this clear authority, we must at the onset reject the argument of the federal appellants that the district court erred as a matter of law by failing to conduct a traditional preliminary injunction analysis and, in particular, by failing to weigh economic harm to the public in reaching its conclusion. As the Supreme Court has instructed, such an analysis does not apply to ESA cases because Congress has already struck the balance. *Id.* Therefore, we conclude that the district court did not apply an incorrect legal standard in this case.

We decline to address the legal issues raised by the district court's summary judgment order. We review the merits only in the very confined context of determining whether the district court abused its discretion in granting the preliminary injunction. To establish a substantial likelihood of success on the merits sufficient to pass appellate review of a district court's grant of a preliminary injunction, the plaintiffs were only obligated to show "a fair chance of success." *Republic of the Philippines v. Marcos*, 862 F.2d 1355, 1362 (9th Cir. 1988) (en banc). Based on our review of the record and briefs in this emergency appeal, we conclude that the plaintiffs have met this burden by raising substantial questions as to whether the agencies have violated Section 7 of the ESA by improperly circumscribing the scope of the consultation or failing to aggregate the impacts of the proposed action. However, in making this threshold determination, we express no opinion on the ultimate merits of the district court's summary judgment decision, leaving that final determination to the district court in the first instance.

B

We also conclude that the district court's grant of a preliminary injunction was not based on clearly erroneous findings of fact. Although the facts and scientific analysis underlying the district court's decision are hotly contested by the parties,

our review in the preliminary injunction context is very deferential. On appellate review in this context, we consider a finding of fact to be clearly erroneous if it is implausible in light of the record, viewed in its entirety, *Serv. Employees Int'l Union v. Fair Political Practices Comm'n*, 955 F.2d 1312, 1317 n.7 (9th Cir. 1992), or if the record contains no evidence to support it, *Oregon Natural Resources Council v. Marsh*, 52 F.3d 1485, 1492 (9th Cir. 1995). Having reviewed the extensive, albeit incomplete, record provided to us by the parties in this expedited proceeding, we find no reversible error in the factual findings made by the district court.

[3] One of the important factual findings made by the district court was that the federal operation of the Columbia and Snake River dams “strongly contribute to the endangerment of the listed species and irreparable injury will result if changes are not made.” The federal appellants contest this finding, arguing that the data show that returns of fall chinook salmon have increased. The district court concluded otherwise in its orders, finding in a 2004 order that the “predicted survival improvement for fall chinook juveniles has not materialized.” The government’s own recent data show that between 78-92% of juvenile fall chinook salmon that remain in-river for their migration are killed by operation of the dams even with use of mitigating measures, with a mean estimated kill of 86% of the salmon migrating in-river.⁹ NWF strongly argues that the government’s assertion of recovery is based on a single, scientifically flawed, study. NWF also claims, through expert testimony, that the increased returns were due to large releases of hatchery fish, rather than successful fish transport over dams, and that the mortality rate for migrating juvenile salmon is actually increasing. The federal agencies dispute this, and offer counter-testimony. The record is replete with differing opinions by various experts. One of the few

⁹Although a non-trivial level of mortality would likely occur under free-flowing river conditions, FCRPS operations account for most of the mortality.

undisputed points, however, is that the fall chinook salmon remain a species listed under the ESA as “likely to become endangered in the foreseeable future.”

[4] Our task in reviewing a district court’s preliminary injunction decision is not to resolve these controversies. “Clear error is not demonstrated by pointing to conflicting evidence in the record.” *United States v. Frank*, 956 F.2d 872, 875 (9th Cir. 1991). Rather, “[a]s long as findings are plausible in light of the record viewed in its entirety, a reviewing court may not reverse even if convinced it would have reached a different result.” *Wardley Int’l Bank, Inc. v. Nasipit Bay Vessel*, 841 F.2d 259, 262 n.1 (9th Cir. 1988) (citing *Anderson v. Bessemer City*, 470 U.S. 564, 574 (1985)). Viewing the record as a whole with our deferential standard of review, we cannot say that the district court’s factual finding concerning irreparable harm was clearly erroneous.

III

Having determined that the district court did not use an incorrect legal standard in its preliminary injunction analysis and did not make clearly erroneous factual findings, we must decide whether the district court abused its discretion in granting the preliminary injunction.

