

(4) Install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate at the control device inlet and monitor and record the damper position consistent with paragraph (h)(5) of this section.

(5) The furnace static pressure monitoring device(s) shall be installed in an EAF or DEC duct prior to combining with other ducts and prior to the introduction of ambient air, at a location that has no flow disturbance due to the junctions.

(6) The volumetric flow monitoring device(s) may be installed in any appropriate location in the capture system such that reproducible flow rate monitoring will result. The flow rate monitoring device(s) shall have an accuracy of ±10 percent over its normal operating range and shall be calibrated according to the manufacturer's instructions. The Administrator may require the owner or operator to demonstrate the accuracy of the monitoring device(s) relative to EPA Methods 1 and 2 of appendix A of this part.

(7) Parameters monitored pursuant to this paragraph, excluding damper position, shall be recorded as integrated block averages not to exceed 15 minutes.

(c)(1) When the owner or operator of an affected facility is required to demonstrate compliance with the standards under § 60.272b(a)(3) and at any other time that the Administrator may require (under section 114 of the CAA, as amended), the owner or operator shall, during all periods in which a hood is operated for the purpose of capturing emissions from the affected facility subject to paragraph (b) of this section, either:

(i) Install, calibrate, and maintain a monitoring device that continuously records the fan motor amperes at each damper position, and damper position consistent with paragraph (h)(5) of this section;

(ii) Monitor and record as no greater than 15-minute integrated block average basis the volumetric flow rate through each separately ducted hood; or

(iii) Install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate at the control device inlet, and monitor and record the damper position consistent with paragraph (h)(5) of this section.

(2) Parameters monitored pursuant to this paragraph, excluding damper position, shall be recorded as integrated block averages not to exceed 15 minutes.

(3) The owner or operator may petition the Administrator or delegated authority for reestablishment of these

parameters whenever the owner or operator can demonstrate to the Administrator's or delegated authority's satisfaction that the affected facility operating conditions upon which the parameters were previously established are no longer applicable. The values of the parameters as determined during the most recent demonstration of compliance shall be the appropriate operational range or control set point throughout each applicable period. Operation at values beyond the accepted operational range or control set point may be subject to the requirements of § 60.276b(c).

* * * * *

(h) * * *

(9) Parameters monitored pursuant to paragraphs (h)(6) through (8) of this section shall be recorded as integrated block averages not to exceed 15 minutes.

■ 13. Amend § 60.276b by revising paragraph (c) to read as follows:

§ 60.276b Recordkeeping and reporting requirements.

* * * * *

(c) Operation at a furnace static pressure that exceeds the operational range or control setting under § 60.274b(g), for owners and operators that elect to install a furnace static pressure monitoring device under § 60.274b(f) and either operation of control system fan motor amperes at values exceeding ±15 percent of the value established under § 60.274b(c) or operation ranges or control settings outside of those established under § 60.274b(c) may be considered by the Administrator or delegated authority to be unacceptable operation and maintenance of the affected facility. Operation at such values shall be reported to the Administrator or delegated authority semiannually.

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[FR Doc. 2024-02634 Filed 2-13-24; 8:45 am]

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 223

[Docket No. 240208-0042; RTID 0648-XR071]

Endangered and Threatened Wildlife and Plants: Listing the Queen Conch as Threatened Under the Endangered Species Act (ESA)

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and

Atmospheric Administration (NOAA), Commerce.

ACTION: Final rule.

SUMMARY: We, NMFS, are listing the queen conch (*Aliger gigas*, formerly known as *Strombus gigas*) as a threatened species under the Endangered Species Act (ESA). We have completed a review of the status of queen conch, including efforts being made to protect the species, and considered public comments submitted on the proposed listing rule as well as new information received since the publication of the proposed rule. Based on all of this information, we have determined that the queen conch is not currently in danger of extinction throughout all or a significant portion of its range, but is likely to become so within the foreseeable future. Thus, we are listing the queen conch as a threatened species under the ESA. At this time, we conclude that critical habitat is not yet determinable because data sufficient to perform the required analysis are lacking; any critical habitat designation would be proposed in a separate, future rulemaking.

DATES: This final rule is effective on March 15, 2024.

ADDRESSES: Public comments that were submitted on the proposed rule to list queen conch are available at <https://www.regulations.gov> identified by docket number NOAA-NMFS-2019-0141. A list of references cited in this final rule and other supporting materials are available at: <https://www.fisheries.noaa.gov/species/queen-conch>, or by submitting a request to the National Marine Fisheries Service, Southeast Regional Office, Protected Resources Division, 263 13th Avenue South, St. Petersburg, Florida 33701. Information relevant to inform separate rulemakings to designate critical habitat for queen conch or issue protective regulations for queen conch may be submitted to this mailing address or to the email address indicated below (see **FOR FURTHER INFORMATION CONTACT**).

FOR FURTHER INFORMATION CONTACT: Orian Tzadik, NMFS Southeast Regional Office, (813) 906-0353-C; or Orian.Tzadik@noaa.gov.

SUPPLEMENTARY INFORMATION:

Background

On February 27, 2012, we received a petition from WildEarth Guardians to list the queen conch as threatened or endangered throughout all or a significant portion of its range under the ESA. We determined that the petitioned action may be warranted and published a positive 90-day finding in the **Federal**

Register (77 FR 51763, August 27, 2012). After conducting a status review, we determined that listing queen conch as threatened or endangered under the ESA was not warranted and published our determination in the **Federal Register** (79 FR 65628, November 5, 2014). In making that determination, we first concluded that queen conch was not presently in danger of extinction, nor was it likely to become so in the foreseeable future. We also evaluated whether the species warranted listing based on its status in a “significant portion of its range” by applying the joint U.S. Fish and Wildlife Service (USFWS) and NMFS Policy on Interpretation of the Phrase “Significant Portion of Its Range” (SPR Policy; 79 FR 37580, July 1, 2014). We concluded that available information did not indicate any “portion’s contribution to the viability of the species is so important that, without the members in that portion, the species would be in danger of extinction, or likely to become so in the foreseeable future, throughout all of its range.” Therefore, we concluded that the species did not warrant listing based on its status in a significant portion of its range.

On July 27, 2016, WildEarth Guardians and Friends of Animals filed suit in the U.S. District Court for the District of Columbia, challenging our decision not to list queen conch as threatened or endangered under the ESA. On August 26, 2019, the Court vacated our determination that listing queen conch under the ESA was not warranted and remanded the determination back to the NMFS based on our reliance on the SPR Policy’s particular threshold for defining “significant,” which was vacated nationwide in 2018 (though other aspects of the policy remain in effect). See *Desert Survivors v. U.S. Dep’t of Interior*, 321 F. Supp. 3d 1011 (N.D. Cal. 2018).

On December 6, 2019, we announced the initiation of a new status review of queen conch and requested scientific and commercial information from the public (84 FR 66885, December 6, 2019). We also provided notice and requested information from jurisdictions through the Western Central Atlantic Fishery Commission (WECAFC), Caribbean Regional Fisheries Mechanism (CRFM), and the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES) Authorities. We received 12 public comments in response to this request.

In May 2022, we completed a status review that considered all relevant new information regarding the status of the species. The status review report

incorporated information received in response to our request for information (84 FR 66885, December 6, 2019), and was peer reviewed by three independent specialists selected from the scientific community with expertise in queen conch biology and ecology, conservation and management, and specific knowledge of threats to queen conch. Peer reviewer comments were addressed and incorporated, as appropriate, prior to dissemination of the final status review report (Horn *et al.* 2022).

On September 8, 2022, we published a proposed rule to list the queen conch as threatened (87 FR 55200, September 8, 2022). We solicited comments on our proposed rule from the public for 95 days (87 FR 55200, September 8, 2022; 87 FR 67853, November 11, 2022) and held a virtual public hearing on November 21, 2022 (87 FR 67853, November 11, 2022), at which time we also accepted public comments. We are basing our listing determination on information in the status review report, information received from the public, and additional materials cited in this final rule, which comprise the best available scientific and commercial information.

Listing Determinations Under the ESA

We are responsible for determining whether the queen conch is threatened or endangered under the ESA (16 U.S.C. 1531 *et seq.*). Section 4(b)(1)(A) of the ESA requires us to make listing determinations based solely on the best scientific and commercial data available after conducting a review of the status of the species and after taking into account efforts being made by any state or foreign nation to protect the species. To be considered for listing under the ESA, a group of organisms must constitute a “species,” which is defined in section 3 of the ESA to include “any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature.”

Because the queen conch is an invertebrate, we do not have the authority to list individual populations as distinct population segments.

Section 3 of the ESA defines an endangered species as “any species which is in danger of extinction throughout all or a significant portion of its range” and a threatened species as one “which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” Thus, in the context of the ESA, we interpret an “endangered species” to be one that is presently at risk of extinction. A “threatened species,” on the other hand,

is not currently at risk of extinction, but is likely to become so in the foreseeable future. In other words, a key statutory difference between a threatened and endangered species is the timing of when a species may be in danger of extinction, either now (endangered) or in the foreseeable future (threatened). Additionally, as the definition of “endangered species” and “threatened species” makes clear, the determination of extinction risk can be based on either the range-wide status of the species, or the status of the species in a “significant portion of its range.” A species may be endangered or threatened throughout all of its range or a species may be endangered or threatened within a significant portion of its range (SPR).

Section 4(a)(1) of the ESA requires us to determine whether any species is endangered or threatened as a result of any of the following five factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence (16 U.S.C. 1533(a)(1)(A)–(E)). We considered the nature of the threats and the species’ response to those threats. We also considered each threat identified, both individually and cumulatively. Once we evaluated the threats, we assessed the efforts being made to protect the species to determine if these conservation efforts were adequate to mitigate the existing threats and alter extinction risk. Finally, we considered the public comments and additional information received in response to the proposed rule. In making this finding, we have relied on the best scientific and commercial data available.

Public Comments and Our Responses

We requested comments on the proposed rule to list the queen conch as threatened during a 60-day comment period. In response to requests for a public hearing, we re-opened the public comment period for an additional 35 days (87 FR 67853, November 10, 2022) and held a virtual public hearing on November 21, 2022 (87 FR 67853, November 10, 2022).

Public comments were accepted via standard mail, at the public hearing, and through the Federal eRulemaking portal. To facilitate access to the proposed rule, we provided English, Spanish, French, Dutch, and Creole versions of the proposed rule, as well as English and Spanish versions of Frequently Asked

Questions on our website in advance of the public hearing. All individuals who requested a public hearing along with representatives from over 30 state, Federal, and international organizations were contacted to provide direct notification of the public hearing. We also directly contacted and solicited comments from a variety of stakeholder groups and fisheries management organizations through avenues such as the CITES, WECAFC, CRFM, the Caribbean Fishery Management Council (CFMC), the United States State Department, the United States Congress, State/Territorial partners, over 6,000 subscribers to our Fishery Bulletin, and others.

The virtual public hearing included live Spanish-language interpretation services and closed captioning translation options for English, French, German, Spanish, and Italian. A total of 137 people attended the virtual public hearing, 10 of whom provided oral public comment. Overall, we received 154 public comments on the proposed rule and supporting documents. Of these public comments, 56 opposed the listing, with 44 providing new information that informed our final determination. We received five comments that were neither supportive nor unsupportive of the listing determination, but provided additional data that were not included in the status review report or the proposed rule. The remaining 93 comments agreed with our proposed determination; many of these supportive comments presented general information on threats and provided supplementary data that were already considered or cited, and consequently discussed in the proposed rule. Of the comments that were supportive of the listing, 50 provided documentation, such as data or work cited, that reinforced the demographic factors and threats identified in the proposed rule, including population declines, smaller maturation sizes, degraded habitats, declining population connectivity, and declining fecundity estimates.

The comments we received concerning critical habitat and protective regulations were not directly related to this action. However, such comments will be considered and addressed during subsequent rulemakings on critical habitat and protective regulations under section 4(d) of the ESA. Due to the direct threat of overutilization throughout the range of queen conch, we intend to promulgate protective regulations pursuant to section 4(d) for queen conch in a future rulemaking. We solicit further public comment to inform future rulemakings on critical habitat and development of

protective regulations for the queen conch (see **ADDRESSES** below). All relevant public comments on the proposed rule to list queen conch are addressed in the following summary below. We have categorized comments by topic. Where appropriate, we have combined similar comments from multiple groups or members of the public and addressed them together.

