

FOR PUBLICATION

**UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT**

NATURAL RESOURCES DEFENSE
COUNCIL, INC.; HUMANE
SOCIETY OF THE UNITED STATES;
CETACEAN SOCIETY
INTERNATIONAL; OCEAN
FUTURES SOCIETY; JEAN-
MICHEL COUSTEAU; MICHAEL
STOCKER,

Plaintiffs-Appellants,

v.

PENNY PRITZKER, Secretary,
U.S. Department of Commerce;
NATIONAL MARINE FISHERIES
SERVICE; EILEEN SOBECK,
Assistant Administrator for
Fisheries; KATHRYN D.
SULLIVAN, Administrator of the
National Oceanic and
Atmospheric Administration;
RAY MABUS, Secretary of the
Navy; JONATHAN GREENERT,
Admiral, Chief of Naval
Operations,

Defendants-Appellees.

No. 14-16375

D.C. No.
3:12-cv-05380-EDL

OPINION

Appeal from the United States District Court
for the Northern District of California
Elizabeth D. Laporte, Magistrate Judge, Presiding

Argued and Submitted March 17, 2016
San Francisco, California

Filed July 15, 2016

Before: John T. Noonan, Ronald M. Gould,
and Michelle T. Friedland, Circuit Judges.

Opinion by Judge Gould

SUMMARY*

Environmental Law

The panel reversed the district court’s grant of summary judgment to federal defendants in a case relating to the proper scope under the Marine Mammal Protection Act (“MMPA”) of mitigation measures required to protect marine mammals when the responsible federal agency, the National Marine Fisheries Service, sought to approve incidental “take” relating to military readiness activities, namely, the Navy’s peacetime use of Surveillance Towed Array Sensor System Low Frequency Active sonar.

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

The Fisheries Service most recently authorized incidental take of marine mammals from Low Frequency Active sonar use for five years beginning in 2012 in a Final Rule.

The panel held that the 2012 Final Rule did not establish means of “effecting the least practicable adverse impact on” marine mammal species, stock and habitat, as was specifically required by the MMPA. The panel further held that the Fisheries Service impermissibly conflated the “least practicable adverse impact” standard with the “negligible impact” finding; and concluded that to authorize incidental take, the Fisheries Service must achieve the “least practicable adverse impact” standard *in addition to* finding a negligible impact.

The panel held that the Fisheries Service did not give adequate protection to areas of the world’s oceans flagged by its own experts as biologically important, based on the present lack of data sufficient to meet the Fisheries Service’s designation criteria. The panel remanded for further proceedings.

COUNSEL

Michael E. Wall (argued), Natural Resources Defense Council, San Francisco, California; Joel R. Reynolds and Giulia C.S. Good Stefani, Natural Resources Defense Council, Santa Monica, California; Sara C. Tallman, Natural Resources Defense Council, Chicago, Illinois; Barbara J. Chisholm, Altshuler Berzon LLP, San Francisco, California; for Plaintiffs-Appellants.

Emily Polachek (argued), Kevin W. McArdle, Ty Bair, J. David Gunter II, and Andrew C. Mergen, Trial Attorneys; John C. Cruden, Assistant Attorney General; Environment and Natural Resources Division, Department of Justice, Washington, D.C.; for Defendants-Appellees.

OPINION

GOULD, Circuit Judge:

This appeal presents a challenging question relating to the proper scope under the Marine Mammal Protection Act (MMPA) of mitigation measures required to protect marine mammals when the responsible federal agency, the National Marine Fisheries Service (NMFS), seeks to approve incidental “take” relating to military readiness activities. The appeal concerns the Navy’s peacetime use of Surveillance Towed Array Sensor System Low Frequency Active sonar (SURTASS LFA or “LFA sonar”).¹ Congress has required

¹ The limitations of government activity under the MMPA that we review here do not apply in the context of a war in which the Navy must locate enemy submarines at the risk of civilian casualties or maritime

that NMFS set limitations on activities that may cause “take”—i.e. harm to marine mammals— such as military readiness activities, to reduce their impacts to the least practicable level.² The question here is whether NMFS

property destruction if it fails. A maxim made famous by Marcus Tullius Cicero is that in times of war, the laws fall silent (in Latin “*silent enim leges inter arma*”). Cicero in *Twenty-Eight Volumes*, Volume XIV 16–17 (N.H. Watts trans., Harvard University Press 1972). Here, as in prior disputes on the Navy’s LFA sonar use, the parties’ disagreement concerns peacetime use of LFA sonar. See *Nat. Res. Def. Council v. Evans*, 279 F. Supp. 2d 1129, 1138 (N.D. Cal. 2003) (“It is true that only peacetime use of this new sonar system is at issue; the Navy is free to use the system without restriction in time of war or heightened threat.”). Moreover, in 2003 Congress added a general national defense exception to the MMPA, under which “[t]he Secretary of Defense, after conferring with the Secretary of Commerce, the Secretary of the Interior, or both, as appropriate, may exempt any action or category of actions undertaken by the Department of Defense or its components from compliance with any requirement of this chapter, if the Secretary determines that it is necessary for national defense.” 16 U.S.C. § 1371(f)(1). The exemption cannot last longer than two years, and the Secretary must report it to the Committees on Armed Services in both the House of Representatives and the Senate. 16 U.S.C. §§ 1371(f)(2)(B) & (f)(4). We are confident that the mitigation measures the MMPA requires do not infringe on the Navy’s capacity to defend the United States during wartime or heightened threats to national security.

