the Tariff Act of 1930, as amended (the Act). As a result of its reviews, the Department determined that revocation of the AD orders from the PRC and India would likely lead to continuation or recurrence of dumping and that revocation of the CVD order from India would likely lead to continuation or recurrence of net countervailable subsidies. Therefore, the Department notified the ITC of the magnitude of the margins and the subsidy rates likely to prevail should the orders be revoked, pursuant to sections 751(c)(1) and 752(b) and (c) of the Act.[4]

On November 6, 2015, the ITC published its determination that revocation of the AD order on CVP–23 from India and the PRC would likely lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time, pursuant to section 751(c) of the Act.[5]

Scope of the Order

The merchandise subject to this countervailing duty order is CVP–23 identified as Color Index No. 51319 and Chemical Abstract No. 6358–30–1, with the chemical name of diindolo [3,2-b:3′,2′-m] [6] triphenodioxazine, 8,18-dichloro-5, 15-diethy-5, 15-dihydro-, and molecular formula of $C_{34}H_{22}Cl_2N_4O_2$. The subject merchandise includes the crude pigment in any form (*e.g.,* dry powder, paste, wet cake) and finished pigment in the form of presscake and dry color. Pigment dispersions in any form (*e.g.,* pigments dispersed in oleoresins, flammable solvents, water) are not included within the scope of the investigation. The merchandise subject to this countervailing duty order is classifiable under subheading 3204.17.9040 of the Harmonized Tariff Schedule of the United States (HTSUS). Although the HTSUS subheadings are provided for convenience and customs purposes, our written description of the scope of this order is dispositive.

During this sunset review period, there was one scope ruling completed between October 1, 2011, and December 31, 2011.[7] The scope ruling was requested by Petitioners. On October 14, 2011, we determined that finished carbazole violet pigment exported from Japan, made from crude carbazole violet pigment from India, is within the scope of the *CVD Order.*

Continuation of the Orders

As a result of the determinations by the Department and the ITC that revocation of the AD orders would likely lead to a continuation or recurrence of dumping and material injury to an industry in the United States and revocation of the CVD order would likely lead to continuation or recurrence of countervailable subsidies and material injury to an industry in the United States. Pursuant to section 75l(d)(2) of the Act and 19 CFR 351.218(a), the Department hereby orders the continuation of the AD orders on CVP–23 from India and the PRC, and the CVD order on CVP–23 from India. U.S. Customs and Border Protection will continue to collect AD and CVD cash deposits at the rates in effect at the time of entry for all imports of subject merchandise.

The effective date of the continuation of the AD order and CVD order will be the date of publication in the **Federal Register** of this notice of continuation. Pursuant to section 751(c)(2) of the Act and 19 CFR 351.218(c)(2), the Department intends to initiate the next five-year review of these orders not later than 30 days prior to the fifth anniversary of the effective date of this continuation notice.

These five-year sunset reviews and this notice are in accordance with section 751(c) and 751(d)(2) of the Act and published pursuant to section 777(i)(1) of the Act and 19 CFR 351.218(f)(4).

Dated: November 9, 2015.

Paul Piquado,

Assistant Secretary for Enforcement and Compliance.

[FR Doc. 2015–29361 Filed 11–16–15; 8:45 am]

BILLING CODE 3510–DS–P

Pigment 23 From India, 69 FR 77995, (December 29, 2004).

[4] *See Carbazole Violet Pigment 23 From India and the People's Republic of China: Final Results of Expedited Second Sunset Reviews of Antidumping Duty Orders,* 80 FR 46955, (August 6, 2015) and *Carbazole Violet Pigment 23 From India: Final Results of Expedited Second Sunset Review of the Countervailing Duty Order,* 80 FR 47462, (August 7, 2015).

[5] *See Carbazole Violet Pigment 23 From China and India; Determinations,* 80 FR 68878 (November 6, 2015).

[6] The bracketed section of the product description, [3,2-b:3′,2′-m], is not business proprietary information. In this case, the brackets are simply part of the chemical nomenclature. *See* December 4, 2003, amendment to petition at 8.

[7] *See Notice of Scope Rulings,* 77 FR 38767 (June 29, 2012).

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[Docket No. 150904820–5820–01]

RIN 0648–BF34

Endangered and Threatened Species; Determination on the Designation of Critical Habitat for Three Scalloped Hammerhead Shark Distinct Population Segments

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

ACTION: Notice of critical habitat determination.

SUMMARY: We, NMFS, find that there are no marine areas within the jurisdiction of the United States that meet the definition of critical habitat for the Central and Southwest (Central & SW) Atlantic Distinction Population Segment (DPS), Indo-West Pacific DPS, or Eastern Pacific DPS of scalloped hammerhead shark. Based on a comprehensive review of the best available scientific and commercial data for use in the identification of critical habitat, we find that there are no identifiable physical or biological features that are essential to the conservation of these scalloped hammerhead DPSs and found within areas under U.S. jurisdiction, or any areas outside of the geographical area occupied by the listed DPSs under U.S. jurisdiction that are considered essential to their conservation. As such, we find that there are no specific areas under the jurisdiction of the United States that meet the definition of critical habitat.

DATES: This finding is made on November 17, 2015.

ADDRESSES: Electronic copies of the determination, list of references and supporting documents prepared for this action are available from the NMFS Office of Protected Resources Web site at *http://www.fisheries.noaa.gov/pr/species/fish/scalloped-hammerhead-shark.html.*

FOR FURTHER INFORMATION CONTACT: Maggie Miller, NMFS, Office of Protected Resources, (301) 427–8403.

SUPPLEMENTARY INFORMATION:

Background

On July 3, 2014, we published a final rule to list the Central and Southwest (Central & SW) Atlantic Distinct Population Segment (DPS) and the Indo-West Pacific DPS of scalloped hammerhead shark (*Sphyrna lewini*) as threatened species under the

Endangered Species Act (ESA), and the Eastern Atlantic DPS and Eastern Pacific DPS of scalloped hammerhead sharks as endangered species under the ESA (79 FR 38213). Section 4(b)(6)(C) of the ESA requires the Secretary of Commerce (Secretary) to designate critical habitat concurrently with making a determination to list a species as threatened or endangered unless it is not determinable at that time, in which case the Secretary may extend the deadline for this designation by 1 year. At the time of listing, we concluded that critical habitat was not determinable at that time because: (1) Sufficient information was not currently available to assess impacts of designation; and (2) sufficient information was not currently available regarding the physical and biological features essential to conservation. We announced our intention to consider critical habitat for the Central & SW Atlantic, Indo-West Pacific, and Eastern Pacific DPSs in a separate rulemaking, and we requested relevant information from interested persons to help us: (1) Identify and describe the physical and biological features essential to the conservation of the scalloped hammerhead DPSs; and (2) assess the economic consequences of designating critical habitat for the DPSs. We solicited input from government agencies, the scientific community, industry and any other interested party on features and areas that may meet the definition of critical habitat for the DPSs that occur in U.S. waters or territories, but we did not receive any response to this solicitation. Subsequently we researched, reviewed, and compiled the best available scientific and commercial data available to be used in the identification of critical habitat for the Central & SW Atlantic, Indo-West Pacific, and Eastern Pacific DPSs. However, as discussed below, based on these data we find that there are no identifiable physical or biological features that are essential to the conservation of the scalloped hammerhead DPSs and found within areas under U.S. jurisdiction. As such, we find that there are no marine areas within U.S. jurisdiction that meet the definition of critical habitat.

This finding describes information on the biology, distribution, and habitat use of scalloped hammerhead sharks and the methods used to identify areas that may meet the definition of critical habitat. In this determination, we focus on those aspects directly relevant to the designation of critical habitat for scalloped hammerhead sharks. For more detailed information on the biology and habitat use of scalloped hammerhead sharks, refer to the status review report (Miller *et al.* 2014) and the proposed and final listing rules (78 FR 20717, April 5, 2013; 79 FR 38213, July 3, 2014).

Scalloped Hammerhead Shark Biology and Status

The following discussion of the life history and status of the scalloped hammerhead shark DPSs is based on the best scientific data available, including the *Scalloped Hammerhead Shark Status Review Report* (Miller *et al.* 2014).

