The Honorable Richard A. Jones

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

STATE OF WASHINGTON, et al.,

Plaintiffs,

v.

The UNITED STATES DEPARTMENT OF THE NAVY, et al.,

Defendants.

NO. 2:19-cv-01059-RAJ-JRC

WASHINGTON'S COMBINED RESPONSE TO FEDERAL DEFENDANTS' MOTION FOR SUMMARY JUDGMENT AND REPLY IN SUPPORT OF WASHINGTON'S MOTION FOR SUMMARY JUDGMENT

ATTORNEY GENERAL OF WASHINGTON
Environmental Protection Division
800 Fifth Avenue STE 2000
Seattle, WA 98104
(206) 464-7744

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ATTORNEY GENERAL OF WASHINGTON
Environmental Protection Division
800 Fifth Avenue STE 2000
Seattle, WA 98104
(206) 464-7744

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Seattle, WA 98104
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ATTORNEY GENERAL OF WASHINGTON
Environmental Protection Division
800 Fifth Avenue STE 2000
Seattle, WA 98104
(206) 464-7744

I. INTRODUCTION

The Navy failed to comply with the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), and the Administrative Procedures Act (APA) before authorizing a 33% increase in its Growler operations on Whidbey Island.

With respect to the NEPA, the Navy failed to conduct a reasoned analysis of the public health and wildlife impacts of its expanded Growler operations because it stopped short of connecting the logical dots between the findings of its literature review concerning noise impacts on child learning with its analysis of on-the-ground impacts, repeatedly drew conclusions that directly contradict the record evidence, and made unsupported assumptions that historical trends in academic performance and bird habituation would continue notwithstanding a substantial increase in Growler operations. With respect to the NHPA, the Navy failed to rationally explain its chosen mitigation measures, which are limited to just one landmark among the wider scale historic resources that the Navy recognized would be impacted by expanded Growler operations, and to interpretative historical signs and potential partnerships with federal programs that bear no connection to noise impacts. The Navy's unreasoned analyses of the impacts of its 33% increase in Growler operations and of the mitigation measures selected to protect Whidbey Island's historic resources from those impacts were arbitrary and capricious in violation of the NEPA, the NHPA, and the APA.

Contrary to the Navy's contentions, Washington does not seek to "use NEPA and NHPA to stop an action [it] disagree[s] with on policy grounds," Fed. Defs. Cross-Mot. Summ. J. and Opp'n 2, ECF No. 92 ("Fed. Defs. Cross-Mot."), but to require the Navy to follow the transparent and rational review process required by federal law. By arbitrarily reaching conclusions contrary to the record evidence, relying upon unfounded assumptions, and failing to draw logical connections, the Navy failed to meet these basic legal requirements.

ATTORNEY GENERAL OF WASHINGTON
Environmental Protection Division
800 Fifth Avenue STE 2000
Seattle, WA 98104
(206) 464-7744

Because the Navy violated the NEPA, the NHPA, and the APA, the Court should grant Washington's motion for summary judgment, deny the Navy's cross motion for summary judgment, vacate and set aside the Navy's Section 106 Determination of Effect and Record of Decision (ROD) authorizing the Navy's expansion of its Growler operations, and remand this matter to the Navy for further review in accordance with this Court's decision.

II. ARGUMENT

A. The Navy Failed to Take a "Hard Look" at Public Health and Bird Impacts, Violating NEPA

The Navy fails to present a compelling defense of its Final Environmental Impact Statement (Final EIS) and ROD. As Washington notes in its initial brief, Wash. Mot. Summ. J. at 10–12, ECF No. 88 ("Wash. Mot."), NEPA requires agencies to take a "hard look" at the potential environmental consequences of a proposed federal action and to "consider every significant aspect of the environmental impact of a proposed action and inform the public that it has indeed considered environmental concerns in its decisionmaking process." *Pit River Tribe v. U.S. Forest Serv.*, 469 F.3d 768, 781 (9th Cir. 2006) (quoting *Earth Island Inst. v. U.S. Forest Serv.*, 442 F.3d 1147, 1153–54 (9th Cir. 2006)); *see generally* Wash. Mot. 10–12. The Navy failed to meet that standard here.

1. The Navy Failed to Take a "Hard Look" at Public Health Impacts

The Navy's response brief fails to legitimize the Navy's deficient analysis of public health impacts. As Washington explains in its motion for summary judgment, the Navy's analysis of public health impacts from its increased Growler operations violated NEPA's hard-look mandate for three independent reasons: (a) the Navy did not adequately analyze impacts to child learning and cognition; (b) the Navy relied on an unreasonably stringent standard to review and dismiss non-auditory public health impacts; and (c) the Navy did not comply with its obligation to either obtain unavailable information essential to its decision or explain why it

could not do so under 40 C.F.R. § 1502.22.[1] Wash. Mot. 12–22. The Navy's efforts to defend its analysis in the Final EIS fall short.

a. The Navy did not adequately analyze impacts to child learning

The Navy has not shown that it adequately analyzed impacts to child cognitive development and learning from increased noise exposure and classroom interference. *See* Wash. Mot. 12–14; Fed. Defs. Cross-Mot. 29–31.

The Navy makes much of its recognition that "the noise environment can impair learning in schools and may contribute to poor academic performance of an individual student." Fed. Defs. Cross-Mot. 30. But that recognition alone does not constitute an adequate analysis when the Navy failed to draw conclusions about the actual impacts to Whidbey Island schoolchildren from increased noise exposure at area schools. *See Oregon Nat. Res. Council Fund v. Brong*, 492 F.3d 1120, 1133–34 (9th Cir. 2007) (agency's general recognition "that fire suppression efforts increased erosion and sedimentation, [and] they might have increased fish mortality, and that private logging has had an impact on fish, aquatic insects, and the accumulation of woody debris" did not constitute a hard look where agency did not offer quantified or detailed data about these effects); *see also id.* at 1134 (agency "may not rely on a statement of uncertainty to avoid even attempting the requisite analysis"). According to the Navy's own noise modeling, certain area schools will experience significant increased noise disruption of up to two additional noise events per hour—or up to sixteen additional noise events per school day—under the Navy's increased training exercises authorized by the ROD. *See* GRR159195 (Final EIS); GRR167649 (ROD). The Navy's review of the scientific

[1] The Council on Environmental Quality (CEQ) revised its regulations implementing NEPA effective September 14, 2020. Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act, 85 Fed. Reg. 43,304 (July 16, 2020) (codified at 40 C.F.R. pt. 1500). CEQ's prior regulations, promulgated in 1978 with minor amendments in 1986 and 2005, govern Defendants' Record of Decision and Final EIS, and all regulatory references in this complaint are to those prior regulations. Implementation of Procedural Provisions, 43 Fed. Reg. 55,978 (Nov. 29, 1978); Incomplete or Unavailable Information, 51 Fed. Reg. 15,618 (Apr. 25, 1986); Other Requirements of NEPA, 70 Fed. Reg. 41,148 (July 18, 2005).

literature on noise impacts also recognized that "there is increasing awareness that chronic exposure to high aircraft noise levels may impair learning." GRR159322; GRR150336 ("Several studies suggest that aircraft noise can affect the academic performance of school children."); *see also* Wash. Mot. 13 (discussing studies). Yet, despite the record evidence demonstrating that increased noise exposure adversely impacts childhood learning, the Navy did not analyze how increased Growler noise may impair learning outcomes on Whidbey Island. Without this missing piece of the puzzle—*i.e.*, any analysis on whether the noise impacts on academic performance might be significant or whether there may be no effect at all—the Navy cannot purport to have meaningfully considered the impacts of increased Growler operations on child learning outcomes. In other words, by failing to tie the results of its noise modeling study together with the findings of its literature review, the Navy failed to consider an important aspect of the problem. *See N. Plains Res. Council, Inc. v. Surface Transp. Bd.*, 668 F.3d 1067, 1075 (9th Cir. 2011) (an agency must rationally "explain the conclusions it has drawn from its chosen methodology, and the reasons it considered the underlying evidence to be reliable") (quotation marks and citation omitted).

