



DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Parts 223 and 224

[Docket No. 210409-0078]

RTID 0648-XR116

Endangered and Threatened Wildlife; 90-Day Finding on a Petition to List the Shortfin Mako Shark as Threatened or Endangered Under the Endangered Species Act

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: 90-day petition finding, request for information, and initiation of status review.

SUMMARY: We, NMFS, announce a 90-day finding on a petition to list the shortfin mako shark (*Isurus oxyrinchus*) as threatened or endangered under the Endangered Species Act (ESA) and to designate critical habitat concurrent with the listing. We find that the petition presents substantial scientific or commercial information indicating that the petitioned action may be warranted. Therefore, we are initiating a status review of the species to determine whether listing under the ESA is warranted. To ensure this status review is comprehensive, we are soliciting scientific and commercial information regarding this species.

DATES: Scientific and commercial information pertinent to the petitioned action must be received by [insert date 60 days after date of publication in the *Federal Register*].

ADDRESSES: You may submit comments on this document, identified by NOAA-NMFS-2021-0028 by the following method:

- *Electronic Submissions:* Submit all electronic public comments via the Federal eRulemaking Portal. Go to <https://www.regulations.gov> and enter NOAA-NMFS-2021-0028 in the Search box. Click on the “Comment” icon, complete the required fields, and enter or attach your comments.

Instructions: Comments sent by any other method, to any other address or individual, or received after the end of the comment period, may not be considered by NMFS. All comments received are a part of the public record and will generally be posted for public viewing on www.regulations.gov without change. All personal identifying information (*e.g.*, name, address, etc.), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. NMFS will accept anonymous comments (enter "N/A" in the required fields if you wish to remain anonymous).

Interested persons may obtain a copy of the petition online at the NMFS website:

<https://www.fisheries.noaa.gov/national/endangered-species-conservation/petitions-awaiting-90-day-findings>.

FOR FURTHER INFORMATION CONTACT: Adrienne Lohe, NMFS Office of Protected Resources, (301) 427-8442, Adrienne.Lohe@noaa.gov.

SUPPLEMENTARY INFORMATION:

Background

On January 25, 2021, we received a petition from Defenders of Wildlife to list the shortfin mako shark (*Isurus oxyrinchus*) as a threatened or endangered species under the ESA and to designate critical habitat concurrent with the listing. The petition asserts that *I. oxyrinchus* is threatened by 4 of the 5 ESA section 4(a)(1) factors: (1) present and threatened modification of its habitat; (2) overutilization for commercial and recreational purposes; (3) inadequacy of existing regulatory mechanisms; and (4) other natural or manmade factors. The petition is available online (see **ADDRESSES**).

ESA Statutory, Regulatory, and Policy Provisions and Evaluation Framework

Section 4(b)(3)(A) of the ESA of 1973, as amended (16 U.S.C. 1531 *et seq.*), requires, to the maximum extent practicable, that within 90 days of receipt of a petition to list a species as threatened or endangered, the Secretary of Commerce make a finding on whether that petition presents substantial scientific or commercial information indicating that the petitioned action may be warranted, and to promptly publish such finding in the **Federal Register** (16 U.S.C. 1533(b)(3)(A)). When it is found that substantial scientific or commercial information in a petition indicates the petitioned action may be warranted (a “positive 90-day finding”), we are required to promptly commence a review of the status of the species concerned during which we will conduct a comprehensive review of the best available scientific and commercial information. In such cases, we conclude the review with a finding as to whether, in fact, the petitioned action is warranted within 12 months of receipt of the petition. Because the finding at the 12-month stage is based on a more thorough review of the available information, as compared to the narrow scope of review at the 90-day stage, a “may be warranted” finding does not prejudice the outcome of the status review.

