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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 223

[Docket No. 150211138-7024-02]

RIN 0648-XD771

**Endangered and Threatened Wildlife and Plants; Final Rule to List Two
Guitarfishes as Threatened Under the Endangered Species Act**

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

ACTION: Final rule.

SUMMARY: We, NMFS, issue a final rule to list two foreign marine guitarfish species under the Endangered Species Act (ESA). We considered comments submitted on the proposed listing rule and have determined that the blackchin guitarfish (*Rhinobatos cemiculus*) and common guitarfish (*Rhinobatos rhinobatos*) warrant listing as threatened species. We will not designate critical habitat for either of these species because the geographical areas occupied by these species are entirely outside U.S. jurisdiction, and we have not identified any unoccupied areas within U.S. jurisdiction that are currently essential to the conservation of either of these species.

DATES: This final rule is effective [*insert date 30 days after date of publication in the FEDERAL REGISTER*].

ADDRESSES: Chief, Endangered Species Division, NMFS Office of Protected Resources (F/PR3), 1315 East West Highway, Silver Spring, MD 20910.

FOR FURTHER INFORMATION CONTACT: Brendan Newell or Marta Nammack
NMFS, Office of Protected Resources (OPR), (301) 427-8403.

SUPPLEMENTARY INFORMATION:

Background

On July 15, 2013, we received a petition from WildEarth Guardians to list 81 marine species or subpopulations as threatened or endangered under the ESA. This petition included species from many different taxonomic groups, and we prepared our 90-day findings in batches by taxonomic group. We found that the petitioned actions may be warranted for 24 of the species and 3 of the subpopulations and announced the initiation of status reviews for each of the 24 species and 3 subpopulations (78 FR 63941, October 25, 2013; 78 FR 66675, November 6, 2013; 78 FR 69376, November 19, 2013; 79 FR 9880, February 21, 2014; and 79 FR 10104, February 24, 2014). On September 19, 2016, we published a proposed rule to list the blackchin guitarfish (*Rhinobatos cemiculus*) and the common guitarfish (*Rhinobatos rhinobatos*) as threatened species (81 FR 64094). We requested public comment on information in the draft status review and proposed rule, and the comment period was open through November 18, 2016. This final rule provides a discussion of the information we received during the public comment period and our final determination on the petition to list the blackchin guitarfish and the common guitarfish under the ESA. The status of the findings and relevant **Federal Register** notices for the other 22 species and 3 subpopulations can be found on our website at www.nmfs.noaa.gov/pr/species/petition81.htm.

Listing Species Under the Endangered Species Act

We are responsible for determining whether species are threatened or endangered

under the ESA (16 U.S.C. 1531 *et seq.*). To make this determination, we consider first whether a group of organisms constitutes a “species” under the ESA, then whether the status of the species qualifies it for listing as either threatened or endangered. Section 3 of the ESA defines a “species” 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.”

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.” We interpret an “endangered species” to be one that is presently in danger of extinction. A “threatened species,” on the other hand, is not presently in danger of extinction, but is likely to become so in the foreseeable future (that is, at a later time). In other words, the primary statutory difference between a threatened and endangered species is the timing of when a species may be in danger of extinction, either presently (endangered) or in the foreseeable future (threatened).

When we consider whether a species might qualify as threatened under the ESA, we must consider the meaning of the term “foreseeable future.” It is appropriate to interpret “foreseeable future” as the horizon over which predictions about the conservation status of the species can be reasonably relied upon. The foreseeable future considers the life history of the species, habitat characteristics, availability of data, particular threats, ability to predict threats, and the reliability to forecast the effects of these threats and future events on the status of the species under consideration. Because a

species may be susceptible to a variety of threats for which different data are available, or which operate across different time scales, the foreseeable future is not necessarily reducible to a particular number of years.

Section 4(a)(1) of the ESA requires us to determine whether any species is endangered or threatened due to any of the following factors: the present or threatened destruction, modification, or curtailment of its habitat or range; overutilization for commercial, recreational, scientific, or educational purposes; disease or predation; the inadequacy of existing regulatory mechanisms; or other natural or manmade factors affecting its continued existence. Under section (4)(b)(1)(A), we are also required to make listing determinations based solely on the best scientific and commercial data available, after conducting a review of the species' status and after taking into account efforts being made by any state or foreign nation to protect the species.

In making a listing determination, we first determine whether a petitioned species meets the ESA definition of a "species." Next, using the best available information gathered during the status review for the species, we complete a status and extinction risk assessment. In assessing extinction risk for these two guitarfishes, we considered the demographic viability factors developed by McElhany *et al.* (2000). The approach of considering demographic risk factors to help frame the consideration of extinction risk has been used in many of our status reviews, including for Pacific salmonids, Pacific hake, walleye pollock, Pacific cod, Puget Sound rockfishes, Pacific herring, scalloped hammerhead sharks, and black abalone (see www.nmfs.noaa.gov/pr/species/ for links to these reviews). In this approach, the collective condition of individual populations is considered at the species level according to four viable population descriptors:

abundance, growth rate/productivity, spatial structure/connectivity, and diversity. These viable population descriptors reflect concepts that are well-founded in conservation biology and that individually and collectively provide strong indicators of extinction risk (NMFS 2015).