Comments on Available Data, Trends, and Analyses

Comment 1: Several commenters provided new, peer-reviewed or agency-produced empirical data on queen conch abundance, density, and landings that were not included in the status review report (Horn *et al.* 2022). New data were provided for the following jurisdictions: Antigua and Barbuda, The Bahamas, Belize, Florida, Nicaragua, Puerto Rico, San Andres Islands in Colombia, St. Vincent and the Grenadines, and the U.S. Virgin Islands. Some commenters suggested that the data provided were indicative of healthier queen conch populations in their particular jurisdiction than indicated by the status review report.

Response: We thank these commenters for the submission of additional data to inform status of the species and this final rule. The new abundance and adult density estimates provided by commenters for Antigua and Barbuda, The Bahamas, Belize, Florida, Nicaragua, San Andres Islands in Colombia, St. Vincent and the Grenadines, and the U.S. Virgin Islands are within the range of previously reported abundance and adult density estimates summarized in the status review report for those jurisdictions (see figure 7 in Horn *et al.* 2022). The new data provided for Florida were highly variable but indicated that high densities of individuals occur in specific locations at different times and that seasonal shifts in adult densities may be occurring (Delgado and Glazer 2020). Overall, these data were still within the adult density estimates that were presented in the status review report for Florida. Similarly, the new commercial landings data provided by Belize and the new commercial export data provided by St. Vincent and the Grenadines were not substantially different from the data considered in the status review report as the values were within the range previously considered (see figure 16 in Horn *et al.* 2022). Therefore, although we considered these additional data sources, these data did not alter the previous conclusions presented in the status review report or the decision to list this species as threatened.

The new density estimates provided for Puerto Rico were derived from Cruz-Marrero *et al.* (2020), who used video sled sampling to estimate conch population densities in Southwestern Puerto Rico. Cruz-Marrero *et al.*'s (2020) estimates of adult densities are higher than those considered in the status review report for Puerto Rico; however, the methodology used to generate these estimates did not include visual inspection to distinguish between live conch and empty shells, potentially leading to overestimation of density, particularly in heavily fished areas where shells are discarded. We determined the video sled sampling method requires additional calibration and validation prior to its inclusion in our analyses.

Therefore, we conclude the Cruz-Marrero *et al.* (2020) publication does not represent the best scientific and commercial data available due to concerns with the methodology used to estimate conch population densities in Southwestern Puerto Rico.

Comment 2: Many commenters, including commercial fishers and local scientists, stated that local stakeholder knowledge should have been solicited prior to the publication of the proposed rule.

Response: We announced the initiation of a status review for queen conch in the **Federal Register** (84 FR 66885, December 6, 2019). At that time, we asked the public to provide information on the queen conch that would inform our status review and opened a 60-day public comment period. We also directly contacted and solicited comments from a variety of stakeholder groups and fisheries management organizations through avenues such as the CITES, WECAFC, CRFM, CFMC, the United States State Department, State/Territorial partners, and others. The CFMC further solicited comments from stakeholders via written comments, District Advisory Panel (DAP) meetings, and oral comments. Comments were initially solicited at the CFMC meeting in December 2019. NMFS staff attended the WECAFC meeting in Puerto Rico in December 2019 to notify members of the opportunity for public comment to inform the status review. General updates on the queen conch status review were provided during the CFMC's regular meetings held in June, August, September, and December of 2020; April, July, August, and December of 2021; February, April, and August of 2022. General updates on the status of the queen conch rulemaking were provided during the CFMC's regular meetings held in December of 2022; and

April, August, and December of 2023. We also directly contacted and solicited information from numerous scientific experts on conch fisheries biology. All information received, including 12 formal public comments, was considered, and relevant information was incorporated into the status review report and the proposed rule.

Comment 3: Several commenters provided anecdotal observations of queen conch densities and one fisher provided underwater videos in Puerto Rico, suggesting that these observations were indicative of healthier queen conch populations in their jurisdictions than indicated by the status review report.

Response: We thank these commenters for submitting their videos and sharing their knowledge of the queen conch population in their particular jurisdictions. While these data are indeed encouraging, they remain difficult to incorporate into the status review report as they cannot be readily converted into estimates of population densities. We acknowledge that the available density data can be difficult to interpret for several reasons, including the fact that survey methods varied, surveys were lacking from many areas and, in some cases, surveys were decades old. In addition, the connectivity modeling scenario provided density estimates that represent jurisdiction-wide medians, and the status review team (SRT) acknowledges that conch are not distributed evenly across space. Even in jurisdictions with very low densities, there likely exist some areas above the critical density threshold where reproduction continues to take place (Horn *et al.* 2022). However, cross-shelf surveys likely generate the most reliable estimates of overall queen conch populations, and cross-shelf surveys are a widely used monitoring method for queen conch stocks (Vaz *et al.* 2022). By contrast, the videos and observations provided are limited in their spatial inference because they represent a relatively small fraction of the overall range of the species. As described in the proposed rule, there is a clear need to improve data collection on this species throughout its range, and NMFS looks forward to working with all stakeholders to improve and standardize data collection to promote the recovery of the species.

Comment 4: We received several comments requesting that NMFS acquire new, additional, or better data prior to making a listing determination. These commenters suggested that the available data and scientific studies do not provide sufficient evidence to

support listing queen conch as a threatened species under the ESA.

Response: As stated above, and as described in the proposed rule, NMFS acknowledges the need for further research and additional and uniform data. However, we disagree with the commenters' assertion that the best scientific studies available do not provide sufficient evidence to support our listing determination. As detailed in the Listing Determinations under the ESA section above, we evaluated all five factors under section 4(a)(1) of the ESA and concluded the best scientific and commercial data available indicate that, while the queen conch is not currently in danger of extinction, it will likely become so in the foreseeable future, therefore warranting listing as a threatened species under the ESA. In the proposed rule, we concluded that the species does not currently have a high risk of extinction due to the following: the species has a broad distribution and still occurs throughout its geographic range and is not confined or limited to a small geographic area; the species does not appear to have been extirpated from any jurisdiction and can still be found, albeit at low densities in most cases, throughout its geographic range; and there are several jurisdictions that have queen conch populations that are currently disproportionately contributing to the viability of the species, such that the species is not presently at risk of extinction. There are 9 jurisdictions that are estimated to have adult queen conch densities greater than 100 conch/ha, and together these 9 jurisdictions comprise about 61 percent of the estimated queen conch habitat. Several of these locations have high connectivity values (see figure 13 in Horn *et al.* 2022), indicating that these areas facilitate the flow of queen conch larvae, allowing for some exchange of larvae and maintenance of some genetic diversity.

In addition, we note that the ESA requires that we base our listing determinations on the best scientific and commercial data available (16 U.S.C. 1533(b)(1)(A) and does not require, nor necessarily allow time for, additional studies to gather more data. *Am. Wildlands v. Kempthorne*, 530 F.3d 991, 998 (D.C. Cir. 2008) (finding that the "best available data" requirement in section 1533(b)(1)(A) requires not only that data be attainable, but that researchers in fact have conducted the tests); *Southwest Ctr. for Biological Diversity v. Babbitt*, 215 F.3d 58, 60 (D.C. Cir. 2000) ("The 'best available data' requirement makes it clear that the Secretary has no obligation to conduct independent studies."); see also,

Oceana, Inc. v. Ross, 321 F. Supp. 3d 128, 142 (D.D.C. 2018) (interpreting analogous language in section 1536(a)(2)) (citations omitted); *San Luis & Delta-Mendota Water Auth. v. Locke*, 776 F.3d 971, 995 (9th Cir. 2014) (holding that the best available science standard "does not require an agency to conduct new tests or make decisions on data that does not yet exist."). The ESA's emphasis on the best available information thus requires us to make listing determinations based upon what is sometimes incomplete information. Provided that the best available information is sufficient to enable us to make a determination as required under the ESA, as is the case here, we must rely on it even though there is some degree of imperfection or uncertainty. *Defenders of Wildlife v. Babbitt*, 958 F. Supp. 670, 679–81 (D.D.C. 1997) (explaining that courts have consistently held that the statutory standard requiring that listing decisions be made on the "best scientific and commercial data available," is less stringent than a standard requiring "conclusive evidence" or "absolute scientific certainty").

Comment 5: Several commenters questioned what data were used to make the final listing determination. Specifically, commenters from Puerto Rico, U.S. Virgin Islands, and Nicaragua asked about the recency of the landings and adult density data and what studies had been used to make the listing determination.

Response: The data and research used to inform our listing decision were published online concurrently with the proposed rule and are summarized in the status review report (Horn *et al.* 2022). This report considered all relevant published and grey literature, databases, and reports, as well as any relevant information provided during the public comment period from our previous notice of initiation of a status review (84 FR 66885, December 6, 2019). The status review evaluated data from 47 countries and territories (*e.g.*, management jurisdictions), assimilating approximately 360 references. The status review considered the scientific literature to determine density thresholds for reproductive viability, then evaluated these thresholds by jurisdiction using the best scientific information available for density surveys from 2012–2020. Similarly, the status review considered fisheries landings data (1950–2018) from the Food and Agriculture Organization and reconstructed landing histories (1950–2016) from the Sea Around Us (SAU) project. It considered results from recent genetic structure studies (*e.g.*, Truelove

et al. 2017) and published results from simulations identifying limiting factors for conch reproductive dynamics (Farmer & Doerr 2022). It evaluated a novel hydrodynamic modeling approach to connectivity which provided insight into how exchange of larvae across the population range has been dramatically interrupted by overexploitation relative to virgin stock patterns (Vaz *et al.* 2022). The status review team organized this information and data by jurisdiction and searched systematically for information regarding conch densities, landings, and population trends. Additionally, the team systematically evaluated the threats to conch across management jurisdictions, including overutilization, inadequacy of regulations and enforcement, and climate change.

Upon its publication in May 2022, the status review report (Horn *et al.* 2022) provided a complete list of citations used as well as five supplemental files, including the most recently available fisheries data by jurisdiction, Food and Agriculture Organization (FAO) landings data, and population density estimates. This information is all publicly available on our website. The landings data alluded to by commenters were included through 2018 (see figures 15, 16, 17, 19, and 20 in Horn *et al.* 2022), and all known fishery independent surveys were considered as well (see table 1 in Horn *et al.* 2022). Specific analyses regarding conch population connectivity and reproductive dynamics within the status review were also published in peer reviewed scientific journals (Vaz *et al.* 2022; Farmer and Doerr 2022).

Comment 6: Several commenters cited the presence of queen conch populations in deep-water habitats that act as refuges due to their inaccessibility to fishing. In particular, commenters from Belize, Jamaica, Puerto Rico, and Florida cited local ecological knowledge to support the presence of deep water populations within their jurisdictions. Other commenters suggested that deep water populations exist throughout the range of the species and that these deep-water populations regularly supply recruits to the shallow water populations, which are subject to fishing. The commenters suggest that the presence of these deep water populations negate the need for listing the species under the ESA, as the populations will always replenish themselves.

Response: The population dynamics of deep-water queen conch populations were evaluated and considered in the status review report. All published findings on deep-water populations

were reported, including documentation of active fishing and depletion of some of these deep-water populations, such as those at Glover's atoll in Belize (Horn *et al.* 2022). The status review assessed all known deep-water populations, including several in the jurisdictions of The Bahamas, Belize, Florida, Jamaica, Puerto Rico, and St. Croix, and also considered other factors such as prevailing currents, and physical recruitment dynamics that can influence population connectivity (Horn *et al.* 2022). The commenters did not provide any new scientific information to support claims of deep-water populations beyond what was already considered in the status review, and we are unable to determine the direct contribution of additional populations to local queen conch populations without further research. The current state of research on deep water populations remains limited due to two major factors. The first is that in most locations, the deep water habitats do not seem to be the primary habitat for queen conch, and population densities are therefore limited. The second is that these populations occur at depths below safe recreational diving limits, therefore necessitating specialized technical training and equipment to access them. We agree with the commenters that there is a need to improve our understanding of the deep-water populations, and we look forward to working with stakeholders on this endeavor as we work to promote the recovery of the species.

Comment 7: One commenter stated that the proposed listing determination arbitrarily relied on reproductive capacity and total population to support its conclusions instead of density and adequacy of regulations, which the commenter asserted should be the driving metrics for the listing determination.

Response: We appropriately considered all relevant biological data when assessing extinction risk for those portions that warranted further investigation based on the initial assessment tool. Biological factors considered, such as reproductive capacity and productivity at viable spawning areas (*e.g.*, areas with sufficient adult density and total population), are directly relevant to assessing status of the species now and in the foreseeable future. We cannot ignore such factors and focus exclusively on the factors the commenter prefers.

