

1 thorough review of the project's possible environmental impact.
2 In the January 2003 Order, this Court enjoined NMFS from issuing
3 any permit allowing similar research without first completing an
4 Environmental Assessment ("EA"). In response to Dr. Stein's
5 recent application, NMFS conducted an Environmental Assessment
6 ("the Stein EA") and subsequently issued the Permit now in
7 question. Plaintiffs allege that NMFS, in issuing the Permit and
8 in preparing the Stein EA, violated NEPA, the Administrative
9 Procedure Act (the "APA") and the Marine Mammal Protection Act
10 (the "MMPA"). This Court, after holding an accelerated trial on
11 the merits, finds that Plaintiffs have failed to establish that
12 Defendants acted arbitrarily or capriciously in issuing the
13 Permit. Accordingly, Plaintiffs' motion for a permanent
14 injunction is denied and judgment is entered in favor of
15 Defendants.

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17 **II. FACTUAL HISTORY**

18 **A. Prior Litigation**

19 One year ago, these same Plaintiffs challenged several
20 permits that NMFS issued to Dr. Peter Tyack for various research
21 projects, including an experiment essentially identical to that of
22 Dr. Stein which lies at the center of this action.¹ In that case,
23 Hawaii County Green Party, et al. v. Evans, et al., No. C-03-0078-

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25 _____
26 ¹Four out of the five Plaintiffs joined in this litigation
27 were also parties to the earlier action: Australians for Animals,
28 Hawaii Green Party, Stop LFAS Worldwide Network and Sea Sanctuary,
Inc. The fifth Plaintiff, Ocean Defense International, was not a
party to the previous litigation.

1 SC (N.D. Cal.), Dr. Tyack held multiple permits authorizing him
2 to, *inter alia*, test whale-finding sonar in the Northern Pacific.
3 Dr. Stein developed the sonar technology that was to be tested,
4 and Dr. Tyack was retained as the scientific advisor. NMFS
5 granted those permits to Dr. Tyack pursuant to categorical
6 exclusions under NEPA which allow for scientific permits generally
7 to be issued without having conducted any sort of formal
8 environmental evaluation. See NOAA Admin. Order Series 216-6, §
9 6.03. This Court, however, invalidated some of the permits,
10 finding that the public controversy and potential environmental
11 consequence associated with the proposed research precluded
12 application of the categorical exclusion. See Order Granting
13 Permanent Injunction, Hawaii County Green Party, No. C-03-0078-SC
14 (N.D. Cal. Jan. 24, 2003) (the "2003 Order"); see also NOAA Admin.
15 Order Series 216-6, § 5.05c. The 2003 Order enjoined all
16 defendants in that case from continuing activities covered by the
17 invalid permits and required that NMFS prepare an Environmental
18 Assessment prior to granting a permit for similar sonar testing on
19 marine mammals.

20 B. The 2004 Permit

21 On May 15, 2003 Dr. Stein submitted an application to NMFS
22 for a permit to conduct high-frequency sonar testing on gray
23 whales off the California coast. In response to Dr. Stein's
24 permit application and in accordance with the relevant
25 administrative regulations, NMFS prepared a draft EA and on
26 November 5, 2003 published a notice in the Federal Register
27 announcing Dr. Stein's application. See 68 Fed. Reg. No. 62563

1 (Nov. 5, 2003); Administrative Record ("AR"), Tab 3. NMFS also
2 announced that it was holding a public meeting in Silver Springs,
3 MD regarding Dr. Stein's permit application. See 68 Fed. Reg.
4 64865 (Nov. 17, 2003); AR, Tab 5. Five different entities or
5 individuals sent written comments to NMFS, including Mr. Lanny
6 Sinkin, counsel for Plaintiffs in this action. That meeting
7 occurred on November 20, 2003, and on December 23, 2003, NMFS
8 issued their final EA and a Finding of No Significant Impact and
9 then the Permit itself. The Permit authorizes Dr. Stein to:

10 conduct research to validate and improve the
11 ability of whale-finder sonar systems to
12 detect marine mammals without adversely
13 affecting them. The permit authorizes [Dr.
14 Stein] to expose gray whales (*Eschrichtius*
15 *robustus*) to the whale-finder sonar sounds to
16 gather data on the reflectivity of gray
17 whales, determine the probability of detection
18 of gray whales out to one mile, and determine,
19 what, if any, reaction the gray whales may
20 have to high frequency active sonars designed
21 to detect marine mammals. See AR, Tab 10 at
22 p. 1.

23 According to the Permit, the proposed research does not involve
24 "activities that may pose a risk of death or injury to marine
25 mammals." Id.