² It has recently been reported that increased numbers of Russian attack submarines are being deployed to patrol the coastlines of Scandinavia, Scotland, the Mediterranean Sea and the North Atlantic in what military officials describe as a significantly increased presence aimed at contesting American and NATO undersea dominance. Eric Schmitt, *Russia Bolsters its Submarine Fleet, and Tensions with U.S. Rise*, N.Y. Times (April 20, 2016), <http://www.nytimes.com/2016/04/21/world/europe/russia-bolsters-submarine-fleet-and-tensions-with-us-rise.html>. This development underscores the importance of effective military readiness training so that if LFA sonar is needed in a war, the Navy will be prepared to use it effectively. The importance of military readiness activities should not be

correctly authorized the incidental take of marine mammals in connection with the Navy’s use of LFA sonar for training, testing, and routine operations. NMFS determined that the incidental take of a specified number of marine mammals by use of LFA sonar would have a negligible impact on the marine mammal species, and Plaintiffs do not appeal that determination. Plaintiffs appeal only the district court’s conclusion that NMFS’s mitigation measures satisfied the MMPA’s least practicable adverse impact standard.³

The district court granted summary judgment to Defendants on the issue of MMPA compliance. It held that “[e]ven if the impact on the population is negligible under 16 U.S.C. §1371(a)(5)(A)(i)(I), the agency could still impose mitigation that would further reduce the impact on the population to the least practicable [level] under 16 U.S.C. § 1371(a)(5)(A)(i)(II)(aa).” The district court further held that “[t]he requirement to adopt measures to ensure the ‘least practicable adverse impact’ on marine mammals is ‘a stringent standard,’” and that though the agency has discretion to choose among possible mitigation measures, it cannot exercise that discretion to vitiate that stringent standard. We agree with those principles. But, because we disagree with the district court’s methodology and with its conclusion that the least practicable adverse impact standard was satisfied, we reverse.

denied or minimized. But the need for them makes it all the more important that NMFS craft mitigation measures that comply with the statutory commands.

³ Plaintiffs initially brought claims under not only the MMPA, but also the Endangered Species Act (ESA) and the National Environmental Policy Act (NEPA). But rulings on the ESA and NEPA claims were not appealed, so our sole concern is the application of the MMPA.

I

The Navy’s plans for use of LFA sonar, as approved by NMFS, have gone through several iterations, resulting in increased protection for marine mammals. We have every reason to believe that the Navy has been deliberate and thoughtful in its plans to follow NMFS guidelines and limit unnecessary harassment and harm to marine mammals. But the question is whether NMFS has satisfied the Congressional mandate that mitigation measures ensure the “least practicable adverse impact” on marine mammals.

The MMPA was enacted in response to Congressional concern that marine mammal species and population stocks were in danger of extinction or depletion due to human activity. 16 U.S.C. § 1361(1). The MMPA aims to balance marine mammal protection with other strong but opposing interests, such as national security. To prevent marine mammal species and population stocks from diminishing “beyond the point at which they cease to be a significant functioning element in the ecosystem,” the MMPA broadly prohibits “take” of marine mammals. 16 U.S.C. §§ 1361(2), 1371. “Take” means to harass, hunt, capture, or kill any marine mammal. 16 U.S.C. § 1362(13).

There are exceptions to the MMPA take prohibition. The MMPA allows NMFS to authorize take of “small numbers” of marine mammals, incidental to a specified activity, for up to five years.⁴ 16 U.S.C. § 1371(a)(5)(A)(i). NMFS may

⁴ The MMPA delegated authority for oceanic marine mammals to the Secretary of the department in which the National Oceanic and Atmospheric Administration (NOAA) operates. 16 U.S.C. § 1362(12). NOAA is part of the U.S. Department of Commerce. NMFS, a division

authorize such incidental take if the take meets two requirements. First, NMFS must find that the total authorized take during the five-year period “will have a negligible impact on such species or stock[.]” 16 U.S.C. § 1371(a)(5)(A)(i)(I). Second, NMFS must prescribe regulations setting forth “permissible methods of taking pursuant to such activity, and other means of effecting the least practicable adverse impact on such species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance[.]” 16 U.S.C. § 1371(a)(5)(A)(i)(II)(aa). The “least practicable adverse impact” standard applies both to “permissible methods of taking pursuant to” the activity causing incidental take and to “other means” of reducing incidental take. *See Evans*, 279 F. Supp. 2d at 1142 (NMFS’s rulemaking must, among other things, “prescribe methods and means of effecting the ‘least practicable adverse impact’ on species and stock and their habitat” (quoting 16 U.S.C. § 1371(a)(5)(A))).

In connection with peacetime activities such as use of LFA sonar for training, testing, and routine operations, Congress struck a balance to permit incidental take of marine mammals caused by deployment of LFA sonar or other techniques that might incidentally harm whales and other marine mammals, so long as the incidental take from the activity has a negligible impact on the species or stock involved, and so long as mitigation measures were fashioned to limit harm to the marine mammals to the “least practicable

of NOAA, is responsible for species of the order Cetacea, whales and dolphins, and the order Pinnipedia, seals and sea lions, except for walruses. The U.S. Department of the Interior is responsible for all other marine mammals including manatees, polar bears, sea otters, and walruses. *Id.*

adverse impact.” As the agency with delegated authority to implement the MMPA, NMFS is bound by these congressional mandates.

II

Whales, dolphins, walrus, and other marine mammals rely on perceptions of underwater sound for vital biological functions such as catching prey, navigating, and communicating. The United States Navy operates LFA sonar vessels around the world for another vital purpose: to protect the nation from increasingly quiet foreign submarines. The Navy has determined that LFA sonar is the most effective way to detect potentially hostile submarines.⁵ LFA sonar uses a set of transmitting projectors that are suspended by a cable from an ocean surveillance ship. The projectors produce low-frequency sound pulses at an intensity of approximately 215 decibels (dB), in sequences that last 60 seconds on average. LFA sonar can detect enemy ships day and night in varied weather conditions over hundreds of miles.

LFA sonar, while beneficial to national defense, can harm many marine mammal species, particularly “low-frequency hearing specialists” such as baleen whales, but also sperm

⁵ LFA sonar can detect submarines over much larger distances than mid-frequency active sonar, which the Navy has used since World War II, because lower frequencies suffer less attenuation in seawater. Kristina Alexander, *Whales and Sonar: Environmental Exemptions for the Navy’s Mid-Frequency Active Sonar Training*, Congressional Research Service, February 18, 2009, available at <https://www.fas.org/sgp/crs/weapons/RL34403.pdf>. In contrast, passive sonar systems merely use hydrophones to detect, amplify, and identify sounds from other sources. *Id.*

whales and pinnipeds such as seals and walruses. LFA sonar disrupts the hearing of these animals and can cause physical injury at sound levels greater than 180 dB. Effects from exposures below 180 dB can cause short-term disruption or abandonment of natural behavior patterns. These behavioral disruptions can cause affected marine mammals to stop communicating with each other, to flee or avoid an ensonified area, to cease foraging for food, to separate from their calves, and to interrupt mating. LFA sonar can also cause heightened stress responses from marine mammals. Such behavioral disruptions can force marine mammals to make trade-offs like delaying migration, delaying reproduction, reducing growth, or migrating with reduced energy reserves.

