FOR PUBLICATION

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

TURTLE ISLAND RESTORATION No. 13-17123 NETWORK: CENTER FOR BIOLOGICAL D.C. No. DIVERSITY. Plaintiffs-Appellants, 1:12-cv-00594-SOM-RLP v. UNITED STATES DEPARTMENT OF **OPINION COMMERCE: NATIONAL MARINE** FISHERIES SERVICE; WILBUR L. ROSS, in his official capacity as Secretary of Commerce: U.S. DEPARTMENT OF THE INTERIOR; U.S. FISH & WILDLIFE SERVICE: RYAN ZINKE, in his official capacity as Secretary of the Interior, Defendants-Appellees, and

HAWAII LONGLINE ASSOCIATION, Intervenor-Defendant-Appellee.

Appeal from the United States District Court for the District of Hawaii Susan Oki Mollway, Chief District Judge, Presiding

> Argued and Submitted June 14, 2016 Honolulu, Hawaii

Filed December 27, 2017

Before: Sidney R. Thomas, Chief Judge, and Consuelo M. Callahan and Mary H. Murguia, Circuit Judges.

Opinion by Judge Murguia; Dissent by Judge Callahan

SUMMARY*

Environmental Law

The panel affirmed in part, and reversed in part, the district court's judgment in favor of federal agencies in an action brought by plaintiff environmental groups challenging the decision of the National Marine Fisheries Service ("NMFS") to allow a Hawaii-based swordfish fishery to increase its fishing efforts, which may result in the unintentional deaths of endangered sea turtles; and challenging the decision of the U.S. Fish and Wildlife Service ("FWS") to issue a "special purpose" permit to the NMFS, which authorized the fishery to incidentally kill migratory birds.

The panel held that the FWS's decision to issue a special purpose permit to the NFMS on behalf of a commercial fishery was arbitrary and capricious. The panel held that the FWS's interpretation of 50 C.F.R. § 21.27 as authorizing it to grant an incidental take permit to the NMFS did not conform to either the Migratory Bird Treaty Act's

^{*} This summary constitutes no part of the opinion of the court. It has been prepared by court staff for the convenience of the reader.

conservation intent or the plain language of the regulation. The panel therefore reversed the district court's grant of summary judgment affirming the FWS's decision to issue the permit.

The panel held that NMFS's 2012 Biological Opinion's "no jeopardy" finding as to the loggerhead sea turtles was arbitrary and capricious because the scientific data suggested that the loggerhead population would significantly decline, and the agency failed to sufficiently explain the discrepancy in its opinion and record evidence. Specifically, the panel held that the climate-based model predicted that the proposed action would exacerbate the loggerheads' decline, and the Biological Opinion was structurally flawed to the extent the NMFS failed to incorporate those findings into its jeopardy analysis. The panel therefore reversed the district court's grant of summary judgment upholding this portion of the Biological Opinion.

The panel otherwise affirmed the district court's grant of summary judgment to defendants, and remanded. The panel held that the NMFS's no jeopardy conclusion regarding the leatherback turtles found support in the scientific record, and therefore was sufficient to withstand judicial review. Specifically, the panel held that it could not conclude that the 2012 Biological Opinion violated the Endangered Species Act or that the NMFS otherwise acted arbitrarily and capriciously in determining that the fishery would have no appreciable effect on the leatherback turtle population. The panel also held that the NMFS's consideration of climate change in the Biological Opinion was neither arbitrary, capricious, nor contrary to the NMFS's obligation to base its jeopardy decision on the best scientific data it could obtain.

Judge Callahan dissented in part. Judge Callahan agreed with the majority that the 2012 Biological Opinion was not

arbitrary and capricious in determining that the Hawaiibased shallow-set fishery expansion would have no appreciable effect on the leatherback sea turtle population, and that the 2012 Biological Opinion adequately considered the impact of global climate change; and dissented from the remainder of the majority opinion. Judge Callahan would uphold the Migratory Bird Treaty Act Permit and the loggerhead sea turtle Biological Opinion.

COUNSEL

David L. Henkin (argued) and Paul H. Achitoff, Earthjustice, Honolulu, Hawaii, for Plaintiffs-Appellants.

Brian C. Toth (argued), Ellen J. Durkee, Dean K. Dunsmore, and Kristen L. Gustafson, Attorneys; Jeffrey H. Wood, Acting Assistant Attorney General; Environment & Natural Resources Division, United States Department of Justice, Washington, D.C.; Philip Kline, Office of the Solicitor, United States Department of the Interior, Portland, Oregon; Elena Onaga, Office of General Counsel, National Oceanic & Atmospheric Administration, United States Department of Commerce, Honolulu, Hawaii; for Defendants-Appellees.

Ryan P. Steen (argued) and Jeffrey W. Leppo, Stoel Rives LLP, Seattle, Washington, for Intervenor-Defendant-Appellee.

OPINION

MURGUIA, Circuit Judge:

Plaintiffs Turtle Island Restoration Network and the Center for Biological Diversity challenge the decision of the National Marine Fisheries Service ("NMFS") to allow a Hawaii-based swordfish fishery to increase its fishing efforts, which may result in the unintentional deaths of endangered sea turtles. Plaintiffs also challenge the decision of the U.S. Fish and Wildlife Service ("FWS") to issue a "special purpose" permit to the NMFS, which authorizes the fishery to incidentally kill migratory birds.

Plaintiffs brought suit against the agencies under various environmental statutes that the NMFS and the FWS are charged with administering, including the Magnuson-Stevens Fishery Conservation and Management Act (the "Magnuson-Stevens Act"), the Endangered Species Act of 1973 ("ESA"), the Migratory Bird Treaty Act ("MBTA"), and the National Environmental Policy Act ("NEPA"). The Hawaii Longline Association subsequently intervened to represent the interests of the swordfish fishery in defense of the agencies' actions. We have jurisdiction under 28 U.S.C. § 1291, and we affirm in part, and reverse and remand in part.

BACKGROUND

I. Regulatory Framework

In response to concerns about overfishing, Congress enacted the Magnuson-Stevens Act to promote the long-term biological and economic sustainability of marine fisheries in U.S. federal waters. *See* 16 U.S.C. § 1801(b). Under this Act, the NMFS and eight regional councils develop "management plans" for the nation's fisheries, which the Secretary of Commerce may approve, partially approve, or reject. *Id.* §§ 1801(b)(4), 1852(h)(1), 1854(a)(3). The Magnuson-Stevens Act demands that a management plan be consistent with the national standards set out in the Act and "any other applicable law," *id.* § 1853(a)(1)(C), including the ESA, *id.* §§ 1531–43, and the MBTA, *id.* §§ 703–12.

The ESA provides for the conservation of fish, wildlife, and plant species that are at risk of extinction by requiring federal agencies to ensure that actions they authorize, fund, or carry out are "not likely to jeopardize the continued existence" any ESA-listed species. of 16 U.S.C. § 1536(a)(2). Agencies proposing actions that may affect an ESA-listed species must consult with either the NMFS or the FWS-depending on the species involved-which then reviews the proposed action and prepares a "biological opinion" ("BiOp") that evaluates whether and the extent to which the action may impact the species. Id. § 1536(b); 50 C.F.R. § 402.12. If the NMFS or the FWS finds that the proposed action would not jeopardize any species' continued existence, it issues a statement permitting the "taking" of a particular number of protected animals "if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity." 16 U.S.C. § 1539(a)(1)(B).

The FWS also has authority to enforce the MBTA, *id.* §§ 703–12; 50 C.F.R. § 10.1, which strictly prohibits the taking of any migratory bird the Act protects except under the terms of a valid permit issued by the Secretary of the Interior, *id.* § 703(a). The Secretary of the Interior has issued regulations authorizing various types of exemptions to the MBTA permitting the taking of migratory birds under certain circumstances. *See* 16 U.S.C. § 704(a).

In addition to the substantive mandates of the ESA and the MBTA, both the NMFS and the FWS are subject to NEPA's procedural requirements. See Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 348 (1989). NEPA is concerned with process alone and "merely prohibits uninformed-rather than unwise-agency action." Id. at 351. NEPA requires federal agencies to prepare environmental impact statements ("EIS") detailing the effects of any proposed action that stands to have a significant impact on the environment. See 42 U.S.C. § 4332(C); Robertson, 490 U.S. at 350. An agency may also prepare an environmental assessment ("EA") to determine whether an EIS is needed. 40 C.F.R. §§ 1501.4(b), 1508.9(a)(1); Te-Moak Tribe of W. Shoshone of Nev. v. U.S. Dep't of Interior, 608 F.3d 592, 599 (9th Cir. 2010). If the EA shows that the proposed action may significantly affect the environment, then the agency must prepare a full EIS. W. Watersheds Project v. Abbey, 719 F.3d 1035, 1050 (9th Cir. 2013). Otherwise, the agency issues a finding of no significant impact and the proposed action can proceed without further study. Id.

II. The Hawaii-Based Longline Fishing Industry

"Longline" fishing is a commercial fishing method that involves reeling out—or "setting"—a single, horizontal mainline to which shorter "branchlines" are attached at intervals. Each dangling branchline carries baited hooks. A typical longline set can use several hundred or thousand individual hooks, allowing a single fishing vessel to spread its efforts over a large area. While the mainline is in the water, the fishing equipment often ensnares birds, sea turtles, and other marine wildlife in addition to the target fish. This incidental taking of non-target animals is known as "bycatch." The NMFS collects bycatch statistics by tracking the number of times a non-target animal is hooked or entangled by fishing gear. The most commonly observed non-target animal interactions are with Northern Pacific loggerhead and leatherback sea turtles, both of which are currently listed under the ESA as "endangered." *See* 50 C.F.R. § 17.11. In addition, several types of albatross interact often with the longline fisheries, including the black-footed albatross and the Laysan albatross.