The Navy's contention that it is entitled to deference so long as it "supports its conclusions with studies that the agency deems reliable and explains the conclusions it has drawn from its chosen methodology," *see* Fed. Defs. Cross-Mot. 30 (citation and internal quotation marks omitted), only highlights that the Navy's analysis failed to draw *any* conclusions on the impacts of increased Growler operations on child learning. What the State seeks is not a "one-to-one analysis" as the Navy claims, *see* Fed. Defs. Cross-Mot. 31, but simply some reasoned analysis of how increased Growler operations would affect learning outcomes for area schools, consistent with the Navy's obligations under NEPA. *See* 40 C.F.R. § 1502.1 (requiring agency-prepared environmental impact statements to be "supported by evidence that the agency has made the necessary environmental analyses"); 40 C.F.R.

§ 1502.24 (obligating agencies to insure the "scientific integrity[] of the discussions and analyses in environmental impact statements"). Quantifying the amount of the noise increase on the one hand and recognizing that noise may impair learning on the other does not count as reasoned analysis when the Navy did not analyze how the identified noise increase will impact academic performance for area schoolchildren. *See N. Plains Res. Council, Inc.*, 668 F.3d at 1075; *Hausrath v. United States Dep't of the Air Force*, 491 F. Supp. 3d 770, 792–94 (D. Idaho 2020) (Air Force's analysis of noise impacts on sleep and sleep disturbance was inadequate when the Air Force did not "conduct any analysis of the project's effects upon sleep interference" and did not analyze the impact of multiple training operations on speech interference).

The Navy relies on *Protect Our Communities Foundation v. Jewell*, 825 F.3d 571 (9th Cir. 2016) for the proposition that it can satisfy NEPA simply by conducting a literature review. *See* Fed. Defs. Cross-Mot. 31 (citing *id.* at 584). But a federal agency that fails to draw reasoned conclusions applicable to the on-the-ground reality from its literature review will nevertheless violate NEPA. *See* 825 F.3d at 584 (agency at issue had "properly canvassed the available literature on electromagnetic fields" and "in a reasonable exercise of its technical expertise" concluded that any field created by the agency action under consideration did not present public health concerns); *see also Nat'l Audubon Soc'y v. Dep't of Navy*, 422 F.3d 174, 193–94 (4th Cir. 2005) ("A hard look . . . entails more than citing the articles or abstracts that contradict the conclusions reached."). Here, the Navy's literature review only carries it so far when the Navy failed to perform the logical next step of analyzing how increased Growler operations would actually affect learning outcomes on Whidbey Island. Without that information, the Navy could not make the informed decision that NEPA requires. *See N. Plains Res. Council, Inc.*, 668 F.3d at 1075 (by requiring agencies to take a "hard look," NEPA ensures that "agencies will have available, and will carefully consider, detailed information

concerning significant environmental impacts"). As a result, Navy's failure to perform this necessary analysis cannot be said to be a "reasonable exercise" of the Navy's "technical expertise," and thus violates NEPA. *See Protect Our Cmtys*, 825 F.3d at 584.

The Navy also cannot rely *on* post-hoc rationalizations to rescue its deficient NEPA analysis. The Navy contends for the first time its briefing that "[b]ecause a definitive causal study is not available [with respect to the relationship between child learning and noise], the Navy need not do more." *See* Fed. Defs. Cross-Mot. 31. But in contrast with its analysis of non-auditory health impacts, *see infra* Part II.A.1.b, the Navy never stated in the Final EIS or the ROD that the relationship between child learning outcomes and noise were not sufficiently "definitive." *See* GRR159320–22 (summary of literature review in Final EIS); GRR161324–25 (Final EIS); GRR167649 (ROD). To the contrary, and despite the Navy's best efforts to downplay these studies in its briefing before this court,[2] the Navy acknowledged in the Final EIS that scientific studies indicate that "chronic exposure to high aircraft noise levels may impair learning." GRR159322. The Navy's insistence that it "need not do more" to analyze noise impacts on child learning in the absence of a "definitive causal study," *see* Fed. Defs. Cross-Mot. 31, is therefore a post hoc rationalization that should be rejected by this Court. *See Dep't of Homeland Sec. v. Regents of the Univ. of Cal.*, 140 S.Ct. 1891, 1909–10, 591 U. S. ___ (2020) (explaining that post hoc rationalizations are impermissible because "[a]n agency must defend its actions based on the reasons it gave when it acted").

Tellingly, the *only* assessment of academic performance the Navy cites in its briefing is an assessment of *historic* "Washington State and Local School District Average Test Scores

[2] For example, in its brief, the Navy understates the finding of the Road-Traffic and Aircraft Noise and Exposure and Children's Cognition and Health study (RANCH study), contending that this study "merely concludes that noise above the 55 dB level *may* cause reading scores to fall below average." Fed. Defs. Cross-Mot. 31 (citing GRR159321) (emphasis in the original). The record indicates otherwise. As the Department of Defense Noise Working Group explicitly recognized this study "showed a decrease in reading scores as the noise level increased, identifying 'a linear exposure-effect association between exposure to aircraft noise and impaired reading comprehension and recognition memory in children.'" GRR42159 (DNWG 2009); GRR31608–18 (RANCH).

and Graduation Rates" demonstrating that students in Anacortes, Coupeville, and Oak Harbor School Districts are "more academically successful than many of their peers across the State of Washington as a whole." GRR160916 (cited in Fed. Defs. Cross-Mot. 30). But not only is purely backwards-looking data an irrational basis for an agency's prediction of future trends, *see Greater Yellowstone Coal. v. Servheen*, 665 F.3d 1015, 1027 (9th Cir. 2011) (the Fish and Wildlife Service irrationally relied on prior data of grizzly bear population growth to conclude that such growth would occur during a decline of a major food source), the question of whether area students tend to perform better academically than their peers across the State of Washington as a whole is entirely irrelevant to the question of whether their performance would be affected by increased Growler operations on the island. The Navy does not—and cannot—cite any analysis in the Final EIS of how the academic performance of students in these districts would be affected by increased Growler operations because it conducted no such analysis.[3]

For all these reasons, the Navy's failure *to* conduct a reasoned analysis of impacts to child learning violates NEPA.

b. The Navy did not adequately analyze non-auditory public health impacts

The Navy's response also fails to justify its reliance on the irrational and unsupported requirement of a "definitive causal study" to assess and ultimately dismiss these impacts, or its conclusion that increased Growler operations would not adversely impact public health despite record evidence indicating otherwise. *See* Wash. Mot. 14–19; Fed. Defs. Cross-Mot. 31–33.

[3] Moreover, the Navy's suggestion that Health's comments "implied" that an HIA would address sufficiently the issue of cognitive impacts from noise, *see* Fed. Defs. Cross-Mot. 31, lacks merit when the Navy's Appendix I suffers from the same backwards-looking flaw and thus does not satisfy the Navy's obligation to connect the dots between the significant increase in noise exposure and the cognitive impacts to area schoolchildren. *See infra* Part II.A.1.d; *see also* Wash. Mot. 22.