We then assess efforts being made to protect the species to determine if these conservation efforts are adequate to mitigate the existing threats. Section 4(b)(1)(A) of the ESA requires the Secretary, when making a listing determination for a species, to take into consideration those efforts, if any, being made by any State or foreign nation to protect the species.

Summary of Comments

In response to our request for comments on the proposed rule, we received five comment letters. Two comment letters were from foreign governments and clarified information about their relevant regulations. One comment letter was from an environmental nonprofit organization supporting our proposed listing decision. Two comment letters were submitted anonymously, each challenging a number of our statements or conclusions in the status review or proposed rule, generally without providing references or evidence that would allow us to investigate further. One commenter also provided some editorial comments, which were incorporated in the status review as appropriate. Summaries of issues raised by the public comments received and our responses are provided below, with references where appropriate.

Comment 1: One commenter pointed out that *R. cemiculus* is also referred to in some of the literature by the taxonomic synonym *Glaucostegus cemiculus*.

Response: The fact that *Glaucostegus cemiculus* is a synonym for *R. cemiculus*

has been added to the *Taxonomy and Distinctive Characteristics* section of the status review. Although we did not include this synonym in the draft status review this did not impact the development of the status review or proposed rule. We were aware of this synonym and searched for publications related to this species using both *Rhinobatos cemiculus* and *Glaucostegus cemiculus* while gathering information for the status review.

Comment 2: One commenter disagreed with our description of the smallest reported length for a fish in a study as the “minimum total length (TL),” stating that minimum TL is always 0 mm for all animals.

Response: The word *minimum* was used while discussing the smallest lengths ever reported for juveniles of each species. We did not intend to imply that the reported lengths were the smallest possible lengths that the animals could be. We have revised the status review to clarify this point.

Comment 3: One commenter noted that we did not include the *k* value for *R. rhinobatos* reported in Ismen *et al.* (2007) in the discussion about growth rates.

Response: The *k* value from Ismen *et al.* (2007) has been added to the discussion in the *Reproduction and Growth* section of the status review.

Comment 4: One commenter claimed our analysis is biased because we discuss “conflict” in the literature regarding conclusions researchers have reached about the two guitarfish species’ reproductive potential and growth rates. This commenter stated that these different conclusions reached by researchers are not conflicting conclusions but are evidence of intraspecies variation, which could be evidence of population structure. The same party made multiple other comments about regional variations in morphology and biology indicating population structure. An additional commenter also claimed that there

is more evidence for population structuring in these guitarfishes than three ESA-listed species of angelshark, *Squatina aculeata*, *S. oculata*, and *S. squatina*. These three *Squatina* species were listed as endangered on August 1, 2016 (81 FR 50394). This commenter provided no references to validate this claim.

Response: We disagree with the commenter's implication that noting conflicting conclusions from different authors about a species' life history implies bias. We acknowledge that variations in biology in different portions of a species' range could imply population structure. However, Lteif (2015) attributed these variations to environmental differences throughout each species' range (*e.g.*, food availability and water temperatures) or the relatively small amount of data on the species and differences in sampling approach. ICES (2010) stated that the relationships between the Mediterranean and Atlantic stocks of *R. cemiculus* and *R. rhinobatos* are unclear. We found no other discussions of population structure in the available information. Given the lack of information, we could not reach conclusions about population structure. Our status review presents the best available information and notes where authors have reached different conclusions to accurately represent the available information.

Comment 5: One commenter asserted that the discussion in the status review of both species' preference for warmer waters is moot because the only temperature data provided in the document is sea surface temperature data, and as both species are demersal, they live below the thermocline. This commenter also asserted that, in our discussion about the threat of climate change in the status review, we failed to address specifically how changing bottom temperatures will affect the species.

Response: According to the best available scientific information, both of the

guitarfishes are demersal species that typically occur up to a maximum depth of 100m and spend at least a portion of their lives in shallow waters. The only information we found regarding how these species interact with water temperature is that both species prefer warmer, subtropical waters (Capape and Zaouali 1994; Corsini-Foka 2009; Edelist 2014). The discussion in the status review is about the role that temperature likely plays in restricting many Mediterranean species to biogeographic ranges. While we consider this information relevant to understanding both guitarfish species' habitat and distribution, we explicitly acknowledged in the draft status review that we found no information on how any particular isotherm affects the distribution and abundance of these guitarfish species. We found no discussion in the scientific literature regarding how these species interact with thermoclines, the depths of which likely vary seasonally and regionally given the wide distribution of these species (Coll *et al.*, 2010). Specifically regarding climate change, Akyol and Capapé (2014) and Rafrafi-Nouira *et al.* (2015) both attributed shifts in *R. cemiculus* distribution to warming waters but did not discuss bottom temperatures or thermoclines. No references were provided by the commenter to explain how both species interact with thermoclines or invalidate our interpretation that sea surface and mixed layer temperature is likely relevant to the distribution of these subtropical species.