26 C. The Environmental Assessment

27 Pursuant to the 2003 Order, NMFS prepared the Stein EA in
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1 response to Dr. Stein's permit application to investigate the
2 possible detrimental effects caused by the whale-finder sonar
3 system. At forty-plus pages in length, the Stein EA discusses the
4 purpose of and need for the proposed research, possible
5 alternatives, the affected environment -- including social and
6 economic, physical, and biological concerns -- and environmental
7 consequences. The chapter on environmental consequences details
8 the effects of proposed alternatives, a comparison of
9 alternatives, compliance with the Endangered Species Act,
10 mitigation measures, unavoidable adverse effects and cumulative
11 environmental impact. The primary section of the Stein EA ends
12 with a consideration of the significant criteria, which leads NMFS
13 to the conclusion that a more thorough Environmental Impact
14 Statement is not warranted.

15 Plaintiffs, in attempting to invalidate the Permit, allege
16 violations of NEPA, the MMPA and the APA. The common charge
17 underlying Plaintiffs' various objections to the Stein EA is that
18 the sonar that Dr. Stein developed and the manner in which he
19 employs it produces hazardous effects on the Northern Pacific
20 ecosystem, particularly against California gray whales. On
21 January 8, 2004, Plaintiffs filed a complaint seeking a temporary
22 restraining order and preliminary injunction against Defendants
23 that would halt Dr. Stein's research which was already underway.
24 On January 12, 2004, this Court held a temporary restraining order
25 hearing, after which we held that Plaintiffs failed to satisfy the
26 requirements for a T.R.O., namely probable success on the merits
27 and a possibility of irreparable harm.

1 Following the denial of Plaintiffs' motion for a T.R.O., this
2 Court held a permanent injunction hearing on Plaintiffs' claims
3 regarding Defendants' alleged violations of NEPA, the MMPA, and
4 the APA. Although Plaintiffs' motion sought only a preliminary
5 injunction, this Court ordered the trial on the merits to be
6 advanced and consolidated with the preliminary injunction hearing,
7 as authorized under Rule 65(a)(2) of the Federal Rules of Civil
8 Procedure. Given the urgency of the situation, we decided *sua*
9 *sponte* to convert the preliminary injunction hearing into a
10 consolidated trial on the merits. See Fed. R. Civ. P. 65(a)(2).
11 As this Court informed the parties of its intent to consolidate
12 the injunction hearing into an accelerated trial and the parties
13 offered no objection, there is no question that the litigants
14 received fair notice and opportunity to be heard. See Glacier
15 Park Foundation v. Watt, 663 F.2d 882, 886 (9th Cir. 1981); see
16 also Carlyn v. City of Akron, 726 F.2d 287, 288 (6th Cir.
17 1984) (parties could not challenge Rule 65 consolidation after
18 resolution of trial on the merits when judge had informed them of
19 his intent to consolidate at the prior T.R.O. hearing).

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21 **III. LEGAL STANDARD**

22 A. National Environmental Policy Act

23 The purpose of NEPA, 42 U.S.C. §§ 4321, *et seq.*, is to
24 "ensure that federal agencies are informed of environmental
25 consequences before rendering decisions and that the information
26 is available to the public." Okanogan Highlands Alliance v.
27 Williams, 236 F.3d 468, 473 (9th Cir. 2000). The legislative
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1 intent is to focus the attention of both the government agency and
2 the general public on a proposed action in order to evaluate the
3 likely consequences of a particular proposal and make an informed
4 determination regarding that proposal. See Marsh v. Oregon
5 Natural Res. Council, 490 U.S. 360, 371 (1989). "By so focusing
6 agency attention, NEPA ensures that the agency will not act on
7 incomplete information, only to regret its decision after it is
8 too late to correct." Id. NEPA requires that relevant
9 environmental information be publicized and subjected to public
10 scrutiny prior to an agency making a decision. See 40 C.F.R §
11 1500.1(b). NEPA mandates procedure; the statute does not demand
12 particular results but only prescribes the process by which agency
13 decisions are rendered. Robertson v. Methow Valley Citizens
14 Council, 490 U.S. 332, 350 (1989); see also Vermont Yankee Nuclear
15 Power Corp. v. Natural Res. Defense Council, Inc., 435 U.S. 519,
16 558 (1978). "If the adverse environmental effects of the proposed
17 action are adequately identified and evaluated, the agency is not
18 constrained by NEPA from deciding that other values outweigh the
19 environmental costs." Robertson, 490 U.S. at 350. Thus the
20 pertinent question for the Court is not whether we would have
21 arrived at the same decision as that of the agency but merely
22 whether the agency's decision was an informed one. Vermont
23 Yankee, 435 U.S. at 558.

