



July 21, 2022

VIA CERTIFIED MAIL

Gina M. Raimondo, Secretary of Commerce
U.S. Department of Commerce
1401 Constitution Ave, N.W.
Washington, D.C. 20230

Kimberly Damon-Randall, Director
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
13th Floor
Silver Spring, MD 20910-3225

Michael Pentony, Regional Administrator
Greater Atlantic Regional Fisheries Office
National Marine Fisheries Service
55 Great Republic Drive
Gloucester, MA 01930

Jennifer Anderson
Assistant Regional Administrator for
Protected Resources
Greater Atlantic Regional Fisheries Office
National Marine Fisheries Service
55 Great Republic Drive
Gloucester, MA 01930

Re: Sixty-day Notice of Intent to Sue for Violations of the Endangered Species Act Related to the February 25, 2022 Biological Opinion for USACE Permit for the New Jersey Wind Port (NAP-2019-01084-39) and the March 30, 2022 Biological Opinion for USACE Permit for the Edgemoor Container Port (NAP-2019-278-23)

Dear Secretary Raimondo, Director Damon-Randall, Regional Administrator Pentony, and Assistant Regional Administrator Anderson:

On behalf of Delaware Riverkeeper Network and Maya K. van Rossum, the Delaware Riverkeeper (collectively, "DRN"), this letter provides the National Marine Fisheries Service ("NMFS") with notice pursuant to section 11(g) of the Endangered Species Act ("ESA"), that DRN intends to sue NMFS for violations of the ESA related to the February 25, 2022 Biological Opinion for the U.S. Army Corps of Engineers ("Corps") Permit for the New Jersey Wind Port,¹ and the March 30, 2022 Biological Opinion for the Corps Permit for the Edgemoor Container

¹ Nat'l Marine Fisheries Serv. Endangered Species Act Section 7 Biological Opinion USACE Permit for the New Jersey Wind Port (NAP-2019-01084-39) (Feb. 25, 2022), available at <https://doi.org/10.25923/j8gz-g091> (hereinafter, "Wind Port BiOp").

Port² (collectively, the “Biological Opinions”). Both pending permit applications are for large-scale port construction and operation in the Delaware River estuary, which is designated critical habitat for the endangered Atlantic sturgeon.

In preparing the Biological Opinions, NMFS failed to use the best scientific and commercial data available, resulting in a dramatic underestimate the existing baseline impact of vessel strikes on the Atlantic sturgeon population, and a failure to accurately predict the consequences of vessel strikes associated operation and construction of the ports. Accordingly, the findings of no jeopardy and the incidental take statements in the Biological Opinions are also without adequate support in the record.

DRN has reason to believe that NMFS is aware of the inaccurate assessments and inappropriate application regarding existing and readily-available science. We have reason to believe that NOAA is also aware that if the correct scientific data sets and analyses were applied to these projects that it could result in a determination that the issuance of the Corps permits would likely jeopardize the continued existence of the Atlantic Sturgeon.

LEGAL BACKGROUND

The Endangered Species Act was enacted in 1973 to “provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions” entered into by the United States for fish, wildlife, or plant conservation purposes.³ The Act is administered by the Fish and Wildlife Service (“FWS”) in the Department of the Interior, and by NMFS, also known as the NOAA Fisheries, in the Department of Commerce.

The Secretary of Commerce is tasked with the responsibility of determining whether a species is endangered or threatened, as well designating the critical habitat of such species and preparing a recovery plan for each listed species.⁴ Once a species’ listing determination has been approved, section 7 prohibits any federal action that is “likely to jeopardize the continued existence of any endangered [or threatened] species,” including any action likely to “result in the destruction or adverse modification of critical habitat of such species.”⁵

In addition to the protections afforded under section 7, section 9 prohibits the “taking” of endangered and most threatened species.⁶ Congress intended the term “take” to be defined in the “broadest possible manner to include every conceivable way” in which a

² Nat’l Marine Fisheries Serv. Endangered Species Act Biological Opinion USACE Permit for the Edgemoor Container Port (NAP-2019-278-23) (Mar. 30, 2022) available at <https://doi.org/10.25923/2nsn-g315> (hereinafter, “Edgemoor BiOp”).

³ See 16 U.S.C. 1531(b), (a).

⁴ 16 U.S.C. 1533(a)(1), (3).

⁵ *Id.* § 1536(a)(2).