The MMPA classifies such forms of harassment in two categories: “Level A” harassment and “Level B” harassment. With respect to “military readiness activit[ies],”⁶ such as the Navy’s use of LFA sonar, the MMPA defines Level A

⁶ The MMPA uses the definition of “military readiness activity” in Pub. L. 107-314 § 315(f)(1). *See* 16 U.S.C. § 1371(a)(5)(A)(ii). The term “includes (A) all training and operations of the Armed Forces that relate to combat; and (B) the adequate and realistic testing of military equipment, vehicles, weapons, and sensors for proper operation and suitability for combat use.” Pub. L. 107-314 § 315(f)(1). Military readiness activities are also the subject of 2003 amendments to the MMPA, which specify that NMFS “shall include consideration of personnel safety, practicability of implementation, and impact on the effectiveness of the military readiness activity” in making a “least practicable adverse impact” determination. National Defense Authorization Act for Fiscal Year 2004, H.R. Cong. Rep. 108-354, reprinted in 2003 U.S.C.C.A.N. 1407 (Nov. 7, 2003); *see* 16 U.S.C. § 1371(a)(5)(A)(ii). These changes define considerations relevant to determining the practicability of mitigation measures, but they do not eliminate the requirement that the “adverse impact on such species or stock” must be mitigated to the greatest extent practicable.

harassment as “any act that injures or has the significant potential to injure a marine mammal or marine mammal stock in the wild.” 16 U.S.C. § 1362(18)(B), (C). Level A harassment happens when marine mammals are exposed to sound pulses of 180 dB or greater. Level B harassment, less severe, includes “any act that disturbs or is likely to disturb a marine mammal or marine mammal stock in the wild by causing disruption of natural behavioral patterns, including, but not limited to, migration, surfacing, nursing, breeding, feeding, or sheltering, to a point where such behavioral patterns are abandoned or significantly altered.” 16 U.S.C. § 1362(18)(B), (D). Level B harassment is caused by sound levels below 180 dB. Sound intensities of 165 dB subject marine mammals to a 50% risk of Level B harassment. And sound intensities as low as 120 dB can still cause “increasing probability of avoidance and other behavioral effects.” Stated another way, Level A harassment involves activities that directly injure or are likely to injure marine mammals. By contrast, Level B harassment involves activities that interfere with normal behavioral patterns of the marine mammals, with the risk of indirect harm that creates.

NMFS most recently authorized incidental take of marine mammals from LFA sonar use for five years beginning in 2012. *See* Taking and Importing Marine Mammals: Taking Marine Mammals Incidental to U.S. Navy Operations of Surveillance Towed Array Sensor System Low Frequency Active Sonar, 77 Fed. Reg. 50290 (Aug. 20, 2012) (2012 “Final Rule”). This authorization, and the accompanying mitigation measures, apply to the Navy’s routine training and testing and use of LFA sonar during military operations in areas of the Pacific, Atlantic, and Indian Oceans and the Mediterranean Sea between 2012–2017. 77 Fed. Reg. at 50291. They do not constrict the Navy’s operations during a

war or active military engagement. The 2012 Final Rule provides guidelines for incidental take regulations for LFA sonar use on a maximum of four Navy vessels in 70–75% of the world’s oceans, covering the Pacific, Atlantic, and Indian Oceans, and the Mediterranean Sea. *Id.* at 50303. Each LFA sonar vessel may perform up to 240 days per year of active sonar operations. *Id.* at 50292. The 2012 Final Rule allows the Navy to incidentally take, through Level A harassment, up to six baleen whales, 25 toothed whales, and 25 pinnipeds annually. *Id.* at 50313, 50317. The Navy may also take, through Level B harassment, up to 12% of the entire stock of every affected marine mammal species every year. *Id.* at 50316–17.

The 2012 Final Rule contains three mitigation measures intended to minimize the impact of this incidental take on marine mammal species, stock, and habitat. First, there is a requirement that the Navy shut down or delay LFA sonar use if it detects a marine mammal near a sonar vessel. This requirement instructs the Navy to use a combination of human lookouts and a dedicated marine mammal detection system (called the “High Frequency Marine Mammal Monitoring” system) to detect nearby marine mammals. If a marine mammal is detected within two kilometers of an LFA sonar vessel, the Navy must delay or suspend sonar transmissions. The intensity of an LFA sonar pulse drops from 215 dB at the source to 175 dB at two kilometers.⁷ Consequently, NMFS expects this two-kilometer shutdown zone to almost completely prevent Level A harassment,

⁷ Decibels measure sound intensity on a logarithmic scale. For example, a sound measuring 180 dB is approximately ten times more intense than a 170 dB sound. *Nat. Res. Def. Council v. Evans*, 232 F. Supp. 2d 1003, 1014 (N.D. Cal. 2002).

including physical injury, which occurs only at intensities of 180 dB or greater.

Second, the Final Rule prohibits the Navy from creating LFA sonar pulses of 180 dB or greater within a “coastal exclusion zone” extending 22 km, or about 12 nautical miles (nm), of any coastline. Continental shelf waters are recognized as biologically important to marine mammals, and the district court previously ordered NMFS to protect these waters even in areas without site-specific data. *Evans*, 279 F. Supp. 2d at 1164.

Third, the Final Rule prohibits the Navy from creating LFA sonar pulses of 180 dB or greater within a kilometer of several designated “offshore biologically important areas” (OBIAAs). OBIAAs are marine protected areas providing marine mammals with relatively low-noise environments, as LFA sonar pulses moving in from the periphery of an OBIA gradually dissipate.

