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Via electronic submission to: <https://www.regulations.gov>

Mr. David Bernhart
Assistant Regional Administrator
National Marine Fisheries Service
Southeast Regional Office, Protected Resources Division
263 13th Avenue South
St. Petersburg, FL 33701

**Re: Proposed Designation of Critical Habitat for the Rice's Whale, 88 Fed. Reg. 47453
(July 24, 2023)**

Dear Mr. Bernhart:

Chevron U.S.A. Inc. ("Chevron") appreciates the opportunity to comment on the National Marine Fisheries Service ("NMFS" or "the Service") Federal Register Notice requesting feedback on the Designation of Critical Habitat for the Rice's Whale rulemaking ("Proposed Rule"). Chevron requests that these comments and any materials either accompanying or referenced in these comments be made part of the administrative record for this critical habitat designation rulemaking.

Chevron, and its affiliated companies, have been exploring and developing outer continental shelf ("OCS") leases from inception of the federal offshore leasing program under the Outer Continental Shelf Lands Act of 1953 ("OCSLA") and are committed to remaining active in the OCS well into the future. We hold interests in hundreds of leases in the Gulf of Mexico and have held interests in thousands of leases during the existence of the offshore leasing and development program established under OCSLA. Additionally, Chevron has a significant downstream presence in Gulf Coast states including refineries in Mississippi and Texas, as well as chemical plants in Louisiana and Texas, all of which rely on a large supply and trading business to facilitate movement of products and raw materials via marine transport in the Gulf of Mexico ("GOM or GOMx"). Chevron and its legacy companies share a long history of operating safely and in an environmentally responsible manner in and around the OCS. We believe our company's focus on developing and operating world-class projects in a prudent manner, coupled with the development of new offshore technologies, will allow us to effectively and efficiently continue to explore for and produce hydrocarbons needed for the U.S. economy today and in the future in a manner that continues to protect the Gulf of Mexico marine environment and the species that inhabit it.

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While we support protection of endangered species through the critical habitat designation provisions of the Endangered Species Act (“ESA”), the proposed critical habitat designation for the Rice’s whale does not meet the ESA’s substantive and procedural requirements. It is far too vague, does not hew to well-established ESA principles, and relies on assertions that are contrary to facts in the record before NMFS. In an apparent effort to justify a broad critical habitat designation, NMFS has devalued what is known about the Rice’s whale where it is consistently found (the DeSoto Canyon area) and overgeneralized about where it *might* be found elsewhere. The designation, as proposed, is unlikely to withstand legal challenge. The significant shortcomings and flaws with NMFS’s current proposal are discussed in detail below. For these reasons, **Chevron requests that NMFS reconsider and reissue a new proposal that complies with the law.**

In addition to the significant legal concerns with the proposed habitat designation, Chevron is also submitting feedback on the scientific basis of the proposed habitat designation, as well as comments regarding specific, probable benefits and impacts stemming from this designation. Each of these areas is discussed in more detail below. In addition to these comments, Chevron supports and has participated in the development of comments being submitted by the American Petroleum Institute (API), EnerGeo, et al. of which Chevron is a member, and, to the extent not inconsistent, incorporates them by reference herein.

1. The Proposed Designation Reflects Fundamental Misapplications of Law and Facts.

Chevron is concerned that the proposed designation falls short of the requirements of the Administrative Procedure Act (APA) and the ESA.¹ This section explains the fundamental legal flaws in the Proposed Rule, and the following sections discuss the errors in detail.

First, NMFS’s intermediate and ultimate conclusions in the proposed designation are arbitrary and capricious and in violation of the APA. The designation reflects insufficient support between the facts found and the choices made.² Throughout the proposed designation, NMFS draws conclusions that are either contrary to the facts in the record before the agency or not supported by those facts. Most notably, NMFS draws conclusions about occupancy in the Gulf of Mexico that are unsupported by the data cited in the Proposed Rule preamble and, in fact, contrary to NMFS’s findings regarding the species’ habitat requirements.

¹ 5 U.S.C. § 706 (a “reviewing court shall . . . set aside agency action, findings, and conclusions found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.”).

² *Motor Vehicle Mfrs. Ass’n v. State Farm*, 463 U.S. 29, 43 (1983) (“[T]he agency must examine the relevant data and articulate a satisfactory explanation for its action including a ‘rational connection between the facts found and the choice made.’”).

Second, when faced with uncertainty in the data, NMFS improperly gives the “benefit of the doubt” to the species rather than impartially evaluating the data. Multiple courts have cautioned the Services against applying the “benefit of the doubt” to the species when faced with uncertainty. The D.C. Circuit recently rebuked NMFS’s position on this issue, stating that its legal reasoning in support of the “benefit of the doubt” to the species “was not just wrong; it was egregiously wrong.”³ The D.C. Circuit evaluated whether NMFS, when preparing a Biological Opinion under Section 7, “must, or even may, when faced with uncertainty, give the ‘benefit of the doubt’ to an endangered species by relying upon worst-case scenarios or pessimistic assumptions.” The court held that “it may not.”⁴ As the court there stated, “It is not the province of a scientific consultant to pick whales over people. The Service must strive to resolve or characterize the uncertainty through accepted scientific techniques, not jump to a substantive presumption that distorts the analysis of effects and creates false positives.”⁵

This same reasoning applies to the designation of critical habitat under Section 4. Both the Ninth and Tenth Circuits have rejected overly broad critical habitat designations that relied on assumptions or speculation rather than firm evidence that the species used the habitat sufficiently to meet the legal standard of “occupation.”⁶ This improper thumb on the scales is found throughout the proposed designation as NMFS appears to be basing its decision on where the species *might be*⁷ and what its life history and habitat requirements *could be*,⁸ rather than basing its decision on the data in hand.

³ *Me. Lobstermen’s Ass’n v. NMFS*, 70 F.4th 582, 589 (D.C. Cir. 2023). See also *W. Watershed Project v. Ashe*, 948 F. Supp. 2d 1166, 1183 (D. Idaho 2013) (rejecting the “benefit of the doubt” principle in the Section 4 context); *Ctr. for Biological Diversity v. Lubchenco*, 758 F. Supp. 2d 945, 955 (N.D. Cal. 2010) (same); *Trout Unlimited v. Lohn*, 645 F. Supp. 2d 929, 947 (D. Or. 2007) (same).

⁴ *Me. Lobstermen’s Ass’n*, 70 F.4th at 586.

⁵ *Id.* at 600.

⁶ *Ctr. for Biological Diversity v. U.S. Fish & Wildlife Serv.*, 67 F.4th 1027, 1048 (9th Cir. 2023); *N.M. Farm & Livestock Bureau v. U.S. Dep’t of Interior*, 952 F.3d 1216, 1227 (10th Cir. 2020).

⁷ See *infra* Section 2(a).

⁸ See *infra* Section 2(b).

Third, NMFS does not use the best available scientific and commercial information in the proposed designation, as is required by the ESA.⁹ NMFS relies heavily on an unpublished report, Garrison et al. (2022),¹⁰ for the proposition that Rice’s whales use the 100-400m isobath throughout the northern Gulf of Mexico. Chevron and other members of the public have repeatedly requested the opportunity to review this critical information but have been denied and told that the report is “being revised.”¹¹ This report is clearly not the “best available science” because it is not available. Moreover, the Proposed Rule does not indicate any consideration of spatial and temporal information regarding presence of the three habitat “attributes” across the Gulf of Mexico and specifically within the 100-400 m isobaths. As discussed in Section 2.b, there is substantial scientific literature focused on the three attributes that shows the DeSoto Canyon area, where Rice’s whales are most likely to be found, is unlike the rest of the 100-400 m isobath in the northern Gulf of Mexico. NMFS completely failed to consider this evidence. Further, NMFS did not evaluate Rice’s whales’ likely presence in non-U.S. waters of the Gulf of Mexico.

It is difficult, if not impossible, for the public to determine what changes would result if NMFS reconsidered the proposed designation using the appropriate APA and ESA standards and published the “in review” draft study cited by the agency. Given the fundamental changes to the reasoning and explanation required to comply with the law, Chevron requests that NMFS reconsider and repropose a revised designation to comply with applicable law and provide the public an adequate opportunity to comment.

2. NMFS Erred at Each Step of the Critical Habitat Identification Process.

The ESA defines critical habitat as “(i) the specific areas within the geographical area occupied by the species, at the time it is listed . . . , on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed . . . , upon a determination by the Secretary that such areas are essential for the conservation of the species.”¹² The Services have further defined the term “physical or biological features essential to the conservation of the species” as “features that occur in specific areas and that are essential to support the life-history needs of the species.”¹³

⁹ 16 U.S.C. § 1533(b)(2); *see also Me. Lobstermen’s Ass’n*, 70 F.4th at 599 (the ESA “requires the Service to use the best available scientific data, not the most pessimistic”).

¹⁰ While the proposed critical habitat rule identifies this report as Garrison et al. (2022), implying it is published, the critical habitat report accompanying the Proposed Rule identifies the report as “Garrison, L. P., Martinez, A., Soldevilla, M. S., Ortega-Ortiz, J., and Mullin, K. D. The habitat of the critically endangered Rice’s whale, *Balaenoptera ricei*, in the Gulf of Mexico. Endangered Species Research, in review,” which acknowledges that it is not published. In response to a request from Chevron to review this report, NMFS asserted that data from the report are available, but did not provide the report itself or a date when it will be available to the public. As such, Chevron has not had an opportunity to review the report, including its analysis, conclusions, or any limitations that might be acknowledged in the report.

¹¹ To comply with its obligations under the APA, NMFS must make the report available for review and provide an opportunity for public comment *before* making a final decision on the proposed designation. *See Idaho Farm Bureau Fed’n v. Babbitt*, 58 F.3d 1392, 1403-04 (9th Cir. 1994) (holding that the Service must provide an opportunity for public comment on a “provisional draft” report that was “central” to the decision and reconsider the decision after public comment).

¹² 16 U.S.C. § 1532(5).

¹³ 50 C.F.R. § 424.02.

In practice, this means NMFS must follow specific, legally required steps to designate critical habitat. First, it must identify the area occupied by the species at the time of listing. Here, the listing occurred in 2019, and courts have generally allowed the Service to use observation data within a reasonable period of the listing date based upon the species' life expectancy.¹⁴ Second, it must identify the physical or biological features essential to the conservation of the species. Courts have explained that "for an area to be 'essential' for conservation of a species, it must be more than beneficial; rather, the agency must determine that the species cannot be brought 'to the point at which the measures provided pursuant to [the ESA] are no longer necessary' without the critical habitat designation."¹⁵ Third, NMFS must show that those features are present in the area it has claimed is occupied. Finally, it must show the feature may need special management considerations.