Under the ESA, a listing determination may address a species, which is defined to also include subspecies and, for any vertebrate species, any distinct population segment (DPS) that interbreeds when mature (16 U.S.C. 1532(16)). A joint NMFS–U.S. Fish and Wildlife Service (USFWS) (jointly, “the Services”) policy clarifies the agencies’ interpretation of the phrase “distinct population segment” for the purposes of listing, delisting, and reclassifying a species under the ESA (61 FR 4722; February 7, 1996). A species, subspecies, or DPS is “endangered” if it is in danger of extinction throughout all or a significant portion of its range, and “threatened” if it is likely to become endangered within the foreseeable future throughout all or a significant portion of its range (ESA sections 3(6) and 3(20), respectively, 16 U.S.C. 1532(6) and (20)). Pursuant to the ESA

and our implementing regulations, we determine whether species are threatened or endangered based on any one or a combination of the following five section 4(a)(1) factors: (1) the present or threatened destruction, modification, or curtailment of habitat or range; (2) overutilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) inadequacy of existing regulatory mechanisms to address identified threats; (5) or any other natural or manmade factors affecting the species' existence (16 U.S.C. 1533(a)(1), 50 CFR 424.11(c)).

ESA-implementing regulations issued jointly by NMFS and USFWS (50 CFR 424.14(h)(1)(i)) define "substantial scientific or commercial information" in the context of reviewing a petition to list, delist, or reclassify a species as credible scientific or commercial information in support of the petition's claims such that a reasonable person conducting an impartial scientific review would conclude that the action proposed in the petition may be warranted. Conclusions drawn in the petition without the support of credible scientific or commercial information will not be considered "substantial information." In reaching the initial (90-day) finding on the petition, we will consider the information described in sections 50 CFR 424.14(c), (d), and (g) (if applicable).

Our determination as to whether the petition provides substantial scientific or commercial information indicating that the petitioned action may be warranted will depend in part on the degree to which the petition includes the following types of information: (1) information on current population status and trends and estimates of current population sizes and distributions, both in captivity and the wild, if available; (2) identification of the factors under section 4(a)(1) of the ESA that may affect the species and where these factors are acting upon the species; (3) whether and to what extent any or all of the factors alone or in combination identified in section 4(a)(1) of the ESA may cause the species to be an endangered species or threatened species (*i.e.*, the species is currently in danger of extinction or is likely to become so within the foreseeable future),

and, if so, how high in magnitude and how imminent the threats to the species and its habitat are; (4) information on adequacy of regulatory protections and effectiveness of conservation activities by States as well as other parties, that have been initiated or that are ongoing, that may protect the species or its habitat; and (5) a complete, balanced representation of the relevant facts, including information that may contradict claims in the petition. See 50 CFR 424.14(d).

If the petitioner provides supplemental information before the initial finding is made and states that it is part of the petition, the new information, along with the previously submitted information, is treated as a new petition that supersedes the original petition, and the statutory timeframes will begin when such supplemental information is received. See 50 CFR 424.14(g).

We may also consider information readily available at the time the determination is made. We are not required to consider any supporting materials cited by the petitioner if the petitioner does not provide electronic or hard copies, to the extent permitted by U.S. copyright law, or appropriate excerpts or quotations from those materials (*e.g.*, publications, maps, reports, letters from authorities). See 50 CFR 424.14(c)(6).

The “substantial scientific or commercial information” standard must be applied in light of any prior reviews or findings we have made on the listing status of the species that is the subject of the petition. Where we have already conducted a finding on, or review of, the listing status of that species (whether in response to a petition or on our own initiative), we will evaluate any petition received thereafter seeking to list, delist, or reclassify that species to determine whether a reasonable person conducting an impartial scientific review would conclude that the action proposed in the petition may be warranted despite the previous review or finding. Where the prior review resulted in a final agency action - such as a final listing determination, 90-day not-substantial finding, or 12-month not-warranted finding - a petition will generally not be considered to present

substantial scientific and commercial information indicating that the petitioned action may be warranted unless the petition provides new information or analysis not previously considered. See 50 CFR 424.14(h)(1)(iii).

At the 90-day finding stage, we do not conduct additional research, and we do not solicit information from parties outside the agency to help us in evaluating the petition. We will accept the petitioners' sources and characterizations of the information presented if they appear to be based on accepted scientific principles, unless we have specific information in our files that indicates the petition's information is incorrect, unreliable, obsolete, or otherwise irrelevant to the requested action. Information that is susceptible to more than one interpretation or that is contradicted by other available information will not be dismissed at the 90-day finding stage, so long as it is reliable and a reasonable person conducting an impartial scientific review would conclude it supports the petitioners' assertions. In other words, conclusive information indicating the species may meet the ESA's requirements for listing is not required to make a positive 90-day finding. We will not conclude that a lack of specific information alone necessitates a negative 90-day finding if a reasonable person conducting an impartial scientific review would conclude that the unknown information itself suggests the species may be at risk of extinction presently or within the foreseeable future.