III

The key provisions of the Administrative Procedure Act (APA) require the court to hold unlawful and set aside a final order of an agency if the order is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” See 5 U.S.C. § 706(2)(A). The Supreme Court has made clear that the federal courts should give deference to federal agency decisions in several ways. *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). First, we generally only set aside a final agency action if the agency decision is “arbitrary and capricious,” or “not in accordance with law.” The general rule elaborating

the meaning of “arbitrary and capricious” was stated in *State Farm* as follows:

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

463 U.S. at 43.

Further, if the agency itself did not provide reasons to satisfy the above standard, we will not use our own line of reasoning to bolster the agency decision on grounds that it did not include in its reasoning. *See, e.g., SEC v. Chenery Corp.*, 332 U.S. 194, 196 (1947).⁸

⁸ This case comes before us on summary judgment, not a decision at trial. We review a district court’s grant of summary judgment *de novo*. *Szajer v. City of Los Angeles*, 632 F.3d 607, 610 (9th Cir. 2011). We view in the light most favorable to Plaintiffs evidence of harm to marine mammals caused by LFA sonar and evidence of whether required mitigation measures achieve the “least practicable adverse effect” on the marine mammals, and we must determine “whether there are any genuine issues of material fact and whether the district court correctly applied the relevant substantive law.” *Id.* (quoting *Universal Health Servs., Inc. v. Thompson*, 363 F.3d 1013, 1019 (9th Cir. 2004)).

IV

The conflict in this case is about whether the mitigation measures set forth in NMFS’s 2012 Final Rule achieve the required “least practicable adverse impact” on marine mammal species, stock, and habitat. 16 U.S.C. § 1371(a)(5)(A)(i)(II)(aa). In *Evans*, 279 F. Supp. 2d at 1159, which applied the “least practicable adverse impact” standard on summary judgment to LFA sonar operations authorized by NMFS’s 2002 Final Rule, the district court held: “In requiring the agency to adopt measures to ensure the ‘least practicable adverse impact’ on marine mammals, Congress imposed a stringent standard. Although the agency has some discretion to choose among possible mitigation measures, it cannot exercise that discretion to vitiate this stringent standard.” We agree with this formulation.

Defendants on appeal advance several arguments for why NMFS was not required to comply with this stringent standard in authorizing the Final Rule. First, they contend that once NMFS makes a negligible impact finding, it “*must* allow the activity,” and the “only question at that point is what mitigation measures will be required for the proposed activity to go forward.” We disagree. To ascertain the meaning of the “least practicable adverse impact” standard, we look to the statutory text, and we must “presume that [the] legislature says in a statute what it means and means in a statute what it says there.” *BedRoc Ltd., LLC v. United States*, 541 U.S. 176, 183 (2004) (alteration in original) (quoting *Conn. Nat’l Bank v. Germain*, 503 U.S. 249, 253–54 (1992)). It is clear from the statute’s text—which sets forth a two-part requirement for authorization of incidental take, *see* 16 U.S.C. § 1371(a)(5)(A)(i)—that mitigation sufficient to achieve the “least practicable adverse impact” is not a mere

secondary issue, but rather an independent, threshold statutory requirement. As with a “negligible impact” finding, it is central to whether NMFS can authorize incidental take in the first place. Congress’s mandate that NMFS must find negligible impact “*and*” set forth regulations to minimize adverse impact in order to authorize incidental take makes the independent nature of these requirements clear. 16 U.S.C. § 1371(a)(5)(A)(i)(I) (emphasis added). Defendants’ contrary reading of the statute is “at odds with one of the most basic interpretive canons, that ‘[a] statute should be construed so that effect is given to all its provisions, so that no part will be inoperative or superfluous, void or insignificant[.]’” *Corley v. United States*, 556 U.S. 303, 314 (2009) (alteration in original) (quoting *Hibbs v. Winn*, 542 U.S. 88, 101 (2004)).

Defendants next contend that the mitigation requirement is superfluous; in their words, the agency “cannot mitigate adverse population-level impacts to any degree less than zero.” This argument is based on a misreading of the agency’s own implementing regulations. These regulations define “negligible impact” as “an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival.” 50 C.F.R. § 216.103. The inquiry as to “negligible impact” is thus focused on population-level effects—i.e. on “annual rates of recruitment or survival.” Defendants seek to import that population-level focus to the “least practicable adverse impact” standard, but the regulations do not even define that standard, let alone limit its focus to population-level effects. Instead, the MMPA itself simply requires NMFS to prescribe regulations setting forth “means of effecting the least practicable adverse impact on such species or stock and its habitat,” both of which could be adversely

affected by activities that do not necessarily affect annual rates of recruitment or survival. 16 U.S.C. § 1371(a)(5)(A)(i)(II)(aa). The statute is properly read to mean that even if population levels are not threatened significantly, still the agency must adopt mitigation measures aimed at protecting marine mammals to the greatest extent practicable in light of military readiness needs.

We conclude that NMFS is required to prescribe regulations to achieve the “least practicable adverse impact” before it can authorize incidental take. While NMFS’s finding that LFA sonar operations will have a “negligible impact” on marine mammal populations is a required element for approval of incidental take, it is not a substitute for an analysis of whether the proposed mitigation measures in the 2012 Final Rule reduce the impact of incidental take on marine mammals to the lowest level practicable. Compliance with the “negligible impact” requirement does not mean there was compliance with the “least practicable adverse impact” standard during rulemaking. Moreover, NMFS did not in agency proceedings contend that its finding of negligible impact on populations meant it satisfied the “least practicable adverse impact” standard for mitigation. NMFS makes that argument only in its briefing on appeal, “underscor[ing] the absence of an adequate explanation in the administrative record itself.” *Humane Soc. of U.S. v. Locke*, 626 F.3d 1040, 1050 (9th Cir. 2010); *see also Chenery*, 332 U.S. at 196; *State Farm*, 463 U.S. at 50 (explaining that “*post hoc* rationalizations for agency action” are no substitute for “the basis articulated by the agency itself”).