NMFS has not followed the statutory instruction that critical habitat must be "essential" for the conservation of the species. At each step of the required analysis, NMFS impermissibly used a broad brush, rather than critically evaluating the evidence to determine what is essential for the Rice's whale. This flawed reasoning compounds throughout the process, resulting in a proposed critical habitat area that has not been shown to be "essential" and has not even been shown to be occupied or habitable by the species. To develop a legally valid critical habitat designation, NMFS must start again, this time focusing on the statutory requirement to identify what is essential to the species.

a. NMFS Improperly Identified the Habitat Occupied At the Time of Listing.

The standard the Service must meet to designate an area as "occupied" at the time of listing is established by courts. For an area to qualify as "occupied," the species must "use[] it with sufficient regularity that it is likely to be present during any reasonable span of time."¹⁶ The evidence of occupancy must be at the time of listing, "not at the time of designation or some undefined period."¹⁷ And courts have recognized that evidence of occupancy must be "compelling" and "substantial," not merely based on speculation.¹⁸ NMFS's determination that the entire Gulf of Mexico was "occupied" by the Rice's whale at the time of listing falls well short of this standard.

- i. The record evidence demonstrates that the majority of the Gulf of Mexico is not suitable habitat, and there is no evidence that any areas outside of the 100–400m isobaths were occupied by the Rice's whale at the time of listing.**

¹⁴ *Ctr. for Biological Diversity*, 67 F.4th at 1039.

¹⁵ *Id.* at 1037.

¹⁶ *Id.* at 1039 (citing *Ariz. Cattle Growers' Ass'n*, 606 F.3d 1160, 1165 (9th Cir. 2009)).

¹⁷ *Id.* (quoting *Ctr. for Biological Diversity v. U.S. Fish & Wildlife Serv.* 441 F. Supp. 3d 843, 872 (D. Ariz. 2020)).

¹⁸ *Id.* (finding the critical habitat designation to be arbitrary and capricious because, "[w]hile jaguars are difficult to detect, without a Class I report or some other compelling evidence from the relevant period in the relevant place, much of the FWS's decision rests on speculation."); *N.M. Farm & Livestock Bureau*, 952 F.3d at 1227 ("[W]e conclude that any finding that jaguars occupied the Units at that time is speculative and not based on substantial evidence.").

As an initial matter, NMFS implies that the “areas” considered should be large-scale geographic features, such as oceans. Consistent with that, NMFS asserts that the two “areas” it considered are the Gulf of Mexico and the Atlantic Ocean.¹⁹ There is no indication in the proposed designation that NMFS considered whether a smaller area would better identify the species’ habitat, or indeed, whether any or all of the area proposed must be habitat at all. But NMFS itself has acknowledged that the phrase “geographical area occupied by the species” “is generally understood to refer to *habitat* occupied at the time of listing.”²⁰ Indeed, a court rejected a designation that included areas “where the species has never been found and could never physically exist.”²¹ The court then criticized the Service’s assertion that it could encompass non-habitat within a larger critical habitat designation:

The FWS’s reading also defies logic: under its interpretation of “occupied,” if two vernal pools containing Riverside fairy shrimp cysts were sighted *on either side of the Mojave desert*, the agency could deem all of the desert area between the two ponds as the “geographical area occupied by the species” even though the species has never been, and could never be, present in the desert. There is nothing about the ESA’s use of “occupied,” or the plain meaning of that term, or, quite frankly, common sense, that permits this result.²²

In a case just a few months ago, a court of appeals applied the same reasoning when it rejected reliance on observations in one mountain range as evidence of occupation in a different range.²³ The court concluded that such limited evidence “alone does not support a finding that [the species] used the challenged area ‘with sufficient regularity that it is likely to be present during any reasonable span of time.’”²⁴

NMFS’s use of the entire Gulf of Mexico as the “occupied area” applies this Mojave desert fallacy. The vast majority of the area NMFS asserts is “occupied” by the Rice’s whale is also, by NMFS’s own admission, *not* suitable habitat for the Rice’s whale because it is outside the 100-400m isobaths. In the proposed designation, NMFS states that the undisclosed Garrison et al. (2022) study “predicted additional suitable Rice’s whale habitat outside the core distribution area in the northeastern GOMx, generally throughout the GOMx *within 100 and 400 meters depth*.”²⁵ There is no indication that Rice’s whales ever use areas outside of the 100-400m isobaths, or that they even could.²⁶ Yet NMFS nonsensically asserts that the entire Gulf of Mexico is “occupied” by the Rice’s whale. This arbitrary conclusion violates the APA because it is contrary to evidence NMFS itself cites.

ii. NMFS has not demonstrated that the entire area within the 100 –400m isobaths was occupied at the time of listing.

Even restricting the analysis to the 100-400m isobaths, NMFS has not demonstrated that all of this area is “occupied.”

¹⁹ 88 Fed. Reg. 47453, 47460 (July 24, 2023).

²⁰ 81 Fed. Reg. 7414, 7415 (Feb. 11, 2016) (emphasis added).

²¹ *Otay Mesa Prop., L.P. v. U.S. DOI*, 344 F. Supp. 3d 355, 369-70 (D.D.C. 2018).

²² *Id.* at 370 (emphasis added).

²³ *Ctr. for Biological Diversity*, 67 F.4th at 1039.

²⁴ *Id.* (citing *Ariz. Cattle Growers’ Ass’n*, 606 F.3d at 1165).

²⁵ 88 Fed. Reg. at 47458 (emphasis added); *see also* 88 Fed. Reg. 916, 935 (Jan. 5, 2023) (recognizing that deep-water areas are considered unsuitable for Rice’s whales); *id.* at 937 (“Historical Rice’s whale habitat, which is also generally modeled as being suitable habitat (Roberts et al., 2016; Garrison et al. 2022), generally consists of the aforementioned strip of continental shelf waters within the 100–400 m isobaths.”).

²⁶ Indeed, because NMFS has provided scant evidence that the species occurs anywhere outside the 100-400m isobaths, NMFS has run afoul of the statutory presumption that the entire area that the species can occupy will not be designated. 16 U.S.C. § 1532(5)(C) (“Except in those circumstances determined by the Secretary, critical habitat shall not include the entire geographical area which can be occupied by the threatened or endangered species.”).

The claimed evidence of occupation cited in the proposed designation is decidedly uneven (and for large portions, completely lacking) across the western, central, and eastern areas of the northern Gulf of Mexico. NMFS cannot use evidence of occupation in one area to claim occupation in areas hundreds of miles away. As discussed below, outside the Biologically Important Area in the northeastern Gulf of Mexico, data are limited to extremely rare visual observations in discrete locations, unverified acoustic data from discrete locations, and predictive modeling. In short, NMFS lacks *any* physical observation data and is relying solely on predictive modeling to support the proposed designation across the vast majority of the proposed critical habitat. NMFS's reliance on predictive modeling does not satisfy applicable legal standards. Nor does the claimed evidence, even for discrete locations, meet the required showing that the species "uses it with sufficient regularity that it is *likely* to be present during any reasonable span of time"²⁷ outside of the Biologically Important Area.

There is a sustained record of visual and acoustic observations of Rice's whale in the DeSoto Canyon area, where the Biologically Important Area for the species was designated. There, the acoustic observations have been matched to visual sightings of Rice's whales. This is the kind of evidence that would likely meet the "compelling" and "substantial" evidence standards applied by the recent decisions from courts of appeals on a critical habitat designation for the jaguar as the required threshold to demonstrate occupation. As explained there, even when protected species are "difficult to detect," "without a Class I report or other compelling evidence from the relevant period in the relevant place, much of [the Service's] decision rests on speculation."²⁸ In that case, the Service had defined a "Class I" report as "substantiated by physical evidence (e.g., a skin, skull, or photograph)"²⁹ It follows that "other compelling evidence" must be at least as convincing as a physical or visual observation. The court further explained that the need for "compelling evidence" of occupation "is particularly true where the record otherwise establishes only minimal presence" of the species in the area.³⁰

The evidence of Rice's whale presence in the Biologically Important Area, however, is not evidence of the whales' occupation *outside* that area.³¹ To demonstrate occupation of other areas, NMFS must provide compelling and substantial evidence of Rice's whale in those other areas. But the evidence provided in the proposed designation is instead "thin."³² In particular, NMFS relies primarily on the July 2022 Soldevilla study ("Soldevilla 2022(b)").³³ This study, however, was focused on call type—it was not a study of the distribution and abundance of Rice's whale. Indeed, the authors acknowledge the limitations of this study, stating: "An important question is how many whales are found in the western GOM, but this is a difficult question to answer from the sparse single-sensor autonomous moored passive acoustic units."³⁴

Soldevilla 2022(b) used passive acoustic monitoring at just four sites outside of what the study refers to as the "[k]nown Rice's whale core habitat" over the course of one year—from June 2016 to August 2017—to evaluate potential seasonal movements of Rice's whales. The figure below, from Soldevilla 2022(b), shows the sites that were assessed for Rice's whale calls.³⁵

²⁷ *Ctr. for Biological Diversity*, 67 F.4th at 1039 (citing *Ariz. Cattle Growers' Ass'n*, 606 F.3d at 1165) (emphasis added).

²⁸ *Ctr. for Biological Diversity*, 67 F.4th at 1039.

²⁹ *Id.* at 1031 n.2.

³⁰ *Id.* at 1039-40.

³¹ *Otay Mesa Prop., L.P. v. U.S. DOI*, 646 F.3d. 914, 918 (D.C. Cir. 2011) ("But the potential existence of San Diego fairy shrimp outside plaintiffs' property does not itself show that San Diego fairy shrimp occupy plaintiffs' property, and occupation of plaintiffs' property was the rationale supplied by the agency's final rule.").

³² *Ctr. for Biological Diversity*, 67 F.4th at 1044.

³³ Soldevilla MS, et al., July 28, 2022. "Rice's whales in the northwestern Gulf of Mexico: call variation and occurrence beyond the known core habitat." *Endangered Species Research* 48: 155-174 ("Soldevilla 2022(b)").

³⁴ Soldevilla 2022(b) at 170.

³⁵ Soldevilla 2022(b) at 170.