To make a 90-day finding on a petition to list a species, we first evaluate whether the information presented in the petition, in light of the information readily available in our files, indicates that the petitioned entity constitutes a "species" eligible for listing under the ESA. Next, if we conclude the petition presents substantial scientific or commercial information suggesting that the petitioned entity may constitute a "species," we evaluate whether the information indicates that the species may face an extinction risk such that listing, delisting, or reclassification may be warranted; this may be indicated in information expressly discussing the species' status and trends, or in information

describing impacts and threats to the species. We evaluate whether the petition presents any information on specific demographic factors pertinent to evaluating extinction risk for the species (*e.g.*, population abundance and trends, productivity, spatial structure, age structure, sex ratio, diversity, current and historical range, habitat integrity or fragmentation), and the potential contribution of identified demographic risks to extinction risk for the species. We then evaluate whether the petition presents information suggesting potential links between these demographic risks and the causative impacts and threats identified in section 4(a)(1) of the ESA.

Information presented on impacts or threats should be specific to the species and should reasonably suggest that one or more of these factors may be operative threats that act or have acted on the species to the point that it may warrant protection under the ESA. Broad statements about generalized threats to the species, or identification of factors that could negatively impact a species, do not constitute substantial information indicating that listing may be warranted. We look for information indicating that not only is the particular species exposed to a factor, but that the species may be responding in a negative fashion; then we assess the potential significance of that negative response.

Many petitions identify risk classifications made by nongovernmental organizations, such as the International Union on the Conservation of Nature (IUCN), the American Fisheries Society, or NatureServe, as evidence of extinction risk for a species. Risk classifications by other organizations or made under other Federal or state statutes may be informative, but such classification alone may not provide the rationale for a positive 90-day finding under the ESA. For example, as explained by NatureServe, their assessments of a species' conservation status do “not constitute a recommendation by NatureServe for listing under the U.S. Endangered Species Act” because NatureServe assessments “have different criteria, evidence requirements, purposes and taxonomic coverage than government lists of endangered and threatened species, and therefore these

two types of lists should not be expected to coincide”

(<https://explorer.natureserve.org/AboutTheData/DataTypes/ConservationStatusCategories>). Additionally, species classifications under IUCN and the ESA are not equivalent; data standards, criteria used to evaluate species, and treatment of uncertainty are also not necessarily the same. Thus, when a petition cites such classifications, we will evaluate the source of information that the classification is based upon in light of the standards on extinction risk and impacts or threats discussed above.

Distribution, Habitat, and Life History

The shortfin mako is a large pelagic shark that occurs across all temperate and tropical ocean waters (Rigby *et al.* 2019; Santos *et al.* 2020). The species is highly migratory and is known to travel long distances in open ocean, continental shelf, shelf edge, and shelf slope habitats (Rogers *et al.* 2015). The species also displays fidelity to small geographic areas on or near continental shelves and coastal areas of high productivity, although this resident behavior is rarely observed in the open ocean (Rogers *et al.* 2015; Francis *et al.* 2019). Shortfin mako shark vertical distribution in the water column is affected by water temperature, dissolved oxygen (DO) concentration, and time of day. The preferred water temperature of the species is thought to range between 17°C and 22°C (Casey and Kohler 1992; Nasby-Lucas *et al.* 2019; Santos *et al.* 2020), though the species also regularly occupies waters between 22°C and 31°C (Vaudo *et al.* 2017). As the species has one of the highest measured metabolic rates of any shark, it typically inhabits waters with DO concentrations of at least 3 milliliters per liter and avoids areas with low levels of DO (Sepulveda *et al.* 2007; Abascal *et al.* 2011). Individuals spend most of their time in the upper part of the water column but dive to depths of several hundred meters, allowing them to forage for mesopelagic fishes and squid, though dives may have other functions including navigation (Francis *et al.* 2019). Tagging studies have found that the species typically spends more time in deeper, colder water during the

daytime and at night moves to shallower, warmer waters (Sepulveda *et al.* 2004; Loefer *et al.* 2005; Stevens *et al.* 2010; Abascal *et al.* 2011; Nasby-Lucas *et al.* 2019). Although thermal barriers have consistently been shown to limit shortfin mako movement between different regions (Casey and Kohler 1992; Vaudo *et al.* 2017; Corrigan *et al.* 2018; Santos *et al.* 2020), genetic studies indicate a globally panmictic population with some genetic structuring between ocean basins (Schrey and Heist 2003; Corrigan *et al.* 2018).