Having determined that NMFS was required to promulgate regulations to effect the “least practicable adverse impact,” we turn to examining what that standard requires

and whether the 2012 Final Rule complied with it. In seeking the meaning of “least practicable adverse impact,” we naturally start with the language of the statute. *United States v. Am. Trucking Ass’ns*, 310 U.S. 534, 543 (1940) (“There is, of course, no more persuasive evidence of the purpose of a statute than the words by which the legislature undertook to give expression to its wishes.”). “Practicable” normally means that something is capable of being done, or practical and effective. *Practicable*, OED Online, <http://www.oed.com/view/Entry/149217>; *Practicable*, Merriam-Webster, <http://www.merriam-webster.com/dictionary/practicable>. In context, a mitigation measure that is practicable in reducing the impact of military readiness activities on marine mammals must be both effective in reducing impact, but also not so restrictive of military activity as to unduly interfere with the government’s legitimate needs for military readiness activities.⁹

NMFS in its Final Rule did not appear to disagree with this formulation of the “least practicable adverse impact” standard. In discussing its evaluation of the standard, it stated:

We have reviewed the Navy’s proposed SURTASS LFA sonar activities and the proposed mitigation measures in the Navy’s application to determine whether the resulting activities and mitigation measures would

⁹ The need to focus on what is practicable can be illustrated with a simple example. Ruling out 99% of the world’s oceans from LFA sonar use would obviously provide more protection to marine mammals. But it would not be practicable because it would so restrict military options for readiness training, that it would render such training ineffective.

effect the least practicable adverse impact on marine mammals which includes a careful balancing of the likely degree to which the measure is expected to minimize adverse impacts to marine mammals with the likely effect of that measure on personnel safety, practicality of implementation, and impact of the effectiveness of the military readiness activity (i.e., minimizing adverse impacts to the lowest level practicable with mitigation measures).

77 Fed. Reg. at 50294.

This formulation makes sense so far as it is stated literally, but the problem arises that the Final Rule does not meaningfully discuss how the mitigation measures meet that “stringent standard.” *Evans*, 279 F. Supp. 2d at 1159. *See* 77 Fed. Reg. at 50295, 50303. Similarly, the Final Rule states that “[o]ur responsibility under 16 U.S.C. 1371(a)(5)(A) and our implementing regulations is to prescribe the means of effecting the least practicable adverse impact, which involves consideration of impacts on military readiness training and operations,” but nowhere in rulemaking is that consideration provided. Merely reciting the statutory language is not enough to satisfy the statute’s explicit requirement.¹⁰ An agency acts contrary to the law when it gives mere lip service or verbal commendation of a standard but then fails to abide the standard in its reasoning

¹⁰ Defendants’ brief contends that NMFS did perform the required analysis, but the segment of the Final Rule they cite discusses only the “negligible impact” standard.

and decision. *See Conner v. Burford*, 848 F.2d 1441, 1453 (9th Cir. 1988).

NMFS was required to analyze whether its proposed mitigation measures reduce the effects of LFA sonar to the “least practicable adverse impact.” 16 U.S.C. § 1371(a)(5)(A)(i)(I)–(II). The agency failed to do so. The Final Rule gave only cursory attention to the requirement that the impact to marine mammals caused by the Navy’s military readiness activities be reduced to the least level practicable. Then, the agency in its briefing to us conflated the least practicable adverse impact standard with the separate obligation that the Final Rule have a negligible impact on marine mammal species and stock. NMFS should have considered whether additional mitigation measures were necessary to achieve the least practicable adverse impact on marine mammals, and also whether these mitigation measures would be practicable in light of the Navy’s need for effective military readiness training.

V

Reviewing the evidence before the agency, we conclude that the “least practicable adverse impact” standard for mitigation measures was not satisfied. The facts before NMFS do not support its unexplained conclusion that the Final Rule’s mitigation measures achieve the “least practicable adverse impact” on marine mammal species, stock, and habitat. 16 U.S.C. § 1371(a)(5)(A)(i)(II)(aa).

We consider the practical impacts of mitigation measures adopted by NMFS and the likely practical impact of mitigation measures that were not adopted. Plaintiffs, while acknowledging that the three chosen mitigation measures

reduce incidental take to some extent, contend that the measures are not sufficient to effect the least practicable adverse impact on marine mammal species, stock, and habitat, as the MMPA requires. Plaintiffs do not challenge the shutdown protocol and the coastal exclusion zone, two of the three mitigation measures discussed in Part II above. They do, however, contend that these measures taken as a whole are inadequate to make up for deficiencies in the third mitigation measure, the designation of OBIA's.

The parties' dispute over OBIA designation dates to the beginning of the Navy's LFA sonar program. In the two previous iterations of LFA sonar rulemaking, many of the same Plaintiffs in this case challenged NMFS's OBIA designations as underinclusive. Plaintiffs first challenged the 2002 Final Rule's designation of only three OBIA's. *Evans*, 279 F. Supp. 2d at 1162. The district court concluded that NMFS acted arbitrarily and capriciously in refusing to designate more OBIA's despite knowing of potentially sensitive areas, and that NMFS improperly shifted the burden to members of the public to prove that more OBIA's were necessary. *Id.* at 1163. Five years later, the 2007 Final Rule prescribed 10 OBIA's, which Plaintiffs again challenged, and which the district court again concluded were inadequate to meet the MMPA's least practicable adverse impact standard. *Nat. Res. Def. Council v. Gutierrez*, No. C-07-04771 EDL, 2008 WL 360852 at *10 (N.D. Cal. Feb. 6, 2008).

For its 2012 rulemaking, the most recent in the series, NMFS flagged 73 candidate OBIA's by consulting prior designated OBIA's, the World Database on Protected Areas, the First and Second Editions of *Marine Protected Areas for Whales, Dolphins, and Porpoises* by Dr. Erich Hoyt, and senior NMFS scientists identified as "subject matter experts."

77 Fed. Reg. at 50300. Four subject matter experts, all senior NMFS scientists, raised concerns about OBIA selection to NMFS's Office of Protected Resources in a 2010 White Paper titled *Identifying Areas of Biological Importance to Cetaceans in Data-Poor Regions*. The White Paper authors were concerned that identifying OBIA's based only on known data would be difficult because in many instances, "relevant cetacean data are lacking for the appropriate region or spatial scale." The White Paper recommended against equating data-poor regions with "zero population density" or "no biological importance." Stated another way, the White Paper cautioned that NMFS should not assume that no or minimal data meant there were no or minimal cetacean populations in those areas.

The subject matter experts concluded that "proven ecological principles" suggest a precautionary approach that protects three types of areas as OBIA's: (1) continental shelf waters and waters within 100 km of the continental slope; (2) 100 km around all islands and seamounts that rise within 500 meters of the ocean surface; and (3) regions of high primary productivity, known to correspond to higher sperm whale presence, as explained in a 2009 monograph that the White Paper cites. Michael A. Huston & Steve Wolverson, *The Global Distribution of Net Primary Production: Resolving the Paradox*, 79 *Ecological Monographs* 343 (2009). Separate from the White Paper, but consistent with its recommendations, the Marine Mammal Commission urged that it was "not possible" to "ensure adequate protection of marine mammals" "if candidate areas are rejected simply

because of insufficient information.”¹¹ Again, no data does not mean no cetaceans.