Comment 6: One commenter asserted that our assumption that both guitarfish species are likely mirroring the trend of decreasing elasmobranch and batoid (rays, skates, guitarfishes, etc.) landings in southern Tunisia, where the best available information shows that both guitarfish species made up a high proportion of the total elasmobranch catch in the longline and gillnet fisheries over a 2-year period, is flawed,

because, “A high percentage of one species in a catch at one time says nothing about the trend of that species over time as different species can be targeted or caught with different methods or have different population structures and sources and sinks.”

Response: We agree that a high percentage of one species in a catch at one time does not indicate a trend. However, the data in question were collected across two different fisheries (longline and gillnet) and in each case the data were collected over multiple months in both 2007 and 2008 years (Echwikhi *et al.*, 2013; Echwikhi *et al.*, 2012). Echwikhi *et al.* (2013) and Echwikhi *et al.* (2012) discuss their results in the context of the trends in elasmobranch abundance declines in the region. An additional citation (Bradaï *et al.*, 2006) has been added to the status review and provides further indication that both species have been and are commonly targeted and landed in southern Tunisia. Given the high proportion of these guitarfish species in the studied artisanal fisheries catches, and the fact that these species are known to be commonly targeted and landed in southern Tunisia, it is likely that the abundance trends for these species are similar to the overall trend of declining elasmobranch catches in southern Tunisia.

Comment 7: One commenter made several comments that there is no evidence that *R. rhinobatos* and *R. cemiculus* were likely historically rare throughout most of the northwestern Mediterranean relative to other portions of its range (*e.g.*, the southern and eastern Mediterranean). The same commenter challenged our conclusion that both species have likely always been rare in all parts of their Atlantic ranges north of the Strait of Gibraltar. This commenter asserted that we failed to include museum records and anthropological literature, but the commenter did not provide any references.

Response: Our interpretation of the best available information is that *R.*

rhinobatos and *R. cemiculus* were present, but likely uncommon or rare throughout most of the northwestern Mediterranean (including the waters off Spain, the seas around Italy, and, in the case of *R. rhinobatos*, the waters of France), with the exception of the waters around Sicily and the Balearic Islands. This interpretation is consistent with the conclusions reached in the best available scientific literature (Akyol and Capapé 2014; Capapé *et al.*, 2006; Capapé *et al.*, 1975; Dulpiu *et al.*, 2005; Psomadakis *et al.*, 2009). In the parts of their Atlantic ranges north of the Strait of Gibraltar, as stated in the status review, we found information that indicates both species have been rare for at least the last 45 years (ICES 2016), and no information that indicates either species was common at any time in what is known to be the northern extent of their ranges.

To reach these conclusions we searched for data and publications related to both species, and guitarfishes in general, in all of the countries and seas that are considered part of either species' historical range. In the status review, we considered and incorporated the best available information, which included peer reviewed scientific articles, regional checklists of ichthyofauna, studies of fishers' knowledge, reports from conservation organizations (*e.g.*, IUCN), and museum records. We also used relevant data from long term datasets such as trawl surveys and regional fisheries databases, including the MEDITS survey program (International bottom trawl survey in the Mediterranean) and the International Council for the Exploration of the Sea (ICES) DATRAS (Baino *et al.*, 2001; Bertrand *et al.*, 2000, ICES 2016). The only publications that we found that concluded that both species were common throughout the northwestern Mediterranean were the IUCN assessments of both species (Notarbartolo di Sciara *et al.*, 2007a; Notarbartolo di Sciara *et al.*, 2007b) and ICES (2010). All three of

these reports specifically discuss and provide references for both species once being common off the Balearic Islands and Sicily, which make up a small amount of the overall area of the northwestern Mediterranean. No references were cited in these three reports to provide evidence that *R. rhinobatos* or *R. cemiculus* were common in the remaining area of the northwestern Mediterranean.

Response: Comment 8: One commenter noted the lack of explanation about what we mean by “available literature.”

Response: A summary of how we compiled the information used in the status review was added to the second paragraph of the *Scope and Intent of Present Document* section of the status review.

Comment 9: Regarding the *Overutilization for Commercial, Recreational, Scientific, or Educational Purposes* section of the status review, one commenter stated: “Generally in this section you misunderstand the difference between science and fisheries data. Scientifically gathered data is preferable and you are required to use the best available SCIENCE. Fisheries catch and landing data are not the best possible type of data, are not scientifically gathered and have serious flaws which you ignore entirely.”

Response: The commenter incorrectly restricts the information we are required to use. ESA Section 4(b)(1)(A) states: “The Secretary shall make determinations required by [Section 4](a)(1) solely on the basis of the best scientific and commercial data available to him...” There is a paucity of scientific studies on both species range wide, including the almost complete lack of fisheries independent population data, a fact that is well documented in the status review and proposed rule. We agree that additional scientifically gathered data would greatly enhance our ability to accurately understand the

status of both species. However, when analyzing the threat of commercial fisheries to these guitarfishes, fisheries data are relevant and valuable. Therefore, this information must be considered as a source of “best scientific and commercial data available,” regardless of flaws with these data, which are acknowledged and discussed throughout the status review.

Comment 10: Also regarding the discussion of commercial overutilization in the *Overutilization for Commercial, Recreational, Scientific, or Educational Purposes* section of the status review, one commenter asks: “why is only bycatch considered?”