Shortfin makos are estimated to live to at least 29 years, and males and females reach maturity at approximately 7-8 years and 18-19 years, respectively (Bishop *et al.* 2006; Natanson *et al.* 2006). Natural mortality levels for the species are low (Bishop *et al.* 2006). Females have a 3-year reproductive cycle (Mollet *et al.* 2000), and estimates of gestation time vary from 9 months to 25 months (Mollet *et al.* 2000; Duffy and Francis 2001; Joung and Hsu 2005; Semba *et al.* 2011). Litter size typically ranges from 4 to 25 pups (Mollet *et al.* 2000; Joung and Hsu 2005). As the species is late maturing and slow growing with moderately high longevity and low annual fecundity, its productivity is very low (Bishop *et al.* 2006).

Status and Population Trends

While there are no data available on the global abundance of shortfin mako sharks, stock assessments and standardized catch-per-unit-effort (CPUE) data indicate that the species is declining globally (CITES 2019; Rigby *et al.* 2019). Overall, the species has experienced an estimated median population reduction of 46.6 percent, with the highest probability of 50–79 percent reduction over three generation lengths (72-75 years) (Rigby *et al.* 2019). All regional populations are in decline with the exception of the South Pacific, which shows some evidence of population increases (Rigby *et al.* 2019).

The steepest population declines are indicated in the North and South Atlantic (Rigby *et al.* 2019). The most recent stock assessment by the International Commission

for the Conservation of Atlantic Tunas (ICCAT) indicates a 90 percent probability that the North Atlantic stock is in an overfished state and is experiencing overfishing (ICCAT 2019b). Trend analysis of modeled biomass in the North Atlantic estimates a median decline of 60 percent between 1950 and 2017 (Rigby *et al.* 2019). Although ICCAT reports a high degree of uncertainty in the status of the South Atlantic stock (ICCAT 2019b), standardized catch rates in South Atlantic longlines indicate steep declines of 99 percent in the average CPUE of 1979–1997 and 1998–2007 (Rigby *et al.* 2019 citing Barreto *et al.* 2016). Further, long-term combined trends for shortfin mako and porbeagle (*Lamna nasus*) in the Mediterranean Sea indicate a 99.99 percent decrease in abundance and biomass since the early 19th century (Ferretti *et al.* 2008).

Declines in the Indian and North Pacific Oceans are also evident, but not as steep as those indicated in the Atlantic (Rigby *et al.* 2019). Although the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC) Shark Working Group (2018) found that the North Pacific stock was likely not in an overfished condition and was likely not experiencing overfishing between 1975 and 2016 (42 years), the IUCN Red List assessment of the trend over three generations (72 years) indicated a median decline of 36.5 percent (Rigby *et al.* 2019). Additionally, data from the Western and Central Pacific Fisheries Commission (WCPFC) indicate that longline catch rates of mako sharks (shortfin and longfin mako (*Isurus paucus*) combined) in the North Pacific declined significantly by an average of 7 percent (90 percent confidence interval: 3 to 11 percent) annually between 1995 and 2010 (Clarke *et al.* 2013). A preliminary stock assessment in the Indian Ocean indicates that the stock is experiencing overfishing, but is not yet overfished (Brunel *et al.* 2018). The trend analysis for modeled biomass in the Indian Ocean indicates a median decline of 47.9 percent over three generation lengths (Rigby *et al.* 2019).

In the South Pacific, trend analysis of modeled biomass indicates a median

increase of 35.2 percent over three generation lengths (Rigby *et al.* 2019). Longline catch rates reported to WCPFC did not indicate a significant trend in abundance of mako (shortfin and longfin combined) in the South Pacific between 1995 and 2010 (Clarke *et al.* 2013).

In sum, while data on abundance and trends are incomplete, the information presented in the petition indicates that the species is declining across its range, with the exception of the South Pacific.