There are two separately regulated longline fisheries based out of Hawaii: the deep-set fishery-which targets tuna—and the shallow-set fishery, which targets swordfish. The two fisheries are managed by the Fishery Ecosystem Plan for Pelagic Fisheries of the Western Pacific Region ("Pelagics FMP"), developed by the Western Pacific Fishery Management Council ("Council") in accordance with the Magnuson-Stevens Act and implemented by the NMFS. In 2001, the shallow-set fishery was closed by court order due to the NMFS's failure to prepare an EIS analyzing the impact of longline fishing on the sea turtle population, which the court found was a violation of the agency's NEPA obligations. See Leatherback Sea Turtle v. Nat'l Marine Fisheries Serv., No. 99-00152, 1999 WL 33594329 (D. Haw. Oct. 18, 1999). In response, the NMFS issued an EIS and a BiOp in which the agency concluded that the shallowset fishery was adversely affecting several species of sea turtles. In 2002, the NMFS issued regulations prohibiting all Hawaii-based swordfish longlining.

The Council subsequently developed various measures to minimize turtle bycatch, and in 2004 the NMFS reauthorized shallow-set longlining subject to new restrictions designed to reduce the number and severity of interactions between protected turtles and fishing gear. In part, the NMFS strictly limited the number of interactions the fishery could have with leatherback and loggerhead sea turtles to a maximum of 16 and 17, respectively, per fishing season. Further, the NMFS imposed an annual limit of 2,120 shallow sets, which represents fifty percent of the average number of sets deployed prior to the fishery's closure in 2001.

In 2008, the NMFS proposed an amendment to the Pelagics FMP ("Amendment 18") that would remove the 2,120 annual set limit, allowing gear deployments to increase to their pre-2001 maximums, and also increase the number of sea turtle interactions allowed each year. After consulting internally pursuant to the ESA, the NMFS produced a BiOp concluding that Amendment 18 would not jeopardize the sea turtles. The NMFS issued a final rule implementing Amendment 18 in December 2009. 74 Fed. Reg. 65,640 (Dec. 10, 2009).

Plaintiffs initiated suit against the NMFS on the grounds that the 2009 rule violated the ESA and the MBTA. *See Turtle Island Restoration Network v. U.S. Dep't of Commerce*, 834 F. Supp. 2d 1004, 1007 (D. Haw. 2011). Plaintiffs' MBTA claim was based on the fishery's incidental take of migratory seabirds without an MBTA permit. The parties settled the case, and the NMFS entered into a consent decree that required it to withdraw its no jeopardy BiOp, reinstate the 2004 annual turtle-interaction caps, and issue a new BiOp after deciding whether to reclassify various population segments of sea turtles under the ESA. *Id.* at 1023–25. The other remaining provisions of the 2009 rule remained in effect, including the removal of annual set limits.

The NMFS later proposed raising the shallow-set fishery's annual turtle interaction cap to 26 (with

leatherbacks), and 34 (with loggerheads) and otherwise continuing to operate the fishery in accordance with the provisions of Amendment 18 to the Pelagics FMP. In January 2012, the NMFS issued a new BiOp concluding that the shallow-set fishery would not jeopardize the continued existence of either the loggerhead or leatherback turtles if it operated under higher caps on turtle interactions.

While it was engaged in the re-consultation process, the NMFS submitted an application to the FWS for a special purpose permit that would allow the shallow-set fishery to take migratory seabirds in connection with swordfish longlining. The FWS issued a final EA in which it considered denying the permit, granting the permit as requested, and granting the permit while requiring the NMFS to conduct new research on additional ways to avoid seabird interactions. See 77 Fed. Reg. 1501 (Jan. 10, 2012). The FWS ultimately concluded that none of the alternatives would have a significant adverse impact on the seabirds' population levels. Accordingly, the FWS issued a finding of "no significant impact." In August 2012, the FWS granted a three-year special purpose permit authorizing the shallowset fishery to kill a maximum of 191 black-footed albatross, 430 Laysan albatross, 30 northern fulmars, 30 sooty shearwaters, and one short-tailed albatross. Of those birds, only the short-tailed albatross is listed under the ESA, 50 C.F.R. § 17.11(h).

Plaintiffs subsequently filed this lawsuit under the ESA, the MBTA, and their implementing regulations, challenging the NMFS's final rule approving the continued operation of the shallow-set fishery and the FWS's issuance of a migratory bird permit to the NMFS. After the parties moved for summary judgment, the district court ruled in the agencies' favor on all of Plaintiffs' claims. Plaintiffs timely appealed.

STANDARD OF REVIEW

We review challenges to final agency action decided on summary judgment de novo and pursuant to Section 706 of the Administrative Procedure Act ("APA"). *Turtle Island Restoration Network v. Nat'l Marine Fisheries Serv.*, 340 F.3d 969, 973 (9th Cir. 2003). Review is based on the administrative record. *Camp v. Pitts*, 411 U.S. 138, 142 (1973).

The APA requires courts to "hold unlawful and set aside agency action, findings, and conclusions found to be arbitrary, capricious, an abuse of discretion, or otherwise not accordance with law," "in excess of statutory in jurisdiction," or "without observance of procedure required by law." 5 U.S.C. § 706(2)(A), (C)-(D). "The scope of review under the 'arbitrary and capricious' standard is narrow and a court is not to substitute its judgment for that of the agency." Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983). Nevertheless, we require the agency to "examine the relevant data and articulate a satisfactory explanation for its action," and we will strike down agency action as "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 if the agency's decision "is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." Id.

Separate from the APA, we also give deference to an agency's interpretation of the statutes and regulations that

define the scope of its authority. Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc. compels us to defer to an agency's reasonable interpretation of its enabling legislation. 467 U.S. 837, 843 (1984). Under the Chevron analysis, we must first exhaust the traditional tools of statutory construction to determine whether Congress has "directly spoken to the precise question at issue." Id. at 842. If we determine that the statute is silent or ambiguous on the question at hand, then at Chevron step two we must respect the agency's interpretation so long as it "is based on a permissible construction of the statute." Id. at 843. Α permissible construction is one that is not "arbitrary, capricious, or manifestly contrary to the statute." Id. at 844; see also Judulang v. Holder, 132 S. Ct. 476, 483 n.7 (2011) (recognizing that Chevron step two is equivalent to the APA's arbitrary and capricious standard).

Chevron deference applies only to agency decisions rendered through formal procedures. United States v. Mead Corp., 533 U.S. 218, 226–27 (2001). However, under Auer v. Robbins, we must also defer to an agency's interpretation of its own ambiguous regulations, which controls unless "plainly erroneous or inconsistent with the regulation," or where there are grounds to believe that the interpretation "does not reflect the agency's fair and considered judgment of the matter in question." Christopher v. SmithKline Beecham Corp., 132 S. Ct. 2156, 2159 (2012) (quoting Auer v. Robbins, 519 U.S. 452, 461-62 (1997)). Similarly, "we must ensure that the interpretation is not inconsistent with a congressional directive; a court need not accept an agency's interpretation of its own regulations if that interpretation is inconsistent with the statute under which the regulations were promulgated." Marsh v. J. Alexander's LLC, 869 F.3d 1108, 1116-17 (9th Cir. 2017) (internal changes, quotation marks and citations omitted). Our review of an agency's

construction of a statute or regulation that does not qualify for either *Chevron* or *Auer* deference is de novo, although we may still accord the agency's opinion some weight. *Satterfield v. Simon & Schuster, Inc.*, 569 F.3d 946, 952–53 (9th Cir. 2009) (citing *Skidmore v. Swift & Co.*, 323 U.S. 134, 140 (1944)).

DISCUSSION

I. "Special Purpose" Permit

Plaintiffs argue that the FWS acted arbitrarily and capriciously by issuing a special purpose permit to the NMFS on behalf of a commercial operation—the shallow-set fishery—that provides no benefit to migratory birds. Plaintiffs specifically contend that, in issuing this permit, the FWS ignored or violated its obligations under the MBTA.

The MBTA is a strict liability criminal statute that Congress enacted for the "object and purpose ... to aid in the restoration of [game and other wild] birds." 16 U.S.C. § 701. The MBTA states in expansive language that, unless otherwise permitted by the Secretary of the Interior, "it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, [or] attempt to take, capture, or kill ... any migratory bird." 16 U.S.C. § 703(a). The MBTA also limits the FWS's authority to authorize the killing of migratory birds absent specified regulations "[s]ubject to the provisions and in order to carry out the purposes of the conventions" underlying the Act. Id. § 704(a). The conventions underlying the MBTA stipulate that migratory birds may only be killed under "extraordinary conditions," where birds have "become seriously injurious to the agricultural or other interests in any particular community." Humane Soc'y of the U.S. v. Glickman, 217 F.3d 882, 885 (D.C. Cir. 2000) (internal quotation marks omitted).

Pursuant to the MBTA, the FWS has enacted a permitting program for narrow categories of migratory bird takings, such as scientific collecting, rehabilitation, hunting, and depredation control. See 16 U.S.C. §§ 704(a), 712(2) (empowering the FWS to promulgate implementing regulations); 50 C.F.R. §§ 21.21–21.61 (authorizing the issuance of various types of permits). The FWS has also established a "special purpose" permit that allows a person to "lawfully take . . . migratory birds . . . for any purpose not covered by the standard form permits" included elsewhere in the regulations. 50 C.F.R. § 21.27(a). The FWS may issue such a permit for "special purpose activities related to migratory birds," where the applicant "makes a sufficient showing" that the activity would be "of benefit to the migratory bird resource, important research reasons, reasons of human concern for individual birds, or other compelling justification." Id.

Here, the FWS interpreted § 21.27 as authorizing it to grant a special purpose permit sanctioning the incidental take of migratory birds to the NMFS, thereby allowing a commercial activity—longline fishing—that does not concern bird conservation. In its decision to issue the permit, the FWS found that the "commercial fishery carries no intrinsic benefit for migratory bird resources," "the take that occurs is neither directed by, nor is the result of, important research," and that "the take that occurs does not result from concern for individual birds." However, the FWS found that "compelling justification" existed to permit the continued operation of the shallow-set fishery, which the FWS believed "provides a net benefit to the Nation" economically and "serves as a benchmark internationally for employing effective seabird mitigation techniques and serves as an example of responsible conservation practices by a fishery." The FWS also noted that "[c]losure of this fishery would likely result in replaced effort by foreign longline fleets to supply swordfish demand, where use of bycatch mitigation methods would not likely follow international best practices."