Comment 8: One commenter stated we had erred by not having the SRT review the various spatial scales considered in the SPR analysis. Another

commenter claimed that NMFS erred by not having the SRT review the eco-regional and macro-regional spatial scale approaches to evaluating SPR.

Response: We disagree. Our analysis of whether queen conch is endangered within a significant portion of its range was informed by the SRT's work, and we applied extensions of the SRT's population-scale approach to our SPR analysis. Specifically, we followed the SRT's approach, by applying the same quantitative assessment tool to screen for "potentially high risk" and "potentially significant" portions of the range. Furthermore, nothing in the ESA or our regulations requires that the SRT review the agency's listing decision, including its evaluation of potential SPRs.

Comment 9: One commenter stated that NMFS should list the queen conch as endangered in a significant portion of its range, asserting that the SPR analysis in the proposed rule was flawed because it arbitrarily divided the range of the queen conch instead of considering those portions where the species is in danger of extinction, and that the determination is contrary to the best available science because the queen conch is endangered in a significant portion of its range. The commenter concluded that our SPR analysis should have evaluated the total portion of the species' range where the species is below the critical density and in danger of extinction. The commenter asserted this "portion" is a significant portion of the range in which the species is endangered.

Response: We conducted a thorough and conservative screening of portions of the range as described in the proposed rule, assessing 50 different portions at 3 different geographic scales. Also as explained above, portions of the range below the critical density are not necessarily "in danger of extinction." While we find that our previous analysis was adequate, we undertook the additional analysis sought by the commenter.

As suggested by the commenter, we identified 11 management jurisdictions with empirical measurements of adult conch densities (*e.g.*, not borrowed from nearest neighbor estimates of density) that were below "critical density" (*i.e.*, Anguilla, Antigua and Barbuda, Aruba, Bonaire, Dominican Republic, Guadeloupe, Haiti, Martinique, Panama, St. Vincent and Grenadines, and Venezuela). We further evaluated this portion of the species' range, comprised of these 11 jurisdictions, to determine whether this portion was, in our assessment, at a "high risk" of extinction and "significant." Because

both of these conditions must be met, regardless of which question is addressed first, if a negative answer is reached with respect to the first question addressed, the other question does not need to be evaluated for that portion of the species' range. As with our SPR analysis in the proposed rule, we elected to address the "high risk" of extinction question first. The members of the species within the portion may be at "high risk" of extinction if the members are at or near a level of abundance, productivity, spatial structure, or diversity that places the members' continued persistence in question. Similarly, the members of the species within the portion may be at "high risk" of extinction if the members face clear and present threats (*e.g.*, confinement to a small geographic area; imminent destruction, modification, or curtailment of habitat; or disease epidemic) that are likely to create imminent and substantial demographic risks.

In evaluating whether this portion of the species' range is at high risk of extinction, we considered the portion's abundance, productivity, spatial structure, and diversity. Although the portion contains only 1 percent of the contemporary abundance for the species, that 1 percent represents nearly 7 million adult conch. Generally speaking, low abundance places a population at greater risk for perturbation or genetic bottlenecks; however, this portion is broadly distributed geographically, which provides a significant buffer against these threats. Although this portion comprises only 12 percent of the total available habitat for queen conch, it contains an estimated 8,753 km² of available habitat. The portion is also protected against genetic bottlenecks because although it contains 11 important connectivity nodes for the species throughout its range, 13 additional important connectivity nodes outside the portion supply areas within the portion with larvae (Vaz *et al.* 2022). For example, within the portion, Panama receives most of its conch larvae from Costa Rica. The Dominican Republic receives larvae from Puerto Rico, Cuba, Turks and Caicos, and possibly Saint Lucia. Haiti has limited connectivity with neighboring islands, but may receive some limited input from Jamaica and Cuba. Anguilla presently receives larvae from multiple Leeward Islands. In Venezuela, Martinique, Bonaire, and Guadeloupe, conch reproduction is thought to be nominal, and most upstream supply would originate from Saint Lucia. For

the management jurisdictions of Aruba, St. Vincent and Grenadines, Antigua and Barbuda, contemporary reproductive output is thought to be nominal, with a small likelihood of receiving larval supply from other locations.

Although this portion has limited abundance and productivity is constrained by likely reproductive failures due to low adult densities leading to depensatory effects, the portion is distributed over a broad geographic area (*i.e.*, the Caribbean basin) and is not subject to disease or disproportionate habitat destruction relative to the species across its range. The spatial structure of the portion and diversity of the portion are partially protected by the remaining reproductively viable populations and connectivity nodes that exist outside the portion. We estimate 685 million adult conch in habitats with reproductively viable densities outside of this portion. A single female conch lays between 7–14 egg masses containing between 500,000–750,000 eggs during a single spawning season (Appeldoorn 2020). Assuming a 1:1 sex ratio, we estimate that the 342 million females in viable aggregation densities could produce up to 3,591 trillion eggs in a single spawning season. Our connectivity modeling suggests that a reasonable number of these eggs might successfully recruit to this portion during a given spawning season. Owing to the prolific reproductive output of viable conch spawning aggregations and the overall connectivity remaining within the system, including connectivity to this portion, we determine that, within this portion, queen conch is not currently in danger of extinction, but is likely to become so within the foreseeable future. This finding is consistent with the species' range wide determination, that queen conch is not currently in danger of extinction, but is likely to become so within the foreseeable future.

Comment 10: Several commenters noted that the adult densities described in the status review report as thresholds for reproduction of individual populations were evaluated against cross-shelf population densities instead of against spawning aggregation densities. These thresholds were therefore overly conservative estimates when discussing the likelihood of extinction because the aggregation-densities are far greater than cross-shelf densities due to the nature of the queen conch spawning aggregation strategies.

Response: As described in the status review report and proposed rule, the absence of reproduction in low density populations is primarily attributed to a

low encounter rate and can contribute to Allee effects and localized extirpation due to reproductive failure. The cross-shelf density threshold of 50 adult conch/hectare is generally accepted as a minimum to achieve some level of reproductive success (Appeldoorn 1995; Gascoigne and Lipcius 2004; Stephens *et al.* 1999; Stoner and Ray-Culp 2000). While we acknowledge that many minimum density estimates have been suggested in the literature, the threshold of 50 adult conch per hectare is lower than most recommended thresholds. For example, CITES initially proposed a minimum threshold of 56 adult conch per hectare but then revised their threshold to 100 adults per hectare after further deliberation (Van Eijs 2014). An equivalent threshold of 100 adult conch per hectare has been proposed by the WECAFC queen conch working group and consequently adopted by the United Nations Environment Programme (UNEP 2012). The reference point used in the proposed rule is derived from cross shelf data from unfished areas in The Bahamas that show that mating and spawning plateau at approximately 100 adult queen conch per hectare (Stoner and Ray-Culp 2000; Stoner *et al.* 2012b). As discussed in the status review report (Horn *et al.* 2022), we agree that density thresholds may vary over both spatial scale and by location, as other studies have demonstrated higher thresholds needed to ensure reproductive success. For example, Delgado and Glazer (2020) identified a within-aggregation minimum of 204 adult conch/hectare.

The SRT conducted a comprehensive review of the best scientific and commercial information available, with the goal of compiling robust, cross-shelf adult conch density estimates for each jurisdiction. To the extent possible, the SRT focused on the most recent studies where randomized sampling was conducted across broad areas of the shelf, including a range of habitats and depths (see table 2 and file S5 in Horn *et al.* 2022). Given differences in survey methodologies and uncertainties in the reproductive threshold, the SRT evaluated current and temporal trends in likely reproductive status by jurisdictions under three categories: (1) densities greater than 100 adult conch/ha, a density considered to support reproductive activity and population growth (UNEP 2012); (2) densities of 50–99.9 adult conch/ha, a density associated with reduced reproduction (Appeldoorn 1988c; Stoner and Ray-Culp 2000); and (3) densities below 50 adult conch/ha, densities associated with likely Allee effects and limited viable reproduction (Stoner and Ray-

Culp 2000; Stoner *et al.* 2012b; UNEP 2012). The SRT considered these uncertainties in their Extinction Risk Analysis, and we considered them in the development of our proposed rule.

We acknowledge that the thresholds considered by the SRT and discussed in the proposed rule (<50 adult conch/ha, 50–99.9 adult conch/ha, and <100 adult conch/ha) may differ from thresholds identified by other regulatory agencies, regional working groups, or national-level policies for some countries within the range of the species. However, we relied on the best available scientific and commercial information, as described within the status review report, to identify appropriate thresholds and to interpret published density estimates relative to those thresholds, while accounting for differences in survey methodologies (see “Density Estimates” section in Horn *et al.* 2022). The commenters did not identify any scientifically-supported alternative estimates or thresholds. The commenters did not provide information on which to base a change to the adult density estimate we used in our analysis, other than they believe the 50 adult conch/ha threshold is overly conservative for assessing the likelihood of extinction of the species. We acknowledge that substantial variability in the collection of conch density estimates by different researchers in different jurisdictions through time has led to challenges in identifying reproductive thresholds and making appropriate comparisons to those thresholds; however, we feel that the best scientific and commercial information available supports our methods and determination.

Comment 11: Several commenters requested uncertainty estimates be provided for data that were used in the status review report and the proposed rule, particularly for those data pertaining to the levels of uncertainty for population model estimates and for the extinction risk analysis.

Response: Uncertainty in the estimates of population densities, adult population sizes, and exploitation rates derived from the best available scientific and commercial data available are all presented in the status review report (see figures 5, 9, 18, and 19 in Horn *et al.* 2022). Uncertainty in reproductive dynamics are presented in the status review report and described further in Farmer and Doerr (2022). Multiple scenarios of population connectivity are presented in the status review report and described further in Vaz *et al.* (2022). These scenarios contribute to the uncertainty of the population model due to the variability of values and of

sampling methods at each of the different nodes in the model. Reported versus reconstructed landings are presented in figure 15 of Horn *et al.* (2022). Variability in the extinction risk analysis is captured in figures 22–24 of Horn *et al.* (2022). Finally, summary statistics and raw data associated with the extinction risk analysis and density estimates are presented in status review Supplementary Files 3 and 5, respectively.

Comment 12: One commenter noted that the variability in morphometric measures, specifically shell lip thickness, among locations suggests that determination of maturity in queen conch is not uniform and can vary by location, thereby limiting the utility of universal measures of maturity, and suggesting that such measures should not be applied to all locations equally.

Response: As described in the proposed rule and discussed in the status review report (Horn *et al.* 2022), we acknowledge that studies have suggested morphometric characteristics may differ among localized populations. Furthermore, age and size at maturity may differ among locations, such that morphometric measures, such as shell lip thickness, at maturity are not consistent among locations. Despite local variability, shell lip thickness is often used as an indicator of maturity in queen conch and in fishery management. Therefore, the status review report analyzes morphology and shell lip thickness carefully. As mentioned in the status review report, some of these differences (including variability in shell lip thickness in mature adults) may be driven by overutilization of the resource. Growth overfishing (*i.e.*, when conch are harvested at an average size that is smaller than the size that would produce the maximum yield per recruit) leads to smaller adults within fished stocks. In addition, the status review report recommends further research on the direct effects of environmental contaminants, such as heavy metals, pesticides, and other pollutants. Contaminants and lower quality habitats may impact growth, reproduction, and morphology. Other than the detrimental effects these pollutants are known to have on early life stages such as larvae, the effects of environmental contaminants on queen conch remain poorly understood (Horn *et al.* 2022).

Despite the variability in morphometric characteristics among localized population, shell lip thickness is the most reliable indicator for maturity in queen conch, as described in the proposed rule. The best available information indicates that shell lip

thickness for mature queen conch ranges from 17.5 to 26.2 mm for females, and 13 to 24 mm for males (Stoner *et al.* 2012; Bissada 2011; Aldana-Aranda and Frenkiel 2007; Avila-Poveda and Barqueiro-Cardenas 2006). Boman *et al.* (2018) suggested that a 15 mm minimum lip thickness would be an appropriate threshold metric for most of the Caribbean region. The primary goal of a minimum lip thickness is as a fishery management metric to ensure that at least 50 percent of the queen conch population will reach maturity prior to being harvested (Boman *et al.* 2018).