Analysis of ESA Section 4(a)(1) Factors

The petition asserts that *I. oxyrinchus* is threatened by four of the five ESA section 4(a)(1) factors: present and threatened modification of its habitat, overutilization for commercial and recreational purposes, inadequacy of existing regulatory mechanisms, and other natural or manmade factors, including climate change. Information in the petition and readily available in our files indicates that the primary threat facing the species is overutilization in fisheries worldwide, and we find that listing the shortfin mako as a threatened or endangered species under the ESA may be warranted based on this threat alone. As such, we focus our discussion below on the evidence of overutilization in commercial fisheries. However, we note that in the status review for this species, we will evaluate all ESA section 4(a)(1) factors to determine whether any one or a combination of these factors are causing declines in the species or are likely to substantially negatively affect the species within the foreseeable future to such a point that the shortfin mako is at risk of extinction or likely to become so in the foreseeable future.

Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

According to information cited in the petition and readily available in our files, the greatest threat to the shortfin mako shark is historical and ongoing overfishing. Shortfin mako sharks are targeted in semi-industrial and artisanal fisheries in the Indian

Ocean and as sportfish in recreational fisheries, though the majority of the catch is taken incidentally in commercial fisheries targeting tuna, billfish, and swordfish throughout the species' range (Camhi *et al.* 2008). According to the Food and Agriculture Organization of the United Nations (FAO) global capture production statistics, total reported catch for the shortfin mako in the period 2010-2016 totaled 91,989 metric tons (t) (CITES 2019). Landings in the Atlantic totaled 45,959 t (50 percent of global reported catch), in the Pacific totaled 31,838 t (34 percent of global reported catch), in the Indian Ocean totaled 14,043 t (15 percent of global reported catch), and in the Mediterranean totaled 152 t (less than 1 percent of global reported catch) (CITES 2019). Reported catch, however, is a substantial underestimate of actual catch. Campana (2016) estimates that in the Atlantic, only 25 percent of the total catch is reported to ICCAT. Reported catch also does not account for mortalities that result from fisheries interactions, including sharks that are discarded, finned, or that experience post-release mortality. In fact, levels of fishing mortality in the Northwest Atlantic estimated through fisheries-independent satellite telemetry data were found to be 10 times greater than previous estimates from fisheries-dependent data, and 5-18 times greater than those associated with maximum sustainable yield (Byrne *et al.* 2017). Therefore, impacts of commercial fishing fleets on the shortfin mako are likely much greater than reported catch numbers suggest.

Shortfin makos are most commonly caught as bycatch in longline fisheries, and are also caught in gillnets, purse seines, trammel nets, and trawls (CITES 2019). When bycaught, the species experiences mortality through at-vessel or hooking mortality, and post-release mortality. Rates of at-vessel mortality, or mortality resulting from interactions with fishing gear prior to being brought onboard, have been estimated at 26.2 percent for shortfin makos bycaught in Northwest Atlantic pelagic longlines, though this varies by target species and fishing vessel (Campana *et al.* 2016). The proportion of shortfin makos that experience at-vessel mortality was significantly higher than that of

blue sharks, likely because shortfin makos are obligate ram ventilators (*i.e.*, they must be continuously swimming forwards to move water over the gills) with high oxygen requirements, and their ability to ram ventilate is compromised once hooked (Campana 2016; Campana *et al.* 2016). The rate of post-release mortality has been estimated at 31.3 percent for shortfin makos bycaught by Northwest Atlantic pelagic longlines (Campana *et al.* 2016). Combining at-vessel and post-release mortality, total bycatch mortality in the Canadian pelagic longline fishery is estimated at 49.3 percent (95 percent confidence interval: 23-73 percent), assuming that no live sharks are retained (Campana *et al.* 2016). Other available estimates of post-release mortality for the species include 47 percent in the Hawaiian deep-set commercial longline fishery and 31.6 percent in the Hawaiian shallow-set commercial longline fishery (Walsh *et al.* 2009). In sum, shortfin makos experience substantial mortality as a result of being incidentally caught in commercial fisheries.