Contrary to the Navy's assertions, the State does not seek "supplemental noise metrics estimating the non-auditory health impacts of the affected population as to each alternative," a "one-to-one comparison (dB increase to percentage risk of health effect)," or a specific "level of quantification" of the non-auditory public health impacts of the proposed action. *See* Fed. Defs. Cross-Mot. 32, 34. Rather, the State simply seeks a reasoned analysis of the scientific evidence consistent with the Navy's obligations under NEPA. Because the Navy unjustifiably dismissed study findings linking noise to non-auditory health impacts based on the Navy's conclusion that none of these studies "have shown a definitive causal and significant relationship between aircraft noise and health," GRR159319—a standard that is unreasonably high and lacks rational basis—the Navy's analysis was arbitrary and capricious in violation of NEPA's hard look mandate. *See Native Vill. of Point Hope v. Jewell*, 740 F.3d 489, 502–05 (9th Cir. 2014) (agency estimate of oil production was arbitrary and capricious where agency failed to justify the standard it selected as a basis for that estimate); *see also Native Ecosystems Council v. U.S. Forest Serv.*, 428 F.3d 1233, 1239 (9th Cir. 2005) (courts employ the APA's arbitrary and capricious standard to determine whether agencies took a "hard look" under NEPA).

The Navy puts much emphasis on the uncontroversial fact that the Final EIS contains discussions of non-auditory health impacts of noise. *See* Fed. Defs. Cross-Mot. 32. What the Navy neglects to mention, however, is that each of these discussions concludes that "[n]o studies have shown a definitive causal and significant relationship between aircraft noise and health," while failing to provide any rational basis for judging these studies against this unreasonably high standard. *See* GRR150339; *see also id.* ("The results of most cited studies are inconclusive, and it cannot be conclusively stated that a causal link exists between aircraft noise exposure and the various type of nonauditory health effects that were studied."). Indeed, while it is superficially true that the Navy "provided a discussion [of non-auditory health

impacts] with respect to each alternative," *see* Fed. Defs. Cross-Mot. 32 (citing GRR150650; GRR150695; GRR150738), each of those discussions merely copied and pasted the same generic and unsupported summary language: that "research conducted to date has not made a definitive connection between intermittent military aircraft noise and nonauditory health effects," and "[t]he results of most cited studies are inconclusive and cannot identify a causal link between aircraft noise exposure and the various type of nonauditory health effects that were studied." GRR150650; GRR150695; GRR150738. The practical effect of this conclusion is that while the Navy did discuss some non-auditory health impacts in the Final EIS, it did so only to then decline to actually account for those non-auditory health impacts of noise in its analysis of on-the-ground conditions on Whidbey Island caused by the Navy's 33% increase in Growler operations.

The Navy relies on its expanded literature review in response to comments from the Environmental Protection Agency (EPA) and Washington State Department of Health, Division of Environmental Public Health (Health) as evidence that it discussed non-auditory health impacts in the Final EIS. *See* Fed. Defs. Cross-Mot. 31–33. But simply expanding the scope of its literature review without adjusting its standard for evaluating the studies it reviewed does nothing to address the underlying concern that the Navy irrationally dismissed potential health impacts linked to noise based on an unjustified causal standard. *See* Wash. Mot. 14–17. This is particularly true when the Navy's reliance on this standard conflicts with its own literature review, which acknowledge that "[r]esearch studies seem to indicate that aircraft noise may contribute to the risk of health disorders," GRR159319, and comments from one of the scientists conducting the literature review acknowledged that aircraft noise can be "hazardous if the intensity and frequency are sufficiently elevated." GRR118248 (Dr. Rennix email).

The Navy's response also doubles down on its discussion in the Final EIS of the World Health Organization's 2000 Report and the Airport Cooperative Research Program 2008 (ARCP 2008) synopsis on "Effects of Aircraft Noise: Research Update on Selected Topics" to support its stringent standard without acknowledging the contrary record evidence identified by Washington in its initial brief. *See* Fed. Defs. Cross-Mot. 33 (citing GRR150246, GRR160923); Wash. Mot. 16–18. But those studies are not a rational basis for the Navy's definitive causal standard when more recent studies cast significant doubt on the Navy's conclusion. In particular, the WHO's 2000 report is undercut by the World Health Organization's 2011 report concluding that environmental noise is "a concern for public health and environmental health," GRR70191 (WHO 2011). And the ARCP 2008 synopsis does not account for more recent studies in the record, including a 2013 study done in partnership with the Federal Aviation Administration's Center of Excellence, the Boston University School of Public Health, and the Harvard School of Public Health that concluded that "aircraft noise, particularly characterized by the 90th centile of noise exposure among census blocks within zip codes, is statistically significantly associated with higher relative rate of hospitalization for cardiovascular disease among older people residing near airports." GRR63737; *see also* GRR63743–44; GRR63737–42 (Correia et al., 2013: finding a "statistically significant association between exposure to aircraft noise and risk of hospitalization for cardiovascular diseases among older people living near airports"). The Navy's reliance on stale data that conflicts with more recent data in the record is arbitrary and capricious and violates NEPA. *See N. Plains Res. Council, Inc.*, 668 F.3d at 1085–87 (agency reliance on ten-year old data was arbitrary and capricious and violated NEPA's hard look requirement).

Moreover, it is disingenuous for the Navy to claim that it "was responsive to comments from the State throughout the NEPA process," Fed. Defs. Cross-Mot. 31, as Health specifically recommended that the Navy not require a "definitive causal and significant relationship"

between aircraft noise and health prior to including potential health outcomes in its model because it was an "unreasonably high [standard] and resulted in non-auditory health effects being excluded from the model." GRR151313. Despite this criticism, the Navy failed to provide a rational justification for its reliance on this heightened standard. GRR150255–56; GRR150339–40. Merely expanding the scope of its literature review while still continuing to rely, without justification, on the requirement of a "definitive causal and significant relationship" does not make the Navy's reliance on this standard any more rational.

In addition, the Navy's claim that it "*did* quantify other health impacts related to aircraft noise, such as potential hearing loss, residential night sleep disturbance, indoor speech interference, and recreational speech interference," Fed. Defs. Cross-Mot. 32, only serves to undermine the Navy's position that it need not perform any level of quantification in the absence of definitive findings in the scientific literature. With respect to potential hearing loss, for example, the Final EIS explained that "[t]he point at which a temporary threshold shift [hearing loss that is not necessarily permanent resulting from loud noise exposure over a given period of time (*e.g.*, from attending a concert)] results in a NIPTS [Noise Induced Permanent Threshold Shift (*i.e.*, permanent hearing loss resulting from repeated exposure to high noise levels)] is difficult to identify and varies with a person's sensitivity to noise." GRR150338. The Final EIS further explained that the standard it uses to assess this hearing loss threshold shift "is not intended to accurately describe the impact of intermittent noise events such as periodic aircraft overflights but is presented as a 'worst-case' analytical tool." *Id.* Despite the Navy's acknowledgment of the uncertainty in the science surrounding when temporary threshold shift results in hearing loss, and the imperfect fit of its tool for measuring potential hearing loss that may result from periodic Growler overflight noise, the Navy nevertheless relied on that tool to quantify estimated potential hearing loss under "worst-case" circumstances for each alternative. *E.g.*, GRR159094–95 (No Action Alternative analysis);

GRR159185–87 (Alternative 2 analysis). It is arbitrary and capricious for the Navy to rely on uncertainty to dismiss some health impacts while at the same time acknowledging and quantifying other health impacts despite similar scientific uncertainty. *See Oregon Nat. Res. Council Fund v. Brong*, 492 F.3d 1120, 1134 (9th Cir. 2007) (agency "can certainly explain specific projections with reference to uncertainty; however, it may not rely on a statement of uncertainty to avoid even attempting the requisite analysis").