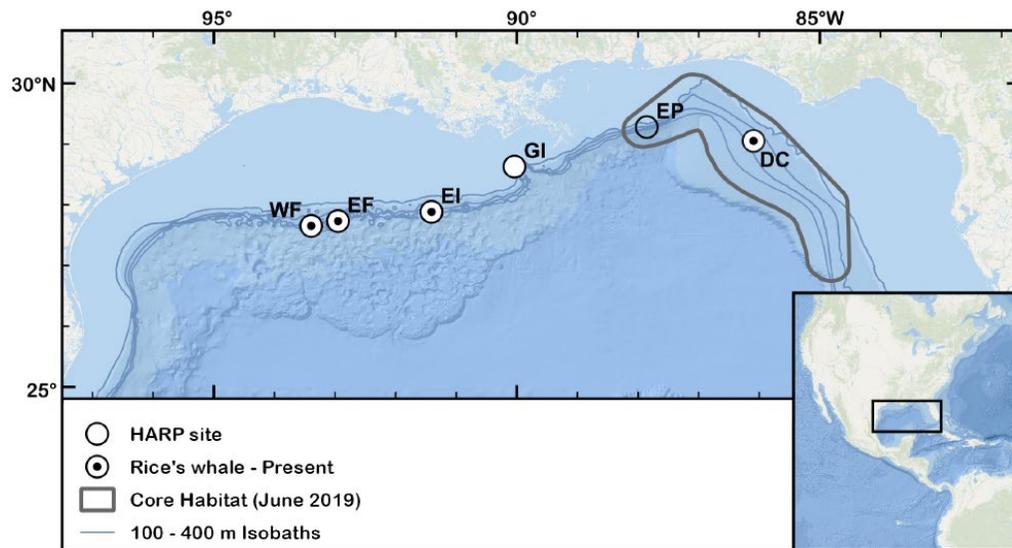


Fig. 1. Locations of 5 high-frequency acoustic recording packages (HARPs) deployed along the northern Gulf of Mexico (GOM) shelf break in areas of potential Rice's whale habitat from July 2016 to August 2017 and a long-term HARP (De Soto Canyon, DC) deployed in the Rice's whale core habitat in the northeastern GOM since 2010. White-filled circles indicate successful data collection; black dots indicate Rice's whale call presence. Known Rice's whale core habitat (gray outline, as of June 2019) and 100 m isobath contours from 100 to 400 m are also shown. WF: Flower Garden West; EF: Flower Garden East; EI: Eugene Isle South; GI: Grand Isle South; EP: East Main Pass

Soldevilla 2022(b) identified a novel call that the authors attribute to Rice's whale in very limited numbers at three of the four sites outside the northeastern Gulf of Mexico. The acoustic data from Soldevilla 2022(b), however, have never been visually matched to any Rice's whale. In other words, there is no verification that the novel calls detected in Soldevilla 2022(b) were in fact made by a Rice's whale. What's more, the data cited in that study are very limited and cannot support a determination that either the central or northwestern areas are "occupied" by the Rice's whale.

In the central Gulf of Mexico, NMFS obtained only limited acoustic data,³⁶ which do not support a determination that this area is occupied. At one acoustic monitoring station in the central area off the coast of Louisiana, the "GI" site, *no* calls were observed. Moreover, stock assessments have identified no visual observations in the central area.³⁷ The infrequent and unverified acoustic records of the Soldevilla 2022(b) study do not provide conclusive evidence that Rice's whales are present in central Gulf of Mexico at all, much less the requisite "compelling" or "substantial" evidence to show occupation of the central area.

³⁶ 88 Fed. Reg. at 47457.

³⁷ Hayes, Sean, et al., June 2023. "U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments 2022." NOAA Technical Memorandum NMFS-NE-304 at pg. 114, Fig. 1. See also id. at pg. 114 ("All verified Rice's whale sightings, with one exception [in the western GOMx], have occurred in a very restricted area of the northeastern Gulf during surveys that uniformly sampled the entire oceanic northern Gulf."). The 2022 Stock Assessment further notes that "[i]t is not possible to extrapolate estimated density beyond the core area since little is known about habitat use and distribution outside of this area."

In the northwestern area, the evidence is likewise insufficient to support a determination that the area is occupied, *i.e.*, that it is used “with sufficient regularity” that the Rice’s whale “is likely to be present during any reasonable span of time.”³⁸ Soldevilla 2022(b) detected the novel calls attributed to the Rice’s whale at the westernmost site—“WF”—on just 16% of the days with recording effort at that site; followed by detections at “EF” on just 6% of the days with effort, and at “EI” on just 1% of the days with effort.³⁹ And although more frequent than what Soldevilla 2022(b) identified in the central area, this does not rise to the “substantial and compelling” evidence required to show occupation. Indeed, the authors of Soldevilla 2022(b) acknowledge the limited nature of the calls identified in the northwestern Gulf of Mexico, as compared to the DeSoto Canyon area in the northeastern Gulf of Mexico: “Rice’s whale long-moan variant calls were present on a maximum of 16% of days at western GOM sites compared to 90-100% of days present per month typical at eastern GOM sites.”⁴⁰

Outside of acoustic data, NMFS points to a single confirmed sighting of a Rice’s whale in the western Gulf of Mexico off the central Texas coast in 2017 and historic unconfirmed sightings and whaling records. These visual observations are so infrequent as to provide no evidence of how Rice’s whales are using the area let alone to justify designating this area as critical habitat.⁴¹ Even Soldevilla 2022(b) acknowledges the limited nature of sightings in the northwestern Gulf of Mexico, noting that “sightings in the northwestern GOM are now rare, despite substantial survey effort.”⁴² Soldevilla 2022(b) goes on to say: “It remains unknown” whether the confirmed and unconfirmed sightings in the western GOM indicate “extralimital movements,” “range contraction,” or “if Rice’s whales still occupy this northwestern region in low densities.”⁴³ To designate the area as occupied critical habitat, NMFS must show it was occupied at the time of listing and contains features “essential” for the Rice’s whale, but NMFS does not even know if or how the species uses the area. Designating critical habitat on such limited evidence can only be justified based on speculation or if the benefit of the doubt is given to the species, in direct violation of the ESA.

Put simply, NMFS’s key evidence demonstrates only that whales making calls similar to Rice’s whale calls are occasionally present at some locations outside the Biologically Important Area. This is well short of the standard required to demonstrate that Rice’s whales “use” those areas—much less all of the areas in between—with “sufficient regularity that [they] are likely to be present during any reasonable span of time.” Indeed, early this year, NMFS itself explained that after review of newly available data, including the Soldevilla 2022(b) acoustic data, “overall Rice’s whale observations remain consistently located within the eastern GOM core habitat area, with few whales sighted elsewhere despite a large amount of dedicated cetacean survey effort that covered both continental shelf and oceanic waters.”⁴⁴

³⁸ *Ctr. for Biological Diversity*, 67 F.4th at 1039 (citing *Ariz. Cattle Growers’ Ass’n*, 606 F.3d 1160, 1165 (9th Cir. 2009)).

³⁹ Soldevilla 2022(b) at 165.

⁴⁰ Soldevilla 2022(b) at 170 (citing Rice et al., (2014), *Passive acoustic monitoring of marine mammals in the northern Gulf of Mexico: June 2010 – March 2012*. BRP Tech Rep 14-07, submitted to BP Production and Exploration, Inc. and the National Oceanic and Atmospheric Administration. Cornell Lab of Ornithology, Cornell University, Ithaca, NY).

⁴¹ As NMFS recognized earlier this year in the proposed Incidental Take Regulation for Taking Marine Mammals Incidental to Geophysical Surveys in the Gulf of Mexico, “intensive survey effort in the region has not resulted in any confirmed Rice’s whale sightings outside the core habitat area (aside from a single anomalous sighting in the western GOM).” 88 Fed. Reg. at 944.

⁴² Soldevilla 2022(b) at 156.

⁴³ Soldevilla 2022(b) at 156.

⁴⁴ 88 Fed. Reg. at 936-37.

In the proposed designation issued six months later, NMFS does not acknowledge, let alone explain, its new position that the evidence supports a conclusion that Rice's whales "use[]" areas outside the Biologically Important Area "with sufficient regularity that [they are] likely to be present during any reasonable span of time." To comply with the APA, NMFS must explain why, with no apparent new evidence, it has changed its position from the evidenced-based conclusion that Rice's whales are "consistently located" only in the Biologically Important Area to the unsupported assertions that Rice's whales "occupy" the entire Gulf of Mexico, and all of the waters between the 100-400m isobaths.⁴⁵ Moving forward without such an explanation would violate the APA in addition to the ESA defects.

Moreover, NMFS cannot rely on unpublished predictive modeling to shore up the insubstantial observation evidence. NMFS's use of that approach here violates both the ESA and APA. *First*, the 2016 amendments to the critical habitat regulations define "geographical area occupied by the species" as "an area that may generally be delineated around species' occurrences, as determined by the Secretary (*i.e.*, range). Such areas may include those areas used throughout all or part of the species' life cycle, even if not used on a regular basis (e.g., migratory corridors, seasonal habitats, and habitats used periodically, but not solely by vagrant individuals)."⁴⁶ The reference to "occurrences" indicates that there needs to be *some* actual, real-world evidence of species occurrence, not just model predictions speculating that it may be there. Likewise, the 2016 preamble explains: "Occupancy by the listed species must be based on evidence of regular period use by the listed species during some portion of the listed species' life history."⁴⁷ While the Services also assert in that preamble that the best available scientific data in some cases may only be indirect or circumstantial evidence, they do not assert that predictive modeling can be used to claim occupancy in the absence of actual, real-world evidence of species occupation.

Second, under the APA and ESA, NMFS may not rely on a model, as it has done here, without explaining its methodology and demonstrating a rational connection between the model projections and actual real-world conditions and species presence or occupancy.⁴⁸ The D.C. Circuit has warned that computer "models, despite their complex design and aura of scientific validity, are at best imperfect and subject to manipulation."⁴⁹ The accuracy of any model's prediction "hinges on whether the underlying assumptions reflect reality" and, thus, model results "can change drastically for a given range of input data if key assumptions are adjusted even slightly."⁵⁰ Accordingly, the D.C. Circuit has held that "[a]n agency's use of a model is arbitrary if that model 'bears no rational relationship to the reality it purports to represent."⁵¹ Furthermore, if a party challenges the model, "the agency must provide a full analytical defense," and "retains a duty to examine key assumptions as part of its affirmative burden of promulgating and explaining a non-arbitrary, non-capricious rule."⁵²

⁴⁵ *Encino Motorcars L.L.C. v. Navarro*, 579 U.S. 211, 221 (2016) ("[T]he agency must at least 'display awareness that it is changing position' and 'show that there are good reasons for the new policy'" (citing *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009))).