24 NEPA generally requires federal agencies to prepare an
25 Environmental Impact Statement ("EIS") prior to undertaking major
26 federal action where there is a substantial likelihood of
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1 significant environmental degradation. See Public Citizen v.
2 Department of Transp., 316 F.3d 1002, 1021 (9th Cir. 2002);
3 Anderson v. Evans, 314 F.3d 1006, 1017 (9th Cir. 2002); Tilamook
4 County v. U.S. Army Corps of Eng'rs, 288 F.3d 1140, 1143 (9th Cir.
5 2002); Hall v. Norton, 266 F.3d 969, 972-73 (9th Cir. 2001).
6 However, an EIS is not necessary in all cases. See id. NEPA
7 demands an EIS when substantial questions exist as to whether a
8 proposed project may have a significant effect on the environment.
9 Id. Therefore, where no significant environmental impact is
10 likely, the government agency may prepare an EA instead.² 40
11 C.F.R. § 1508.9(a)(2) (1997). An Environmental Assessment is a
12 document that examines whether significant environmental impacts
13 could result from issuance of the proposed scientific research
14 permit. The purpose of an EA is to aide the agency's
15 determination when no EIS is required. Id.

16 An EA should "[b]riefly provide sufficient evidence and
17 analysis for determining whether to prepare an environmental
18 impact statement or a finding of no significant impact." 40
19 C.F.R. § 1508.9(a)(1) (1997). While an EA ought to include short
20 discussions of the need for the proposal, practical alternatives
21 and the environmental impacts of both the proposal and such
22 alternatives, "long descriptions or detailed data" are
23 unnecessary. 46 Fed. Reg. 18026 (March 23, 1981). Thus an EA is
24 essentially a "rough-cut, low budget environmental impact
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26 ²The Council on Environmental Quality promulgates regulations
27 to provide guidance in applying NEPA requirements. See Robertson,
28 490 U.S. at 355-56 (1989).

1 statement intended to determine whether environmental effects are
2 significant enough to warrant preparation of an EIS." Sierra
3 Club v. Espy, 38 F.3d 792, 802 (5th Cir. 1994).

4 B. The Marine Mammal Protection Act

5 The MMPA generally prohibits "takings" of marine mammals,
6 where a "taking" means to "harass, hunt, capture, or kill, or
7 attempt [any of such]." 16 U.S.C. §§ 1372(a); 1362(13). The
8 MMPA, however, carves out an exception allowing for "takings" for
9 the purpose of scientific research, as determined by the Secretary
10 of Commerce who may issue permits accordingly. See 16 U.S.C. §§
11 1371(a)(1); 1374(c)(3).³ The process for acquiring a permit
12 pursuant to the MMPA is similar to that of NEPA. Individuals
13 seeking MMPA permits must submit an application to the NMFS, which
14 following a period for public review, determines whether the
15 proposed activity comports with the MMPA guidelines or whether
16 such a determination first requires preparation of an EA or EIS.
17 15 C.F.R. § 216.33(d).

18 C. The Administrative Procedure Act

19 The Administrative Procedure Act governs judicial review of
20 an agency decision under NEPA and the MMPA. See 5 U.S.C. § 706;
21 Pyramid Lake Paiute Tribe of Indians v. United States Dept. of
22 Navy, 898 F.2d 1410, 1414 (9th Cir. 1990). Agency actions may be
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25 ³In November 2003, Congress amended the MMPA to provide a
26 specific definition of harassment as it relates to scientific
27 research. Under the new amendment, "harassment" includes "any act
28 that injures ... or is likely to disturb ... natural behavioral
patterns" Pub. l. no. 108-136, § 319(a) (2003).

1 properly overturned where they are "arbitrary, capricious, an
2 abuse of discretion, or otherwise not in accordance with law."
3 Id. at § 706(2) (A); see also Idaho Sporting Congress v. Thomas,
4 137 F.3d 1146, 1149 (9th Cir. 1998); Oregon Natural Res. Council
5 v. Lowe, 109 F.3d 521, 526 (9th Cir. 1997). Therefore, in
6 evaluating the legal sufficiency of the agency's action, the Court
7 is required to apply the "arbitrary and capricious" standard of
8 the APA. This standard is highly deferential, and review of the
9 record is to be "searching and careful" but "narrow." Marsh, 490
10 U.S. at 378. District courts are not empowered to substitute
11 their own judgment for that of the government agency. Wetlands
12 Action Network v. U.S. Army Corps of Eng'rs, 222 F.3d 1005, 1114
13 (9th Cir. 2000). The reason behind this doctrine lies in the
14 principle that a court should not usurp the role of the agency but
15 rather should determine simply whether the agency took a "hard
16 look" at the evidence before it -- that is, whether the agency
17 decision was arbitrary or capricious. See Center for Biological
18 Diversity v. U.S. Forest Serv., 349 F.3d 1157, 1166 (9th Cir.
19 2003).

20 For decisions involving the particular expertise of the
21 decision-maker, the reviewing court should defer to the "informed
22 discretion of the responsible federal agencies." Marsh, 490 U.S.
23 at 377. As the Supreme Court explained:

24 "When specialists express conflicting views,
25 an agency must have discretion to rely on the
26 reasonable opinions of its own qualified
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1 experts even if, as an original matter, a
2 court might find contrary views more
3 persuasive." Id. at 378.