While the relationships between shell lip thickness, age, and sexual maturity vary geographically, the best available information demonstrates that the value established for minimum shell lip thickness by most jurisdictions is inadequate to prevent immature conch from being harvested. Only six jurisdictions (*i.e.*, Colombia, Puerto Rico, Nicaragua, U.S. Virgin Islands, Cuba, and Honduras) have minimum shell lip thickness regulations. Only Honduras has a minimum shell lip thickness of at least 18 mm, which is likely the most effective criteria for prohibiting the harvest of immature conch; the other five jurisdictions require a minimum lip thickness well below reported minimum size at maturity (*i.e.*, 5 mm, Colombia; 9.5 mm, Puerto Rico; 9.5 mm, Nicaragua; and 10 mm, Cuba). Thus, although several jurisdictions have regulations that may prohibit harvest of immature conch and while measures of maturity may vary geographically, our review of minimum meat weight, shell length, and flared lip regulations indicates that immature queen conch are being legally harvested in 20 jurisdictions, which is partially responsible for observed low densities and declining populations. We also note that the majority of queen conch fisheries (except St. Lucia and the U.S. Virgin Islands) do not have requirements to land queen conch in the shell. Regulations that allow queen conch meat to be removed and the shell discarded at sea undermine enforcement and compliance with regulations for a minimum shell length, shell lip thickness, and flared shell lip.

Comment 13: Several commenters suggested that demographic and exploitation thresholds should not be equally applied across all jurisdictions due to the nuances of individual fisheries. The commenters argued that the differences among jurisdictions should be accounted for and therefore different thresholds should be considered for each individual jurisdiction.

Response: The status review report used threshold values of population densities associated with reproductive capacity and harvest levels that are generally considered sustainable. Those thresholds were compared against the available information on population density and harvest levels as a tool to evaluate the population in each jurisdiction; however, we did not use these thresholds as definitive measures of population status. Instead, thresholds were used to flag whether jurisdictions, eco-regions, or macro-regions merited further evaluation as being potentially at higher risk for viable queen conch populations. Flagged locations were subjected to additional scrutiny including evaluation of local and regional differences in data collection programs, population productivity, connectivity, and management regimes. In the status review report, the species was evaluated across four demographic factors for viability (*i.e.*, abundance, growth rate/productivity, spatial structure/connectivity, and diversity) and five major threat categories as identified in section 4(a)(1)(A)–(E) of the ESA (*i.e.*, present or threatened destruction, modification, or curtailment of its habitat or range; over-utilization of the species for commercial, recreational, scientific, or educational purposes; disease or predation; inadequacy of existing regulatory mechanisms; and other natural or manmade factors affecting its continued existence) across its entire range. We evaluated these factors and threats across the entire range of the species, then within individual jurisdictions, and ultimately across 10 distinct ecoregions within the range of the species. This approach ensured that all risk factors were evaluated at both small and large spatial scales, and no single factor was relied upon to determine the extinction risk at any one location.

Comment 14: One commenter noted that the cause of reproductive failure of queen conch in the Florida Keys is unknown, and cautioned NMFS to consider this issue in the derivation of future regulations.

Response: NMFS acknowledges this issue and discusses the phenomenon in the status review report and the proposed rule (87 FR 55220). Nearshore populations seem to be disproportionately affected by the described phenomenon. Given that heavy metals have been documented to impair egg-laying in gastropods, several experts in the field have speculated that the presence of ambient heavy metals in the Florida Keys is likely contributing to reproductive failure in the nearshore

environment, however, further research is necessary to definitively determine causality. We look forward to working with stakeholders in the Florida Keys to address knowledge gaps and promote the recovery of regional queen conch populations.

Comment 15: One commenter noted that subpopulations of queen conch exist in Florida due to larval settlement patterns and barriers to connectivity. In particular, the commenter discussed the importance of the Hawk Channel in the Florida Keys as it represents a unique barrier that limits connectivity among inshore and offshore populations in the Keys that does not exist in other jurisdictions. The commenter stated that this barrier in the Keys limits the ability of individuals from inshore populations to migrate based on unfavorable environmental conditions.

Response: Queen conch require physical contact to procreate; however, their ability to move is hindered by various barriers throughout its range, such as deep water passages, physical features of insular shelves, and manmade structures. We agree with the commenter that the Hawk Channel is a particularly large barrier. The status review report and the proposed rule note the potential impacts of Hawk Channel on connectivity and that it may be limiting movement, thereby limiting the formation of spawning aggregations in the Florida Keys.

Comment 16: One commenter requested that NMFS contact one particular researcher that has an extensive knowledge of queen conch and the fishery throughout the region.

Response: The publications of the researcher in question were used to inform the status review. In addition, the researcher that was mentioned provided public comment on the proposed rule, and we have considered that comment, which was generally supportive of the proposed rule.

Comment 17: One commenter requested that NMFS summarize the uncertainty associated with the habitat model that was used in the status review to estimate total area of queen conch habitat throughout its range and provide uncertainty estimates.

Response: NMFS used a habitat model published in Vaz *et al.* (2022) to estimate the total area of queen conch habitat throughout its range. The habitat estimates presented in Vaz *et al.* (2022) were based on coral reef locations from the Millennium Coral Mapping Project (Spalding *et al.* 2001; IMaRS–USF 2005; IMaRS–USF and IRD 2005; Andréfouët 2008; UNEP–WCMC *et al.* 2021), and restricted to depths of less than 20 m (Salley 1986; Berg Jr. *et al.* 1992;

Boidron-Metairon 1992; Stoner and Sandt 1992; Stoner and Schwarte 1994; Delgado and Glazer 2020). Vaz *et al.* (2022) also included known spawning sites, including putative deep-water spawning locations, in the habitat layer, by ground-truthing the habitat map with spawning sites reported in the literature (Randall 1964; D’Asaro 1965; Brownell 1977; Davis *et al.* 1984; Weil and Laughlin 1984; Coulston *et al.* 1987; Wilkins *et al.* 1987; Wicklund *et al.* 1991; Berg Jr. *et al.* 1992; García-Escobar *et al.* 1992; Stoner and Sandt 1992; Márquez-Pretel *et al.* 1994; Lagos-Bayona *et al.* 1996; Pérez-Pérez and Aldana-Aranda 2003; Garcia-Sais *et al.* 2012; Cala *et al.* 2013; de Graaf *et al.* 2014; Meijer zu Schlochtern 2014; Wynne *et al.* 2016; Truelove *et al.* 2017). This review led to the inclusion of 13 shallow-water polygons not initially present in the Coral Mapping Project-derived habitat layer. These areas were in St. Eustatius, U.S. Virgin Islands (USVI), Colombia, Florida, Mexico, Jamaica, Saba, Bonaire, and The Bahamas (Randall 1964; Coulston *et al.* 1987; García-Escobar *et al.* 1992; Márquez-Pretel *et al.* 1994; Meijer zu Schlochtern 2014; Truelove *et al.* 2017). Vaz *et al.* (2022) also included additional 14 polygons containing putative deep spawning sites in waters off of Venezuela, Cuba, The Bahamas, USVI, Turks and Caicos Islands (TCI), Saba, Colombia, Belize, Honduras, Puerto Rico and Jamaica (*i.e.*, Pedro Bank) (Randall 1964; Brownell 1977; Davis *et al.* 1984; Weil and Laughlin 1984; Wicklund *et al.* 1991; Stoner and Sandt 1992; Lagos-Bayona *et al.* 1996; Aiken *et al.* 2006; Garcia-Sais *et al.* 2012; Cala *et al.* 2013; de Graaf *et al.* 2014; Truelove *et al.* 2017).

Uncertainty associated with the habitat area estimates were not reported for the data sources used to derive the Vaz *et al.* (2022) habitat model. To evaluate uncertainty in their habitat categorizations, Vaz *et al.* (2022) compared their habitat model estimates to published seagrass habitat cover and conch fishing areas (supplemental information figure 3 in Vaz *et al.* 2022), including compilations of global geomorphic zones (UNEP–WCMC and Short 2021; Allen Coral Atlas 2020; McKenzie *et al.* 2020; Schill *et al.* 2021); studies focused on jurisdictions or regional levels (Wabnitz *et al.* 2008; Tewfik *et al.* 2017; León-Pérez *et al.* 2019); and documented fishing sites (compiled in Prada *et al.*, 2017). Overall, Vaz *et al.* (2022) found that estimates of seagrass area by jurisdiction were highly variable, and estimates of conch fishing areas were generally much lower than

the highest estimates of seagrass cover. Vaz *et al.* (2022) concluded that their final habitat model represented a conservative measurement of conch habitat throughout the Caribbean.

Comments on Existing Regulatory Mechanisms

Comment 18: Several commenters stated that local regulations are sufficient to recover the queen conch population, or that they were already effective in preventing the decline of the species in local jurisdictions.

Response: We disagree that existing regulatory mechanisms are adequate to prevent the decline of queen conch. The status review assessed the adequacy of regulatory mechanisms in each jurisdiction relative to the threats impacting the status of queen conch, and we concluded that existing regulations were unlikely to prevent queen conch from becoming in danger of extinction within the foreseeable future throughout its range.

We recognize that efforts are being made throughout the region to responsibly manage the queen conch fishery. However, many populations continue to decline, particularly in the central/southern Caribbean, despite these efforts. In addition, the regulatory mechanisms in place for minimum sizes, harvest rules, and landing methods are inadequate in many jurisdictions. For example, in many jurisdictions, current regulations allow the harvest of immature individuals. Moreover, as detailed in the proposed rule, many jurisdictions lack effective enforcement of their existing regulatory mechanisms and evidence of illegal, unreported, and unregulated (IUU) fishing undermines the ability of such mechanisms to prevent further declines. Only a fraction of the jurisdictions (*i.e.*, Belize, The Bahamas, Jamaica, Nicaragua, and Colombia) are conducting periodic surveys to inform their national harvest quotas. Several jurisdictions (*e.g.*, Curacao and Trinidad and Tobago) have no regulations despite having queen conch fisheries.

Despite some potentially effective local efforts to protect conch populations, when considering management strategies throughout the range of the species, most efforts have fallen short of their goals. Due primarily to a lack of population surveys, assessments, and monitoring, and a reliance on minimum size-based regulations that likely do not prevent the harvest of immature conch or protect spawning stocks, we conclude that existing regulatory mechanisms throughout the range of the species are inadequate to achieve their purpose of

protecting the queen conch from unsustainable harvest and continued populations decline. The commenters provided no new information suggesting that new regulations have been implemented, that regulations exist that were not previously considered in making our listing determination, or that there is evidence that the existing regulations are effectively enforced or more effective than we considered.

Comment 19: Several commenters mentioned that inadequate enforcement of existing regulations is one of the primary threats to the queen conch population throughout the region. Similar comments mentioned that overutilization by IUU fishing was a significant contributor to the decline of the species.

Response: We agree that inadequate enforcement of existing regulations and IUU fishing are serious threats to the queen conch population throughout its range. We discussed these factors in the proposed rule and in response to comment 18.

Comment 20: One commenter encouraged NMFS to increase support for collaborative efforts to address IUU fishing throughout the region, because this is the largest threat that the queen conch is facing.

Response: As outlined in the status review and the proposed rule, NMFS recognizes the detrimental impact of IUU fishing on the population of queen conch as a serious threat throughout the region. We plan to work with regional stakeholders to foster collaborations and address this threat as we strive to implement actions that will promote the recovery of the species.

Comment 21: Several commenters expressed concern that the ESA listing would penalize particular regions or jurisdictions that have implemented sustainable regulations to protect queen conch as a result of detrimental actions in other jurisdictions.

Response: Under section 4(b) of the ESA, we are required to base listing decision solely on the best scientific and commercial data available after conducting a review of the status of the species, and after taking into account conservation efforts to protect the species (16 U.S.C. 1533(b)(1)(A)). When making a listing decision, we cannot consider economic impacts or other potential impacts that may result from a listing. Our decision to list the queen conch as a threatened species does not automatically result in take prohibitions, nor does it automatically impose any restrictions on trade in queen conch. However, under section 7(a)(2) of the ESA, listing does result in a requirement for Federal agencies to

ensure that activities they carry out, fund, or authorize are not likely to jeopardize the continued existence of the species (16 U.S.C. 1533(d)). Section 4(d) of the ESA also authorizes us to issue protective regulations we deem necessary and advisable for the conservation of threatened species (16 U.S.C. 1533(d)). Under section 4(d) of the ESA, we may also prohibit any of the actions that are prohibited under section 9(a)(1) of the ESA for endangered species, including import into and export from the United States of the listed species. Protective regulations would be tailored specifically to prevent further decline and facilitate recovery, and would be issued through a separate rulemaking with further opportunity for public comment.