⁶ *Id.* § 1538(a).

person could harm or kill fish or wildlife⁷, and includes acts like harassing, harming, selling, pursuing, shooting, collecting, transporting, or even attempting to include any of these actions against a protected species.⁸ In an attempt to balance the extensive take prohibition in section 9, Congress amended the Act in 1982 to provide two avenues of relief if it is determined that the action does not jeopardize the survival of the species. Section 10 of the Act allows “[a]nyone who believes that their otherwise-lawful activities will result in an ‘incidental take’ of a listed wildlife species” to apply for an incidental take permit accompanied by a habitat conservation plan.⁹ The second is provided through the section 7 consultation process, which can result in the issuance of a biological opinion that includes an “incidental take statement.”¹⁰

In order to ensure conformity with the requirements of the Act, a Federal agency whose actions “may affect listed species or critical habitat” must consult with NMFS. During the consultation process, federal agencies must “use the best scientific and commercial data available.”¹¹ Notably, section 7(a)(2) prohibits agency actions that: (1) jeopardize the continued existence of listed species; or (2) destroy or adversely modify the species’ designated critical habitat. If NMFS determines that the species is present in the area and that the proposed action is likely to affect the species or its habitat, then the formal consultation process begins and culminates with the issuance of a biological opinion, which generally includes an incidental take statement.¹²

The biological opinion includes a determination of whether the action is likely to jeopardize the species or destroy or adversely modify critical habitat and, if so, suggestions of “reasonable and prudent alternatives” to avoid that result.¹³ “Jeopardize the continued existence of” is defined in the Act as “to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.”¹⁴

Once the biological opinion is complete and an incidental take statement has been obtained, the agency is authorized, if in compliance with the terms and conditions of the incidental take statement, to “take” listed species without facing section 9 liability.¹⁵ However, a legally flawed biological opinion cannot shield an action agency from liability under the Act. In fact, an action agency’s reliance on an inadequate, incomplete, or flawed

⁷ See S. Rep. No. 307, 93rd Cong., 1st Sess. 1, reprinted in 1973 U.S. Code Cong. & Admin. News 2989, 2995.

⁸ *Id.* § 1532(19); See *Palila v. Hawaii Dept. of Land & Nat. Resources*, 852 F.2d 1106 (9th Cir. 1988); 50 C.F.R. § 17.3.

⁹ 16 U.S.C. § 1539.

¹⁰ *Id.* § 1536.

¹¹ *Id.*; 50 C.F.R. § 402.14(d).

¹² 50 C.F.R. § 402.14(i).

¹³ 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. § 402.14(g)(5), (g)(8).

¹⁴ 50 C.F.R. § 402.02.

¹⁵ 16 U.S.C. § 1536(o)(2); 50 C.F.R. § 402.14(i)(5).

biological opinion to satisfy its duty to avoid jeopardy, however, is itself arbitrary and capricious.¹⁶

The Atlantic sturgeon was first identified as a candidate species—a list that served to notify the public of the Services’ concern for a species that may warrant future listing—for listing under the ESA in 1991.¹⁷ Following the denial of a 1997 petition requesting the listing of the sturgeon as threatened or endangered, the Services sponsored a 2003 workshop discussing the status of the species which culminated in a decision to review the Atlantic sturgeon for potential listing.¹⁸ In 2009, a second petition was submitted to list the Atlantic sturgeon throughout its range as endangered.¹⁹ Based on a review of all of the new information that the Services had obtained since 1997, it was determined that there were five distinct population segments (“DPS”) of Atlantic sturgeon that qualified as species under the ESA.²⁰ The New York Bight DPS, the focus of the two biological opinions of concern, was determined to be in danger of extinction.²¹ As a result, the New York Bight DPS was proposed to be listed as endangered in October of 2010, with the proposal being finalized on April 6, 2012.²²

FACTUAL BACKGROUND

The Biological Opinions at issue are for two projects located within the Delaware River estuary, the New Jersey Wind Port project, and the Edgemoor Container Port Project. Both Biological Opinions feature the same flawed analysis with regard to vessel strikes.

The Wind Port is a proposed project located at approximately river mile 52 by Public Service Enterprise Group (“PSEG”) to construct and operate a “marshalling facility in support of offshore wind projects in New Jersey and other U.S. East Coast states.”²³ The project also involves a compensatory mitigation project in response to the loss of benthic habitat associated with the project.²⁴

The Edgemoor Container Port is a proposed project located at approximately river miles 72.5 to 72.3 by the Diamond State Port Corporation to construct and operate a “multi-user containerized cargo port capable of accepting New Panamax cargo ships.”²⁵ During construction of the Edgemoor project, which would occur between July 15th and March 14th each year for approximately three years, 5,442 new vessel trips would occur within the

¹⁶ See, e.g., *Stop H-3 Ass’n. v. Dole*, 740 F.2d 1442, 1460 (9th Cir. 1984).

¹⁷ 77 Fed. Reg. 5879, 5880 (2012).

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ *Id.*

²¹ *Id.*

²² *Id.*

²³ Wind Port BiOp at 1-2.

²⁴ *Id.* at 13-15.

²⁵ Edgemoor BiOp at 1-4.