The Navy's reliance on *Department of Transportation v. Public Citizen*, 541 U.S. 752 (2004) for the proposition that agencies are only required "to consider environmental impacts that have a 'reasonably close causal relationship' to the proposed action, akin to 'proximate cause in tort law'" also lacks merit. Fed. Defs. Cross-Mot. 34 (quoting *Public Citizen*, 541 U.S. at 767). *Public Citizen* addressed a situation where the Federal Motor Carrier Safety Administration (FMCSA) was not required to consider the environmental impacts of increased truck traffic from Mexico because only "the President, not FMCSA, could authorize (or not authorize) cross-border operations from Mexican motor carriers" and thus "FMCSA has no discretion to prevent the entry of Mexican trucks." *Public Citizen*, 541 U.S. at 770. Accordingly *Public Citizen* held only that "where an agency has no ability to prevent a certain effect due to its limited statutory authority over the relevant actions, the agency cannot be considered a legally relevant 'cause' of the effect." *Id.* at 770. Here, the authority to increase or not increase Growler operations on Whidbey Island rests with the Navy making it the "legally relevant 'cause' of the effect." *Id*.; GRR167640–65 (ROD). As a result, the Navy must consider all "reasonably foreseeable significant adverse effects" of its exercise of that authority. *Native Vill. of Point Hope*, 740 F.3d at 493 (citing 40 C.F.R. §§ 1502.22 and 1508.7). Moreover, the Navy effectively concedes that non-auditory health impacts of increased Growler operations should be considered by discussing those impacts in its Final

EIS. *See* Fed. Defs. Cross-Mot. 32 ("The FEIS contains a detailed discussion of non-auditory health impacts.").

Public Citizen is *thus* a distraction because it focuses on the wrong argument. The question is not whether the Navy considered non-auditory health impacts at all but rather whether the Navy arbitrarily and capriciously dismissed non-auditory health impacts based on its application of an unsupported and unjustified standard (*i.e.*, the lack of definitive proof of a causal relationship between noise and non-auditory health effects). As Washington has demonstrated, Wash. Mot. 14–18, the Navy has not rationally justified its reliance on this standard in violation of NEPA. *See Native Ecosystems Council v. U.S. Forest Serv.*, 418 F.3d 953, 964 (9th Cir. 2005) ("To take the required 'hard look' at a proposed project's effects, an agency may not rely on incorrect assumptions or data in an EIS."); *cf. Ocean Mammal Inst. v. Gates*, 546 F. Supp. 2d 960, 975 (D. Haw. 2008) (concluding at the preliminary injunction stage that the Navy failed to articulate a rational connection between the vast majority of the science and its adoption of a noise threshold for marine species), *injunction modified*, No. CV 07-00254 DAE-LEK, 2008 WL 11348364 (D. Haw. Mar. 19, 2008), *and injunction modified in part*, No. CIV. 07-00254DAELEK, 2008 WL 2020406 (D. Haw. May 9, 2008).

In sum, because the *Navy* relied on an irrational and unsupported standard to assess public health impacts, failed to rationally justify its conclusions, and reached conclusions that conflict with the record, the Navy's analysis of public health impacts is arbitrary and capricious in violation of NEPA's hard look mandate. *See Motor Vehicle Mfrs. Ass'n , Inc. v. State Farm Mut. Ins. Co.*, 463 U.S. 29, 43 (1983) [hereinafter State Farm]; *N. Plains Res. Council, Inc.*, 668 F.3d at 1075.

c. The Navy did not adequately analyze non-auditory child health impacts

The Navy's conclusion that "there is no proven positive correlation between noise-related events and physiological changes in children," GRR150753, fails for similar reasons. In support of this conclusion, the Final EIS cited only the Department of Defense Noise Working Group's 2013 technical bulletin on "Noise-Induced Hearing Impairment," GRR150753, which focused on hearing impairment risks, not impacts to cognition or other physiological effects in children. *See generally* GRR56292–303 (DNWG 2013). In other words, the Navy irrationally relied upon a technical bulletin on the *auditory* impacts of noise to dismiss the *non-auditory* health impacts to children that can be caused by noise. *See* Wash. Mot. 18–19.

Apparently conceding that the Department of Defense Noise Working Group's 2013 technical bulletin on auditory health risks is not a rational basis for the Navy's conclusion that there is no proven correlation between noise and non-auditory health outcomes in children, the Navy now suggests that its discussion in a different part of the Final EIS justifies its reliance on its unreasonably high standard to dismiss physiological impacts on children. Fed. Defs. Cross-Mot. 35 (quoting GRR150336). But that discussion hardly carries the weight placed on it by the Navy when it first acknowledges that there "may be some relationship between noise" and physiological effects and then cites the Department of Defense Noise Working Group's 2013 technical bulletin for the proposition that further study is needed to differentiate that cause and effect relationship. GRR150336. Moreover, the Final EIS's vague reference to two undefined German studies followed by a citation to an irrelevant study in a section titled "Classroom/learning Interference," GRR150336, does not satisfy the Navy's obligation to "insure the professional integrity, including scientific integrity, of the discussions and analyses in an [EIS]" including by making "explicit reference . . . to the scientific and other sources relied upon for conclusions in the statement." 40 C.F.R. § 1502.24; *see also Idaho Wool*

Growers Ass'n v. Vilsack, 816 F.3d 1095, 1107 (9th Cir. 2016) ("NEPA requires that [EISs] contain high-quality information and accurate scientific analysis.") (quoting *Lands Council v. Powell*, 395 F.3d 1019, 1031 (9th Cir. 2005)). The Navy therefore fails to rationally justify its conclusion that no link exists between noise and children's physiological health.

d. The Navy's failure to obtain information about public health impacts violates 40 C.F.R. § 1502.22

Section 1502.22 requires the Navy to either (1) include information that is essential to a reasoned choice among alternatives in the EIS, if the cost of obtaining that information is not exorbitant, or (2) if the information is not obtainable, include in the EIS a statement identifying the relevant unavailable or incomplete information, discussing the relevance of that information to potential environmental impacts, summarizing available credible scientific evidence, and describing the agency's evaluation of those impacts based on generally accepted scientific approaches. 40 C.F.R. § 1502.22. The Navy violated 40 C.F.R. § 1502.22 by failing to obtain on-the-ground health and noise information despite the fact that this missing information was essential to a reasoned choice among alternatives and obtainable. *See* Wash. Mot. 19–22.

The Navy's contention that the Final EIS contained an analysis that is equivalent to or over-inclusive of any analysis a Health Impact Assessment (HIA) would contain wholly fails to address this defect because even the purportedly HIA-equivalent portions of the Final EIS did not include on-the-ground information on the health impacts of the Navy's Growler operations. Both Health and the EPA recommended that the Navy conduct a health impact study informed by on-the-ground monitoring due to concerns that the Navy's analysis shed no light on the actual noise impacts on health that Whidbey Island residents may already be experiencing, or might expect to experience as a result of increased Growler operations. *See, e.g.*, GRR151252–54 (EPA comments stating that "on-the-ground validation would help

provide an assessment of *actual noise impacts* projected to be experienced by Whidbey Island and surrounding area residents and wildlife due to the proposed expansion") (emphasis added); GRR151315 (Health comments recommending that the Navy conduct an HIA and noting that the question of whether Whidbey Island residents are "actually experiencing" adverse health outcomes associated with noise in the current scientific literature "is a question beyond the scope of a literature review"). In response to this concern, the Navy repeatedly emphasizes that it conducted an extensive literature review, and consolidated the findings of its "Community Health and Learning Review" in a single user-friendly Appendix. *See* Fed. Defs. Cross-Mot. 26–27. But both of these responses miss the mark: as Health noted, whether Whidbey Island residents are "*actually experiencing*" the adverse health effects that have been associated with noise in the current scientific literature "is a question beyond the scope of a literature review," GRR151315 (emphasis in original), and the only on-the-ground data contained in the "Community Health and Learning Review" appendix consists of *historic* data on health and learning outcomes on Whidbey Island. *See* GRR160912–17. Without any data on the on-the-ground noise levels corresponding to those historic outcomes, or any other information that might otherwise inform the Navy's understanding of potential noise impacts on health resulting from increased Growler operations, such historic data cannot be said to provide any insight into whether Whidbey Island residents are *actually experiencing* adverse health outcomes associated with noise.