We conclude that the FWS's decision to issue a special purpose permit to the NMFS on behalf of a commercial fishery was arbitrary and capricious. Although the FWS's interpretation of § 21.27 would ordinarily deserve deference, see Mead, 533 U.S. at 226–27, we cannot conclude that such deference is appropriate in this case. Deference to the FWS's interpretation is not warranted because the plain language of this regulation is not reasonably susceptible to the FWS's new interpretation. The other "standard form permits" the MBTA regulations authorize govern discrete types of takings, such as scientific collecting, taxidermy, and rehabilitation, and although § 21.27 is intended to allow the FWS to authorize activities not otherwise permitted by the regulations, it is still a narrow exception to the MBTA's general prohibition on killing migratory birds. See Marsh, 869 F.3d at 1116–17 ("[W]e must always ensure that the interpretation is not inconsistent with a congressional directive"); Ctr. for Biological Diversity v. Salazar, 706 F.3d 1085, 1092 (9th Cir. 2013) ("[W]e must interpret [a] regulation as a whole, in light of the overall statutory and regulatory scheme" (internal quotation marks omitted)). The FWS's construction of § 21.27's "special purpose activit[y]" exception as applying to basic commercial activities like fishing that have no articulable "special purpose" is therefore inconsistent with the existing permitting scheme that the FWS has enacted. The FWS must read the "special purpose" provision in the context of the regulation's other requirements that, taken together, fail to turn § 21.27 into a general incidental take exception: the permit must "relate[] to migratory birds" and may issue only upon a "sufficient showing of ... [a] compelling justification." 50 C.F.R. § 21.27.

The FWS unpersuasively argues that the phrase "related to migratory birds" is not a restriction on its permitting authority, but merely a description of what can be permitted. The FWS specifically maintains that longline fishing is "related to migratory birds" because it incidentally interacts with them. Although nothing in the regulation requires that the permitted activity directly concern migratory birds, it nevertheless strains reason to say that every activity that risks killing migratory birds "relate[s] to" those birds. *See* 50 C.F.R. § 21.27. The FWS's approach to the regulation renders the majority of its text superfluous. *See Nat'l Ass'n of Home Builders v. Defs. of Wildlife*, 551 U.S. 644, 669 (2007) (cautioning against reading an agency regulation in a way that renders part of it redundant).

The FWS's interpretation of § 21.27 as authorizing it to grant an incidental take permit to the NMFS does not conform to either the MBTA's conservation intent or the plain language of the regulation. We therefore conclude that the FWS's grant of a special purpose permit to the NMFS was arbitrary and capricious.¹

¹Because we conclude that the FWS acted arbitrarily and capriciously in issuing the incidental take permit to the NMFS under § 21.27, we need not reach Plaintiffs' additional argument concerning whether the FWS's action also violated NEPA.

II. 2012 "No Jeopardy" BiOp

Plaintiffs also argue that the NMFS violated the ESA by failing to properly assess the shallow-set fishery's impacts on endangered sea turtles. The ESA permits federal agencies to authorize actions that will result in the taking of endangered or threatened species only if the projected take "is not likely to jeopardize the continued existence of" any listed species. 16 U.S.C. § 1536(a)(2). "Jeopardize the continued existence of means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species." 50 C.F.R. § 402.02 (emphasis added).

Where listed marine species are concerned, the NMFS prepares a BiOp evaluating the effects of the proposed action on the survival and recovery of the listed species. 16 U.S.C. § 1536(c). The agency specifically considers the proposed action's direct, indirect, and cumulative effects on a listed species in relation to the environmental baseline, and opines on whether the action is likely to jeopardize the species' survival. 50 C.F.R. § 402.14(g)(4); *see also Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv.*, 524 F.3d 917, 924 (9th Cir. 2008). Where a species is already in peril, an agency may not take an action that will cause an "active change of status" for the worse. *Nat'l Wildlife Fed'n*, 524 F.3d at 930.

When formulating a BiOp, the NMFS must base its conclusions on evidence supported by "the best scientific and commercial data available." 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(g)(8). This requirement "prohibits [an agency] from disregarding available scientific evidence that is in some way better than the evidence [it] relies on." *San*

Luis & Delta-Mendota Water Auth. v. Jewell, 747 F.3d 581, 602 (9th Cir. 2014) (citation and internal quotation mark omitted). "The determination of what constitutes the 'best scientific data available' belongs to the agency's 'special expertise'...." Id. (emphasis in original) (citation omitted).

In 2012, the NMFS issued a BiOp concluding that the removal of the annual limit of 2.120 shallow-set lines in the fishery might result in the incidental "take" of Northern Pacific loggerhead and leatherback sea turtles, but would not jeopardize the continued existence of either species for the next 25 years. To establish the environmental baseline, the NMFS used existing studies on loggerhead and leatherback interactions with all Pacific longline fisheries (domestic and international) from 2000 to 2009. The NMFS ultimately found that the Hawaii-based shallow-set fishery is currently responsible for killing two to three loggerheads and leatherbacks (each) per year. The NMFS also determined that the impacts associated with anthropogenic climate change were likely beginning to affect both sea turtle species, but lacked sufficient data to quantify the threat that climate change posed to the turtles.

The NMFS then attempted to predict the impact that allowing the fishery to deploy 5,500 longline sets per year the approximate maximum annual number of sets before the fishery was first closed out of concern for the sea turtle populations—would have on the loggerheads and leatherbacks. The NMFS ultimately projected that setting 5,500 lines would kill no more than one adult, female loggerhead turtle and four adult, female leatherback turtles. The NMFS then employed population viability assessment models to forecast the risk that killing small numbers of adult, female sea turtles would lead to the species' extinction. The NMFS concluded from the results that the proposed action could not reasonably be expected to appreciably reduce the likelihood of survival of either the loggerhead or the leatherback turtles.

The NMFS's "no jeopardy" conclusion was not affected by the agency's consideration of the cumulative effects of worsening climates. And, the NMFS's analysis of "spillover" trends suggested that the proposed increase in Hawaii-based swordfishing would benefit sea turtles overall. Because domestic fisheries operate under more stringent conservation measures than foreign fleets that compete to provide swordfish to U.S. consumers, the NMFS predicted that increasing domestic fishery yields would displace foreign fishing activities in the same area that the Hawaiibased shallow-set fishery operates, resulting in a net decrease in mortalities for the affected turtle species. However, because the NMFS concluded that the projected decrease in turtle deaths from this "spillover" effect was not precise enough to incorporate into its population assessment models, the NMFS did not incorporate these benefits into its no jeopardy finding.

A. Population Viability Assessment Models

Plaintiffs argue that the 2012 BiOp's conclusion that the proposed action would not appreciably impact loggerhead and leatherback sea turtles is unsupported by the scientific methods the FWS relied on. To project the impact of the shallow-set fishery's operations on the sea turtle species' likelihood of survival, the NMFS ran a climate-based population forecast model and relied primarily on the results of this model, "along with inputs from multiple experts and sources, where available." The climate-based model showed a significant decline in loggerhead numbers over the next generation even without the proposed action of removing the fishery's set limits: 99.5% of the tests showed the loggerhead

falling below the quasi-extinction threshold within 25 years. When the model was run incorporating the anticipated mortality associated with the fishery's operations without set limits, the results were similar. The NMFS specifically found that "[v]irtually all the loggerhead climate model runs ... indicat[ed] high extinction risk with high model confidence." The additional loss to the loggerhead population from the proposed action ranged from 4 to 11%. As for the leatherback turtles, the climate-based model showed an increase in leatherback population over the next generation without a change in the fishery's set limits, and even with the proposed action the "extinction risk remain[ed] in the low category," although the results predicted a "measurable loss to the population" of 16 to 30%.

Based on the results from the model, the NMFS decided that it did not "believe that the small effect posed by the lethal takes in this fishery, when considered together with the environmental baseline and the cumulative effects, will be detectable or appreciable" and "that the additional risk to the [loggerhead turtles] that would result from loss of one adult female annually is considered negligible." Similarly, the NMFS concluded "that the proposed action would have a negligible impact on the risk to ... the western Pacific leatherback population as a whole." Therefore, the NMFS opined that increasing the maximum annual number of sets at the fishery would not jeopardize either species.

1. Loggerhead Turtles

With respect to the loggerhead turtles, the NMFS violated the APA's requirement that the agency articulate a rational connection between the population viability model upon which the NMFS relied and its no jeopardy conclusion. The BiOp acknowledged that the climate-based model

predicted a decline in loggerhead populations to a level that "represents a heightened risk of extinction," but still upheld a finding of "no jeopardy" on the grounds that there was "little to no difference in the extinction risk when the annual removal of one adult female loggerhead resulting from the proposed action is considered in the model." We rejected similar logic in *National Wildlife Federation*, holding that "where baseline conditions already jeopardize a species, an agency may not take action that deepens the jeopardy by causing additional harm." 524 F.3d at 930 (noting that listed species' "slow slide into oblivion is one of the very ills the ESA seeks to prevent"). In National Wildlife Federation, the NMFS had prepared a BiOp in which it determined that hydropower dam operations would not jeopardize threatened and endangered salmon populations. Id. at 925. NMFS, had already determined baseline however. that environmental conditions posed a risk of jeopardy to the species. Id. Therefore, to reach a conclusion of "no jeopardy," the agency completely excluded from the environmental baseline all impacts from "nondiscretionary" federal activities such as operations relating to irrigation, flood control, and power generation. We held that this exclusion was improper and that baseline conditions must be factored into the jeopardy analysis, cumulatively with the entirety of agency actions. The relevant inquiry is therefore whether the "action effects, when added to the underlying baseline conditions," are such that they would cause jeopardy. Id. at 929.