None of the subject matter experts who wrote the White Paper was involved in drafting the Final Rule. The White Paper appears to have played no role in the drafting of the Final Rule until less than two months before the Final Rule was finalized, when one of the rule drafters told the Navy that she had “unearthed” the subject matter experts’ “guidelines for selecting OBIAAs in data-poor areas.” Even still, NMFS only responded to the White Paper in the Final Rule preamble’s response-to-comments section, which referred to the White Paper’s authors as “several other commenters” rather than as NMFS subject matter experts specifically convened to provide their expertise to the selection process. 77 Fed. Reg. at 50303.

NMFS’s chosen OBIA designation criteria differ significantly from the White Paper’s recommendations. The agency employed a multiple-step designation process that required for designation presence of one or more of the following attributes: high densities of animals, known breeding/calving grounds, foraging grounds, migration routes, or small distinct populations with limited distributions. NMFS evaluated these criteria based on what it termed the “best available information.” This designation method

¹¹ The Marine Mammal Commission is “a federal entity possessing expertise on issues relating to the protection of marine mammals.” *Humane Soc.*, 626 F.3d at 1051. The Commission is required under the MMPA to, among other things, produce reports and recommendations on the condition of marine mammals and the status of policies arranging for their protection and to consult with NMFS. 16 U.S.C. § 1402.

resulted in NMFS cutting nearly 70% of the candidate OBIA's. 77 Fed. Reg. at 50299–300.

NMFS's stated reason for cutting so many potential OBIA's was that there were insufficient data proving at least one of the chosen criteria above, even though such data do not exist for most of the world's oceans. NMFS also cut some areas that its subject matter experts had nominated for protection based on their judgment, regional expertise, or non-peer-reviewed literature, stating that those areas "require[d] more justification." As the district court observed in its review of the 2007 Final Rule's OBIA selection, the current list of OBIA's once again shows what the Marine Mammal Commission deemed a "bias toward U.S. waters." Only one OBIA was designated in each of the Caribbean Sea, Mediterranean Sea, Antarctic Convergence Zone, Southeast Atlantic, northwest Pacific, and southeast Pacific, and no area was designated on the Pacific Coast of South America. By contrast, NMFS designated four OBIA's each in the northwest Atlantic and the Northeast Pacific.

Plaintiffs contend that the resulting list of 22 OBIA's was an arbitrary and capricious policy choice. Defendants respond that NMFS considered the White Paper's recommendations for data-poor regions but properly chose a different approach, to which this court must defer. First, Defendants contend that NMFS was under no obligation to follow the White Paper's guidelines, because the White Paper itself acknowledged the existence of a policy choice between a "precautionary" approach that "minimize[s] the chances of overlooking biologically important areas," or a "pure" approach that "minimize[s] the chances of nominating sites that are of marginal biological importance and, therefore risk[s] overlooking biologically important areas." Defendants

contend that NMFS's resulting policy choice is entitled to deference, in essence that NMFS's explaining its decision not to adopt the White Paper's recommendations is all that the APA requires.

The district court agreed with Defendants. First, the district court found that the White Paper acknowledged that the "precautionary" approach that it advanced "risk[ed] designating OBIA[s] in areas of 'marginal biological importance' that did not meet NMFS's criteria." The district court concluded that because the White Paper refrained from choosing between the "precautionary" and "pure" approaches, it was inappropriate for the district court to substitute its judgment for that of the agency. The district court was satisfied that "NMFS chose the pure approach and explained its decision in the record, including reference to the White Paper and reasons for choosing a different approach." Second, the district court found it probative that the White Paper did not recommend specific OBIA[s], but only provided guidelines for inferring biological significance.

Although review under the APA is deferential, here we evaluate the agency's choices in the context not just of the APA, but also of the MMPA's least practicable adverse impact requirement, which sets a "stringent standard." *Evans*, 279 F. Supp. 2d at 1159. We conclude that NMFS erred because the measures adopted do not result in the "least practicable adverse impact" on marine mammal species, stock, and habitat.

OBIA[s] are a central component of the Final Rule's mitigation measures. The White Paper recommended a "precautionary" approach toward OBIA designation. The subject matter experts made clear that given the state of the

science, particularly the many data-poor areas of the world's oceans, NMFS faced a choice whether to protect areas likely to have biological importance based on "proven ecological principles," or instead to "minimize the chances of nominating sites that are of marginal biological importance and, therefore, risk overlooking biologically important areas." These competing options would either risk overprotection, or risk underprotection. NMFS chose the latter option without evaluating whether its choice satisfied the least practicable adverse impact standard. It should have considered whether the precautionary approach would give more protection to marine mammals, and then whether that protection would impede military training to a degree making that mitigation not practicable.

For areas of potentially high biological importance, NMFS's protocol made non-designation the default, and required specific data to overturn that conclusion. This default is directly adverse to the subject matter experts' recommended principle that shelf and slope areas should be protected absent "specific data to the contrary." NMFS identified no science to support its conclusion that protecting data-poor areas of potential importance as OBIA's would not reduce adverse impacts on marine mammal species and habitat. In fact, Defendants themselves, as well as the district court, seem to agree with Plaintiffs that the Final Rule chose to forego some protections that would have further reduced the impact on marine mammals. For example, Defendants accept that there may be alternative OBIA criteria or mitigation measures that NMFS could have reasonably selected, but argue that the agency's choice should still be given deference. Yet the MMPA requires the "least practicable adverse impact," and the agency has offered no explanation why it meets that standard—in fact, as explained

above, it instead argues that it does not have to meet that standard.