A

As we have discussed, the district court’s preliminary injunction order was premised on its finding that the agencies had violated both the substantive and procedural requirements of ESA § 7. Thus, the question before the district court was what interim remedy was appropriate to redress the ESA violations.

[5] Although not every statutory violation leads to the “automatic” issuance of an injunction, in the context of the ESA, “the test for determining if equitable relief is appropriate is

whether an injunction is necessary to effectuate the congressional purpose behind the statute.” *Biodiversity Legal Found. v. Badgley*, 30 F.3d 1166, 1177 (9th Cir. 2002) (citing *TVA*, 437 U.S. at 194). We therefore have held that injunctive relief was necessary to effectuate Congress’s clear intent by requiring compliance with the substantive and procedural provisions of the ESA. *Id.* at 1177 (holding that the district court was “compelled” to grant injunctive relief to remedy a violation of the ESA); *Sierra Club*, 816 F.2d at 1384 (holding that the Sierra Club was entitled to injunctive relief if the agency violated substantive or procedural provisions of the ESA).

Given this legal backdrop, we conclude that the district court did not abuse its discretion in granting a preliminary injunction. It had rejected the biological opinion upon which the summer operations were premised, and it had concluded that continuation of the status quo could result in irreparable harm to a threatened species. Those are precisely the circumstances in which our precedent indicates that the issuance of an injunction is appropriate.

This case is unlike the circumstances presented in our recent decision in *R-CALF*. In *R-CALF*, we concluded that the district court had misread the governing statute. *R-CALF*, slip op. at 8754. We also concluded that the agency had acted in conformity with the governing statute. *Id.* at 8756-58. We further concluded that none of the reasons listed by the district court supported its conclusion that the agency’s adoption of the final rule at issue was arbitrary and capricious. *Id.* at 8758-65.

[6] Here, in contrast, the district court’s conclusions were well grounded in the governing statute; the agency had altered its own interpretation of the statute significantly; and the record supported the district court’s reasoning in declaring the 2004 BiOp to be invalid. Further, the operations involved in this case have had a long history. The district court has monitored the situation carefully over the past few years and has

found that the status quo will not lead to recovery of the listed species. Thus, although we do not reach the merits of the summary judgment order, the record supports the district court's analysis that the plaintiffs are likely to prevail on the merits of their claim that the 2004 BiOp violates Section 7 of the ESA and is arbitrary and capricious under the Administrative Procedure Act. Finally, as we have discussed, the standard for injunctive relief under the ESA is far different from the usual standard governing preliminary injunctions that applied in the *R-CALF* case. In ESA cases such as the one at bar, "the balance has been struck in favor of affording endangered species the highest of priorities." *TVA*, 437 U.S. at 194. For these reasons, this case is quite distinguishable from *R-CALF*, and we conclude that the district court did not commit reversible error in deciding to grant a preliminary injunction.

B

Having concluded that the district court did not err in deciding to grant preliminary injunctive relief, we must also examine the nature and scope of relief ordered by the district court. One of the primary complications of this case is that the operations in question are, by necessity, ongoing. Thus, our situation is unlike that of a timber sale, which can be postponed in order to permit the agency to correct the ESA violations before the planned operation commences. *See, e.g., Native Ecosystems Council v. Dombeck*, 304 F.3d 886, 900-03 (9th Cir. 2002) (enjoining timber sale for ESA and NEPA violations). Here, the district court was faced with a continuing operation that it had concluded would cause irreparable harm to threatened species. Thus, the district court was confronted with two choices: (1) continue the status quo, the foundation of which the court had rejected as violative of the ESA and the continuation of which it had concluded could irreparably harm listed species, or (2) order modifications. After considering the positions of the parties, the district court adopted one of the plaintiffs' suggestions: mandatory summer spills over selected dams. It rejected the plaintiffs' other major

request, namely that the court order a decrease in the water particle travel time by 10% in specified areas.¹⁰

The district court's selection of a remedy of selected spills was based on expert opinion tendered by the plaintiffs and evidence in the historical record. Frederick Olney, a former fishery biologist for the U.S. Fish and Wildlife Service with thirty-five years of experience in the field, testified by affidavit that spilling water for fish passage was a "cornerstone of protection and mitigation programs" in the area and that there was "regional agreement that spill is the safest passage route through mainstream hydroelectric projects." He testified that "recent information indicates that transportation [of fish] is not providing the benefits previously assumed," citing the 2004 BiOp statement that "it is uncertain whether transport provides a benefit or a detriment for Snake River fall Chinook." Olney concluded that the plaintiffs' request for summer spills would pose less risk for migrating fish than the proposed operations.