Because the queen conch is an invertebrate, we cannot list this species as distinct population segments, and therefore we cannot limit this species' listing to certain jurisdictions. Any future regulatory impacts associated with listing queen conch under the ESA apply within the United States, U.S. Territories, and any persons subject to U.S. jurisdiction. While we encourage other jurisdictions to implement actions to recover queen conch populations in light of this listing determination, we cannot enforce regulatory actions in foreign jurisdictions.

Comment 22: Several commenters suggested that NMFS consider other actions to facilitate the recovery of the queen conch population rather than an ESA listing, including regional collaborations, such as working with WECAFC or stricter CITES regulations.

Response: Section 4 of the ESA requires that we make listing determinations based solely on the best scientific and commercial data available after conducting a status review of the species and after taking into account efforts being made to protect the species (16 U.S.C. 1533(b)(1)(A)). In the proposed rule, we provided an assessment of existing regulations, including those associated with the CITES Appendix II, as well as other conservation measures currently underway in the region to account for efforts being made by any state or foreign nation to protect the species. We also evaluated the certainty of whether formalized conservation efforts will be implemented and will demonstrate effectiveness in accordance with the Policy for Evaluation of Conservation Efforts (68 FR 15100, March 28, 2003). The evaluation conducted under this policy assesses whether these conservation efforts are sufficiently certain to be implemented and effective

such that that they contribute to making it unnecessary to list a species, or to list a species as threatened rather than endangered. As explained in the proposed rule, and further expanded upon in comment 20, we concluded that existing regulatory mechanisms are inadequate to control overutilization of the species, and various protective efforts are not sufficient to change the species' risk of extinction. We acknowledge that the Seafood Import Monitoring Program of the United States includes the queen conch as one of the species monitored to combat IUU fishing and therefore promotes sustainable harvest. We are also aware of restoration efforts being carried out to promote population recovery (e.g., Florida Atlantic University Queen Conch Aquaculture program), as well as the recovery of queen conch habitats, including coral reefs (e.g., Coral Reef Conservation Program) and seagrasses (e.g., Restore Act), all of which will in turn promote the recovery of the species. Despite fishery management regulations aimed at controlling commercial harvest, poor enforcement, inappropriate management measures, and significant IUU fishing demonstrate that the existing regulatory mechanisms throughout much of the range of the species are inadequate to control overharvest and therefore are contributing to continued population decline. We note that the integration of efforts by FAO, CFMC, WECAFC, and the Organizacion del Sector Pesquero y Acuicola del Istmo Centroamericano (OPESCA) to coordinate and improve management and combat IUU fishing region-wide, is an encouraging sign, as their goals are to improve fishery data collection and establish reliable landings data based on scientifically supported conversion factors and management measures (Horn *et al.* 2022).

Comment 23: One commenter suggested that NMFS did not account for the ability of range states to adapt management policies based on their own queen conch population projections, such as has occurred in The Bahamas. According to this commenter, The Bahamas has greatly reduced queen conch exports in favor of meeting local demand due to population survey monitoring results.

Response: The status review report summarizes the adequacy of each jurisdiction's specific fisheries management regulations, in terms of their design and enforcement, on the status of queen conch populations across the range of the species, and includes a detailed Supplemental File describing regional management strategies (Supplemental File 1 in Horn

et al. 2022). We understand The Bahamas policy referenced by the commenter is not an enforceable regulation, but rather a suggested policy. While we support all strategies that have the potential to reduce over-exploitation of the species, without data to support the effectiveness of such strategies, such as increased population density or increased reproductive output, we cannot rely on them to support a decision not to list a species that otherwise meets the definition of threatened.

Comment 24: Several commenters stated that their particular jurisdictions were promoting queen conch recovery via CITES management measures (including quotas, exploitation rates and density thresholds) and CRFM legislation, and therefore the ESA listing is unnecessary.

Response: The status review report and proposed rule considered existing regulations and recovery efforts, including those mentioned by the commenters (see the Inadequacy of Existing Regulatory Mechanisms section in Horn *et al.* (2022) for a jurisdiction by jurisdiction breakdown of regulatory mechanisms). We are encouraged by local recovery efforts, and intend to partner with local stakeholders to complement these types of efforts with our own to ultimately promote the recovery of the species.

Comments on Threats

Comment 25: One commenter asked what specifications allow a species to be listed under the ESA, whether different species have different specifications for a listing, whether a species can be listed based on loss of habitat, and whether overfishing of queen conch in one location can lead to a listing even if healthy populations exist elsewhere.

Response: A species is considered "endangered" if it is in danger of extinction throughout all or a significant portion of its range, whereas a "threatened" species is defined as any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. As mandated by the ESA, we are required to determine whether a species is threatened or endangered because of any of the factors identified in section 4(a)(1)(A)-(E) of the ESA. A species may be listed as threatened or endangered as a result of any one or more of those factors (threats). The particular circumstances and threats that contribute to a particular species' listing under the ESA are highly fact- and case-specific, but each listing determination must be based on the best scientific and

commercial data available and be supported by those data.

One of the section 4(a)(1) factors (factor A) specifically addresses habitat loss as a potential basis for listing. However, with regard to queen conch, we concluded that at this time, the best available information indicates that habitat loss and degradation are not significantly contributing to the species' extinction risk. As outlined in the status review report, factor B, overutilization for commercial, recreational, scientific, or educational purposes, was identified as the primary contributor to the listing determination. The extinction risk analysis was conducted on the entire range of the species, assessing demographic trends, including productivity and connectivity across 39 unique jurisdictions. Overall, we concluded that overfishing, coupled with inadequate regulatory mechanisms to control overfishing, in particular jurisdictions is having adverse effects across the range of the species such that the species is likely to become an endangered species within the foreseeable throughout its range.

Comment 26: Several commenters pointed out that the exploitation rate of 8 percent for the adult queen conch populations referenced in the proposed rule was intended as a guideline to be used in data-limited situations as opposed to a firm threshold that cannot be surpassed in data-rich fisheries. These commenters suggested that their own jurisdictions could in fact surpass this threshold given the status of their monitoring programs and fishery regulations.

Response: We did not use the exploitation rate of 8 percent as a definitive threshold to evaluate the status of queen conch fisheries across all jurisdictions. Instead, we used it as a tool to flag areas that exhibited high amounts of harvest relative to the local population. We evaluated the threat of overutilization of conch populations across many factors including density thresholds, available habitat, and exploitation rate. In particular, we note that 51 percent of jurisdictions were above the 8 percent exploitation rate; 80 percent of those had densities below 100 adult conch/hectare and 65 percent had densities below 50 adult conch/hectare.

The commenters have not provided any new data or information derived from their monitoring programs beyond what was considered in the status review report and proposed rule. Moreover, the commenters did not identify better available scientific or commercial information that would lead us to change our determination.

Comment 27: Fourteen commenters recommended listing queen conch as endangered; one commenter specifically mentioned that the ESA section 4(a) risk factors support listing queen conch as an endangered species, rather than a threatened species. One commenter in particular stated that because overfishing (factor B) is reducing queen conch populations and there is no foreseeable reduction in fishing pressure, queen conch will continue on the path towards extinction, which the commenter equates with the standard for listing the species as endangered. This commenter also stated that existing regulatory mechanisms (factor D) over the past 30 years have not succeeded in recovering queen conch populations. According to this commenter, NMFS should list the species as endangered because once the population falls below critical density thresholds, it is at risk of extinction, and NMFS should not wait to list the species as endangered until this threat becomes more severe, which the commenter believes will occur in less than 30 years.

Response: We disagree that the queen conch should be listed as an endangered species. As explained in the proposed rule, the key statutory difference between a threatened and endangered species is the timing of when a species may be in danger of extinction, either now (endangered) or in the foreseeable future (threatened). We have concluded that the queen conch is not presently in danger of extinction, but is likely to become so in the foreseeable future. The status review team conducted an extinction risk analysis whereby risk categories (*i.e.*, low, medium, high) were assigned to the threats and the demographic risks to the species throughout its range. Guided by the results of their demographic risk analysis and the threats assessment, the status review team used their informed professional judgement to make an overall extinction risk determination for the queen conch. The SRT ultimately concluded that queen conch is facing a moderate risk of extinction, meaning that it is on a trajectory that puts it at a high level of extinction risk within the foreseeable future.

As stated in the proposed rule and in our response above to comment 4, we evaluated the SRT's conclusions regarding extinction risk and ongoing and planned conservation efforts for queen conch. We considered each of the statutory factors to determine whether it presented an extinction risk to the queen conch on its own, now or in the foreseeable future, and also considered the combination of those factors to determine whether they collectively

contribute to the extinction risk of the species, currently or in the foreseeable future. Based on our consideration of the best available scientific and commercial information, as summarized here, including the SPR analysis, we conclude that while queen conch is not currently in danger of extinction throughout all or a significant portion of its range, it is likely to become so within the foreseeable future as a result of ESA section 4(a)(1) factors: B (overutilization for commercial, recreational, scientific, or educational purposes); D (inadequacy of existing regulatory mechanisms to address identified threats); and E (other natural or human factors affecting its continued existence).

We conclude that the species does not currently have a high risk of extinction due to its broad distribution, its presence throughout its geographic range, and the significant connectivity between reproductively viable locations and other locations with reduced populations throughout the species' range. The commenters did not provide any new or better information about any threats that NMFS failed to consider in reaching its determination that the species' extinction risk is in the foreseeable future. Nor did the commenters suggest that NMFS relied on anything other than the best available information in assessing the threats.

Based on our consideration of the best data available, and as explained above, we do not find that queen conch is presently in danger of extinction. We also disagree that a species that is currently on a path towards extinction is necessarily equivalent to a species that is currently in danger of extinction. A species that is on a path towards extinction is, however, consistent with our determination in this case that queen conch is likely to become endangered in the foreseeable future, *i.e.*, threatened.

While we agree with the commenter that factor D is a threat to the species, we disagree that this threat means the species is currently at risk of extinction. Our decision to list the species as threatened does not mean that we will wait until the threats become more severe before we undertake actions to recover the species. To the contrary, after the species is listed, we will work on developing a recovery plan that will guide future efforts to change the species' trajectory toward recovery. To the extent this comment disagrees with NMFS's definition of the foreseeable future, we address that comment in response to comment 29.

Thus, while we recognize that the commenters would have reached a

different assessment of the species' extinction risk based on the information NMFS relied upon, the commenters did not provide any information that would change our conclusion that the queen conch is not presently in danger of extinction, but is likely to become an endangered species within the foreseeable future.

Comment 28: One commenter stated that queen conch should be listed as endangered because ocean temperature, ocean acidification, and possible changes in Caribbean circulation patterns, all of which are associated with climate change (factor E), represent serious threats to the continued viability of the queen conch. This commenter also stated that because NMFS determined that the foreseeable future for climate change extends out to the year 2100, there may not be sufficient levels of queen conch to protect, or enough density to continue reproducing, given the current decline.

Response: NMFS agrees with the commenter that ocean temperature, ocean acidification, and changes in circulation patterns present threats to queen conch. We disagree, however, that these climate-change associated threats mean the species is currently at risk of extinction and thereby warrant listing the species as endangered. The climate-change associated threats have been evaluated for the foreseeable future (*i.e.*, to the year 2100), when we expect them to present greater challenges to the viability of queen conch. If a species is at risk of extinction in the foreseeable future, but not presently, then a threatened listing is warranted instead of an endangered one.

We selected a longer timeframe associated with the threat of climate change, out to the year 2100, because of the availability of long-term predictions of increasing climate change and associated predicted impacts on queen conch. The commenter did not provide a scientifically defensible alternative to the foreseeable future values that were developed and applied in the status review report. With respect to the year 2100 (equal to roughly 8–18 generations), the commenter is concerned that populations of queen conch will be too depleted to be recovered at that time, if they do not receive the protections of an endangered status. We also note that by listing queen conch as a threatened species, the goal is to alleviate the effects of such threats before the species becomes endangered. Once listed under the ESA, we are required to review the status of the species every 5 years, thereby ensuring that we monitor the status of

this species and the appropriateness of its classification as threatened.

As explained in response to comment 27, our determination that the species is likely to become in danger of extinction in the foreseeable future (*i.e.*, threatened) does not mean that we will wait until the effects associated with climate change occur before undertaking actions to recover the species. While the commenter disagrees with our assessment that 2100 represents the foreseeable future as it relates to climate change (factor E), the commenter does not assert that threats associated with climate change represent an imminent extinction risk for queen conch. Thus, even if the commenter believes NMFS should have selected a shorter timeframe as the foreseeable future associated with climate change, the commenter's acknowledgement that climate change presents threat to species' risk of extinction within the foreseeable future is consistent with our determination to list the species as threatened.