Response: All types of interactions with commercial and artisanal fisheries are considered and described in the status review, including bycatch from industrial and artisanal fishing and targeted fishing of both guitarfish species by artisanal fishers using gillnets, longlines, and beach based lines. The commenter may have missed the information by focusing on only one part of the discussion within the section.

Comment 11: Regarding the passage in the status review: “At the time of the 2007 publication of the IUCN report *Overview of the Conservation Status of Cartilaginous Fishes (Chondrichthyans) in the Mediterranean Sea,*” by Cavanagh and Gibson (2007) there were six Mediterranean elasmobranchs affected by target fisheries...It is unclear if *R. rhinobatos* and *R. cemiculus* were two of the six targeted species referenced in this report”, one commenter asked how it can be unclear if the two *Rhinobatos* species were not part of the six species referred to in Cavanagh and Gibson (2007).

Response: Cavanagh and Gibson (2007) did not discuss which elasmobranch species or groups were part of past or present targeted fisheries, except for using angelsharks (*Squatina spp.*) as an example of species that had become so rare they were

no longer targeted. Therefore, it was not possible to determine which six Mediterranean elasmobranch species were considered to be affected by targeted fisheries by Cavanagh and Gibson (2007).

Comment 12: One commenter stated that the discussion of elasmobranch landing trends in Egyptian fisheries in the status review is contradictory because it claims both increased and decreased landings in Egyptian fisheries.

Response: In Egypt, an increase in effort across fisheries led to a decrease in overall fisheries landings, but an increase in the landings of, and demand for, elasmobranchs, which had previously been discarded. The commenter appears to have misunderstood the discussion in the status review. Elasmobranch landings increased because the landings of preferred, non-elasmobranch targets were decreasing. Thus, elasmobranchs, which were always caught but previously discarded, have been landed at a higher rate by fishers to offset the decreasing availability of other species.

Comment 13: Regarding the discussion in the status review of the development of the shark (and other shark-like elasmobranchs) fin industry in the Atlantic, one commenter stated, “you claim a need for increased effort CAUSES a need to maximize profits. This is quite [a] twist on economic theory which usually has causation go from the desire for profit as the starting point causing need for more effort...”

Response: This conclusion was reached by Diop and Dossa (2011) who provide the most comprehensive report on shark fishing in West Africa available. As explained in the status review, as fisheries in easily accessible areas became overexploited, fishers had to travel farther to find fish. This increased effort raised their cost of doing business (e.g., fuel costs). Because storage capacity is limited on fishing vessels, and shark fins are more

valuable than other products that would take up more space, shrinking profit margins that resulted from the need to increase effort contributed to the unsustainable shift to retaining a larger percentage of the highest value products (*i.e.*, shark fins from many sharks) rather than utilizing the entire shark or less valuable species.

Comment 14: One commenter stated that while we noted in the status review that large sharks, such as dusky sharks, are predators of *Rhinobatos* spp., we failed to discuss how the decline of dusky sharks would impact *R. cemiculus* and *R. rhinobatos*.

Response: Based on our analysis, predation is not posing a threat to either guitarfish species and, with the exception of one sentence in Camhi *et al.* (2005), we found no additional information regarding predation on guitarfishes by any shark species. Additionally, dusky sharks were an example of a large shark that preys on these species, but not the only shark species to do so.

Comment 15: One commenter stated that in the *Commercial Overutilization in the Atlantic* section of the status review “you claim *Rhinobatos* is found in the highest numbers but you fail to say compared to what or part of what grouping.”

Response: The sentence the commenter is referring to is a quote provided in a series of quotes of the qualitative descriptions of elasmobranch fisheries in West African nations by Diop and Dossa (2011). In all cases, Diop and Dossa (2011) were discussing landing of guitarfishes relative to other elasmobranchs. Additional text has been added to the *Commercial Overutilization in the Atlantic* section to clarify this point.

Comment 16: One commenter pointed out the recent evidence suggesting a decline in the demand for shark fins.

Response: A paragraph further discussing trends in demand for shark fins and

meat, as well as the uncertainty related to how these shifts in demand are impacting both guitarfish species, has been added to the *Commercial Overutilization in the Atlantic* section of the status review.

Comment 17: One commenter stated that we are required to consider the interaction of the ESA Section 4 (a)(1) factors but failed to do so.

Response: The commenter is correct that we are required to consider the interaction between the ESA 4(a)(1) factors, and we did so. We present a discussion of the interactions among the threats and each species' demographic risks in the *Extinction Risk Analysis* sections of the status review for each species. However, because data on both species and their threats are generally lacking, a more detailed analysis of the interactions among the threat factors was not possible.

Comment 18: One commenter stated that we incorrectly limited our analysis to present and future threats only and that we should have also considered past threats.

Response: The ESA and the section 4 regulations require that we list a species if the species is endangered or threatened because of any of the five factors in ESA section 4 (a)(1). Included in our risk analysis is an assessment of the manifestation of past threats that have contributed to the species' current status.

Comment 19: One commenter stated, "Foreseeable future discussion is confounded and you just assert your timeline, you provide no evidence it is the best available. Assertions really aren't [sic] facts."