All hammerhead sharks belong to the family Sphyrnidae and are classified as ground sharks (Order Carcharhiniformes). Most hammerheads, including the scalloped hammerhead shark, belong to the Genus *Sphyrna.* The hammerhead sharks are recognized by their laterally expanded head that resembles a hammer, hence the common name ''hammerhead.'' The scalloped hammerhead shark (*Sphyrna lewini*) is distinguished from other hammerheads by a marked central indentation on the anterior margin of the head, along with two more indentations on each side of this central indentation, giving the head a ''scalloped'' appearance.

Scalloped hammerhead sharks can be found in coastal warm temperate and tropical seas worldwide. They occur over continental and insular shelves, as well as adjacent deep waters, but are seldom found in waters cooler than 22° C (Compagno 1984; Schulze-Haugen and Kohler 2003). These sharks range from the intertidal and surface to depths of up to 450–512 m (Sanches 1991; Klimley 1993), with occasional dives to even deeper waters (Jorgensen *et al.,* 2009). They have also been documented entering enclosed bays and estuaries (Compagno 1984).

Both juveniles and adult scalloped hammerhead sharks occur as solitary individuals, pairs, or in schools. The schooling behavior has been documented during summer migrations off the coast of South Africa as well as in permanent resident populations, like those in the East China Sea (Compagno 1984). Adult aggregations are most common offshore over seamounts and near islands, whereas neonate and juvenile aggregations are more common in nearshore nursery habitats (Compagno 1984; Duncan and Holland 2006; CITES 2010; Hearn *et al.* 2010; Bejarano-Álvarez *et al.* 2011; Bessudo *et al.* 2011). It has been suggested that juveniles inhabit these nursery areas for up to or more than a year, as they provide valuable refuges from predation (Duncan and Holland 2006).

The scalloped hammerhead shark is a high trophic level predator (trophic level = 4.1; Cortés 1999) and opportunistic feeder with a diet that includes a wide variety of teleosts, cephalopods, crustaceans, and rays (Compagno 1984; Bush 2003; Júnior *et al.* 2009; Noriega *et al.* 2011). In terms of reproduction, the scalloped hammerhead shark is viviparous (*i.e.,* gives birth to live young), with a gestation period of 9–12 months (Branstetter 1987; Stevens and Lyle 1989), which may be followed by a one-year resting period (Liu and Chen 1999). Females attain maturity around 200–250 cm total length (TL) while males reach maturity at smaller sizes (range 128–200 cm TL). Parturition may be partially seasonal (Harry *et al.* 2011), with neonates present year round but with abundance peaking during the spring and summer months (Duncan and Holland 2006; Adams and Paperno 2007; Bejarano-Álvarez *et al.* 2011; Harry *et al.* 2011; Noriega *et al.* 2011). Females move inshore to birth, with litter sizes anywhere between 1 and 41 live pups. Observed maximum sizes for male scalloped hammerheads range from 196–321 cm TL, with the oldest male scalloped hammerhead estimated at 30.5 years (Piercy *et al.* 2007). Observed maximum sizes for female scalloped hammerheads range from 217–346 cm TL, with the oldest female scalloped hammerhead estimated at 31.5 years (Kotas *et al.* 2011).

Based on the genetic diversity among subpopulations, geographic isolation, and differences in international regulatory mechanisms, we identified six DPSs of scalloped hammerhead sharks that are both discrete and significant to the taxon as a whole. The six scalloped hammerhead shark DPSs, which comprise the global population, are: (1) Northwest Atlantic and Gulf of Mexico DPS, (2) Central & SW Atlantic DPS, (3) Eastern Atlantic DPS, (4) Indo-West Pacific DPS, (5) Central Pacific DPS, and (6) Eastern Pacific DPS. All scalloped hammerhead sharks are both targeted and taken as bycatch in many global fisheries, with their fins a primary product for international trade. However, the exploitation by commercial and artisanal fisheries and lack of adequate regulatory mechanisms, combined with the species' biological vulnerability to depletion, has led to declines of the Eastern Atlantic, Eastern Pacific, Central & SW Atlantic, and Indo-West Pacific DPSs to the point where the Eastern Atlantic and Eastern Pacific DPSs are presently in danger of extinction and the Central & SW

Atlantic and Indo-West Pacific are likely to become so in the foreseeable future.

Critical Habitat Identification and Designation

Critical habitat is defined by section 3 of the ESA as: ''(i) the specific areas within the geographical area occupied by the species, at the time it is listed . . ., on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed . . . upon a determination by the Secretary that such areas are essential for the conservation of the species.'' This definition provides a step-wise approach to identifying areas that may qualify as critical habitat for the listed scalloped hammerhead shark DPSs: (1) Determine the geographical area occupied by the species at the time of listing; (2) identify physical or biological habitat features essential to the conservation of the species; (3) delineate specific areas within the geographical area occupied by the species on which are found the physical or biological features; (4) determine whether the features in a specific area may require special management considerations or protection; and (5) determine whether any unoccupied areas are essential for conservation. Our evaluation and conclusions as we worked through this step-wise process are described in detail in the following sections.

Geographical Area Occupied by the Species

We have interpreted ''geographical area occupied'' in the definition of critical habitat as the range of the species at the time of listing (45 FR 13011; February 27, 1980). Further, our regulations at 50 CFR 424.12(h) state: ''Critical habitat shall not be designated within foreign countries or in other areas outside of United States jurisdiction.'' The distribution of the Eastern Atlantic DPS of scalloped hammerhead shark is found entirely in waters outside of U.S. jurisdiction. As such, we cannot designate critical habitat for the Eastern Atlantic DPS and will focus the following discussion on the other three listed scalloped hammerhead DPSs: Eastern Pacific DPS, Central & SW Atlantic DPS, and Indo-West Pacific DPS.

Eastern Pacific DPS

The Eastern Pacific DPS generally occurs off the coasts of Mexico and within the Gulf of California, from 32°N latitude south to northern Peru, around 4°S latitude. We characterize this geographical area as the ''core range'' or occupied area of the DPS (where one would most likely observe scalloped hammerhead sharks). This core range is entirely outside of U.S. jurisdiction. However, individuals of the species have been documented north and south of these core range boundary lines, but rarely and usually only during specific weather events. These observations primarily occur during strong El Niño events, defined as a positive sea surface temperature (SST) departure from normal greater than or equal to +1.5°C for 5 consecutive 3-month running mean SSTs, and represent an opportunistic northward displacement of the species (Siegel 1987; Shane 2001). It is important to note that these strong El Niño events are only identified as such after they have already occurred (since they are based on 3-month running averages), and, as such, are difficult to forecast. There is no information that the areas off southern California and areas north, and off Peru and Chile, are now or were historically used as habitat for the species. Given the amount of fishing effort as well as the human population density in these regions, it is highly unlikely that substantial concentrations of scalloped hammerhead sharks would have passed unnoticed. As such, we consider these areas outside of the core range to be used solely by vagrants (individuals that occur outside of their normal range) and only during rare weather events that are difficult to forecast. Below we provide further information on the occupation and use of these areas to support this conclusion.

In southern California waters (which are under U.S. jurisdiction), the first verified observation of a scalloped hammerhead shark was in 1977 (Fusaro and Anderson 1980). Since then, observations have been sporadic and only associated with unusually warm water, as occurs during El Niño Southern Oscillation (ENSO) events. Based on the available information, we found confirmation of 26 scalloped hammerhead individuals in southern California waters since 1977 (Fusaro and Anderson 1980; Siegel 1985; Lea and Rosenblatt 2000; Shane 2001; Galante 2014). The majority of these observations occurred immediately before, during, and following the strong 1997–1998 ENSO event (Lea and Rosenblatt 2000; Shane 2001). Between 1997 and 1999, 19 young-of-the-year (YOY) (<100 cm TL) scalloped hammerhead sharks were caught in San Diego Bay (Shane 2001). Since 1999, only one scalloped hammerhead shark has been observed in southern California waters, caught on video by spear fishermen off Anacapa Island, Channel Islands in October of 2014 (Galante 2014). The observed scalloped hammerhead sharks consist of adult female and juvenile sharks, suggesting that during strong El Niño events, the species may use southern California waters as pupping and nursery grounds. The last strong (≥1.5°C SST) El Niño event to occur was in 1997–1998. Since then, there have been a number of weak (0.5 to 0.9°C SST anomaly) and moderate (1.0 to 1.4°C SST anomaly) El Niño events, but based on the observational data, these events do not appear to transform the southern California waters into occupiable habitat for the species.