Comment 29: One commenter asserted that NMFS erred in limiting the foreseeable future as 30 years for factors B and D. The commenter stated that previous management measures that were enacted well over 30 years ago have yet to recover populations in individual jurisdictions.

Response: The "foreseeable future," in the context of an ESA status review, is the time period over which we can reasonably determine that both the future threats and the species' responses to those threats are likely. After we published the proposed rule to list queen conch as a threatened species, NMFS and the USFWS jointly proposed to revise the interpretation of "foreseeable future" in the definition of a "threatened species," as extending as far into the future as we can reasonably rely on information about the threats to the species and the species' responses to those threats (88 FR 40764, June 22, 2023). Applying either interpretation, we must have a reasonable degree of confidence in the prediction based on the best available information.

Regarding listing factors B and D, the foreseeable future of 30 years indicates that we anticipate both the threats associated with those factors and their continued impact on queen conch are likely to be realized over that period. As the commenter points out, restrictions that were put in place over 30 years ago (equal to roughly 3–6 generations) have not resulted in fully recovered populations; however, some of those specific jurisdictions (*e.g.*, Florida) have seen initial signs of recovery which have resulted in some of the highest

densities of aggregating individuals (Delgado and Glazer 2020) recorded throughout the range of the species. Additionally, recovery within a particular jurisdiction will depend on the larval dynamics associated with that sub-population, such that self-recruiting populations will have greater benefits resulting from no-take prohibitions, while other jurisdictions will need to rely on upstream sub-populations to augment recovery.

We continue to find that the foreseeable future timeframes applied to queen conch are appropriate and that we can reasonably determine that both the threats and the species' responses to the threats are likely to occur within those timeframes.

Comment 30: One commenter asserted that NMFS failed to analyze all of the statutory factors in ESA section 4(a)(1)(A)–(E) when determining whether queen conch should be listed as endangered or threatened. Namely, the commenter indicated that NMFS failed to analyze factors A (*e.g.*, the present or threatened destruction, modification, or curtailment of its habitat or range) and C (*e.g.*, disease or predation). The commenter went on to assert that the habitat of queen conch exhibits destruction and curtailment throughout its range, which is likely a result of risk factors B, D, and E. The commenter further indicated that climate change will exacerbate this destruction and therefore precautionary actions should be taken to acknowledge the habitat destruction in the jurisdiction of the United States.

Response: We disagree. We considered all five statutory factors (ESA section 4(a)(1)(A)–(E)) in reaching our determination that the queen conch warrants listing as a threatened species under the ESA. With respect to factor A, the SRT concluded that (i) habitat stability, quality, and resilience is decreasing in many parts of the Caribbean due to anthropogenic activities that have led to direct and indirect impacts to seagrass and substrate, which are important to queen conch, (ii) increased pollutants, contaminants, and microplastics are impacting conch via their habitats, and (iii) the severity of these habitat related threats depend on the spatial scope and temporal persistence of the specific activities and the local demographics of queen conch populations. Nonetheless, the SRT concluded that the best available information indicates that habitat loss and degradation alone are not threatening the species' persistence. Additionally, with respect to factor C, we concluded that the best available information indicates that an organism,

which may be parasitic, is prevalent in all the sampled conch specimens throughout the Caribbean and that several studies suggest that the organisms are correlated with irregularities in reproductive cycles and reduced gametogenesis, while other studies are contradictory, suggesting that the organisms had no negative effects on health or reproduction. With respect to predation, the SRT concluded it is not believed to currently be a factor that is influencing the status of queen conch.

As explained in the proposed rule, we concluded that the SRT's findings on all five factors in ESA section 4(a)(1)(A)–(E), including factors A and C, were well-considered and based on the best available scientific information. We concurred with the SRT's assessment and found that the best available information does not indicate that factors A and C are operative threats on this species (87 FR 55209, September 8, 2022).

Comment 31: One commenter mentioned that it was contradictory to state that ESA section 4(a) risk factor A was not significantly contributing to the extinction of the species, while also acknowledging that specific jurisdictions may require habitat protections or regulations, adding that such measures would not be warranted if no threats to the species' habitat existed.

Response: We disagree that the need for measures to protect a species' habitat means that factor A must always be significantly contributing to the extinction risk of the species. In this case, the present or threatened destruction, modification, or curtailment of the species' habitat or range is not currently a factor contributing to the queen conch's overall extinction risk. At the same time, there are some areas, such as in Bermuda, where regulations aimed at protecting local habitat or water quality may be warranted. The fact that one jurisdiction may need additional measures to protect queen conch habitat within that jurisdiction does not necessarily mean that habitat destruction, modification, or curtailment is contributing to the species' extinction risk throughout all or a significant portion of its range.

Comment 32: Several commenters asserted that NMFS failed to provide a substantive analysis of the cumulative impact of the five factors (ESA section 4(a)(1)(A)–(E)). These commenters suggested that the cumulative impact of threats to queen conch supports listing the queen conch as an endangered species, rather than a threatened

species. The commenter further asserted that NMFS failed to provide any quantitative or qualitative assessments or estimates of the overall extinction risk for the queen conch.

Response: We disagree. NMFS considered all five listing factors in combination in determining whether to list the queen conch under the ESA. The analysis in the status review report considered and evaluated the species overall extinction risk resulting from the threats assessment as well as the demographic assessment. The overall extinction risk analysis ranking considers the cumulative impact of all identified threats and risks to the species. In the proposed rule, we describe in detail the relationship between the inadequacy of existing regulatory measures and enforcement to control the threat of overutilization, which translates into demographic concerns of low reproductive densities and disrupted population connectivity. Additionally, in our discussion of indirect impacts of climate change on queen conch (as part of our discussion of factor E), we discuss how higher temperatures could impact the availability of sea grasses and oxygen and salinity levels, all of which would impact the species habitat, food sources and availability of shelter from predators. We also discuss how ocean acidification could affect shell formation, which plays a vital role in protection from predators, parasites, and unfavorable environmental conditions.

We acknowledge that more information is needed to better understand the population consequences of multiple stressors, especially those associated with interactions between long-term climate change such as sea level rise and increased erosion, turbidity, siltation, and severity of tropical storms. These threats have the potential to produce more widespread impacts, especially as they affect key ecological processes during early life stages such as larval dispersal, growth, and predation and whether presence of parasites increases the species' extinction risk. Despite this need for more information and as explained above in our response to comment 27, we disagree that queen conch is currently at risk of extinction and should be listed as an endangered species. We find that the best available scientific and commercial information indicates that the species is likely to become "endangered" (in danger of extinction) "within the foreseeable future," which is consistent with listing the species as threatened.

In support of this listing determination, the SRT conducted a

qualitative assessment of the overall extinction risk for the queen conch. This assessment is discussed in detail in the status review report (Horn *et al.* 2022). There is no requirement under the ESA that NMFS conduct a quantitative assessment of extinction risk, and sufficient data to perform quantitative analyses of extinction risk are often not available. As we described in the proposed rule, based on demographic risk factors and threats to the species, the SRT evaluated the overall extinction risk for queen conch using a "likelihood point" (Forest Ecosystem Management Assessment Team 1993) method to express each team member's assessment of extinction risk across all factors and capture their uncertainty in that assessment. As discussed in more detail in the status review report, each of the 7 SRT members distributed 10 "likelihood points" among 3 extinction risk categories: (1) low risk; (2) moderate risk; and (3) high risk. The SRT placed 59 percent of their likelihood points in the "moderate risk" category. Due to uncertainty, particularly regarding consistent reporting of landings and survey methodologies, the SRT also placed some of their likelihood points in the "low risk" (30 percent) and "high risk" (11 percent) categories. Based on this analysis, the SRT concluded that the queen conch is currently at a "moderate risk" of extinction. We agreed that the SRT's approach to assessing the extinction risk for queen conch was appropriate, consistent with our agency practice, and based on the best scientific and commercial information available. After considering the SRT's assessment, we concluded that the queen conch is not currently in danger of extinction, but is likely to become so in the foreseeable future throughout all of its range.

Comments on Social, Economic, or Cultural Factors

Comment 33: Several commenters provided a social or cultural rationale as to why the species should not be listed under the ESA. The commenters referred to the cultural and social importance of queen conch in the form of traditional cuisine, subsistence, nutrition, and historical cultural values and beliefs.

Response: NMFS is mandated under the ESA to determine whether a species is an endangered or threatened species "solely on the basis of the best scientific and commercial data available" (16 U.S.C. 1533(b)(1)(A)). Therefore, we are not allowed to consider social, economic, or cultural factors when deciding whether to list a species under the ESA. Within U.S. jurisdiction, the

listing of listing queen conch as a threatened species under the ESA does not create additional user regulations beyond those that are already in place; therefore, this rule is not anticipated to impact the cultural or social importance of queen conch within the United States. The ESA listing will have no effect on the citizens of other nations, outside the jurisdiction of the United States, and thus would not restrict traditional uses there. Any potential regulations under the authority of the ESA for the species would be developed through a separate rulemaking process under section 4(d) of the ESA, whereby NMFS can tailor the rule to specifically address conservation needs. Public comment would be solicited and considered, along with economic and social impacts, in the development of any future 4(d) regulations.

Comment 34: Several commenters suggested that better outreach and educational programs are needed to inform stakeholders about how species can get listed under the ESA, citing concerns over equity and environmental justice. Specifically, commenters suggested that NMFS coordinate with under-served communities to promote outreach and education opportunities due to unawareness of regulations and local management strategies.

Response: Prior to publication of the proposed rule, NMFS sent Spanish-speaking staff to discuss the queen conch status review with the CFMC and WECFAC working groups. Following publication of the proposed rule, NMFS provided English, Spanish, French, Dutch, and Creole versions of the proposed rule; along with English and Spanish versions of Frequently Asked Questions. Additionally, NMFS provided an after-hours virtual public hearing presentation and question and answer session, with live Spanish-language interpretation services and English, French, German, Spanish, and Italian closed captioning translation options. Spanish-speaking staff have attended several CFMC and District Advisory Panel meetings to provide presentations and updates on queen conch rulemaking.

Although NMFS has made good faith efforts to engage under-served communities in the development of this final rule, we recognize there is room for improvement. NMFS identified outreach and engagement as a core component of the new National Equity and Environmental Justice (EEJ) strategy released in May of 2023 (<https://media.fisheries.noaa.gov/2023-05/NOAA-Fisheries-EEJ-Strategy-Final.pdf>). The three overarching goals of the strategy are to: (1) prioritize

identification, equitable treatment, and meaningful involvement of underserved communities; (2) prioritize equitable delivery of services; and (3) prioritize EEJ in our mandated and mission work with demonstrable progress. Our outreach and engagement objective aims to build relationships with underserved communities to better understand their engagement preferences and improve information sharing with all communities.

We are currently working to operationalize the national EEJ strategy in the Southeast Region through the development of a Southeast EEJ Implementation Plan. That plan is being informed by feedback we received in response to a public Request for Information, along with information we obtained through a series of focus group meetings conducted with underserved community members and liaisons throughout the region. We will continue to coordinate with underserved communities on outreach and education initiatives as we work to incorporate EEJ into the vital services we provide to all communities.

Comment 35: One commenter suggested that NMFS should increase outreach and education programs to warn fishers of the dangers of IUU fishing and overexploitation as there is a lack of awareness of local management strategies and regulations.

Response: We agree that increased outreach and education programs could promote queen conch fishery sustainability throughout the region, and we look forward to working with regional partners to promote such programs, as appropriate, to facilitate the recovery of the species.

Comment 36: Several commenters requested that the public documents, presentations, rulings, listings in the **Federal Register**, and other communications put forward by NMFS should be provided in Spanish.

Response: The issue of language alternatives was brought to our attention early on during the public comment period. In response, we provided English, Spanish, French, Dutch, and Creole versions of the proposed rule; English and Spanish versions of Frequently Asked Questions and the public hearing presentation; and live Spanish-language interpretation services and English, French, German, Spanish, and Italian closed captioning translation options for the public hearing. To the extent possible, we will similarly prepare English, Spanish, French, Dutch, and Creole versions of the final rule, and we will continue to provide English and Spanish versions of frequently asked questions and other

documents that will be developed as a part of the recovery planning process.

Comment 37: One commenter suggested that NMFS is undermining local stakeholders to ensure that the queen conch is listed under the ESA.

Response: While we disagree with the commenter's assertion, we recognize the important role of stakeholders as we work together to recover the species. NMFS received a petition to list the species, and we are carrying out our statutory responsibilities under the ESA. Listing queen conch as a threatened species under the ESA recognizes the objectively determined status of the species and provides support from the Federal Government towards the recovery of the species.