The plaintiffs also tendered the opinion of Stephen Pettit, a former fisheries research biologist for the Idaho Department of Fish and Game, who similarly concluded that the plaintiffs' proposed spills would "reduce significantly, even substantially, the harmful effects ESA-listed salmon and steelhead would otherwise experience under the 2004 BiOp."

In addition to the opinions of these experts, and others, the district court considered the previous positive results of the prior use of spills for assisting salmon migrating during the summer months. The 2000 BiOp concluded that "relative to other passage routes currently available, direct juvenile survival is highest through spillbays." In reaching this conclusion, the agency took into consideration the possibility of gas

¹⁰The district court also appointed a technical advisor, Dr. Howard Horton, to aid it in understanding the various reports, studies and opinions regarding the status of the listed species and effects of FCRPS.

bubble trauma and elevated temperatures. The agency also concluded that spillway passage “should be the baseline against which other passage methods are measured.” Because “juvenile survival is generally highest through this passage route,” the 2000 BiOp recommended that “measures that increase juvenile fish passage over FCRPS project spillways are the highest priority unless it can be shown that alternative passage improvements would provide comparable survival.” The district court’s action was in accord with the consulting agency’s findings and recommendations in its 2000 BiOp, which was the only operative document at the time, and was in conformance with the historical belief that spillway passage produced the highest survival of the species. This historical assumption was not contested in the 2004 BiOp; rather, it asserted that alternative transportation could provide comparable, but not necessarily better, survival rates.

[7] In short, without summarizing all of the voluminous evidence in the record, the district court had a more than sufficient basis upon which to conclude that summer spills would provide the best and safest alternative to the planned operations contemplated in the 2004 BiOp that was rejected by the court.

The federal appellants and other defendants vigorously contest the conclusions of the experts tendered by the plaintiffs. The defendants offered substantial expert counter-testimony in opposition to the proposed spills, with experts opining that:

- Because the migratory patterns and river conditions are so different, it is inappropriate to extrapolate the experience from previous spills involving adult salmon at different locations and times to the summer spills proposed by the plaintiffs to assist juvenile migrating salmon.
- Although passage over a spillway may result in higher survival, the falling water over the dam

increases the amount of atmospheric gases that are dissolved in the water, which may cause “gas bubble trauma” and damage fish. In addition, spills may expose the fish to potentially dangerous high water temperatures.

- Research indicates that there is no apparent difference in adult return rates between fish that are transported and those that remain in the river. New research also indicates that a significant number of salmon hold over in freshwater and migrate to the ocean during their second year of life, which may mean that hastening the transportation of salmon downstream may not necessarily be beneficial.
- The total number of adult Snake River Chinook Salmon that migrated upriver has increased significantly.
- It is highly imprudent and highly risky to try an untested operation in a critically low water year. Transportation rather than spillage is the safest means of passage in a low water year.
- Ordering spills at certain locations will adversely affect other endangered species.

These are significant and serious concerns. However, it is not our task to weigh the evidence presented to the district court; rather we must decide whether the district court abused its discretion. An abuse of discretion is “a plain error, discretion exercised to an end not justified by the evidence, a judgment that is clearly against the logic and effect of the facts as are found.” *Wing v. Asarco, Inc.*, 114 F.3d 986, 988 (9th Cir. 1997) (quoting *Int'l Jensen, Inc. v. Metrosound U.S.A., Inc.*, 4 F.3d 819, 822 (9th Cir. 1993)) (internal quotation marks omitted). The abuse of discretion standard requires that we

“not reverse a district court’s exercise of its discretion unless we have a definite and firm conviction that the district court committed a clear error of judgment in the conclusion it reached.” *SEC v. Coldicutt*, 258 F.3d 939, 941 (9th Cir. 2001).