⁴⁶ 50 C.F.R. § 424.02.

⁴⁷ 81 Fed. Reg. at 7430.

⁴⁸ See *Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 43; *Columbia Falls Aluminum Co. v. EPA*, 139 F.3d 914, 923 (D.C. Cir. 1998); see also *Oceana, Inc. v. Evans*, 384 F. Supp. 2d 203, 220 (D.D.C. 2005) ("[T]he 'best available science' does not always pass muster under a rationality test . . .") (citation omitted).

⁴⁹ *Gas Appliance Mfrs. Ass'n v. Dep't of Energy*, 998 F.2d 1041, 1045 (D.C. Cir. 1993) (citation omitted).

⁵⁰ *Sierra Club v. Costle*, 657 F.2d 298, 332 (D.C. Cir. 1981).

⁵¹ *Columbia Falls*, 139 F.3d at 923 (citation omitted).

⁵² *Id.* (citations omitted) (reliance on model was arbitrary and capricious where its underlying assumptions were wrong); accord *Appalachian Power Co. v. EPA*, 249 F.3d 1032, 1053-55 (D.C. Cir. 2001) (agency failed to justify the methodology and assumptions of its chosen model); *Gas Appliance*, 998 F.2d at 1045-47 (same).

Here, NMFS fails to provide the required “full analytical defense” of its reliance on its referenced modeling to show widespread habitat occupancy across the Gulf of Mexico. NMFS has not even made the model available for public review, much less made the required showing that the model is analytically sound. For example, NMFS fails to (1) show that the model it relied on bears a rational relationship to the reality the model purports to represent, (2) justify the model assumptions or ensure that they were properly verified, or (3) establish the requisite rational relationship between the model’s projections and the agency’s occupancy determination. The model may suffer from other defects, but Chevron is unable to comment on those because NMFS refused to provide the study containing the model despite Chevron’s and others’ requests. Thus, it was arbitrary and capricious for the Service to rely to any extent on the referenced, unpublished model to support its conclusion of widespread occupancy by Rice’s whale throughout the Gulf of Mexico.⁵³

iii. NMFS’s failure to properly support its designation of the area occupied at the time of listing is a fundamental flaw requiring reconsideration and a new proposed designation.

The identification of the area occupied at the time of listing is the foundation of a critical habitat designation. No critical habitat can be designated without first making this showing or completing the separate analysis required for unoccupied habitat.⁵⁴ NMFS has not shown that the entire area it proposes to designate as critical habitat (everything within the 100-400m isobaths of the Gulf of Mexico in U.S. territory)⁵⁵ was in fact occupied at the time of listing. If NMFS has evidence of such occupation, it must be provided to the public for review and comment.⁵⁶ If it does not, NMFS must determine whether it will comply with the ESA by (1) reducing the area it proposes to designate such that it designates only areas that were occupied at the time of listing or (2) conducting the unoccupied area analysis that was not included in the proposed designation.⁵⁷ In either case, the proposed designation does not provide the public sufficient information about the approach NMFS will take to propose a legally valid critical habitat designation, so the only viable course is for the agency to reconsider and repropose a lawful designation.

b. NMFS Has Not Properly Identified the Physical or Biological Features Essential to the Rice’s Whale.

⁵³ See, e.g., *Am. Mar. Ass’n v. United States*, 766 F.2d 545, 566 n.30, 567-68 (D.C. Cir. 1985) (“[A]n agency must justify the assumptions essential to its actions . . . as part of its affirmative duty to engage in rational decision making”); *Trout Unlimited v. Lohn*, 645 F. Supp. 2d at 952-54 (assumption underlying agency ESA decision was not supported by the cited models).

⁵⁴ *Otay Mesa Prop., L.P.*, 646 F.3d at 918 (recognizing that the ESA allows designation of critical habitat for both occupied and unoccupied areas, but if the Service believes an area “is critical habitat not because it is occupied, but rather because it is ‘essential to the conservation of the species,’ then it must say so in its agency decision and justify that determination.”).

⁵⁵ 88 Fed Reg. at 47471.

⁵⁶ *Idaho Farm Bureau Fed’n v. Babbitt*, 58 F.3d 1392, 1403-04 (9th Cir. 1994).

⁵⁷ 88 Fed. Reg. at 47463 (“Based on our current understanding of the species’ life history, status, and conservation needs, we are not able to identify any specific areas outside the geographical area occupied by the species that are essential for its conservation”). NMFS does not propose to designate any unoccupied habitat and would be required to issue a new proposal with the appropriate analysis for unoccupied habitat if it did so. On the record presented here, it appears that, at a minimum, the central area would not qualify as unoccupied critical habitat because NMFS has not shown how that area is essential to the conservation of the species. *Cape Hatteras Access Pres. All. v. U.S. DOI*, 344 F. Supp. 2d 108, 125 (D.D.C. 2004) (“Designation of unoccupied land is a more extraordinary event than designation of occupied lands. The Service regulation prohibits designation of unoccupied lands unless designation of occupied lands is insufficient. This finding and reasoning to back it up is made nowhere in the record. The Service cannot attempt to designate as unoccupied those lands it considers occupied and for which it has failed to make the proper showings required by statute.”).

Purporting to meet the statutory requirement to identify the physical and biological features of habitat “essential” to the species, NMFS has identified a solitary feature – waters with a depth between 100 and 400 meters that support individual growth, reproduction, and development, social behavior, and overall population growth.⁵⁸ It is unclear in the proposed designation how NMFS determined that water of this depth is “essential” to the species or even how the Service is defining the feature. These are fundamental flaws in the proposed designation that preclude effective public comment. To assist NMFS in identifying physical or biological features essential to the Rice’s whale in a future proposal, Chevron provides the following comments on the requirement and how the current proposal misses the mark.

NMFS’s identification of the single physical or biological feature essential to the Rice’s whale is far too vague. Courts have routinely vacated critical habitat designations where the identification of physical or biological features was too vague. A court vacated a critical habitat designation, for example, where the agency “merely describe[d] the primary constituent elements as essential for five primary biological needs” and the designation failed to “tell the reader what the primary constituent elements actually are.”⁵⁹ In that case, although the final rule stated that “adequate insect populations are necessary to sustain prey populations,” it did not define either “adequate” or “prey populations.”⁶⁰

Another court invalidated a critical habitat designation of the entire Rio Grande that “state[d] only an obvious need for ‘sufficient flowing water,’ ‘water of sufficient quality’ and ‘water of sufficient quantity.’”⁶¹ The court explained that such “findings provide vague generalities that state little more than what is required for any fish species and are insufficient to clarify those constituent elements considered ‘primary’ or most necessary to the” species in question. It emphasized that such vague terms “give little indication what” the Service “considers absolutely essential” to the species’ survival, “how much water might be regarded as ‘sufficient,’ where or when ‘sufficient’ water is most critical or what touchstones [the Service] used in determining that all of the Rio Grande warrants a designation of ‘critical’ habitat.”⁶²

The Rice’s whale critical habitat proposal suffers from similar errors. NMFS has identified a single feature as being essential to the conservation of the Rice’s whale: “GOMx continental shelf and slope associated waters between the 100 and 400 m isobaths that support individual growth, reproduction, and development, social behavior, and overall population growth.”⁶³ It further identifies three “attributes” of the “feature” that “support Rice’s whales’ ability to forage, develop, communicate, reproduce, rear calves, and migrate throughout the Gulf of Mexico continental shelf and slope waters and influence the value of the feature to the conservation of the species:

1. *Sufficient density, quality, abundance, and accessibility of small demersal and vertically migrating prey species, including scombriformes, stomiiformes, myctophiformes, and myopsida;*
2. *Marine water with (i) elevated productivity, (ii) bottom temperatures of 10–19 degrees Celsius, and (iii) levels of pollutants that do not preclude or inhibit any demographic function; and*

⁵⁸ 88 Fed. Reg. at 47471.

⁵⁹ *Home Builders Ass’n of N. Cal. v. U.S. Fish & Wildlife Serv.*, 268 F. Supp. 2d 1197, 1211 (E.D. Cal. 2003).

⁶⁰ *Id.* at 1213. See also *Ctr. for Biological Diversity v. U.S. Fish & Wildlife Serv.*, 2011 U.S. Dist. LEXIS 2349, *8 (C.D. Cal. 2011) (Service did not satisfy Section 4 obligations when it determined that areas that qualified as critical habitat were those that contained specified features “laid out in the appropriate quantity and spatial arrangement” but did not identify the “appropriate quantity” or “spatial arrangement”).

⁶¹ *Middle Rio Grande Conservancy Dist. v. Babbitt*, 206 F. Supp. 2d. 1156, 1184-85 (D.N.M. 2000).

⁶² *Id.* at 1185.

⁶³ 88 Fed. Reg. at 47461.

3. *Sufficiently quiet conditions for normal use and occupancy, including intraspecific communication, navigation, and detection of prey, predators, and other threats.*⁶⁴

These three “attributes” suffer from legal and scientific flaws. Legally, it is unclear how NMFS is using this new term, which does not appear in applicable regulations and is otherwise undefined. Several years ago, the Services jointly retired the term “primary constituent elements,” which had previously been used as a modifier or proxy for “physical or biological features essential to the species.”⁶⁵ However, now it appears that NMFS may be introducing “attributes” as a new concept with a similar function.⁶⁶ To do so, NMFS must undertake notice-and-comment rulemaking to inform the public about how this new regulatory concept will be applied in the Service’s designation of critical habitat areas.⁶⁷

The proposed designation cannot fulfill the notice-and-comment requirement for the new “attribute” term because it provides no explanation about how NMFS intends to use the attributes. For example, it is unclear if NMFS intends to use the “attributes” to define the “feature” such that only waters of the required depth *that also* include the three attributes are eligible to be considered the “feature.” If so, the proposed designation includes no discussion or evidence that all of the waters of the requisite depth have the identified attributes. As discussed below, there is substantial scientific literature analyzing these attributes in the Gulf of Mexico, but the proposed designation violates the ESA by failing to consider that scientific and commercial information with direct bearing on the “feature” NMFS has identified as essential to the Rice’s whale.

Additionally, the “attributes” are flawed because they lack the necessary precision or specificity. As with the cases noted above, the descriptions are far too vague. For example, attribute definitions use terms like “*sufficient*” density, quality, abundance, and accessibility of prey species, “*elevated*” productivity, and “*sufficiently*” quiet conditions.⁶⁸ This level of generality makes these attributes applicable to broad regions of the Gulf of Mexico. Given the extensive areas of the Gulf of Mexico that feature these overbroad attributes, data should show a broader and more equal distribution of Rice’s whales across the Gulf of Mexico. But tellingly, the data do not show a distribution of Rice’s whales that match the attributes, and indeed, data showing presence in the western and central areas are rare. This indicates that NMFS has overgeneralized in its identification of the essential feature (and its attendant attributes) and has not successfully identified the physical or biological features that are essential for the Rice’s whale.