Here, the NMFS improperly minimized the risk of bycatch to the loggerheads' survival by only comparing the effects of the fishery against the baseline conditions that have already contributed to the turtles' decline. The BiOp's no jeopardy opinion is premised on the proportionally low risk that the shallow-set fishery poses to the loggerheads relative to other threats, such as international fishing and climate change: the NMFS specifically found that although "any level of take and mortality can have an adverse effect on the overlying population ... the expected level of take from the action, including a small number of mortalities, is extremely small when considered together with all impacts considered in the Status of the Species, Baseline and Cumulative Effects sections, including other federally authorized fisheries and foreign fisheries." As in National Wildlife Federation, the agency reached an arbitrary conclusion by only comparing the prospective harm to the loggerheads that is attributable to the proposed action—the death of a single adult, female loggerhead per year-to the much greater harm resulting from factors beyond the fishery. Based on this impermissible comparison, the agency concluded that the proposed action's adverse impacts would not appreciably reduce the loggerheads' likelihood of survival. See Nat'l Wildlife Fed'n. 524 F.3d at 930.

The NMFS relies heavily on the conservative nature of its calculations to support the difference between its conclusion and the climate-based model's results. The NMFS asserts that it rounded up its calculation of maximum adult female mortality, modeled the viability of turtle populations using the maximum potential number of annual interactions opposed to the average number of interactions reported in previous years, and estimated the number of sea turtle deaths based on the assumption that the shallow-set fishery would immediately operate at 5,500 sets each year. In reality, the increase in sets is expected to be gradual over many years. The ESA, however, requires agencies to rigorously ensure their actions will not "tip [the loggerhead] species from a state of precarious survival into a state of likely extinction." See Nat'l Wildlife Fed'n, 524 F.3d at 930. The agency may not reject the "best scientific data" in favor of its belief that "incidental take . . . would be reduced to the best extent possible" and "the vast majority of the loggerhead sea turtle takes from the proposed action are expected to be non-lethal."

The NMFS also notes that the climate-based model used an assumed fraction of the current turtle population size (50%) as a proxy for extinction, and explains that "population decline below that" number "does not necessarily mean that" the species is "unrecoverable" or "functionally extinct." But, given the agency's endorsement of the climate-based model and its expert's decision to use a "quasi-extinction threshold" to reflect a decline in the turtle population to numbers insufficient to ensure the population's viability, this logic does not support the NMFS's determination that the projected population declines would not appreciably threaten the loggerheads' survival.

Another rationale presented in the BiOp is that "spillover effect is reasonably certain to contribute to a reduction in loggerhead mortalities . . . due to reduced effort in foreign fisheries." Shortly thereafter, however, the NMFS noted that data on foreign fishery bycatch are "likely incomplete or inaccurate." The NMFS went on to state that "mortality reduction data associated with spillover effects are not as robust as those analyzed for the direct effects of the proposed action." For those reasons, the NMFS did not incorporate the estimated sea turtle mortalities that would be avoided due to a potential spillover effect into its population assessment models.

The NMFS's model showed the loggerhead species are on a path toward extinction, which accords with the fact that the NMFS recently raised the Pacific loggerhead's ESA listing from "threatened" to "endangered." The NMFS also found that "effects" to the loggerhead "are likely to occur as a result of worsening climate change," which the NMFS "expect[s] to continue and therefore may impact sea turtles and their habitats in the future." Rising levels of marine debris "could also increase entanglements." Even though the NMFS was unable to quantify the risks of climate change and its associated impacts, the agency recognized that they would be detrimental to the loggerheads.

The climate-based model predicted that the proposed action would exacerbate the loggerheads' decline, and the BiOp is structurally flawed to the extent the NMFS failed to incorporate those findings into its jeopardy analysis. *Nat'l Wildlife Fed'n*, 524 F.3d at 927. Because the NMFS has not articulated a rational connection between the best available science and its conclusion that the loggerhead sea turtles would not be affected by the increased fishing efforts, the agency's determination that the loggerhead "population will remain large enough to retain the potential for recovery" is arbitrary and capricious.

2. Leatherback Turtles

Plaintiffs also argue that the 2012 BiOp improperly concluded that the fishery would have no appreciable impact on the leatherback turtle population. Unlike its conclusion concerning the loggerheads, however, the NMFS's no jeopardy conclusion regarding the leatherback turtles finds support in the scientific record and, therefore, is sufficient to withstand judicial review.

Plaintiffs specifically argue that the NMFS erred in limiting the "temporal scale" of its analysis to 25 years, despite the fact that the fishery's operations have no related limitation and the NMFS determined that impacts on the sea turtles due to increasing temperatures "are expected to occur slowly over the next century." However, the NMFS was entitled to rely on the climate-based population assessment model, even though that model could only predict changes in the turtle population for 25 years. See San Luis & Delta-Mendota Water Auth. v. Locke, 776 F.3d 971, 997 (9th Cir. 2014) ("[T]he agency has substantial discretion to choose between available scientific models, provided that it explains its choice."); The Lands Council v. McNair, 537 F.3d 981, 988 (9th Cir. 2008) (explaining that the court may not "act as a panel of scientists that instructs the [agency] how to ... choose[] among scientific studies"), overruled on other grounds by Winter v. Nat. Res. Def. Council, Inc., 555 U.S. 7 (2008). The constraints in the available data supply a reasonable justification for the NMFS to limit its analysis. Accordingly, we cannot conclude that the 2012 BiOp violated the ESA or that the NMFS otherwise acted arbitrarily and capriciously in determining that the fishery would have no appreciable effect on the leatherback turtle population.

B. Consideration of the Effects of Climate Change

Lastly, Plaintiffs argue that the 2012 BiOp failed to evaluate the impacts of global climate change. Plaintiffs specifically maintain that the NMFS acted arbitrarily by dismissing the effects of global warming on sea turtles as uncertain without further study.

In the 2012 BiOp, the NMFS explained that the effects from climate change on listed turtle species include rising sand temperatures and sea levels, beach erosion, increased storm activity, and changes in ocean temperature and chemistry. The BiOp also summarized studies anticipating that climate change will impact, among other traits and behaviors, turtle gender ratios, nesting habitat, and reproductive capacity. However, the NMFS determined that there was no available data from which it could credibly project the impacts that climate change would have on the loggerhead or leatherback turtle survival rates. With respect to the loggerhead turtles, the NMFS explained that "current scientific methods are not able to reliably predict the future magnitude of climate change and associated impacts or the adaptive capacity of this species." The NMFS also stated that "leatherbacks are probably already beginning to be affected by impacts associated with anthropogenic climate change in several ways," but noted that it did "not have information to predict what the population would do" or "what impact other climate-related changes may have such as increasing sand temperatures, sea level rise, and increased storm events." As the NMFS observed elsewhere in the BiOp, the effects of climate change will not be globally uniform, and the uncertainty of the rate, magnitude, and distribution of such effects on different temporal and spatial scales-not to mention the turtles' ability to adapt to these effects-have not been comprehensively studied. Consequently, the NMFS decided that climate change effects could not be "reliably quantified" nor "qualitatively described or predicted" by the agency at the time.

Here, we cannot conclude from the NMFS's lack of precision that it failed to adequately consider the effects of climate change on the sea turtles. On the whole, the BiOp demonstrated that the NMFS considered a variety of ways in which climate change may affect the sea turtles, but simply concluded that the data available was too indeterminate for the agency to evaluate the potential sea-turtle impacts with any certainty. *Cf. Greenpeace Action v. Franklin*, 14 F.3d 1324, 1326–27, 1336 (9th Cir. 1993) (holding that the agency's no jeopardy conclusion was not arbitrary because the BiOp at issue demonstrated that the agency had based its no jeopardy decision on the best available scientific data, even though the data was "uncertain"); *Stop H-3 Ass'n v.*

Dole, 740 F.2d 1442, 1460 (9th Cir. 1984) (sustaining a BiOp that stated "we have very little data for providing an opinion, but feel it would be unreasonable to request [an additional] study which would be unlikely to provide definitive results.... Based on the available information, which we grant is weak, it is our opinion the proposed project is not likely to jeopardize the continued existence of the Oahu Creeper"). Plaintiffs have failed to sufficiently refute the NMFS's stated inability to offer more specific predictions on the effects of climate change, and they have not alleged that less speculative scientific information is available that the agency overlooked. San Luis & Delta-Mendota, 747 F.3d at 602 ("[W]here [superior] information is not readily available, we cannot insist on perfection: [T]he 'best scientific ... data available,' does not mean the best scientific data possible." (citation and internal quotation marks omitted)). Accordingly, the NMFS's consideration of climate change in the BiOp was neither arbitrary, capricious, nor contrary to the NMFS's obligation to base its jeopardy decision on the best scientific data it could obtain. See 16 U.S.C. § 1536(a)(2).

CONCLUSION

We conclude that the FWS's grant of an incidental take permit to the NMFS in reliance on the "special purpose permit" provision in 50 C.F.R. § 21.27 was arbitrary and capricious because the FWS's interpretation of § 21.27 does not conform to either the MBTA's conservation intent or the plain language of the regulation. We therefore reverse the district court's grant of summary judgment affirming the FWS's decision to issue the permit.

We also conclude that NMFS's 2012 BiOp's no jeopardy finding as to the loggerhead sea turtles was arbitrary and capricious because the scientific data suggested that the loggerhead population would significantly decline, and the agency failed to sufficiently explain the discrepancy in its opinion and the record evidence. We therefore reverse the district court's grant of summary judgment upholding this portion of the BiOp. We otherwise affirm the district court's grant of summary judgment to Defendants.

AFFIRMED in part; REVERSED in part; and REMANDED. Each party shall bear its own costs on appeal.

CALLAHAN, Circuit Judge, dissenting in part:

I agree with the majority that the 2012 Biological Opinion ("BiOp") is not arbitrary and capricious in determining that the Hawaii-based shallow-set fishery expansion would have no appreciable effect on the leatherback sea turtle population, and that the 2012 BiOp adequately considers the impact of global climate change. However, I dissent from the remainder of the majority opinion.

