

A close-up photograph of several fish, likely salmon, caught in a white mesh fishing net. The fish are packed together, and their scales and fins are visible through the netting. The net is made of thick, white rope with yellow knots. The background is a solid blue color.

Improving International Fisheries Management

January 2017 Report to Congress



Improving International Fisheries Management

*Report to Congress Pursuant to Section 403(a) of the
Magnuson-Stevens Fishery Conservation and Management
Reauthorization Act of 2006*

January 2017

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Executive Summary

It's a fact – Americans love their seafood. We are one of the world's largest seafood consuming nations and our appetite for seafood will only continue to grow. However, we already import 80 to 90 percent of the seafood we consume in any given year. Fisheries sees this as an opportunity and an obligation to share with other nations what we have learned about how to sustainably manage fisheries and to promote the conservation and protection of marine life and their habitats. Just as we do in the United States for domestic fisheries management, Fisheries works hand-in-hand with international management and conservation bodies, to export our sustainable practices, strengthen international enforcement of regulations, and demonstrate the importance of careful stewardship of our ocean species and habitats globally.

– Eileen Sobeck, Assistant Administrator for NOAA Fisheries
November 16, 2016

The Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (MSRA) acknowledged the need for international cooperation to address fishing activities that have a deleterious effect on sustainable fisheries worldwide. In amending the High Seas Driftnet Fishing Moratorium Protection Act (Moratorium Protection Act), Congress directed the Executive Branch to strengthen its leadership in international fisheries management and enforcement, particularly with regard to illegal, unreported, and unregulated (IUU) fishing and unsustainable fishing practices such as bycatch of protected living marine resources (PLMRs). The Shark Conservation Act of 2010 (SCA) amended the Moratorium Protection Act to add a third focus: directed and incidental catch of sharks, especially the practice of finning, in areas beyond national jurisdiction.

As explained in more detail below, the Illegal, Unreported, and Unregulated Fisheries Enforcement Act of 2015 (IUU Fisheries Enforcement Act), P.L. 114-81, strengthened enforcement tools and implemented two important treaties. It further amended the Moratorium Protection Act with improvements and technical corrections to the identification and certification process. In early December of 2016, Congress passed the Ensuring Access to Pacific Fisheries Act, P.L. 114-327, which made further amendments to the Moratorium Protection Act, and which will allow the United States to join the two newest regional fisheries management organizations (RFMOs) and to implement the amendments to another RFMO convention. President Obama signed the bill into law on December 16, 2016.

Under the Moratorium Protection Act, Congress requires the Secretary of Commerce to identify countries whose fishing vessels were engaged in IUU fishing or certain other activities, and to consult with those countries on improving their fisheries management and enforcement practices. Two years after an identification, the Secretary is to certify whether actions by the identified countries have adequately addressed the offending activities. These responsibilities have been delegated to the National Marine Fisheries Service's (NMFS) Assistant Administrator.

In its 2013 Report to Congress, NMFS identified Mexico for bycatch of North Pacific loggerhead turtles. In the 2015 Report to Congress, NMFS delayed making a certification for Mexico. On August 14, 2015, NMFS issued a negative certification to Mexico for failure to adopt a regulatory program comparable to that of the United States for addressing that bycatch. Subsequently, Mexico developed and adopted management measures to reduce bycatch of North Pacific loggerheads that were comparable with those of the United States. On September 1, 2016, NMFS issued Mexico a positive certification for bycatch.

In the 2015 Report, NMFS identified six countries as having vessels engaged in IUU fishing during the preceding two years: Colombia, Ecuador, Mexico, Nicaragua, Nigeria, and Portugal. This report details the consultations with those countries over the past two years. As required by the Moratorium Protection Act, Part IV contains NMFS's certification decisions for those six countries. Five of the countries received positive certifications; Mexico did not.

In Part III of this report, NMFS identifies two countries, Ecuador and the Russian Federation, as having been engaged in IUU fishing based on reported violations of international conservation and management measures during 2014, 2015, or 2016. NMFS identifies two countries, Mexico and the Russian Federation, as having vessels that fished without authorization in waters of the United States. NMFS also identifies Mexico for overfishing of stocks shared with the United States.

In addition, this report updates domestic, regional, and global efforts to combat IUU fishing, minimize bycatch of protected species, and conserve sharks. Among the most important developments during the past two years are the following:

- The IUU Fisheries Enforcement Act expanded, from two years to three years, the period during which IUU fishing activities serve as a basis for identification of a country. For identifications based on bycatch of PLMRs, the Act lengthened the period from one year to three. The Act also provided the authority needed to implement the Antigua Convention (for the management of tuna and tuna-like species in the eastern Pacific Ocean) and the 2009 Agreement on Port State Measures to Prevent, Deter, and Eliminate Illegal, Unreported and Unregulated Fishing (PSMA), allowing the United States to ratify those important agreements in 2016. The first binding global instrument focused specifically on combating IUU fishing, the PSMA entered into force on June 5, 2016. See Parts II, VI.6, and VII.A.
- The Ensuring Access to Pacific Fisheries Act makes it possible for the United States to become a member of the North Pacific Fisheries Commission (NPFC) and the South Pacific Regional Fisheries Management Organization (SPRFMO), and to implement amendments to the convention establishing the North Atlantic Fisheries Organization (NAFO). The statute also amended the Moratorium Protection Act, including by changing the period, from one year to three, during which certain shark fishing activities may be the basis for a country to be identified. See Part II.
- The Presidential Task Force on Combating IUU Fishing and Seafood Fraud made recommendations to the White House in December 2014, and in April 2015 presented an

action plan to implement its recommendations. The Task Force is now a standing committee of the National Ocean Council to oversee implementation. Among other accomplishments, the Committee has developed a risk-based traceability program to track both domestic and imported seafood products from point of harvest or production to entry into U.S. commerce, to prevent the entry of IUU fish or fish products and to combat seafood fraud. See Part I.E.1.