Moreover, the available scientific literature on the three “attributes”—that NMFS did not analyze in the proposed designation—reveals fine-scale distinctions of the northeastern Gulf of Mexico, where the Biologically Important Area is found. These distinctions demonstrate that the features of the Biologically Important Area, where the Rice’s whale is most likely to be found, are neither consistent nor equivalent across the area proposed by NMFS as critical habitat.

⁶⁴ *Id.*

⁶⁵ 81 Fed. Reg. at 7426.

⁶⁶ Compounding the confusion, the Services toyed with using “attributes” in the definition of “habitat” just three years ago (85 Fed. Reg. 47333, 47334 (Aug. 5, 2020)), but rejected it due to comments that the term was vague, poorly defined, or confusing. 85 Fed. Reg. 81411, 81412 (Dec. 16, 2020).

⁶⁷ See *Kisor v. Wilkie*, 139 S. Ct 2400, 2420 (2019) (legislative rules with the power to bind private parties may not be issued without notice-and-comment); *Motor Vehicle Mfrs. Ass’n*, 463 U.S. at 42 (agency cannot change position without explanation).

⁶⁸ This level of generality is a striking contrast to the specificity NMFS used to describe the features it determined to be essential to the right whale when designating critical habitat for that species. See 80 Fed. Reg. 9313, 9315-9323 (Feb. 20, 2015) (describing the physical and biological features essential for foraging, calving, migrating, and breeding habitat in extensive detail).

Prey. The first attribute identifies “[s]ufficient density, quality, abundance, and accessibility of small demersal and vertically migrating prey species, including scombriformes, stomiiformes, myctophiformes, and myopsida.” As an initial matter, this does not define how much “density, quality, abundance, and accessibility” is “sufficient.” Moreover, the kind of fish identified here as necessary are small, schooling fishes that are widely represented throughout the Gulf of Mexico. For example, the “stomiiformes” (dragonfish) and “myctophiformes (lanternfish) are some of the most abundant fishes on earth, and likewise within the Gulf of Mexico.⁶⁹ Despite naming these widely distributed fish as critical to Rice’s whale, NMFS later identifies “*Ariomma bondi*”—another kind of small, schooling fish—as the primary prey species for the Rice’s whale.⁷⁰ Importantly, this particular schooling fish occurs in higher concentrations within the DeSoto Canyon, in which the Biologically Important Area is found.⁷¹ Thus, there are regional differences in the abundance and potentially in the concentrations of the Rice’s whale’s primary prey species that NMFS seemingly ignores. And because the primary prey species is in abundance and in higher concentrations in the DeSoto Canyon area, as compared to elsewhere in the Gulf of Mexico, there is reason to believe the Rice’s whale would prioritize that area. By casting a wide net for the generalized prey species, including fish that are found throughout the Gulf of Mexico, rather than considering the concentration parameters for the stated primary prey species, NMFS has failed to use the best available scientific and commercial information to reach its proposed critical habitat designation, in violation of the ESA.

Oceanographic conditions. The second attribute requires marine water with “elevated productivity” and “levels of pollutants that do not preclude or inhibit any demographic function,” but it does not identify what level of productivity would be considered “elevated” or what levels of pollutants (or which pollutants) that would “inhibit any demographic function.” As to productivity, NMFS notes that the undisclosed Garrison et al. (2022) model “identified water depth, surface chlorophyll-a concentration, bottom temperature, and bottom salinity as the key parameters that characterize a Rice’s whale habitat.”⁷² But the evaluation of chlorophyll-a will not provide the fine-scale information about what is driving productivity in the Gulf of Mexico due to the intricate loop and bottom currents that create different trophic and primary productivity patterns. Jochens and DiMarco (2008) noted that surface loop currents may drive near-bottom speeds throughout the Gulf of Mexico, with more intensity along sloping bathymetry, and thus provide transport of large amounts of organic material.⁷³ The same study also noted that the region near DeSoto Canyon had persistent cyclones or anticyclones near the shelf edge.⁷⁴ This persistence can influence the productivity of deepwater communities, and these kinds of loop currents and deep current influences seen in DeSoto Canyon are not likely present in other areas across the Gulf of Mexico. NMFS apparently failed to consider differences in circulation-driving productivity and nutrient transport when proposing the critical habitat designation.

⁶⁹ Marks, A.D., Kerstetter, D.W., Wyanski, D.M. and Sutton, T.T., 2020. Reproductive ecology of dragonfishes (Stomiiformes: Stomiidae) in the Gulf of Mexico. *Frontiers in Marine Science*, 7, p.101; Daudén-Bengoa, G., Jiménez-Rosenberg, S.P.A., Compaire, J.C., del Pilar Echeverri-García, L., Pérez-Brunius, P. and Herzka, S.Z., 2020. Larval fish assemblages of myctophids in the deep-water region of the southern Gulf of Mexico linked to oceanographic conditions. *Deep Sea Research Part I: Oceanographic Research Papers*, 155, p.103181.

⁷⁰ 88 Fed. Reg. at 47459.

⁷¹ Lamkin, J., 1997. Description of the larval stages of the stromateoid fish *Ariomma melanum*, and its abundance and distribution in the Gulf of Mexico. *Bulletin of marine science*, 60(3), pp.950-959.

⁷² 88 Fed. Reg. at 47458. Yet again, because NMFS bases its identification of the productivity “attribute” on the undisclosed Garrison et al. (2022) model and report, the public is unable to fairly evaluate and comment on this purported attribute.

⁷³ Jochens, A.E. and DiMarco, S.F. 2008. Physical oceanographic conditions in the deepwater Gulf of Mexico in summer 2000–2002. *Deep Sea Research Part II: Topical Studies in Oceanography*, 55(24-26), pp.2541-2554.

⁷⁴ *Id.*

Further, NMFS also apparently did not consider the unique bottom features for areas where data on the presence of Rice's whales are more available. For example, NMFS did not evaluate the bottom features within the Pinnacles Trend—an area with unique features within the northeastern Gulf of Mexico. In short, NMFS did not assess the complexities related to productivity that are unique to the northeastern Gulf of Mexico, which has the most available data and the highest abundance of Rice's whales.

Sound. The third attribute requires “[s]ufficiently quiet conditions for normal use and occupancy” without identifying what levels of sound meet this standard. What’s more, soundscape data across the Gulf of Mexico are extensive and demonstrate the clear and very relevant differences in soundscapes between the different areas of the Gulf.⁷⁵ One key difference is the relative quiet of the Biologically Important Area as compared to the other areas in the proposed critical habitat designation. Rafter et al. (2022) found, for example, that the DeSoto Canyon had substantially lower noise levels than other areas surveyed.⁷⁶ In addition, another study—HDR (2022)—showed that sound propagates differently in DeSoto Canyon than other areas in the Gulf of Mexico.⁷⁷ These studies demonstrate clear, measurable differences in soundscapes between different areas of the Gulf of Mexico. Despite those differences, the proposed critical habitat designation only provides the vague description above. There is insufficient evidence that the entire stretch of the Gulf of Mexico along the 100 –400m isobath can be characterized as “sufficiently quiet.”

Overall, the “attributes” seem to identify generically what a baleen whale might need but fall well short of identifying unique physical and biological features of habitat that are “essential” to the Rice's whale and thus should be considered critical habitat. By failing to consider the best available scientific and commercial evidence about the three proposed attributes, NMFS has missed information that strongly indicates that the Biologically Important Area, the only area where Rice's whales are likely to be found during any reasonable span of time, is qualitatively different than other areas of the proposed critical habitat. Analysis of these data may lead to identification of physical or biological features that actually are essential to this species, not just any species of baleen whale.

Because it is unclear whether the attributes are part of the essential feature, evaluation of the essential feature alone, without reference to the attributes, is appropriate. As discussed above in more detail, the single essential feature is lacking in specificity such that it cannot be determined whether the essential feature is “found” in the areas designated as critical habitat. While the areas between the 100 and 400m isobaths can be identified, there is no way of knowing which areas at that depth “support individual growth, reproduction, and development, social behavior, and overall population growth.” Similar to the critical habitat designations described above that were rejected by courts, the language of the proposed designation does not indicate what is needed to support these life-history requirements.

⁷⁵ Rafter, M.R., Frasier K.E., Soldevilla, M.S., Hodge, L., Frouin-Mouy H., Pérez Carballo, I. 2022. LISTEN GoMex: 2010-2021 - Long-term Investigations into Soundscapes, Trends, Ecosystems, and Noise in the Gulf of Mexico. Marine Physical Laboratory, Scripps Institution of Oceanography, University of California San Diego, La Jolla, CA. MPL Technical Memorandum #662.

⁷⁶ Rafter, M.R., Frasier K.E., Soldevilla, M.S., Hodge, L., Frouin-Mouy H., Pérez Carballo, I. 2022. LISTEN GoMex: 2010-2021 - Long-term Investigations into Soundscapes, Trends, Ecosystems, and Noise in the Gulf of Mexico. Marine Physical Laboratory, Scripps Institution of Oceanography, University of California San Diego, La Jolla, CA. MPL Technical Memorandum #662. The following studies found similar results: Estabrook, B.J., Ponirakis, D.W., Clark, C.W. and Rice, A.N., 2016. Widespread spatial and temporal extent of anthropogenic noise across the northeastern Gulf of Mexico shelf ecosystem. *Endangered Species Research*, 30, pp.267-282; ^[1] HDR (Athens AL). 2022. Passive acoustic monitoring program for the Northern Gulf of Mexico: project report. U.S. Department of the Interior, Bureau of Ocean Energy Management, New Orleans, LA. Contract No: M17PC00001. Report No: OCS Study BOEM 2022-074.

⁷⁷ HDR (Athens AL). 2022. Passive acoustic monitoring program for the Northern Gulf of Mexico: project report. U.S. Department of the Interior, Bureau of Ocean Energy Management, New Orleans, LA. Contract No: M17PC00001. Report No: OCS Study BOEM 2022-074.