Delaware River estuary.²⁶ Operation of the Edgemoor facility would increase vessel traffic by 708 new vessel trips annually over a period of 50 years.²⁷

VIOLATIONS OF THE ENDANGERED SPECIES ACT

NMFS violated the ESA by issuing two unlawful Biological Opinions that failed to utilize the best available scientific and commercial data, inaccurately evaluated the environmental baseline, failed to accurately account for the consequences of the actions, issued incidental take statements inadequate to protect the species at issue, and, as a result, failed to ensure against jeopardy of the species. As recognized in NMFS’s most recent 5-Year Review for the New York Bight DPS of Atlantic sturgeon, although “[v]essel strikes were considered a primary threat to the New York Bight DPS when NMFS listed the DPS as endangered,” the “number of strikes is far greater than NMFS anticipated when the DPS was listed” and the “inadequacy of existing regulatory mechanisms is a greater stressor . . . than considered” at the time of listing.²⁸ In support of this conclusion, NMFS cited a study by Fox, *et al.*:

NMFS has only minimum counts of the number of Atlantic sturgeon that are struck and killed by vessels because only sturgeon that are found dead with evidence of a vessel strike are counted. New research, including a study that intentionally placed Atlantic sturgeon carcasses along the Delaware River in areas used by the public, suggests that most Atlantic sturgeon carcasses are not found and, when found, many are not reported to NMFS or to our sturgeon salvage coinvestigators (Balazik et al. 2012b, Balazik, pers. comm. in ASMFC 2017; Fox et al. 2020). Based on the reporting rates in their study, Fox et al. estimated that a total of 199 and 213 carcasses were present along the Delaware Estuary shoreline in 2018 and 2019, respectively.²⁹

The 5-Year Review highlighted several regulatory methods of protection, advising that “[s]ome effects of vessel activity to the New York Bight DPS can be addressed through section 7 consultation if a federal agency is proposing to authorize, fund, or carry out the vessel-related action (e.g., issuing a license or permit for construction of a commercial port).”³⁰ The 5-Year Review was published shortly before the issuance of both Biological Opinions, indicating that NMFS was aware of this information at the time it finalized the Biological Opinions.

²⁶ *Id.* at 147–48.

²⁷ *Id.* at 151–52.

²⁸ Nat’l Marine Fisheries Serv., Greater Atlantic Fisheries Office, New York Bight Distinct Population Segment of Atlantic Sturgeon 5-Year Review: Summary and Evaluation at 23, 25 (Feb. 16, 2022), https://media.fisheries.noaa.gov/2022-02/Atlantic%20sturgeon%20NYB%205-year%20review_FINAL%20SIGNED.pdf (hereinafter, “New York Bight DPS 5-Year Review”).

²⁹ New York Bight DPS 5-Year Review at 24.

³⁰ New York Bight DPS 5-Year Review at 23.

Despite acknowledging this new research indicating that NMFS had previously underestimated vessel strikes, and acknowledging the role that section 7 consultations play in federally-permitted commercial ports, the Biological Opinions at issue rely on an older study from an entirely different river system (Balazik, *et al.*) that did not directly address reporting rates of discovered Atlantic sturgeon carcasses, but rather the number of deployed carcasses that wound up on a beach. The Fox, *et al.* study, which was conducted in the Delaware River and focused on the number of washed-up carcasses that were actually reported, is the best scientific and commercial data available to base an estimate of vessel strike mortality upon.

Failure to Rely on Best Available Scientific Data

The ESA requires that a Biological Opinion be based on the “best scientific and commercial data available.”³¹ NMFS’s failure to do so violates both the ESA and the Administrative Procedure Act.³² The purpose of the best-available-data standard is to ensure that NMFS does not act based on “speculation and surmise.”³³ The best available data requirement explicitly prohibits an agency from disregarding available scientific evidence that is in some way better than the evidence it relies on.³⁴ Essentially, NMFS “cannot ignore available biological information.”³⁵ Rather, NMFS must seek out and consider all existing scientific data relevant to the decision it is tasked with making.³⁶ After consideration, NMFS must then base its ultimate decision on the best scientific data that was available at the time of decision.

In the present situation, NMFS consulted a variety of studies while drafting the Biological Opinions, including both the Balazik³⁷ and Fox³⁸ studies. These are two studies that NMFS evaluated to determine how to estimate vessel strike mortalities of Atlantic sturgeon and shortnose sturgeon, ultimately relying on the Balazik study and disregarding the Fox study. NMFS characterized the Balazik study as establishing that monitoring efforts only document about one-third of all vessel strike mortalities.³⁹ It then acknowledges the competing data from the Fox study, which estimates that “reporting rates varied from 2.0 (spring 2018) to 12.5 (summer and fall 2018) percent with a reporting rate of about 5 percent when they combined the data for all seasons over the two years.”⁴⁰

³¹ 16 U.S.C.A. § 1536(a)(2); 50 C.F.R. § 402.14(g)(8).

³² *San Luis & Delta-Mendota Water Auth. v. Locke*, 776 F.3d 971, 995 (9th Cir. 2014) (citing 5 U.S.C. § 706(2)(A)).