The Navy contends that "even if the Navy were incorrect that the FEIS renders the HIA superfluous, the Navy appropriately recognized the scope of its analysis" by stating in response to Health's comments that "'[t]o the extent that the intent is not to perform an HIA but to conduct long-term, scientific research study on the impacts of aircraft noise and human health, such study is beyond the scope of this analysis.'" Fed. Defs. Cross-Mot. 28 (quoting GRR161327). Under the Navy's reasoning, which is without support, the Navy could avoid its

NEPA obligations to obtain relevant information simply by narrowing scope of analysis—and indeed, that is what the Navy has done here by declining to consider on-the-ground health impacts on the basis that "such a study is beyond the scope of this analysis." GRR161327. But simply stating that something is "beyond the scope of this analysis" does not satisfy the Navy's obligations under Section 1502.22 to obtain additional information relevant to the agency's consideration of alternatives or to rationally explain why obtaining such information is not possible. *See Ctr. for Biological Diversity v. Bernhardt*, 982 F.3d 723, 739–40 (9th Cir. 2020) (holding that the Department of the Interior violated § 1502.22 by failing to provide a qualitative estimate of downstream greenhouse gas emissions or to explain more specifically why it could not do so).

Ultimately, the Navy's explanation for why it did not conduct on-the-ground monitoring or perform an HIA is based on the same flawed causal standard it relied on to dismiss non-auditory health impacts. *See* Fed. Defs. Cross-Mot. 28 (quoting GRR161327–28). As explained above, the Navy's failure to provide a rational basis for its reliance on the unsupported requirement of a definitive study proving a causal relationship between noise and non-auditory health impacts is arbitrary and capricious. *See supra* Part II.A.1.b.

For all these reasons—because the Navy did not adequately analyze impacts to child learning, non-auditory public health impacts, or physiological impacts on children, and because the Navy failed to obtain on-the-ground health and noise information in violation of 40 C.F.R. § 1502.22—the Navy's analysis of public health impacts from its Growler operations is arbitrary and capricious and violates NEPA.

2. The Navy Failed to Take a "Hard Look" at Bird Impacts

The Navy's response brief also fails to salvage its deficient analysis of bird impacts, which violated NEPA by relying on a general discussion of impacts to birds that ignored

species-specific impacts and irrationally concluding that birds would not be adversely impacted by Growler operations. *See* Wash. Mot. 22–29.

a. The Navy did not analyze species-specific impacts to birds, despite recognizing that bird species respond differently to noise

The Navy fails to adequately explain why it did not conduct a species-specific analysis of the impacts that increased Growler operations will have on birds despite explicitly recognizing that bird response to aircraft noise varies by species. Fed. Defs. Cross-Mot. 36–40. In particular, the Navy fails to justify why it did not consider how different noise exposure levels will impact specific species differently, and offers no explanation for why it completely ignored entire species, including tufted puffins, which breed within the action area and are a state-listed endangered species. Fed. Defs. Cross-Mot. 36–40; *see* Wash. Mot. 23–25.

The Navy's response is rather confused: First, the Navy suggests that it did in fact conduct a species-specific analysis. *See* Fed. Defs. Cross-Mot. 36 ("Contrary to Washington's claim . . . the FEIS includes a thorough discussion of different species of birds affected by the increase in Growler training operations."). Then, the Navy argues that based on the data it reviewed, "the Navy determined a species by species analysis was unnecessary." Fed. Defs. Cross-Mot. 37. As explained below, each of these responses lack record support and do nothing to rebut the State's argument that it was arbitrary and capricious for the Navy to conclude that a species-specific analysis was unnecessary despite the ample record evidence and the Navy's own admission that different bird species respond differently to noise. Wash. Mot. 23–24.

Taking the Navy's second response first, to the extent that the Navy contends that its species-specific analysis led it to conclude that inter-species variations in reactions to noise were only "minor" and that a species-by species analysis was therefore unnecessary, Fed. Defs. Cross-Mot. 37, that conclusion is not supported by the record. The Final EIS is rife with

statements that bird responses to aircraft noise do in fact vary by species, with certain responses varying "substantially":

- "Despite their shared traits, waterfowl species can exhibit *great variability* in size, appearance, habitat use, and *behavior*." GRR150475 (emphasis added).
- "Bird responses to anthropogenic disturbances, including aircraft noise, *vary by species* and may vary by situation." GRR150911 (citations omitted) (emphasis added).
- "Studies of hearing loss (called 'threshold shift') in birds within their frequencies of best hearing (between 2 and 4 kHz) due to long-duration (30 minutes to 72 hours), continuous, non-impulsive, high-level sound exposures in air have shown that susceptibility to hearing loss *varies substantially by species*, even in species with similar auditory sensitivities, hearing ranges, and body size." GRR150911–12 (citations omitted) (emphasis added).
- "Because of *the observed variability of threshold shift susceptibility among bird species* and the relatively long duration of sound exposure in Saunders and Dooling (1974) [study in which young budgerigars were exposed to four levels of continuous 1/3-octave band noise for 72 hours], the observed onset level cannot be assumed to represent the SEL [sound exposure level] that would cause onset of temporary threshold shift for other bird species or for shorter duration exposures . . . ." GRR150912 (emphasis added).
- "Behavioral reactions to aircraft overflights are *dependent upon species* and activity at the time of the stimulus. Generally, birds tend to begin to react (by lifting the head or alerting to the stimulus) to aircraft overflights at 60 dBA to 65 dBA, with more intense alert responses (e.g., flushing) occurring when noise levels exceed 75 dBA. However, other birds have been observed to show no reaction or significant effect from overflights with noise levels ranging from 52 to 101 dBA." GRR150912 (citations omitted) (emphasis added).
- "Airplane overflights less than 1,000 feet AGL [above ground level] (or mean sea level, for seabirds) more frequently elicit behavioral responses, although *geese responded more significantly* when aircraft flew between 1,000 feet AGL and 2,500 feet AGL. However, *not all birds react to overflights*, as black-crowned night herons (*Nycticorax nycticorax*) and great blue herons (*Ardea herodias*) in nesting colonies had 'no apparent reaction' from aircraft at altitudes between 150 and 800 feet AGL, and sandhill cranes (*Grus canadensis*) remained on their nests when exposed to helicopter flights as low as 130 feet." GRR150912 (citations omitted) (emphasis added).
- "Habituation to repeated exposure to aircraft noise and visual disturbance has been noted in numerous species, but *not all species exhibit the same pattern of habituation*,

> and residual effects are possible. For example, 25 to 30 percent of captive American black ducks (*Anas rubripes*) initially responded to aircraft noise and visual disturbances, but they habituated to the disturbances with repeated exposure, whereas wood ducks (*Aix sponsa*) did not exhibit habituation to the same stimuli." GRR150913 (citations omitted) (emphasis added).