4 For this reason, courts are not required to balance conflicting
5 expert opinions. See Friends of Endangered Species, Inc. v.
6 Jantzen, 760 F.2d 976, 986 (9th Cir. 1985). That a plaintiff can
7 dispute an agency's findings does not sufficiently establish that
8 the agency acted arbitrarily or capriciously. See Greenpeace
9 Action v. Franklin, 14 F.3d 1324, 1336 (9th Cir. 1992).
10 Ultimately, the dispositive question is whether or not the agency
11 made an informed decision.

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13 **IV. DISCUSSION**

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15 A. Compliance with NEPA

16 Plaintiffs raised seven claims in their original complaint
17 and voiced one additional objection during the T.R.O. hearing
18 before the Court. The first five of these claims involve specific
19 challenges to conclusions that NMFS made in the Stein EA regarding
20 the possible detrimental effects of Dr. Stein's research on the
21 surrounding environment. Plaintiffs also contest the validity of
22 the Stein EA for its failure to discuss significant unknowns
23 associated with the project. This claim surfaced for the first
24 time at the T.R.O. hearing. Plaintiffs' final two claims allege,
25 respectively, that NMFS produced the Stein EA in bad faith and
26 erred in deciding that the proposed research did not warrant
27 preparation of an EIS. We now consider each of these claims in

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1 turn.

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3 1. Auditory Effects of Sonar on Gray Whales

4 Plaintiffs allege that Defendants ignored possible harmful
5 effects on gray whales stemming from the animals' ability to hear
6 the sonar. According to Plaintiffs, the Stein EA erroneously
7 asserts that gray whales will not be able to detect the sonar
8 sounds. See Pls.' Mem. in Supp. of T.R.O. and Prelim. Inj.
9 ("Pls.' Memo") at p. 6. Their contention is that gray whales will
10 likely modify their behavior in reaction to the sonar or that the
11 sonar is loud enough to possibly harm the whales' hearing
12 capacity. Plaintiffs believe that Defendants acted arbitrarily
13 and capriciously in ignoring evidence of how insonification
14 potentially affects gray whales.
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16 The Stein EA adequately discusses the auditory effects of
17 sonar on gray whales (as well as other marine mammals). See
18 Environmental Assessment at p. 24. It explains in detail the
19 hearing range of baleen whales (the classification to which gray
20 whales belong) based on frequency and decibel level and concludes
21 that these whales are more sensitive to lower-frequency sounds.
22 See id. Furthermore, Dr. Roger Gentry, director of the NMFS
23 Acoustics Program, testified that the sonar, when operated at high
24 frequencies, will be inaudible to gray whales and therefore not
25 alter their normal behavior. Decl. of Roger Gentry in Supp. of
26 Federal Defs.' Opp. to Pls.' Mot. for T.R.O. and Prelim. Inj.
27 ("Gentry Decl."), ¶ 3. Also, with respect to the potential for
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1 auditory damage, Dr. Gentry explained, "no sonar could produce a
2 sound at [the pertinent] frequency loud enough to cause even a
3 temporary change in hearing." Id. Dr. Gentry compared the effect
4 of the sonar on gray whales to that of a dog whistle on humans and
5 concluded that the Stein EA reasonably and accurately determined
6 that the research posed no risk of acoustic injury to gray whales.

7 Relying on affidavits and testimony from Mr. Larry Mebust and
8 Ms. Katy Penland, Plaintiffs offer evidence to refute the Stein
9 EA's conclusions and illustrate that gray whales can hear sonar.
10 The majority of this evidence, however, came in the form of
11 anecdotal hearsay regarding the claims of whale-watching boat
12 captains who boasted that they could cause gray whales to breach
13 by activating sonar. Plaintiffs contend that NMFS should have
14 consulted with Mr. Mebust or Ms. Penland in order to thoroughly
15 investigate the behavioral effects of the sonar on gray whales.
16 However, given the lack of scientific expertise of Mr. Mebust and
17 Ms. Penland -- a pilot and photographer, respectively -- such
18 consultations were not imperative. In addition, even if the Court
19 were to accept the testimony of Mr. Mebust and Ms. Penland as
20 given, Plaintiffs have not offered any explanation as to how the
21 gray whales' mere ability to hear the sonar equates to a harmful
22 effect on the animals.

23 At the injunction hearing, Plaintiffs' own witness, David
24 Bain, testified under cross-examination to the similarity between
25 the type of sonar employed by Dr. Stein and that of commercial
26 fish-finders. According to Mr. Bain, Dr. Stein's sonar uses a
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1 longer pulse duration, generally lower frequency and has greater
2 depth and range than commercial sonar, but the power source levels
3 between the two are comparable. Furthermore, the frequency range
4 of Dr. Stein's sonar overlaps with that of commercial sonar. Thus
5 there was inconclusive evidence that the sonar involved with the
6 proposed research was substantially different than that which
7 commercial fisherman permissibly use on a regular basis.