First, the majority errs in rejecting the U.S. Fish and Wildlife Service's ("FWS") issuance of a special purpose permit (the "Permit") under the Migratory Bird Treaty Act ("MBTA") to the National Marine Fisheries Service ("NMFS") for the incidental take of migratory birds. The majority determines that issuing the Permit runs afoul of the pertinent regulation's plain language and the MBTA's conservation-oriented purpose. That conclusion, however, reflects a misapplication of our deferential standard of review under *Auer v. Robbins*, 519 U.S. 452 (1997), because both the regulation—50 C.F.R. § 21.27—and the MBTA itself accommodate FWS's view. *See Auer*, 519 U.S. at 461;

Marsh v. J. Alexander's LLC, 869 F.3d 1108, 1116–17 (9th Cir. 2017). Moreover, the Permit accords with FWS's past practice, and thereby reflects its considered judgment—another basis for granting deference under *Auer*. *Christopher v. SmithKline*, 132 S. Ct. 2156, 2166 (2012).

Second, the majority errs in rejecting the 2012 BiOp's assessment of the proposed shallow-set fishery expansion's effects on the endangered loggerhead sea turtle. NMFS's BiOp concludes that the proposed action would not jeopardize the continued survival and recovery of the loggerhead, as is required to green-light the project under the Endangered Species Act ("ESA"). The majority dismisses the BiOp as arbitrary and capricious because, among other things, it concludes that the scientific evidence does not support NMFS's no-jeopardy conclusion, and it perceives a conflict with our case law. I disagree. While the record data shows that the loggerhead is in decline, NMFS reasonably concluded that the fishery expansion would not appreciably reduce the likelihood of the loggerhead's survival and recovery. Nor did NMFS misapply our decision in National Wildlife Federation v. National Marine Fisheries Service, 524 F.3d 917 (9th Cir. 2008) ("NWF"): it considered the incremental impact of the proposed action along with degraded baseline conditions. That is precisely what NWF requires.

The majority's contrary conclusion is a classic example of the judiciary exceeding its authority by substituting an agency's judgments with its own. This complex case relies on the technical and scientific findings of experts tasked with the responsibility of protecting our Nation's species-in-peril. It is in this context that our respect for a coordinate branch of government is at its zenith. Indeed, we are "at our most deferential' when reviewing scientific judgments and technical analyses within the agency's expertise," *Lands Council v. McNair*, 629 F.3d 1070, 1074 (9th Cir. 2010) (quoting *Balt. Gas & Elec. Co. v. Natural Res. Def. Council*, 462 U.S. 87, 103 (1983)) (adjustment omitted) ("*Lands Council II*"), and should only reject an agency's action if it is plainly arbitrary and capricious, see Motor Vehicle Mfrs. *Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 42–43 (1983). Yet instead of anchoring its analysis in well-established principles of agency deference, the majority sets sail on a voyage of discovery, leaving in its wake our precedent and the doctrinal moorings of Auer v. *Robbins.* I dissent, respectfully.

I.

A.

Under *Auer v. Robbins*, we must defer to an agency's reasonable interpretation of its own regulation. *See Christopher*, 132 S. Ct. at 2166. Deference is not warranted, however, "when the agency's interpretation is plainly erroneous or inconsistent with the regulation," or when it does not reflect the agency's "considered judgment." *Id.* (internal quotation marks omitted). A lack of "considered judgment" may be evidenced by (i) an "agency[] interpretation [that] conflicts with a prior interpretation," (ii) "when it appears that the interpretation is nothing more than a convenient litigating position," or (iii) when the interpretation amounts to a "*post hoc* rationalization advanced by an agency seeking to defend past agency action

against attack." *Id.* (internal quotation marks and adjustment omitted).¹

At issue is FWS's issuance of a special purpose permit allowing NMFS to authorize incidental take of migratory birds that are protected under the MBTA. 50 C.F.R. § 21.27 authorizes FWS to issue permits for the take of migratory birds protected under the MBTA in certain circumstances. In full, the regulation provides that

> [p]ermits may be issued for special purpose activities related to migratory birds, their parts, nests, or eggs, which are otherwise outside the scope of the standard form permits of this part. A special purpose permit for migratory bird related activities not otherwise provided for in this part may be

¹Auer's continued vitality is a matter of considerable debate. Justice Antonin Scalia, the progenitor of the doctrine named after the 1997 case, Auer v. Robbins, which he authored, called for its abolition eighteen years later in Perez v. Mortgage Bankers Association, 135 S. Ct. 1199, 1213 (2015) (Scalia, J., concurring). He appears to have shared this view with at least two other justices, Justices Samuel Alito and Clarence Thomas. See id. at 1210 (Alito, J., concurring); id. at 1213 (Thomas, J., concurring). See also John C. Eastman, The President's Pen and the Bureaucrat's Fiefdom, 40 HARV. J.L. & PUB. POL'Y 639, 641 (2017). Also, Justice Neil Gorsuch has openly criticized Chevron deference, see Gutierrez-Brizuela v. Lynch, 834 F.3d 1142, 1156 (10th Cir. 2016) (Gorsuch, J., concurring) (citing Marbury v. Madison, 5 U.S. 137 (1803))-a less controversial deference doctrine because it provides for a check-and-balance between two branches of government (Congress and the Executive), whereas Auer involves the Executive's interpretations of its own actions. At any rate, my conclusion that the Permit is a lawful exercise of FWS's authority does not rely on the continued validity of Auer. Applying traditional tools of statutory construction, the Permit is lawful agency action because it is consistent with (i) the regulatory text of § 21.27, (ii) § 21.27's greater context, and (iii) the purposes of both § 21.27 and the MBTA itself.

issued to an applicant who submits a written application containing the general information and certification required by part 13 and makes a sufficient showing of benefit to the migratory bird resource, important research reasons, reasons of human concern for individual birds, or other compelling justification.

50 C.F.R. § 21.27. The majority declines to defer to FWS's issuance of the Permit because it finds that FWS's action is plainly contrary to § 21.27 and the MBTA and is therefore ultra vires. Because I conclude that issuing the Permit does not depart from FWS's past practice, is not inconsistent with § 21.27's text, and comports with the MBTA's conservation-oriented purpose, I would defer to FWS's determination.

1.

Appellants Center for Biological Diversity, et al. ("CBD") argue that FWS's Permit should not be accorded *Auer* deference because, CBD asserts, it does not align with FWS's past practice.

To determine whether an agency has departed from past practice, the first step is—manifestly—to define the practice. *Christopher*, 132 S. Ct. at 2167–68. A practice is a policy or mode of operating that is defined by articulable parameters; simply showing that a current action differs from a prior one in some way does not establish a departure from past *practice*. *Cf. FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 538 (2009) (agency departed from past practice by deeming broadcasts of non-literal uses of expletives as actionable only upon repetition); *Dillmon v. Nat'l Transp. Safety Bd.*, 588 F.3d 1085, 1090–91 (D.C. Cir. 2009) (agency departed from past practice of deferring to an ALJ's credibility determinations).

CBD argues that by issuing the Permit, FWS has changed course from its prior position that it lacks authority to grant permits to allow unintentional bird taking-i.e., incidental taking-for an activity that is not directed at migratory birds. The majority does not base its decision on this rationale and for good reason: FWS has long-issued incidental take permits for all manner of activities whose only relationship to migratory birds is that they affect the birds. For example, since at least 1996, FWS has authorized incidental take of migratory birds for commercial activities through Endangered Species Act ("ESA") Habitat Conservation Plans ("HCPs").² A benefit of entering into an HCP is that it comes with an ESA § 10 incidental take permit. See 16 U.S.C. § 1539(a)(1)(B), (a)(2). That permit "double[s]" as a § 21.27 special purpose permit under the MBTA. See Dep't of Commerce, Habitat Conservation Plan Assurances ("No Surprises") Rule, 63 Fed. Reg. 8859, 8862-63 (Feb. 23, 1998). Critically, the take that occurs results from activities that are unrelated to migratory birdse.g., natural gas drilling, homebuilding, and myriad other types of land development-except that they result in incidental bird deaths-the very ill that CBD insists infects the Permit at issue here.

² See Fish and Wildlife Service and National Marine Fisheries Service, *Habitat Conservation Planning and Incidental Take Permit Processing Handbook* App'x 5 (Nov. 4, 1996) ("1996 HCP Handbook"); see also Fish and Wildlife Service and National Marine Fisheries Service, *Habitat Conservation Planning and Incidental Take Permit Processing Handbook* 16-9 (Dec. 21, 2016) ("2016 HCP Handbook") ("FWS routinely issues consolidated ESA and [MBTA] permits for ESA-listed bird species.").

FWS has also issued incidental take permits for bald and golden eagles—which are migratory birds—for activities that, too, are not directed at migratory birds. *See* 50 C.F.R. §§ 22.11; 22.26. And in 1998, FWS issued a special purpose permit allowing the incidental take of migratory raptors by a wind farm due to collisions and electrocutions. *See* FWS Region 6, Fed. Fish & Wildlife Permit No. PRT-808690 (1998). In short, CBD's categorical assertion that "FWS has always understood [§] 21.27 does *not* authorize incidental take as the Permit allows" is plainly wrong.

Identifying one error in CBD's consistency-with-pastpractice argument reveals another. CBD asserts that, "until [FWS] issued to NMFS the permit at issue exempting commercial longline fishing from the MBTA's take prohibition, the only Special Use Permits FWS had ever issued authorizing incidental take of non-endangered migratory birds were specifically intended to promote migratory bird conservation " If CBD means to say that past permits were always associated with activities that had as their *purpose* bird conservation, then the preceding paragraph refutes this contention. But if CBD means something more capacious—i.e., that such activities must incorporate bird conservation strategies-then the Permit addresses this concern. NMFS regulates the Hawaii-based shallow-set longline fishery under a program that is expressly geared at reducing seabird bycatch. See 50 C.F.R. § 665.815(a)(1), (2), (4). Indeed, since the program took effect in 2004, incidental take of seabirds by the fishery has plunged nearly 90 percent. Thus, whatever CBD means by activities that "promote migratory bird conservation," FWS's issuance of the Permit is consistent with the agency's historical practice of tying incidental take permits to conservation measures. If there is a past practice to be discerned, that is it.³

2.