To the extent that the Navy claims that it did in fact in fact conduct a species-specific analysis, *see* Fed. Defs. Cross-Mot. 36, the Navy provides little record support for that assertion, and the Final EIS specifically states that the Navy opted not to conduct a species-specific analysis. *See* GRR161346 (stating in response to comments that the Navy would "present[] its impact conclusions for the species group as a whole, and not for individual species, with the exception of federally protected species"). While the Navy's brief contains a string of citations in support of its statement that "the FEIS includes a thorough discussion of different species of birds affected by the increase in Growler training operations," most of the material the Navy cites in support for its statement is not, in fact, in the Final EIS, but elsewhere in the record. *See* Fed. Defs. Cross-Mot. 36–37 (citing GRR85321 (study published by Society of Northwestern Vertebrate Biology); GRR34387 (study); GRR44287 (study); GRR92892 (study); GRR17857 (literature review summary authored by California Department of Fish and Game biologist); GRR75109–54 (eBird data); GRR57586 (interagency Marbled Murrelet Effectiveness Monitoring Forest Plan)). Indeed, the Navy's brief cites in support of this assertion three reports prepared by Washington's Department of Fish and Wildlife (WDFW) but not discussed in the Final EIS. *See* Fed. Defs. Cross-Mot. 36–37 (citing GRR75158 (January 2015 tufted puffin status report); GRR85280 (April 2015 research progress report on Washington at-sea marbled murrelet population monitoring); GRR31375 (January 2005 monitoring report of multiple local marine bird and mammal species)). That these studies are in the record does little to show that the Navy considered how increased Growler operations would actually impact the specific species examined in these studies, particularly where the Final EIS does not cite or otherwise discuss them. The Navy's failure to

identify a rational basis for not conducting a species-specific analysis despite its own admission and record evidence that such analysis is necessary is arbitrary and capricious and violates NEPA. *See Nat'l Audubon Soc'y v. Dep't of Navy*, 422 F.3d 174, 192–94 (4th Cir. 2005) (the Navy failed to take a "hard look" as required by NEPA where it did not conduct a species-specific analysis despite record evidence and Navy's explicit recognition that "wildlife reaction to aircraft noise is species-specific"); *AquAlliance v. U.S. Bureau of Reclamation*, 287 F. Supp. 3d 969, 1032 (E.D. Cal. 2018) (agency failed to consider important aspect of problem in violation of NEPA when it did not "address or otherwise explain" how information about potential climate change impacts could be reconciled with the agency's conclusion that those impacts wound not be significant).

Without record support for its position, the Navy turns to mischaracterizing the State's arguments. Contrary to the Navy's assertion, the State does not contend that the Navy "ignore[d] comments on the draft EIS, including from the State, disagreeing with the Navy's more generalized approach" to bird impacts or failed to respond to the State's comments that the Final EIS should specifically discuss impacts to the tufted puffin. Fed. Defs. Cross-Mot. 37–38. Rather, the State's position is that it was arbitrary and capricious for the Navy to conclude that no species-specific analysis was necessary despite ample record evidence that different bird species respond differently to noise, including as demonstrated through comments submitted by the State's expert wildlife agency. Wash. Mot. 23–25. In other words, the issue here is not whether the Navy needed to "respond to every single scientific study or comment," *see* Fed. Defs. Cross-Mot. 38 n.16 (quoting *Ecology Cntr. v. Castaneda*, 574 F.3d 652, 668 (9th Cir. 2009), but rather whether the Navy met its obligation under NEPA to thoroughly review the environmental impacts of its actions, particularly where Washington's expert wildlife agency highlighted the need to assess those impacts. *See* 40 C.F.R. § 1502.1 (an EIS "shall provide a full and fair discussion of significant environmental impacts" that is

"supported by evidence that the agency has made the necessary environmental analyses"); *Idaho Wool Growers Ass'n v. Vilsack*, 816 F.3d 1095, 1107 (9th Cir. 2016) ("NEPA requires that [EISs] contain high-quality information and accurate scientific analysis") (quoting *Lands Council v. Powell,* 395 F.3d 1019, 1031 (9th Cir. 2005)). Here, the Navy failed to meet this obligation by refusing to conduct a species-specific analysis of bird impacts. The Navy's failure is particularly problematic for vulnerable species like certain shorebirds of conservation concern, including red knots, solitary sandpipers, and black oystercatchers, GRR150472, and the tufted puffin, which is a state-listed endangered species that breeds in the action area, GRR151276, and which the Final EIS fails to mention, GRR150906–26. In short, the Navy has not provided a compelling response to the State's position.[4]

The Navy similarly distorts Washington's argument with respect to *National Audubon Society v. Department of Navy*, 422 F.3d 174 (4th Cir. 2005). Contrary to the Navy's argument, Fed. Defs. Cross-Mot. 38, *National Audubon Society* demonstrates that the Navy's failure to consider species-specific impacts can constitute a NEPA violation where the Navy explicitly acknowledged that different bird species respond differently to aircraft noise, not that "fail[ure] to conduct a species-by-species analysis of noise effects is *per se* unreasonable." Fed. Defs. Cross-Mot. 38. On the facts here, just as in *National Audubon Society*, the Navy's failure to consider species-specific impacts is arbitrary and capricious when the Navy's own analysis demonstrates that different species respond differently to aircraft noise.

In this case, as in *National Audubon Society*, the Navy failed to analyze how increased Growler operations would affect specific bird species, despite the Navy's explicit recognition

[4] It is particularly disingenuous for the Navy to cite in its brief three reports prepared by Washington's Department of Fish and Wildlife, essentially recognizing the Department's expertise in this area, while at the same time brushing aside its obligation to consider the comments submitted by the Department on the Draft EIS. *Compare* Fed. Defs. Cross-Mot. 36–37 (citing GRR75158 (January 2015 tufted puffin status report); GRR85280 (April 2015 research progress report on Washington at-sea marbled murrelet population monitoring); GRR31375 (January 2005 monitoring report of multiple local marine bird and mammal species)), *with* Fed. Defs. Cross-Mot. 38 n.16.

in the Final EIS that different bird species respond differently to aircraft noise and ample record evidence. *See, e.g.*, GRR150912 ("Behavioral reactions to aircraft overflights are dependent upon species and activity at the time of stimulus."); *see also National Audubon Society*, 422 F.3d at 193 (concluding that the Navy violated NEPA's hard look mandate because it placed little weight on certain snow geese studies it reviewed and did not obtain sufficient species-specific data to counter the most relevant studies despite "consistently maintain[ing] that effects from aircraft activity are species-specific"). Just as it was not sufficient for the Navy to "simply describe all the snow geese studies in the FEIS and acknowledge their conclusions" in *National Audubon Society*, especially in light of the Navy's "clear" position that "the effects of aircraft activity are species-specific," *id.*, it is not sufficient here for the Navy to simply describe the studies it reviewed and acknowledge that some demonstrate that certain bird species may be uniquely affected by aircraft noise, while nevertheless drawing the contrary conclusion that "a species by species analysis was unnecessary," Fed. Defs. Cross-Mot. at 37. *See also Nat'l Audubon Soc'y*, 422 F.3d at 193–94 ("A hard look in this context . . . entails more than citing the articles or abstracts that contradict the conclusions reached. . . . An agency's hard look should include neither researching in a cursory manner nor sweeping negative evidence under the rug.").