8 2. Effects on Cow-Calf Migration

9 Plaintiffs argue that the Stein EA fails to consider the
10 potential harm that the sonar causes on gray whale migration,
11 specifically regarding cow-calf communication.⁴ See Pls.' Memo at
12 pp. 18-20. They contend that use of the sonar risks interfering
13 with the ability of cows to communicate with their calves,
14 possibly resulting in calves becoming separated from their mothers
15 and thereby extremely vulnerable. The Stein EA, however, directly
16 addresses the likelihood of communicative interference
17 ("masking"), explaining that masking is improbable given the
18 duration and frequency of the signal. See Environmental
19 Assessment at p. 25. On this issue, the Stein EA relies on the
20 opinion of Dr. Tyack, a recognized expert in marine mammal
21 acoustics, and cites three different studies to justify its
22 position. Furthermore, Dr. Gentry testified that the sonar was
23 not likely to compromise cow-calf communications given the
24 frequency of the sonar versus that which gray whales use to
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27 ⁴The terms "cow" and "calf" respectively refer to adult female
28 whales and baby whales.

1 communicate. See Gentry Decl., ¶ 3. Dr. Gentry analogized the
2 question to humans' ability to converse over the sound of a dog
3 whistle to illustrate the appropriateness of the conclusions
4 reached in the Stein EA.

5 3. Gray Whale Population

6 Plaintiffs allege that the Stein EA neglected the precarious
7 state of the gray whale population. Specifically, Plaintiffs
8 challenge the Stein EA's population estimate and question NMFS's
9 failure to list gray whales as an endangered or threatened
10 species. Plaintiffs offer credible testimony through Mr. Bain
11 identifying the forty-percent decline over the past few years as a
12 sufficiently extraordinary event to merit further investigation,
13 and they contend that the Stein EA improperly disregards the
14 significance of this decline. See Pls.' Memo, pp. 11-13. The
15 Stein EA, however, adequately addresses gray whale population,
16 citing multiple studies over the past decade and as recently as
17 2002 and discussing population trends over the past thirty years.
18 In rebuttal to Mr. Bain, Dr. David J. Rugh confirmed the veracity
19 of the data referenced in the Stein EA and justified the NMFS
20 having removed the Eastern North Pacific stock of gray whales from
21 the endangered species list. See Dec. of David Rugh in Supp. of
22 Fed. Defs.' Opp. to Pls.' Mot. for T.R.O. & Prelim. Inj ("Rugh
23 Decl."), ¶¶ 7-8. Additionally, Dr. Gentry opined that the long-
24 term significance of the recent population decline is
25 indeterminable given the small sample size and other statistical
26 indicators regarding dynamic equilibrium and carrying capacity.
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1 See Gentry Decl., ¶ 2. As the responsibility of the Court is not
2 to resolve conflicting expert testimony but rather to determine
3 whether the conclusions in the Stein EA are reasonable and well-
4 informed, the testimony of Drs. Rugh and Gentry preclude a finding
5 of arbitrariness or capriciousness on this issue. See Franklin,
6 14 F.3d at 1336; Jantzen, 760 F.2d at 986.

7 Plaintiffs also object to the Stein EA's lack of discussion
8 of the causes of the recent population decline. In particular,
9 Plaintiffs argue that the Stein EA excludes consideration of links
10 between this population decline and food shortages or other
11 climatic events and the likelihood of further ecological
12 occurrences affecting the gray whale population. The Stein EA's
13 failure to analyze these concerns, according to Plaintiffs,
14 constitutes a fatal defect. See Pls.' Memo at p. 9. Plaintiffs
15 accurately indicate that the Stein EA lacks a comprehensive
16 discussion of the potential causes of the recent gray whale
17 population decline. That, however, is not the purpose of the
18 Stein EA. An EA is required to "briefly provide sufficient
19 evidence and analysis" 40 C.F.R. § 1508.9(a)(1) (1997). The
20 Stein EA was not intended to serve as a treatise on marine mammal
21 population dynamics. As the aim of the Stein EA is to address the
22 environmental effects of sonar use, its treatment of the current
23 gray whale population was adequate.

24 4. Effects on Other Species

25 Plaintiffs' fourth claim concerns the supposed failure of the
26 Stein EA to discuss the impact on species other than the
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1 California gray whale. Plaintiffs focus on the limited discussion
2 of harbor porpoises contained within the Stein EA. At trial, Mr.
3 Bain testified that the research project could scare away harbor
4 porpoises from the insonified area, thereby reducing the available
5 space in which the porpoises live. That in turn would result in
6 an overcrowding effect where a greater number of porpoises would
7 depend on a presumably static food supply within a given area.
8 Mr. Bain estimated that this chain reaction could ultimately
9 adversely affect -- even kill -- a significant percentage of the
10 harbor porpoises in the vicinity. See Supp. Decl. of David Bain
11 ("Bain Decl."), ¶¶ 2-10; 13-21; 28-41.