CBD insists that FWS's past statements belie the agency's assertion that the Permit accords with historical practice. CBD points to a 2009 regulation governing take under the Bald and Golden Eagle Protection Act ("BGEPA"). See Dep't of the Interior, Eagle Permits; Take Necessary to Protect Interests in Particular Localities, 74 Fed. Reg. 46,836, 46,862 (Sept. 11, 2009). BGEPA allows for the take of bald and golden eagles—which species also fall under the purview of the MBTA—pursuant to an MBTA permit. 50 C.F.R. § 22.11; see 50 C.F.R. § 22.26. In response to a public comment, the regulation's preamble notes that "[n]o permit is currently available to authorize incidental take under the MBTA." 74 Fed. Reg. at 46,862. CBD seizes on this language as evidence that the Permit is unlawful.

CBD's argument proves too much. If the cited statement means that FWS does not issue incidental take permits for migratory birds as a categorical rule, then *all* other instances

³ To be sure, what I articulate as FWS's past practice does not precisely align with FWS's own description of its policy for issuing special purpose permits, which broadly encompasses "incidental take of migratory birds" pursuant to agency "activities." Courts are not permitted to make sense of an agency action by supplying a rationale not offered by the agency itself. *Bowman Transp., Inc. v. Arkansas-Best Freight Sys., Inc.*, 419 U.S. 281, 285–86 (1974) (citing *SEC v. Chenery Corp.*, 332 U.S. 194, 196 (1947)). But my description of the agency's past practice does not supply a rationale for an otherwise arbitrary and capricious agency action. My observation that FWS's issuance of the Permit is consistent with FWS's historical policy simply demonstrates that CBD has not met its burden of showing that FWS has departed from past practice.

of such permits would be unlawful. Yet CBD spills pages of ink distinguishing the Permit here from other take permits granted under the aegis of § 21.27, without suggesting that those permits are similarly unlawful. Moreover, under CBD's interpretation, the cited statement is irreconcilable with FWS's other pronouncements permitting take for, e.g., migratory birds that are also ESA-listed species. *See* 2016 HCP Handbook at 16-9. *Cf. Boise Cascade Corp. v. EPA*, 942 F.2d 1427, 1432 (9th Cir. 1991) (where possible, courts avoid statutory interpretations that result in inconsistencies).

A more natural reading of FWS's statements—and one that comports with FWS's past practice—is that the agency recognizes that the MBTA lacks a programmatic framework for issuing incidental take permits. To be sure, a comprehensive regulation governing incidental take would be preferable. It could set forth uniform criteria for issuing permits, thereby offering predictability for the regulated and environmental communities.⁴ But the fact that there exists a better way to authorize incidental take does not mean that it is the *only* lawful way of doing so. Neither the majority nor CBD provides a persuasive explanation for why § 21.27 does not support case-by-case issuance of permits authorizing incidental take.⁵

⁴ FWS is in the process of drafting a regulation that would do just that, though it appears the process has stalled. *See* Dep't of the Interior, *Migratory Bird Permits; Programmatic Environmental Impact Statement*, Notice of Intent, 80 Fed. Reg. 30,032 (May 26, 2015).

⁵ CBD also references statements from a 1996 version of FWS's Habitat Conservation Handbook. The Handbook describes the process governing HCPs under the ESA. Because the Handbook is, at most, a guidance document, it lacks the force and effect of law. *See Perez v.*

Undeterred, CBD takes aim at yet another non-MBTA regulation. This one-the so-called "No Surprises Rule"implements the HCP provision of the ESA. See 63 Fed. Reg. at 8862–63. The rule explains that an ESA § 10 incidental take permit, issued in conjunction with an HCP, may "double" as a special purpose permit under the MBTA for ESA-listed species. FWS explains that issuing an ESA § 10 permit in lieu of an MBTA § 21.27 special purpose permit is appropriate because the ESA is more species-protective than the MBTA. Id. For example, HCPs require an "operating conservation program designed to conserve the species and minimize and mitigate the impacts of take of the listed species of migratory birds to the maximum extent practicable." Id. at 8863. CBD extracts from this statement the conclusion that special purpose permits may not be used to cover incidental take of non-ESA-listed species because such species will not enjoy the superior protections of the ESA.

CBD's reasoning founders on a logical fallacy. The No Surprises Rule provides that, because an ESA take permit comes with greater protections than an MBTA permit, a

Mortg. Bankers Ass'n, 135 S. Ct. 1199, 1203–04 (2015); *see generally* 1996 HCP Handbook. And to the extent it is probative of FWS's "past practice," it is of little value because the current Handbook is internally contradictory. One chapter states that "[n]on ESA-listed, migratory birds can be covered or otherwise addressed in the HCP and incidental take permit." 2016 Handbook at 3-28. But another chapter states that "if an MBTA protected species is not ESA-listed, the FWS does not have a way to authorize incidental take." 2016 Handbook at 7-7. An internal contradiction is archetypal evidence of a lack of "considered [agency] judgment," and so the Handbook's description of FWS's MBTA permitting authority is neither persuasive nor deserving of deference. *See Christopher*, 132 S. Ct. at 2166.

party need not *also* apply for an MBTA permit: the latter is subsumed under the former. *See id.* at 8862–63. But that does not mean that ESA-level protections are *necessary* to authorize take under the MBTA. Put another way, the No Surprises Rule says nothing about whether it is appropriate to issue a special purpose permit for incidental take under the MBTA for non-ESA-listed species.⁶

By analogy, consider a hypothetical state's labeling requirements for perishable foodstuffs. The default regulation for all perishable foods requires the use-by date to be no more than thirty days from the sell-by date. But certain perishable foods are on a "highly perishable" list, and are subject to stricter regulations requiring the affixed use-by date to be no more than a week from the sell-by date. Now consider a particular perishable food that is not subject to the stricter regulations because it is not on the applicable list. Does this mean it is not governed by the laxer default rule? Not at all. Yet that is CBD's logic here: that because the ESA's heightened protections apply to some migratory birds, other non-ESA birds are not subject to the MBTA's take provision. In fact, nothing about FWS's incidental take policy toward ESA-listed migratory birds forecloses the

⁶CBD offers no reason why the rationale for issuing ESA § 10 permits in lieu of an MBTA § 21.27 permit—that the ESA affords species greater protections—is not equally applicable to standalone § 21.27 permits for non-ESA-listed species. FWS, in its discretion, may require a § 21.27 permittee to implement the same types of conservation measures that are codified under the ESA. FWS effectively did just that with the shallowset fishery here. Because the fishery incorporates conservation measures that have dramatically reduced seabird bycatch, FWS's issuance of the Permit is consistent with its rationale for covering migratory birds under ESA § 10.

agency from issuing incidental take permits for non-ESA-listed migratory birds.

В.

While FWS's issuance of the shallow-set fishery incidental take permit reflects its considered judgment and is consistent with its past practice, we may still be compelled to withhold deference if its interpretation of § 21.27 is "plainly erroneous or inconsistent with the regulation." *Christopher*, 132 S. Ct. at 2166 (internal quotation marks omitted). The majority relies on this rationale in concluding that we should not afford FWS's action *Auer* deference, but its reasoning is based on flawed logic and a misinterpretation of the MBTA.

1.

The majority claims that the "special purpose activit[y]" exception to the general ban on permitting take does not apply here because fishing lacks an "articulable special purpose." What qualifies a purpose as "special"? The majority never quite answers this question, except to obliquely note that "special purpose" must be read "in the context of the regulation's other requirements" Those requirements are, according to the majority, that the activity authorized by the permit "relate[] to migratory birds," be paired with a "compelling justification," and have a conservation purpose.⁷ But the majority never explains what

⁷ See Klem v. City of Santa Clara, 208 F.3d 1085, 1092 (9th Cir. 2000) ("the question ... is whether the Secretary's interpretation is justified when considered together with the text of [the regulation], taken in context"); cf. FDA v. Brown & Williamson Tobacco Corp., 529 U.S. 120, 133 (2000) (noting the "fundamental canon of statutory construction that

it means to "relate[] to migratory birds," except to posit a proposition in the negative—namely, that not all activities that risk killing migratory birds "relate[] to those birds." Landowners, environmental practitioners, and FWS will be hard-pressed to decipher this delphic explanation. Do some activities that do not have as their purpose the conservation of migratory birds "relate to those birds"? Which ones? And how do we know?

The *Auer* inquiry is more straightforward. We consider the agency's interpretation relative to the regulation and the governing statute. *Marsh*, 869 F.3d at 1116–17. We must assure ourselves that the agency has fairly construed its own regulation, while also keeping one eye trained on Congress' intent. *Id.* To that end, "'[we] need not accept an agency's interpretation of its own regulations if that interpretation is ... inconsistent with the statute under which the regulations were promulgated." *Id.* at 1117 (quoting *Mines v. Sullivan*, 981 F.2d 1068, 1070 (9th Cir. 1992)).

My analysis proceeds as follows: I disaggregate § 21.27 into its relevant textual parts, consider each part against the regulation's broader structure and context, and then assess FWS's interpretation against the MBTA.

• "Permits may be issued for special purpose activities ... which are otherwise outside the scope of the standard form permits of this part." The regulation does not define "special purpose activit[y]." It is also a regulatory term of art that is not susceptible to interpretation by reference to dictionary definitions.

the words of a statute must be read in their context and with a view to their place in the overall statutory scheme" (internal quotation marks omitted)).

Deploying a wider net, we expand our analysis to the regulation's structure and context. The latter part of the sentence is instructive. It indicates that a "special purpose activit[y]" is one that is not covered by an expressly identified permitting scheme. Contrary to CBD's assertion, nothing in the context of the regulation indicates that to be "special" an activity's purpose must be *directed at* migratory birds.⁸ *See Klem*, 208 F.3d at 1092.

• Special purpose permits must be "related to migratory birds" The term "relate" has several dictionary definitions (an inauspicious start for the majority), including, as is pertinent here: "[t]o refer to," "[t]o have reference to," "[t]o have some connection with; to stand in relation to," or "[t]o connect, to link; to establish a relation between." Oxford English Dictionary (3d ed. 2009) (goo.gl/grzBqC) (last accessed Dec. 8, 2017). Whether the first two definitions could flex to embrace an activity whose purpose is not *directed at* migratory birds is debatable. But we need not parse those definitions because the last two plainly do: an activity like commercial fishing indisputably has "some connection with" migratory birds.