Comment 38: One commenter suggested that NMFS is implementing "draconian measures" on resources in the U.S. Caribbean, which equates to "institutional racism and discrimination." The commenter elaborated by mentioning that these issues fall under "equity and environmental justice."

Response: We disagree. By listing a species under the ESA, NMFS is executing its statutory responsibilities. As required by the ESA, we based our listing determination solely on the best scientific and commercial data available regarding the status of the species. Our procedures, some prescribed by statute and others by Agency regulations or policies, are focused on ensuring that our decisions are objective and based on the best available science. We recognized the need for further engagement with local stakeholders beyond conventional means, particularly to solicit input from underrepresented, marginalized, and underserved communities that may not have the technical training, technology, or experience needed to provide public comment via traditional platform, as explained in response to comment 34. As we develop further actions related to the queen conch, NMFS will continue to work to find ways to meaningfully engage with local stakeholders to promote the recovery of the species.

Comment 39: One commenter referenced the United Nations sustainable development goal 10, to "Reduce inequality within and among countries." The commenter expressed concern that the listing determination would inadvertently lead to inequality and limit inclusion by stakeholder groups.

Response: We disagree that our determination to list queen conch as a threatened species will lead to inequality and limit inclusion by stakeholder groups. We note that listing

of queen conch under the ESA has no regulatory effect beyond those required through ESA section 7 that Federal agencies consult with us on actions they authorize, fund, or carry out if those actions may affect the listed species or designated critical habitat within our jurisdiction. Under the ESA, we are also required to designate critical habitat for listed species to the maximum extent prudent and determinable (16 U.S.C. 1533(a)(3)(A)(ii)). Per our implementing regulations, however, we cannot designate critical habitat within foreign countries or in other areas outside the jurisdiction of the United States (50 CFR 424.12(g)).

While we acknowledge that economic, social, and cultural considerations cannot be considered during the listing process, we note that the listing determination was based on the best available science, and we took measures to ensure broad and inclusive stakeholder participation. Public comments were solicited and received after the 90-day positive finding (77 FR 51763, December 6, 2019) and again for an extended period after the publication of the proposed listing (87 FR 55200, September 8, 2022; 87 FR 67853, November 10, 2022). As noted above, substantial efforts were made to provide materials across numerous languages and to engage with stakeholders throughout the range of the species. Our public hearing, held on November 21, 2022, was formally noticed to representatives from over 30 state, Federal, and international organizations including CITES; WECAFC; CRFM; CFMC; the United States Department of State; the United States Congress; State/Territorial partners; over 6,000 subscribers to our Fishery Bulletin, including 4,000 in the U.S. Caribbean; and many others.

Should further rulemaking be initiated through section 4(d) of the ESA, other factors including economic, social, and cultural considerations can be incorporated into the decision making process. This process would provide additional opportunities for public comment, community engagement, and stakeholder inclusion.

Comment 40: Several commenters referenced the economic importance of queen conch to their fisheries, and commented that any further restrictions on catch would hinder economic growth and fishing community prosperity.

Response: NMFS is mandated under the ESA to make listing decisions "solely on the basis of the best scientific and commercial data available," after conducting a review of the status of the species and taking into account the efforts being made by any state or

foreign nation to protect the species. While we recognize the economic importance of queen conch to fishing communities, we cannot consider social, economic, or cultural impacts that may stem from a species' listing when determining whether to list that species under the ESA. Additionally, no fishing restrictions are being proposed at this time. Listing the species as threatened under the ESA does not automatically establish any take prohibitions, which would apply if the species were listed as endangered. However, based on our review of the current population trends of the species and the inadequacy of existing regulations to control the ongoing threat of overutilization, we intend to propose protective regulations pursuant to section 4(d) for queen conch in a future rulemaking. A future rulemaking on protective regulations will include an opportunity for additional public comment, including any comments related to the economic importance of queen conch. We will also develop a recovery plan for queen conch to identify actions and establish goals for conserving and recovering the species. The development of the recovery plan will also include an opportunity for public comment.

Comment 41: Several commenters pointed out that exports of queen conch out of their jurisdictions are already highly regulated and that the level of exports comply with CITES regulations to ensure sustainable resource use. Many of these commenters also mentioned that exports were primarily distributed to the United States and therefore U.S. law should not create any additional regulations that will inhibit exports of queen conch from their jurisdictions.

Response: In making our listing determination, we reviewed the best scientific and commercial data available and ultimately concluded that the species warrants listing as a threatened species under the ESA. Foreign regulatory measures and actions of other stakeholders, including a detailed analysis of management measures by jurisdiction, were considered during our determination. In the proposed rule, we reviewed existing regulatory measures and concluded that existing regulations are inadequate to control the ongoing threats of overutilization and climate change. We determined that despite CITES measures to ensure sustainable resource use, the species is likely to become endangered within the foreseeable future and therefore warrants a threatened listing status. A threatened listing under the ESA does not automatically establish any

restrictions on imports into the United States. However, as stated in our response to comment 40, we recognize the threat of overutilization throughout the range of queen conch and we intend to propose protective regulations pursuant to section 4(d) for the queen conch in a future rulemaking. Such regulations, including any potential import restrictions, will be proposed in a separate rulemaking that will include an opportunity for additional public comment. We will also consider any comments related to export compliance with CITES regulations further in the subsequent rulemaking regarding protective regulations.

Comment 42: Several commenters mentioned that consumption of queen conch within local markets was exceptionally low and that their local fishery was only profitable by exporting their product, while others mentioned that local consumption was the only queen conch market that exists. These commenters assert that fishers within local jurisdictions do not apply sufficient fishing pressure to overharvest the species due to limited local demand and harvesting strategies.

Response: The proposed rule identified overutilization of the resource in the form of extraction as the primary threat to queen conch throughout its range. Many commenters provided evidence of industrial fishing driven by exports while others provided anecdotal evidence of high local consumption. We agree that industrial-scale fishing is a primary threat to the species. As we explain in the proposed rule, fishing pressure for local consumption remains difficult to quantify and varies considerably among locations. The high degree of impact from industrial fishing combined with the uncertainty of subsistence fishing efforts supports our decision to list the queen conch as threatened throughout its range. Although the contributions of industrial, artisanal, and IUU fishing are challenging to discretely quantify, the status review report clearly shows that overutilization, in aggregate, has contributed to declines in reproductive densities and fishery failures in many jurisdictions.

Comments on Recovery Planning and Recovery Actions

Comment 43: One commenter requested that NMFS implement protective measures that incentivize good practices instead of punishing unsustainable practices, recognizing that a collaborative, regional approach is essential to recover the species.

Response: We will consider these comments in a subsequent rulemaking

regarding protective regulations under section 4(d), which will include an opportunity for additional public comment. We will also consider these comments when we develop a recovery plan under section 4(f) of the ESA. We agree that a collaborative, regional approach is essential to recover the species.

Comment 44: One commenter requested that NMFS take specific actions related to the queen conch population in Florida. These requests include: (1) limit the social, economic, and cultural impact of the ESA listing to communities that depend on the imports, cultural significance, and tourism associated with the species, such as in the Florida Keys; (2) develop criteria to identify sustainable commercial fisheries throughout the Caribbean to allow for the import, export, and sale of commercially harvested queen conch in these fisheries; (3) coordinate an aquaculture program to further develop the capacity of existing operations and to promote new operations for recovery and commercial aquaculture purposes; (4) allow for the possession of queen conch shells, as it would be impossible to determine existing products compared to newly extracted ones; and (5) allow for conservation activities that are currently being carried out to continue unhindered.

Response: The actions requested by this commenter go beyond the scope of this rule. Subsequent actions, including developing a recovery plan, can consider these actions requested by this commenter. Similarly, any potential take prohibitions we might develop under the authority of ESA section 4(d) can be specifically tailored to consider regional needs. Therefore, we will consider this comment in the context of future actions, including recovery planning, and any separate rulemaking we may undertake pursuant to ESA section 4(d).

Comment 45: Several commenters requested that they be consulted and included in strategies to enhance the recovery of the species moving forward.

Response: We thank these commenters for identifying their interest in the recovery planning process. NMFS intends to work with regional stakeholders to identify the most effective actions and the best strategies to promote the recovery of the species. This will include consultations with stakeholders and recovery planning based on the best available information.

Comment 46: One commenter recommended that NMFS establish a regional initiative with the following components: (1) define and standardize

a queen conch assessment method; (2) standardize survey designs; (3) develop a more robust monitoring design, ideally using electronic monitoring; and (4) apply the developed initiative in three pilot countries to determine effectiveness and analyze the results.

Response: We appreciate these suggestions, although they are beyond the scope of this rule. The actions requested are appropriate for evaluation during the recovery planning process. During the development of the recovery plan, NMFS will consider this comment and solicit additional information and recommendations from a variety of stakeholders to develop effective strategies to promote the recovery of queen conch throughout its range.

Summary of Changes From the Proposed Listing Rule

We did not receive, nor did we find, data or references that presented substantial new information that would cause us to change our proposed listing determination. We did however, receive nine sources of new data (see comment 1), eight of which provided data that fit within the range of estimates considered in the status review report (Horn *et al.* 2022) and proposed rule. As stated above, the ninth new data source provided data that was derived using experimental methodology that has yet to be sufficiently validated and is not considered the best scientific information available. Therefore, while the new data contributed to our overall understanding of population dynamics and provided more refined local density estimates for populations in Antigua and Barbuda, The Bahamas, Belize, Florida, Nicaragua, San Andres Islands in Colombia, St. Vincent and the Grenadines, and the USVI, they did not alter the outcomes of the extinction risk analysis nor our interpretation of risk factors across the range of the species.

After the publication of our proposed rule (87 FR 55200, September 8, 2022) and during our analysis of public comments, NMFS adopted a new set of guidelines with regards to climate considerations during rulemaking processes. On May 9, 2023, NMFS officially recognized climate scenario SSP3–7.0 as the most likely predictor of future climate conditions, and therefore the climate scenario that should be used to evaluate climate change effects under the ESA. The proposed rule evaluated the ESA section (4)(a)(1) factors (specifically factor E) using the climate scenario SSP5–8.5. Climate scenario SSP3–7.0 is characterized by emissions and temperatures rising steadily, with carbon dioxide emissions roughly doubling and average temperatures

rising by 3.6 °C from current levels by 2100. While this scenario is more optimistic than scenario SSP5–8.5, the effects to queen conch and the corresponding extinction analysis are equivalent, as explained more fully below. ESA section 4(a)(1) factor E, other natural or man-made factors affecting the continued existence of the species, was highlighted by the SRT as one of the risk factors that was relevant to the listing determination in that climate change is significantly contributing to the species extinction risk in the foreseeable future, which in this case is the year 2100. The SRT highlighted high carbon dioxide levels, higher mean sea surface temperature, and possible changes to the Caribbean Sea circulation patterns as major threats to the species. The corresponding effects are predicted to include disruption to shell formation due to acidic ambient water conditions, negative implications on reproduction, and impacts to population-level connectivity and recruitment, respectively. The associated extinction analysis under climate scenario SSP5–8.5 was also conducted with the considerations into the foreseeable future (*i.e.*, 2100).

The climate considerations in the proposed rule represent a range of values and were used to analyze the effects on queen conch biology using possible trends that may occur under climate scenario SSP5–8.5. The environmental changes anticipated within the range of the species under climate scenario SSP3–7.0 do not alter our interpretation of anticipated trends in the climate change risk factor, nor do they affect our corresponding extinction analyses. Specifically, decreases in aragonite and larval shell calcification can occur at pH levels of 7.6–7.7, which are projected to occur by 2100 under climate scenario SSP3–7.0 due to elevated carbon dioxide levels. The anticipated mean sea surface temperature increases under scenario SSP3–7.0 are within the range evaluated in the status review report of 1.1–6.4 °C; thus, changes in reproductive biology are still anticipated. Additionally, the increase in water temperatures and its effects on circulation patterns in the Caribbean anticipated under climate scenario SSP3–7.0 are not substantively different from those considered in the proposed rule under SSP5–8.5, with similar impacts to conch connectivity and recruitment. Thus, the conclusions contained in the status review and determinations based on those conclusions in the proposed rule are reaffirmed in this final action.