12 In response, Dr. Gentry testified that the scenario described
13 by Mr. Bain was implausible based on the ease with which harbor
14 porpoises habituate to high-frequency sounds. According to Dr.
15 Gentry, it is therefore doubtful that the sonar would scare any
16 porpoises away from the insonified area. Furthermore, Defendants
17 introduced Dr. Adam Frankel, the scientist supervising observation
18 for Dr. Stein's research project. Dr. Frankel testified that in
19 his experience as an observer for this project as well as Dr.
20 Tyack's project in 2003, zero harbor porpoises had been observed
21 near the insonified area regardless of whether the sonar was
22 active or not. In Dr. Frankel's opinion, harbor porpoises
23 seemingly do not live in or travel through the particular part of
24 the ocean where the research is being conducted. In addition to
25 these experts' testimony, the Stein EA discusses the possible
26 presence of harbor porpoises, their ability to hear sounds in the
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1 frequency range of the research and the potential behavioral
2 reactions caused by the sonar. See Environmental Assessment at
3 pp. 12; 22; 31-34.

4 Plaintiffs cannot substantiate their assertion that the Stein
5 EA grossly miscalculates the extent to which the research project
6 will affect harbor porpoises. Even if this Court were to
7 disregard the credible evidence offered through Drs. Gentry and
8 Frankel, Plaintiffs have still failed to demonstrate the
9 likelihood of any harmful effects on the harbor porpoise
10 population. Although Plaintiffs boldly state that the research
11 will create "an extraordinary loss of population," the theory that
12 harbor porpoises will perish as an indirect result of the project
13 as the animals, in avoiding the sonar, relocate to a different
14 area that lacks an adequate food supply is highly speculative.
15 See Pls.' Supplemental Mem. in Supp. of Mot. for Prelim. Inj.
16 ("Pls.' Supplement"). Furthermore, Mr. Bain even admitted that
17 the noise from the sonar which could conceivably trigger the
18 tragic chain reaction ending in the death of some creatures is
19 similar to other oceanic noise, such as that from a boat's motor.
20 Thus the potential harm to harbor porpoises from the sonar --
21 again, which seems quite dubious -- is no different than that
22 risked whenever boats permissibly venture into these waters. For
23 this reason, Plaintiffs' allegation that Defendants acted
24 arbitrarily or capriciously in not considering the possible harm
25 to harbor porpoises is fallacious.

26 We also note that Plaintiffs' claims regarding the plight of
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1 harbor porpoises was conspicuously absent from the administrative
2 process. Following the announcement of Dr. Stein's permit
3 application, various groups including Plaintiffs contested the
4 Stein EA while it was in draft form prior to NMFS issuing the
5 Permit. At no time, however, did Plaintiffs raise the point of
6 harbor porpoises. While we acknowledge that NEPA obligates the
7 agency to consider the various potential environmental impacts of
8 a proposed action, "it is still incumbent upon intervenors who
9 wish to participate to structure their participation so that it is
10 meaningful, so that it alerts the agency to the intervenors'
11 position and contentions." Vermont Yankee, 435 U.S. at 553.
12 Therefore, that Plaintiffs raised the issue of harbor porpoises
13 for the first time at the T.R.O. hearing detracts from the
14 efficacy of this claim. See id.

15 Aside from harbor porpoises, Plaintiffs claim that the Stein
16 EA does not sufficiently consider the effects of the proposed
17 research on other species, including killer whales. On this
18 point, the Court finds it beneficial to note some of the species
19 that the Stein EA explicitly considers: invertebrates such as
20 mollusks, crustaceans, sponges and jellyfish; fish including
21 anchovy, tuna, swordfish, herring, sardine, mackerel, rockfish,
22 and flatfish; sea turtles; seabirds; blue whales; fin whales;
23 minke whales; right whales; humpback whales; beaked whales; sperm
24 whales; harbor seals; northern fur seals; California sea lions;
25 and sea otters. We include this lengthy list of species to
26 illustrate the comprehensiveness of the Stein EA. Because the
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1 Stein EA is specifically designed to briefly discuss the potential
2 environmental impact, it is always possible to identify some
3 considerations which were not analyzed in depth. However, given
4 the extensive list of species that the Stein EA covers, including
5 specific discussions regarding odontocetes such as killer whales,
6 we find that the Stein EA satisfactorily discusses the impact on
7 animals other than gray whales.

8 5. Mitigation Measures

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10 There is no dispute that the Stein EA considers and adopts
11 mitigation measures intended to "minimize the potential for
12 adverse effects on marine mammals." Environmental Assessment at
13 p. 36. Still, Plaintiffs contend that the mitigation measures
14 included are "woefully inadequate." See Pls.' Memo at p. 20.
15 Specifically, Plaintiffs argue that Defendants' intent to use
16 observers stationed on the research vessel and onshore but not
17 employ aerial observation represent insufficient precautions. The
18 evidence, however, indicates otherwise. Dr. Stephen Leathery,
19 Chief of the Permits Division for NMFS, explained that aerial
20 surveys are unlikely to increase the detection of adverse
21 reactions during sonar transmissions given the altitude and
22 airspeed of most survey craft, and thus onshore and onboard
23 observers definitely suffice. See Decl. of Stephen Leathery, ¶ 6.
24 In addition, Dr. Leathery cites evidence that low-flying aircraft
25 such as those conducting aerial surveys often disturb marine
26 mammals and could therefore tamper with the data that the research
27 aims to collect. See id., ¶ 7.

