

United States District Court
Northern District of California

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

<p>OCEANA, INC., Plaintiff, v. GINA RAIMONDO, et al., Defendants.</p>	<p>Case No. 21-cv-05407-VKD ORDER ON CROSS-MOTIONS FOR SUMMARY JUDGMENT Re: Dkt. Nos. 43, 44</p>
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Plaintiff Oceana, Inc. (“Oceana”), a non-profit ocean conservation and advocacy organization, sues Secretary of Commerce Gina Raimondo, the National Oceanic and Atmospheric Administration (“NOAA”), and the National Marine Fisheries Service (“NMFS”), challenging defendants’ management of the Pacific sardine under the Magnuson-Stevens Fishery Conservation and Management Act (“MSA”), 16 U.S.C. § 1801 *et seq.*, and the National Environmental Policy Act (“NEPA”), 42 U.S.C. § 4321 *et seq.*

After proceedings regarding completion of the administrative record, the parties filed cross-motions for summary judgment. Dkt. Nos. 43, 44. On July 11, 2023, the Court held a hearing on the motions. Dkt. No. 48. After the hearing, the parties stipulated to allow Oceana to file an amended complaint adding a challenge to NMFS’s 2023-2024 annual specifications for the Pacific sardine. *See* Dkt. Nos. 47, 50. They also agreed that defendants would file a supplemental administrative record regarding the annual specifications and that the parties would file supplemental briefs in support of their respective motions. *Id.*

In its operative complaint, Oceana claims that NMFS’s plan to rebuild the Pacific sardine’s population after it was declared overfished in 2019 violates the MSA because NMFS: (1) failed to

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1 set a reasonable rebuilding target for the sardine population based on the best available science
2 (claim 1); (2) failed to demonstrate, based on the best available science, that the plan will rebuild
3 the sardine population (claim 2); (3) failed to demonstrate, based on the best available science, that
4 the plan will prevent overfishing (claim 3); (4) failed to failed to consult regarding the plan’s
5 impact on essential fish habitat (claim 7); and (5) failed to demonstrate, based on the best available
6 science, that the 2023-2024 annual specifications will prevent overfishing or rebuild the sardine
7 population (claim 8). Dkt. No. 51 ¶¶ 140-161, 182-191. Oceana also claims that NMFS’s
8 approval of the plan violates NEPA because they: (1) failed to analyze the impacts of the
9 authorized action (claim 4); (2) failed to take a hard look at the plan’s impacts on sardine
10 population and marine predators (claim 5); and (3) failed to prepare an environmental impact
11 statement for the plan, even though the plan will have significant impacts on the environment
12 (claim 6). *Id.* ¶¶ 162-181.

13 Having considered the parties’ briefing and oral arguments, the Court grants Oceana’s
14 motion in part and denies it in part, and grants defendants’ cross-motion in part and denies it in
15 part.

16 **I. BACKGROUND**

17 **A. Statutory and Regulatory Background**

18 **1. The Magnuson-Stevens Fishery Conservation and Management Act**

19 After overfishing threatened the survival of some fish species, Congress enacted the
20 Magnuson-Stevens Fishery Conservation Act in 1976 to conserve and manage the fisheries off the
21 coasts of the United States. *See* 16 U.S.C. § 1801(a), (b). The MSA establishes eight regional
22 fishery management councils, each of which is charged with developing a “fishery management
23 plan” (“FMP”) for the fisheries in its region. 16 U.S.C. § 1852(a)(1), (h)(1). The regional
24 councils are assisted in the work of developing and amending fishery management plans by
25 scientific and statistical committees (“SSCs”) whose members must have “strong scientific or
26 technical credentials and experience.” 16 U.S.C. § 1852(g)(1)(A), (C).

27 FMPs must contain the conservation and management measures “necessary and
28 appropriate for the conservation and management of the fishery, to prevent overfishing and rebuild

1 overfished stocks, and to protect, restore, and promote the long-term health and stability of the
2 fishery.” 16 U.S.C. § 1853(a)(1)(A). FMPs must also comply with ten national standards,
3 including the requirements that conservation and management measures must “prevent overfishing
4 while achieving, on a continuing basis, the optimum yield from each fishery for the United States
5 fishing industry” (National Standard 1), and must “be based upon the best scientific information
6 available” (National Standard 2). 16 U.S.C. § 1852(a)(1), (2). The Secretary of Commerce has
7 promulgated regulations in the form of “advisory guidelines” based on these national standards “to
8 assist in the development and review of FMPs, amendment and regulations” prepared by the
9 regional councils. *See* 16 U.S.C. § 1851(b); 50 C.F.R. § 600.305 *et seq.*

10 Among many other requirements, FMPs must “establish a mechanism for specifying
11 annual catch limits . . . at a level such that overfishing does not occur in the fishery, including
12 measures to ensure accountability.” 16 U.S.C. § 1853(a)(15). FMPs must also “specify objective
13 and measurable criteria for identifying when the fishery . . . is overfished . . . and, in the case of a
14 fishery which [has been determined to be] overfished, contain conservation and management
15 measures to prevent overfishing or end overfishing and rebuild the fishery.” 16 U.S.C.
16 § 1853(a)(10). In addition, they must also “describe and identify essential fish habitat [(“EFH”)]
17 for [a] fishery” and “minimize to the extent practicable adverse effects on such habitat caused by
18 fishing.” 16 U.S.C. § 1853(a)(7).

19 NMFS, an agency of the United States Department of Commerce, has primary
20 responsibility for ensuring that the requirements of the MSA are followed and enforced.¹ *See Pac.*
21 *Dawn LLC v. Pritzker*, 831 F.3d 1166, 1170 (9th Cir. 2016).

22 2. National Environmental Policy Act

23 NEPA establishes a national policy to “encourage productive and enjoyable harmony
24 between man and his environment” and to “promote efforts which will prevent or eliminate
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27 ¹ The Secretary of Commerce is ultimately responsible for overseeing the proper administration
28 and implementation of the MSA. *See* 16 U.S.C. §§ 1802(39), 1851-1855. The Secretary has
delegated responsibility for ensuring compliance with the MSA to NMFS, an agency within
NOAA. *See Pac. Dawn LLC*, 831 F.3d at 1170.

1 damage to the environment and biosphere and stimulate the health and welfare of man.” 42
 2 U.S.C. § 4321. NMFS, as a federal agency, is bound by NEPA and its implementing regulations.
 3 42 U.S.C. § 4332; 40 C.F.R. § 1500.3.

4 An agency must take a “hard look” at the environmental effects of a proposed action,
 5 including considering all foreseeable direct and indirect impacts as well as cumulative impacts.
 6 *Ctr. for Biological Diversity v. Salazar*, 695 F.3d 893, 916-17 (9th Cir. 2012); *Robertson v.*
 7 *Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989); *see also* 42 U.S.C. § 4321. However,
 8 NEPA “imposes only procedural requirements on federal agencies” and “does not mandate
 9 particular results.” *Dep’t of Transp. v. Pub. Citizen*, 541 U.S. 752, 756 (2004) (quoting
 10 *Robertson*, 490 U.S. at 350).

11 Under NEPA, a federal agency must prepare an environmental impact statement (“EIS”)
 12 for any major federal action significantly affecting the human environment. 42 U.S.C. § 4332(C);
 13 40 C.F.R. § 1501.3(a)(3). If an action is not likely to have a significant impact on the environment
 14 or if the environmental impact is unknown, the agency must prepare an environmental assessment
 15 (“EA”). 40 C.F.R. § 1501.3(a)(2). An EA is a “concise, public document” providing “sufficient
 16 evidence and analysis” for the agency to determine “whether to prepare an environmental impact
 17 statement.” 40 C.F.R. § 1508.1(h). If the EA demonstrates that the action is likely to significantly
 18 impact the environment, then the agency must prepare an EIS. 40 C.F.R. § 1501.5(c)(1). If the
 19 EA demonstrates that the action is not likely to significantly impact the environment, then the
 20 agency must prepare a finding of no significant impact. 40 C.F.R. §§ 1501.6(a), 1501.5(c)(1).

21 **B. Management of the Pacific Sardine**

22 The northern subpopulation of Pacific sardine (“Pacific sardine”) is a small pelagic fish
 23 that travels in large schools. AR 12. This subpopulation is found off the west coast between
 24 southeast Alaska and the northern portion of Baja California in Mexico.² AR 12. The Pacific

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 27 ² A different subpopulation, the southern subpopulation of Pacific sardine, is found off the coast of
 28 southern California and the Baja California peninsula and overlaps with the northern
 subpopulation in southern California. AR 12. The southern subpopulation sardine is not managed
 by the NMFS under the MSA. *See* AR 12; Dkt. No. 44 at 5.

1 sardine is an important source of forage for larger fish, marine mammals, and seabirds. AR 24.
2 Multiple fisheries take the Pacific sardine, including (1) the primary directed commercial fishery,
3 which directly targets sardine at a large scale, (2) the live bait fishery, which harvests sardines for
4 bait, (3) the minor direct fishery, comprised of small-scale fishing that directly targets sardines, (4)
5 the tribal fishery, which includes directed fishing by Native American tribes, and (5) fisheries that
6 target other fish species, but catch sardines incidentally.³ AR 16-19.

7 The Pacific sardine population naturally fluctuates in abundance and productivity over
8 time. AR 12. Overfishing can occur at any time, but fishing during a period of low abundance
9 and productivity may contribute to the rapid decline of the population and delay its recovery—
10 although scientists disagree regarding the extent to which fishing impacts sardine population
11 fluctuations. AR 15, 5823, 6323, 6339, 6371. For example, scientists agree that a natural decline
12 in sardine population, combined with overfishing, led to the sudden collapse of the Pacific sardine
13 fishery in the 1950s. AR 15-16, 6320, 6339. More recently, the population of Pacific sardine
14 peaked in 2006 with an estimated biomass of over 1.5 million metric tons (“mt”),⁴ after which it
15 declined significantly over the next several years to an estimated biomass of only 28,276 mt in
16 2020. AR 15-16; AR 28 (graph showing sardine biomass 2005-2019).

17 The Pacific Fishery Management Council (“the Council”) is the regional council
18 responsible for fisheries off the coasts of California, Oregon, and Washington. 16 U.S.C.
19 § 1852(a)(1)(F). Effective January 1, 2000, the Council amended its Coastal Pelagic Species
20 Fishery Management Plan (“CPS FMP”) to cover the Pacific sardine. AR 12, 1939, 5442. Like
21 all FMPs, the CPS FMP must “prevent overfishing” while also achieving the “optimum yield”
22 from the fishery on a sustained basis. *See* 16 U.S.C. § 1851(a)(1).