Response: As discussed in *Box 2: Defining Foreseeable Future* in the status review, the foreseeable future for both guitarfish species (15-20 years) is based on these species' life histories and the main threats each species faces. Given the relatively low

productivity of these species, it will likely take more than one generation for these species to recover. 15-20 years corresponds to approximately three generations of *R. cemiculus*, which likely reproduces at a slower rate than *R. rhinobatos*. 15-20 years is also a reasonable period of time to project the continued threats of overutilization and inadequacy of existing regulations. Many of the regulations that protect these species have recently been adopted and are inadequately enforced. Given both species' reproductive life history traits, 15-20 years is a reasonable amount of time to foresee continued decline of both species should these regulations continue to be inadequate, which seems likely at this time. The commenter provided no information to invalidate any or all of the justification for our definition.

Comment 20: One commenter pointed out that in our discussion of the increase in abundance of *R. rhinobatos* in the Tunis Northern and Southern Lagoon after restoration, we did not discuss the possibility that individuals could be migrating into the area without an increase in the overall population.

Response: A sentence acknowledging that it is unknown if the increase of *R. rhinobatos* in the Tunis Lagoons is the result of an increasing population or simply individuals migrating into what has become suitable habitat has been added to the *Demographic Risk Analysis* section of the status review.

Comment 21: One commenter stated that we missed the following references: Ali *et al.* (2008), Ambrose (2004), Bauchot (1987), Faruggia, Feretti, Lloris, and Rucabado (1998), McEachran and Capape (1984), Seck *et al.* (2004), Valadou (2003), and Whitehead *et al.* (1984).

Response: In response to this comment, we conducted a search for the references

listed that we were unaware of, which were Ambrose (2004), Valadou (2003), and Faruggia *et al.* (1998). Only an abstract for Ambrose. (2004) was available online, which contained no information about guitarfishes. Because we were not able to review this publication we have not included it in this analysis. We requested but have not received a copy of Valadou (2003), which is a master's dissertation that we cannot access online. We were also unable to find Faruggia *et al.* (1998) based on the information provided.

We were already aware of Seck *et al.* (2004), Ali *et al.* (2008), Bauchot (1987), McEachran and Capape (1984), and Whitehead *et al.* (1984). Seck *et al.* (2004) was used and cited in our draft status review and proposed rule. Ali *et al.* (2008) was not available online or through interlibrary loan during the development of the status review, proposed rule, and final rule, and we reached out to one of the authors regarding this and another publication but have not received a response. Because this comment was submitted anonymously, we also could not contact the commenter with a request for a copy of this or other references. Bauchot (1987), McEachran and Capape (1984), and Whitehead *et al.* (1984) are identification guides that provide basic taxonomic and life history information consistent with information already included in the status review. Thus, these references provided no additional information that would affect our status review.

Comment 22: One comment letter asserted that our decision to list *R. rhinobatos* and *R. cemiculus* as threatened is arbitrary and capricious because the commenter believes that both guitarfish species are “in at least as bad a condition” as three species of angelshark, *Squatina aculeata*, *S. oculata*, and *S. squatina*, which are listed as endangered under the ESA (81 FR 50394). This commenter provided the following reasons for this opinion: (1) These five species are all demersal elasmobranchs that share similar ranges,

thus they face similar spatial threats; (2) The maximum depth that the guitarfishes occur in (100m) is shallower than the angelsharks' maximum depth (550m), thus the guitarfishes must be easier for humans to catch, increasing their vulnerability; (3) Guitarfishes have a faster reproductive cycle, smaller litter size, later age at maturity, and likely longer life span than the angelsharks, which makes the guitarfishes less resilient to overexploitation; (4) The guitarfishes, but not the angelsharks, are known to have an inshore migration for reproduction, putting the guitarfishes at a greater risk from human threats; (5) There is more evidence of population structuring for the guitarfishes than the angelsharks, resulting in smaller, isolated, less resilient populations; (6) There is higher commercial demand and fewer conservation efforts for the guitarfishes than the angelsharks; (7) Abundance data, including data from the Canary Islands and the northwest Mediterranean, support a worse status for the guitarfishes than the angelsharks, and; (8) The guitarfishes were likely in demand and serially exploited even earlier than the angelsharks.

Response: While we acknowledge that all five species share some similarities in biology, ecology, and threats, we do not base decisions on whether or not one species should be listed as threatened or endangered solely on similarities in life history traits or circumstances with other listed species. We assess each species individually based on the best scientific and commercial information available, considering both the demographic risks facing the species as well as current and future threats that may affect the species' status. Data on all five species are lacking, but the best available information shows that all three angelsharks are extremely rare throughout most of their ranges, with evidence of declines in abundance and subsequent extirpations and range curtailment, while both

guitarfishes are likely still somewhat abundant in relatively larger portions of their ranges, such as within portions of the southern and eastern Mediterranean and West Africa (Echwikhi *et al.*, 2012; Golani 2006; Ismen *et al.*, 2007, Lteif 2015, M. Ducrocq, Parcs Gabon, pers. comm. to J. Shultz, NMFS, 21 June, 2016; Miller 2016, Saad *et al.*, 2006).