• An applicant for a special purpose permit must "make[] a sufficient showing of benefit to the migratory bird resource, important research reasons, reasons of

⁸ CBD asserts that an "ongoing fishing business ... has no 'special purpose' beyond catching fish." But this observation only begs the question: what *is* a "special purpose"? CBD offers no explanation, except to march out a parade of horribles, warning that if the Permit is allowed to stand then the court will have ushered in a brave new world in which "every activity that happens to somehow harm birds" will qualify for an incidental take permit.

human concern for individual birds, or other compelling justification." FWS invoked the "other compelling justification" category as the regulatory hook for issuing the Permit. FWS discerned a "compelling justification" in its determination that the Permit would "provide a[n economic] net benefit to the Nation" and would "serve[] as a benchmark internationally for employing effective seabird mitigation techniques and serves as an example of responsible conservation practices by a fishery."

The majority concludes that FWS's rationale is inadequate, observing that FWS fails to "read the 'special purpose' provision in the context of the regulation's other requirements that, taken together, fail to turn § 21.27 into a general incidental take exception."9 The problem for CBD and the majority, however, is that nothing in § 21.27 suggests-let alone requires-that all special purpose activities must have as their objective migratory bird conservation to satisfy the "compelling justification" standard. In fact, § 21.27's text reveals just the opposite. The first eligible category is for activities that provide a "benefit to the migratory bird resource." Thus, one type of permit is for an activity that is directed at bird conservation. another listed category-"important research But reasons"-includes not even a gloss of conservation intent. Nor does anything in § 21.27 indicate that a characteristic of the first stand-alone category—"benefit to the migratory bird resource"-modifies all those that follow. Rather, the most natural reading is that special purpose permits are

⁹ The majority correctly adheres to the doctrine that "all the words used in a list should be read together and given related meaning when construing a statute or regulation." *Aguayo v. U.S. Bank*, 653 F.3d 912, 927 (9th Cir. 2011).

appropriate for activities that are *either* directed at bird conservation *or* at other activities that may or may not have a conservation purpose—e.g., scientific research.

Lest there be any doubt, the immediately following subsection makes clear that permits may be issued for nonconservation-related purposes. Section 21.27(a) describes the criteria for issuing a special purpose permit. *See* 50 C.F.R. § 21.27(a). It explains that such a permit "is required before any person may sell, purchase, or barter captive-bred, migratory game birds" *Id.* Nothing in this subsection suggests that selling, purchasing, or bartering birds serves the purpose of *conserving* those birds. Nor do those terms have an inherent conservation-oriented meaning—quite the opposite.¹⁰

In sum, the catch-all category "other compelling justification" is not limited to activities whose purpose is conserving migratory birds. And the majority provides no other limiting condition, except to warn against transforming § 21.27 into a "general incidental take exception." But no party argues that § 21.27 grants FWS a roving license to permit incidental take whenever it chooses. The question is, instead: where the agency's interpretation is not irreconcilable with the regulation's text and reflects the agency's "considered judgment" (i.e., it is consistent with past practice), who gets to decide, the courts or the agency? Auer provides the answer: we defer to the agency in which Congress has vested regulatory authority to craft policy based on its expert judgment. See Christopher, 132 S. Ct. at 2166–67 (internal quotation marks omitted). Accordingly, I

¹⁰ To be sure, the quoted phrase applies only to captive-bred birds. But the point is that the regulation expressly contemplates issuing special purpose permits for something other than conserving migratory birds.

conclude that FWS's interpretation of "other compelling justification" as including economic benefits and the benefit of teaching other nations good conservation techniques is not "plainly erroneous or inconsistent with the regulation." *Id.* at 2166 (internal quotation marks omitted).

2.

The Permit also comports with the MBTA's conservation purpose. The majority is correct that in passing the MBTA Congress sought to promote migratory bird conservation.¹¹ But the statute also expressly provides for non-conservation-related take of migratory birds. As is relevant here, the MBTA allows FWS to consider economic factors in determining whether to permit, among other things, the taking, killing, possessing, or sale of migratory birds or their parts. 16 U.S.C. § 704(a). Stated in full, § 704(a) provides that:

Subject to the provisions and in order to carry out the purposes of the [migratory bird treaty] conventions . . . the [FWS] is authorized and directed, from time to time, having due regard to the zones of temperature and to the distribution, abundance, economic value, breeding habits, and times and lines of migratory flight of such birds, to determine

¹¹ See Humane Soc'y of U.S. v. Watt, 551 F. Supp. 1310, 1319 (D.D.C. 1982), *aff* 'd, 713 F.2d 865 (D.C. Cir. 1983) ("'The United States . . . [and] Great Britain . . . , being desirous of saving from indiscriminate slaughter and insuring the preservation of such migratory birds as are either useful to men or are harmless, have resolved to adopt some uniform system of protection which shall effectively accomplish such objects") (quoting 39 Stat. 1702 (Convention on the Protection of Migratory Birds) incorporated by reference into the MBTA at 16 U.S.C. § 703(a)).

when, to what extent, if at all, and by what means, it is compatible with the terms of the conventions to allow hunting, *taking*, capture, *killing*, *possession*, *sale*, purchase shipment, transportation, carriage, or export of any such bird, or any part, nest, or egg thereof, and to adopt suitable regulations permitting and governing the same

Id. (emphasis added).

But how—the reader may ask—can we reconcile the statute's conservation-oriented focus with its provisions allowing for the killing of migratory birds? One way is to interpret § 704(a) as permitting bird deaths—by way of hunting, incidental take, or other means—to the extent that doing so does not threaten the *overall* conservation of migratory birds. Indeed, we would not be the first court to adopt this interpretation. *See Humane Soc'y v. Watt*, 551 F. Supp. 1310, 1319 (D.D.C. 1982), *aff'd*, 713 F.2d 865 (D.C. Cir. 1983) ("It does not necessarily follow from the MBTA's evident purposes of conservation that the statute creates a presumption against hunting").

The Permit is consistent with this accommodation of competing statutory directives: it allows for the take of migratory birds when paired with measures designed to minimize such take. Neither CBD nor the majority contends that, if such measures are followed, the MBTA's broad goal of conserving migratory birds is threatened.

3.

The majority has one lure left in its tackle box, but I decline to take the bait. The majority suggests that because the MBTA generally prohibits take, a presumption attaches

against reading § 21.27 as authorizing incidental take. The majority reasons that "although § 21.27 is intended to allow the FWS to authorize activities not otherwise permitted by the regulations, it is still a narrow exception to the MBTA's general prohibition on killing migratory birds."

While it is true that the MBTA generally prohibits taking migratory birds, the majority's observation is a red herring because the statute and regulations provide for numerous exceptions to the general rule.¹² The pertinent question turns on the *scope* of the exception to the prohibition, not the existence of the general prohibition in the first place. As discussed, § 21.27 is ambiguous and accommodates FWS's view that the Permit supports a "special purpose activit[y]" that is anchored in a "compelling justification."

* * *

Because issuing the Permit follows FWS's past practice, is not plainly erroneous or inconsistent with § 21.27, and comports with the MBTA's conservation-oriented purpose, I would hold it to be a lawful exercise of FWS's authority.

¹² See 16 U.S.C. § 703(a) ("except as permitted by regulations ... it shall be unlawful ... to ... take ... any migratory bird" (emphasis added)); 50 C.F.R. §§ 21.13 (taking certain mallard ducks); 21.15 (incidental take for military readiness activities); 21.23 (taking for scientific research); 21.24 (taking for taxidermy); 21.25 ("dispos[ing]" of migratory waterfowl); 21.26 (killing Canada geese); 21.27 ("special purpose activities" not covered by other permits); 21.29 (taking for raptors).

II.

The majority also errs in rejecting NMFS's loggerhead turtle BiOp as arbitrary and capricious. The majority's analysis rests on a misapprehension of both binding case law and the administrative record in this case.

Section 7(a)(2) of the ESA requires all federal agencies to ensure that any discretionary "action" they authorize, fund, or implement does not "jeopardize the continued existence" of an ESA-listed species. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.03.¹³ To "jeopardize" means "to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species." 50 C.F.R. § 402.02. Put another way, "[t]o 'jeopardize'—the action ESA prohibits—means to 'expose to loss or injury' or to 'imperil.'" *NWF*, 524 F.3d at 930. As we have previously explained,

> [e]ither of these [terms] implies causation, and thus some *new risk of harm*. Likewise, the suffix "-ize" in "jeopardize" indicates some active change of status: an agency may not "cause a species to be or to become" in a state of jeopardy or "subject a species to" jeopardy....

> [A]n agency may not take action that will tip a species from a state of precarious survival into a state of likely extinction.

¹³ "Section 7 . . . appl[ies] to all actions in which there is discretionary Federal involvement or control." 50 C.F.R. § 402.03.

Likewise, even where baseline conditions already jeopardize a species, an agency may not take action that deepens the jeopardy by causing additional harm.

Id. (emphasis added).

Our discussion of "jeopardy" in NWF must be read in the context of the regulatory standard. To "deepen[] the jeopardy" of a species is to "reduce appreciably" a species' chance at continued survival and recovery. See 50 C.F.R. § 402.02. It cannot—as CBD and the majority suggest simply mean exacerbating a species' already "imperiled" existence, no matter how de minimis the impact. An "endangered species" like the loggerhead is, by definition, a "species which is in danger of extinction throughout all of a significant portion of its range." 16 U.S.C. § 1532(6) (defining "endangered"). If the ESA prohibited any action that worsened—no matter how marginally—a species' current plight, then it is difficult to conceive of an action that *could* survive § 7 consultation. That is not the standard: the question is not whether the agency action will negatively affect the species, but whether in doing so it will appreciably reduce its likelihood of survival and recovery. NWF. 524 F.3d at 930 (the operative inquiry is whether the action will "cause[] some new jeopardy"—i.e., whether it will "tip a species from a state of precarious survival into a state of likely extinction" (emphasis added)).