Defining and identifying physical or biological features essential to the species is a requirement before NMFS may designate critical habitat. The proposed designation of the Rice's whale critical habitat fails on this threshold step. It is impossible to determine from the proposed designation what a legally sufficient "essential feature" for the Rice's whale might be. Thus, any final designation that attempts to cure the fundamental error would not be a logical outgrowth of this flawed proposal. NMFS must reconsider and issue a new proposed designation that complies with the law by identifying an essential feature that is specific and essential to the Rice's whale, concretely defined, and supported by evidence that it is "found" within the proposed critical habitat area.

c. NMFS Has Not Demonstrated that the Essential Feature is Found in the Areas Identified as Occupied.

The physical or biological features "must be 'found' on occupied land because that land can be eligible for critical habitat designation."⁷⁸ The "Service may not statutorily cast a net over tracts of land with the mere hope that they will develop [physical or biological features] and be subject to designation."⁷⁹

In the Rice's whale proposed designation, most of the area identified as "occupied" lacks even the most basic part of the "essential feature" because most of the Gulf of Mexico is either shallower or deeper than 100-400m, the lone objective measure of the essential feature. This is a clear indication that NMFS's identification of the geographic area occupied at the time of species listing is faulty. But NMFS has also failed to demonstrate that the "essential feature" is "found" within all areas between 100-400m in depth. While NMFS's definition of the essential feature is not a model of clarity (see Section 2.b above), on the face of the designation, the essential feature must include the requisite depth and also "support individual growth, reproduction, and development, social behavior, and overall population growth." NMFS does not explain why it believes all areas with a depth of 100-400m in the U.S. Gulf of Mexico "support individual growth, reproduction, and development, social behavior, and overall population growth," which seriously undermines the public's ability to comment on the crucial question of whether NMFS has successfully identified areas for designation that meet the statutory requirements to be critical habitat. In fact, it does not appear that NMFS evaluated whether all areas of the Gulf of Mexico between 100 and 400 m isobaths actually do support growth, reproduction, etc., because it simply designated every area within the Gulf (under U.S. control) at those depths.⁸⁰ Indeed, it appears the modifier "that support individual growth, reproduction, and development, social behavior, and overall population growth" may be superfluous since NMFS just assumed—without explanation or evidence—that all areas at those depths provided such support.

Although NMFS does not say so in the proposed designation, it is possible that NMFS intends the "attributes" to further define and restrict the definition of the essential feature. In other words, the three "attributes" may be intended to define what specific elements are needed to "support individual growth, reproduction, and development, social behavior, and overall population growth." If that is the case, the proposed designation fails to demonstrate that these attributes (even as vague as they are) are always found within the 100-400m isobaths.

⁷⁸ *Cape Hatteras Access Pres. All.*, 344 F. Supp. 2d at 122.

⁷⁹ *Id.* *Cape Hatteras* addressed a prior regulatory term, "primary constituent elements," which was effectively a proxy for "physical or biological features essential to the conservation of the species" and which the Services have since abandoned to "reduce redundancy." *Id.*; 81 Fed. Reg. at 7426.

⁸⁰ 88 Fed. Reg. at 47453 ("We, NMFS, propose to designate critical habitat for the Rice's whale (*Balaenoptera ricei*) by designating waters from the 100 meter (m) isobath to the 400 m isobath in the Gulf of Mexico (GOMx))."

Indeed, available evidence indicates that the three “attributes” are not found throughout the identified depth zone. First, the prey species identified by NMFS as the Rice’s whale’s primary prey—the *Ariomma bondi*—are concentrated in the vicinity of the Biologically Important Area.⁸¹ Second, the productivity “attribute” varies throughout the Gulf of Mexico with indications that on some measurements the Biologically Important Area is unique, and the evidence does not establish that this “attribute” is uniformly distributed across the rest of the proposed critical habitat.⁸² And finally, soundscapes differ across the Gulf of Mexico, with the Biologically Important Area maintaining the highest level of quiet.⁸³ Indeed, the face of the proposed designation acknowledges that “quiet” is decidedly not uniformly distributed throughout the proposed area because it states that the central area lacks the “quiet” found in other areas.⁸⁴ NMFS’s superficial analysis of the three attributes, without considering whether they might vary across Gulf of Mexico, falls well short of the analytical rigor required by the ESA.

Finally, any determination that areas are “essential” to the Rice’s whale is highly suspect given that NMFS acknowledges it has no idea how or if Rice’s whales exist outside of U.S. waters, including in the southern portion of the Gulf of Mexico or the wider Caribbean. In particular, genetic and morphometric data are absent from the southern Gulf of Mexico and Caribbean, resulting in a knowledge gap about Bryde’s-like whales immediately outside but adjacent to the northern Gulf of Mexico. NMFS did not appear to consider this. Notwithstanding legal limitations in *designating* critical habitat, a determination that the U.S. habitat is “essential” necessarily involves a judgment about how the species uses all of its habitat, including but not limited to the portions of the Gulf of Mexico that are outside of U.S. waters. NMFS’s failure to make any effort to evaluate this question invalidates its conclusion that areas within the U.S. territory are “essential.”

d. NMFS’s Analysis of the Need for Special Management is Based on Unsupported Assumptions.

NMFS asserts that the statutory threshold to demonstrate that the essential habitat features “may” require special management considerations or protection is “met or exceeded” based the unsupported assertion that “in-water construction, energy development, commercial shipping, aquaculture, military activities, and fisheries” “could independently or in combination result in the need for special management.”⁸⁵ The proposed designation cites no evidence to support this assertion, but instead provides two “examples” of activities that NMFS believes “could” affect the habitat.

⁸¹ See discussion of “Prey” in Section 2(b), *supra*.

⁸² See discussion of “Oceanographic Conditions” in Section 2(b), *supra*.

⁸³ See discussion of “Soundscape” in Section 2(b), *supra*.

⁸⁴ 88 Fed. Reg. at 47457 (“The three westernmost sites used by Soldevilla et al. (2022b) were not far from a major shipping fairway and vessel traffic noise was common in the recordings at those sites. The effects of low-frequency noise from shipping traffic and airguns on researchers’ ability to detect calls were apparent in the detectable features of Rice’s whale calls in the western GOMx.”); *id.* at 47463 (“noise levels within the 100 m to 400 m isobaths portion of the northern GOMx may be impacting the environment such that, in locations where noise levels are chronically the highest, Rice’s whales may be periodically avoiding habitat they would otherwise inhabit.”).

⁸⁵ 88 Fed. Reg. at 47461-62.

First, NMFS asserts that “direct harvest of prey by fisheries” could affect the “essential feature and the ability of feeding areas to support the conservation of the Rice’s whale.”⁸⁶ NMFS provides no evidence of direct harvest of prey, nor has NMFS identified “feeding areas” within the designation. *Second*, NMFS speculates that “[e]nergy development could inhibit safe, unrestricted passage between important habitat areas to find prey and find other life history requirements.”⁸⁷ Nothing in the proposed designation indicates that Rice’s whales have multiple “important habitat areas.” The only such habitat that has ever been identified is in the Biologically Important Area, and there is no evidence supporting the idea that Rice’s whales regularly transit to some other unidentified “important” area to find food.

NMFS also fails to address how existing management provisions, which are substantial, fail to provide appropriate protections. In short, NMFS’s claim that special management “may” be required rests on the possibility that industry activity may *change* from the status quo and/or the species may *change* current life patterns, that existing regulatory structures will not address the changes, and, in that case, special management may be required. While the “may” threshold is low, as applied by NMFS here, it is no threshold at all. If all NMFS must do to meet the threshold is speculate about ways in which the status quo might change to require management, then this statutory requirement will always be satisfied. NMFS must reconsider this analysis, and in a reissued proposed designation, address whether special management may be required based on what is known (rather than speculated) about species behavior and current industry activities.

3. NMFS’s Analysis of Section 4(b)(2) Omits Substantial Information.

Chevron is further concerned that NMFS fails to properly analyze and significantly underestimates the economic impacts of the proposed designation by vastly underestimating the number of consultations that will be required and omitting any consideration of the mitigation costs resulting from these consultations. *First*, NMFS assumes that there will be two reinitiations of Section 7 consultation on impacts related to oil and gas over the next ten years.⁸⁸ This assumption ignores the format of the 2020 Biological Opinion, which requires “step down” consultation on numerous activities.⁸⁹ The proposed designation does not acknowledge this process, let alone estimate how the designation would factor into the step-down consultation process.

Second, NMFS has not considered the economic impact of mitigation measures resulting from consultations required by the critical habitat designation for numerous activities. There is no evidence that NMFS has considered whether or how the designation could affect the substantial shipping traffic that currently uses the shipping fairways designated by the U.S. Coast Guard. The Department of Homeland Security through the U.S. Coast Guard has designated by regulation shipping safety fairways “to provide safe approaches through oil fields in the Gulf of Mexico and entrances to the major ports along the Gulf Coast.”⁹⁰ As depicted in Appendix A to this comment, these federally designated shipping fairways overlap with a significant portion of the proposed critical habitat. The U.S. Coast Guard strongly recommends that vessel traffic adhere to these fairways to mitigate the risk of allisions with oilfield structures, which could result in personal injury and/or environmental damage.⁹¹

⁸⁶ *Id.* at 47462.

⁸⁷ *Id.*

⁸⁸ *Id.* at 47464.

⁸⁹ NMFS, Biological Opinion on the Federally Regulated Oil and Gas Program Activities in the Gulf of Mexico, as amended (2021), at 116-126 and Incidental Take Statement as Amended (April 26, 2021) at 1.

⁹⁰ 33 C.F.R. § 166.200(a); see *generally* 33 C.F.R. Part 166.

⁹¹ See U.S. Coast Pilot 5 (Gulf of Mexico, Puerto Rico and Virgin Islands) 2023 (51st Edition) at Chapter 3, ¶ 75.

NMFS's assurance that no project modifications are expected as a result of the designation is unsupported because the proposed designation does not identify what NMFS would consider adverse modification of critical habitat. If NMFS believes that the continuation of existing activities within the proposed critical habitat area would not constitute adverse modification, it should state that conclusion explicitly to adequately support its evaluation of the economic impacts and to provide appropriate guidance to consulting agencies and the regulated public. Contrary to NMFS's assurances, BOEM has already sought to restrict oilfield service vessel activity in the proposed critical habitat.⁹² This suggests that the U.S. Coast Guard may be compelled to similarly restrict activities under its authority, including the unfettered transit of vessels in the Gulf of Mexico shipping fairways. Restricting use of the shipping fairways to certain hours or reduced speeds (as attempted by BOEM for oilfield service vessels) may have unintended consequences of port congestion and increased greenhouse gas emissions from vessels stuck idling outside the zone. Any restrictions on vessel activities within the shipping fairways may cause vessels to avoid the shipping fairways, leading to increased risks of vessel collisions with wind energy and oilfield structures. Alternatively, any attempt by the U.S. Coast Guard to redesignate the shipping fairways outside of the proposed habitat may prejudice the rights of wind energy and oil and gas lessees, as well as potentially increase vessel transit time, resulting in increased freight costs and greenhouse gas emissions. In summary, NMFS's almost-nonexistent consideration of the economic impact of its proposed designation fails to consider the very real impacts that will be felt by a wide range of industries and society as a whole.