³³ *Bennett v. Spear*, 520 U.S. 154, 176 (1997).

³⁴ See *Center for Biological Diversity v. U.S. Fish & Wildlife Service*, 807 F.3d 1031 (9th Cir. 2015); *Heartwood, Inc. v. U.S. Forest Serv.*, 380 F.3d 428, 436 (8th Cir. 2004).

³⁵ *Kern County Farm Bureau v. Allen*, 450 F.3d 1072, 1080–81 (9th Cir. 2006).

³⁶ *Heartwood, Inc.* 380 F.3d at 436.

³⁷ Matthew T. Bakazik, Kevin J. Reine, Albert J. Spells, Charles A. Fredrickson, Michael L. Fine, Greg C. Garman & Stephen P. McNinch, *The Potential for Vessel Interactions with Adult Atlantic Sturgeon in the James River, Virginia*, 32 North American Journal of Fisheries Management 1062 (2012).

³⁸ Dewayne A. Fox, Edward A. Hale & John A. Sweka, *Examination of Atlantic Sturgeon Vessel Strikes in the Delaware River Estuary, Final Report*, Delaware State University (2020).

³⁹ Wind Port BiOp at 190; Edgemoor BiOp at 153.

⁴⁰ Wind Port BiOp at 140; Edgemoor BiOp at 108.

After considering both studies, NMFS concluded that “[b]ecause there is substantial uncertainty regarding the precise rate of interactions, carcass observations, as well as other factors such as []seasonality, and annual fluctuations in number and type of vessels, distribution and abundance of sturgeon, [NMFS] will continue to assume that the average number of reported vessel strikes in any given year represents one-third of actual mortalities.”⁴¹ The problems with this decision by NMFS are numerous.

First, the agencies’ consultation handbook provides that when “significant data gaps exist there are two options: (1) if the action agency concurs, extend the due date of the biological opinion until sufficient information is developed for a more complete analysis; or (2) develop the biological opinion with the available information *giving the benefit of the doubt to the species*.”⁴² This maxim also applies in situations where there is competing information, rather than just significant data gaps. Given that the purpose of the ESA is to improve outcomes for protected species, and agencies must honor Congress’s intent to give the benefit of the doubt to the species,⁴³ it was incumbent upon NFMS to utilize the more directly applicable Fox study or, at a minimum, to allow more time for a more complete analysis that would resolve the uncertainty. We note that the deficient analysis used for the Wind Port project seems to have been simply cut and pasted into the Edgemoor Port analysis, therefore duplicating and compounding the lack of a site-specific assessment essential for determining the potential species ramifications of that project.

Second, the Balazik study was conducted on the James River in Virginia, a significantly different river system than the Delaware River and Estuary. The Fox study was conducted on, and is specific to, the Delaware River system, including taking into account the more limited access to the riverfront, affecting discovery and reporting of dead sturgeon. The differences in these estuarine systems are significant and material to the likelihood of sturgeon carcass reporting; tidal energy, industrial shorelines, residential access, fringing marshlands, and types and levels of boating activity are highly divergent between these two estuarine systems. Even if reporting rates had been thoroughly studied on the James River (see below), they would provide inappropriate rates for a system like the Delaware Estuary. Clearly, an estuary-specific reporting rate for the Delaware River and Bay would provide the only defensible estimate for this key parameter in evaluating the Atlantic sturgeon population.

Third, NMFS misinterpreted the findings of the Balazik study. While NMFS has been using the study to estimate that the number of sturgeon mortalities is approximately 3 times those reported,⁴⁴ the Balazik study does not support such a direct calculation. In Balazik *et al*, no actual reporting of carcasses by the public or by independent researchers

⁴¹ Wind Port BiOp at 140; Edgemoor BiOp at 108.

⁴² *Endangered Species Consultation Handbook*, U.S. Fish & Wildlife Service and National Marine Fisheries Service at I-7 (March 1998) (emphasis added).

⁴³ *Defenders of Wildlife v. United States Department of the Interior*, 931 F.3d 399 (4th Cir. 2019); *Conner v. Burford*, 848 F.2d 1441 (9th Cir. 1988); *Native Ecosystems Council v. Marten*, 209 F.Supp. 3d 1168 (D. Mont. 2016); See H.R. Cong. Rep. No. 697, 96th Cong., 2nd Sess. 12 (1979).

⁴⁴ Wind Port BiOp at 140; Edgemoor BiOp at 108.

was recorded. Instead, these authors report only a rate of carcass settlement in locations that presumably could be detected, based on known monitoring programs and activities specific to the James River. In addition, Balazik, *et al.* used a very limited sample size and a short temporal window. NMFS has misapplied a reporting number in Balazik, *et al.* for use in models of the Delaware Estuary system.