In *NWF*, we rejected a BiOp that excluded certain discretionary agency actions from the jeopardy analysis, and which also failed to consider degraded baseline conditions. *Id.* at 933. The BiOp assessed the effects of dam operations on the Chinook salmon, an ESA-listed species. *Id.* at 925–26. We faulted NMFS for departing from its past practice

and taking a novel approach in evaluating dam operation impacts. First, NMFS labeled several operations as nondiscretionary, thereby "excluding them from the requisite ESA jeopardy analysis." *Id.* at 928–29. Second, NMFS considered only the marginal impact of certain discretionary dam operations in its jeopardy analysis. *Id.* at 929–30. As concerns the second error, NMFS considered only whether those actions were "appreciably' worse than baseline conditions." *Id.* at 930. Only if they were would NMFS then conduct a jeopardy analysis. *Id.*

We held that NMFS's methodology collided with the plain text of the regulations. Section 402.02 explains that an agency action "jeopardizes" a species if it "reduce[s] appreciably the likelihood of" the species' "survival and recovery," when considering the action's direct, indirect, and cumulative impacts measured against the environmental baseline. 50 C.F.R. §§ 402.02; 402.14(g)(4). NMFS executed a different procedure. Instead of weighing the proposed action in the context of the species' continued existence, it assessed the action against then-current baseline conditions. *See NWF*, 524 F.3d at 930.

By way of example, consider a hypothetical scenario in which a residential subdivision is planned for an area inhabited by the endangered arroyo toad. *See Rancho Viejo*, *LLC v. Norton*, 334 F.3d 1158, 1160 (D.C. Cir. 2003) (Roberts, J., dissenting from denial of rehearing en banc). The development requires a federal permit, thereby triggering ESA § 7 consultation. *Sierra Club v. Bureau of Land Mgmt.*, 786 F.3d 1219, 1224 (9th Cir. 2015) (consultation required where a private project is "funded, authorized, or constructed by any federal agency"). The toad is already threatened by the combined effects of climate change and habitat fragmentation.¹⁴ Existing developments have substantially reduced the toad's habitat, and it teeters on the precipice between survival and extinction. The proposed development would reduce the toad's habitat by an additional 10 percent, which, in the agency's estimation, does not amount to an "appreciable" negative impact when compared to the habitat destruction that has already taken place. Thus, under the methodology rejected by this court in *NWF*, the agency would not have engaged in a jeopardy analysis.

The pertinent question under NWF, however, is whether the proposed development would have an appreciable impact on the *toad's survival and recovery*. Comparing only the marginal impact against already degraded baseline conditions conceals this inquiry. Only by considering the impact of the proposed development "within the context of other existing human activities that impact the listed species""-i.e., in the context of climate change effects and an already diminished natural habitat—can the agency determine whether the proposed action will consign the toad to a fate of oblivion. See NWF, 524 F.3d at 930. Similarly, the flaw *NWF* identified in that case was NMFS's failure to account for the "existing human activity" of dam operations, which impacted the salmon's survival. See id. at 930-31. The court held that NMFS should have considered the proposed agency action-continued dam operationstogether with degraded baseline conditions, instead of against those conditions. See id. at 931.

Turning to the matter before us, NMFS undertook the analysis required by *NWF*. NMFS considered, among other

¹⁴ See U.S. Fish and Wildlife Service, *Arroyo Toad 5-Year Review:* Summary and Evaluation 10, 16 (Aug. 2009).

things, the (i) the current status of the loggerhead sea turtle, (ii) the direct effects of the proposed action on the loggerhead based on climate-based and classical modeling, (iii) the impact of climate change and other cumulative effects, and (iv) whether the proposed action would result in appreciable reduction in the likelihood of the an loggerhead's survival and recovery. The majority arrives at a contrary conclusion by fixating on the BiOp's statement that the incremental harm of the proposed action is "the death of a single adult, female loggerhead per year," which is an "extremely small . . . level of take from the action." The majority insists that NMFS ran afoul of NWF by comparing the marginal impact of the fishery "to the much greater harm resulting from factors beyond the fishery." But NMFS's consideration of the marginal impact of the fishery did not drive its jeopardy analysis à la NWF. Instead, NMFS considered the "adverse effect on the overlying population ... when considered *together with all impacts considered in* the Status of the Species, Baseline and Cumulative Effects sections, including other federally authorized fisheries and foreign fisheries." NMFS explained that.

> [d]espite the projected population decline over one generation, we expect the overall population to remain large enough to maintain genetic heterogeneity, broad demographic representation, and successful reproduction. The proposed action will have a small effect on the overall size of the population, and we do not expect it to affect the loggerheads' ability meet their lifecycle requirements and to retain the potential for recovery.

Thus, unlike in *NWF*, where NMFS failed to consider direct, indirect, and cumulative effects, here, NMFS incorporated the marginal impact of the fishery in assessing whether the action—*combined with baseline conditions*—would "tip [the loggerhead] from a state of precarious survival into a state of likely extinction." *See id.* at 930. It concluded it would not, and we owe that determination deference.¹⁵ *See Lands Council II*, 629 F.3d at 1074 ("Review under the arbitrary and capricious standard is narrow and we do not substitute our judgment for that of the agency.") (internal quotation marks omitted)).

The majority also criticizes NMFS for relying on "the conservative nature of its calculations to support the difference between its conclusion and the climate-based model's results." As a first matter, the majority does not explain where the model results diverge from NMFS's finding of no-jeopardy. Nor could it plausibly do so: an

This data amply supports NMFS's no-jeopardy conclusion. However, NMFS did not incorporate its findings into the jeopardy analysis because it concluded that "data on foreign fisheries is likely incomplete or inaccurate." Thus, while the "spillover" effects data is compelling, I—like the agency—do not rely on it in assessing the reasonableness of NMFS's ultimate determination.

¹⁵ NMFS included in its analysis an assessment of "spillover" effects—i.e., the impact of the expanded domestic shallow-set fishery on foreign fisheries. NMFS found that without the expansion, foreign fisheries would move in and occupy the area. And because the implicated foreign nations generally have weaker environmental laws than does the United States, NMFS concluded "with reasonable certainty, that [under the agency action] there will be a reduction of [loggerhead and leatherback sea turtle] mortalities as a result of the spillover effect." NMFS estimated the reduction to be "11 fewer interactions in the central and north Pacific ... or four fewer [loggerhead and leatherback sea turtle] mortalities."

analysis of the record data in the BiOp supports NMFS's conclusion. The climate-based model showed that, in 99.5 percent of the tests, the loggerhead would fall below the quasi-extinction threshold ("QET") in 25 years without the proposed action. NMFS similarly found that "[w]hen the same model is run with the proposed action, the mortality of 1 adult female, the results are similar with 99.5% to 100% of the runs falling below the QET."¹⁶ Indeed, the model showed that while the proposed action would have a "detectable influence on the loggerhead population, there is no significant difference in the risk of extinction between the default, climate-based trends and the forecast considering the direct effects of the proposed action." In other words, the risk of extinction is virtually the same whether or not the shallow-set fishery is expanded. Accordingly, NMFS reasonably concluded that the proposed action would not "reduce appreciably the likelihood" of the loggerheads' "survival and recovery." See 50 C.F.R. § 402.02.

At any rate, the majority is simply wrong that NMFS relied on its conservative estimates to arrive at its nojeopardy conclusion. In fact, NMFS relied on (i) the results of the climate change model showing no statistically significant difference in the risk of extinction to the loggerhead with or without the proposed agency action; and

¹⁶ The additional loss of one adult female per annum from the proposed action results in a projected reduction in the overall population of 4 to 11 percent, due to a loss of that single turtle's "reproductive potential" over the course of generations. But, contrary to the majority's assessment, NMFS did not credit this numerical loss because it had low confidence in the data. NMFS noted that the estimated loss does "not account for the high mortality rate expected of these hatchlings from other sources, including climate-based threats." In other words, the reduction due to a loss of reproductive potential is significantly overstated.

(ii) a "qualitative analysis" reflecting that the loss of one additional female loggerhead per year would still allow the loggerhead population to "remain large enough to maintain genetic heterogeneity, broad demographic representation, and successful reproduction."¹⁷

Accordingly, because NMFS's path "may reasonably be discerned" and "a reasonable basis exists for its decision," I would affirm NMFS's loggerhead BiOp. *Pac. Coast Fed'n of Fishermen's Ass'ns v. Blank*, 693 F.3d 1084, 1091 (9th Cir. 2012) (internal quotation marks and citation omitted); *Bowman Transp., Inc. v. Arkansas-Best Freight System, Inc.*, 419 U.S. 281 (1974) ("[W]e will uphold a decision of less than ideal clarity if the agency's path may reasonably be discerned.").

As discussed, NMFS's no-jeopardy conclusion is not unreasonable even without considering the conservative nature of its inputs. Recognizing that those inputs are more conservative than actual conditions warrant therefore only weakens the majority's erroneous conclusion that NMFS's action is arbitrary and capricious. *See George v. Bay Area Rapid Transit*, 577 F.3d 1005, 1011 (9th Cir. 2009) ("The party challenging an agency's action as arbitrary and capricious bears the burden of proof").

¹⁷ NMFS's use of conservative data inputs is relevant not because it is the sole basis for its no-jeopardy conclusion (as discussed, it isn't), but because it reflects the reasonableness of its findings. For example, NMFS considered the lost "reproductive potential" of all "unborn hatchlings," even though hatchlings have a "high mortality rate." It also assumed that the shallow-set fishery would immediately operate at 5,500 sets every year, even though the increase is likely to be gradual over time. And its climate model did not incorporate the results of anticipated indirect effects—namely, beneficial "spillover" effects—of the domestic fishery's displacement of international fisheries.

CONCLUSION

FWS acted within its authority when it issued a special purpose permit to NMFS under the MBTA. Its decision aligns with past practice, is not "plainly erroneous or inconsistent with [50 C.F.R. § 21.27]," and comports with the MBTA's conservation-oriented purpose. The majority errs in holding otherwise. Similarly, NMFS's no-jeopardy finding for the loggerhead sea turtle is rationally related to the evidence in the record, satisfies its statutory obligation to consider direct, indirect, and cumulative impacts, and is faithful to our decision in *NWF*. Because we should uphold the MBTA Permit and the loggerhead BiOp, I must respectfully dissent.