NMFS's cursory economic impact analysis is all the more concerning given the lack of evidence of occupation by the Rice's whale across the 28,000 square miles of proposed critical habitat. As noted in Section 2.a, there is no evidence that Rice's whales occupy the central portion of the proposed critical habitat where major shipping fairways exist.

There is a stark contrast between the purely speculative presence of Rice's whales in the proposed critical habitat and the undisputed presence of numerous projects and activities. If NMFS's unsupported prediction that no projects will be modified because of the designation proves inaccurate—for instance, if reinitiated consultation on the oil and gas industry extended the current reasonable and prudent measures to the entire proposed critical habitat area—this activity and many others will be subject to extremely costly mitigation measures for the purported benefit of a species that no one has ever seen in the area.

4. At a minimum, NMFS Should Exclude Federally Designated Shipping Lanes.

If NMFS moves forward with designating the full proposed area, notwithstanding the lack of evidence of occupation (particularly in the central area) and other defects, Chevron requests that NMFS exclude designated shipping fairways from the critical habitat area pursuant to Section 4(b)(2).⁹³ As previously noted, the U.S. Coast Guard has designated shipping fairways that cross significant portions of the proposed critical habitat area. These transit corridors provide mariners safe passage through oilfields or other potential marine hazards by limiting the number of potential obstructions.

⁹² See Section 6, *infra*.

⁹³ 16 U.S.C. § 1533(b)(2) ("The Secretary may exclude any area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific and commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species concerned.").

There is a significant benefit to excluding these fairways from the proposed critical habitat. *First*, the use of the fairways mitigates the risk of allisions and the resulting personal injuries and environmental damage. *Second*, they decrease the risk of vessel strikes outside of the fairways because fewer vessels transit outside of the designated fairways. *Third*, the density of vessel traffic and associated noise may, as NMFS postulates, cause the Rice's whale to avoid these areas. Given the little to no benefit in including the shipping lanes within the 28,000 square miles of proposed habitat for the Rice's whale, NMFS should, at a minimum and only if it does not redesignate for the reasons described above, exclude the federally designated shipping fairways from the final critical habitat rule.

5. NMFS Must Comply with NEPA for the Critical Habitat Designation.

NMFS's proposed critical habitat designation was not evaluated pursuant to the National Environmental Policy Act ("NEPA"), as is required for all major federal actions significantly affecting the human environment. NMFS fails to address that consideration in its Proposed Rule preamble. This failure to follow the required environmental evaluation procedure is arbitrary and capricious, shows that the proposed designation was not prepared in accordance with the procedures required by law, and requires that NMFS re-evaluate and re-issue its proposed designation following compliance with NEPA's requirements.

Chevron recognizes that there is a split of federal circuit court authority as to whether a critical habitat designation requires NEPA compliance. In *Catron County v. U.S. Fish & Wildlife Service*, the court held that critical habitat designations required NEPA analysis.⁹⁴ As the Tenth Circuit reasoned, and as applicable here, the ESA does not displace NEPA's procedural requirements. And just as these comments show for the proposed Rice's whale critical habitat, the designation of critical habitat can result in potentially significant environmental impacts. A NEPA analysis in an environmental assessment or environmental impact statement, as required by the particular circumstances, would assist NMFS in determining the effects of the designation and reasonable alternatives to avoid or minimize potential adverse effects. NEPA therefore compliments rather than displaces the ESA.⁹⁵

By contrast, in *Douglas County v. Babbitt*, the Ninth Circuit held that "NEPA does not apply to the [Service]'s decision to designate a habitat for an endangered or threatened species under the ESA because (1) Congress intended that the ESA critical habitat procedures displace the NEPA requirements, (2) NEPA does not apply to actions that do not change the physical environment, and (3) to apply NEPA to the ESA would further the purposes of neither statute."⁹⁶ There is no precedential appellate court-level authority on this question in the Fifth, Eleventh, or D.C. Circuits. Of the two approaches represented by *Douglas County* and *Catron County*, the Tenth Circuit approach in *Catron County* is better decided and most consistent with the text and purposes of both the ESA and NEPA.⁹⁷

First, the ESA's narrower focus is on listed species and their habitats. NEPA broadly encompasses all environmental effects of a major federal action. The NEPA evaluation and alternatives requirements are not duplicated in the ESA. Thus, the ESA does not displace NEPA's more broadly applicable requirements.

⁹⁴ 75 F.3d 1429, 1439 (10th Cir. 1996); see also *Middle Rio Grande Conservancy Dist. v. Norton*, 294 F.3d 1220, 1225, 1230-31 (10th Cir. 2002) (upholding district court decision that "circumstances in the Tenth Circuit which would relieve the Secretary of the Interior from the duty to prepare an EIS when designating critical habitat will be unquestionably rare. The present case does not at this point present that rare exception.") (internal citation omitted).

⁹⁵ See *Catron County*, 75 F.3d at 1436.

⁹⁶ 48 F.3d 1495, 1507-08 (9th Cir. 1995).

⁹⁷ See, e.g., *Cape Hatteras Pres. All.*, 344 F. Supp. 2d at 133-36 (rejecting Ninth Circuit *Douglas County* approach and holding that NEPA applies to Fish and Wildlife Service critical habitat designation for the piping plover).

Second, critical habitat designation does have effects that are within the scope of environmental effects requiring consideration under NEPA, and the absence of some physical change to the environment from the proposed designation does not obviate the required NEPA analysis. The critical habitat designation will, at the very least, have the effects of changing the access to and activities within the proposed critical habitat area, which are sufficient environmental effects to trigger NEPA.⁹⁸

Third, applying NEPA to the critical habitat designation would further the purposes of both statutes. For NEPA, it would support that statute's purposes of "encourag[ing] productive and enjoyable harmony between man and his environment" and for all federal agencies to "utilize a systematic, interdisciplinary approach which will ensure the integrated use of the natural and social sciences and the environmental design arts in planning and decisionmaking which may have an impact on man's environment."⁹⁹ And for the ESA, it would help implement that statute's requirement that NMFS consider "the economic impact, the impact on national security, and any other relevant impact of specifying any particular area as critical habitat."¹⁰⁰ Applying NEPA to the critical habitat designation would also assist NMFS in its obligation to give actual notice to the State wildlife agency in each state in which the species is believed to occur,¹⁰¹ to consider and address input from any State wildlife agency under ESA Section 4(i), to "cooperate to the maximum extent practicable with the States,"¹⁰² and to "consult[] as appropriate with affected States" on the determination of critical habitat.¹⁰³ Thus, applying NEPA to critical habitat designations is complimentary to, and not in conflict with, the ESA.

Accordingly, NMFS must conduct a NEPA review of the Rice's whale proposed critical habitat designation. It is erroneous for NMFS not to do so here.

6. Specific, Probable Benefits and Impacts from the Proposed Designation

Chevron appreciates the opportunity to comment on the impacts stemming from the proposed designation as well as comment on any projects or activities that may be affected or delayed by this designation. Chevron also provides information here on NMFS's assumption that consultations will not result in modifications and offers the following discussion of specific and highly probable impacts to our Gulf of Mexico operations as a result of this designation.

⁹⁸ See, e.g., *In re Polar Bear Endangered Species Act Listing and § 4(d) Litigation*, 818 F. Supp. 2d 214, 238 (D.D.C. 2011) (Fish and Wildlife Service was required to comply with NEPA in promulgating special ESA Section 4(d) rule for take of polar bear, which is listed as threatened under ESA); *State of Alaska v. Lubchenko*, 2012 U.S. Dist. LEXIS 192920, *68–74 (D. Alaska Jan. 19, 2012) (NMFS was required to prepare an EIS when promulgating species protection measures for endangered-listed western distinct population of Stellar sea lion).

⁹⁹ 42 U.S.C. §§ 4321, 4332(2)(A).

¹⁰⁰ 16 U.S.C. § 1533(b)(2).

¹⁰¹ See *id.* § 1533(b)(5)(A)(ii).

¹⁰² See *id.* § 1535(a).

¹⁰³ See *id.* § 1536(a)(2).

As NMFS is aware, BOEM has already attempted to impose a new lease stipulation in the Final Notice of Sale (FNOS) for Lease Sale 261 (Stipulation No. 4, Item (B)(4)) containing burdensome operating restrictions across a newly defined “expanded Rice’s whale area,” which mirrors the area included in the proposed critical habitat designation. The restrictions on vessel operations would have included a year-round 10-knot speed limit restriction, on board observer requirements, and limitations on vessel transit through the area after dusk and before dawn (nighttime), as well as other periods of low visibility. BOEM also withdrew from Lease Sale 261 all acreage in the expanded area. A federal court determined both measures were unlawful for Lease Sale 261,¹⁰⁴ but they appear to represent the types of restrictions BOEM intends to implement for oil and gas exploration and production. As such, our commentary included herein not only addresses the shortcomings of NMFS’s economic and national security analysis as required under the ESA related to oil and gas production activities in the Gulf of Mexico, but also appropriately considers impacts from similar mitigations being imposed on other Chevron Gulf of Mexico business interests, such as pipeline operations, future carbon capture and sequestration projects, and shipping activities supporting supply and trading operations serving U.S. and international interests.

a. Impacts to Gulf of Mexico Oil and Gas Production Activities

While the size and scope of impacts to oil and gas operations from the proposed critical habitat cannot yet be fully known, they can be qualitatively described as to what impacts would be included, which NMFS can then use to appropriately estimate or model the full range of economic effects under Section 4(b)(2).

As mentioned above, BOEM’s removal of the acreage and imposition of burdensome vessel restrictions in the proposed critical habitat area in the FNOS for Lease Sale 261, a move that can reasonably be expected to continue if the critical habitat is finalized as proposed, will have significant economic and potential national security impacts that have not been considered as part of this proposal as required under the ESA.