Nor did NMFS consider more protected areas only to conclude that more protection was not practicable. Although Defendants argue that national security would be threatened without the long-range detection capacity that LFA sonar provides, NMFS's decision to cut the list of potential OBIAAs did not rely on practical considerations that particular additional OBIAAs would impede military readiness training, aside from one decision regarding the Southern California Bight, which Plaintiffs did not challenge. Otherwise, military practicability played no role in NMFS's decision; in fact, NMFS deemed it "immaterial." Similarly, although counsel for Defendants claimed at oral argument that the Final Rule intended to balance the equities between military readiness and conservation, we hold that such balancing must be made explicit in rulemaking.¹²

We owe "[o]ur highest deference" to the agency's "technical analyses and judgments within its area of expertise." *League of Wilderness Defs. Blue Mountains Biodiversity Proj. v. Allen*, 615 F.3d 1122, 1131 (9th Cir. 2010). But we do not "rubber-stamp . . . administrative decisions that [we] deem inconsistent with a statutory mandate or that frustrate the congressional policy underlying a statute." *Ocean Advocates v. U.S. Army Corps of*

¹² In rulemaking, it is not enough to assert without meaningful discussion that more protective mitigation measures are impracticable. *See Conservation Council for Haw. v. Nat'l Marine Fisheries Serv.*, 97 F. Supp. 3d 1210, 1230 (D. Haw. 2015) (ruling that to meet the least practicable adverse impact standard, "something more than a refusal to consider mitigation measures and an unexplained assertion that further mitigation is not practical is needed").

Engineers, 402 F.3d 846, 859 (9th Cir. 2005) (alterations in original) (citation omitted). The agency decision here conflicts with the statutory mandate requiring mitigation at levels that yield the least practicable adverse impact. An agency conclusion that is in “direct conflict with the conclusion of its own experts,”—here, the agency’s drastic reduction of OBIA’s by eliminating candidate OBIA’s in data-poor waters against the recommendations of its subject matter experts—is arbitrary and capricious. *W. Watersheds Proj. v. Kraayenbrink*, 632 F.3d 472, 492 (9th Cir. 2011).

Defendants also urge us to defer to the agency’s chosen OBIA selection criteria, which differed from the White Paper’s, on the ground that we should not second-guess an agency’s reasonable treatment of scientific data. Defendants rely on this court’s decision in *San Luis & Delta-Mendota Water Authority v. Jewell*, 747 F.3d 581 (9th Cir. 2014), in which we stated that we will “reject an agency’s choice of a scientific model ‘only when the model bears no rational relationship to the characteristics of the data to which it is applied.’” *Id.* at 621 (first quoting *Nat’l Wildlife Fed’n v. EPA*, 286 F.3d 554, 565 (D.C. Cir. 2002); then quoting *Appalachian Power Co. v. EPA*, 135 F.3d 791, 802 (D.C. Cir. 1998)). In *San Luis*, experts differed on which of two methods was best suited to assess the effect of certain water projects on the endangered delta smelt. *Id.* The U.S. Fish and Wildlife Service (FWS) chose the more conservative method, and the court found that the choice was supported by the record and within FWS’s discretion. *Id.* at 610. But here, NMFS did not choose between competing methods designed to answer the same question; it made a policy choice not to protect areas—composing most of the world’s oceans—for which little scientific data exist.

This policy choice is underprotective compared to the alternative proposed by the agency's subject matter experts. Although NMFS considered the White Paper's discussion of data-poor regions, the record does not show that NMFS critiqued the White Paper's scientific analysis or concluded that its proposed guidelines were unsound.¹³ NMFS instead offered two reasons for refusing to designate additional OBIA's based on the White Paper's principles.

First, NMFS said that areas identified using the White Paper's ecological principles did "not meet the criteria we established" for designating such areas. 77 Fed. Reg. at 50303–04. But this distinction is tautological. The White Paper's criteria were different than those NMFS ultimately chose, but the difference itself does not explain why NMFS's criteria were equally or more capable of meeting the statutory standard, particularly in areas where site-specific data do not exist.

Defendants contend that NMFS need not consider mitigation measures that are not supported by the best available information because federal regulations provide that the Final Rule and its mitigation measures are to be based on the "best available information." 50 C.F.R. § 216.105(c). Moreover, Defendants contend, "[t]he determination of what constitutes the 'best scientific data available' belongs to the agency's 'special expertise.'" *San Luis*, 747 F.3d at 602 (first quoting 50 C.F.R. § 402.14(g)(8); then quoting *Balt. Gas & Elec. Co. v. Nat. Res. Def. Council*, 462 U.S. 87, 103 (1983)). Defendants make a case that NMFS used the best available science in deciding if a potential OBIA met its screening

¹³ NMFS said the White Paper was not "unearthed" until July 9, 2012, less than two months before NMFS published its Final Rule on August 20.

criteria. But the screening criteria themselves required a definitive showing of biological significance even though NMFS's own experts concluded that "[t]he task of identifying OBIA's for cetaceans is particularly difficult for regions in which data on cetacean distribution or population density are limited or lacking entirely, which includes the majority of the world's oceans."

This selection of screening criteria, in our view, was a policy choice, not a scientific determination. We review it according to the standard voiced by the Supreme Court in *State Farm*, and hold that NMFS "failed to consider an important aspect of the problem," namely the underprotection that accompanies making conclusive data an indispensable component of OBIA designation. 463 U.S. at 43. This systematic underprotection of marine mammals cannot be consistent with the requirement that mitigation measures result in the "least practicable adverse impact" on marine mammals.

Second, in response to the White Paper's conclusion that it is "not acceptable to proceed in the decision making process as if the 'no data' scenario were equivalent to . . . 'no biological importance,'" NMFS reasoned that OBIA's are but one component of a "suite" of mitigation measures. 77 Fed. Reg. at 50304. However, the other two mitigation measures, the shutdown zone and coastal exclusion zone, apply regardless of whether an area is considered potentially biologically important or not. Relative to these mitigation measures, the only heightened protection possible under the agency's plan is designation as an OBIA. Defendants repeatedly emphasize that NMFS's decision not to designate an area as an OBIA did not mean that the agency assumed the area was biologically unimportant. But this is exactly how

NMFS treated data-poor areas when it categorically barred their designation as OBIAAs.

Furthermore, the MMPA’s mitigation requirement applies to marine mammal “species or stock *and its habitat*,” and NMFS must “pay[] particular attention to rookeries, mating grounds, and areas of similar significance[.]” 16 U.S.C. § 1371(a)(5)(A)(i)(II)(aa) (emphasis added). This statutory guidance means that protecting marine mammal habitat from the effects of LFA sonar is of paramount importance under the MMPA. Defendants’ reference to their “suite” of mitigation measures does not repair the underinclusive OBIA designation protocol, particularly in light of the subject matter experts’ conclusion that “the other forms of mitigation [are] considerably less effective than specifying OBIAAs.” The result is that a meaningful proportion of the world’s marine mammal habitat is underprotected.