Shortfin makos also experience mortality through opportunistic retention, and are more frequently retained than other pelagic sharks based on their highly valued meat and fins (CITES 2019). The species is preferred in the Hong Kong fin market, one of the largest fin trading markets in the world (Fields *et al.* 2018). Clarke *et al.* (2006a) estimate that the species makes up approximately 2.7 percent (95 percent probability interval: 2.3 to 3.1 percent) of the Hong Kong shark fin trade, the fourth highest proportion of auctioned fin weight after blue (*Prionace glauca*, 17.3 percent), hammerhead (*Sphyrna zygaena* or *S. lewini*, 4.4 percent) and silky (*Carcharhinus falciformis*, 3.5 percent) sharks. A more recent study found shortfin makos to be the fifth most commonly traded species in Hong Kong based on random samples of fin trimmings from retail markets (Fields *et al.* 2018). The estimated number of shortfin makos utilized in the worldwide shark fin trade each year is between 300,000 and 1,000,000, totaling between 20,000 and 55,000 t in biomass (Clarke *et al.* 2006b). Beyond the fin trade, shortfin mako sharks are

highly valued for their meat, which is utilized fresh, frozen, smoked, dried, and salted for human consumption (CITES 2019; Dent and Clarke 2015). Shortfin mako liver oil, teeth, jaws, and skin are also traded, though most of these products are of lower value and are not traded in significant quantities (CITES 2019).

The shortfin mako's low productivity and high susceptibility to capture give it one of the highest risks of overexploitation of sharks caught by Atlantic pelagic longline fleets (Cortés *et al.* 2015). Additionally, fisheries mortality primarily affects sub-adults (approximate ages of 3-15 years), meaning that as this exploited age-class matures, the reproductive population will shrink (Winker *et al.* 2020). For this reason, ICCAT (2019a) projects that even with zero total allowable catch in the North Atlantic, the stock would continue to decline until 2035, and would have only a 53 percent probability of being rebuilt and no longer subject to overfishing by 2045. Overall, the shortfin mako's recent population declines, low productivity, high vulnerability to overexploitation, and the long lag time between implementation of management measures (*e.g.*, reducing or eliminating allowable catch) and the start of population recovery lead us to conclude that listing the species as threatened or endangered may be warranted.

Petition Finding

After reviewing the petition, the literature cited in the petition, and other information readily available in our files, we find that listing *I. oxyrinchus* as a threatened or endangered species may be warranted. Therefore, in accordance with section 4(b)(3)(A) of the ESA and NMFS' implementing regulations (50 CFR 424.14(h)(2)), we will commence a status review of this species. During the status review, we will determine whether *I. oxyrinchus* is in danger of extinction (endangered) or likely to become so (threatened) throughout all or a significant portion of its range. As required by section 4(b)(3)(B) of the ESA, within 12 months of the receipt of the petition (January 25, 2021), we will make a finding as to whether listing the shortfin mako shark as an

endangered or threatened species is warranted. If listing is warranted, we will publish a proposed rule and solicit public comments before developing and publishing a final rule.

Information Solicited

To ensure that the status review is based on the best available scientific and commercial data, we are soliciting comments and information from interested parties on the status of the shortfin mako shark. Specifically, we are soliciting information in the following areas:

- (1) Historical and current abundance and population trends of *I. oxyrinchus* throughout its range;
- (2) Historical and current distribution and population structure of *I. oxyrinchus*;
- (3) Historical and current condition of habitat for *I. oxyrinchus*;
- (3) Historical and current data on bycatch and retention of *I. oxyrinchus* in industrial, commercial, artisanal, and recreational fisheries worldwide;
- (4) Data on trade of shortfin mako products, including fins, meat, jaws, skin, and liver oil; and
- (5) The effects of other known or potential threats to *I. oxyrinchus* over the short-term or long-term; and
- (5) Management, regulatory, or conservation programs for *I. oxyrinchus*, including mitigation measures related to any known or potential threats to the species throughout its range.

We request that all data and information be accompanied by supporting documentation such as maps, bibliographic references, or reprints of pertinent publications. Please send any comments in accordance with the instructions provided in the **ADDRESSES** section above. We will base our findings on a review of the best available scientific and commercial information available, including all information received during the public comment period.

References Cited

A complete list of all references cited herein is available upon request (See **FOR FURTHER INFORMATION CONTACT**).

Authority: The authority for this action is the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Dated: April 12, 2021.

Samuel D. Rauch III,

Deputy Assistant Administrator for Regulatory Programs,

National Marine Fisheries Service.