To specifically address some of the commenter's points about guitarfish, regarding point (6), while both the guitarfish and the angelsharks face threats from commercial fishing, it is not appropriate to directly compare the fishing related threats these species face. For example, the fin trade has contributed to the decline of the guitarfishes but is not a direct threat to the angelsharks, while historical commercial fishing pressure on angelsharks has already made these species so rare that they can no longer support fisheries in most areas. Regarding points (5) and (7), the commenter provided no references to verify the assertions about the two guitarfishes' population structures or abundance throughout their respective ranges or the presence of guitarfish in the Canary Islands, so we are unable to determine the validity of any data upon which the commenter based these assertions. As such, without any new information to consider, we maintain our previous conclusion in the proposed rule that the two guitarfish species are likely to be in danger of extinction in the foreseeable future throughout their ranges and, thus, are threatened species under the ESA.

Additionally, we also wish to clarify some of the information presented for angelsharks, particularly in response to the commenter's points in (2) and (4). We note that while *S. aculeata* and *S. oculata* have maximum depths of up to 500 m and 560 m, respectively, *S. aculeata* can be found in depths as shallow as 30 m and *S. oculata* is

more commonly found in depths between 50 m and 100 m. *Squatina squatina* is generally found in shallower water, from inshore areas out to the continental shelf in depths of 5 m to 150 m. This species is also thought to conduct inshore migrations in the summer, with reports of beachgoers being bitten by small (likely juvenile) angelsharks (suggesting inshore migration for reproduction). This information on these species, as well as additional information on the threats and status of the three angelsharks, can be found in the proposed (80 FR 40969; July 14, 2015) and final rules (81 FR 50394; August 1, 2016) listing these species under the ESA, as well as the status review for these three species (Miller 2016), available on our website at www.nmfs.noaa.gov/pr/species/petition81.htm.

Comment 23: The Embassy of Greece, through the Hellenic Ministry of Rural Development and Food, commented that Greece meets its obligations arising from international conventions, such as the Barcelona Convention, and is a party to the General Fisheries Commission of the Mediterranean (GFCM), the regional fisheries management organization whose convention area includes Mediterranean waters and the Black Sea. The measures adopted by the GFCM are incorporated into European Law. The Ministry specifically highlighted GFCM recommendation GFCM/36/3012/3, which prohibits those elasmobranchs on Annex II of the Specially Protected Areas and Biological Diversity (SPA/BD) Protocol to the Barcelona Convention (which includes both guitarfish species) from being retained on board, transhipped, landed, transferred, stored, sold or displayed, or offered for sale. The Ministry noted that the species must be released, as far as possible, unharmed and alive, and that there is an obligation for owners of fishing vessels to record information related to fishing activities, including capture

data, incidental catch, and releases and/or discards of species. The Ministry recently adopted and released Circular No. 4531/83795 / 20-07-2016 to inform all stakeholders of the provisions of the above protection measures.

Response: We thank the Hellenic Ministry of Rural Development and Food for the comments and have updated the status review accordingly. We note that while these regulations will likely, to some extent, reduce the fishing related mortality to both guitarfish species, it does not appear that either species is common in Greek waters. Therefore we conclude that these regulatory mechanisms are unlikely to significantly decrease both *Rhinobatos* species' risks of extinction.

Comment 24: The Lebanese Ministry of Agriculture, through the Embassy of Lebanon, commented that fishing both *Rhinobatos* species is prohibited in Lebanon by decision number 1045/1 issued on November 25, 2014, based on GFCM recommendation GFCM/36/3012/3. Based on this decision, they welcomed our proposal to list both guitarfishes species as threatened under the ESA.

Response: We thank the Lebanese Ministry of Agriculture for the comments and have updated the status review accordingly. We note that the information available to us (Lteif 2015) indicates that regulations related to these guitarfish species are not adequately enforced. However, we note that these conclusions were reached based on data that were collected up until approximately the time that decision number 1045/1 was issued, so the enforcement of relevant regulations may now be effective. Given the uncertainty regarding the enforcement of these regulations, and the relatively small portion of both species' ranges that occur in Lebanese waters, we conclude that these regulatory mechanisms are unlikely to significantly decrease both *Rhinobatos* species'

risks of extinction range wide.

Comment 25: One commenter noted that in the *Inadequacy of Existing Regulations* section of the status review we did not mention relevant Turkish laws, species specific laws for *Rhinobatos* species in Banc d'Arguin National Park (Mauritania), and a ban on finning in Nigeria.

Response: The commenter provided no references regarding any of these regulations. We found no information about Turkish laws relevant to guitarfishes or sharks and rays in general and the General Fisheries Commission for the Mediterranean National Legislation Database (available at: <http://nationallegislation.gfcmsecretariat.org>) lists no such relevant law. However, some additional information about general fisheries management efforts in Turkey, including vessel registrations, gear restrictions, and seasonal area closures has been added to the *Regulatory Mechanisms in the Mediterranean* section of the status review. Because these management efforts are not specific to guitarfish, and we have no information on how these efforts affect guitarfish in Turkey, this new information does not change our conclusion that current regulations are inadequate to protect either species.

As discussed in the status review, fishing for all shark species, including guitarfishes, has been banned since 2003 in Banc d'Arguin National Park. Additional information on regulatory efforts from 1998 to 2003 has been added to the *Regulatory Mechanisms in the Atlantic* section of the status review. This information provides context for how the current protective regulations were developed in Banc d'Arguin, which are currently adequately protecting both species in this small portion of their ranges, a fact that was acknowledged in the draft status review.

The fact that Nigeria prohibits the dumping of shark carcasses at sea has also been added to the *Regulatory Mechanisms in the Atlantic* section. While this information augments our knowledge of regulations that may affect these species, we found no information on how this regulation is enforced and very little information on guitarfish in Nigeria in general. Thus, it does not change our conclusion that current regulations are inadequate to protect either species.

Comment 26: One commenter strongly supported our proposed rule and encouraged us to finalize the our listing decision in a timely manner, incorporate comments and suggestions submitted during the comment period, and incorporate a full analysis of all the factors under section 4(a)(1) of the ESA.

Response: We appreciate this comment. We have incorporated all substantive comments received into the status review and this final rule and fully analyzed the ESA section 4(a)(1) factors using the best available scientific and commercial information.

Summary of Changes from the Proposed Listing Rule

We reviewed, and incorporated as appropriate, scientific data from references that were not previously included in the draft status review (Newell 2016) and proposed rule (81 FR 64094; September 19, 2016). We included the following references and communications, which, together with previously cited references, represent the best available scientific and commercial data on *R. cemiculus* and *R. rhinobatos*: Ambrose *et al.* (2005), Atweberhan *et al.* (2012), Carla Jazzar, Embassy of Lebanon, pers. comm. to D. Wieting, NMFS (7 December, 2016), Caverivière and Andriamirado (1997), Coll (2010), D. Berces, University of Florida, pers. comm. to B. Newell, NMFS, (14 November, 2016), Farrugio *et al.* (1993), Hellenic Ministry of Rural Development pers.

comm. (2016), HSI (2016), ICES (2010), and OECD (undated). However, the information not previously included in the draft status review or proposed rule does not present significant new findings that change either of our proposed listing determinations.

The updated status review (Newell 2016) is available at:

www.nmfs.noaa.gov/pr/species/petition81.htm.

Status Review

The status review for both guitarfish species was conducted by a NMFS biologist in the Office of Protected Resources. In order to complete the status review, we compiled information on the species' biology, ecology, life history, threats, and conservation status from information contained in the petition, our files, a comprehensive literature search, and consultation with experts. Prior to publication of the proposed rule, the status review was subjected to peer review. Peer reviewer comments are available at www.cio.noaa.gov/services_programs/prplans/PRsummaries.html. This status review provides a thorough discussion of the life history, demographic risks, and threats to the two guitarfish species. We considered all identified threats, both individually and cumulatively, to determine whether these guitarfish species respond in a way that causes actual impacts at the species level. The collective condition of individual populations was also considered at the species level, according to the four viable population descriptors discussed above.

Summary of Factors Affecting the Two Guitarfish Species

We considered whether any one or a combination of the five threat factors specified in section 4(a)(1) of the ESA contribute to the extinction risk of these species. The comments that we received on the proposed rule and the additional information that

became available since the publication of the proposed rule did not change our conclusions regarding any of the section 4(a)(1) factors or their interactions for these species. Therefore, we incorporate herein all information, discussion, and conclusions on the summary of factors affecting the two guitarfish species in the status review (Newell 2016) and proposed rule (81 FR 64094; September 19, 2016).

Extinction Risk

None of the information we received from public comment on the proposed rule affected our extinction risk evaluations of these two guitarfish species. Therefore, we incorporate herein all information, discussion, and conclusions, with the minor updates noted above, on the extinction risk of the two guitarfish species in the status review (Newell 2016) and proposed rule (81 FR 64094; September 19, 2016).

Protective Efforts

As part of our evaluation of the status of the guitarfishes, we considered conservation efforts to protect each species and evaluated whether these conservation efforts are adequate to mitigate the existing threats to the point where extinction risk is significantly lowered and the species' status is improved. None of the information we received from public comment on the proposed rule affected our conclusions regarding conservation efforts to protect the two guitarfish species. We incorporate herein all information, discussion, and conclusions on the protective efforts for both guitarfish species in the status review (Newell 2016) and proposed rule (81 FR 64094; September 19, 2016).

Final Determination

There is significant uncertainty regarding the status of the current populations of both *R. rhinobatos* and *R. cemiculus*, but both species may still be relatively common, although very likely below their historical population levels, in Tunisia, Israel, Lebanon, Syria, and southeastern Turkey. Based on this information, and the best available scientific and commercial information, as summarized here, in the proposed rule (81 FR 64094; September 19, 2016), and in Newell (2016), we find that neither *Rhinobatos* species is currently at high risk of extinction throughout their ranges. However, both species are at moderate risk of extinction. We assessed the ESA section 4(a)(1) factors and conclude that *R. rhinobatos* and *R. cemiculus* face ongoing threats of overutilization by fisheries and inadequate existing regulatory mechanisms throughout their ranges. Both species have also suffered a curtailment of a large portion of their historical ranges. These species' natural biological vulnerability to overexploitation and present demographic risks (declining abundance, decreasing size of reproductive individuals, and low productivity) are currently exacerbating the negative effects of these threats. Further, ongoing conservation efforts are not adequate to improve the status of these species. Thus, both species likely to become endangered throughout their ranges in the foreseeable future (15-20 years). Therefore, we are listing both species as threatened under the ESA.