[8] The federal appellants argue that the district court was required to defer to agency expertise. Courts, as a general matter, ought to defer to an agency’s scientific or technical expertise. “Deference to the informed discretion of the responsible federal agencies is especially important, where, as here, the agency’s decision involves a high level of technical expertise.” *R-CALF*, slip op. at 8753. However, “[t]he deference accorded an agency’s scientific or technical expertise is not unlimited.” *Brower v. Evans*, 257 F.3d 1058, 1067 (9th Cir. 2001) (citing *Defenders of Wildlife v. Babbitt*, 958 F. Supp. 670, 679 (D.D.C. 1997)). Deference is not owed when “ ‘the agency has completely failed to address some factor consideration of which was essential to [making an] informed decision.’ ” *Id.* (quoting *Inland Empire Pub. Lands Council v. Schultz*, 992 F.2d 977, 981 (9th Cir. 1993) (internal citations omitted)). Here, the district court had already invalidated the agency biological opinion upon which the operations were based, in large part because it omitted factors essential to the analysis. As the district court noted, NMFS had completely reversed course in its 2004 BiOp, particularly in its statutory interpretation of the environmental baseline. “An agency interpretation of a relevant provision which conflicts with the agency’s earlier interpretation is ‘entitled to considerably less deference,’ than a consistently held agency view.” *INS v. Cardoza-Fonseca*, 480 U.S. 421, 446, n. 30 (1987) (quoting *Watt v. Alaska*, 451 U.S. 259, 273 (1981)). The district court had rejected the underlying premise of the agency’s methodology and the 2004 BiOp. Therefore, there was no formal agency finding to which deference might arguably be owed. Rather, the government chose to present its case through expert affidavit.

[9] Throughout the course of these proceedings, the government has adhered to its position that it would not alter its planned summer dam operations which the district court had determined could cause irreparable harm. Indeed, the government's own 2000 BiOp had concluded that the present operations of the Columbia River System would jeopardize eight of the listed species. In its summary judgment order, the district court had made the factual finding that the listed species were "in serious decline and not evidencing signs of recovery." Therefore, in the absence of an approved, final biological opinion, the district court did not abuse its discretion in considering the record evidence. We conclude that the district court did not abuse its discretion in ordering preliminary injunctive relief.

C

The federal appellants also suggest that, even if preliminary injunctive relief were appropriate, the district court's order must be vacated because it is not narrowly tailored. The appellants did not present this argument to the district court, nor have they sought modification of the injunction. On appeal, the appellants have declined to identify how the injunction should be narrowly tailored, even under questioning. There is also some tension between appellants' argument on appeal that the district court is micromanaging the Columbia River System and its argument that the district court was not specific or detailed enough in its order. The gist of the federal appellants' argument seems to be that the purported lack of narrow tailoring should result in a vacation of the entire injunction, rather than any modification designed to achieve narrow tailoring.

That being said, all sides agree that modifications to the district court's order have been required. Indeed, the district court anticipated this by encouraging the parties "to engage in discussions to reach a consensus on issues of spill." The federal appellants have requested that we allow them to supple-

ment the appellate record with declarations identifying specific problems with the district court's injunction. The plaintiffs have opposed the motion; however, in the alternative, they have tendered supplemental declarations.

[10] Without reviewing the tendered evidence or outlining the evidence in the record indicating that specific issues at certain sites may require modification of the preliminary injunction, we conclude that there are issues that have arisen after the issuance of the preliminary injunction that may require modification of the district court order. It is inappropriate for us to decide those questions for the first time on appeal, and we therefore deny the parties' motions to supplement the record. Although we conclude that the district court did not abuse its discretion in granting the preliminary injunction, we remand the question of whether modification or "narrow tailoring" of the order is required to the district court for its consideration in the first instance.

The BPA Customer Group has also argued that the district court's order should be vacated as not narrowly tailored. The basis of the BPA Customer Group's argument is different. It argues that the order insufficiently relates the remedy to the alleged ESA violation. Although the BPA Customer Group raised this issue in their memorandum in opposition to the preliminary injunction, the district court did not explicitly address this issue in its preliminary injunction order. In light of our decision to remand for consideration of modifications to the preliminary injunction, we also remand this question to the district court for its consideration in the first instance. We urge the parties and the district court to resolve these remanded issues as expeditiously as possible.

IV

In sum, we affirm the district court's issuance of a preliminary injunction, but remand to the district court the question

of whether the injunction should be more narrowly tailored or modified.

AFFIRMED AND REMANDED.