In fact, the Balazik study recovered just five of the 16 carcass deployments, which is a 31.25% recovery rate.⁴⁵ This is lower than the 33.33% reporting rate that NMFS has continued to rely on in its biological opinions, and no justification has been provided for rounding up to 33.33% or how this rounding up gives the benefit of the doubt to the sturgeon at issue. Additionally, the Balazik study itself directly contradicts NMFS's use of a 33.33% reporting rate to estimate vessel strikes. The Balazik study actually used a figure of 31% to estimate the total number of Atlantic sturgeon killed between 2007 and 2010 to be 80, but cautioned that "the estimate of 80 mortalities is *extremely conservative*."⁴⁶ Thus, not only did the Balazik study employ a more conservative recovery rate estimate than NMFS in its calculations, it explicitly cautioned that doing so resulted in an extremely conservative estimate of total strikes. This caution from Balazik was only confirmed by the Fox study which estimated that a mere 5% of all strike mortalities were accounted for.

The Biological Opinions are silent as to how the selection of a higher carcass reporting rate estimate than the study on which it purports to rely was reasonable in light of the documented conservativeness of the results. The reasonableness of the one-third figure used by NMFS also fails to find support in other studies that were cited in the Biological Opinions, and the agency fails to explain why the one-third assumption is based on the best scientific and commercial data available. NMFS similarly failed to explain how the selected figure affords the benefit of the doubt to the species at issue in this case. Here, NMFS ignored significant evidence that undermines its estimates—evidence that the agency itself had gathered and relied upon⁴⁷—instead using an estimate that is even less conservative than the one utilized in the study. These arbitrary calculations demonstrate the overall arbitrary and capricious nature of NMFS' Biological Opinions concerning the Atlantic sturgeon.⁴⁸

⁴⁵ Matthew T. Bakazik, Kevin J. Reine, Albert J. Spells, Charles A. Fredrickson, Michael L. Fine, Greg C. Garman & Stephen P. McNinch, *The Potential for Vessel Interactions with Adult Atlantic Sturgeon in the James River, Virginia*, 32 North American Journal of Fisheries Management at 1068 (2012).

⁴⁶ *Id.* (emphasis added).

⁴⁷ *New York Bight Distinct Population Segment of Atlantic Sturgeon*, National Marine Fisheries Service at 24 (Feb. 2022), available at https://media.fisheries.noaa.gov/2022-02/Atlantic%20sturgeon%20NYB%205-year%20review_FINAL%20SIGNED.pdf

⁴⁸ *Def's of Wildlife v. U.S. Dept. of Interior*, 931 F.3d 399 (4th Cir. 2019); *Def's of Wildlife v. North Carolina Dept. of Transp.*, 762 F.3d 374, 396 (4th Cir. 2014) (stating that agency action is arbitrary and capricious if the agency "offered an explanation for its decision that runs counter to the evidence before the agency"); *Dow AgroSciences LLC v. Nat'l Marine Fisheries Serv.*, 707 F.3d 462, 473 (4th Cir. 2013) (explaining that, where agency's data is "either outdated or inaccurate," the agency should, at the very least, explain why it nonetheless relied on the data on which it did).

Unlawful Environmental Baseline

The “environmental baseline” is defined by regulation as “the condition of the listed species or its designated critical habitat in the action area.”⁴⁹ It includes “the past and present impacts of all Federal, State, or private action and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process.”⁵⁰ Accurate analysis of the environmental baseline is more than a mere procedural requirement, because “whether an action is included in the baseline determines whether its impacts are considered at all in the agency’s basic jeopardy analysis.”⁵¹ When the impacts accounted for in an environmental baseline “already jeopardize a species, an agency may not take action that deepens the jeopardy by causing additional harm.”⁵²

In analyzing the environmental baseline with regard to the impacts of vessel strikes on endangered sturgeon species, NMFS adopted an assumption in both Biological Opinions that “the average number of reported vessel strikes in any given year represents one-third of actual mortalities” based on “a study of sturgeon carcass observations on the James River (Virginia) by Balazik *et al.*”⁵³ Using that assumption, NMFS concluded that a median of 36 Atlantic sturgeon are killed by vessel strike per year,⁵⁴ and that one Atlantic sturgeon is killed for every 898 vessel trips.⁵⁵

The crucial error made by NMFS in formulating this assumption is that the Balazik study was not designed to identify a reporting rate for Atlantic sturgeon carcasses, but rather to “estimate the proportion of undetected vessel strike mortalities of adult Atlantic sturgeon”⁵⁶ by identifying deployed carcasses that were deposited “in areas where they *would likely be found* by using current monitoring techniques” that were specific to the James River.⁵⁷ The Fox study, on the other hand, was specifically designed to determine a reporting rate for Atlantic sturgeon carcasses in the Delaware River.⁵⁸ Thus, when extrapolating estimates of vessel strike mortality from actual reports of Atlantic sturgeon carcasses in the Delaware River, the rate of 4.76% (Fox, *et al.*) as opposed to one-third (Balazik, *et al.*) is the best available information.