Similarly, in the central-south eastern Pacific, off the coasts of Peru and Chile, scalloped hammerhead observations are rare and also seem to be correlated with El Niño events. A single reference to the occurrence of the species in waters of Peru points to the presence of the species off Puerto Pizzaro in 1998, which is located in northern Peru, very close to the border of Ecuador (Love *et al.* 2005). As mentioned previously, 1997–1998 registered as a strong El Niño event, bringing much warmer waters to the eastern Pacific, and especially off the coast of Peru. This could explain the observation of the species in 1998, as, since then, no other observations of the species in the waters off Peru have been reported. In a recent paper that examined shark landings in Peru from 1996–2010, the authors found no records of scalloped hammerhead sharks (Gonzalez-Pestana *et al.* 2014).

In Chile, the first record of the species is from 2006 and is based on the genetic identification of three dried shark fins that were stored in a commercial warehouse for export to the international market (Sebastian *et al.* 2008). It is unclear where these scalloped hammerhead sharks were caught, but the authors suggest that many of the pelagic sharks are caught by the artisanal and industrial swordfish fisheries operating in Chile's exclusive economic zone (EEZ), and by the nearshore artisanal fisheries operating in north-central Chile. The sharks are generally landed at Coquimbo (29°579 S, 71°209 W); however, the authors obtained the three scalloped hammerhead shark fins from a storage warehouse in the town of Paico, in central Chile. This remains the only record of the species from Chile. Although the origin of the scalloped hammerhead sharks is uncertain, there was a weak El Niño event that occurred

at the end of 2006 and could possibly explain the occurrence of these three sharks in Chilean waters at that time. However, given the extremely rare occurrence of the species in waters off Peru and Chile, even during El Niño events, these areas do not likely contain habitat for the species.

For the foregoing reasons, we find that the geographical area occupied by the Eastern Pacific DPS at the time of ESA listing is the previously-defined core range of the species, which extends over a broad area of the Eastern Pacific Ocean. Specifically, the geographical area occupied by the Eastern Pacific DPS includes all coastal and oceanic waters between 32°N and 4°S latitude, and follows the boundary lines of the DPS for longitude from 140° W to 150° W. We find that the geographical areas outside of this delineation where scalloped hammerhead sharks have been observed (*i.e.,* areas off California, Peru and Chile) are used solely by vagrant individuals and only during rare weather events and, as such, are not identified as geographical areas occupied by the Eastern Pacific DPS at the time of listing. Given these findings, we conclude that there are no geographical areas occupied by the Eastern Pacific DPS that are within the jurisdiction of the United States at the time of listing.

Central & Southwest Atlantic DPS

The geographic range of the Central & SW Atlantic DPS includes all coastal and oceanic waters from 28° N. latitude to 36° S. latitude, following the boundary lines designated for this DPS. Although this range covers the territorial waters of Puerto Rico and the U.S. Virgin Islands (USVI), as well as the Navassa Island National Wildlife Refuge, there is little to no available information on the occurrence or distribution of the scalloped hammerhead shark within these waters at the time of listing.

Smooth, scalloped, and great hammerhead sharks are noted as historically occurring in USVI and Puerto Rican waters. In terms of habitat use around the USVI, personal communication (from E. Kadison, Ecology Laboratory Specialist, University of the Virgin Islands) suggests that Magens Bay, St. Thomas, may be a breeding ground for hammerheads, based on anecdotal reports of large aggregations found in the bay; however, the species of the hammerheads within Magens Bay was unknown (E. Kadison, personal communication, 2015). We could find no other information on the use of Magens Bay by hammerhead sharks that could help clarify or support the anecdotal reports. Similarly, Salt River Canyon off St. Croix's north shore was also noted as a diving spot for seeing the ''occasional'' large hammerhead, but species was not identified (N2Theblue 2014). The scalloped hammerhead shark is included in St. Croix's checklist of marine and inland fishes based only on records of two individuals that were caught as bycatch in 1991 during fishing operations for bigeye scad (Tobias 1991; Smith-Vaniz and Jelks 2014). We also received a photo of a hammerhead shark from a researcher conducting a longline shark survey in the area, but upon inspection identified the shark as a great hammerhead (E. Kadison, pers. comm. 2015). In fact, the great hammerhead shark is noted as a ''common Caribbean species'' in these waters, often found inshore and around coral reefs (Smith-Vaniz and Jelks 2014), and thus may likely be the species observed in the above anecdotal reports.

In waters off Puerto Rico, we found no information on the present distribution or habitat use of scalloped hammerhead sharks. The only information indicating the species' historical occurrence in Puerto Rican waters is its inclusion in a 1974 technical report that provides the common names of fishes in Puerto Rico (Erdman 1974; revised in 1983). Similarly, the presence and distribution of scalloped hammerhead sharks in the Navassa Island National Wildlife Refuge are unknown. In 1998, seven scalloped hammerhead sharks were caught in the refuge during an exploratory longline fish research survey conducted by NMFS scientists (Grace *et al.* 2000), indicating its past occurrence in these waters. A number of more recent NOAA surveys have been conducted in the Navassa Island National Wildlife Refuge; however, these surveys have focused on the nearshore reef habitat and fish assemblages and do not report any observations of scalloped hammerhead sharks (Miller 2003; Piniak *et al.* 2006). As such, we have no information on the present occurrence of the species in the Navassa Island National Wildlife Refuge.

Based on the foregoing information, we cannot establish if the geographical area occupied by the listed Central & SW Atlantic DPS includes any areas under the jurisdiction of the United States. Although scalloped hammerhead sharks have been included in historical checklists or observed in fish surveys conducted over 15 years ago, we have no information to indicate that the species was present in the territorial waters of Puerto Rico, USVI, or the Navassa Island National Wildlife Refuge at the time of listing. Because all three species of hammerhead sharks are noted as occurring in these waters, with the great hammerhead shark described as ''common,'' we cannot assume that the anecdotal reports of hammerhead sharks specifically refer to scalloped hammerhead sharks. As such, we consider the waters under U.S. jurisdiction within the Central & SW Atlantic DPS range to be unoccupied areas at the time of listing.

Indo-West Pacific DPS

The geographic range of the Indo-West Pacific DPS includes all coastal and oceanic waters from 40° N. latitude to 36° S. latitude, and follows the boundary lines designated for this DPS.

Although this range covers the territorial waters of Guam, Commonwealth of the Northern Mariana Islands (CNMI), American Samoa, and the Pacific Remote Island Areas (PRIAs), there is very little information on the occurrence, distribution, or use of habitat by the scalloped hammerhead shark within these waters at the time of listing. Most of the available information is based on personal observations and anecdotal reports of the species. In Guam, anecdotal reports suggest that Apra Harbor may have been used as a pupping ground for scalloped hammerhead sharks, based on the observed presence of young scalloped hammerhead sharks in Sasa Bay over a decade ago (D. Burdick, Research Associate, University of Guam, personal communication 2015). Over the time period of 1982–2004, a NMFS scientist working in Guam indicated that he personally observed and caught juvenile and adult scalloped hammerhead sharks in Apra Harbor (specifically the channel that connects the inner harbor and Sasa Bay) and observed juveniles near northern Piti, the Pago Bay river mouth, and the Ylig River mouth, and adults outside of Pago Bay and Taragues Beach (G. Davis, Assistant Regional Administrator for Habitat Conservation, NMFS, personal communication 2015). More recent observations, from Dr. Terry Donaldson (Professor, University of Guam), suggest that adults may periodically use Apra Harbor. He noted that he has personally observed them, albeit only very rarely over the past few years, in Apra Harbor and the inner harbor. The sharks occurred as solitary individuals (not schools), and he detailed one observation of a large adult feeding on a fish in the inner harbor. He also noted that neither he nor his technicians have observed any juveniles in Apra Harbor over the last few years.

In terms of occurrence around the PRIAs, we received personal communication from NMFS research

scientists that they have observed and recorded scalloped hammerhead sharks around the islands as recently as 2012 (I. Williams, Research Fish Biologist, NMFS; K. Lino, Marine Ecosystems Research Coordinator, NMFS; personal communication 2014). Since 2000, NMFS scientists have conducted tow diver surveys every 3 years at the PRIAs, during which they are at each island for 3–5 days surveying the reef. The survey method consists of two divers pulled behind a vessel surveying for large fish (>50 cm TL) and also looking at the benthic habitat of the islands' fore reefs from 30–60 feet (9.1 m–18.3 m) depths. According to their observations and records, schools of adult scalloped hammerhead sharks are most commonly observed at Jarvis and Baker Islands, although adult individuals tend to be observed daily at many of the islands during the survey period. No juveniles have been recorded during these surveys.