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25 ³ In addition, some sardine fishing is exempt from regulation and is permitted for scientific
26 purposes. *See* AR 5462.

27 ⁴ Sardine populations may be described in terms of metric tons of biomass. There are two
28 different ways to measure biomass. “Spawning biomass” measures sardines two years or older,
when the fish become old enough to reproduce, while “1+ biomass” measures sardines one year or
older. Dkt. No 43 at 13 n.4; Dkt. No. 44 at 20 n.7; AR 6150. Unless otherwise stated, this order
uses “biomass” to refer to the “1+ biomass” measure.

1 The MSA defines “overfishing” as a “rate or level of fishing mortality that jeopardizes the
2 capacity of a fishery to produce the maximum sustainable yield on a continuing basis.” 16 U.S.C.
3 § 1802(34). The “optimum yield” of a fishery is “the amount of fish” that “will provide the
4 greatest overall benefit to the Nation, particularly with respect to food production and recreational
5 opportunities,” while “taking into account the protection of marine ecosystems.” 16 U.S.C.
6 § 1802(33)(A). The optimum yield is meant to be “the maximum sustainable yield from the
7 fishery, as reduced by any relevant social, economic, or ecological factor.” 16 U.S.C.
8 § 1802(33)(B). The “maximum sustainable yield” or “MSY” is defined by regulation as “the
9 largest long-term average catch” that can be taken from a stock “under prevailing ecological,
10 environmental conditions and fishery technological characteristics.” 50 C.F.R. § 600.310(b)(2)(i),
11 (e)(1)(i)(A). If a fishery is “overfished,” the optimum yield means “the amount of fish” that
12 “provides for rebuilding to a level consistent with producing the maximum sustainable yield in
13 such fishery.” 16 U.S.C. § 1802(33)(C).

14 Closely related to MSY are exploitation rate at maximum sustainable yield (“ E_{MSY} ”),
15 which is “the fishing mortality *rate* that, if applied over the long term, would result in MSY,” and
16 biomass at maximum sustainable yield (“ B_{MSY} ”), which is “the long-term average *size* of the stock
17 or stock complex . . . that would be achieved by fishing at [E_{MSY} .]” 50 C.F.R.
18 § 600.310(e)(1)(i)(B)-(C) (emphasis added).

19 To prevent overfishing, an FMP must “specify objective and measurable criteria for
20 identifying when the fishery to which the plan applies is overfished.” 16 U.S.C. § 1853(a)(10).
21 One such measure is an overfishing limit (“OFL”), which is the annual amount of catch “above
22 which overfishing is occurring.” 50 C.F.R. § 600.310(e)(2)(i)(C), (D). To prevent overfishing,
23 regulators set annual catch limits below the OFL, using two additional measures: the acceptable
24 biological catch and annual catch limits. Acceptable biological catch (“ABC”) reflects an
25 adjustment to OFL “to account for scientific uncertainty in the estimate of OFL.” 50 C.F.R.
26 § 600.310(f)(1)(ii). The annual catch limit (“ACL”) is the maximum amount of fish that may be
27 caught each year for the fishery and serves as the trigger for invoking accountability measures. 50
28 C.F.R § 600.310(f)(1)(iii); 16 U.S.C. § 1853(a)(15). The ACL “cannot exceed” the ABC and may

1 be set lower because of “ecological, economic, and social factors” to ensure the optimum yield
 2 from a fishery. 50 C.F.R. § 600.310(f)(1)(iii), (f)(4)(i), (f)(4)(iv); *see also* 16 U.S.C. § 1851(a)(1).
 3 To account for uncertainty and ensure that catch does not exceed the ACL, an annual catch target
 4 (“ACT”) may also be set. 50 C.F.R. § 600.310(g)(4).

5 In addition to requiring calculation of catch limits using these measures, the CPS FMP
 6 adopts two different management approaches for the Pacific sardine depending on whether the
 7 sardine population is above or below a “cutoff” biomass level of 150,000 mt. AR 8-9, 5475-76. If
 8 the stock has an estimated biomass of more than 150,000 mt, NMFS uses a “harvest guideline” to
 9 set the catch limit for the year, which is based on the stock’s estimated biomass, reduced by
 10 150,000 mt. AR 5474-76. Typically, the harvest guideline will produce a lower catch limit than
 11 the limit calculated using the OFL/ABC measures. AR 5474-76. If the stock has an estimated
 12 biomass at or below the 150,000 mt cutoff, NMFS automatically closes the primary directed
 13 commercial fishery, which eliminates the main source of Pacific sardine removals, and then sets
 14 an annual catch limit for the remaining fisheries using the OFL/ABC measures. AR 5443, 5474-
 15 76.

16 **C. Overfishing and Development of the Pacific Sardine Rebuilding Plan**

17 In 2015, Pacific sardine biomass fell below 150,000 mt. AR 7. As required by the CPS
 18 FMP, NMFS closed the primary directed commercial fishery. AR 7, 16. Although the live bait,
 19 minor directed, and tribal fisheries remained open, and the incidental harvest of sardines by
 20 fisherman targeting other species continued, AR 16-18, the closure of the primary directed
 21 commercial fishery had a substantial impact on the amount of catch, AR 20. The annual Pacific
 22 sardine catch fell from 19,440 mt in the 2014-2015 fishing year to 2,329 mt in the 2015-2016
 23 fishing year.⁵ AR 7, 20. Over the next several years, while the primary directed commercial
 24 fishery remained closed, the annual catch averaged approximately 2,200 mt. AR 20.

25 As required by the MSA, the CPS FMP specifies a threshold for determining when the
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27 ⁵ These figures include all sardine catch in the United States, of which the northern subpopulation
 28 sardine is only a portion. *See* AR 13, 15.

1 Pacific sardine is overfished—here, 50,000 mt. AR 5476; 16 U.S.C. § 1853(a)(10). An April
2 2019 stock assessment showed that Pacific sardine biomass had fallen below 50,000 mt. AR 6,
3 3118. In June of 2019, NMFS declared the Pacific sardine overfished, triggering NMFS’s and the
4 Council’s obligation under the MSA to prepare and implement a rebuilding plan. AR 6101-02;
5 *see also* 16 U.S.C. § 1854(e).

6 Once the NMFS identifies a fishery as overfished, the responsible regional council is given
7 two years to “prepare and implement a fishery management plan, plan amendment, or proposed
8 regulations” to prevent or end or prevent the overfishing. 16 U.S.C. § 1854(e)(3). The plan must
9 “specify a time period for rebuilding the fishery” that is “as short as possible, taking into account
10 the status and biology of any overfished stocks of fish, the needs of fishing communities, . . . and
11 the interaction of the overfished stock of fish within the marine ecosystem.” 16 U.S.C.
12 § 1854(e)(4)(i). This period may “not exceed 10 years, except in cases where the biology of the
13 stock of fish [or] other environmental conditions . . . dictate otherwise.” 16 U.S.C.
14 § 1854(e)(4)(ii); *see also Nat. Res. Def. Council, Inc. (“NRDC”) v. NMFS*, 421 F.3d 872, 879-81
15 (9th Cir. 2005) (describing 16 U.S.C. § 1854(e)(4)’s requirements).

16 To ensure that its rebuilding plan complied with 16 U.S.C. § 1854(e), the Council first had
17 to set a rebuilding target—i.e. the level of sardine population at which rebuilding would be
18 deemed a success. The Council’s SSC used a model called “Rebuilder” to estimate the Pacific
19 sardine’s B_{MSY} under low and moderate productivity levels, drawing on sardine recruitment data
20 from 2005 to 2018. AR 36, 48, 50-51. Under low productivity conditions, modeled on data from
21 2010 to 2018, the SSC estimated a B_{MSY} of 38,112 mt spawning biomass (which is roughly
22 equivalent to 48,994 mt 1+ biomass).⁶ AR 36. Under moderate productivity levels, modeled on
23 data from 2005 to 2018, the SSC estimated a B_{MSY} of 137,812 mt spawning biomass (which is
24 roughly equivalent to 169,929 mt 1+ biomass). AR 36. The SSC recommended that the Council
25 set the rebuilding target at the median of the two values, a B_{MSY} of 116,374 mt spawning biomass

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28 ⁶ For these calculations, the Court assumes that the ratio of spawning biomass to +1 biomass
approximates that reported at AR 37.

1 (which is roughly equivalent to 143,495 mt 1+ biomass). AR 37. The Council chose a target of
2 150,000 mt 1+ biomass, equivalent to 121,650 mt spawning biomass, explaining that it was
3 slightly above the SSC's recommendation and consistent with the cutoff threshold already used in
4 the FMP. AR 37.

5 After setting the rebuilding target, the Council formulated and analyzed three potential
6 rebuilding plans for the Pacific sardine. AR 6-7. Alternative 1 ("Status Quo Management")
7 would adopt and maintain all existing management measures and rules already in place for the
8 Pacific sardine. AR 8. Alternative 2 ("Zero U.S. Harvest Rate") would eliminate all Pacific
9 sardine fishing under U.S. jurisdiction, including complete closure of the remaining fisheries that
10 target Pacific sardine. AR 9. Alternative 3 ("Five Percent Fixed U.S. Harvest Rate") would set
11 the annual catch limit for the Pacific sardine at 5% of the stock's biomass for the year, bypassing
12 the other formulas in the CPS FMP. AR 9.

13 To predict the effects the alternative proposals would have on the Pacific sardine
14 population over time, the Council again used the Rebuilder model. AR 10. The SSC modeled
15 how long it would take each proposal to rebuild the sardine, defined as the point at which there
16 was a 50% or greater probability that sardine biomass would exceed the target. *See* AR 14, 45-56.
17 Each proposal was modeled under both moderate and low productivity conditions. AR 10-11.
18 The model did not eliminate the uncertainty caused by sardine's natural fluctuations in population.
19 As the Council noted, because "Pacific sardine recruitment and productivity are largely driven by
20 environmental conditions, which cannot be accurately predicted, . . . the modeling results [] have
21 limitations in informing realistic rebuilding timelines." AR 10. Even so, the SSC endorsed the
22 use of the Rebuilder model to analyze the sardine's recovery. AR 3667.

23 For Alternative 2, where no fishing was allowed, the model predicted rebuilding would
24 require 12 years. AR 14. For Alternative 3, where the annual catch was limited to 5% of biomass,
25 the model predicted rebuilding would require 16 years, assuming that the full amount of catch
26 permitted was taken each year. AR 14-15. For Alternative 1, which contemplated the level of
27 catch currently permitted under the CPS FMP would be allowed to continue, the model predicted
28 rebuilding *would never occur*, assuming the full ABC would be taken each year. AR 14.

1 However, the Council decided to model Alternative 1 a second time using a different assumption;
2 rather than assuming an annual catch up to the limit of ABC, it assumed the annual catch would be
3 2,200 mt per year, consistent with the actual average catch for the proceeding five years, which
4 was significantly below the ABC. AR 14, 20. This time, the model predicted rebuilding would
5 require 17 years. AR 14. Comparing the revised rebuilding timeline for Alternative 1 with the
6 timelines for the two other alternatives, the Council reasoned that it was “unclear” whether
7 Alternative 3 “would allow the stock to realistically rebuild any faster” than Alternative 1, noting
8 that there was only a one-year difference between the projected rebuilding timelines for these two
9 alternatives. AR 15. The Council observed that “the rebuilding timeline under Alternative 3 is
10 expected to be longer than the 12 years for Alternative 2, but potentially shorter than the 16 years
11 initially modeled.” AR 15. But, it ultimately concluded that “no management alternative is
12 expected to significantly impact the ability of the Pacific sardine resource to rebuild in the near or
13 long term, as fishing mortality is not the primary driver of stock biomass.” AR 15.

14 Having modeled the rebuilding timelines for the three alternatives, the Council then
15 considered the impact of each alternative on the fishing industry. Because the primary directed
16 commercial fishery would remain closed until the rebuilding target was reached under all three
17 plans, the Council focused its analysis on the smaller fisheries that had remained open after the
18 cutoff was reached in 2015, most notably the live bait fishery, the minor directed fishery, and the
19 incidental harvest of sardines by other fisheries.⁷ See AR 16. According to the Council, under
20 Alternative 1, these fisheries would experience “minimal” negative impacts; under Alternative 2,
21 they would be “severely and adversely impacted,” until sardine biomass was rebuilt and fishing
22 was permitted again; and under Alternative 3, “there would inevitably be negative economic
23 impacts to the smaller-scale fishery sectors when biomass is at 50,000 mt and below.” AR 19-21.
24 Weighing these considerations, the Council determined that “Alternative 3 would impose
25 unnecessary economic impact to the industry with minimal change in the rebuilding timeline.”
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28 ⁷ Of the three fisheries, the live bait fishery is the largest, catching an average of 2,522 mt of
sardines per year between 2005 and 2015. AR 17-18.

1 AR 23.

2 As required by NEPA, the Council also considered the environmental impacts of the three
 3 alternative proposals. It noted that Pacific sardine is prey for “several commercially important
 4 marine fishes,” including salmon and tuna. AR 24. It also acknowledged that sardines are forage
 5 for two endangered species, the marbled murrelet and the humpback whale. AR 24. However, the
 6 Council concluded that “none of the proposed management alternatives are expected to
 7 significantly affect forage availability, as most Pacific sardine predators are generalists that are not
 8 dependent on the availability of a single species but rather on a suite of species, any one (or more)
 9 of which is likely to be abundant each year.” AR 27.

10 Based on these analyses, in September 2020 the Council selected Alternative 1 as its
 11 preferred alternative. AR 4911. The Council then a proposed an amendment, Amendment 18, to
 12 the CPS FMP incorporating Alternative 1, and transmitted the proposed amendment to NMFS for
 13 approval in January of 2021. AR 4324. NMFS solicited public comment on the proposed
 14 amendment. AR 3113; 86 Fed. Reg. 14,401. Oceana urged the agency not to approve it, arguing
 15 that Amendment 18 violated the MSA and the APA. *See* AR 5279. Several fishing industry
 16 groups filed comments in support of the amendment. *See* AR 4877, 4881, 4904. NMFS approved
 17 the amendment on June 14, 2021. AR 4910, 4883. Along with its approval, the agency issued a
 18 finding of no significant impact under NEPA. AR 158-63.

19 **D. 2023-2024 Annual Specifications**

20 The CPS FMP requires the Council and NMFS to set annual specifications, including the
 21 OFL, ABC, ACL, and accountability measures, for the Pacific sardine. AR 5479. Annual
 22 specifications are set after a rulemaking process including consultation with the SSC, a public
 23 meeting, and an opportunity for public comment. AR 5479-80.

24 On June 23, 2023, NMFS published in the Federal Register annual specifications “based
 25 on the annual specification framework, control rules, and management guidelines in the [CPS]
 26 FMP” for the Pacific sardine during the 2023-2024 fishing year.⁸ Dkt. No. 53-2 at 12-15; 88 Fed.

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 28 ⁸ The fishing year runs from July 1st of one year to June 30th of the next. *See* Dkt. No. 53-2 at 12.

1 Reg. 41,040-43. Based on a biomass estimate of 27,369 mt, the specifications included an OFL of
 2 5,506 mt, an ABC of 3,953 mt, an ACL of 3,953 mt, and an ACT of 3,600 mt. Dkt. No. 53-2 at
 3 13. The primary directed commercial fishery remained closed. *Id.* The 2023-2024 annual
 4 specifications also included the following management measures to limit live bait and incidental
 5 catch fishing: “(1) If landings in the live bait fishery reach 2,500 mt of Pacific sardine, then a 1-
 6 mt per-trip limit of sardine would apply to the live bait fishery. (2) An incidental per-landing limit
 7 of 20-percent (by weight) Pacific sardine applies to other CPS primary directed fisheries (*e.g.*,
 8 Pacific mackerel). (3) If the ACT of 3,600 mt is attained, then a 1-mt per-trip limit of Pacific
 9 sardine would apply to all CPS fisheries (*i.e.*, (1) and (2) would no longer apply). (4) An
 10 incidental per-landing allowance of 2 mt of Pacific sardine applies to non-CPS fisheries until the
 11 ACL is reached.” *Id.*

12 **II. STANDARD OF REVIEW**

13 Judicial review of agency decisions under the MSA and NEPA is governed by the APA’s
 14 standard of review. 16 U.S.C. § 1855(f)(1); *Oregon Trollers Ass’n v. Gutierrez*, 452 F.3d 1104,
 15 1116 (9th Cir. 2006) (MSA); *Native Ecosystems Council v. Dombeck*, 304 F.3d 886, 891 (9th Cir.
 16 2002) (NEPA). Agency action must be set aside if it is “arbitrary, capricious, an abuse of
 17 discretion, or otherwise not in accordance with law,” or if the agency acts without observing
 18 “procedure required by law.” 5 U.S.C. § 706(2)(A), (D). Agency action is arbitrary and
 19 capricious if “the agency has relied on factors which Congress has not intended it to consider,
 20 entirely failed to consider an important aspect of the problem, offered an explanation for its
 21 decision that runs counter to the evidence before the agency, or is so implausible that it could not
 22 be ascribed to a difference in view or the product of agency expertise.” *Motor Vehicle Mfrs. Ass’n*
 23 *v. State Farm Mutual Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (“*State Farm*”).

24 While a court must “conduct a ‘searching and careful’ inquiry” into the agency’s decision,
 25 *Native Ecosystems Council v. Weldon*, 697 F.3d 1043, 1050 (9th Cir. 2012) (quoting *Marsh v.*
 26 *Oregon Nat. Res. Council*, 490 U.S. 360, 378 (1989)), the scope of this review is narrow and “a
 27 court is not to substitute its judgment for that of the agency.” *Snoqualmie Valley Pres. All. v. U.S.*
 28 *Army Corps of Eng’rs*, 683 F.3d 1155, 1159 (9th Cir. 2012) (quoting *State Farm*, 463 U.S. at 43).

1 The court looks only to whether the agency “examined ‘the relevant data’ and articulated ‘a
2 satisfactory explanation’ for [its] decision, ‘including a rational connection between the facts
3 found and the choice made.’” *Dep’t of Com. v. New York*, 139 S. Ct. 2551, 2569 (2019) (quoting
4 *State Farm*, 463 U.S. at 43).

5 A court must defer to the expert agency in factual disputes, particularly “when the analysis
6 requires a high level of technical expertise.” *Selkirk Conservation All. v. Forsgren*, 336 F.3d 944,
7 954 (9th Cir. 2003). However, “the deference accorded an agency’s scientific or technical
8 expertise is not unlimited” and can be rebutted “when its decisions, while relying on scientific
9 expertise, are not reasoned.” *Brower v. Evans*, 257 F.3d 1058, 1067 (9th Cir. 2001).

10 Although courts routinely resolve APA challenges to an agency’s administrative decisions
11 by summary judgment, they need not conduct the traditional search for genuine disputes of
12 material fact, because “there are no disputed facts that the district court must resolve.” *Occidental*
13 *Eng’g Co. v. INS.*, 753 F.2d 766, 769 (9th Cir. 1985). Rather, “the function of the district court is
14 to determine whether or not as a matter of law the evidence in the administrative record permitted
15 the agency to make the decision it did.” *Id.*

16 **III. DISCUSSION**

17 **A. Whether Disputed Agency Action Is Subject to Judicial Review**

18 In their motion for summary judgment, defendants initially contended that this Court lacks
19 jurisdiction to decide Oceana’s claims. *See* Dkt. No. 44 at 12-15. Citing *Alaska Factory Trawler*
20 *Association v. Baldrige*, 831 F.2d 1456, 1464 (9th Cir. 1987), defendants argued that (1) the
21 MSA provides for judicial review only of regulations and “actions” taken to “implement a fishery
22 management plan,” and not FMPs themselves, *see id.* at 12-13 (quoting 16 U.S.C. § 1855(f)(1)-
23 (2)), and (2) judicial review is unavailable under the APA because an FMP is not a “final agency
24 action,” *see id.* at 13-15. Oceana responded that Amendment 18 is a regulation, or alternatively an
25 agency action, reviewable under the MSA and the APA. Dkt. No. 45 at 3-9.

26 However, the parties agree that the annual specifications implementing the FMP *are*
27 subject to judicial review, and defendants concede that if Oceana challenges the annual
28 specifications, that challenge may encompass the FMP amendment on which the specifications are

1 based. Dkt. No. 46 at 2, 6; *see also Oregon Trollers*, 452 F.3d at 1113 (“[A timely] petition . . . of
 2 an action may challenge both the action and the regulation under which the action is taken.”); *Gulf*
 3 *Fishermen’s Ass’n v. Gutierrez*, 529 F.3d 1321, 1323 (11th Cir. 2008) (same). Pursuant to the
 4 parties’ stipulation, Oceana filed an amended complaint that includes a challenge to the 2023-2024
 5 annual specifications. *See* Dkt. Nos. 50, 51. The parties agree that the amendment “eliminate[s]
 6 any dispute as to whether the Court has jurisdiction over this suit.” Dkt. No. 50 at ECF 2.

7 **B. Magnuson-Stevens Act Claims**

8 Oceana claims that in approving Amendment 18 and the 2023-2024 annual specifications
 9 implementing the amendment, NMFS violated the MSA in five ways: (1) it failed to set a
 10 reasonable rebuilding target for the sardine population (claim 1); (2) it failed to demonstrate that
 11 the rebuilding plan will rebuild the sardine population in the statutory timeframe (claim 2); (3) it
 12 failed to demonstrate that the plan will prevent overfishing (claim 3); (4) it failed to consult
 13 regarding the plan’s impact on essential fish habitat (claim 7); and (5) it failed to demonstrate that
 14 the 2023-2024 annual specifications will prevent overfishing or rebuild the sardine population
 15 (claim 8). Dkt. No. 51 ¶¶ 140-161, 182-191.

16 **1. Claim 1: Rebuilding Target**

17 Oceana claims that NMFS failed to use the best available science to set a rebuilding target
 18 for the Pacific sardine. *Id.* ¶¶ 140-147; Dkt. No. 43 at 12-15. It argues that the rebuilding target in
 19 Amendment 18 conflicts with the agency’s own scientific estimates of the long-term biomass
 20 necessary to support MSY. Specifically, Oceana contends that “the rebuilding target must reflect
 21 the long-term average B_{MSY} ,” and because the sardine population fluctuates over a period of about
 22 60 years, NMFS must estimate B_{MSY} using data from a 60-year population cycle or at least periods
 23 of both low and high productivity. *See* Dkt. No. 43 at 13-14 (citing 50 C.F.R.
 24 § 600.310(e)(1)(i)(C)). Oceana faults NMFS for calculating a B_{MSY} value based on data from a
 25 “shorter timeframe of 14 years (from 2005-2018) that only included years when sardine
 26 productivity was low,” when the agency had superior data for longer periods of time. *Id.* at 14.

27 Defendants respond that NMFS relied on the best available science when setting the
 28 rebuilding target at 150,000 mt biomass. Dkt. No. 44 at 20-22. They note that NMFS has never

1 specified a single B_{MSY} for the Pacific sardine because its population is subject to dramatic, natural
2 fluctuations. *Id.* at 20 (citing AR 3062). They also argue that the older B_{MSY} estimates proffered
3 by Oceana are “inconsistent with current conditions,” *id.* at 21, and that the applicable regulations
4 direct that MSY should be estimated “under prevailing ecological, environmental conditions,”
5 Dkt. No. 46 at 10 (citing 50 C.F.R. § 600.310(1)(i)(A)); *see also* AR 4928 (“[W]hen developing a
6 rebuilding plan it is important to consider the current environmental and/or reproductive
7 conditions the stock is experiencing.”). Finally, defendants emphasize that the B_{MSY} estimates and
8 the Rebuilder model used to calculate the estimates were reviewed and endorsed by the SSC,
9 reflect the best available science, and are therefore entitled to deference. Dkt. No. 44 at 20, 22
10 (citing AR 3667).

11 Once a fishery becomes overfished, the MSA requires NMFS to implement an FMP, FMP
12 amendment, or regulation to end overfishing immediately and rebuild the stock “to a level
13 consistent with producing the maximum sustainable yield in such fishery”—i.e. B_{MSY} . 16 U.S.C.
14 §§ 1802(33)(C), 1851(a)(1), 1854(e); 50 C.F.R. § 600.310(j)(3)(i); *see also* *AML Int’l, Inc. v.*
15 *Daley*, 107 F. Supp. 2d 90, 98 (D. Mass. 2000) (“The primary purpose of a rebuilding program for
16 overfished stock is to rebuild the stock to produce MSY on a continuing basis.”). NMFS’s MSA
17 regulations provide guidelines for “specifying MSY.” *See* 50 C.F.R. § 600.310(e)(1)(v).
18 “Ecological and environmental information should be taken into account,” when estimating MSY
19 or B_{MSY} and these values “should be re-estimated as required by changes in long-term
20 environmental or ecological conditions, fishery technological characteristics, or new scientific
21 information.” 50 C.F.R. § 600.310(e)(1)(v)(A), (B). These estimates “must be based on the best
22 scientific information available.” 50 C.F.R. § 600.310(e)(1)(v)(A); *see also* 16 U.S.C.
23 § 1851(a)(2). The guidelines also recognize that MSY estimates “will have some level of
24 uncertainty associated with them” and suggest that “[t]he degree of uncertainty in the estimates
25 should be identified, when practicable, . . . and should be taken into account when specifying the
26 ABC Control rule” and “[w]hen data are insufficient to estimate MSY directly, Councils should
27 adopt other measures of reproductive potential that can serve as reasonable proxies for [MSY or
28 B_{MSY}].” 50 C.F.R. § 600.310(e)(1)(v)(B), (D).

1 “Where scientific and technical expertise is necessarily involved in agency decision-
2 making, a reviewing court must be highly deferential to the judgment of the agency.” *Oregon*
3 *Trollers*, 452 F.3d at 1120 (quoting *Nat’l Wildlife Fed’n v. U.S. Army Corps of Eng’rs*, 384 F.3d
4 1163, 1174 (9th Cir. 2004). However, no deference is owed if the “agency’s decision is without
5 substantial basis in fact” or it “did not consider all the relevant factors and [] there is no rational
6 connection between the facts found and the determination made.” *Earth Island Inst. v. Hogarth*,
7 494 F.3d 757, 766 (9th Cir. 2007) (quoting *Fed. Power Comm’n v. Fla. Power & Light Co.*, 404
8 U.S. 453, 463 (1972) and *Pac. Coast Fed’n of Fishermen’s Ass’n, Inc. v. NMFS*, 265 F.3d 1028,
9 1034 (9th Cir. 2001)).

10 The Court concludes that NMFS’s decision to set the rebuilding target at 150,000 mt does
11 not violate the MSA or the APA. Oceana is correct that NMFS must set a target that reflects long-
12 term average B_{MSY} , but neither the MSA nor its implementing regulations defines “long-term” to
13 mean the entire productivity cycle of a species. *See generally* 50 C.F.R. § 600.310. More
14 importantly, neither the MSA nor its implementing regulations specifies whether, for a species
15 with natural productivity fluctuations like the Pacific sardine, the agency *must* set a target that
16 reflects periods of *both* low and high productivity, regardless of whether the stock is presently in a
17 natural period of low productivity, or conversely, high productivity. Rather, the guidelines
18 contemplate that *current* ecological and environmental conditions may be taken account in
19 estimating B_{MSY} . *See* 50 C.F.R. § 600.310(e)(1)(i), (v).

20 The rebuilding target adopted by NMFS is based on a rebuilding analysis prepared the
21 SSC, whose members must have “strong scientific or technical credentials and experience.” 16
22 U.S.C. § 1852(g)(1)(C); *see also* AR 45-56 (SSC rebuilding analysis). The SSC acknowledged
23 that the results of its rebuilding analysis “are difficult to interpret as the target biomass levels and
24 times to achieve rebuilding are strongly dependent on assumptions of the state of nature.” AR 53.
25 Likewise, the SSC noted that its analysis relies on data “represent[ing] a relatively narrow time
26 frame” and thus provides “a limited snapshot of the long-term population fluctuations.” AR 53.
27 Citing the Pacific sardine’s “highly variable recruitment success and related population abundance
28 based primarily on oceanographic factors,” the SSC also concluded that accurate projections of the

1 Pacific sardine’s population over a longer period could not be made. *See* AR 53 (“Detailed
2 understanding of the relationship between specific environmental drivers and a [small pelagic fish]
3 stock’s productivity is generally lacking or at the very least, refuted when evaluated over longer
4 time periods.”). Similarly, the SSC acknowledged that the rebuilding model it adopted also could
5 not accurately project the size of the Pacific sardine stock over a longer period. AR 54 (“[T]he
6 results presented here are likely to be more accurate in capturing short-term projected stock and
7 fishery dynamics as opposed to the longer term since there is an absence of critical environmental
8 data generally believed to be the underlying/overriding factors that influence this species’
9 population dynamics.”); *see also* AR 4928 (stating in response to Oceana’s comment that
10 “[a]lthough history and science have shown that the Pacific sardine population can recover quickly
11 when conditions are favorable . . . it is unknown when those conditions will change.”). In view of
12 these uncertainties, the SSC used data from a period of low and moderate productivity for
13 purposes of setting the rebuilding target, taking into account existing and reasonably anticipated
14 ecological and environmental conditions. Based on the SSC’s analysis, the NMFS concluded that
15 the Pacific sardine fishery can support a specified maximum average catch during a sustained
16 period of low productivity when the stock is at 150,000 mt. This reflects a reasoned determination
17 based on scientifically relevant data, rather than a “clear error of judgment,” *San Luis & Delta-*
18 *Mendota Water Auth. v. Jewell*, 747 F.3d 581, 601 (9th Cir. 2014) (quoting *Citizens to Pres.*
19 *Overton Park, Inc. v. Volpe*, 401 U.S. 402, 416 (1971)).⁹

20 On this record, the Court finds that NMFS did not ignore or disregard the best available
21

22 ⁹ Oceana argues that 150,000 mt “represents a vulnerable, low sardine population level,” Dkt. No.
23 43 at 15 (quoting AR 2590), and that by adopting this biomass as the rebuilding target
24 “Amendment 18 keeps the sardine population at levels too low to support either dependent
25 predators or the primary sardine fishery for half a century or more,” *id.* at 1, 12-15. Nothing in the
26 MSA or its implementing regulations prohibits NMFS from setting the rebuilding target at the
27 150,000 mt level, even if that is the same level at which NMFS has decided to automatically close
28 the primary directed fishery when biomass is declining. Defendants explain that NMFS adopted
the 150,000 mt cutoff as a conservative measure—a “precaution built into [the FMP’s]
framework”—that is intended to automatically protect the fishery from overfishing in the first
instance. Dkt. No. 44 at 22; *see also* AR 4924, 4928. As such, defendants argue—and the Court
agrees—there is no inherent inconsistency arising from the fact that NMFS set the cutoff and the
rebuilding target at the same level. *See* Dkt. No. 44 at 22.

1 science. While NMFS could have rationally relied on different data and/or different models in
 2 setting the rebuilding target, the agency has articulated a rational connection between the scientific
 3 evidence and its decision to set the rebuilding target at 150,000 mt. *See Oregon Trollers*, 452 F.3d
 4 at 1119 (“[W]e will uphold a regulation against a claim of inconsistency with a ‘national standard’
 5 under § 1851 if [NMFS] had a ‘rational basis’ for it.”).

6 Accordingly, the Court concludes that NMFS’s rebuilding target does not fail to use the
 7 best available science.

8 2. Claim 2: Failure to Rebuild Within Statutory Timeframe

9 Oceana claims that defendants have failed to demonstrate that Amendment 18 will rebuild
 10 the sardine population. Dkt. No. 51 ¶¶ 148-155. It argues that NMFS’s modeling of the plan’s
 11 effects assumes that only 2,200 mt of sardine will be caught each year, while NMFS has
 12 implemented no measures to ensure that catch will not exceed this level. Dkt. No. 43 at 17; Dkt.
 13 No. 55 at 3. Defendants respond that the assumptions underlying its modeling are sound because
 14 the existing conservation and management measures result in a real-world Pacific sardine catch
 15 consistent with these assumptions. Dkt. No. 44 at 16-19; Dkt. No. 54 at 2.

16 After a fishery has been identified as overfished, the MSA requires the Council to develop
 17 a rebuilding plan that specifies a time period for rebuilding that is “as short as possible,” taking
 18 into account, among other factors, “the status and biology of any overfished stocks of fish” and
 19 “the needs of fishing communities.” 16 U.S.C. § 1854(e)(4)(A)(i). The rebuilding period may not
 20 exceed 10 years, unless “the biology of the stock of fish” or “other environmental conditions”
 21 dictate otherwise. 16 U.S.C. § 1854(e)(4)(A)(ii). If the rebuilding period must exceed 10 years,
 22 NMFS may still take into account the needs of fishing communities “so long as the weight given is
 23 proportionate to the weight the Agency might give to such needs in rebuilding periods under 10
 24 years.” *NRDC v. NMFS*, 421 F.3d at 881. Regulations implementing the MSA require NMFS to
 25 estimate the minimum and maximum times required for rebuilding the stock, and to select a time
 26 that is within the resulting range. *See* 50 C.F.R. § 600.310(j)(3)(i). The minimum time period is
 27 the amount of time it can be expected, with at least 50% probability, that the stock would reach
 28 B_{MSY} with no fishing mortality, while the maximum time is set at a default of 10 years, although it

1 may exceed 10 years if conditions require. 50 C.F.R. § 600.310(j)(3)(i)(A), (B).

2 In developing the rebuilding plan adopted by NMFS, the Council modeled how long it
3 would take to rebuild the Pacific sardine using three alternative approaches. As explained above,
4 it initially determined that if catch met the limit permitted in Alternative 1 (i.e. ABC, which was
5 calculated as 4,288 mt in 2020-2021), then the Pacific sardine biomass would never¹⁰ reach the
6 rebuilding target. AR 14, 22. By contrast, the Council determined that biomass would reach the
7 rebuilding target in 12 years under Alternative 2 (i.e. no fishing mortality), and in 16 years under
8 Alternative 3 (i.e. an ACL of 5% of biomass, which was calculated as 1,414 mt in 2020-2021).
9 AR. 14, 22. Thereafter, it modeled Alternative 1 again, this time assuming that only 2,200 mt of
10 sardines would be caught each year, consistent with the average sardine catch for the preceding
11 five years, even though the ABCs during those years ranged from 4,514 mt to 15,479 mt. See AR
12 14, 20. Under this assumption, the model predicted that Alternative 1 would rebuild the sardine
13 population in 17 years. AR 14. Because the Council viewed this 17-year period as “comparable”
14 to the 16-year period estimated for Alternative 3, and because Alternative 1 did not require
15 additional economically disruptive fishery closures, the Council and NMFS ultimately adopted
16 Alternative 1. See AR 23.

17 The Court agrees with Oceana that NMFS violated the MSA by assuming that the sardine
18 harvest would never reach the ABC or the ACLs authorized by the rebuilding plan. The statute
19 requires FMPs to “establish a mechanism for specifying annual catch limits in the plan (including
20 a multiyear plan), implementing regulations, or annual specifications, at a level such that
21 overfishing does not occur in the fishery, including measures to ensure accountability.” 16 U.S.C.
22 § 1853(a)(15). Specifically, NMFS and the regional councils must set “hard, science-based caps
23 on how many fish could be caught each year” and requires that those caps be backed by
24 “accountability measures [that are] triggered when fishermen exceeded those caps.” *Conservation*
25 *Law Found. v. Pritzker*, 37 F. Supp. 3d 254, 266 (D.D.C. 2014) (citing Magnuson-Stevens Fishery
26

27 _____
28 ¹⁰ The modeling period extended only through 2050, and the model projected the Pacific sardine
would not rebuild by that date. AR 14.

1 Conservation and Management Reauthorization Act of 2006, sec. 103, 104, Pub. L. No. 109-479,
2 120 Stat. 3575, 3580, 3584); *see also Oceana v. Locke*, 831 F. Supp. 2d 95, 119-20 (D.D.C. 2011)
3 (quoting 50 C.F.R. § 600.310(g)(3)) (“The Council *must* determine as soon as possible after the
4 fishing year if an ACL was exceeded. If an ACL was exceeded, [accountability measures] *must* be
5 triggered and implemented as soon as possible. . .”) (cleaned up, emphasis in original). The
6 legislative history of the 2006 amendments to the MSA suggests that Congress added this
7 requirement because it was dissatisfied with NMFS’s and the regional councils’ exercise of
8 discretion in the past and intended to further constrain their ability to exceed the SSC’s
9 recommendations. *Conservation Law Found. v. Pritzker*, 37 F. Supp. 3d at 266 (“Congress
10 fundamentally altered American fishing regulation by requiring regional fishing Councils to set
11 hard, science-based caps on how many fish could be caught each year. . . . [This] system was
12 necessary because the prior regime—which was less data driven—had resulted in continued
13 overfishing.”); *see also* 16 U.S.C. § 1852(h)(6) (requiring that ACLs not exceed the
14 recommendations of a council’s SSC).

15 Defendants argue that the MSA permits NMFS to rely on conservation and management
16 measures, in addition to annual catch limits, to achieve the agency’s rebuilding goals. Dkt. No. 44
17 at 18; Dkt. No. 46 at 9. They cite 16 U.S.C. § 1853(a)(10), which requires that FMPs “contain
18 conservation and management measures to prevent overfishing or end overfishing and rebuild the
19 fishery.” 16 U.S.C. § 1853(a)(10). According to defendants, management measures, like those
20 implemented in the 2023-2024 annual specifications, “form the core of the rebuilding plan.” Dkt.
21 No. 54 at 1; *see also* Dkt. No. 53-2 at 13 (2023-2024 management measures). They claim that
22 because “[c]hanges to the OFL and annual catch limits will not have an on-the-ground effect when
23 the management measures are already limiting the fishery to landing only 1% of NSP sardine
24 biomass,” these measures validate the rebuilding timeframe modeled for Alternative 1. Dkt. No.
25 54 at 3.

26 However, NMFS may not avoid the “[e]xpress limits set by Congress” in the MSA’s
27 ABC/ACL requirement. *See Conservation Law Found. v. Pritzker*, 37 F. Supp. 3d at 266. While
28 the CPS FMP contains conservation and management measures that may have the practical effect

1 of significantly limiting sardine harvest, as Oceana points out, the agency’s own regulations make
 2 clear that an agency *must* use ABCs, from which ACLs are derived, to rebuild the fishery, even if
 3 other measures are also employed. *See* Dkt. No. 45 at 13; 50 C.F.R. § 600.310(f)(3)(ii) (“For
 4 overfished stocks and stock complexes, a rebuilding ABC *must* be set to reflect the annual catch
 5 that is consistent with the schedule of fishing mortality rates (i.e., F_{rebuild}) in the rebuilding plan.”)
 6 (emphasis added). These regulations are entitled to “considerable deference.” *Guindon v.*
 7 *Pritzker*, 31 F. Supp. 3d 169, 198 (D.D.C. 2014). Moreover, defendants’ argument that
 8 conservation and management measures adequately constrain the *fishery* does not address the fact
 9 that the MSA’s ACL requirement is intended to constrain the *regulators*—i.e. NMFS and the
 10 regional councils—as well. *See Conservation Law Found. v. Pritzker*, 37 F. Supp. 3d at 266.

11 In assessing Alternative 1 the second time, NMFS modeled an annual catch—2,200mt—
 12 that was substantially less than the catch limits set in Alternative 1. The FMP does not expressly
 13 limit harvest to 2,200 mt nor does the FMP require NMFS to set annual specifications that do not
 14 exceed this level. *See* Dkt. No. 55 at 3; AR 5476; Dkt. No. 53-2 at 6, 13. In effect, NMFS
 15 modeled *an entirely different* alternative and then relied on *that* modeling as support for
 16 Alternative 1. *See* Dkt. No. 43 at 17. This approach to evaluating Alternative 1—the alternative
 17 the agency ultimately adopted as Amendment 18—was arbitrary and capricious and not in
 18 accordance with the law. *Oceana v. Ross*, 483 F. Supp. 3d 764, 785 (N.D. Cal. 2020) (rejecting
 19 agency’s argument that ACLs would prevent overfishing because past harvests fell below the
 20 levels authorized by the ACLs); *see also Oceana v. Locke*, 670 F.3d 1238, 1243 (D.C. Cir. 2011)
 21 (“When a statute commands an agency without qualification to carry out a particular program in a
 22 particular way, the agency’s duty is clear; if it believes the statute untoward in some respect, then
 23 it should take its concerns to Congress, for in the meantime it must obey the statute as written.”)
 24 (cleaned up).

25 Accordingly, the Court concludes that Amendment 18 violates the MSA because it does
 26 not set catch limits that will rebuild the Pacific sardine population within the statutory timeframe.

27 3. Claim 3: Failure to Prevent Overfishing

28 Oceana claims that Amendment 18 will not prevent overfishing, as required by the MSA.

1 Dkt. No. 51 ¶¶ 156-161. Specifically, Oceana argues that the formula NMFS used to calculate
2 E_{MSY} for the Pacific sardine, which is based on a set of ocean temperature measurements made by
3 the California Cooperative Oceanic Fisheries Investigations (“CalCOFI”), is scientifically
4 unsound and overstates the stock’s productivity. Dkt. No. 43 at 18-20. According to Oceana,
5 NMFS’s use of the CalCOFI data produces artificially high OFLs that do not reliably indicate
6 when overfishing has occurred. Dkt. No. 45 at 19.

7 Defendants respond that while the current methodology for calculating E_{MSY} is imperfect,
8 NMFS’s estimates are nevertheless based on the best scientific information available. *See* Dkt.
9 No. 44 at 24; Dkt. No. 54 at 2. They acknowledge that “the SSC has recommended additional
10 investigation” into the use of the CalCOFI data to estimate E_{MSY} , but defendants maintain that the
11 SSC “has *not* . . . found that evidence sufficient to recommend a change for this fishing year.”
12 Dkt. No. 54 at 2 (emphasis in original).

13 As noted above, overfishing refers to a rate of fishing mortality “that jeopardizes the
14 capacity of a fishery to produce the maximum sustainable yield on a continuing basis.” 16 U.S.C.
15 § 1802(34). “The overfishing limit is the numerical instantiation of this concept”—i.e. catch
16 levels above the limit constitute overfishing. *Oceana v. Coggins*, 606 F. Supp. 3d 920, 933 (N.D.
17 Cal. 2022). E_{MSY} is the maximum rate of fishing that can occur over time without causing
18 overfishing. *Id.*; 50 C.F.R. § 600.310(e)(1)(i). Like all aspects of an FMP, OFLs must be
19 determined using the best available science. 16 U.S.C. § 1851(a)(1).

20 Oceana’s critique of NMFS’s use of the CalCOFI data finds support in the administrative
21 record. In April of 2021, during the process of setting the 2021-2022 annual specifications, both
22 the Council’s SSC and the Coastal Pelagic Species Management Team, noted serious concerns
23 regarding the E_{MSY} estimates calculated from the CalCOFI data. The SSC stated: “There are
24 several urgent research priorities to consider revisiting to better inform the next benchmark
25 assessment. The SSC strongly recommends that these issues be addressed in time for the next
26 benchmark assessment. . . . The value for E_{MSY} based on the CalCOFI temperature index suggests
27 a productive stock but this is not evident from recent assessments, suggesting the need to re-
28 evaluate the best way to calculate E_{MSY} for the northern subpopulation sardine stock.” AR S-

1 1618. The Management Team stated: “The CPSMT recommends evaluation of the E_{MSY} term
2 based on the [CalCOFI] temperature index because it no longer appears to adequately reflect
3 sardine productivity. . . . This environmental proxy was designed to reflect stock productivity, yet
4 it has been near that upper cap for the last five years, while the most recent benchmark assessment
5 stated that actual recruitments have been some of the lowest on record during that same time
6 period.” AR S-498-99. When Oceana raised this issue in a comment on the proposed rebuilding
7 plan that became Amendment 18 in June of 2021, NMFS responded that it was monitoring the
8 situation, but that a change was not yet warranted. AR 4926-27 (“NMFS is aware of the scientific
9 publications and ongoing Council discussions related to E_{MSY} , and is committed to participating in
10 these ongoing discussions about new science, and whether that new science justifies a change for
11 how E_{MSY} is calculated for management purposes. . . . If a change is determined to be necessary,
12 NMFS will promulgate a new action that will go through the proper Council process and will
13 include public input during the Council process and during NMFS’[s] subsequent rulemaking
14 process.”).

15 Despite the acknowledged flaws in this methodology, when NMFS calculated E_{MSY} for use
16 in the 2023-2024 annual specifications, it continued to rely on the CalCOFI data. Dkt. No. 53-2 at
17 60. Defendants point out that the SSC approved the use of this data. *Id.* at 60. However, the
18 SSC’s own comments reflect its continued concerns about NMFS’s use of this data, including its
19 recommendations that something be done to address the concerns: “The SSC noted last year that
20 since this [harvest control rule] was revised in 2013, the temperature has suggested an E_{MSY} close
21 to the upper end of the recommended range, despite evidence for low productivity and abundance
22 since that time. The SSC recommends that a workshop be convened to revisit the analysis and
23 assumptions that have been used to inform the NSP Pacific sardine [harvest control rule], as there
24 continues to be evidence that the adopted relationship between sardine productivity and ocean
25 temperatures is not currently valid.” *Id.* at 60-61. So far, NMFS has not taken the recommended
26 action.

27 The question presented is whether, in setting an overfishing limit in Amendment 18,
28 NMFS relied on the best available science. Oceana does not propose a specific alternative to

1 NMFS’s use of the CalCOFI data to calculate E_{MSY} ; instead, it argues that NMFS should set limits
2 that do not rely exclusively on E_{MSY} . Dkt. No. 55 at 2. The Court agrees. While the agency has a
3 statutory obligation to “assess and specify the present and probable future condition of, and the
4 maximum sustainable yield . . . from the fishery,” 16 U.S.C. § 1853(a)(3), neither the MSA nor its
5 implementing regulations require the agency to adopt, without adjustment, the results of its E_{MSY}
6 calculation as the overfishing limit. *See* 50 C.F.R. § 600.310(e)(2) (guidelines for setting “status
7 determination criteria” for overfishing). Rather, the MSA requires NMFS to “specify objective
8 and measurable criteria for identifying when the fishery to which the plan applies is overfished
9 (with an analysis of how the criteria were determined and the relationship of the criteria to the
10 reproductive potential of stocks of fish in that fishery).” 16 U.S.C. § 1853 (a)(10); 50 C.F.R.
11 § 600.310(e)(2).

12 The best available science demonstrates that the CalCOFI data does not yield a reliable
13 measure of Pacific sardine productivity in existing or anticipated conditions. It is not that the
14 scientific information is “uncertain” or has “gaps.” Rather, the record reflects that use of the
15 CalCOFI temperature index to calculate E_{MSY} consistently and materially overstates the
16 productivity of the Pacific sardine. The SSC has expressed doubts about use of the CalCOFI data
17 for several years and most recently describes the NMFS calculation that relies on that data as “not
18 currently valid.” Dkt. No. 53-2 at 61. And while the SSC identified this issue as an “urgent
19 research priorit[y]” in 2021, NMFS has made no changes to its E_{MSY} formula. AR S-1618; Dkt.
20 No. 53-2 at 60-61. The Court appreciates that developing a new E_{MSY} model for the Pacific
21 sardine is a time-consuming and resource-intensive endeavor, but there appears to be no
22 reasonable justification for NMFS’s continued reliance on an E_{MSY} value without addressing, in
23 any way, the unreliability of its methodology when setting the overfishing limit. *See* 50 C.F.R.
24 § 600.315(a)(2) (“Scientific information that is used to inform decision making should include an
25 evaluation of its uncertainty and identify gaps in the information. Management decisions should
26 recognize the . . . risks associated with the sources of uncertainty and gaps in the scientific
27 information.”). NMFS “cannot use insufficient evidence as an excuse” when “*all* of the evidence”
28 before it indicates that its current methodology for calculating sardine E_{MSY} produces directionally

1 incorrect results. *See Brower*, 257 F.3d at 1071.

2 NMFS has failed to demonstrate that it relied on the best available science to set the
3 overfishing limits and that Amendment 18 will prevent overfishing.

4 **4. Claim 7: Essential Fish Habitats**

5 Oceana contends that NMFS failed to consult as required regarding Amendment 18’s
6 adverse effects on essential fish habits (“EFHs”). Dkt. No. 1 ¶¶ 175-179; Dkt. No. 43 at 20-21.
7 Defendants respond that NMFS determined Amendment 18 would have no adverse effects on
8 EFHs, and thus no consultation was required. Dkt. No. 44 at 24-25; Dkt. No. 46 at 14; *see also*
9 AR 4915.

10 The MSA requires that FMPs “minimize to the extent practicable adverse effects on
11 [EFHs] caused by fishing.” 16 U.S.C. § 1853(a)(7). This mandate applies to FMP amendments
12 and extends to EFHs designated under other FMPs. 50 C.F.R. § 600.815(a)(2)(ii). “Adverse
13 effect” means “any impact that reduces quality and/or quantity of EFH” and includes “individual,
14 cumulative, or synergistic consequences of actions.” 50 C.F.R. § 600.810(a). “[A]ctions that
15 reduce the availability of a major prey species . . . may be considered adverse effects on EFH.” 50
16 C.F.R. § 600.815(a)(7). In addressing adverse effects, an agency may apply its “expertise and
17 discretion in determining how best to manage fishery resources.” *Conservation Law Found. v.*
18 *Ross*, 374 F. Supp. 3d 77, 91 (D.D.C. 2019) (quoting *Conservation Law Found. v. Evans*, 360 F.3d
19 21, 28 (1st Cir. 2004)). NMFS need not adopt measures to minimize effects on EFHs when the
20 available scientific evidence suggests no such measures are required or that sufficient measures
21 are already in place. *See Am. Oceans Campaign v. Daley*, 183 F. Supp. 2d 1, 13 (D.D.C. 2000);
22 *Friends of Del Norte v. Cal. Dep’t of Transp.*, No. 18-CV-00129-JD, 2023 WL 2351649, at *11
23 (N.D. Cal. Mar. 3, 2023).

24 The MSA also requires federal agencies to consult with NMFS “with respect to any action
25 authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken” that may
26 “adversely affect” an EFH. 16 U.S.C. § 1855(b)(2); 50 C.F.R. § 600.920. The consultation
27 requirement applies to NMFS, as a federal agency, thereby requiring NMFS to consult with itself
28 regarding any action within the scope of the requirement. *See* AR 5432; *cf. Turtle Island*

1 *Restoration Network v. NMFS*, 340 F.3d 969, 974 (9th Cir. 2003) (noting that NMFS “must
2 consult within its own agency” to fulfil the Endangered Species Act’s consultation requirement).
3 When consulting on an action that may adversely affect EFHs, NMFS must provide an assessment
4 that includes an “analysis of the potential adverse effects of the action on EFH and the managed
5 species” as well as “alternatives that could avoid or minimize adverse effects on EFH.” 50 C.F.R.
6 § 600.920(e)(3) (ii), (iv). Consultation under the MSA may be consolidated and coordinated with
7 other review procedures, such as those required by NEPA. 50 C.F.R. § 600.920(f)(1).

8 Oceana argues that NMFS was required to consult with respect to the impact of
9 Amendment 18 on EFHs but failed to do so. Dkt. No. 43 at 21. Oceana’s premise is that
10 Amendment 18, and the annual specifications implementing it, “will keep sardines at low levels
11 for the foreseeable future,” which may adversely affect EFHs for marine predators, like
12 groundfish, tuna, sharks, and salmon, that rely on the Pacific sardine as a key food source. Dkt.
13 No. 45 at 20. Defendants respond that because Amendment 18 and the annual specifications rely
14 on existing management measures for the Pacific sardine, including application of the harvest
15 guidelines and closure of the primary directed commercial fishery, the amendment creates no new
16 fishing pressures and therefore no additional anticipated impacts to EFH. Dkt. No. 44 at 25; Dkt.
17 No. 46 at 14; *see also* AR 4915, 4929. In addition, defendants point to the results of an EFH
18 consultation in 2013 on which they continue to rely. Dkt. No. 44 at 25; AR 5432. Oceana objects
19 that the 2013 consultation “addresses a single year of fishery removals from a sardine population
20 that was an order of magnitude larger than it is now,” and addresses circumstances that are not at
21 all comparable to the FMP implemented by Amendment 18 and the annual specifications. Dkt.
22 No. 43 at 21.

23 In determining that adoption of Amendment 18 did not require consultation, NMFS
24 reasoned that because the primary directed fishery would remain closed for the foreseeable future
25 and other existing management measures would remain in place, Amendment 18 would have no
26 new or different adverse impacts on EFHs. *See* AR 4915-16 (“This action maintains the closure of
27 the primary directed fishery for Pacific sardine; therefore, [NMFS has] determined that this action
28 would have no adverse impact on any areas identified as EFH for U.S. fisheries[.]”). NMFS relied

1 on similar reasoning when it found that the 2023-2024 annual specifications would not adversely
 2 impact EFHs. Dkt. No. 53-2 at 21 (“Because this proposed action is prohibiting fishing by the
 3 primary directed fishery for sardine, there is no affected area. As such, the proposed action in this
 4 context will not have an adverse impact on EFH; therefore, an EFH consultation is not required.”).
 5 The rebuilding plan discusses the fact that Pacific sardine are important forage for marine
 6 predators, while observing that most such predators are generalists that also rely on other forage
 7 species, including some that are presently abundant and likely to be so in the future. AR 24-25;
 8 *see also* 4919-20. The agency also specifically considered that, under the amendment, fishing
 9 would remain at minimal levels, as required by the MSA, due to closure of the primary directed
 10 commercial fishery, and noted the scientific uncertainty regarding the extent to which fishing
 11 impacts natural sardine population fluctuations. AR 12-13, 4915, 4924, 4929. NMFS’s
 12 assessment that sufficient measures were in place to minimize fishing and protect EFHs because
 13 Amendment 18 and the annual specifications implemented existing constraints is rationally
 14 connected to the evidence in the record and consistent with the statutory and regulatory
 15 requirements.¹¹

16 In sum, NMFS’s determination that Amendment 18 and its annual specifications required
 17 no EFH consultation was not arbitrary and capricious, as NMFS did consider whether Amendment
 18 18 may adversely affect EFH and the agency’s conclusion that it would not is rationally connected
 19 to the factors it considered.

20 5. Claim 8: 2023-2024 Annual Specifications

21 In its amended complaint, Oceana challenges NMFS’s 2023-2024 annual specifications for
 22 the Pacific sardine. Dkt. No. 51 ¶¶ 187-191. These specifications “set annual catch levels for the
 23 Pacific sardine fishery based on the annual specifications framework, control rules, and
 24 management measures in the FMP.” Dkt. No. 53-2; 88 Fed. Reg. 41,040, 41,041. Oceana argues
 25

26 ¹¹ The Court agrees with Oceana that to the extent defendants rely on the 2013 EFH consultation,
 27 their reliance is not supported by the record. No one disputes that fishery conditions in 2013
 28 differed from fishery conditions at the time Amendment 18 was adopted, and there is no indication
 in the record that the findings reflected in the 2013 memorandum have any relevant bearing on the
 circumstances presented by Amendment 18. *See* AR 5432.

1 that the annual specifications fail to rebuild the sardine population and fail to prevent overfishing.
 2 Dkt. No. 51 ¶¶ 187-191. As discussed above, the annual specifications implement Amendment 18
 3 and provide Oceana with a vehicle to challenge it. *See Oregon Trollers*, 452 F.3d at 1115-16.
 4 And, as explained above, the Court concludes that NMFS has set a rebuilding target that does not
 5 violate the MSA, but that it has failed to demonstrate that the rebuilding plan will rebuild the
 6 sardine population in the statutory timeframe and that the plan will prevent overfishing. These
 7 conclusions apply equally to Oceana’s challenges to the annual specifications in claim 8.

8 C. NEPA Claims

9 Oceana claims that NMFS’s approval of Amendment 18 violated NEPA in three ways: (1)
 10 it failed to analyze the impacts of the authorized action (claim 4); (2) it failed to take a hard look at
 11 the plan’s impacts on the sardine population and marine predators (claim 5); and (3) it failed to
 12 prepare an environmental impact statement (claim 6). Dkt. No. 51 ¶¶ 162-181.

13 1. Claim 4: Action Analyzed Based on Incorrect Assumptions

14 Oceana contends that NMFS’s environmental assessment (“EA”) failed to analyze the
 15 impacts of the actions Amendment 18 authorizes because the agency assumed that only 2,200 mt
 16 of sardine would be caught each year under Alternative 1, rather than the higher amount permitted
 17 under the plan’s ABC or ACLs. Dkt. No. 51 ¶¶ 162-166. Like Oceana’s challenge to NMFS’s
 18 rebuilding plan in claim 2, this challenge relies principally on the agency’s assumption that the full
 19 ACLs would not be caught under Alternative 1. *See* Dkt. No. 43 at 22-25. Oceana argues that
 20 NMFS applied this assumption inconsistently in its environmental analysis, preventing both the
 21 agency and the public from making an informed assessment of the alternative plans. *Id.*
 22 Defendants disagree, arguing that it was reasonable for NMFS to consider what Alternative 1’s
 23 actual effects would be. Dkt. No. 44 at 26-27.

24 When reviewing a proposed action, an agency must take a “hard look” at all foreseeable
 25 impacts and “may not rely on incorrect assumptions or data.” *Env’t Def. Ctr. v. Bureau of Ocean*
 26 *Energy Mgmt.*, 36 F.4th 850, 872 (9th Cir. 2022) (quoting *Native Ecosystems Council v. U.S.*
 27 *Forest Serv.*, 418 F.3d 953, 964 (9th Cir. 2005)); *see also* 40 C.F.R. § 1502.23 (“Agencies shall
 28 ensure the professional integrity, including scientific integrity, of the discussions and analyses in

1 environmental documents.”). The agency’s EA must “provide [a] full and fair discussion of
2 significant environmental impacts and inform decisionmakers and the public of the reasonable
3 alternatives which would avoid or minimize adverse impacts or enhance the quality of the human
4 environment.” *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 387 F.3d 989, 993 (9th
5 Cir. 2004) (quoting 40 C.F.R. § 1502.1) (cleaned up). If the agency “entirely fail[s] to consider an
6 important aspect of the problem,” then its actions are arbitrary and capricious. *Idaho Sporting
7 Cong., Inc. v. Rittenhouse*, 305 F.3d 957, 973 (9th Cir. 2002) (quoting *State Farm*, 463 U.S. at 43).

8 The Court agrees with Oceana that NMFS’s analysis of how Alternative 1 compares to the
9 other two alternatives relied on flawed assumptions and therefore was arbitrary and capricious. As
10 explained above, ACLs play a significant role in the MSA regulatory framework, most notably in
11 requiring NMFS and the Council to ensure the catch limits are not exceeded. NMFS cited the
12 “flexibility” to increase harvests if future conditions allowed as a reason to adopt Alternative 1.
13 AR 22. However, it did not consider the effect that such increases, whether intentional or
14 accidental, would have on rebuilding. NMFS’s justification for modeling Alternative 1 based on
15 the assumption that annual catch would average 2,200 mt was that it “represent[ed] a more
16 realistic projection of fishery landings” given “the prohibition on primary directed fishing,
17 restrictions on incidental harvest, and to some degree market dynamics.” AR 14. NMFS
18 acknowledged that the same circumstances also could lead to catches below the ACL under
19 Alternative 3, but it made no attempt to adjust for or model this possibility. AR 15, 26. In effect,
20 NMFS compared apples and oranges: predictions of future catches, which had no binding effect,
21 for Alternative 1; and binding ACLs, which might overestimate catch, for Alternative 3.

22 Defendants point out that the EA made no attempt to mask how NMFS conducted its
23 assessment of the relevant alternative. Dkt. No. 44 at 28 (citing AR 15, 30). However, merely
24 noting a potential issue or discrepancy is not sufficient for the “hard look” required by NEPA.
25 *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1213 (9th Cir. 1998) (“General
26 statements about possible effects and some risk do not constitute a hard look absent a justification
27 regarding why more definitive information could not be provided.”). Here, NMFS made no
28 attempt to quantify the differences between its alternative rebuilding plans, beyond observing that

1 “[t]he modeling [for Alternative 3] also does not account for restrictions on incidental catch that
2 might restrict harvest, or the fact that industry may not take the full five percent for other
3 socioeconomic reasons.” AR 15.

4 NMFS acted arbitrarily and capriciously and failed to take the hard look required by NEPA
5 by relying on inconsistent assumptions and by ignoring important aspects of the proposed
6 rebuilding plans under consideration. *See State Farm*, 463 U.S. at 43; *Env’t Def. Ctr.*, 36 F.4th at
7 872.

8 2. Claim 5: Impact on Marine Predators

9 Oceana contends that defendants also failed to take a hard look at the impact that
10 Alternative 1 would have on the marine predators that rely on the Pacific sardine for food,
11 including specifically the endangered humpback whale. Dkt. No. 43 at 28-30. Defendants
12 respond that the EA concisely noted the sardine’s importance to many of these species, consistent
13 with NEPA’s requirements. Dkt. No. 44 at 28-29 (citing 40 C.F.R. §§ 1501.5(c)(1)-(2) (“An
14 environmental assessment shall briefly [discuss various factors.]”), 1508.1(h) (“Environmental
15 assessment means a concise public document. . . .”)); AR 24. They also argue that the EA
16 acknowledged the possibility of effects on other predators, but concluded that these effects would
17 not be materially different under the other alternatives. Dkt. No. 44 at 28-29.

18 “To satisfy the ‘hard look’ requirement, an agency must provide ‘a reasonably thorough
19 discussion of the significant aspects of the probable environmental consequences.’” *350 Montana*
20 *v. Haaland*, 50 F.4th 1254, 1265 (9th Cir. 2022) (quoting *Ctr. for Biological Diversity v. Nat’l*
21 *Highway Traffic Safety Admin.* (“NHTSA”), 538 F.3d 1172, 1194 (9th Cir. 2008)). “A ‘hard look’
22 includes considering all foreseeable direct and indirect impacts [and] should involve a discussion
23 of adverse impacts that does not improperly minimize negative side effects.” *N. Alaska Env’t Ctr.*
24 *v. Kempthorne*, 457 F.3d 969, 975 (9th Cir. 2006). The agency must also consider reasonably
25 foreseeable cumulative effects of the proposed action, *see* 40 C.F.R. § 1508.1(g)(2)-(3), and must
26 provide a convincing statement of reasons explaining why the proposed action will have no
27 significant impact on the environment, *see Ocean Advocs. v. U.S. Army Corps of Eng’rs*, 402 F.3d
28 846, 865 (9th Cir. 2005). Among the factors agencies are directed to consider in this analysis are

1 the effects on “listed species and designated critical habitat under the Endangered Species Act.”
 2 40 C.F.R. § 1501.3(b).

3 When reviewing an agency decision to determine whether the hard look standard is met,
 4 courts must “employ a ‘rule of reason,’” rather than “fly speck” the agency’s analysis or “act[] as a
 5 type of omnipotent scientist.” *Audubon Soc’y of Portland v. Haaland*, 40 F.4th 967, 984 (9th Cir.
 6 2022) (cleaned up). The agency need not affirmatively address every uncertainty—though it must
 7 “acknowledge and respond to comments by outside parties that raise significant scientific
 8 uncertainties and reasonably support that such uncertainties exist.” *The Lands Council v. McNair*,
 9 537 F.3d 981, 1001 (9th Cir. 2008). If the agency’s decision is “fully informed and well-
 10 considered,” then the court must defer to it. *N. Alaska Env’t Ctr*, 457 F.3d at 975.

11 The record reflects that NMFS did consider the reasonably foreseeable impacts of the
 12 proposed alternatives on marine predators generally, including how those impacts would likely be
 13 mitigated by the availability of other forage fish species. The agency explained:

14 [M]ost Pacific sardine predators are generalists that are not
 15 dependent on the availability of a single species but rather on a suite
 16 of species, any one (or more) of which is likely to be abundant each
 17 year. For example, while the biomass of Pacific sardine is currently
 18 low, the central population of northern anchovy biomass is high
 19 (approximately 800,000 mt in 2019 . . .). Therefore, it is unclear
 whether there would be any measurable difference in benefits
 between the rebuilding timelines for Pacific sardine from the aspect
 of prey availability.

20 AR 25. For the reasons explained above, *see* III.B.1, the Court disagrees with Oceana’s
 21 characterization of Amendment 18 as an action that “keeps” the sardine population at a biomass of
 22 150,000 mt, and further disagrees that NMFS failed to analyze how the rebuilding target and other
 23 aspects of the rebuilding plan impact marine predators. *See* Dkt. No. 43 at 28.

24 However, Oceana also argues that NMFS failed to consider how Amendment 18 and its
 25 annual specifications may impact the endangered humpback whale and its critical habitat, contrary
 26 to NEPA regulations. Dkt. No. 51 ¶¶ 10, 121-22; Dkt. No. 43 at 29; *see also* 50 C.F.R.
 27 § 226.227(f); 86 Fed. Reg. 21,082, 21,084 (listing the Pacific sardine among “species that have
 28 been recognized and documented as key prey species within the diet of humpback whales”).

1 Oceana specifically raised this issue in public comments submitted in response to NMFS’s draft
2 and final rebuilding plans. *See* AR 148, 5290-91. Defendants’ response is limited to the
3 observation that the EA “acknowledged that endangered humpback whales are part of the
4 assemblage of predators that use NSP sardine.” Dkt. No. 44 at 29 (citing AR 24).¹²

5 To comply with NEPA, NMFS need only have “sufficiently considered the issue and
6 arrived at a reasonable conclusion that the effects would not be significant.” *WildEarth Guardians*
7 *v. Provencio*, 923 F.3d 655, 675 (9th Cir. 2019). However, neither the EA nor any other
8 environmental document discusses whether or how Amendment 18 may impact the humpback
9 whale’s critical habitat. *See* AR 1-43 (EA), 158-63 (finding of no significant impact), 4910-30
10 (NMFS decision memorandum). The agency’s mere acknowledgment of the humpback whale’s
11 endangered status is not enough to satisfy NEPA’s “hard look” requirement. *See Klamath-*
12 *Siskiyou Wildlands Ctr.*, 387 F.3d at 997 (EAs that failed to discuss impact of timber sales on
13 northern spotted owl’s critical habitat “[did] not satisfy the requirements of the NEPA”).

14 Accordingly, while the NMFS prepared an adequate EA regarding the impact of
15 Amendment 18 and its implementing annual specifications on marine predators generally, it failed
16 to take a hard look at the impact on the endangered humpback whale, as required by NEPA. *See*
17 40 C.F.R. § 1501.3(b).

18 3. Claim 6: Failure to Prepare an Environmental Impact Statement

19 Oceana claims that NMFS violated NEPA by failing to prepare an EIS. Dkt. No. 51
20 ¶¶ 173-172; Dkt. No. 43 at 30. Defendants disagree that an EIS was required. Dkt. No. 44 at 29-
21 30.

22 A reviewing court must examine an EA “with two purposes in mind: to determine whether
23 it has adequately considered and elaborated the possible consequences of the proposed agency
24 action when concluding that it will have no significant impact on the environment, and whether its
25 determination that no EIS is required is a reasonable conclusion.” *Env’t Def. Ctr.*, 36 F.4th at 872

26 _____
27 ¹² NMFS’s decision materials refer to “prior ESA consultations on the Pacific sardine fishery.”
28 *See* AR 159, 4929. However, neither party raised these consultations in their briefs, nor do they
appear to be a part of the administrative record.

1 (quoting *Ctr. for Biological Diversity v. NHTSA*, 538 F.3d at 1215). “An EIS *must* be prepared if
2 substantial questions are raised as to whether a project *may* cause significant degradation of some
3 human environmental factor.” *Ocean Advocs.*, 402 F.3d at 864 (cleaned up, emphasis in original).
4 If an agency opts not to prepare one, it must give a “convincing statement of reasons” why the
5 project’s environmental impact will not be significant. *Id.* (quoting *Blue Mountains Biodiversity*
6 *Project*, 161 F.3d at 1212). “[C]onclusory assertions that an activity will have only an
7 insignificant impact on the environment” are insufficient. *Id.* However, “it does not follow that
8 the presence of some negative effects necessarily rises to the level of demonstrating a significant
9 effect on the environment.” *Barnes v. Fed. Aviation Admin.*, 865 F.3d 1266, 1275 (9th Cir. 2017)
10 (quoting *Native Ecosystems Council v. U.S. Forest Serv.*, 428 F.3d 1233, 1240 (9th Cir. 2005)).

11 “[P]reparation of an EIS is not mandated in all cases simply because an agency has
12 prepared a deficient EA or otherwise failed to comply with NEPA.” *Ctr. for Biological Diversity*
13 *v. NHTSA*, 538 F.3d at 1225. If an “EA [is] prepared in reliance” on an erroneous legal
14 conclusion, remand to the agency for the preparation of a new EA may be proper. *San Luis*
15 *Obispo Mothers for Peace v. Nuclear Regul. Comm’n*, 449 F.3d 1016, 1035 (9th Cir. 2006); *Ctr.*
16 *for Biological Diversity v. NHTSA*, 538 F.3d at 1225.

17 As described above, NMFS violated NEPA by relying on inconsistent assumptions and
18 failing to take a hard look at the impact of Amendment 18 and the annual specifications on the
19 endangered humpback whale. Because of these errors, the EA was deficient. However, the
20 significance of these deficiencies, and whether they can be remedied, is unclear. As such, “the
21 record is insufficiently complete for [the Court] to order the immediate preparation of an EIS.”
22 *Ctr. for Biological Diversity v. NHTSA*, 538 F.3d at 1227.

23 **IV. REMEDY**

24 Oceana asks the Court to vacate Amendment 18 and the 2023-2024 annual specifications
25 and remand to NMFS with instructions to promulgate a new rebuilding plan within nine months,
26 as well as regulations implementing it. Dkt. No. 43 at 30; Dkt. No. 55 at 3. Defendants claim that
27 “nine months is not sufficient time to comply with the requirements of the MSA” and requests the
28 opportunity to submit briefing on the question of remedy. Dkt. No. 44 at 30. They also assert that

1 if the 2023-2024 annual specifications are vacated “all the limitations placed on the fishery would
2 be lifted and the management measures would no longer control catch levels.” Dkt. No. 54 at 1.

3 Where agency action is found to be arbitrary and capricious or not in accordance with the
4 law, a court typically vacates the decision or action and remands to the agency for further
5 proceedings. *350 Montana*, 50 F.4th at 1273; *Earth Island Institute v. Hogarth*, 494 F.3d at 770.
6 However, remand without vacatur is proper in “limited circumstances.” *350 Montana*, 50 F.4th at
7 1273 (quoting *Pollinator Stewardship Council v. EPA*, 806 F.3d 520, 532 (9th Cir. 2015)).
8 “Whether agency action should be vacated depends on how serious the agency’s errors are and the
9 disruptive consequences of an interim change that may itself be changed.” *Id.* (quoting *Nat’l*
10 *Family Farm Coal. v. EPA*, 966 F.3d 893, 929 (9th Cir. 2020)). The Ninth Circuit considers
11 “whether vacating a faulty rule could result in possible environmental harm” and has “chosen to
12 leave a rule in place when vacating would risk such harm.” *Pollinator Stewardship Council*, 806
13 F.3d at 532; *see also All. for the Wild Rockies v. U.S. Forest Serv.*, 907 F.3d 1105, 1121 (9th Cir.
14 2018) (“When equity demands, however, the regulation can be left in place while the agency
15 reconsiders or replaces the action, or to give the agency time to follow the necessary
16 procedures.”).

17 Given defendants’ representations regarding the possible effect of an order vacating
18 Amendment 18 and/or the annual specifications, the Court declines to issue such an order at this
19 time. Instead, the parties must confer regarding what further proceedings are necessary to resolve
20 the question of an appropriate remedy.

21 **V. CONCLUSION**

22 The parties’ cross-motions for summary judgment are granted in part and denied in part, as
23 follows:

- 24 1. On claim 1 (unlawful rebuilding target under the MSA), defendants’ motion is granted
25 and Oceana’s cross-motion is denied.
- 26 2. On claim 2 (failure to rebuild within statutory timeframe under the MSA), Oceana’s
27 motion is granted and defendants’ cross-motion is denied.