ESA Section 4(a)(1) Factors Affecting the Queen Conch

As stated previously and as discussed in the proposed rule (87 FR 55200, September 8, 2022), we considered whether any one or a combination of the five threat factors specified in section 4(a)(1) of the ESA is contributing to the extinction risk of the queen conch. Several commenters provided additional information related to threats, such as overutilization, IUU fishing, inadequate regulatory mechanisms, and climate considerations. The information provided was consistent with or reinforced information in the status review and proposed rule, and thus, did not change our conclusions regarding any of the section 4(a)(1) factors or their interactions. Therefore, we incorporate and affirm herein all information, discussion, and conclusions regarding the factors affecting the queen conch from the status review report (Horn *et al.* 2022) and the proposed rule (87 FR 55200, September 8, 2022).

Protective Efforts

In addition to regulatory measures (*e.g.*, fishing regulations, seasonal closures, spatial closures, etc.), we considered other efforts being made to protect the queen conch. We assessed whether such protective efforts altered the conclusions of the extinction risk analysis for the species; however, none of the information we received on the proposed rule affected our prior conclusions regarding conservation efforts to protect the queen conch. Therefore, we incorporate and affirm herein all information, discussion, and conclusions on the extinction risk of the queen conch in the status review report (Horn *et al.* 2022) and proposed rule (87 FR 55200, September 8, 2022).

Final Listing Determination

We reviewed the best available scientific and commercial information, including the information in the status review report (Horn *et al.* 2022). Based on the status review report, our evaluation of protective efforts, and consideration of all public comments, we determine that the queen conch meets the definition of a threatened species under the ESA. We find that the queen conch is in danger of extinction in the foreseeable future throughout all of its range as a result of ESA section 4(a)(1) factors B, D, and E. We summarize the results of our determination as follows: (1) The most significant threat to queen conch is overutilization; (2) Existing regulatory mechanisms including morphometric

and exploitation thresholds, compliance, and enforcement are insufficient to protect the species from growth overfishing and poaching, including IUU fishing, throughout the Caribbean; (3) The majority of jurisdictions are below the minimum adult density threshold required to support mate finding (*i.e.*, 100 adult conch/hectare). These populations are not reproductive and unlikely to be contributing to recruitment and population growth; (4) The species currently suffers from low population densities and poor recruitment throughout a vast majority of its range and experiences limited larval dispersal and interrupted population connectivity; (5) The Caribbean region is likely to be impacted by climate change, and those adverse impacts, while not yet fully realized, could have devastating implications for queen conch over the next century (*i.e.*, by 2100). Based on the demographic risks and threats under ESA section 4(1)B, D, and E, we have concluded that queen conch is likely to become an endangered species in the foreseeable future throughout its range. However, as stated in the proposed rule and reiterated here, we concluded that the species does not currently have a high risk of extinction such that it warrants listing as an endangered species due to the following: the species has a broad distribution and still occurs throughout its geographic range and is not confined or limited to a small geographic area; the species does not appear to have been extirpated from any jurisdiction and can still be found, albeit at low densities in most cases, throughout its geographic range; and there are several jurisdictions that have queen conch populations that are currently disproportionately contributing to the viability of the species, such that the species is not presently at risk of extinction. After considering efforts being made to protect the species, we conclude that existing conservation efforts are insufficient to alter the extinction risk. We evaluated 51 different portions of the species range at 4 different geographic scales and determined that none are at “high risk” of extinction but some are likely to become so in the foreseeable future. Therefore, our conclusion regarding the species’ overall extinction risk does not change based on consideration of status of the species within portions of the species’ range, and thus we find that queen conch is not currently in danger, but is likely to become an endangered species within the foreseeable future throughout all of its range. Accordingly, we have

determined that the queen conch warrants listing as a threatened species under the ESA.

Effects of Listing

Conservation measures provided for species listed as endangered or threatened under the ESA include the development and implementation of recovery plans (16 U.S.C. 1533(f)); designation of critical habitat (16 U.S.C. 1533(a)(3)(A)); and a requirement that Federal agencies consult with NMFS under section 7 of the ESA to ensure their actions are not likely to jeopardize the continued existence of the species or result in adverse modification or destruction of designated critical habitat (16 U.S.C. 1536). An endangered species automatically receives protections against “take” under section 9 of the ESA. The ESA defines take to mean “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” (16 U.S.C. 1532(19)). The ESA section 9 prohibitions do not automatically apply to species listed as threatened; however, we may extend any of these prohibitions to threatened species through a regulation issued under section 4(d) of the ESA (16 U.S.C. 1533(d)). Section 4(d) of the ESA also directs the Secretary of Commerce to develop regulations that the Secretary “deems necessary and advisable to provide for the conservation of [a threatened] species.” Recognition of the species’ imperiled status through listing may also promote conservation actions by Federal and state agencies, foreign entities, private groups, and individuals.

Identifying ESA Section 7 Consultation Requirements

Section 7(a)(2) of the ESA (16 U.S.C. 1536(a)(2)) and joint NMFS and USFWS regulations (50 CFR part 402) require Federal agencies to consult with us on actions they authorize, fund, or carry out if those actions may affect the listed species or designated critical habitat. Based on currently available information, we conclude that examples of Federal actions that may affect the queen conch include but are not limited to: Fishery harvest and management, renewable energy projects, discharge of pollution from point sources, non-point source pollution, contaminated waste and plastic disposal, dredging, pile-driving, development of water quality standards, military activities, beach renourishment, coastal construction, and shoreline development.

Critical Habitat

Critical habitat is defined in section 3 of the ESA (16 U.S.C. 1532(5)) as: (1) the

specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the ESA, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by a species at the time it is listed, if such areas are determined to be essential for the conservation of the species. “Conservation” means the use of all methods and procedures needed to bring the species to the point at which listing under the ESA is no longer necessary. Designation of critical habitat must be based on the best scientific data available and must take into consideration the economic, national security, and other relevant impacts of specifying any particular area as critical habitat.

Section 4(a)(3)(A) of the ESA (16 U.S.C. 1533(a)(3)(A)) requires that, to the maximum extent prudent and determinable, critical habitat be designated concurrently with the listing of a species, unless as described in section 4(b)(6)(C), critical habitat is not then determinable, in which case we may take an additional year to publish the final critical habitat determination (16 U.S.C. 1533(b)(6)(C)(ii)). In our proposal to list the queen conch, we requested information on the identification of specific features and areas in U.S. waters that may meet the definition of critical habitat for the queen conch (87 FR 55200, September 8, 2022). We received and considered six comments that specifically provided information to inform the determination of critical habitat. We conclude that critical habitat is not determinable at this time for the following reasons: (1) Sufficient information and analysis are not currently available to assess the impacts of designation; and (2) Sufficient information and analysis are not currently available regarding the physical and biological features essential to conservation. We will continue to evaluate potential critical habitat for the queen conch, and we intend to consider critical habitat for this species in a separate action.

ESA Section 9 Take Prohibitions

Because we are listing the queen conch as threatened, the prohibitions under section 9 of the ESA will not automatically apply to this species. As described below, ESA section 4(d) leaves it to the Secretary’s discretion whether, and to what extent, to extend the section 9(a) prohibitions to threatened species, and authorizes us to issue regulations that are deemed

necessary and advisable to provide for the conservation of the species.

Protective Regulations Under Section 4(d) of the ESA

As discussed previously, NMFS has flexibility under section 4(d) to tailor protective regulations based on the needs of and threats to the species. Section 4(d) protective regulations may prohibit, with respect to threatened species, some or all of the acts which section 9(a) of the ESA prohibits with respect to endangered species. We are not proposing such regulations at this time, but may consider potential protective regulations pursuant to section 4(d) for the queen conch in a future rulemaking.

Peer Review

In December 2004, the Office of Management and Budget (OMB) issued a Final Information Quality Bulletin for Peer Review. The primary purpose of the Bulletin is to improve the quality and credibility of scientific information disseminated by the Federal government by requiring peer review. To satisfy our requirements under the Bulletin, we solicited peer review comments on the draft status review report from three scientists with specific knowledge regarding queen conch. We received and reviewed comments from these scientists, and, prior to publication of the proposed rule, their comments were incorporated into the status review report (Horn *et al.* 2022), which was then made available for public comment. Peer reviewer comments on the status review report are available at <https://www.noaa.gov/organization/information-technology/information-quality-peer-review-id425>.

Information Solicited

Subsequent to this listing, as required by ESA, we will evaluate whether any locations within U.S. waters meet the definition of critical habitat for queen conch and designate any critical habitat as appropriate. We request interested persons to submit relevant information related to the identification of critical habitat and essential physical or biological features for this species, as well as economic or other relevant impacts of designation of critical habitat for the queen conch. Physical and biological features essential to the conservation of the species include, but are not limited to, features specific to queen conch habitats and life history characteristics within the following general categories: (1) space for individual growth and for normal behavior; (2) food, water, air, light, minerals, or other nutritional or

physiological requirements; (3) cover or shelter; (4) sites for reproduction and development of offspring; and (5) habitats that are protected from disturbance or are representative of the historical, geographical, and ecological distributions of the species.

In addition, while we are not proposing any protective regulations under section 4(d) at this time, we intend to propose protective regulations to conserve queen conch throughout its range in the future. These regulations may prohibit for the threatened queen conch one or more of the acts prohibited by section 9(a)(1) of the ESA for endangered species. Examples of measures that may be included in protective regulations include prohibiting the import, export, or take of the species and also specifying conditions under which import, export, or take of the species may be allowed. We solicit information to inform this determination and the development of any protective regulations for the queen conch. In addition to information on the potential conservation benefits of particular protective regulations, we solicit input on the associated cultural and socio-economic impacts that those regulatory measures may produce. Information on these topics may be submitted from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party directly to us (see **ADDRESSES**).

References

A complete list of the references used in this final rule, and the corresponding proposed rule, is available upon request, and also available at: <https://www.fisheries.noaa.gov/species/queen-conch>.

Classification

National Environmental Policy Act (NEPA)

The 1982 amendments to the ESA in section 4(b)(1)(A), restrict the information that may be considered when assessing species for listing. Based on this limitation of criteria for a listing decision and the opinion in *Pacific Legal Foundation v. Andrus*, 675 F. 2d 825 (6th Cir. 1981), NMFS has concluded that ESA listing actions are not subject to the environmental assessment requirements of the NEPA (See NOAA Administrative Order 216–6A).

Executive Order 12866, Regulatory Flexibility Act, and Paperwork Reduction Act

As noted in the Conference Report on the 1982 amendments to the ESA, economic impacts cannot be considered when assessing the status of a species. Therefore, the economic analysis requirements of the Regulatory Flexibility Act are not applicable to the listing process. In addition, this final rule is exempt from review under Executive Order 12866. This final rule does not contain a collection-of-information requirement for the purposes of the Paperwork Reduction Act.

Executive Order 13132, Federalism

In accordance with E.O. 13132, agencies are required to take into account any federalism impacts of regulations under development. This Executive Order includes specific consultation directives for situations where a regulation will preempt state law, or impose substantial direct compliance costs on state and local governments (unless required by statute). Neither of those circumstances is applicable to this final listing determination. In keeping with the intent of the Administration and Congress to provide continuing and meaningful dialogue on issues of mutual state and Federal interest, the proposed rule was provided to the relevant agencies in each state in which the subject species occurs, and these agencies were invited to comment. Their comments were addressed with other comments in the Public Comments and Our Responses section.

List of Subjects in 50 CFR Part 223

Endangered and threatened species, Exports, Imports, Transportation.

Dated: February 8, 2024.

Samuel D. Rauch, III,

Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

For the reasons set out in the preamble, we amend 50 CFR part 223 as follows:

PART 223—THREATENED MARINE AND ANADROMOUS SPECIES

■ 1. The authority citation for part 223 continues to read as follows:

Authority: 16 U.S.C. 1531–1543; subpart B, § 223.201–202 also issued under 16 U.S.C. 1361 *et seq.*; 16 U.S.C. 5503(d) for § 223.206(d)(9).

■ 2. In § 223.102, in the table in paragraph (e), under the subheading “Molluscs,” add an entry for “Conch,

queen” in alphabetical order by
common name to read as follows:

**§ 223.102 Enumeration of endangered
marine and anadromous species.**

(e) * * *

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Species ¹		Description of listed entity	Citation(s) for listing determina- tion(s)	Critical habitat	ESA rules
Common name	Scientific name				
*	*	*	*	*	*

Molluscs

Conch, queen *Aliger gigas* Entire species [Insert **Federal Register** citation] NA NA.
February 14, 2024.

* * * * *

¹Species includes taxonomic species, subspecies, distinct population segments (DPSs) (for a policy statement, see 61 FR 4722, February 7, 1996), and evolutionarily significant units (ESUs) (for a policy statement, see 56 FR 58612, November 20, 1991).

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