Relying on the other two mitigation measures—shutdown upon detection of a marine mammal and a coastal exclusion zone—in all areas of the ocean not designated as OBIAAs ignores that OBIAAs are one of only two mitigation measures capable of measurably reducing Level B harassment. The shutdown zone around LFA sonar vessels is not large enough to protect marine mammals from Level B effects between 165 and 175 dB. As a result, unless an area is designated as an OBIA or lies within 22 km of the coast, there is minimal mitigation of Level B harassment. Although Defendants emphasize that OBIAAs are not the core component of the Final Rule’s “suite” of mitigation measures, the record does

not show that the other mitigation measures achieve the least practicable adverse impact.¹⁴

¹⁴ To illustrate the underprotection given by NMFS's designation criteria, we note elimination in the 2012 Final Rule of two OBIA's that the district court in *Gutierrez* faulted NMFS for refusing to include in the 2007 Final Rule: the Papahānaumokuākea Marine National Monument (formerly named the Northwestern Hawaiian Islands Marine National Monument) and the Galapagos Islands off the coast of Ecuador. *Gutierrez*, 2008 WL 360852 at *24. The district court here did not analyze the exclusion of Papahānaumokuākea, other than repeating Defendants' determination that "[m]arine animals present in the operational [national monument] area are more than adequately protected by the Navy's three-part mitigation monitoring (visual, passive acoustic, and active acoustic), delay/shutdown protocols for LFA transmissions, and geographic restrictions," and that the monument "is the habitat for the endangered Hawaiian monk seal, which is not [a low-frequency] hearing specialist. For this reason, the area did not qualify as an [OBIA]." But the government's management plan for Papahānaumokuākea says that "[t]he waters of the Monument are also home to more than 20 cetacean species, six of them federally recognized as endangered under the ESA . . . and "depleted" under the Marine Mammal Protection Act . . . but comparatively little is known about the distributions and ecologies of these whales and dolphins Recent research . . . reveals that the Monument also hosts many more humpback whales than originally thought." Papahānaumokuākea Marine National Monument Management Plan, December 2008, <http://sanctuaries.noaa.gov/management/mpr/mpr-papahanaumokuakeamp-2008.pdf>. For Papahānaumokuākea, NMFS faced the familiar choice of how to handle uncertainty, and chose underprotection without adequately explaining the decision, or how the least practicable adverse impact standard for mitigation was met.

The treatment of the Galapagos Islands is also illustrative. Like the 2012 Final Rule, the previous 2007 Final Rule did not designate this area as an OBIA. The district court in *Gutierrez* noted with disapproval that according to the government's own website, the Galapagos Islands consist of "highly productive coastal waters' that create 'important feeding zones for marine mammals Dolphins, orcas, and blue and humpback whales are some of the 24 species of cetacean known to visit this refuge for feeding and mating.'" *Gutierrez*, 2008 WL 360852 at *7. The district

VI

Defendants contend, and the district court was persuaded, that NMFS's plans to engage in "adaptive management" will in time allow the Final Rule to achieve the least practicable adverse impact standard. For example, the Final Rule allows NMFS and the Navy to specify additional OBIA's or other forms of mitigation in annual letters of authorization (LOAs), based on new information. Responding to the problem of data-poor oceanic regions, the Final Rule notes: "Recognizing that many areas throughout the world's oceans currently have few data to support an OBIA designation at this time, we and the Navy will continue to conduct literature reviews under the adaptive management provision of this regulation." 77 Fed. Reg. at 50303. Moreover, "information regarding data poor areas is likely to evolve over the five year course of the final rule and beyond, and NMFS will consider new information to continue identifying OBIA's for [LFA sonar] operations." *Id.* at 50304. Similarly, although the Final Rule did not designate any OBIA's for sperm whales, it promised to consider designating such OBIA's "through the adaptive management process." *Id.* at 50309.

court concluded that "the limited and skewed selection of OBIA's demonstrates the arbitrariness of the decision not to designate more OBIA's, including outside the United States." *Id.* In this round of litigation, the district court reversed course and cited with approval NMFS's stated reason for excluding the Galapagos Islands: "Even though blue whales are reported to be present, there is no scientific evidence that these whales occur in these waters in densities higher than any other similar location. Therefore, this area was not recommended as an [OBIA]." The district court concluded without analysis that "[o]n balance, Defendants did not act arbitrarily or capriciously." We disagree and hold that Defendants arbitrarily gave insignificant weight to the district court's prior ruling.

Despite these nods to the future, the Final Rule does not require that any specific mitigation measure be taken as a result of adaptive management activities. The mere possibility of changing the rules to accommodate new information does not satisfy the MMPA’s strict requirements for mitigating the effects of incidental take. The district court observed that “the duty to adopt in advance measures to ensure the least practicable adverse impact cannot be met simply by deferring to potential unknown future measures.” *See also Greater Yellowstone Coal., Inc. v. Servheen*, 665 F.3d 1015, 1029 (9th Cir. 2011) (“Just as it is not enough simply to invoke ‘scientific uncertainty’ to justify an agency action, it is not enough to invoke ‘adaptive management’ as an answer to scientific uncertainty.”). We agree with these principles and conclude that “adaptive management” is not an answer to the failure to adopt mitigation measures effecting the least practicable adverse impact on those marine mammal species, stocks, and habitats.

VII

The 2012 Final Rule does not establish means of “effecting the least practicable adverse impact on” marine mammal species, stock, and habitat, as is specifically required by the MMPA. NMFS impermissibly conflated the “least practicable adverse impact” standard with the required “negligible impact” finding. The statute’s text makes clear that to authorize incidental take, NMFS must achieve the “least practicable adverse impact” standard *in addition to* finding a negligible impact. NMFS also did not give adequate protection to areas of the world’s oceans flagged by its own experts as biologically important, based on the present lack of data sufficient to meet NMFS’s designation criteria, even though NMFS’s own experts acknowledged that

“[f]or much of the world’s oceans, data on cetacean distribution or density do not exist.”

The district court’s grant of summary judgment to Defendants is **REVERSED** and the matter is **REMANDED** to the district court for further proceedings.