Chevron is one of the top leaseholders in the Gulf of Mexico and produces over 200,000 barrels of oil per day from Gulf of Mexico operations. Impacts to our nation’s ability to provide its own energy resources is a serious national security concern that has not been duly considered by NMFS. The Service has admittedly not prepared a statement of Energy Impacts in accordance with Executive Order 13211 because the agency assumes that this “rule, if finalized, will not have a significant adverse effect on the supply, distribution, or use of energy.”¹⁰⁵ This assumption is flawed, and NMFS should thoroughly evaluate economic and national security impacts as they relate to the offshore energy industry as part of a re-proposed rule.

¹⁰⁴ Order on Preliminary Injunction at 2, 30, *Louisiana v. Haaland, et al.*, No. 2:23-cv-1157 (W.D. La. Sept. 21, 2023) (enjoining BOEM from imposing unlawful stipulations restricting oilfield service vessel activity in an upcoming Gulf of Mexico lease sale).

¹⁰⁵ 88 Fed. Reg. at 47469.

Chevron, along with all other Gulf of Mexico oil and gas operators with facilities located within the proposed critical habitat area or that must transit the proposed critical habitat area to reach facilities south of it, will incur significant costs associated with the vessel restrictions, particularly limitations on vessel transit times through the proposed critical habitat area. These kinds of vessel restrictions will be significant factors at all phases of investment decisions for Gulf of Mexico exploration and production and consequently may have significant federal and state economic impacts. In some situations, the nighttime vessel transit restriction appears to cut roughly in half the available hours for transit across the proposed critical habitat area. Furthermore, the nighttime and low visibility transit limitations create complex logistical challenges for vessels moving from Gulf Coast ports to deepwater facilities south of the proposed critical habitat area. Certain phases of offshore work require continuous supplies or equipment, often involving materials too heavy for helicopter transport, which are carefully coordinated with ports and suppliers to ensure that mission-critical work can continue in a safe and efficient manner. In addition to the cost impacts to oil and gas operators from vessel downtime and wasted fuel, port operations will also be impacted as these restrictions completely upend decades of marine logistics coordinated to efficiently and safely support offshore oil and gas operations.

Critical coastal restoration projects and hurricane-protection projects are funded in part by the proceeds of offshore oil and gas lease sales and revenues from Gulf of Mexico production. These funds are vital to coastline preservation and port protections, through which billions of dollars in U.S. gross domestic product pass annually. Proceeds from offshore oil and gas production also partially fund the Land and Water Conservation Fund, which provides matching grants to assist states with outdoor recreation funds. NMFS has not accounted for any of these probable and specific economic impacts in the proposal, despite the virtual certainty that finalization of the critical habitat designation as proposed will result in considerable economic harm to the Gulf Coast region.

b. Impacts to Shipping Operations and Associated Supply and Trading Activities

Imposing vessel transit limitations, such as those included in NMFS's request for comments on the "Petition to Establish a Vessel Speed Restriction and Other Vessel-Related Measure to Protect Rice's Whales," published in the Federal Register on April 7, 2023, on shipping operations through the proposed critical habitat area could substantially impact freight costs and supply, which would ultimately increase costs for consumers.

For example, Chevron's Pascagoula Refinery, located in the Gulf Coast state of Mississippi, is a major supplier of gasoline, jet fuel, and diesel to Florida and is the primary supplier of jet fuel to the Tampa International Airport and a majority supplier to the Orlando International Airport. Cargo tankers entering and exiting the loading facilities for the Pascagoula Refinery must cross the proposed critical habitat area. Florida's population is the third highest in the U.S., and there are no refineries and no interstate product pipelines located in Florida, making the state almost exclusively reliant on marine shipping operations to deliver fuels to terminals within the state. As such, Florida is very vulnerable to marine shipping supply delays and disruptions, which could result in consumer fuel station supply shortages and airline cancellations due to inability to supply airports with jet fuel. Jones Act-compliant freight is severely limited, meaning there is little capacity for additional supplemental voyages. Hurricane response could also be significantly limited by these restrictions, delaying vessel movements to bring needed supplies to impacted areas in a timely manner.

Beyond the potential impacts to the State of Florida, interruptions and delays to crude imports and feedstocks delivered via marine shipping suppliers to Gulf Coast refineries will limit refinery production. A significant percentage of the United States' refining capacity is located in the Gulf Coast region and could be impacted by vessel restrictions related to the Proposed Rule. One example is Chevron's Pascagoula Refinery, where over half of the facility's crude and product supply travels via marine movements through the proposed critical habitat area. Limiting a large majority of the refinery's marine movements to day-time travel would result in major impacts to refinery operational efficiency and could require significant increases in onsite storage tank requirements and notably reduce the throughput of the refinery. Consequently, the potential decrease in supply and marine shipping reliability will result in increased costs to consumers and a reduction in the supply of fuels and other hydrocarbon products available. The restrictions may also reduce refinery utilization caused by shipment delays, which could potentially impact tax revenue and jobs for Gulf Coast states.

Imposing restrictions on vessel movements will not only impact the domestic market, but the international market as well. U.S. export activity of crude oil, natural gas liquids, and liquid natural gas is projected to grow as domestic production continues to increase and the supply is not absorbed within the U.S. market. Supply disruptions are likely in tight domestic and international markets with low inventories and storage capacity. For example, the Chevron Pascagoula Refinery is the primary supplier of transportation fuels to the country of Panama and a major supplier to the remainder of Central America and Columbia; vessel restrictions that may be imposed within the proposed critical habitat area significantly increase the risk of reliable fuel supply to these international locations as they lack storage capacity. Many of these countries would need to find a large source of additional fuels from outside of the U.S. Gulf Coast to ensure supply reliability. Upstream travel impacts from vessel transit restrictions through the proposed critical habitat area also result in the potential risk that ships transiting the Panama Canal will miss assigned transit windows, leading to costly delays as they are demurred waiting for later transit windows.

In conclusion, Chevron requests that NMFS reconsider and reissue a new proposal that complies with the law. The significant shortcomings with the technical basis and economic impact analysis underpinning this proposal must also be addressed before NMFS moves forward with the habitat designation. Should you have any questions regarding Chevron's comments or feedback on the Proposed Rule, please do not hesitate to contact me.

Sincerely,

Handwritten signature of Kaim Knutson in black ink.

Attachment A:
Map Depicting Shipping Fairways and Vessel Traffic

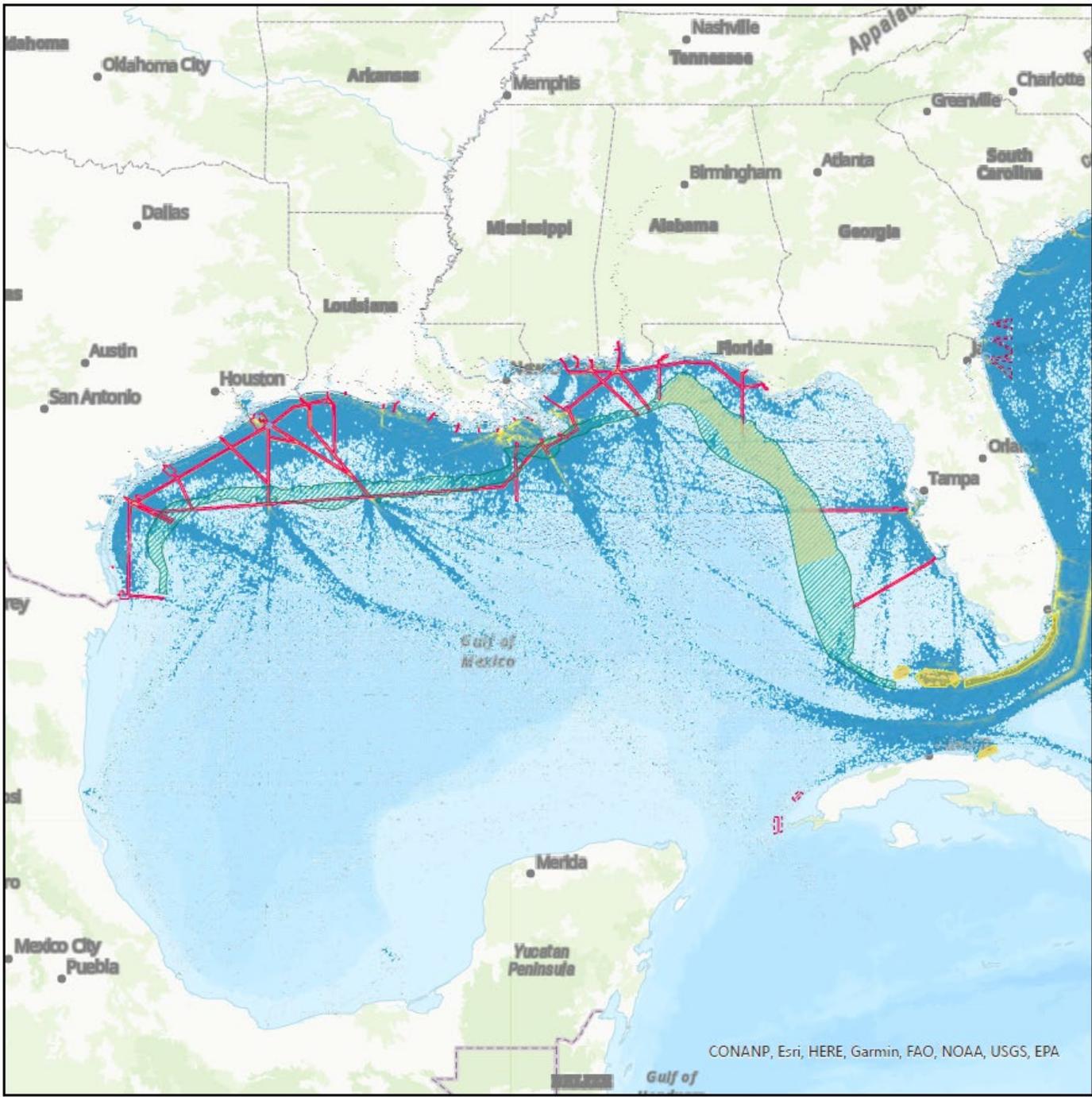
Shipping Fairways & Vessel Traffic

0 100 200 Miles



Legend

- Shipping Zones**
- Shipping Safety Fairway
 - Traffic Lane
 - Separation Zone
 - Precautionary Areas
 - Area to be Avoided
 - Biologically Important Area (LaBrecque, 2015)
 - Proposed Rice's Whale Critical Habitat
- AIS Vessel Transit Counts 2021**
- 1 - 25
 - 26 - 50
 - 51 - 75
 - 76 - 100
 - 101 - 250
 - 251 - 500
 - 501 - 750
 - 751 - 1500
 - 1,501 +



CONANP, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA