

also be held by video teleconference in the future. During the hearing, the operator can expect the region issuing the notice to introduce the allegations and provide an explanation as to the evidence gathered in support. The operator will then have the opportunity to present its own information, facts, evidence, explanations, and arguments in response. The operator may submit any material relevant to the issues under consideration, and may call witnesses on its behalf and examine the evidence and witnesses presented by the region. At the close of the operator's presentation, the hearing officer may allow the presentation of any rebuttal information by the region, and respondents may then respond to that information.

The hearing officer ensures that all parties have an ample opportunity to present their position and supporting evidence, and will end discussion on a topic only once it is clear that all the issues have been fully examined. Questions may be asked by the hearing officer during either party's presentations. In addition, the informal nature of the proceeding allows the parties to ask questions of one another, although parameters may be established to ensure the parties have sufficient uninterrupted time to make their presentations. The hearing officer ensures that discussion stays focused on the relevant and determinative matters in the case and avoids allowing tangential issues to become a distraction. The hearing will last as long as necessary to ensure the parties have ample opportunity to present their case, although the hearing officer will attempt to accommodate the parties' schedules to the extent practicable.

Written materials and evidence presented at the hearing will be collected by the hearing officer for insertion into the record. Hearings are not recorded and are not transcribed, but if requested in advance of the hearing, the respondent may make arrangements for the hearing to be transcribed at its own expense, provided that a copy of the final transcript is submitted for the record. The hearing officer may take notes, including electronic notes and recordings during the hearing, but such personal notes are not part of the official record or maintained by the agency.

At the close of the hearing, the respondent may request an opportunity to submit further written material for inclusion in the record. The hearing officer will allow a reasonable time for the submission of the material, but if the material is not submitted within the

time prescribed, the case will proceed to final action without the material.

#### VII. After the Hearing

If post-hearing documents contain new evidence or new arguments, the hearing officer will provide written notification to all parties and direct the parties to respond within a certain amount of time. The hearing officer may also request that additional documents be submitted after the hearing, if necessary, to fully develop the record.

The hearing officer will ensure that all material submitted before and during the hearing is placed in the record. At this stage, the record will include the notice, violation report, written statements by the parties, evidence submitted, list of hearing attendees, any hearing transcript, and any other pre-hearing or post-hearing documents submitted by the parties.

Upon the close of a hearing and receipt of all post-hearing submissions, the hearing officer will prepare a recommended decision to be issued by the Associate Administrator. The restriction on ex parte communications discussed above is especially applicable at this stage of the proceeding, and the hearing officer will not engage in such discussions or communications regarding the case with anyone involved in the prosecution or defense of the notice. The hearing officer's recommended decision may be reviewed by the Deputy Chief Counsel and staff of the Associate Administrator prior to issuance by the Associate Administrator.

Upon signature of the decision by the Associate Administrator, PHMSA will serve the decision upon the respondent and the applicable region in accordance with § 190.5. Decisions by the Associate Administrator are also made publicly available on the PHMSA Enforcement Transparency Web site.

Issued in Washington, DC, on July 1, 2011.

**Bizunesh Scott,**

*Chief Counsel.*

**Jeffrey D. Wiese,**

*Associate Administrator for Pipeline Safety.*

[FR Doc. 2011-17231 Filed 7-11-11; 8:45 am]

**BILLING CODE 4910-60-P**

## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

#### 50 CFR Part 224

[Docket No. 0906221082-0484-03]

RIN 0648-XQ03

#### Endangered and Threatened Wildlife and Plants; Endangered Status for the Largetooth Sawfish

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

**ACTION:** Final rule.

**SUMMARY:** We, NMFS, issue a final determination to list the largetooth sawfish (*Pristis perotteti*) as endangered under the Endangered Species Act (ESA) of 1973, as amended. We do not intend to propose to designate critical habitat for the species. We have reviewed the status of the species and conservation efforts being made to protect the species, considered public and peer review comments, and we have made our determination that the largetooth sawfish is in danger of extinction throughout its range, and should be listed as an endangered species, based on the best available scientific and commercial data.

**DATES:** This final rule is effective August 11, 2011.

**ADDRESSES:** Assistant Regional Administrator for Protected Resources, NMFS, Southeast Regional Office, 263 13th Avenue South, St. Petersburg, FL 33701-5505.

**FOR FURTHER INFORMATION CONTACT:** Shelley Norton, NMFS, Southeast Regional Office (727) 824-5312 or Dwayne Meadows, NMFS, Office of Protected Resources (301) 713-1401.

#### SUPPLEMENTARY INFORMATION:

##### Background

On November 30, 1999, the Center for Marine Conservation (currently called Ocean Conservancy) petitioned us to list North American populations of largetooth and smalltooth sawfish as endangered under the ESA. While the smalltooth sawfish underwent a formal status review (56 FR 12959), on March 10, 2000, we determined the petitioner did not present substantial scientific or commercial information indicating that the petitioned action may be warranted for the largetooth sawfish (*Pristis perotteti*). Specifically, there was no evidence that a North American population of largetooth sawfish existed. The largetooth sawfish was,

however, maintained on the candidate species list and later transferred to the new Species of Concern list on April 15, 2004 (69 FR 19975).

On April 21, 2009, WildEarth Guardians petitioned the Secretary of Commerce to list the largemouth sawfish as endangered or threatened throughout its range and to designate critical habitat for this species. The petitioners also requested that we reconsider our previous March 10, 2000, negative finding on listing the North American population.

On July 29, 2009, we published a positive 90-day finding (74 FR 37671) announcing that the petition presented substantial scientific or commercial information indicating the petitioned action of listing the species may be warranted. We announced the initiation of a status review of the species and requested information to inform the agency's decision on whether to propose the species for ESA listing. Our Southeast Regional Office (SERO) issued two contracts in 2009 to the Florida Museum of Natural History to compile all confirmed records of largemouth sawfish in the U.S. and internationally. The status review (NMFS, 2010) was conducted by the Southeast Fisheries Science Center (SEFSC) and SERO staff. The status review is available electronically at <http://sero.nmfs.noaa.gov/pr/largetoothsawfish.htm>. On May 7, 2010, we published a proposed rule (75 FR 25174) to list *Pristis perotteti* as an endangered species under the ESA. We solicited public comment on the proposed listing for 60 days. We did not hold a public hearing for the proposal.

#### Listing Determinations Under the Endangered Species Act

We are responsible for determining whether the largemouth sawfish 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. We have followed a stepwise approach in making this listing determination. As the first of five steps (species determination, extinction risk assessment, threats assessment, protective efforts, status determination), we determined whether the largemouth sawfish is a "species" under the ESA. 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 taxonomic species plus "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."

Next we completed an extinction risk assessment to determine the status of the species, in particular whether it qualified for threatened or endangered status. 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." For our extinction risk analysis we follow the general procedure developed by Wainwright and Kope (1999).

In the third step, we assessed the threats affecting the species status. We did this by following the guidance in the ESA that requires us to determine whether any species is endangered or threatened due to 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 (section 4(a)(1)(A) through (E)). After analyzing the threats affecting the species, we re-evaluated the extinction status for the species to see if the status changed after the assessment of the five factors.

The fourth step involved an assessment of the efforts being made to protect the species to determine if these efforts are adequate to mitigate existing threats. We evaluated all conservation efforts using the criteria outlined in the joint NMFS and U.S. Fish and Wildlife Service (USFWS) Policy for Evaluating Conservation Efforts When Making Listing Decisions (PECE policy; 68 FR 15100; March 28, 2003) to determine their certainties of implementation and effectiveness. In the final step, we reassessed the preliminary extinction risk assessment conclusion from above to determine if the status of the species had changed based on the PECE analysis.

To evaluate the petitioner's request that we designate critical habitat for the species, we followed the provisions in the ESA and in our implementing regulations (50 CFR part 424). Of particular relevance in this case are provisions that we cannot designate critical habitat in "foreign countries" or

areas outside of U.S. jurisdiction and that we shall not designate as critical habitat areas outside of the geographical area presently occupied by a species, unless "a designation limited to its present range would be inadequate to ensure the conservation of the species" (50 CFR 424.12). Furthermore, to designate unoccupied critical habitat, we must also determine that the specific area(s) outside the geographic area currently occupied by the species at the time it is listed are essential to the conservation of the species.

Section 4(b)(1)(B) of the ESA requires us to give consideration to species which: (1) Have been designated as requiring protection from unrestricted commerce by any foreign nation or pursuant to an international agreement; or (2) have been identified as in danger of extinction, or likely to become so within the foreseeable future, by any state agency or by any agency of a foreign nation.

#### Largemouth Sawfish Natural History

##### Taxonomy

All sawfishes belong to two Genera (*Pristis* and *Anoxypristis*) in the Family Pristidae of the Order Pristiformes, and are classified as rays (Superorder Batoidea). Sawfishes are distinguished from other rays by the long snout (rostrum) with teeth on either side. Using molecular phylogeny (mitochondrial and nuclear gene analysis) paired with morphological characters, Faria (2007) distinguished seven extant species in the Pristidae. Sawfishes are classified into three morphological groups based on rostrum characteristics: Largemouth, smalltooth, and knifetooth (Garman, 1913). Three species are currently classified in the largemouth "group," namely *P. perotteti*, *P. microdon*, and *P. pristis*, though difficulties associated with taxonomic identification are known (Faria, 2007; Wiley *et al.*, 2008, Wueringer *et al.*, 2009).

*Pristis perotteti* has been referred to by other names throughout its range. For instance, it has been called *P. antiquorum* (as cited in Bigelow and Schroeder, 1953), *P. zephyreus* (Beebe and Tee-Van, 1941), *P. pristis* (McEachran and Fechhelm, 1998), or *P. microdon* (Garman, 1913; Fowler, 1941; Chirichigno and Cornejo, 2001; Vakily *et al.*, 2002). Some scientists consider the eastern Pacific populations to be part of the species *P. microdon* (Garman, 1913; Fowler, 1941; Chirichigno and Cornejo, 2001), while others consider the eastern Pacific populations to be *P. perotteti* (Jordan and Evermann, 1896; refs. in Beebe and

Tee-Van, 1941; Compagno and Cook, 1995; Camhi *et al.*, 1998; Cook *et al.*, 2005). The species are generally classified based upon location (i.e., *P. perotteti* occurs in the Atlantic, while *P. microdon* is in the Indo-Pacific), and there is some evidence that tooth counts may differ (Wueringer *et al.*, 2009). The conserved morphology of sawfishes makes identification difficult in some cases; most species are distinguished by the number of teeth on, and size of, the rostrum, placement of the first dorsal fin in relation to the pectoral fins, and shape of the lower lobe of the caudal fin. However, Faria (2007), used both mitochondrial and nuclear genes to investigate the population structure for all Pristidae. The results from his study indicate that the "largetooth" species *P. microdon* and *P. perotteti* are separate species, and that *P. microdon* occurs in the Pacific, based on their mitochondrial deoxyribonucleic acid sequencing data and differences in external morphology (e.g., rostrum length and horizontal length of the eye). Based on the available taxonomic information on *P. perotteti*, we have determined the species' range is the eastern and western Atlantic Ocean.

The rostral tooth count per side for *P. perotteti* ranges from 14 to 22, and the space between the two most posterior teeth is between 4.5 and 8.5 percent of rostrum standard length (Faria, 2007). The origin of the first dorsal fin is forward of the pelvic fin origin, and the lower lobe of the caudal fin is distinct at all maturity stages. The largest known specimen was a 275.6 in (700 cm) total length (TL) female captured in northern Brazilian waters (Almeida, 1999). The only other sawfish species that overlaps in range with *P. perotteti* is the smalltooth sawfish, *P. pectinata*. These species are differentiated by the number of teeth on the rostrum (22 to 29 per side for *P. pectinata* (Wiley *et al.*, 2008), and 14 to 22 per side for *P. perotteti* (Faria, 2007)), and the rostrum length of *P. pectinata* is shorter in relation to its body length.

#### Habitat Use and Migration

Largetooth sawfish are generally restricted to shallow coastal, estuarine, and fresh waters, although they have been found at depths of up to 400 ft (122 m) in Lake Nicaragua. Largetooth sawfish are often found in brackish water near river mouths and large bays, preferring partially enclosed waters, lying in deeper holes and on bottoms of mud or muddy sand (Bigelow and Schroeder, 1953). This species, like the smalltooth sawfish, is highly mangrove-associated (Burgess *et al.*, 2009). Juvenile smalltooth sawfish are

commonly found close to shore on muddy or sandy bottoms (NMFS 2009); however they are commonly observed swimming near the surface in the wild and in aquaria (Cook *et al.*, 2005). Largetooth sawfish move across salinity gradients freely and appear to have more physiological tolerance of freshwater than smalltooth sawfish (Bigelow and Schroeder, 1953; Dahl, 1971; Thorson, 1974; 1976a; all as cited in Thorson, 1982a).

Though their habitats once overlapped in the northern Gulf of Mexico, the largetooth sawfish historically had a more southerly range than the smalltooth sawfish, with what appears to be a more narrow seasonal migration pattern. Mature largetooth sawfish seasonally ventured into waters as far north as U.S. waters of the Gulf of Mexico.

#### Age and Growth

There have been no formal studies examining the age and growth of the largetooth sawfish, though Thorson's (1982a) study of the Lake Nicaragua population estimated size at birth to be 30 in (75 cm) and an early juvenile growth rate of 13.8 to 15.7 in (35 to 40 cm)/year. Thorson (1982a) also estimated age of maturity to be 10 years and size at maturity 118 in (300 cm). Preliminary vertebral growth ring analysis has extrapolated largetooth sawfish (*P. microdon*) lifespan to an estimated maximum age of 51 years (Peeverell, 2006), and we determined this to be our best available estimate of largetooth sawfish lifespan. Growth rates of captive sawfish in Colombia averaged 7.7 in (19.6 cm) per year (Bohorquez, 2001).

#### Reproductive Biology

The reproductive method of sawfishes is most likely lecithotrophic viviparity; ova are internally fertilized, developing embryos receive nourishment from an external yolk sac, and the pups are born live after the yolk sac is absorbed. The only known reproductive study of largetooth sawfish was from Lake Nicaragua in the 1970s (Thorson, 1976a). This study found that litter size ranged from one to 13 pups, with an average of 7.3 pups per cycle. The gestation period was approximately 5 months, with a biennial reproductive cycle. After gestation, young are born between October and December (Oetinger, 1978). Thorson (1976a) also found that both ovaries appeared to be functional, though the left seemed to be larger and carry more ova. Parturition occurred in October and November and size at birth was between 28.7 and 31.5 in (73 and 80 cm) TL. Thorson (1976a)

reported that the smallest gravid female was 120 in (305 cm) TL, and based on this and other observations, reported the size at maturity is estimated to be around 118 in (300 cm) TL. The life history of largetooth sawfish, like most elasmobranchs, is characterized by slow growth, late maturity, and low fecundity, which generally contributes to a low intrinsic rate of population increase.

Simpfendorfer (2000) estimated that largetooth sawfish in Lake Nicaragua had an intrinsic rate of increase ( $r$ ) of 0.05 to 0.07 per year, with a population doubling time ( $t_{2}$ ) of 10.3 to 13.6 years. Intrinsic rates of increase below 0.1 are considered low, making species particularly vulnerable to population decline (Musick *et al.*, 2000). The results indicated that if effective conservation measures are put in place for the species and its habitats, recovery to levels with little risk of extinction will take many decades. Since Thorson (1973) hypothesized that many Lake Nicaragua sawfish may live their whole lives in the lake and Faria (2007) reported that the Lake Nicaragua sawfish may be a separate stock, the life history parameters estimated by Simpfendorfer (2000) may be unique to that subpopulation or stock.

#### Diet and Feeding

No published information is available that quantitatively describes the diet of largetooth sawfish. Bigelow and Schroeder (1953) reported that, in general, sawfish subsist on the most abundant small schooling fishes in the area, such as mullets and small clupeids. There is also some evidence of largetooth sawfish feeding on crustaceans and other small benthic organisms (Bigelow and Schroeder, 1953). In these cases, the rostrum may be used to stir up the bottom sediments to locate prey, and in the case of fish predation, the rostrum may be used to stun or wound the fish in a slashing movement (Bigelow and Schroeder, 1953).

#### Predation

While there is potential for competition between *P. perotteti* and *P. pectinata* due to their overlap in range and habitat types, there is no data to support this, and differences in patterns of habitat use and salinity tolerance may adequately partition the niches of these species. Thorson (1970) speculated that the Lake Nicaragua population may have also competed with the bull shark, *Carcharhinus leucas*, as both were quite prevalent (Thorson, 1970); however, both species have since declined to the point of near extirpation. A *Pristis*

species has been documented within the stomach of a bottlenose dolphin near Bermuda (Bigelow and Schroeder, 1953), in the stomach of a bull shark (*C. leucas*) in Australia (Thorburn *et al.*, 2004), and a juvenile smalltooth sawfish was captured with fresh bite marks from what appears to be a bull shark (Tonya Wiley, pers. comm., 2009). The International Union for Conservation of Nature (IUCN) Red List for the largemouth sawfish also states that crocodiles prey on the species (Charvet-Almeida *et al.*, 2007).

#### *Distribution and Abundance*

Historically, *P. perotteti* are thought to inhabit warm temperate to tropical marine waters in the eastern and western Atlantic and Caribbean. In the western Atlantic, *P. perotteti* occurred from the Caribbean and Gulf of Mexico south through Brazil, and in the United States, largemouth sawfish were reported in the Gulf of Mexico, mainly along the Texas coast and east into Florida waters (Burgess and Curtis, 2003; Burgess *et al.*, 2009). Burgess *et al.* (2009) also state that, based on the evidence, the species rarely occurred in Florida waters and that nearly all records of largemouth sawfish encountered in U.S. waters were limited to the Texas coast. In the eastern Atlantic, *P. perotteti* historically occurred from Spain through Angola.

Currently, *P. perotteti* are thought to primarily occur in freshwater habitats in Central (includes Mexico) and South America and West Africa. In Atlantic drainages, largemouth sawfish have been found in freshwater at least 833 miles (1,340 km) from the ocean in the Amazon River system (Manacapuru, Brazil), as well as in Lake Nicaragua and the San Juan River; the Rio Coco, on the border of Nicaragua and Honduras; Rio Patuca, Honduras; Lago de Izabal, Rio Motagua, and Rio Dulce, Guatemala; the Belize River, Belize; Mexican streams that flow into the Gulf of Mexico; Las Lagunas Del Tortuguero, Rio Parismina, Rio Pacuare, and Rio Matina, Costa Rica; Rio San Juan and the Magdalena River, Colombia; the Falm River in Mali and Senegal; the Saloum River, Senegal; coastal rivers in Gambia; and the Geba River, Guinea-Bissau (Thorson, 1974; 1982b; Castro-Aguirre, 1978 as cited in Thorson, 1982b; Compagno and Cook, 1995; C. Scharpf and M. McDavitt, pers. comm., as cited in Cook *et al.*, 2005).

#### *The United States*

Although the first confirmed record of a U.S. largemouth sawfish was from "the Gulf of Mexico" in 1878 (Burgess *et al.*, 2009), they were likely present prior to this time period. Sawfish encounters were reported in the entire Gulf of

Mexico in early popular literature of the late 1800s but the similarities between the smalltooth and largemouth sawfishes limited the ability of non-specialists to discriminate between the two species. Because of this, there is no conclusive data available for largemouth sawfish abundance before fishing and other anthropogenic pressures began to affect their distribution. Recreational fishers in Texas began targeting prize fishes, including large elasmobranchs such as sawfishes, in the 1930s. Photographs taken of these catches were favored in the print media, allowing Burgess *et al.* (2009), to identify 33 largemouth sawfish in Texas.

Though reported in the United States, it appears that *P. perotteti* was never as abundant as *P. pectinata*, with approximately 39 confirmed records (33 in Texas) from 1910 through 1961, and no confirmed sightings in the years since (Burgess *et al.*, 2009). A 1963 newspaper article reporting a shrimp trawler off the coast of Texas taking a "broadbill sawfish" may refer to a largemouth sawfish (Burgess *et al.*, 2009). One specimen was reported between 1916 and 1919 in Louisiana. The capture location and identification as a largemouth sawfish species "presumably from Alabama" was catalogued at the University of Alabama but could not be verified (Burgess *et al.*, 2009). Four individuals from Florida were noted between 1910 and 1960 (Burgess *et al.*, 2009). Two of the reports in Florida were identified by elasmobranch researcher Stewart Springer by rostral tooth counts: One from Key West (1941) and another from Port Salerno (Baughman, 1943; Bigelow and Schroeder, 1953). Port Salerno is on the east coast of Florida, making this capture the only reported largemouth sawfish outside of the Gulf of Mexico in the United States. Another specimen from south Florida was collected by the American Museum of Natural History in 1910. The final record for *P. perotteti* in Florida was recorded in the Springer and Woodburn (1960) study of Tampa Bay fishes. The dried specimen was on display at the Sea-Orama in the City of Clearwater Beach, but the identification was not verified, and the size of the specimen (Burgess *et al.*, 2009) was much smaller than any other individual captured in U.S. waters. With this exception, all largemouth sawfish captured in the U.S. were 14 feet (4.3 m) in length or larger.

In Texas, largemouth sawfish were primarily found in three regions: Padre Island-Laguna Madre, Corpus Christi-Port Aransas, and Galveston-Freeport (Burgess *et al.*, 2009). Most were caught from 1929 through 1957, though some

records may have been duplicated (Baughman, 1943). Ten largemouth sawfish were encountered in the Corpus Christi-Port Aransas region, from 1917 to 1961, though again duplication of records is possible. The highest number of records is from the northeast Texas coast (Galveston) and the lowest number from near the Texas-Mexico border (Padre Island), corresponding to the historical freshwater inflow patterns of the region (Longley, 1994). That is, sighting frequency is positively correlated with higher freshwater flow discharge. While it is likely that the freshwater affinity of this species, especially in comparison to the smalltooth sawfish, attracted the largemouth sawfish to these high outflow areas, these numbers may also be an artifact of higher fishing effort or likelihood of reporting in that area.

Burgess *et al.* (2009) report captures of largemouth sawfish in Texas were primarily in shallow inshore waters and the majority (65 percent) of those captures noted were taken from fisheries using rod and reel gears. Additionally, shrimp nets (reported as shrimp seines, shrimp net, and shrimp trawls) are the gear type associated with approximately 25 percent of all captures. Where size data could be determined, all largemouth sawfish caught in Texas were greater than 16 ft (4.88 m) TL. Burgess *et al.* (2009) report all largemouth sawfish found in U.S. waters were large (>14 ft (4.3 m)) and were primarily encountered during periods of warm water (May through October), suggesting that adults of this species mainly utilized Texas waters in the summer (but data on month of capture only exist for 10 records). The last confirmed record of *P. perotteti* in U.S. waters was from Port Aransas, Texas on June 24, 1961. The last records for other Gulf of Mexico states include Florida in 1941 and Louisiana in 1917. No records of largemouth sawfish were found from Mississippi, and, as stated previously, the one Alabama specimen could not be verified.

#### *The Caribbean, Central America, and Northern South America*

Only 33 confirmed records of *P. perotteti* exist for this region outside of Costa Rica and Nicaragua (Burgess *et al.*, 2009). The lack of data likely stems from several factors, including confusion or ambiguity of identification with smalltooth sawfish and the lack of scientific surveys and popular reports during the time of highest abundance. In total, 5 largemouth sawfish records were from Mexico, 5 from Guatemala, 1 from Honduras, 483 from Nicaragua, 37 from Costa Rica, 7 from Colombia, 6 from

Venezuela, 1 from Guyana, 5 from Suriname, 1 from French Guiana, and 1 from Trinidad. Length data was not available for most of these specimens.

Of the known Mexican largemouth sawfish, four were from the southwestern Gulf of Mexico (Tamaulipas, Veracruz, Tabasco, and Campeche), while one was captured at the northeastern tip of the Yucatan Peninsula (Quintana Roo). The mature (17.7 ft (5.4 m in total length), 1764 lbs (800 kg)) Yucatan individual was captured in 1997, which is the northernmost record in recent history. It appears that the last records in the Mexican Gulf of Mexico were prior to 1978, and Caribbean records are very sparse.

No encounters could be substantiated in Belize (Burgess *et al.*, 2009). All five Guatemalan largemouth sawfish were from a survey of Lake Izabal between 1946 and 1947, and sawfishes were reported to be important inland fishes (Saunders *et al.*, 1950). Though reported by Thorson *et al.* (1966a; 1966b) to be common throughout the area, a claim which was mirrored by local fishers at the time, there are no recent reports of encounters with sawfishes in Guatemala. The lone largemouth sawfish reported from Honduras was acquired from that country, but the true origin of the rostrum and the date of capture could not be confirmed.

The vast majority of *P. perotteti* records from Costa Rica (34 of 37) and Nicaragua (397 of 483) stem from Thorson's (1982a; 1982b) years of work on the Lake Nicaragua-Rio San Juan system. The San Juan River originates at Lake Nicaragua and runs along the Nicaragua-Costa Rica border until it reaches the Caribbean slightly south of the Nicaraguan border; therefore, movement between the countries was likely. Sawfish were noted in Nicaragua as early as 1529 by a Spanish chronicler (Gill and Bransford, 1877). This species was also reported in Nicaragua by Meek (1907), Regan (1908), Marden (1944), Bigelow and Schroeder (1953), Hagberg (1968), and Baez (1980a; 1980b). A commercial fishery for the largemouth sawfish that began in earnest around 1970 quickly decimated the Lake Nicaragua population (Thorson, 1982a). Low-level sustenance fishing for this species was common before this time, but the Nicaraguan government helped to establish a processing plant in 1970, which processed and sold the meat, fins, and rostra in an efficient manner. In the 1970s, an American supermarket chain (A&P) produced advertisements in their Ohio, Pennsylvania, and Illinois chains which included "Fish Features" listing "Sierra Steaks" using the Spanish name for sawfish, *pez sierra*, as

a fresh fish available in their stores (The Times Recorder, 1975). By 1981, Thorson (1982a) was unable to locate a single live specimen. Thorson (1982a) documented that within a decade the commercial largemouth sawfish fishery had removed the species from shallow water habitats within Lake Nicaragua. The species was relegated to deep water "pockets" remaining in Lake Nicaragua. Commercial fishing for largemouth sawfish in Lake Nicaragua was banned in 2006, but the species is still caught incidentally by fishers netting for other species (McDavitt, 2002). A Lake Nicaragua fisherman reported that he encounters a few sawfish annually (McDavitt, 2002). There are no known Nicaraguan records of the largemouth sawfish outside of the Lake Nicaragua-Rio San Juan-Rio Colorado system (Burgess *et al.*, 2009).

Bussing (2002) indicated that this species was known to inhabit the Rio Tempisque and tributaries of the San Juan basin in Costa Rica. Three occurrences in that river were found in internet searches, one being a 200 lb (90.7-kg) specimen caught recreationally (Burgess *et al.*, 2009). In Colombia, the Magdalena River estuary was the primary source for largemouth sawfish encounters from the 1940s (Miles, 1945), while other records originated from the Bahia de Cartagena and Isla de Salamanca (both marine), and Rio Sinu (freshwater) from the 1960s through the 1980s (Dahl, 1964; 1971; Frank and Rodriguez, 1976; Alvarez and Blanco, 1985). Scientists in the country reported that there have been no sightings of this species in Colombia for about 10 years (Burgess *et al.*, 2009).

Though thought to have once been abundant in some areas of Venezuela (Cervignon, 1966a; 1966b), the last of the four confirmed records of *P. perotteti* from that country was from 1962. The single records from Guyana, French Guiana, and Trinidad appear to be from the late 1800s and early 1900s. Of the five Suriname accounts, the latest was collected in 1962.

#### Brazil

The largemouth sawfish was assessed as critically endangered in Brazil by Charvet-Almeida and Faria (2008). A total of 139 reports are available for this species (Burgess *et al.*, 2009), some from as recently as 2009. Most of the records for which location is known originated in the state of Amazonas (12), which encompasses the middle section of the Amazon River basin along with the confluence of the Rio Negro and Rio Solimoes (in the state of Manaus). The other known locations are from the states of Rio Grande do Norte, Sergipe,

Bahia, Espirito Santo, Rio de Janeiro, and Sao Paulo (1 record each), Para (7 records), and Maranhao (3 records). A few more reports were reported in Maranhao (email from Patricia Charvet-Almeida to Shelley Norton, 2010). Para contains the estuary and lower reaches of the Amazon River, and Maranhao is just southeast of Para. Anecdotal reports from fishers indicate that they are also caught in Amapa, which is the northernmost state in Brazil (Charvet-Almeida and Faria, 2008).

The Amazon River basin and adjacent waters are traditionally the most abundant known area for largemouth sawfish in Brazil (Bates, 1964; Marlier, 1967; Furneau, 1969); however, scientific collection and fisheries data for this region are very limited, both historically and recently. Sawfishes are captured as bycatch in artisanal and commercial fisheries in northern Brazil (Charvet-Almeida, 2002). Most historic records of largemouth sawfish in the Amazon River (Amazonia) predate 1974. Known lengths ranged from 4.9 to 8.2 ft (1.5 to 2.5 m) in total length. Mathew McDavitt (pers. comm., 2010) notes there is anecdotal evidence that *P. perotteti* is currently being targeted in Brazil for the lucrative Chinese shark fin trade. A recent popular guide in China for dried seafood products provides descriptions of a dozen or so popular shark fin categories. Based on photographs and descriptions, the category *huang jiao* (literally: "yellow-glue") comes from sawfishes, the trade name deriving from its beige color and the especially copious gelatine it produces when cooked. This Chinese dried seafood book gives the current sources for *huang jiao* fin, noting that the supply from Brazil is favored nowadays due to its comparatively large size.

The Brazilian sawfish populations, which include both *P. perotteti* and *P. pectinata*, are found in this region, but are almost exclusively of the largemouth species, are presumably large and abundant compared to those captured in other localities, due to the fact that sawfishes have not yet been extirpated in Brazilian waters to the extent that they have been elsewhere. Presumably both species are caught and sold. No quantification of the exact species or number of captured or sold sawfishes is currently available, though Charvet-Almeida and Faria (2008) reported that as many as 1500 small and medium rostra and 180 large rostra were sold each year in Para alone.

The two most recent largemouth records in Brazil were from Maranhao, one caught by a fisher in 1998 and another in 2009. The latter was a gravid

female estimated to be 7 m TL (Burgess *et al.*, 2009). Earlier reports of largemouth sawfish in Maranhao were mostly from the 1980s and 90s (Lessa, 1986; Martins-Juras *et al.*, 1987; Stride and Batista, 1992; Menni and Lessa, 1998; and Lessa *et al.*, 1999). Sawfish are likely caught incidentally by shark fishers in this state and landed for their saws (Almeida *et al.*, 2006).

Records of largemouth sawfish in each of the states south of Maranhao are limited to one each, and the dates of capture are largely unknown, though most appear to be from the nineteenth century. An archeological site in Sao Paulo yielded tooled *P. perotteti* rostral teeth, though whether they came from locally caught animals, or were traded from the north is unknown. Charvet-Almeida and Faria (2008) concluded that largemouth sawfish are most likely extirpated in most of the states south of Maranhao.

#### *West Coast of Africa*

Historical records indicate that largemouth sawfish were once relatively common in the coastal estuaries of West Africa. Verified records exist from Senegal (1841 to 1902), Gambia (1885 to 1909), Guinea-Bissau (1912), Republic of Guinea (1965), Sierra Leone (date unknown), Liberia (1927), Cote d'Ivoire (1881 to 1923), Congo (1951 to 1958), Democratic Republic of the Congo (1951 to 1959), and Angola (1951) (Burgess *et al.*, 2009). Most records, however, lacked species identification and locality data and may have been confused taxonomically with other sawfish species that also occur in the area. Unpublished notes from a 1950s survey detail 12 *P. perotteti* from Mauritania, Senegal, Guinea, Cote d'Ivoire, and Nigeria, ranging in size from 35 through 276 in (89 through 700 cm) in total length (Burgess *et al.*, 2009).

A more recent status review by Ballouard *et al.* (2006) reported that sawfishes, including the largemouth sawfish, were once common from Mauritania to the Republic of Guinea, but are now rarely captured or encountered. According to this report, the range of sawfishes has decreased to the Bissagos Archipelago (Guinea Bissau). The most recent sawfish encounters outside Guinea Bissau were in the 1990s in Mauritania, Senegal, Gambia, and the Republic of Guinea. The most recent documented *P. perotteti* capture was from 2005 in Nord de Caravela (Guinea Bissau), along with anecdotal accounts from fishers of captures off of two islands in the same area (Burgess *et al.*, 2009).

#### **Summary and Abundance**

As documented above, the range of the largemouth sawfish has contracted significantly on both sides of the Atlantic. Although no time-series abundance data exists to quantify the extent of the decline of the species throughout its range, we believe that with the substantial number of commercial and recreational fisheries fishing along our U.S. coast, the uniqueness of the species morphology, and because media and internet sites are easily accessible to the public, largemouth sawfish encounters would be noteworthy and reported. Additionally, outreach efforts along the Gulf of Mexico coast in the U.S. for the smalltooth sawfish, which includes printed brochures and signage in local bait shops, marinas, and boat ramps on where and how to report sawfish encounters, should have increased the likelihood of reporting a largemouth sawfish encounter. Access to media and internet sites for reporting largemouth encounters outside the U.S. is most likely less common in some of the remote areas along the coasts of Central America, the Amazonian region of Brazil, and West Africa. Nevertheless, the apparent decrease of sightings over time suggests that the species has undergone severe declines in abundance throughout its range. Moreover, the decline in museum records, negative scientific survey results in the U.S. and Lake Nicaragua, and anecdotal reports from fisher people suggest the trend for the species is declining (Burgess *et al.*, 2009).

#### **Peer Review and Public Comment**

In December 2004, the Office of Management and Budget (OMB) issued a Final Information Quality Bulletin for Peer Review establishing minimum standards for peer review. Similarly, a joint NMFS/FWS policy (59 FR 34270; July 1, 1994) requires us to solicit independent expert review from at least three qualified specialists, concurrent with the public comment period. We solicited peer review comments from four scientific peer reviewers. Public comments were received from five commenters. Three commenters supported our decision to list the species as endangered under the ESA, but none of the commenters or peer reviewers indicated they did not support the decision to list the species. Several of the commenters did not support our decision not to designate critical habitat. Two commenters provide information on the occurrence of the species within specific areas. The

peer review and public comments are summarized below.

#### *Peer Review Comments*

*Comment 1:* General editorial peer review comments identified some errors in the lack of italicization of the species genus and species name.

*Response:* We have corrected these errors in the final rule.

*Comment 2:* No directed research for largemouth sawfish is ongoing in Texas, but Texas Parks and Wildlife Department (TPWD) is conducting surveys which could capture sawfish in Texas waters. TPWD has ongoing standardized fisheries independent and dependent monitoring programs in all of the bay systems and in the Gulf of Mexico along the Texas coastline for the last 35 years. The surveys are conducted using seines, trawls, and gill nets annually. All of the gears used have been found to capture sawfish. Only two sawfish have been recorded during the sampling and they were smalltooth sawfish.

*Response:* This supports the information in our files on the extirpation of the largemouth sawfish from Texas waters for decades. We have incorporated this information into our files.

*Comment 3:* TPWD classifies the smalltooth sawfish and largemouth sawfish as endangered or threatened animals and prohibits the killing or take of either species. TPWD also distributes "Shark Identification and Regulations in Texas" brochures that includes information on the prohibition of take of sawfish and also provides information on where to report an encounter. These brochures are distributed from TPWD Field Stations, Law Enforcement Offices, during outreach events, public meetings, public hearings, and upon request. In 2010, NMFS funded the TPWD with section 6 ESA funds to conduct outreach and educational events to promote reporting sawfish captures to the National Sawfish Encounter Database.

*Response:* Outreach efforts in Texas have been very successful and have resulted in the public reporting of smalltooth sawfish encounters to the National Sawfish Encounter Database, and the reporting of the location of curious saws of largemouth sawfish for the purposes of obtaining genetic information.

*Comment 4:* The largemouth sawfish will benefit from an endangered species listing, but critical habitat should not be designated or a recovery plan developed, unless the species returns to U.S. waters. Designating critical habitat or developing a recovery plan would be

arbitrary and capricious with little scientific merit.

*Response:* We do not propose to designate critical habitat. We will develop a recovery plan for the largemouth sawfish if we determine that sections 4(f)(1) and 4(a)(1)(A) of the ESA apply. Section 4(f)(1) of the ESA states that "Recovery plans shall be developed unless such plans will not promote the conservation of the species \* \* \*" Section 4 (f)(1)(A) of the ESA also states "Priority will be given to the maximum extent practicable, to those species that will most likely benefit from such plans \* \* \*"

*Comment 5:* Several reviewers requested we designate critical habitat in foreign countries and one reviewer stated that we can determine the habitat capacity for the species in foreign countries.

*Response:* We do not have specific information on the habitat capacity for the largemouth sawfish in foreign countries and no law provides us with authority to designate critical habitat in foreign countries (50 CFR 424.12 (h)).

*Comment 6:* The Convention on International Trade of Endangered Species (CITES) does not include the U.S. in their described distribution of *P. perotteti* listing, it only includes Brazil, Colombia, El Salvador, Gambia, Guatemala, Guinea Bissau, Honduras, Mali, Nicaragua, Panama, and Senegal.

*Response:* The range information in CITES is consistent with the information in our files.

*Comment 7:* Hotspots exist for the species throughout its range. Conservation efforts should be made which include the development of regulations and the redirecting of law enforcement efforts in hotspot areas. Three potential hot spots are Costa Rica, Nicaragua, and Brazil. Additionally, a proposed dredging project in the San Juan River in Nicaragua was identified in a hotspot area that will modify water flow and natural habitats for largemouth and smalltooth sawfish in the area.

*Response:* NMFS agrees that Costa Rica, Nicaragua, and Brazil appear to be hotspots for the species. We cannot develop regulations or manage law enforcement efforts in foreign countries, but we can provide information to international sawfish researchers and government staff on potential conservation issues or threats to listed species. Prohibitions under section 9 of the ESA apply to all U.S. citizens and U.S. government actions, anywhere.

*Comment 8:* Although some biologists in Costa Rica believe the largemouth sawfish has been extirpated from the country, recent anecdotal information from fisherman indicate that sawfish

(smalltooth or largemouth) are still present in the area.

*Response:* We do not have any information on recent reports of largemouth sawfish in Costa Rica, but we will follow-up with the reviewer to try to obtain more information on the recent reports.

*Comment 9:* A recommendation was made to advise local governments, universities, researchers, and non-governmental agencies to become more involved in promoting and funding scientific research throughout the range of the largemouth sawfish. The reviewer also provided a list of potential research efforts that should be considered.

*Response:* We will work with the IUCN Shark Specialist Group's newly formed Sawfish Conservation Committee, to develop a conservation strategy and plan for all sawfish species, foreign and domestic. The conservation plan should identify actions or research efforts necessary to conserve all species of sawfish.

*Comment 10:* A reviewer noted that mangrove areas are considered pupping grounds for *P. perotteti* but provided no data or references in support.

*Response:* We could not locate specific information on pupping grounds for *P. perotteti*, but we believe the species may use mangrove habitat for pupping, based on the information known on the use of mangrove habitats as nursery areas for *P. pectinata*.

*Comment 11:* Add information into the "Age and Growth" section from a paper written by Simpfendorfer (2000).

*Response:* Simpfendorfer (2000) provides population growth rate information which is included in the "Reproductive Biology" section. Growth rate information from captive sawfish in Colombia from Bohoroquez (2001) was added to the "Age and Growth" section.

*Comment 12:* A reviewer did not agree that there is doubt regarding the reproductive method for sawfish.

*Response:* No reproductive studies on *P. perotteti* exist in the literature so reproductive method is inferred from studies of closely related sawfishes.

*Comment 13:* Are foreign records of largemouth sawfish reports from museums or grey literature?

*Response:* The primary source of foreign records of *P. perotteti* comes from Burgess *et al.* (2009). Burgess *et al.* (2009) used various methods to gather information on the species including personal interviews, literature searches, historic newspaper and magazine searches, and interviews with scientists in museum curators in foreign countries.

*Comment 14:* A reviewer suggested we change the word "few" to "many"

when we discuss the number of decades needed to recover *P. perotteti*.

*Response:* We agree, Simpfendorfer (2000), determined it will take several decades to recover the species and changed the text.

*Comment 15:* A reviewer requested additional citations throughout the document.

*Response:* The reviewer did not provide suggested citations to add to our document. Information is limited on *P. perotteti*, and we provided the applicable citations available on the species.

*Comment 16:* Rostral teeth counts can overlap between *P. perotteti* and *P. pectinata*.

*Response:* We acknowledge that the rostral teeth counts can overlap between the species, both species can have 22 teeth per side.

*Comment 17:* A reviewer stated that, based on the limited fisheries data available on *P. perotteti*, that the statement that *P. perotteti* was never abundant in U.S. waters should be restated as "never as abundant as *P. pectinata*."

*Response:* We agree with the reviewer statement and changed the text in the final rule.

*Comment 18:* Guerillas and drug smugglers make it almost impossible to access some areas in Central and South America.

*Response:* We acknowledge that illegal activities may affect access to areas that support *P. perotteti* and recent information on the presence of the species in these areas may not be available.

*Comment 19:* NMFS does not need evidence of habitat loss throughout the species' range to say that habitat loss is a threat outside the U.S. The reviewer also notes that population growth is linked to a world-wide habitat problem that affects all coastal and estuarine species.

*Response:* We acknowledge that habitat loss is occurring throughout the species' entire range in the proposed and final rule in the "The Present or Threatened Destruction, Modification, or Curtailment of its Habitat or Range" section and we also recognize that habitat losses are occurring range-wide.

*Comment 20:* A reviewer noted that data may not exist outside of Lake Nicaragua on the exact extent of the species decline but that it is correct to say that severe declines have taken place within its range.

*Response:* NMFS agrees that no other fishery data exists outside of the Lake Nicaragua fishery data and we agree that significant declines in the species abundance have most likely occurred.

*Comment 21:* Capture records in the states south of Maranhao are incorrect. A few more reports from other states occurred in the 1970's.

*Response:* We corrected the information in our final rule.

*Comment 22:* A score of (3) was very low on our evaluation of "other risk" factors for evaluating extinction risk. Simpfendorfer (2000) indicates recovery would take decades and the species is very, very, vulnerable to fishing gear entanglement, so the reviewer suggests the score should be increased. The reviewer also suggests that fishing gears or risk of entanglement would fit better in the "other risk" evaluation category.

*Response:* A risk level of 3 equates to a moderate risk, which according to Wainwright and Kope's (1999) is defined as factors that contribute significantly to long-term risk of extinction, but do not alone constitute a danger of extinction in the future. We rated the "other risk" factors, which includes life history characteristics of slow growth and late maturity a 3 because life history alone does not alone constitute a danger of extinction in the future. We did not change our ranking of the "other risks" factors.

Wainwright and Kope (1999) explain the "other risks" factor category as including life history information so we believe this is the correct place for evaluating the life history information. Entanglement and other bycatch are commonly considered in the overutilization factor.

*Comment 23:* The fishing gear types listed under the "Commercial Fisheries" section of the proposed rule for the shark fishery in Brazil are incorrect. The gear types should be listed as gillnets and trawl nets.

*Response:* We corrected this error in the final rule.

*Comment 24:* In Brazil and Nicaragua the species is protected, which means catches and landings are illegal. Harvest limits are not in place and enforcement is a challenge. The reviewer requested we revise the sentence in the "The Inadequacy of Existing Regulatory Mechanisms" section on the protections in Brazil.

*Response:* We modified the sentence to clarify that the protections do not apply to harvest limits.

*Comment 25:* Protections in the U.S. for *P. pectinata* will benefit *P. perotteti*, should it return to U.S. waters.

*Response:* We agree because both species are susceptible to the same types of threats, and because we have conservations measures in place for *P. pectinata* throughout the U.S. historic range of *P. perotteti*.

*Comment 26:* Predation is not a threat for the species.

*Response:* We stated in the proposed rule that no evidence suggests that predation is a threat to the species.

*Comment 27:* A citation quoted rostral tooth counts incorrectly for Wiley *et al.* (2008). Rostral tooth counts for *P. pectinata* should be 22–29 per side.

*Response:* We corrected the error in the final rule.

#### Public Comments

*Comment 28:* Largetooth sawfish has not been documented within the boundaries of any National Park Service unit.

*Response:* This information has been incorporated into our files.

*Comment 29:* *Pristis perotteti* likely disappeared from the area of intervention of the Regional Commission on Fisheries which covers Gambia, Guinea, Guinea Bissau, Mauritania, Senegal, and Sierra Leone, 20 years ago. Investigations conducted in 2005–2006 for the Sharks Sub-Regional Action Plan, Fondation Internationale du Banc d'Arguin, Poverty Reduction Strategy Paper, and Noah Conservation, revealed that recent catches of *P. perotteti* in West Africa date back to 1970 in Gambia, 1984 in Senegal, 1993 in Guinea, 1995 in Mauritania, and 2000 in Guinea-Bissau. The species was abundant in West Africa until 1970. Additionally, investigators in the seven countries (Gambia, Guinea, Guinea Bissau, Mauritania, Senegal, and Sierra Leone) made no observations of *P. perotteti* between 2004 and September of 2010.

*Response:* The commenter's information supports the information in our files regarding the decline of the species in West Africa.

*Comment 30:* Loss of habitat has contributed to the reduction in range for *P. perotteti* and habitat loss is affecting the largetooth sawfish throughout its range; consequently a proposed project (Harbour Pointe) in southwest Florida has the potential to remove three acres of mangrove habitat that may impact the *P. perotteti* and other fishes.

*Response:* We acknowledge in our proposed rule that habitat loss is a threat to the species. The species is no longer found in U.S. waters so projects proposed in southwest Florida will not affect the species. However, NMFS will consult under section 7 of the ESA on federally authorized or funded projects in southwest Florida, if the effects of the proposed project may affect listed species (e.g. smalltooth sawfish and sea turtles) or their designated critical habitat, under our jurisdiction.

*Comment 31:* Effects from urban and agricultural activities can directly impact critical habitat but may also have lasting effects on adjacent water resources (i.e., water chemistry, hydrology, salinity, and quality). The commenter also noted that nutrient pollution from urban and agricultural sources can threaten sawfish and other fish species. In particular, the commenter notes that dinoflagellates, for example *Pfiesteria* species, can cause haemorrhaging, sloughing of the skin tissue and deep ulcerations, and that fish with these symptoms have a higher probability of experiencing mortality. The commenter also suggests that once listed, the recovery plan for the species should follow the goals of the smalltooth sawfish recovery plan for reducing threatening algal blooms, improving water quality, and decreasing red tide events.

*Response:* As stated in the proposed rule, we have no information indicating that diseases are a threat to the species. NMFS will consider all potential threats to the species if we develop a recovery plan for the species.

*Comment 32:* Based on the best available scientific reports NMFS cannot conclude confidently that the largetooth sawfish has been extirpated from Florida.

*Response:* The information in our files indicates the species has not been encountered in Florida since 1941.

*Comment 33:* Listing of the species should move forward while concurrently considering the prudence of determinability of critical habitat as required under 16 U.S.C. 1533 (a)(3)(A)(i).

*Response:* We are moving forward with the listing of *P. perotteti* but are not proposing to designate critical habitat for the species. Please see "Critical Habitat" section below for further explanation on our decision not to designate critical habitat.

*Comment 34:* Two commenters stated that failing to designate critical habitat within the U.S. jurisdictional waters will deprive largetooth sawfish of its key protections and will inadequately conserve the species. The primary conservation benefit of critical habitat designation is that it provides a separate basis for federal agencies to consult under ESA section 7, 16 U.S.C. 1536(a)(2). Additionally, 50 CFR 424.12(b)(5) requires NMFS to consider historic geographical and ecological distributions of a species and that in the proposed rule to list *P. perotteti* we fail to do this, and that we elevate only one of the regulatory factors (50 CFR 424.12(b)(4)), "breeding" above all others. The commenter further states

that we are ignoring 4 of the 5 factors we are required to consider for critical habitat designation and that it is inappropriate and illegal to do so. The commenter also stated that foraging is an essential biological function that cannot be discounted and requests we consider foraging behaviours as a trigger for designating critical habitat.

*Response:* We disagree, determining not to designate critical habitat for *P. perotteti* will not deprive the species of its key protections. Section 3(5)(A)(ii) of the ESA states that “critical habitat” for threatened or endangered species means specific area(s) outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of the Act, upon a determination of the Secretary that such area(s) are essential for the conservation of the species. Using the best available scientific and commercial data we cannot determine an area or areas essential to the conservation of *P. perotteti* within U.S. jurisdiction. We cannot designate critical habitat in foreign countries or in areas outside U.S. jurisdiction (50 CFR 424.12(h)). See the “Critical Habitat” section for further explanation on our determination not to designate critical habitat. Additionally, regulations at 50 CFR 424.12(b) only apply to identifying occupied areas. For unoccupied critical habitat the required finding is “one or more specific areas are essential to the species conservation.”

*Comment 35:* Conclusions about largemouth sawfish uses of U.S. waters for seasonal foraging and our determination that the species will most likely never breed in U.S. waters is suspect. The commenter also stated that our reliance on historic accounts of reports of encounters of only large animals (14 ft or larger) to establish no breeding historically occurred in U.S. waters is also speculative.

*Response:* All encounter records of largemouth sawfish in U.S. waters were reported during the summer months and no juvenile largemouth sawfish have ever been documented from U.S. waters. Additionally, the commenter did not provide any data to support a breeding population of largemouth sawfish ever existed in the U.S.

*Comment 36:* Two commenters stated that historically, fisherman were only inclined to report the capture of large fish and generally do not report small (juvenile) sawfish so that our determination that U.S. waters does not contain the essential biological features necessary for the species conservation is flawed.

*Response:* The best available scientific and commercial data does not contain

reports of small (juvenile) largemouth sawfish. Juvenile sawfish can range in size from 2–6 ft in total length, based on information taken from the smallmouth sawfish recovery plan. A fish that is 2–6 ft long is not considered by many people as small. Also, based on information in the National Sawfish Encounter Database, located at the Florida Museum of Natural History, reports of smaller sawfish species (not *P. perotteti*) have been reported historically, and currently by U.S. and foreign fishers. NMFS is not required to determine if essential biological features exist for the largemouth sawfish when designating unoccupied critical habitat. See “Critical Habitat” section for more details.

*Comment 37:* A commenter stated that we discount the recovery aspect of a critical habitat designation and that the designation of unoccupied critical habitat is necessary for population growth or foraging behaviour.

*Response:* Based on the best available scientific and commercial data, including the lack of evidence of a permanent, large population in U.S. waters, we have determined that the species does not require expansion into or re-establishment of use of U.S. habitats for recovery. See “Critical Habitat” section for more details.

*Comment 38:* A commenter questioned our conclusion in the proposed rule that the protections offered to the endangered U.S. distinct population segment (DPS) of smallmouth sawfish may benefit the largemouth sawfish.

*Response:* All sawfish species in the U.S. are threatened by similar factors (incidental and directed capture from commercial and recreational fishers, habitat loss, and trade) so conservation efforts directed toward the endangered U.S. DPS of smallmouth sawfish will also promote the conservation of the largemouth sawfish, should it return to U.S. waters.

*Comment 39:* NMFS should include an analysis on any new and likely significant impacts to largemouth sawfish from the recent BP Deepwater Horizon oil spill, and acknowledge that ongoing and/or future oil and gas production in the Gulf of Mexico is a significant threat to the largemouth sawfish.

*Response:* Studies are ongoing to determine the impacts from the BP Deepwater Horizon oil spill. No conclusive determinations have been made yet.

### *Summary of Changes From the Proposed Listing Rule*

Based on the comments received and our review of the proposed rule, we made the changes listed below.

1. We corrected any errors identified by reviewers and commenters.
2. We corrected the error in the “Background” section that stated we completed a status review of the species in 2000.

### **Species Determination**

We first considered whether *P. perotteti* met the definition of “species” pursuant to section 3 of the ESA as described above. As stated in the taxonomy section above, after reviewing the best available scientific and commercial taxonomic data on the species, we determined that *P. perotteti* is a “species” and its range is the eastern and western Atlantic Ocean.

### **Extinction Risk**

We next considered the risk of extinction for *P. perotteti* to determine whether the species is threatened or endangered as defined above. No quantitative estimate of abundance for the species is known, so methods such as population viability analysis cannot be used to determine the risk of extinction for the species. Therefore, we must use a method to determine the risk of extinction using qualitative information.

Wainwright and Kope (1999) developed methods to assess the risk of extinction for U.S. West Coast salmon. Using the definitions of endangered and threatened in the ESA, they considered a variety of information to assess extinction risks, including abundance, trends, productivity, variability, genetic integrity, and other risks. Wainwright and Kope (1999) further consider the risk to small populations based on potential genetic effects or random demographic effects. They also considered habitat capacity to answer questions about the carrying capacity and whether the carrying capacity can ensure the populations viability. In assessing the risk of extinction using trends, productivity, and variability, Wainwright and Kope (1999) indicate that short- and long-term trends in abundance are the primary indicators of risk. Wainwright and Kope (1999) also assessed the effects of genetic integrity (introduced genotypes, interactions with hatchery fish, or anthropogenic selection) as it relates to evaluating the risk of extinction. Loss of fitness and loss of diversity can occur from random genetic effects and increase the risk of extinction for a species. Wainwright and

Kope (1999) also evaluated other risks that are considered for salmonids (disease, predation, and changes in life history). These “other risks” can affect the sustainability of a population. The last factor that Wainwright and Kope (1999) evaluated is the risks associated with recent events. Changes in harvest rates, anthropogenic changes in the environment (habitat degradation or enhancement), or natural events (floods, volcanic eruptions) can pose a risk for species but may not have been adequately considered by looking at the other effects above when there is a time-lag in seeing the effect of recent events.

In addition to analyzing factors that may affect the risk of extinction for salmon, Wainwright and Kope (1999) developed a general quantitative evaluation method to assess both qualitative and quantitative evidence for the various risk factors. In this method, four of the major categories of extinction risk are scored. These four categories are: (1) Abundance, (2) trend, productivity, and variability (TPV), (3) genetic integrity, and (4) “other risks”. The risk categories are scored on a scale from 1 to 5. A score of 1 represents a very low risk and factors (single or multiple factors) scored at this level are unlikely to contribute significantly to risk of extinction. A score of 2 represents a low risk and single factors are unlikely to contribute to extinction alone, but in combination with other factors may be a concern. Scores of 3 represent moderate risk. These factors contribute significantly to long-term risk of extinction, but do not alone constitute a danger of extinction in the near future. Score values of 4 represent increasing risk. This rating indicates the present risk is low or moderate, but is likely to increase to high risk in the future (reflects the ESA definition of threatened). Scores of 5 represent the high risk rating. This factor indicates danger of extinction in the near future.

Biologists at SERO used Wainwright and Kope's (1999) methods to assess extinction risk for *P. perotteti*. For the abundance category the following were important considerations. Small-population risks for the species were considered to assess the risk of extinction. As detailed above, museum records, negative scientific survey results in the U.S. and Lake Nicaragua, and anecdotal reports from fishers suggest the trend for the species is declining and population size is small. This species is also a K-selected animal which indicates they are usually successful at maintaining relatively small, persistent population sizes in relatively constant environments. We expect changes from random

demographic effects are likely to be significant for the species since they are not able to respond rapidly to stochastic events. Information on the distribution of the species was also used as an indicator of abundance. The current distribution for the species is significantly reduced from its historic range. Thus, the existing population of *P. perotteti* does not adequately represent historic patterns of geographic distribution and this is considered a risk factor for the species. We could not determine the habitat capacity for the species since most of the habitat within the species range is located in foreign countries and we have poor data from those areas. Based on small population risks that could occur from demographic effects and the range constriction that has occurred, we assigned a rating of 5 (high-risk) for the abundance factor.

For the TPV category we considered that the data for the species indicates a declining trend in abundance. A directed fishery existed for the species in Lake Nicaragua but no longer exists today. Reports of the species in Lake Nicaragua are rare. Lack of reports of the species occurrence throughout most of its range, including the U.S. and southern Brazil, also indicates the species abundance has declined from historic levels. Productivity rates are not known for the species but are expected to be declining. Variations in freshwater and marine environments within the species range are difficult to assess. Since reports of the species are rare throughout its range, we expect that productivity is low.

Genetic integrity was not evaluated or scored because we do not have information on the loss of fitness and loss of genetic diversity for the species.

Our evaluation of the “other risks” factor considered information about the species life history characteristics, in particular that the species has slow growth rates, late maturation, low fecundity, and population recovery potential is considered limited. Based on this information, we scored the other risks category as a 3.

Using Wainwright and Kope (1999) methods to determine the risk of extinction for *P. perotteti*, we believe that abundance and distribution of *P. perotteti* is likely to continue to decline in the near future. Therefore, we have determined the current threats affecting the species will continue into the future and the species is currently in danger of extinction throughout all of its range.

#### **Summary of Factors Affecting the Largetooth Sawfish**

In this section, we consider the five factors specified in section 4(a)(1) of the

ESA that we outlined in our listing determination process above.

#### *The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range*

Coastal habitat loss throughout the species' historical range is a contributing factor to the species decline. Coastal habitats in the southern U. S. Gulf of Mexico region have experienced and continue to experience losses due to urbanization. Wetland losses in the Gulf of Mexico region of the U.S. averages annual net losses of 60,000 acres (242.8 km<sup>2</sup>) of coastal and freshwater habitats from 1998 to 2004 (Stedman *et al.*, 2008). Although wetland restoration activities are ongoing in this region of the U.S., the losses significantly outweigh the gains (Stedman *et al.*, 2008). These losses have been attributed to commercial and residential development, port construction (dredging, blasting, and filling activities), construction of water control structures, modification to freshwater inflows (Rio Grande River in Texas), and gas and oil related activities. Riverine systems throughout the species' historical range have been altered or dammed. NOAA's Restoration Center is involved in ongoing coastal restoration activities throughout the Gulf of Mexico to restore coastal habitats. In spite of ongoing efforts to restore coastal habitats, coastal habitat losses will continue to occur.

The status of habitats within the current international range of the species is not well known, but with continued development and human population growth, negative effects on habitat are likely. Ruiz-Luna *et al.* (2008) acknowledge that deforestation of mangrove forests in Mexico has occurred from logging practices, construction of harbors, tourism, and aquaculture activities. In addition to deforestation, Ruiz-Luna *et al.* (2008) document that changes in the hydrological systems occurred with opening of the artificial canal in Cuautla, in the state of Nayarit. Valiela *et al.* (2001) report the total area of mangrove habitats in Brazil has decreased significantly (from 9,653 to 5,174 mi<sup>2</sup> (25,000 to 13,400 km<sup>2</sup>) ) from 1983 to 1997, with similar trends in Guinea-Bissau (1,838 to 959 mi<sup>2</sup> (4760 to 2484 km<sup>2</sup>)) from 1953 to 1995. Habitat modification, including mangrove forest removal, is also likely in northern Brazil (Compagno *et al.*, 2006). The areas with the most rapid mangrove declines in the Americas included Venezuela, Mexico, Panama, the United States, and Brazil, while Senegal, Gambia, Sierra Leone, and

Guinea-Bissau showed the largest declines in western Africa (Ruiz-Luna *et al.* 2008). World-wide mangrove habitat loss was estimated to be 35 percent from 1980 to 2000 (Valiela *et al.*, 2001). There are unconfirmed reports of dam building activities on the Rio San Juan (Nicaragua) system, which could affect the movements of largemouth sawfish in that region. These threats cannot be directly related to the decline of the largemouth sawfish, but habitat loss is a known factor contributing to the decline of many freshwater and marine species, including the endangered U.S. distinct population segment (DPS) of smalltooth sawfish.

*Overutilization for Commercial, Recreational, Scientific, or Educational Purposes*

*Commercial Fisheries*

Sawfishes are very vulnerable to most fishing gears, and were historically caught by gillnets, trawls, seines, and lines (Compagno *et al.*, 2006). Most targeted catches of largemouth sawfish in Texas in the 1930s were from recreational hook and line, but they were also caught incidentally by shrimp trawls and seines (Burgess *et al.*, 2009). The Lake Nicaragua commercial fishery for largemouth sawfish consisted mostly of gillnet boats (Thorson, 1982a), and the commercial small coastal shark fishery in Brazil mainly utilizes gillnets and some trawl nets (Charvet-Almeida, 2002). Today the main threat to the largemouth sawfish is most likely from bycatch mortality, though sawfishes may be targeted opportunistically in some areas (Brazil) when the occasion arises. The current scarcity of sawfish may inhibit targeted fisheries that might occur in spite of international trade bans. However, if caught as bycatch they are most likely retained because of the value of their parts (e.g., the rostra, teeth, and fins). For example McDavitt's (2006) review of eBay sales of rostra estimate a total of 200 rostra per year are sold, with a value of more than US \$25,000.

*Recreational Fisheries*

Historically, recreational hook and line fishers targeted large elasmobranchs, including sawfishes, as trophies in Texas (Burgess *et al.*, 2009). Elsewhere in the U.S., abundance was likely never high enough for recreational fishers to encounter this species, much less target it. Because of its current distribution, which is mostly in developing nations, the largemouth sawfish is unlikely to be encountered by recreational fishers, with possible rare exceptions of tourists in these areas.

There is no current information on the use of sawfish species for subsistence fishing, though it was noted in Brazil that the meat was often sold in local fish markets, while the other products (rostra, fins) were sold internationally (Charvet-Almeida, 2002).

*Commercial Trade*

There is very little information available about the trade of sawfish products in general, especially the largemouth sawfish. Largemouth sawfish were listed under Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in 2007, which prohibits the commercial trade of largemouth sawfish parts (see Regulatory Mechanisms section below). In 2006, eBay banned the sale of smalltooth sawfish on their online auction site; however, the ban was not established for all sawfish species. A survey by McDavitt and Charvet-Almeida (2004) of sawfish rostra on eBay (before the ban) found that large rostra command prices of over \$1,000 (US). An informal web search in November 2009 turned up several sawfish rostra for sale online to international buyers, some listed as "largemouth", along with sites selling cockfighting spurs made from South American sawfish teeth. It is apparent that largemouth and smalltooth sawfishes are still landed and sold illegally in northern Brazil (Charvet-Almeida pers. comm., 2009). It was previously observed that sawfish rostra from small individuals were sold to tourists, while damaged or cut rostra were used for local folk medicine (McDavitt and Charvet-Almeida, 2004). The larger rostra were sold in international cockfighting markets, as the rostral teeth were used as spurs. The larger rostra were also purchased by Asian shark fin buyers, most likely for medicine or curios. The proportion of largemouth sawfish in these markets is unknown, though as many as 180 large *Pristis spp.* rostra were sold per year at a single market in northern Brazil in the early 2000s (McDavitt and Charvet-Almeida, 2004). With little enforcement of regional and international laws, the practice of landing sawfishes may continue in Brazil, though the extent of any international trade since the CITES listing is unknown. No confirmed reports of *P. perotteti* in aquaria exist currently. No seizures of largemouth sawfish in international trade have occurred since its CITES listing (Sharon Lynn (USFWS) pers. comm.).

*Scientific Use*

The only published studies on life history and movements of the largemouth

sawfish were conducted by Thorson in the 1970s and 1980s in Costa Rica and Nicaragua (Thorson, 1970; 1973; 1974; 1976a; 1976b; 1978; 1982a; 1982b; 1987; Thorson *et al.*, 1966a; 1966b). While many live largemouth sawfish were tagged by Thorson in this time period, it seems that most of the biological data were obtained from dead specimens that were purchased from commercial fishers. Most areas where the largemouth sawfish now occurs suffer from lack of biological sampling due to logistical difficulties and most likely low research funding. However, there is some scientific information being collected by researchers in Brazil, mostly from fish markets, where sawfishes are illegally landed and sold.

*Disease and Predation*

No commercial or scientific data exists on diseases that may affect the largemouth sawfish and all information related to predation is listed above in the "Largemouth Sawfish Natural History" section. There is no evidence that unusual levels of disease or predation are a threat to the species.

*The Inadequacy of Existing Regulatory Mechanisms*

Protective measures covering trade in the largemouth sawfish (*P. perotteti*) are implemented internationally under Appendix I of CITES, making non-domestic trade of parts or whole animals illegal. Additional Federal, state, and national laws in the United States, Nicaragua, and Brazil are designed to protect the species from harvest and sale locally and internationally. The Nicaraguan government officially banned commercial fishing for largemouth sawfish in Lake Nicaragua in 2006. The Brazilian Environment Ministry listed *P. perotteti* in Appendix I of the "Instrucao Normativa numero 05," meaning that the species is considered endangered and therefore cannot be landed or sold. Enforcement of these regulations in Brazil and Nicaragua is difficult due to the length of the coastline, extensive internal waterways, lack of enforcement personnel, and the need for more efficient tools. Sawfish abundance within other parts of their current range is depleted so targeted fisheries are unlikely; however, those caught as bycatch are probably kept due to their value. Thus, illegal foreign trade of sawfish parts may be ongoing (efforts may be reduced due to CITES), in Nicaragua and Brazil and elsewhere, in spite of the CITES listing and national laws, due to lack of enforcement and the high value of sawfish parts.

The status of largemouth sawfish protection in western Africa is mostly unknown, though Guinea-Bissau has created six official Protected Areas, which were established in 2005 (UNEP, 2008). Among these areas are several island chains and deltas with intertidal muddy sand banks and mangroves, which are ideal sawfish habitat. Nevertheless, existing regulations in this part of the world may be inadequate to protect and restore populations of largemouth sawfish.

Though not currently found in U.S. waters, existing regulations and measures put in place to protect the smalltooth sawfish could also benefit the largemouth sawfish, should it return into the northern most extent of its historical range in North America. The U.S. DPS of smalltooth sawfish (*P. pectinata*) was listed as endangered on April 1, 2003. Both the smalltooth and largemouth sawfish are susceptible to similar threats (e.g., bycatch in various fisheries and habitat loss) so protections for the smalltooth sawfish will benefit the largemouth sawfish. In response to the listing of the U.S. DPS of smalltooth sawfish, Texas implemented a ban on harvest of largemouth sawfish because of the possibility of misidentification. The trading of any largemouth sawfish parts is banned by state laws in both Florida and Louisiana. No directed research for largemouth sawfish is ongoing in Texas, but Texas Parks and Wildlife Department (TPWD) is conducting surveys which could capture sawfish in Texas waters. TPWD has ongoing standardized fisheries independent and dependent monitoring programs in all of the bay systems and in the Gulf of Mexico along the Texas coastline for the last 35 years. The surveys are conducted using seines, trawls, and gill nets annually. These are all gears that have been found to entangle sawfish. Only two sawfish have been recorded during the sampling and they were both smalltooth sawfish. Additionally, Florida (only in the Gulf of Mexico) and Texas do not allow gillnet fishing in state waters less than 9 miles (14.5 km) from shore, and Alabama restricts gillnet fishing within less than 3.5 miles (5.6 km) from shore.

In summary, the high value of sawfish parts, weak enforcement, and lack of adequate protections for largemouth sawfish habitat mean that existing regulations are inadequate to protect the species from further declines.

#### *Other Natural or Manmade Factors Affecting Its Continued Existence*

Largemouth sawfish have slow growth rates, late maturity, a long life span, and low fecundity rates. The largemouth

sawfish is a more k-selected type species, with an intrinsic rate of population increase below 1.0 (Simpfendorfer, 2000). K-selected animals are usually successful at maintaining relatively small, persistent population sizes in relatively constant environments. Conversely, they are not able to respond rapidly to additional sources of mortality, such as overexploitation and habitat degradation. Because of this, the risk of extinction remains high without effective conservation plans put into place.

Red tide may also be a human amplified factor that could affect the species. Red tide is caused by an increase of toxic, naturally occurring microscopic blooms of plankton and is a coastal phenomenon which is caused by environmental conditions. Factors that are especially favorable include warm surface temperatures, high nutrient content, low salinity, and calm seas. Rain followed by sunny weather in the summer months is often associated with red tide blooms. We do not have specific information on red tide effects upon largemouth sawfish but we do have a report of a smalltooth sawfish that was found dead along the west coast of Florida during a red tide event (National Sawfish Encounter Database, 2009).

#### **Summary**

After considering the 5 factors above from section 4(a)(1) of the ESA we determined that the species is in danger of extinction throughout all of its range.

#### **Protective Efforts**

As a requirement of the ESA, current or future conservation efforts that have yet to be implemented or to show effectiveness to protect and recover largemouth sawfish must be evaluated under the PECE Policy (see above). This policy is designed to determine whether any conservation efforts that have been recently adopted or implemented or proposed, but not yet proven to be successful, will result in recovering the species to the point at which listing is not warranted or contribute to forming a basis for listing a species as threatened rather than endangered (68 FR 15101; March 28, 2003). The PECE policy established two basic criteria to be met before an action could be considered to help improve the conservation status of a species: (1) The certainty that the conservation efforts will be implemented, and (2) the certainty that the efforts will be effective.

Ongoing conservation efforts for the smalltooth sawfish may benefit the conservation of the largemouth sawfish if it returns to U.S. waters. The Smalltooth

Sawfish Recovery Plan was finalized in 2009. The Smalltooth Sawfish Recovery Plan lays out specific guidelines for federal and state agencies to follow. Among the recovery plan's objectives are to minimize harm caused by human interactions and to protect and restore habitats. Since both species are susceptible to similar threats, implementation of the Smalltooth Sawfish Recovery Plan will provide conservation benefits for the largemouth sawfish if it returns to U.S. waters. Additionally, in 2010, NOAA funded coastal restoration activities in Texas and Louisiana using appropriations from The American Recovery and Reinvestment Act of 2009, which will restore habitats used by sawfish when completed. Both of these projects meet the criteria of the PECE for certainty of implementation and effectiveness. However, we have determined that these conservation efforts will not alter the extinction risk of the species.

#### **Listing Determination**

NMFS is responsible for determining whether the largemouth sawfish (*P. perotteti*) is threatened or endangered under the ESA (16 U.S.C. 1531 *et seq.*) Accordingly, we have followed a stepwise approach as outlined above in making this listing determination for the largemouth sawfish. We determined that *P. perotteti* is a valid species with a range in the eastern and western Atlantic Ocean. We then reviewed the status of the species and the threats to its status using the five-factor analysis described above. Next, we assessed efforts being made to protect the species, determining if these efforts are adequate to mitigate existing threats.

The largemouth sawfish (*P. perotteti*) faces ongoing threats from habitat alteration, bycatch, trade, and the inadequacy of existing regulatory mechanisms to address and reduce habitat alterations, bycatch, and trade. The species range has constricted so that it has not been seen in the U.S. since 1961. A similar range constriction is apparent at the southern extreme of the species' historical range. The species has not been reported from southern Brazil for almost a century. All of the threats attributed to the species decline are ongoing, except for the directed largemouth sawfish fishery in Lake Nicaragua. The Lake Nicaragua fishery collapsed presumably when the sawfish population collapsed. These ongoing threats exist throughout the species current range (Central and South America and West Africa) and existing regulatory mechanisms in place are insufficient to protect the species from further decline. No current or proposed

conservation activities will be enough to sufficiently improve the species status. Based on our review, therefore, we find that the species is in danger of extinction throughout all of its range and should be listed as endangered.

#### Effects of Listing

Conservation measures provided for species listed as endangered or threatened under the ESA include recovery actions (16 U.S.C. 1533(f)), Federal agency consultation requirements (16 U.S.C. 1536), and prohibitions on taking and, where appropriate, critical habitat designations (16 U.S.C. 1538). 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) of the ESA requires Federal agencies to consult with NMFS to ensure that activities authorized, funded, or carried out by those agencies are not likely to jeopardize the continued existence of the species or destroy or adversely modify critical habitat. We anticipate very few section 7 consultation requirements for Federal agencies given the species' current distribution and abundance.

#### 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 in accordance with the provisions of section 4 of the Act, upon a determination that such areas are 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. Regulations require that we shall designate critical habitat in areas outside the geographical area presently occupied by a species only when a designation limited to its present range would be inadequate to ensure the conservation of the species (50 CFR 424.12 (e)). We cannot designate critical habitat in foreign countries or other areas outside U.S. jurisdiction (50 CFR 424.12 (h)).

The best available scientific and commercial data, as discussed above, identifies the geographical area occupied by *P. perotteti* as Central and South America and West Africa. Since these areas are entirely outside U.S. jurisdiction, we cannot designate critical habitat in the geographical area occupied by the species. We can designate critical habitat in unoccupied areas in the U.S.

Section 3(5)(C) of the ESA specifies that except in those circumstances determined by the Secretary, critical habitat shall not include the entire geographical area which can be occupied by the threatened or endangered species. We do not consider this section to stop or prevent the designation of unoccupied critical habitat because we are restricted from designating critical habitat outside U.S. jurisdiction.

In evaluating the applicability of section 3 of the ESA (16 U.S.C. 1532(5)) for unoccupied critical habitat, we must determine that the specific areas outside the geographical area occupied by the species at the time it is listed, are essential to the conservation of the species. Very little information is available on the specific areas occupied historically by *P. perotteti* in U.S. waters. Information in the status review document suggests the species made narrow seasonal migrations into U.S. waters. The majority of the records of the largemouth sawfish in U.S. waters are from three regions in Texas: Padre Island-Laguna Madre, Corpus Christi-Port Aransas, and Galveston-Freeport. The highest concentration of the species was in the Galveston area. Additionally, we believe that based on historic rarity of the species in U.S. waters, and since the U.S. represented a very limited portion of the species historic range, re-establishment back into U.S. waters is not required for the species recovery. We have reviewed all of the best available scientific and commercial data on *P. perotteti* and its habitat and cannot identify a specific unoccupied area or areas in the U.S. that are essential to the conservation of the species.

In summary, the best available scientific and commercial information on the species does not indicate that unoccupied area(s) are essential to the conservation of *P. perotteti*, therefore, no critical habitat designation is currently being proposed.

#### Take Prohibitions

ESA section 9(a) and 16 U.S.C. 1538 (a)(1)(B) take prohibitions apply to all species listed as endangered. These include prohibitions against the import, export, use in foreign commerce, or

"take" of the species. Take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." These prohibitions apply to all persons subject to the jurisdiction of the United States, including in the U.S. or on the high seas.

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

On July 1, 1994, we and the USFWS published a series of policies regarding listings under the ESA, including a policy to identify, to the maximum extent possible, those activities that would or would not constitute a violation of section 9 of the ESA (59 FR34272). The intent of this policy is to increase public awareness of the effect of this listing on proposed and ongoing activities within the species' range. We identify, to the extent known, specific activities that will not be considered likely to result in violation of ESA section 9, as well as activities that will be considered likely to result in violation. Activities that we believe could result in violation of section 9 prohibitions against "take" of the largemouth sawfish include, but are not limited to, the following: (1) Importation, (2) exportation, (3) take any such species within the U.S. or the territorially seas of the U.S., (4) sale, (5) delivery that directly or indirectly affect endangered species, and (6) take any such species on the high seas. These prohibitions apply to all individuals, organizations, and agencies subject to U.S. jurisdiction.

ESA sections 10(a)(1)(A) and 10(a)(1)(B) provide NMFS with authority to grant exceptions to the section 9 take prohibitions. Section 10(a)(1)(A) scientific research and enhancement permits may be issued to entities (Federal and non-Federal) conducting research that involves a take of listed species. We have issued section 10(a)(1)(A) research and enhancement permits for other listed species for these purposes. ESA section 10(a)(1)(B) incidental take permits may be issued to non-Federal entities performing activities that may incidentally take listed species.

The ESA also provides some exceptions to the prohibitions, without permits, for certain antique articles and species held in captivity at the time of listing. ESA section 10(h) allows antique articles of listed species to be excluded from essentially all the ESA prohibitions as long as they are at least 100 years old and meet certain other specified conditions. Section 9(b)(1) provides a narrow exemption for

animals held in captivity at the time of listing: those animals are not subject to the import/export prohibition or to protective regulations adopted by the Secretary, so long as the holding of the species in captivity, before and after listing, is not in the course of a commercial activity; however, 180 days after listing there is a rebuttable presumption that the exemption does not apply. Thus, in order to apply this exemption, the burden of proof for confirming the status of animals held in captivity prior to listing lies with the holder. The section 9(b)(1) exemption for captive wildlife would not apply to any progeny of the captive animals that may be produced post-listing.

*Policies on Peer Review*

On July 1, 1994, NMFS and USFWS published a series of policies regarding listings under the ESA, including a policy for peer review of scientific data (59 FR 34270; July 1, 1994), the Office of Management and Budget (2004) Bulletin on Peer Review. The intent of the peer review policies is to ensure that listings are based on the best scientific and commercial data available. We formally solicited the expert opinion of four appropriate and independent specialists regarding scientific or commercial data or assumptions related to the information considered for listing. We conclude that these experts' reviews satisfy the requirements for "adequate [prior] peer review" contained in the Bulletin (sec. II.2.) as well as the Services joint policy.

**References**

A complete list of the 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) (See NOAA Administrative Order 216-6).

*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*

E.O. 13132 requires agencies to take into account any federalism impacts of regulations under development. It 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.

*International Relations*

We have conferred with the U.S. Department of State to ensure appropriate notice is given to foreign nations within the range of the species. We intend to continue engaging in informal and formal contacts with the U.S. State Department.

**List of Subjects in 50 CFR Part 224**

Administrative practice and procedure, Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Dated: July 6, 2011.

**John Oliver,**

*Deputy Assistant Administrator for Operations, National Marine Fisheries Service.*

For the reasons set out in the preamble, 50 CFR part 224 is amended as follows:

**PART 224—ENDANGERED MARINE AND ANADROMOUS SPECIES**

■ 1. The authority citation for part 224 continues to read as follows:

**Authority:** 16 U.S.C. 1531–1543 and 16 U.S.C. 1361 *et seq.*

■ 2. In § 224.101, the table in paragraph (a) is amended by adding an entry for "Largetooth Sawfish" at the end of the table to read as follows:

**§ 224.101 Enumeration of endangered marine and threatened anadromous species.**

\* \* \* \* \*  
(a) \* \* \*

Species <sup>1</sup>		Where listed	Citation(s) for listing determination(s)	Citation(s) for critical habitat designation(s)
Common name	Scientific name			
Largetooth Sawfish	<i>Pristis perotteti</i>	Everywhere	[Insert <b>FEDERAL REGISTER</b> citation], July 12, 2011.	NA

<sup>1</sup> Species 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).

\* \* \* \* \*

[FR Doc. 2011-17502 Filed 7-11-11; 8:45 am]

BILLING CODE 3510-22-P

**DEPARTMENT OF COMMERCE****National Oceanic and Atmospheric Administration****50 CFR Part 660**

[Docket No. 0912281446-0111-02]

RIN 0648-XA554

**Fisheries Off West Coast States; Coastal Pelagic Species Fisheries; Closure**

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

**ACTION:** Temporary rule; closure.

**SUMMARY:** NMFS is prohibiting directed fishing for Pacific sardine off the coasts of Washington, Oregon and California. This action is necessary because the directed harvest allocation total for the second seasonal period (July 1–September 14) is projected to be reached by the effective date of this rule. From the effective date of this rule until September 15, 2011, Pacific sardine may be harvested only as part of the live bait fishery or incidental to other fisheries; the incidental harvest of Pacific sardine is limited to 30-percent by weight of all fish per trip. Fishing vessels must be at shore and in the process of offloading at 12:01 a.m. Pacific Daylight Time, July 12, 2011.

**DATES:** Effective 12:01 a.m. Pacific Daylight Time (PDT) July 12, 2011, through 11:59 p.m., September 14, 2011.

**FOR FURTHER INFORMATION CONTACT:** Joshua Lindsay, Southwest Region, NMFS, (562) 980-4034.

**SUPPLEMENTARY INFORMATION:** This document announces that based on the best available information recently obtained from the fishery and information on past effort, the directed fishing harvest allocation for the second allocation period (July 1–September 14) will be reached and therefore directed fishing for Pacific sardine is being closed until September 15, 2011. Fishing vessels must be at shore and in the process of offloading at the time of closure. From 12:01 a.m., July 12, 2011 through September 14, 2011, Pacific sardine may be harvested only as part of the live bait fishery or incidental to other fisheries, with the incidental harvest of Pacific sardine limited to 30-percent by weight of all fish caught during a trip.

NMFS manages the Pacific sardine fishery in the U.S. exclusive economic zone (EEZ) off the Pacific coast (California, Oregon, and Washington) in accordance with the Coastal Pelagic Species (CPS) Fishery Management Plan (FMP). Annual specifications published in the **Federal Register** establish the harvest guideline (HG) and allowable harvest levels for each Pacific sardine fishing season (January 1–December 31). If during any of the seasonal allocation periods the applicable adjusted directed harvest allocation is projected to be taken only incidental harvest is allowed, and for the remainder of the period, any incidental Pacific sardine landings will be counted against that period's incidental set aside. In the event that an incidental set-aside is projected to be attained, all fisheries will be closed to the retention of Pacific sardine for the remainder of the period via appropriate rulemaking.

Under 50 CFR 660.509, if the total HG or these apportionment levels for Pacific sardine are reached at any time, NMFS is required to close the Pacific sardine fishery via appropriate rulemaking and it is to remain closed until it re-opens either per the allocation scheme or the beginning of the next fishing season. In accordance with § 660.509 the Regional Administrator shall publish a notice in the **Federal Register** announcing the date of the closure of the directed fishery for Pacific sardine.

The above in-season harvest restrictions are not intended to affect the prosecution of the live bait portion of the Pacific sardine fishery.

**Classification**

This action is required by 50 CFR 660.509 and is exempt from Office of Management and Budget review under Executive Order 12866.

NMFS finds good cause to waive the requirement to provide prior notice and opportunity for public comment pursuant to the authority set forth at 5 U.S.C. 553(b)(B) for the closure of the directed harvest of Pacific sardine. For the reasons set forth below, notice and comment procedures are impracticable and contrary to the public interest. For the same reasons, NMFS also finds good cause under 5 U.S.C. 553(d)(3) to waive the 30-day delay in effectiveness for this action. This measure responds to the best available information and is necessary for the conservation and management of the Pacific sardine resource. A delay in effectiveness would cause the fishery to exceed the in-season harvest level. These seasonal harvest levels are important mechanisms in preventing overfishing and managing the fishery at optimum yield. The

established directed and incidental harvest allocations are designed to allow fair and equitable opportunity to the resource by all sectors of the Pacific sardine fishery and to allow access to other profitable CPS fisheries, such as squid and Pacific mackerel.

Many of the same fishermen who harvest Pacific sardine rely on these other fisheries for a significant portion of their income.

**Authority:** 16 U.S.C. 1801 *et seq.*

Dated: July 7, 2011.

**Margo Schulze-Haugen,**

*Acting Director, Office of Sustainable Fisheries, National Marine Fisheries Service.*

[FR Doc. 2011-17506 Filed 7-11-11; 8:45 am]

BILLING CODE 3510-22-P

**DEPARTMENT OF COMMERCE****National Oceanic and Atmospheric Administration****50 CFR Part 679**

[Docket No. 101126522-0640-02]

RIN 0648-XA556

**Fisheries of the Exclusive Economic Zone Off Alaska; Pelagic Shelf Rockfish by Vessels Subject to Amendment 80 Sideboard Limits in the Western Regulatory Area of the Gulf of Alaska**

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

**ACTION:** Temporary rule; closure.

**SUMMARY:** NMFS is prohibiting directed fishing for pelagic shelf rockfish (PSR) by Amendment 80 vessels subject to sideboard limits in the Western Regulatory Area of the Gulf of Alaska (GOA). This action is necessary to prevent exceeding the 2011 PSR sideboard limit established for Amendment 80 vessels subject to sideboard limits in the Western Regulatory Area of the GOA.

**DATES:** Effective 1200 hrs, Alaska local time (A.l.t.), July 7, 2011, until 2400 hrs, A.l.t., December 31, 2011.

**FOR FURTHER INFORMATION CONTACT:** Steve Whitney, 907-586-7269.

**SUPPLEMENTARY INFORMATION:** NMFS manages the groundfish fishery in the GOA exclusive economic zone according to the Fishery Management Plan for Groundfish of the Gulf of Alaska (FMP) prepared by the North Pacific Fishery Management Council under authority of the Magnuson-Stevens Fishery Conservation and Management Act. Regulations governing