The Navy's attempts to distinguish *National Audubon Society* fail. First, the Navy's argument that *National Audubon Society* concerned a new training location rather than an existing one is a red herring because the Navy's ability to rely on historical data concerning bird strikes in this case (*i.e.*, the numbers and types of birds that have been struck at the Naval Air Station Whidbey Island complex) is irrelevant to the question of how increased Growler noise would affect different bird species. *See* Fed. Defs. Cross-Mot. 38. Second, the Fourth Circuit focused not only on the Navy's recognition that "snow geese may be especially sensitive to aircraft activity" in *National Audubon Society*, 422 F.3d at 192–93, but also on the

Navy's consistent position—similar to its explicit acknowledgements in this case—that "the effects of aircraft activity are species-specific." *Id.* at 193. Third, the State's position is not limited to "the Navy's ostensible failure to consider tufted puffins separately," *see* Fed. Defs. Cross-Mot. 39 (citation omitted), but rather to the Navy's failure to consider species-specific impacts of any kind, tufted puffin or otherwise. Finally, it is not simply the proximity of the Navy's Field Carrier Landing Practice (FCLP) operations at OLF Coupeville to the San Juan Islands National Wildlife Refuge that merits special attention, but the proximity of *all* of the Navy's increased flight operations (not limited to FCLP training operations) to not only the Wildlife Refuge, which the Final EIS recognized would be adversely impacted, GRR161349 (noting the increase in annual average noise exposure at Williamson Rocks and Bird Rocks within the Wildlife Refuge); *see also* GRR150476 (noting that the Wildlife Refuge was established to protect colonies of nesting seabirds); GRR151276, but also to several other important bird areas, which are essential habitats for breeding, wintering, and migrating, particularly for bird species that are protected by the Migratory Bird Treaty Act, GRR150473–75.

In light of the record evidence that bird responses to aircraft noise vary substantially by species, it was arbitrary and capricious for the Navy to determine that a species-by-species analysis was unnecessary. *National Audubon Society*, 422 F.3d at 193. As such, the Navy failed to take a hard look at bird impacts from increased Growler operations in violation of NEPA.

b. The Navy irrationally concluded that increased Growler flights will not significantly impact birds, despite record evidence to the contrary

The Navy's response brief also fails to explain its irrational conclusion that increased Growler operations will not significantly impact birds. *See* Fed. Defs. Cross-Mot. 40–42. The Final EIS relied upon three flawed premises in reaching this conclusion: (1) birds that have

habituated to the current level of aircraft operations will habituate to a 33% increase in those operations, *see* GRR150916; (2) the habituation of birds to aircraft operations necessarily indicates that birds do not suffer long-term impacts from those operations (*i.e.*, that aircraft disturbances "are not expected to affect critical behaviors," GRR150916), despite record evidence showing long-term impacts exist even when birds do not outwardly react to noise; and (3) any negative impacts to birds resulting from a 33% increase in flights will be short-term and minimal based on the annual hours of noise exposure rather than the number of flight operations, *see* GRR150914–16, despite record evidence indicating that the frequency of noise disruptions may impact birds more significantly than the duration of those disruptions, *see* GRR30309. *See also* Wash. Mot. 25. Because there is no rational basis for any of these flawed premises in the record—a fact that the Navy's response brief does not and cannot rebut—it was arbitrary and irrational for the Navy to conclude that increased Growler operations would not significantly impact birds despite record evidence to the contrary.

First, contrary to the Navy's claims, *see* Fed. Defs. Cross-Mot. 40, its conclusion that "at least some degree of future habituation could be assumed [for bird species] even with increased noise," (quoting GRR150913), is completely without support in—and instead contradicted by—the record evidence. While the Final EIS cited a number of studies that are at least two decades old for the proposition that habituation "has been noted in numerous species," GRR150913 (citing Grubb, 1979; Smitt and Visser, 1993; Trimper and Thomas, 2001; Delaney et al., 1999), those studies acknowledged obstacles to drawing broad conclusions about the specific species under examination, and drew no conclusions concerning bird species in general. *See, e.g.*, GRR6857 (Grubb, 1979: "[i]t is *difficult to draw any hard conclusions* from this study [on herons and egrets] as data available in the literature and data collected in this study were limited") (emphasis added); GRR24664 (Delaney et al., 1999: "sample sizes [for spotted owl study] were *too small to establish significance* for indicated

trends") (emphasis added); GRR24668 (Delaney et al., 1999: certain identified trends were "*weaker evidence* for habituation because the influence of seasonal factors, such as nesting phase, cannot be differentiated") (emphasis added). Moreover, the Navy's briefing selectively omits the clause in the Final EIS immediately following the Navy's assertion that habituation to aircraft noise has been noted in numerous species, *see* Fed. Defs. Cross-Mot. 40, which explicitly states that "not all species exhibit the same pattern of habituation, and residual effects are possible." GRR150913 (citing two studies). The Navy's acknowledgement that habituation varies by species makes it particularly irrational for the Navy to conclude, based on a handful of non-definitive studies concerning specific bird types such as spotted owls, herons, and egrets, that for birds generally "at least some degree of future habituation could be assumed even with increased noise." Fed. Defs. Cross-Mot. 40 (quoting GRR150913). The Navy's assumption that bird species will generally habituate to increased Growler noise given their past habituation therefore lacks any rational basis in the record. *See Native Ecosystems Council v. U.S. Forest Serv.*, 418 F.3d 953, 964 (9th Cir. 2005) ("To take the required 'hard look' at a proposed project's effects, an agency may not rely on incorrect assumptions or data in an EIS.").

Second, the Navy fails to salvage its unsupported premise that limited long-term impacts from noise can be assumed for bird species that do not overtly respond to noise, or display only a short-lived response. *See* Wash. Mot. 26–28; Fed. Defs. Cross-Mot. 40–42. The Navy's response makes no attempt to address record evidence in support of the opposite conclusion (*i.e.*, that bird species do suffer long-term impacts from noise notwithstanding habituation or lack of observable response). In particular, the Navy does not justify its conclusion that a lack of species response to stimuli or "habituation" represents a decreased impact on species in light of studies demonstrating that: (1) conventional research approaches focusing on overt behavioral responses from wildlife may overlook non-observable responses

to stimuli such as aircraft noise, GRR32994–3001 (Goudie, 2006), (2) a species' ability to remain in an area despite human activity does not necessarily indicate that the species is unaffected, GRR39482–85 (Bedjer, 2009) and (3) even species that outwardly appear to habituate may suffer from decreased fitness, GRR56493 (Francis and Barber, 2013).

The Navy's insistence "that there was insufficient evidence demonstrating long-term impacts from increased noise," *see* Fed. Defs. Cross-Mot. 41–42, blatantly overlooks record evidence. Specifically, it ignores evidence that certain bird species show "reduced pairing success in noisy areas," GRR56488, which is a long-term impact from increased noise, *see* GRR151275 (WDFW comments explaining that "[f]itness is defined as an organism's ability to survive to reproductive age, find a mate, and produce offspring"), and that wildlife "may experience strong negative impacts" in ways that cannot be observed as direct responses to noise stimuli, such as "pairing success, number of offspring, physiological stress, or other measures of fitness," despite otherwise displaying "little to no response to noise." GRR56488 (Francis and Barber, 2013). Moreover, the Navy's claim of "insufficient evidence" is undercut by its own statements in the Final EIS that "[a]mple research has demonstrated that anthropogenic disturbances contribute to ecological effects on wildlife, such as reduced species richness, time budgets, space use and habitat selection, reproductive success, and predator-prey interactions, and greater nest abandonment in birds," GRR150910, that some bird species may experience "residual" effects from noise stimuli, GRR150913, and that "acclimation or tolerance to disturbances might not release individuals from costs to their fitness," GRR150910. In sum, the Navy has no rational basis for its decision not to consider long-term impacts to birds from its Growler operations where the record demonstrates that such impacts exist. *See Native Vill. of Point Hope v. Jewell*, 740 F.3d 489, 503–04 (9th Cir. 2014) (agency lacked rational basis to conclude that oil production would be limited to one oil field despite previous evaluations indicating that "multiple oil fields would develop" and agency's

acknowledgement of the same); *Nat'l Audubon Soc'y*, 422 F.3d at 193–94 (Navy failed to take a "hard look" as required by NEPA by failing to conduct species-specific analysis where studies in the record indicated that such analysis was necessary).