Effects of Listing

Conservation measures provided for species listed as threatened under the ESA include recovery actions (16 U.S.C. 1533(f)); Federal agency requirements to consult with NMFS under section 7 of the ESA to ensure their actions do not jeopardize the species or result in adverse modification or destruction of critical habitat should it be

designated (16 U.S.C. 1536); designation of critical habitat if prudent and determinable (16 U.S.C. 1533(a)(3)(A)); and prohibitions on taking (16 U.S.C. 1538) through a rule promulgated under section 4(d). In addition, recognition of the species' plight through listing promotes conservation actions by Federal and State agencies, foreign entities, private groups, and individuals.

Identifying Section 7 Consultation Requirements

Section 7(a)(2) (16 U.S.C. 1536(a)(2)) of the ESA and NMFS/USFWS regulations require Federal agencies to consult with us to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of listed species or destroy or adversely modify critical habitat. It is unlikely that the listing of these species under the ESA will increase the number of section 7 consultations, because these species occur entirely outside of the United States and are unlikely to be affected by Federal actions.

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 (a) essential to the conservation of the species and (b) 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 upon a determination that such areas are essential for the conservation of the species. Section 4(a)(3)(A) of the ESA (16 U.S.C. 1533(a)(3)(A)) requires that, to the extent prudent and determinable, critical habitat be designated concurrently with the listing of a species. However, critical habitat shall not

be designated in foreign countries or other areas outside U.S. jurisdiction (50 CFR 424.12 (g)).

The best available scientific and commercial data as discussed above identify the geographical areas occupied by *R. rhinobatos* and *R. cemiculus* as being entirely outside U.S. jurisdiction, so we cannot designate occupied critical habitat for these species. We can designate critical habitat in areas in the United States currently unoccupied by the species if the area(s) are determined by the Secretary to be essential for the conservation of the species. The best available scientific and commercial information on these species does not indicate that U.S. waters provide any specific essential biological function for either of the *Rhinobatos* species. Therefore, based on the available information, we are not designating critical habitat for *R. cemiculus* or *R. rhinobatos*.

Identification of Those Activities That Would Constitute a Violation of Section 9 of the ESA

On July 1, 1994, NMFS and FWS published a policy (59 FR 34272) that requires NMFS to identify, to the maximum extent practicable at the time a species is listed, those activities that would or would not constitute a violation of section 9 of the ESA. Because we are listing *R. rhinobatos* and *R. cemiculus* as threatened, no prohibitions of section 9(a)(1) of the ESA will apply to these species.

Protective Regulations Under Section 4(d) of the ESA

We are listing *R. rhinobatos* and *R. cemiculus* as threatened under the ESA. In the case of threatened species, ESA section 4(d) leaves it to the Secretary's discretion whether, and to what extent, to extend the section 9(a) "take" prohibitions to the species, and authorizes us to issue regulations necessary and advisable for the conservation of the

species. Thus, we have flexibility under section 4(d) to tailor protective regulations, taking into account the effectiveness of available conservation measures. The 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. These section 9(a) prohibitions apply to all individuals, organizations, and agencies subject to U.S. jurisdiction. Because neither species has ever occupied U.S. waters, and the United States has no known commercial or management interest in either species, we are not applying any section 9(a) prohibitions to either species at this time.

References

A complete list of references used in this final rule is available upon request (see **ADDRESSES**).

Classification

National Environmental Policy Act

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), we have concluded that ESA listing actions are not subject to the environmental assessment requirements of the National Environmental Policy Act (NEPA).

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, we determined that this final rule does not have significant federalism effects and that a federalism assessment is not required.

List of Subjects in 50 CFR Part 223

Endangered and threatened species, Exports, Imports, Transportation.

Dated: January 10, 2017

Samuel D. Rauch, III,

Deputy Assistant Administrator for Regulatory Programs,

National Marine Fisheries Service.

For the reasons set out in the preamble, 50 CFR part 223 is amended 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, paragraph (e) add new entries for “Guitarfish, blackchin” and “Guitarfish, common”, in alphabetical order by common name under the “Fishes” table subheading to read as follows:

§ 223.102 Enumeration of threatened marine and anadromous species.

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(e) * * *

Species ¹			Citation(s) for listing Determination(s)	Critical Habitat	ESA rules
Common name	Scientific name	Description of listed entity			

Fishes					

Guitarfish, blackchin	<i>Rhinobatos cemiculus</i>	Entire species	82 FR [Insert FEDERAL REGISTER page where the document begins], [Insert date of publication when published in the FEDERAL REGISTER]	NA	NA.
Guitarfish, common	<i>Rhinobatos rhinobatos</i>	Entire species	82 FR [Insert FEDERAL REGISTER page where the document begins], [Insert date of publication when published in the FEDERAL REGISTER]	NA	NA.

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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