⁴⁹ 50 C.F.R. 402.02.

⁵⁰ *Id.*

⁵¹ *Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv.*, 524 F.3d 917, 930 n.9 (9th Cir. 2008); *see also Am. Rivers v. FERC*, 895 F.3d 32, 47 (D.C. Cir. 2018) (failure to incorporate the environmental baseline into a jeopardy analysis is arbitrary and capricious).

⁵² *Def. of Wildlife v. U.S. Dept of the Interior*, 931 F.3d 339, 353 (4th Cir. 2019) (quoting *Nat’l Wildlife Fed’n*, 524 F.3d at 930).

⁵³ Wind Port BiOp at 140; Edgemoor BiOp at 108.

⁵⁴ Wind Port BiOp at 140; Edgemoor BiOp at 108.

⁵⁵ Wind Port BiOp at 142; Edgemoor BiOp at 110.

⁵⁶ Balazik, *et al.* at 1064.

⁵⁷ Balazik, *et al.* at 1067 (emphasis added).

⁵⁸ *See Fox, et al.*

Even if the Balazik study accurately estimated a reporting rate, NMFS’s assumption would still be unreasonable because that study is not focused on the “action area,” which is required to accurately evaluate the environmental baseline.⁵⁹ Compared to the James River, where the Balazik study occurred, the Delaware River estuary is highly industrialized with limited public access to the shoreline. Thus, it is less likely that Atlantic sturgeon carcasses that wash up on Delaware River shores will be found. In addition, the Balazik, et al. study assumed that certain carcasses “would likely be found using current monitoring techniques” in the James River, including areas “that are frequented by researchers of the riverkeeper.”⁶⁰ These assumptions simply do not apply in the Delaware River, which is neither geographically identical to the James River nor subject to the same monitoring techniques.

In establishing the environmental baseline, NMFS also failed to rely on the best available information, and directly contradicted itself, in estimating the amount of ship traffic per year. In the “Baseline Vessel Strike Risk” section, NMFS provided that “while vessel strike by recreational vessels and small fishing boats have occurred, we expect recreational vessel strike mortalities to be rare in the lower Delaware River estuary and in Delaware Bay. As such, they do not meaningfully contribute to our evaluation of baseline vessel strike risk.”⁶¹ Reviewing NMFS’s own Atlantic sturgeon website, however, NMFS says that Atlantic Sturgeon “are struck and killed by large commercial vessels as well as smaller vessels such as recreational vessels.”⁶² NMFS takes an even firmer stance on this in the Atlantic Sturgeon’s five-year review, stating unequivocally that the “best available information supports the conclusion that sturgeon are struck by small (e.g., recreational) as well as large vessels.”⁶³ Thus, NMFS has implicitly acknowledged that the environmental baselines utilized in both Biological Opinions fails to accord itself with what they consider to be the best available information.

Finally, in relying on the Balazik study and rejecting the Fox data, NMFS merely cites general “uncertainty” without explaining why the chosen data better reflects conditions within the action area.⁶⁴ This justification is arbitrary and fails to meet the ESA’s rigorous standards.

Unlawful Consequences Analysis

A biological opinion must include “all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it

⁵⁹ See *Appalachian Voices v. U.S. Dept. of Interior*, 25 F.4th 259, 271 (4th Cir. 2022) (finding a BiOp inadequate where it used models to account for the range-wide conditions of a species but “fail[ed] to adequately evaluate the environmental baseline for these species within the action area itself.”); see also *id.* at 273 (faulting the Fish and Wildlife Service for “never narrow[ing] its analysis to focus on the specific action area”).

⁶⁰ Balazik, *et al.* at 1067, 1068.

⁶¹ Wind Port BiOp at 141; Edgemoor BiOp at 109.

⁶² NOAA Fisheries, *Atlantic Sturgeon* (2022), available at [Atlantic Sturgeon | NOAA Fisheries](#).

⁶³ New York Bight DPS Five-Year Review at 24.

⁶⁴ See *Appalachian Voices*, 25 F.4th at 274 (failure to “explain why [the agency] believes . . . population-level models reflect conditions within the action area” is arbitrary and capricious).

would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action.”⁶⁵

NMFS’s effects analysis in the Biological Opinions is arbitrary, capricious, and contrary to the law for two reasons. First, it is based on an erroneous environmental baseline that underestimates the current level of vessel strike mortality for Atlantic sturgeon.⁶⁶ Second, because the estimate that one Atlantic sturgeon is killed for every 898 vessel trips is based on the erroneous assumption that one-third of all vessel strike mortalities in the Delaware River estuary are reported, the calculations of vessel strike mortalities that would be caused by the actions are also erroneous.