In addition, these NMFS scientists, who survey at more than 50 U.S.-affiliated islands, atolls, and reefs, have never recorded scalloped hammerheads in American Samoa, Guam, or CNMI while conducting these reef surveys. Corroborating these observations, fishery observer data from 2006–2010 indicate that scalloped hammerhead sharks are also rarely observed caught in the American Samoa longline fishery, which primarily operates within the U.S. EEZ around American Samoa (Simmonds 2014). We could find no information on the present occurrence or distribution of scalloped hammerhead sharks around CNMI.

The above information gives us confirmation of the past and perhaps present occurrence of the species in U.S. waters within the range of the Indo-West Pacific DPS. Specifically, at the time of listing, the geographical areas occupied by the Indo-Pacific DPS likely include waters off Guam and the PRIAs. Although observations of scalloped hammerhead sharks in American Samoa waters are rare, they still occur and, thus, we cannot rule out that habitats in these waters were being used, at least periodically, at the time of listing. However, given the severe lack of information about or observations of scalloped hammerhead sharks within waters of CNMI, we cannot conclude that this area was occupied by the species at the time of listing.

Conclusion

Based on the information above, we consider the geographical area occupied by Indo-West Pacific DPS of the scalloped hammerhead shark at the time of listing to include the waters under U.S. jurisdiction off Guam, the PRIAs, and American Samoa, and we consider the geographical areas occupied by the Eastern Pacific and Central & SW Atlantic DPSs at the time of listing to not include any waters under U.S. jurisdiction.

Physical or Biological Features Essential for Conservation

Within the geographical area occupied by an endangered or threatened species at the time of listing, critical habitat consists of specific areas on which are found those physical or biological features essential to the conservation of the species (hereafter also referred to as ''essential features'') and that may require special management considerations or protection. Section 3 of the ESA (16 U.S.C. 1532(3)) defines the terms ''conserve,'' ''conserving,'' and ''conservation'' to mean: ''to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this chapter are no longer necessary.'' Further, our regulations at 50 CFR 424.12(b) for designating critical habitat state that physical and biological features that are essential to the conservation of a given species and that may require special management considerations or protection may include: (1) Space for individual and population growth, and for normal behavior; (2) food, water, air, light, minerals, or other nutritional or physiological requirements; (3) cover or shelter; (4) sites for breeding, reproduction, rearing of offspring, germination, or seed dispersal; and generally, (5) habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species.

For scalloped hammerhead shark DPSs, we define conservation as the use of all methods and procedures necessary to bring scalloped hammerhead sharks to the point at which factors related to population ecology and vital rates indicate that the population is recovered in accordance with the definition of recovery in 50 CFR 402.02. Important factors related to population ecology and vital rates include population size and trends, range, distribution, age structure, gender ratios, age-specific survival, age-specific reproduction, and lifetime reproductive success. Based on the available knowledge of scalloped hammerhead shark population ecology and life history, we have identified four biological behaviors that are critical to the goal of increasing survival and population growth: (1) Feeding, (2) pupping, (3) migration, and (4) breeding. In the following section, we evaluate whether there are physical and biological features of the habitat areas known or thought to be used for these behaviors that are essential to the species' conservation because they facilitate or are intimately tied to these behaviors and, hence, support the life-history needs of the species. Because these behaviors are essential to the species' conservation, facilitating or protecting each one is considered a key conservation objective for any critical habitat designation for this species.

The Physical and Biological Features of Foraging Habitat That Are Essential to the Conservation of the Species

Scalloped hammerhead sharks are opportunistic predators, with a high degree of trophic plasticity (Torres-Rojas *et al.* 2006; Rojas *et al.* 2014). They feed on a wide range of teleosts, crustaceans, and cephalopods (Klimley 1987; Torres-Rojas *et al.* 2006; Junior *et al.* 2009; Hussey *et al.* 2011). As juveniles, when they occur primarily in inshore and shallow coastal waters, their diet is a reflection of their habitat and consists of small reef fish and crustaceans. For example, in Kāne'ohe Bay, a coastal bay of Hawaii consisting of a shallow reef, YOY scalloped hammered sharks (47–84 cm TL) were observed feeding mainly on scarids and gobioids abundant around the reef (Clarke 1971). The species of gobioids were characterized as ''rather ubiquitous and found in a variety of habitats in the bay'' (Clarke 1971). For those YOY that were captured in a part of the bay characterized by dead and silted reefs and an absence of reef fish, stomach analysis showed that these sharks primarily foraged on crustaceans (principally alpheids), suggesting the species, even at a young age, is not limited in its foraging habits but rather adapts to its present habitat and feeds on whatever prey is available (Clarke 1971). Similarly, in an analysis of stomach contents from 556 juvenile *S. lewini,* ranging from 48–160 cm TL, Torres-Rojas *et al.* (2006) identified 87 prey species and concluded that *S. lewini* is a generalist, un-selective feeder, with the type and amount of prey consumed by the juvenile sharks primarily determined by abundance and availability.

The species is also thought to undergo an ontogenetic change in feeding habits. This change is estimated to occur when the species reaches sizes of around 100 cm TL (Klimley 1987; Torres-Rojas *et al.* 2006; Kotas *et al.* 2012; Rojas *et al.* 2014). Generally, as the sharks become

larger, they begin to venture into neighboring deep-water habitats to feed on the larger pelagic fishes and squid. In their analysis, Torres-Rojas *et al.* (2006) noted that scalloped hammerhead sharks <100 cm TL in the southern Gulf of California, Mexico, fed primarily on *Loliolopsis diomedaea* (46.7 percent Index of Relative Importance (IRI) in diet), a squid found in shallow waters, whereas sharks >100 cm TL had a diet consisting more of carangid fishes (30.6 percent IRI) and *Abraliopsis affinis* (33.9 percent IRI), a squid more commonly found in mid-depths and over continental shelves. Female scalloped hammerhead sharks are thought to undergo this ontogenetic shift in feeding habits at a smaller size than males, transitioning from juvenile foraging grounds in shallow, nearshore waters to foraging in pelagic, deeper water habitat. As Klimley (1987) observed in the Gulf of California, Mexico, females ≤160 cm TL had a higher percentage of pelagic prey and much lower percentage of benthic prey in their diet compared to males of similar sizes, consistent with this type of foraging behavior. Off the coast of South Africa, Hussey (2011) observed that the diet signatures for female sharks of 161–214 cm TL indicated prolonged residence in offshore-pelagic waters (as opposed to continental shelf habitats). The diet signatures of males and females became similar only after male size increased to >214 cm TL. These findings also seem to corroborate those from a detailed tracking study of a juvenile female that was initially tagged in a nearshore nursery ground (La Paz Bay, Mexico) (Hoyos-Padilla *et al.* 2014). The female was 95 cm TL when tagged and spent the next 8 months primarily in shallow waters (<50 m depths), close to shore and near the surface (Hoyos-Padilla *et al.* 2014). However, towards the end of the 10-month study period, the shark was tracked making an increasing number of deeper dives, between 150 to 250 m depths, indicating a transition to offshore waters (Hoyos-Padilla *et al.* 2014). At the point of recapture, 10 months later, the shark had attained a size of 123 cm TL, which appears to fall within the estimated sizes above which juvenile females begin their ontogenetic migration (Klimley 1987; Torres-Rojas *et al.* 2006; Kotas *et al.* 2012; Rojas *et al.* 2014). Klimley (1987) suggests that this offshore migration occurs sooner for females, enabling them to achieve faster growth to reproductively-active sizes through access to a greater abundance of prey. This, in turn, translates to females achieving maturity at similar ages as their male counterparts (Klimely 1987).

Although little is known regarding the foraging behavior of adults, based on tracking and diet studies, it is thought that adults (and sub-adult females that have already migrated offshore) tend to exhibit a diel feeding pattern (Ketchum *et al.* 2014a, 2014b). During the day, sharks are observed refuging in large aggregations in shallow, nearshore coastal areas, off islands, and over seamount ridges (Klimley 1985; Ketchum *et al.* 2014a, 2014b). They tend to stay in a small core area, making occasional vertical dives through the mixed layer, and generally remaining above the thermocline in waters >23 °C (Bessudo *et al.* 2011; Ketchum *et al.* 2014a). These ''refuge'' areas tend to be located on the up-current side of islands and also correspond to where the pelagic assemblage is richer and represents lower-level trophic groups (such as trevally, pompano, and jacks) (Hearn *et al.* 2010; Bessudo *et al.* 2011; Ketchum *et al.* 2014a; 2014b; K. Lino, pers. comm. 2014). One theory is that this specific location on the island/seamounts, where the current splits to flow around obstacles, may cause an area of entrainment, providing the hammerheads with a food source upstream of the island (Hearn *et al.* 2010). Another theory is that the interactions between abrupt, sloping topography of seamounts and other bathymetrical features, and the impact of currents, tides, and internal waves, may enhance fluxes of near-bottom food particles, increasing abundance of benthic suspension feeders and further supporting higher densities of resident fish above seamounts (Mohn and Beckmann 2002; Hearn *et al.* 2010). However, feeding has not been observed at these refuge spots. Instead, it is thought that scalloped hammerheads may aggregate at these locations to reduce energy costs (these refuge spots are still areas of reduced currents relative to offshore) at areas that may provide some degree of food availability (with food-rich thermocline waters preferentially delivered to the up-current side of the island) and other benefits (such as cleaning stations), but that work more as a central and vantage location for foraging excursions into open waters (Ketchum *et al.* 2014a, 2014b). Based on tracking data, it is thought that individuals leave the adult aggregations at night to forage as solitary individuals in the neighboring deep-water pelagic habitats (Klimley and Nelson 1984, Klimley 1987, Klimley *et al.* 1988). Diet analysis shows that cephalopods, in particular, constitute an important prey item for adult scalloped hammerhead sharks. Deep-water squid species recorded in the stomachs of scalloped hammerhead sharks include: *Ancistrocheirus lesueuri* (Orbigny), *Mastigoteuthis* sp., *Moroteuthis robustus* (Verrill), *Dosidicus gigas* (Orbigny) (Klimley, 1987), *Histioteuthis* sp., *Ommastrephes bartramii* and Cranchiidae (Junior *et al.* 2009). Many of these cephalopod species have a wide geographic distribution, moving throughout the deep waters of the ocean, and, as such, it would be difficult to link these prey species to any ''specific'' areas within the oceanic geographic areas occupied by the scalloped hammerhead DPSs.

Overall, the best available information indicates that scalloped hammerhead sharks are opportunistic feeders. The species, regardless of life stage, does not appear to be limited by foraging grounds, adapting to its present habitat by feeding on whatever prey are available. There does not appear to be a specific prey species that is required to be present in a habitat for successful foraging to occur. Nor are there any specific habitat characteristics that appear to be intimately tied with feeding behavior. As such, we are unable to identify any particular physical or biological features of areas that facilitate successful foraging. While the above information suggests that scalloped hammerhead sharks may aggregate in tropical waters, near seamount ridges or productive coastal areas that face the impinging current, these areas are thought to be used more for refuging purposes as opposed to foraging habitats. Although these refuging habitats may be linked to foraging activities, this is purely speculative. Additionally, the particular physical or biological features of these refuging habitats that make them preferential for scalloped hammerhead aggregations are uncertain and their importance to the life-history needs of scalloped hammerhead sharks is unknown. Furthermore, no scalloped hammerhead sharks of the Central & SW Atlantic DPS or Eastern Pacific DPS have been observed refuging or foraging in the geographic areas under U.S. jurisdiction. The same holds true for the Indo-West Pacific DPS, with the exception of a single, personal observation of an adult scalloped hammerhead shark feeding on a large mullet in the Inner Harbor of Guam (T. Donaldson, pers. comm. 2014). For the foregoing reasons, it is not possible to identify any physical or biological features related to foraging that are essential to the conservation of the

species, nor are there any ''specific areas'' that appear to be used for foraging purposes within waters under U.S. jurisdiction.

The Physical and Biological Features of Pupping Habitat That are Essential to the Conservation of the Species

Scalloped hammerhead sharks are known to give birth in warm tropical and temperate shallow, inshore waters. The specific nursery habitat requisites for such factors as temperature, depth, and substrate, are highly variable. Below is a summary of the information on the habitat characteristics of known scalloped hammerhead nursery areas, identified as such based on the: (1) Common presence of neonates, YOY, and juvenile scalloped hammerhead sharks in the area, (2) long residency period of immature individuals in these areas (*e.g.,* weeks, months, years), and (3) repeated usage of the area over the years by these age classes (Salmon-Aguilar *et al.* 2009).

Nursery habitats for scalloped hammerhead sharks are generally identified as shallow inshore areas, including bays and estuaries. Kāne′ohe Bay in Hawaii, for example, is a well-studied and confirmed nursery ground for scalloped hammerhead sharks (and is part of the range of the identified Central Pacific DPS, for which we determined listing was ''not warranted''; 78 FR 20717, April 5, 2013). Kāne′ohe Bay is the largest bay in the Hawaiian Islands (61 km^2), located on the windward side of Oahu, and is separated from the ocean by a large barrier reef (0–3 m deep) (Clarke 1971). There are also two channels that provide access to the ocean on either side of the bay, the North Channel (10 m deep) and the shallower Sampan Channel (3 m deep). Most of the bay is around 14 m deep, with the deepest spots at around 19 m. It has a muddy/silty bottom with temperatures ranging from 20–30 °C. Patch reefs and small islands are interspersed throughout the bay. As mentioned above, the scalloped hammerhead population within this bay has been studied for many years (Clarke 1971; Holland *et al.* 1993; Duncan and Holland 2006). The juveniles show a preference for the southern end of the bay, which is characterized as being more turbid and estuarine than the other parts of the bay. In fact, females tend to drop the pups in the bay at the start of the trade-wind season, which stirs up the bay and creates constantly turbid waters, allowing the juveniles to remain in the bay for a significant portion of the year (Clarke 1971). The preference for the turbid portions of the bay is thought to be a defense mechanism, protecting juveniles from predator visibility. Behavioral observations in this nursery habitat show that juveniles tend to refuge in aggregations during the day near the bottom (between 0.5 m and 1.5 m off the bay floor) and in deeper areas of the bay (Holland *et al.* 1993). At night, juveniles tend to disperse, possibly hunting where patch and fringing reef walls meet the bay floor (Holland *et al.* 1993).

Identified nursery habitats in other regions also appear to share many of the same characteristics as those physical and biological features of Kāne′ohe Bay. For example, off the east coast of Australia, along the tropical northern Queensland coastline, there are a number of primarily shallow (<15 m) bays within which YOY scalloped hammerhead sharks of the Indo-West Pacific DPS have been observed (Simpfendorfer *et al.* 2014). These bays are protected seaward by the Great Barrier Reef and are also characterized by substrate that is dominated by silt and mudflats or mangrove-lined foreshores. The bays themselves tend to vary in other factors, such as freshwater input and seagrass abundance (Simpfendorfer *et al.* 2014). Young-of-the-year scalloped hammerheads have been observed in many of these bays (including Moreton, Rockhingham, Halifax, Cleveland, Bowling Green, Upstart, Repulse), but their spatial distribution indicates a preference for some (*e.g.,* Rockingham, Cleveland, Repulse) more than others (Simpfendorfer and Millward 1993; Taylor 2008; Simpfendorfer *et al.* 2014; Australia Department of Environment 2014). The specific aspects of these bays that make them more preferential as nursery habitats over the others is not clear; although, based on information from Simpfendorfer *et al.* (2014), these bays receive a greater input of freshwater compared to some of the bays where scalloped hammerheads have not been observed. In Cleveland Bay, for example, freshwater flows from four creeks into the mangrove-dominated southern portion of the bay, causing significant drops in salinity in the summer (from 39% to 36%) (Kinney *et al.* 2011). This is also the part of the bay where large numbers of YOY scalloped hammerheads have been recorded throughout the year in depths <5 m (Simpfendorfer and Milward 1993). Other physical aspects of the bay include silty substrates with mangrove-lined shorelines, areas of coastal reefs, and warm temperatures (SST ranges from 22.5 °C in winter to 30.5 °C in the summer) (Kinney *et al.* 2011). In the intertidal surf zone of Cleveland Bay, which is characterized by mud and sand flats, neonates of *S. lewini* have also been caught, but this is a brief occurrence (Tobin *et al.* 2014). They appear to only be present during the summer, from October to January, in depths typically <0.5 m, and thus are assumed to utilize this area as either transient short-term protection from predators after birth or possibly for prey resources (shrimp, small fishes), after which the neonates disperse into the adjoining subtidal nursery area of Cleveland Bay (Tobin *et al.* 2014). This migration may explain why more *S. lewini* YOY were observed in the southern portion of the Bay from February to July (Simpfendorfer and Milward 1993).

Apra Harbor, Guam, may also contain nursery habitat for the Indo-West Pacific DPS of scalloped hammerhead sharks, but this supposition is based only on anecdotal observations of juvenile sharks in Sasa Bay and both adults and juveniles in the channel connecting the inner Apra Harbor and Sasa Bay (personal communication, G. Davis and D. Burdick 2015). Sasa Bay, which is a no-take marine reserve, is a shallow bay (0–11 m) that primarily consists of sand/mud substrate, with patch reefs in deeper water and a mangrove swamp that extends along the coastline. The inner Apra Harbor has been extensively modified through dredging, construction activities, and landfills undertaken by the U.S. Navy since 1945 (Smith *et al.* 2009). The inner Apra Harbor now consists of a mud bottom of uniform depth, high turbidity, and an abundance of planktonic and benthic suspension feeders (compared to other parts of the harbor) but also has a relatively untouched mangrove area at the mouth of the Atantano River. Depths in the inner Apra Harbor range from 0–11 m, with some deeper areas of 11–18 m (Smith *et al.* 2009). On the opposite side of the island, the Pago Bay river mouth has also been identified as an area where juvenile scalloped hammerhead sharks have been observed. This area consists of a fringing reef flat, shallow depths (<10 m) and temperatures that range from around 16 to 34 °C (Tsuda 2004). Further information about the habitat use of scalloped hammerhead sharks that could provide insight into the specific physical or biological features within these systems that support the life-needs of the species is unknown, with the only available information from general personal observations and interactions with the species.

Off South Africa, nursery habitats for the Indo-West Pacific DPS have been identified on the continental shelf off

the geopolitical provinces that encompass KwaZulu-Natal (KZN) and northern Eastern Cape. This area is characterized by a narrow continental shelf and steep continental slope bordered at its eastern edge by the warm south-westward flowing Agulhas Current (Hussey *et al.* 2009). In Tugela Bank, KZN, YOY scalloped hammerheads were caught on trawling grounds in <50 m depths, where temperatures range from 21–27 °C. This area also coincides with the deepest deposit of mud originating from the discharges of numerous rivers in the area, and, as a result, the water is permanently turbid (Fennessy 1994). Young-of-the-year scalloped hammerheads were also caught year-round in the Transkei area where temperatures range from 16.5–22 °C (the coastal area just south of KZN), particularly the Port St Johns region which is the location of the mouth of the Mzimvbu River (Diemer *et al.* 2011). These temperatures and depths appear to be a bit cooler and deeper, respectively, than those described previously for nursery habitats in this DPS' range.

In the range of the Eastern Pacific DPS, Zanella *et al.* (2009) noted significant catches of juvenile scalloped hammerhead sharks in the vicinity of the mouth of the Tarcoles River, Costa Rica. Within this area, YOY sharks primarily occurred in depths between 1 and 30 m, whereas larger juveniles occurred in deeper areas of 61–90 m. Most sharks were caught in the portion of the river mouth characterized by muddy substrate, and shallow and murky waters. This area, in particular, is characterized by higher sedimentation and nutrient flow due to the influence of a mangrove ecosystem surrounding the coast and river discharge from the Tarcoles River (Zanella *et al.* 2009).

Other sites in the Eastern Pacific DPS range that have been identified as nursery areas are located in the Gulf of California and further south off the Pacific coast of Mexico. Sites in the Gulf of California include coastal waters off Mazatlan (Sinaloa) and San Francisquito and El Barril (Baja California). In the eastern Gulf of California, features of the areas where large numbers of YOY and juvenile *S. lewini* have been observed include both shallow and wide continental shelves (5–25 km), warm water temperatures, and highly productive waters. In 2014, Hoyos-Padilla *et al.* tracked an older juvenile female scalloped hammerhead shark in the Gulf of California (tagged in La Paz Bay) and found that the shark generally remained in depths less than 50 m, with a preference for temperatures of 23–26 °C. The onset of the birthing and nursery period in this area appears to be governed by temperature, when the temperatures increase from 18–19 °C in the spring to 30–31 °C in the summer. Significant upwelling events occur in the central and southern Gulf of California in winter and spring, generating high productivity and greater food availability during the peak breeding months and likely contribute to this area's importance as a nursery habitat for scalloped hammerhead sharks (Torres *et al.* 2008).

The Gulf of Tehuantepec, off the southern coast of Mexico, is also thought to be an important spawning and nursery area for *S. lewini* based on the presence of YOY, juveniles, and pregnant females in these waters. It is characterized by a narrow continental shelf with rivers and temporal streams that form large coastal lagoons and estuaries, and well-developed mangrove forest communities that provide abundant food resources (Alego-plata *et al.* 2007; Rios-Jara *et al.* 2009).The region has a tropical warm sub-humid climate with an average annual temperature close to 26 °C (range 14–31 °C at 10 m depths; Tapia-Garcia *et al.* 2007). It also experiences numerous summer rains (annual rainfall = 2500–3000 mm), making this region one of the wettest of Mexico (Rios-Jara *et al.* 2009). It is during the wet season that observations of YOY and juveniles increase, with birthing thought to occur in July and August. From October to May, this region experiences the strong ''Tehauntepec winds'' that cause the collapse of the thermocline and create upwelling of nutrients (Tapia-Garcia *et al.* 2007), likely providing a source of greater food availability during the first years of growth for these juvenile sharks.

From the best available information, the physical features of nursery areas in the Atlantic appear to be generally similar to those found in the Pacific. In the range of the Central & SW Atlantic DPS, Kotas *et al.* (2012) noted that in waters off Brazil pups tend to occur in shallow, coastal, turbid areas, in depths <20 m with sandy substrate. Juveniles are found near bays, estuaries, and over continental shelf in depths up to around 275 m (Kotas *et al.* 2012). No other information on nursery habitat characteristics for this DPS, especially those physical and biological features that directly support the life-history needs of the species, could be found. In fact, with the exception of the anecdotal information from Guam waters, there are no identified nursery grounds within waters under U.S. jurisdiction for either the Central & SW Atlantic DPS or the Indo-West Pacific DPS. The same is true for the Eastern Pacific DPS. Although YOY scalloped hammerhead sharks have been observed in U.S. waters off southern California, these individuals are identified as vagrants, with their occurrence associated only with rare strong ENSO events (Lea and Rosenblatt 2000; Shane 2001). In other words, the presence of YOY scalloped hammerhead sharks in California waters is not common, nor have scalloped hammerhead sharks displayed a repeated usage of these areas over the years. As such, we do not consider U.S. waters off southern California to contain identified nursery habitat for the Eastern Pacific DPS.

Based on the foregoing information regarding known or presumed pupping areas for scalloped hammerhead sharks, the general physical oceanographic features that appear to be associated with this habitat include: (1) Relatively shallow inshore bays/estuaries with areas of moderate to high freshwater input; (2) tropical water temperatures (≥20 °C); (3) muddy/silty/sandy substrate bottom; (4) presence of patchy reefs, mangrove systems, or seagrass beds; and (5) areas within inshore habitats of higher turbidity/current flow. However, because of the variability in the presence of the above physical features in the different identified nursery areas (*e.g.,* mud versus silt or sand, low temperatures (16–22 °C) versus higher temperatures (>30 °C), varying levels of salinity and freshwater input, shallow depths (<10 m) versus areas with deeper waters (up to 275m)) we can only characterize nursery grounds using broad terms to describe the physical features. Given this level of resolution, and the fact that these features vary even for nursery grounds within a DPS' range, it is unclear which of the above physical characteristics, if any, are necessary to facilitate successful pupping behavior. In other words, we cannot identify whether any or a combination of these characteristics of nursery grounds are essential for the conservation of the species. Although scalloped hammerhead sharks may prefer areas that contain these characteristics, the available information does not allow us to identify any physical or biological features within these areas that are essential to support the life-history needs of scalloped hammerhead sharks. Additionally, while the available data suggest nursery habitats share many of the above physical characteristics, these general features are relatively ubiquitous throughout the global range of the species and not all areas with the

above features provide meaningful pupping or nursery habitat. Furthermore, there is no evidence of scalloped hammerhead sharks being limited to a specific nursery ground. In fact, Duncan *et al.*(2006) provided mtDNA data that argued against strong natal homing behavior by the species and anecdotal information of scalloped hammerhead sharks using artificially enlarged estuaries in Hawaii as nursery grounds (which were 100–600 km from confirmed nursery habitats). In other words, the species is highly migratory and does not appear to be limited to certain nursery areas.

As mentioned previously, for the listed DPSs, there are no confirmed nursery grounds for the species in U.S. waters. Due to the rarity of the presence of the Central & SW Atlantic DPS in waters under U.S. jurisdiction, both historically and presently, these waters do not likely provide important pupping habitat. Similarly, the waters under U.S. jurisdiction in the Eastern Pacific are considered unoccupied areas used solely by vagrants of the Eastern Pacific DPS and only during rare weather events. As such, these waters do not provide important nursery habitat for the DPS. The anecdotal observations from Guam lend support to the potential use of waters under U.S. jurisdiction by juvenile scalloped hammerhead sharks; however, without knowledge of the essential features that create meaningful pupping grounds, we cannot identify any areas that meet the definition of critical habitat. Simply the observation of the presence of juveniles utilizing these waters (with unknown abundance, duration, habitat use, or frequency of occurrence) is not enough information to indicate that these areas contain physical and biological features that are essential to the conservation of the species. Additionally, the waters under U.S. jurisdiction for the Indo-West Pacific DPS represent an extremely small percentage of the suitable habitat available for the DPS (which comprises the waters of the entire Indian Ocean and Western Pacific Ocean), and based on the absence of any recent observations of juvenile scalloped hammerhead sharks utilizing waters off Guam, these waters under U.S. jurisdiction do not appear to contain important nursery habitat that could be characterized as essential for the conservation of the DPS.

The Physical and Biological Features of Migratory Habitat That Are Essential to the Conservation of the Species

Both small and large-scale migratory movements are a necessary component in the life-history of the scalloped hammerhead shark. Examples of small scale migratory movements (<300 km) include those undertaken for feeding and refuging (Ketchum *et al.* 2014b; Diemer *et al.* 2011; Hearn *et al.* 2010; Klimley and Nelson 1984). Large scale migrations have also been observed by scalloped hammerhead sharks and are thought to occur for foraging but also reproductive purposes (Ketchum *et al.* 2014b; Bessudo *et al.* 2011). Pregnant females must make large scale migrations from their offshore habitats to coastal inshore nursery habitats for successful reproduction. Similarly, juvenile females are also thought to make this migration in the opposite direction as they attain larger sizes (>100 cm TL). The extent of juvenile and adult male migrations is unknown, but as some have been observed in schools offshore (Klimley 1985; Ketchum *et al.* 2014) and some in nearshore nursery areas (Clarke 1971; Dudley and Simpfendorfer 2006), it is likely that a proportion of the male population may also undergo larger scale migrations. For logistical reasons, survey efforts have been focused in nearshore habitats, with a number of studies conducted around the island chains in the Eastern Tropical Pacific (Galapagos, Cocos Island, and Malpelo Island), part of the Eastern Pacific DPS range. For example, in the Galapagos, Ketchum *et al.* (2014b) tagged 134 scalloped hammerhead sharks, 80 percent of which were females. The most common movement exhibited by these sharks was short back and forth inter-island movement (<50 km), which was thought to represent focused foraging movements. However, five tagged scalloped hammerhead sharks were also tracked making long-distance migrations (>300 km) across the eastern Pacific, primarily during the warm season (March to May). One female (possibly mature with a size of 170 cm TL) was tracked moving from Wolf Island (Galapagos) to Cocos Island off Costa Rica, a distance of around 700 km. Two other female sharks (both likely mature, 200 cm TL) were tracked migrating from Darwin Island (Galapagos) to Cocos Island, a distance of 679 km. One of the females even returned to Darwin Island, indicating that these long distance migrations may be directed movements. Similarly, a female tagged at Malpelo Island (off Colombia) was tracked migrating to Cocos Island and then to Wolf and Darwin Islands. Results from another tagging study of scalloped hammerheads around Malpelo Island found many pregnant females leaving the island around March-April (Bessudo *et al.* 2011). As pupping tends to occur in the summer months off the continental Eastern Pacific (Torres *et al.* 2008; Rios-Jara *et al.* 2009; Zanella *et al.* 2009), it is thought that these long distance and seemingly directed movements across the Eastern Pacific may be conducted by female sharks during the final stages of the gestation period, with the sharks likely migrating to the continental coast for parturition (Bessudo *et al.* 2011; Ketchum *et al.* 2014b). Additionally, in the Ketchum *et al.* (2014b) study, one mature male scalloped hammerhead shark (218 cm TL) was also tracked making a long-distance migration. The shark travelled from Darwin Island to Malpelo Island (a distance of 627km) (Ketchum *et al.* 2014b). Given that this migration occurred during the same season as the female long-distance migrations, it could be that a small proportion of the mature male population may also undergo long-distance migrations, following reproductively active females to coastal nursery habitats for mating purposes.

Although the available information suggests that these sharks do undergo short and long-distance migrations, the space or migratory corridor used by scalloped hammerhead sharks during these migrations remains unknown. In addition, we are not aware of any migratory tracking studies that have been conducted in waters under U.S. jurisdiction and, therefore, have no information on any potential migratory corridors that may exist within waters under U.S. jurisdiction for the listed scalloped hammerhead DPSs. Based on the foregoing information, we cannot identify any specific essential features that define migratory habitat for scalloped hammerhead sharks.

The Physical and Biological Features of Breeding Habitat That Are Essential to the Conservation of the Species

Important areas for mating are largely unknown for scalloped hammerhead sharks. To identify potential sites as mating grounds, we looked for the presence of both mature females and males. For the most part, adult females are usually found schooling offshore with subadult females (Klimley 1985; Ketchum *et al.* 2014b). Studies have documented that these schools also consist of a few adult males (Klimley 1985; Ketchum *et al.* 2014a, 2014b). As such, potential mating events may occur in these offshore refuging schools, but this has not been confirmed. Furthermore, none of these refuging schools described above have been observed in waters under U.S. jurisdiction for the listed scalloped hammerhead DPSs.

Additionally, adult females, including ones that have recently given birth, are occasionally observed in identified nursery habitats along with adult males (Clark 1971; Dudley and Simpfendorfer 2006; Hussey *et al.* 2011). It is thought that mating may also occur during the principal pupping season, and potentially near these nursery areas (possibly over continental shelf or even near shelf slope; Kotas *et al.* 2012), with adult females moving inshore for a short time to mate and then proceeding to migrate offshore (Clarke 1971). Adult males, however, tend to be observed in larger numbers (sometimes with no evidence of mature females) staying in these inshore areas for longer periods of time, perhaps as a way to maximize the number of breeding females they can encounter (Clarke 1971; Dudley and Simpfendorfer 2006; Hussey *et al.* 2011; Yates *et al.* 2015). However, as stated above, the areas where scalloped hammerhead shark mating occurs remain unknown and purely speculative. There has not been any systematic evaluation of the particular physical or biological features that facilitate or are necessary for mating to occur. As such, we cannot identify physical or biological features of breeding habitat that are essential to the conservation of the species.

Unoccupied Areas

Section 3(5)(A)(ii) of the ESA defines critical habitat to include specific areas outside the geographical area occupied by a threatened or endangered species at the time it is listed if the areas are determined by the Secretary to be essential for the conservation of the species. Regulations at 50 CFR 424.12(e) specify that we shall designate as critical habitat 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. Our regulations at 50 CFR 424.12(h) also state: ''Critical habitat shall not be designated within foreign countries or in other areas outside of United States jurisdiction.''

As discussed previously, the waters off California are not considered part of the geographical area occupied by the Eastern Pacific DPS at the time of listing. We also conclude that it is not an unoccupied area essential to the DPS' conservation, given the rare, errant use of the area by vagrant scalloped hammerhead sharks in the past, with this use associated only with sporadic weather events, and the fact that we have no information to suggest the area is essential to the conservation of the DPS. Furthermore, for the areas under U.S. jurisdiction off USVI, Puerto Rico, Navassa Wildlife Refuge, and CNMI, which we could not conclude were occupied by the applicable scalloped hammerhead DPSs at the time of listing, we found no information that would indicate these areas are essential for the conservation of the listed DPSs. Scalloped hammerhead sharks are highly migratory, and although they may have historically been observed in these waters, the lack of historical or anecdotal data or information tends to suggest these may have been rare or sporadic occurrences as the shark passed through these waters. We do not find that these unoccupied areas under U.S. jurisdiction, which additionally comprise such small portions of the overall ranges of the listed DPSs, are essential to the conservation of the listed DPSs. As such, we find that there are no identifiable areas outside the geographical areas occupied by the listed DPSs that would meet the definition of critical habitat for the scalloped hammerhead shark DPSs.

Any conservation actions for the listed scalloped hammerhead shark DPSs that would bring these DPSs to the point that the measures of the ESA are no longer necessary will need to be implemented by foreign nations. As noted in the final rule (79 FR 38213, July 3, 2014), the significant operative threats to the listed scalloped hammerhead DPSs are overutilization by foreign industrial, commercial, and artisanal fisheries and inadequate regulatory mechanisms in foreign nations to protect these sharks from the heavy fishing pressure and related mortality, with illegal fishing identified as a significant problem in areas outside of U.S. jurisdiction. Thus, recovery of the listed DPSs is highly dependent upon international conservation efforts. This includes increased protection for the listed DPSs from fishery-related mortality, especially within those foreign areas described above where the biological behaviors that support the life-history needs of the listed DPSs have been observed (*e.g.,* the identified nursery grounds in foreign waters). We are committed to increasing the awareness of the threats to these listed DPSs and encourage the development of conservation programs by foreign nations and international regulations to protect these DPSs. For example, we recently collaborated with a coalition of countries to gain support for a proposal to add three hammerhead shark species (scalloped, smooth, and great) to Appendix II of the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES). In March 2013, at the 16th Meeting of the Conference of the Parties to CITES, member nations, referred to as ''Parties,'' voted in support of this proposal, an action that will complement existing international shark protection measures by ensuring trade of these hammerhead shark species is sustainable and does not threaten their survival. We will continue to be a leader in promoting the conservation and management of sharks globally, and will work internationally within regional fisheries management organizations and other international bodies to promote the adoption of conservation and management measures, particularly for the listed scalloped hammerhead shark DPSs.

Critical Habitat Determination

Given the best available information and the above analysis of this information, we find that there are no identifiable occupied areas under the jurisdiction of the United States with physical or biological features that are essential to the conservation of the species or unoccupied areas that are essential to the conservation of the species. Therefore, we conclude that for the Eastern Pacific DPS, Central & SW Atlantic DPS, and the Indo-West Pacific DPS, there are no specific areas within their respective ranges and under U.S. jurisdiction that meet the definition of critical habitat. Since there is not any habitat of scalloped hammerhead sharks in waters under U.S. jurisdiction that is considered to be critical habitat, there is no critical habitat to designate under ESA section 4(a)(3)(A)(i).

Although we have determined that no areas meet the definition of critical habitat for the listed scalloped hammerhead DPSs, the areas occupied by the DPSs under U.S. jurisdiction will continue to be subject to conservation actions implemented under section 7(a)(1) of the ESA, as well as consultation pursuant to section 7(a)(2) of the ESA for Federal activities that may affect the listed scalloped hammerhead DPSs, as determined on the basis of the best available information at the time of the action. Through the consultation process, we will continue to assess effects of Federal actions on these species and their habitat. In addition, the prohibitions against importing, exporting, engaging in foreign or interstate commerce, or ''taking'' of the scalloped hammerhead sharks of the Eastern Pacific DPS and Eastern Atlantic DPS under section 9 of the ESA continue to apply.

References

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

Authority

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

Dated: November 10, 2015.

Samuel D. Rauch III,

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

[FR Doc. 2015–29262 Filed 11–16–15; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF DEFENSE

Department of the Air Force

[Docket ID USAF–2013–0030]

Proposed Collection; Comment Request

AGENCY: Air Force Chief of Chaplains Office (DOD/USAF/HQ AF/HC), Department of the Air Force, Department of Defense.

ACTION: Notice.

SUMMARY: In compliance with the *Paperwork Reduction Act of 1995,* the Department of the Air Force announces a proposed public information collection and seeks public comment on the provisions thereof. Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed information collection; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the information collection on respondents, including through the use of automated collection techniques or other forms of information technology.

DATES: Consideration will be given to all comments received by January 19, 2016.

ADDRESSES: You may submit comments, identified by docket number and title, by any of the following methods:

• Federal eRulemaking Portal: *http://www.regulations.gov.* Follow the instructions for submitting comments.

• Mail: Department of Defense, Office of the Deputy Chief Management Officer, Directorate of Oversight and Compliance, Regulatory and Audit Matters Office, 9010 Defense Pentagon, Washington, DC 20301–9010.

Instructions: All submissions received must include the agency name, docket number and title for this **Federal Register** document. The general policy for comments and other submissions from members of the public is to make these submissions available for public viewing on the Internet at *http://www.regulations.gov* as they are received without change, including any personal identifiers or contact information. Any associated form(s) for this collection may be located within this same electronic docket and downloaded for review/testing. Follow the instructions at *http://www.regulations.gov* for submitting comments. Please submit comments on any given form identified by docket number, form number, and title.

FOR FURTHER INFORMATION CONTACT: To request more information on this proposed information collection or to obtain a copy of the proposal and associated collection instruments, please write to the Chaplain Corps Accounting Center, 266 F Street, Suite 2, JBSA Randolph, TX 78150–4583, email *gary.gilliam.1@us.af.mil* or call (210) 652–5122 option 9.

SUPPLEMENTARY INFORMATION:

Title; Associated Form; and OMB Number: AF Form 4356, Chapel Tithes and Offering Fund (CTOF) Purchase Request, AF Form 4357, Chapel Tithes and Offering Fund (CTOF) Monthly Statement of Contract Services, and AF Form 4360, Chapel Tithes and Offering Fund (CTOF) Electronic Funds Transfer EFT, OMB Control Number 0701–TBD.

Needs and Uses: The information collection requirement is necessary to enable the request of advance funds for purchase of supplies for chapel projects, or for the payment of contract payments to Non-personnel Service Contracts between the local base chapel and each individual contractor. Air Force Instruction 52–105V2 requires that all contract payments only be accomplished by EFT, the 4360 Form gives CCAC the information needed to pay by EFT.

Affected Public: Individuals or Households.

Annual Burden Hours: 6,250 hours.

Number of Respondents: 5,000.

Responses per Respondent: 5.

Annual Responses: 25,000.

Average Burden per Response: 15 minutes.

Frequency: Annually.

The Chaplain Corps Accounting Center (CCAC) requires the forms to be completed and submitted, to have all the information needed to process fund requests and payments. The calculation of average burden per response uses fifteen minutes as an average time for each form. The only members of the public that are affected are those who require funds from the CCAC.

Dated: November 12, 2015.

Aaron Siegel,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 2015–29337 Filed 11–16–15; 8:45 am]

BILLING CODE 5001–06–P

DEPARTMENT OF DEFENSE

Department of the Army

[Docket ID: USA–2015–HQ–0045]

Proposed Collection; Comment Request

AGENCY: Civilian Human Resources Agency, DoD.

ACTION: Notice.

SUMMARY: In compliance with the *Paperwork Reduction Act of 1995,* the Civilian Human Resources Agency announces a proposed public information collection and seeks public comment on the provisions thereof. Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed information collection; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the information collection on respondents, including through the use of automated collection techniques or other forms of information technology.

DATES: Consideration will be given to all comments received by January 19, 2016.

ADDRESSES: You may submit comments, identified by docket number and title, by any of the following methods:

• *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.

• *Mail:* Department of Defense, Office of the Deputy Chief Management Officer, Directorate of Oversight and Compliance, Regulatory and Audit Matters Office, 9010 Defense Pentagon, Washington, DC 20301–9010.

Instructions: All submissions received must include the agency name, docket number and title for this **Federal Register** document. The general policy for comments and other submissions from members of the public is to make these submissions available for public viewing on the Internet at *http://www.regulations.gov* as they are