1 Plaintiffs also contest the effectiveness of the prescribed
2 ramp-up procedure -- in which the researchers initiate the sonar
3 signal at a low power level and progressively increase it. The
4 Stein EA details how ramping up the sonar signal in this manner
5 would allow disturbed animals to flee the immediate area.
6 Furthermore, the sonar is to be deactivated if a marine mammal
7 approaches within one hundred meters of the vessel or if any
8 endangered species comes within two kilometers of the vessel.
9 Also, the sonar will only be used during daylight hours so that
10 the onshore and onboard observers can be most effective. NEPA
11 only requires a "reasonably complete discussion of possible
12 mitigation measures."⁵ Thus, in light of the absence of evidence
13 illustrating that the sonar even harms marine mammals or other
14 species, we hold that the mitigation measures are entirely
15 adequate.

16 6. Significant Unknowns

17 During the T.R.O. hearing, Plaintiffs raised the issue of
18 significant unknowns, a claim that they did not include in their
19 original complaint. Plaintiffs' argument on this issue is
20 essentially a conglomeration of elements from their other claims
21 in that they contend the Stein EA did not assess the impact of
22 numerous unknown factors related to the proposal, thereby
23 rendering the NMFS decision to issue the Permit arbitrary and
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26 ⁵This requirement pertains to an EIS rather than an EA.
27 Therefore, given that the former is inherently more analytical and
28 thorough than the latter, there is no question that an EA which
satisfies this standard for mitigation measures complies with NEPA.

1 capricious. According to Plaintiffs, the ability of marine
2 mammals to hear the sonar, the effects of sonar on cow-calf
3 communication, the causes of the gray whale population decline,
4 and the potential impact on harbor porpoises all represent
5 significant unknowns that invalidate the legitimacy of the Permit.

6 Throughout its discussion of particular areas of potential
7 environmental impact, the Stein EA acknowledges that there are
8 unknown factors and indeterminable consequences. Plaintiffs seek
9 to use this acknowledgment to justify nullification of the Permit.
10 NEPA, however, requires an agency to discuss the present knowledge
11 base and draw reasonable conclusions given the available
12 scholarship. See Okanogan Highlands, 236 F.3d at 473. To demand
13 that an agency predict or even precisely identify every possible
14 unknown prior to approving proposals would severely restrict
15 scientific research. As it was once said, "to solve a problem
16 that we have never solved before, we must leave the door to the
17 unknown ajar."⁶ For this reason and in light of the extensiveness
18 of the Stein EA and its attempts to identify the significant
19 unknowns associated with the proposal, the Court refuses to hold
20 that Defendants' failure to hazard a guess as to what unforeseen
21 consequences will stem from unknown variables amounts to a
22 violation of applicable law.

23 7. Bad Faith

24 Plaintiffs accuse NMFS of conducting the administrative
25 process in bad faith. Plaintiffs argue that because NMFS was
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27 ⁶Richard Feynman, winner of the 1965 Nobel Prize in Physics.

1 biased from the beginning of the entire administrative process
2 surrounding Dr. Stein's permit application, the agency was not
3 objective in preparing the Stein EA, deciding not to conduct an
4 EIS or ultimately issuing the Permit. Allegedly, the agency's
5 response to the 2003 Order reflects its bias in favor of the
6 deployment of the high-frequency sonar. See Pls.' Memo at p. 22-
7 24. On the official website of the National Oceanic and
8 Atmospheric Administration ("NOAA"), NMFS posted a listing
9 entitled "Whale Conservation Setback" in which it decried the 2003
10 Order and proclaimed the absence of scientific evidence
11 demonstrating any potential harm to marine mammals. See Pls.' Ex.
12 16. The NOAA website posting, in Plaintiffs' opinion,
13 demonstrates NMFS' partiality in support of the proposal.
14 According to Plaintiffs, NMFS's lack of objectivity violates the
15 APA.

16 While NMFS undoubtedly disagreed with the 2003 Order, such
17 disagreement does not translate into a procedural violation. It
18 is self-evident that an agency which decides to support a given
19 proposal after objectively weighing the merits of that proposal
20 will subsequently defend the propriety of its decision. That NMFS
21 stood by its choice to issue the Permit following the 2003 Order
22 does not create an inference of bias that bears on the objectivity
23 with which the agency initially considered the proposal. Thus,
24 NMFS's support of this type of whale-finding sonar research does
25 not render its decision to grant the Permit arbitrary or
26 capricious. In scrutinizing the tedious EA, we find no basis for
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1 any assertion that Defendants deliberately ignored evidence,
2 manipulated the administrative process or engaged in otherwise
3 objectionable behavior. Accordingly, Plaintiffs' allegation of
4 bad faith is untenable.