The Biological Opinion for the Wind Port concludes that “over the two years of construction we expect construction vessels will kill 0.76 or one (1) Atlantic sturgeon rounded up,”⁶⁷ and that “approximately 35 sturgeon . . . vessel mortalities over the 25-year life span” of the Wind Port will occur due to operation.⁶⁸ These figures were explicitly based on the incorrect “assumption that the DNREC database includes only one third of actual sturgeon mortalities in the Delaware River and Bay would result in overestimate of vessel strikes if a higher proportion is reported and an underestimate if even less are reported.”⁶⁹

The Edgemoor Biological Opinion concluded there would be “up to 52 Atlantic sturgeon vessel strike mortalities over a 53-year period (construction and operation).”⁷⁰ Again, calculation of this total was based in part on the Balazik study which “estimated that approximately one third of vessel mortalities are reported in the James River.”⁷¹ NMFS arbitrarily and capriciously used this study as the basis for their assumption that the DNREC database includes only one-third of actual sturgeon mortalities due to vessel strike in the Delaware River.⁷²

Despite NMFS’s recognition that the one-third figure may result in an underestimate, the decision to ignore the approximately 5% figure from Fox et al. results in a dramatic and meaningful underestimate of vessel strike impacts that would likely alter the overall finding of no jeopardy.

Failure of Incidental Take Statements to Accurately Specify the Impact to Atlantic Sturgeon and to Provide Measures Necessary to Minimize Impact.

The reliance on a reporting rate figure that was arbitrarily selected and undercounts the total number of vessel strike mortalities resulted in incidental take statements that fail

⁶⁵ 50 C.F.R. 402.02, 402.17(b).

⁶⁶ *See supra*.

⁶⁷ Wind Port BiOp at 187.

⁶⁸ *Id.* at 190.

⁶⁹ *Id.* at 193.

⁷⁰ Edgemoor BiOp at 155.

⁷¹ *Id.*

⁷² *Id.*

to fulfill their intended purpose, threaten species viability, and are arbitrary and capricious. As a result, any permit issued by the Corps in reliance on such incidental take statements would also be arbitrary, capricious, and contrary to law, and would likely jeopardize the continued existence of the Atlantic sturgeon.

The primary purpose of an incidental take statement is, when consistent with protection of the species, to exempt the incidental take of listed species that is anticipated to result from the agency action and impose conditions on that exemption intended to *minimize* the impacts of such take for the species' benefit.⁷³ "The provisions of an incidental take statement, including the amount and extent of take and the terms and conditions, necessarily must be specific to ensure they can be followed and allow for a determination of when they have been exceeded."⁷⁴ The specificity in the amount of take is important because it acts as "a 'trigger' for further consultation at the point where the allowed incidental take is exceeded, a point at which there is a risk of jeopardizing the species."⁷⁵

Here, because the proxy selected by NMFS to estimate take of Atlantic sturgeon underestimates the total number of vessel strike mortalities, the resulting take limits are artificially high and allow for a greater take of sturgeon than would be allowed using the more accurate figure from the Fox study. NMFS's reliance on such a figure thus fails to minimize the take involved and is not specific enough to allow for a determination of when there is a risk of jeopardizing the species. NMFS thus issued Biological Opinions which, when relied upon, create a risk of jeopardizing the species continued existence despite the purported "no jeopardy" finding.

Further, the Terms and Conditions of the incidental take statements are contrary to the standards established in the Endangered Species Consulting Handbook. The Handbook provides that, "if the anticipated level of incidental take is exceeded, the action agency *must immediately stop the action causing the taking* and reinitiate formal consultation."⁷⁶ Here, however, both of the incidental take statements rely primarily on vessel counts as a proxy for estimating the number of Atlantic sturgeon taken. Because NMFS's conclusions concerning the consequences of vessel strikes associated with the Wind Port and Edgemoor are based on inaccurate assumptions drawn from the Balazik study, the Corps will not be able to accurately determine when the incidental take threshold has actually been exceeded.

Furthermore, the Terms and Conditions of both documents⁷⁷ only require the Corps to report the number of vessels on an annual basis, which means that the take limits could be exceeded in the first half of a reporting year but the projects would not be required to halt the activities resulting in takings until the official report is submitted months later. This result is not consistent with the intent of the ESA or the standards established in the Services'

⁷³ See 16 U.S.C. § 1536(b)(4); H.R. Rep. 97-567, at 26-27 (1982) (emphasis added).

⁷⁴ 80 Fed. Reg. 26832, 26836 (citing 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(i)).

⁷⁵ *Miccosukee Tribe of Indians of Fla. v. United States*, 566 F.3d 1257, 1271-72 (11th Cir. 2009) (citing 50 C.F.R. § 402.14(i)(4)).

⁷⁶ *Endangered Species Consultation Handbook*, U.S. Fish & Wildlife Service and National Marine Fisheries Service at 4-54 (March 1998) (emphasis added).

⁷⁷ Edgemoor Table 33, page 190; NJWP Table 37, page 228.

handbook. Given that the proxy utilized already underestimates the total number of vessel strike mortalities, this approach is not only arbitrary and capricious, but directly threatens the continued existence of the Atlantic sturgeon.

Another inconsistency with the Consultation Handbook is the failure to include explicit research requirements. “Where practical, an attempt should be made to salvage specimens or habitat data from areas to be destroyed as a direct or indirect result of the action. For example, when the Services determine that research would be beneficial to the species (generally identified by a recovery plan or recovery outline), [] the terms and conditions could call for reasonable allowance to collect biological data on specimens [].”⁷⁸ “If dead specimens can be collected, valuable data may still be obtained, possibly providing research material in lieu of the need to collect additional specimens.”⁷⁹ The Atlantic sturgeon recovery outline repeatedly calls on the Services to “gather information through research and monitoring on current distribution and abundance; vessel strikes; effects of climate change; and bycatch.”⁸⁰

Despite this need for information and research, the only time “research” is used in the Terms and Conditions is when the Corps requests concurrence that a collected dead sturgeon should not count towards the incidental take but NMFS disagrees, or, where it cannot be determined whether the proposed activity caused the death.⁸¹ Rather than include research requirements in the mandatory Terms and Conditions, NMFS passes the buck by merely recommending that the Corps should support no less than five different research focuses in the non-binding Conservation Recommendations.⁸² The Services cannot have it both ways. They cannot state the dire need for additional information and research to aid in the recovery of the Atlantic and Shortnose Sturgeon in multiple official documents while also voluntarily abdicating their regulatory authority to obtain exactly that data. NMFS’s failure to meaningfully address data gaps necessary to make progress towards the sturgeons’ recovery is arbitrary, capricious, and contrary to law.

In absence of a valid incidental take statement or other exemption under the Act, any resulting take of sturgeon by the Corps is prohibited. Because the two biological opinions, including the respective incidental take statements, are arbitrary and capricious, the incidental take statements are also invalid and do not shield the action agency from violating section 9.⁸³

⁷⁸ *Endangered Species Consultation Handbook*, U.S. Fish & Wildlife Service and National Marine Fisheries Service at 4-55 (March 1998).

⁷⁹ *Id.*

⁸⁰ *Recovery Outline – Atlantic Sturgeon*, NOAA Fisheries at 7 (March 2018), available at [ats_recovery_outline.pdf \(noaa.gov\)](https://www.noaa.gov/sites/default/files/2018-03/ats_recovery_outline.pdf).

⁸¹ Wind Port BiOp at 232; Edgemoor BiOp at 194.

⁸² Wind Port BiOp at 236; Edgemoor BiOp at 197.

⁸³ *Oregon Natural Resources Council v. Allen*, 476 F.3d 1031 (9th Cir. 2007).

Failure to Ensure Against Jeopardy

Section 7(a)(2) of the Act requires Federal agencies to ensure that their activities are not likely to jeopardize the continued existence of any listed species. Regulations implementing this section of the Act defines “jeopardize the continued existence of” as: “to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.”⁸⁴

The compounding error of repeatedly using a recovery rate which severely underestimates the total vessel strike mortalities resulted in the Biological Opinions’ inadequate environmental baseline and inaccurate evaluation of the actions’ consequences, and renders the jeopardy analyses inaccurate, arbitrary, and capricious, in violation of ESA section 7(a)(2). Similarly, action agencies have an independent duty to ensure that their actions avoid jeopardy, so any reliance on these legally insufficient biological opinions by the Corps would also be arbitrary and capricious. Had NMFS utilized the best available scientific data, adequately considered the environmental baseline, accurately estimated the consequences of the actions on the Atlantic sturgeon, and provided the benefit of the doubt to the species in doing all of the above, it is possible that such analysis would result in a jeopardy determination for the Atlantic Sturgeon.

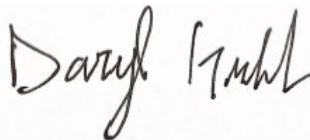
CONCLUSION

If the parties involved do not cure the violations of law described above immediately, upon the expiration of 60 days, the Delaware Riverkeeper and Delaware Riverkeeper Network intend to file suit against you pursuant to the citizen suit provision of the ESA, 16 U.S.C. § 1540(g). If you would like to discuss the significant violations described herein and seek a mutually acceptable solution to them, please contact the undersigned.

Sincerely,



Kacy C. Manahan
Senior Attorney
Delaware Riverkeeper Network
925 Canal Street, Suite 3701
Bristol, PA 19007
215-369-1188 x115
kacy@delawareriverkeeper.org



Daryl D. Grable
Staff Attorney
Delaware Riverkeeper Network
925 Canal Street, Suite 3701
Bristol, PA 19007
215-369-1188 x124
daryl@delawareriverkeeper.org

⁸⁴ 50 C.F.R. § 402.02.