Apparently assuming that any discussion of "adverse impacts" automatically satisfies NEPA's "hard look" requirement, the Navy highlights that it acknowledged in the Final EIS that: (1) "some additional sensory disturbance impacts" may result from increased Growler noise, Fed. Defs. Cross-Mot. 41 (quoting GRR150908), (2) behavioral responses to sensory disturbances can lead to energy loss, Fed. Defs. Cross-Mot. 41 (citing GRR150909), and (3) "all behavioral responses are accompanied by some form of physiological response," Fed. Defs. Cross-Mot. 41 (quoting GRR150909). But merely acknowledging these impacts does not satisfy NEPA when the Navy then draws conclusions in the Final EIS that conflict with its own analysis. *See Nat'l Audubon Soc'y*, 422 F.3d at 193–94 ("A hard look . . . entails more than citing the articles or abstracts that contradict the conclusions reached."); *see also* 40 C.F.R. § 1502.1 (an EIS should be "supported by evidence that the agency has made the necessary environmental analyses"); 40 C.F.R. § 1502.24 (agencies should insure the "scientific integrity[] of the discussions and analyses in environmental impact statements").

Third, the Navy offers no compelling response to the State's argument that the Navy lacked a rational basis to conclude that Growler operations will result in only minimal, short-term impacts on birds. *See* Wash. Mot. 28–29; Fed. Defs. Cross-Mot. 42. Focused on defending its use of the 92-decibel threshold, Fed. Defs. Cross-Mot. 42 (citing GRR150914), the Navy's argument is wholly unresponsive to the State's position: even if the Navy provided a rational basis for its 92-decibel threshold, it has not provided a rational basis for its decision to measure only the amount of time above this threshold and to not account for the frequency with which the threshold is broken, despite record evidence demonstrating that a considerable increase in the number of disturbances (rather than the overall duration of the disturbances) can

negatively impact birds. *See, e.g.*, GRR30309 (Goudie and Jones, 2004: noting that a considerable increase in frequency of over-flights beyond the flights documented during the duration of the study could impact the ability of harlequin ducks to budget sufficient time for feeding). Because the Navy irrationally measured only the duration of disturbances and not their frequency in order to assess the impacts of its expanded Growler operations on birds, the Navy's conclusion that any negative impacts to birds resulting from increased Growler operations will be short-term and minimal lacks rational basis and is unlawful. *See Native Vill. of Point Hope*, 740 F.3d at 502–05 (agency estimate of oil production lacked rational basis where it was based on the lowest possible amount of oil that would be economical to produce, rather than the mean estimate of such amount, despite the latter being "by definition a more likely occurrence").

In sum, the Navy's analysis of bird impacts lacks a rational basis and record support and thus violates NEPA. *See Ctr. for Biological Diversity*, 982 F.3d at 739 ("An agency acts arbitrarily and capriciously when it reaches a decision that is 'so implausible that it could not be ascribed to a difference in view or the product of agency expertise.'") (quoting *Motor Vehicle Mfrs. Ass'n , Inc. v. State Farm Mut. Ins. Co.*, 463 U.S. 29, 43 (1983)); *Native Vill. of Point Hope*, 740 F.3d at 502–05 (agency estimate of oil production was arbitrary and capricious where it relied upon assumptions that lacked rational basis); *Native Ecosystems Council*, 418 F.3d at 964 ("To take the required 'hard look' at a proposed project's effects, an agency may not rely on incorrect assumptions or data in an EIS.").

B. The Navy's Section 106 Determination Failed to Rationally Explain its Mitigation Measures, Violating the NHPA and the APA

The Navy fails to present a compelling defense of its Section 106 determination, which was arbitrary and capricious because the Navy failed to provide a rational explanation for its chosen mitigation measures in violation of the NHPA and the APA. *See* Wash. Mot. 30–31.

Instead, the Navy nakedly asserts that it met the requirement of articulating a "rational connection between the fact found and choices made," *see* Fed. Defs. Cross-Mot. 56 (quoting *State Farm*, 463 U.S. at 43), but does not articulate what that connection is.

The Navy's response fails to offer any rational connection between the Navy's narrow choice to mitigate harms only at Ferry House, and the Navy's noise impacts to historical resources, which the Navy recognized extend beyond Ferry House in its adverse effects finding. GRR138521. Nor does the Navy's response explain how the interpretative historical signs and the REPI program, which have no noise mitigation function, bear any rational connection to the impacts from the Navy's operations on Whidbey Island's historic resources, which are inherently caused by noise, as the Navy also recognized in its adverse effects finding. *See* GRR138521 (noting intent to "minimize noise effects"). Simply listing these mitigation measures as the Navy has done here, *see* GRR167574–78; GRR167659–61 (ROD), without articulating their rational connection to the acknowledged adverse effects of the Navy's increased Growler operations, falls short of the reasoned discussion required by the NHPA and the APA. *See Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372, 1380 (9th Cir. 1998) ("A mere listing of mitigation measures is insufficient to qualify as the reasoned discussion required by NEPA.") (citation omitted). The Navy's Section 106 determination is therefore unlawful.

III. CONCLUSION

For the reasons set forth above and for the reasons stated in the State's opening brief, this Court should grant the State's motion for summary judgment, deny the Federal Defendants' cross-motion, and declare that Federal Defendants violated NEPA and the APA by adopting and relying on a legally deficient EIS in issuing the challenged ROD, and violated the NHPA and the APA by relying on a legally deficient Section 106 process in issuing the challenged ROD. The ROD and Section 106 determination should be vacated and set aside,

and this matter should be remanded to the Navy to comply fully with NEPA, the NHPA, and the APA. *All. for the Wild Rockies v. U.S. Forest Serv.*, 907 F.3d 1105, 1121 (9th Cir. 2018) ("vacatur of an unlawful agency action normally accompanies a remand"); *California v. Bernhardt*, 472 F. Supp. 3d 573, 630 (N.D. Cal. 2020) ("[v]acatur is the standard remedy under the APA and NEPA if a court determines that an agency action is unlawful").

Respectfully submitted this June 22, 2021.

OFFICE OF THE ATTORNEY GENERAL
ROBERT W. FERGUSON
Attorney General

By:/s/ C. L. Junine So
C. L. JUNINE SO, Pro Hac Vice
By:/s/ Aurora R. Janke
AURORA R. JANKE, WSBA#45862
By:/s/ William R. Sherman
WILLIAM R. SHERMAN, WSBA#29365
Environmental protection Division
Assistant Attorneys General
800 5th Ave Suite 2000, TB-14
Seattle, WA 98104-3188
(206) 389-2426
Junine.So@atg.wa.gov
Bill.Sherman@atg.wa.gov
Aurora.Janke@atg.wa.gov

CERTIFICATE OF SERVICE

I hereby certify that on June 22, 2021, I served a copy of the foregoing on counsel of record electronically through the court's CM/ECF system.

By: /s/ Tricia Kealy
Tricia Kealy
Paralegal

ATTORNEY GENERAL OF WASHINGTON
Environmental Protection Division
800 Fifth Avenue STE 2000
Seattle, WA 98104
(206) 464-7744