5 8. Environmental Impact Statement

6 Plaintiffs' eighth and final objection to the Stein EA
7 concerns NMFS's conclusion that the proposed research did not
8 warrant preparation of an Environmental Impact Statement. NEPA
9 stipulates that an EIS is necessary where an EA demonstrates that
10 a proposed project may have a significant effect on the
11 environment. Public Citizen v. Department of Transp., 316 F.3d at
12 1021. As the Ninth Circuit explained, "The plaintiff need not
13 show that significant effects *will in fact occur*, but if the
14 plaintiff raises substantial questions whether a project may have
15 a significant effect, an EIS *must* be prepared." Greenpeace, 14
16 F.3d at 1332. An agency's decision not to prepare an EIS is
17 reviewed under the arbitrary and capricious standard. Marsh, 490
18 U.S. at 376-77; Anderson v. Evans, 350 F.3d at 829.

19 Plaintiffs essentially repeat their first six claims to
20 illustrate that the proposal required an EIS, arguing that the
21 potential harms to marine mammals from the sonar and the unknown
22 consequences associated with the sonar research necessitated
23 further investigation prior to issuance of the Permit. We
24 respectfully disagree. NMFS considered the significance of the
25 potential effects of the research in terms of both context and
26 intensity and concluded that there were not substantial questions
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1 of significant impact. See Environmental Assessment at pp. 41-43;
2 40 C.F.R 1508.27 (defining "significantly" for purposes of NEPA).
3 The Stein EA explored all of the questions raised by Plaintiffs --
4 the possible harm to marine mammals from hearing the sonar, the
5 status of the gray whale population, the effects on gray whale
6 calf migration, impact on other species including the harbor
7 porpoise and the adequacy of the mitigation measures included --
8 and reasonably concluded that preparation of an EIS was
9 unnecessary. Thus there is no basis to hold that Defendants acted
10 arbitrarily or capriciously in concluding that the Stein EA
11 foreclosed any substantial questions about significant
12 environmental effects that may occur as a result of the proposed
13 research.

14 B. Compliance with The MMPA

15 The MMPA authorizes the issuance of permits for "takings" of
16 marine mammals for scientific purposes, provided that the Marine
17 Mammal Commission (the "MMC") and the Committee of Scientific
18 Advisors on Marine Mammals (the "CSAMM") first review the proposed
19 taking. 16 U.S.C. § 1371(a)(1). The MMC, in consulting with the
20 CSAMM, supported NMFS's decision to issue the Permit, finding that
21 Dr. Stein's proposal is "important and will contribute to our
22 knowledge concerning the efficacy of whale finding sonar and its
23 effects on marine mammals" and "consistent with the purposes and
24 policies of the MMPA." Letter from MMC to Stephen Leathery, AR,
25 Tab 5. As Dr. Stein's permit application addresses the various
26 MMPA elements required under 16 U.S.C. § 1374(d)(3) and in light
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1 of the support from the MMC and the CSAMM, we find that Defendants
2 have not violated MMPA.

3
4 **V. CONCLUSION**

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6 Plaintiffs have failed to establish that Defendants acted in
7 any arbitrary or capricious manner that would constitute a
8 violation of federal law. Given the applicable standard, the fact
9 that Plaintiffs' offer of evidence -- only some of which qualifies
10 as expert testimony and is persuasive -- partly contradicts some
11 of the conclusions formulated in the Stein EA is insufficient to
12 justify an injunction. The APA, the MMPA and NEPA mandate
13 procedure. NMFS was required to take a hard look at the potential
14 environmental impact and use its own judgment in assessing the
15 merits of the proposal. Defendants heeded the environmental
16 concerns that Plaintiffs had previously voiced and spent
17 considerable time and effort researching and examining the
18 consequences of the proposed research. The Stein EA, produced at
19 the direction of the Court and in response to Plaintiffs'
20 objections, is both specific and exhaustive and thoroughly
21 addresses the environmental impact of the project, including the
22 likely physical and behavioral effects of sonar use on a menagerie
23 of ocean organisms, particularly the gray whale. After adequately
24 identifying and evaluating Dr. Stein's project, NMFS had the
25 discretion to decide whether the benefits from the research
26 outweighed its environmental costs. See Robertson, 490 U.S. at
27 350. The decision to issue the Permit was neither arbitrary nor

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capricious but rather connotes an informed judgment. Accordingly,
Plaintiffs' motion for a permanent injunction is HEREBY DENIED and
JUDGMENT IS ENTERED IN FAVOR OF DEFENDANTS.

IT IS SO ORDERED.

January 29, 2004

/s/ Samuel Conti
UNITED STATES DISTRICT JUDGE