- In October 2016, the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) created in the Ross Sea the world's largest marine protected area – some 600,000 square miles. Effective December 1, 2017, commercial fishing will be banned in most of the area. The reserve is designed to protect areas representative of various bioregions; protect important breeding and feeding grounds for large fish, seals, whales, penguins, and many other species; and promote scientific research on living marine resources. See Part VIII.B.
- At the 17th meeting of the Conference of Parties, a number of marine species were added to Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The listings include chambered nautilus, devil rays, silky sharks, and bigeye thresher sharks. The United States submitted the nautilus proposal, co-sponsored the ray proposal, and supported the shark proposals. See Part VI.B.
- On December 9, 2016, NMFS published a final rule establishing the Seafood Import Monitoring Program, with reporting and recordkeeping requirements designed to prevent IUU fish and fisheries products and misrepresented seafood from entering the United States. See Part II.E.1.
- NMFS issued a final rule implementing the import provisions of the Marine Mammal Protection Act (MMPA). The rule establishes criteria and procedures for a harvesting nation to be able to import fish and fish products into the United States. The nation must demonstrate that its regulatory programs for reducing marine mammal mortality during fishing activities are comparable in effectiveness to those of the United States. See Part I.D.

List of Acronyms

<u>Acronym</u>	<u>Full Name</u>
ACAP	Agreement on the Conservation of Albatrosses and Petrels
CCAMLR	Commission for the Conservation of Antarctic Marine Living Resources
CCSBT	Commission for the Conservation of Southern Bluefin Tuna
CDS	Catch documentation scheme
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CMM	Conservation and management measure
CMS	Convention on the Conservation of Migratory Species of Wild Animals
COFI	Committee on Fisheries of the FAO
CoP17	Seventeenth Conference of the Parties (CITES)
CPC	Contracting parties and cooperating non-contracting parties, entities, or fishing entities (IATTC, ICCAT, and IOTC)
DOS	United States Department of State
EEZ	Exclusive Economic Zone
ESA	Endangered Species Act
EU	European Union
FAO	United Nations Food and Agriculture Organization
HSFCA	High Seas Fishing Compliance Act
IAC	Inter-American Convention for the Protection and Conservation of Sea Turtles
IATTC	Inter-American Tropical Tuna Commission
ICCAT	International Commission for the Conservation of Atlantic Tunas
IMO	International Maritime Organization
IOTC	Indian Ocean Tuna Commission
ITDS	International Trade Data System
IUU	Illegal, unreported, and unregulated (fishing)
IWC	International Whaling Commission
MCS	Monitoring, control, and surveillance
MMPA	Marine Mammal Protection Act
MOU	Memorandum of understanding
MSA	Magnuson-Stevens Fishery Conservation and Management Act
MSRA	Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006

NAFO	Northwest Atlantic Fisheries Organization
NASCO	North Atlantic Salmon Conservation Organization
NEAFC	North East Atlantic Fisheries Commission
NGO	Non-governmental organization
NMFS	National Marine Fisheries Service (a NOAA line office)
NOAA	National Oceanic and Atmospheric Administration (an agency of the Department of Commerce)
NOC	National Ocean Council
NPAFC	North Pacific Anadromous Fisheries Commission
NPFC	North Pacific Fisheries Commission
PLMRs	Protected living marine resources
PSMA	Agreement on Port State Measures to Prevent, Deter, and Eliminate Illegal, Unreported and Unregulated Fishing
RFMO	Regional fisheries management organization/arrangement
SCA	Shark Conservation Act of 2010
SCIC	Standing Committee on Implementation and Compliance (CCAMLR)
SCRS	Standing Committee on Research and Statistics (ICCAT)
SEAFO	South East Atlantic Fisheries Organization
SPRFMO	South Pacific Regional Fisheries Management Organization
TED	Turtle excluder device
TPP	Trans-Pacific Partnership
UNFSA	United Nations Fish Stocks Agreement
UNGA	United Nations General Assembly
USAID	United States Agency for International Development
USCG	United States Coast Guard
VME	Vulnerable marine ecosystem
VMS	Vessel monitoring system
WCPFC	Western and Central Pacific Fisheries Commission
WECAFC	Western Central Atlantic Fisheries Commission

I. Introduction and Background

Every two years the Secretary of Commerce submits a Biennial Report to Congress, as required by Section 609 of the Moratorium Protection Act. The first Biennial Report was sent to Congress in January 2009, with subsequent reports submitted in January 2011, January 2013, and February 2015. Central to the statutory scheme is the requirement that the Secretary of Commerce, in these biennial reports, identify nations whose fishing vessels are engaged in IUU fishing, or in certain bycatch or shark fishing practices; describe U.S. consultations with the identified countries to urge appropriate actions; and certify whether such actions subsequent to identification have adequately addressed the offending activities. The Secretary of Commerce has delegated authority to identify and certify countries under the Moratorium Protection Act to the NOAA Assistant Administrator for Fisheries.

The Moratorium Protection Act also directs the Secretary of Commerce, in consultation with the Secretary of State and in cooperation with relevant regional fishery management councils and any relevant advisory committees, to take certain actions to improve the effectiveness of international fishery management organizations in conserving and managing stocks under their jurisdiction. These actions include urging those organizations of which the United States is a member to:

- Incorporate multilateral market-related measures against member or non-member governments whose vessels engage in IUU fishing.
- Seek adoption of lists that identify fishing vessels and vessel owners engaged in IUU fishing.
- Seek adoption of a centralized vessel monitoring system (VMS).
- Increase use of observers and technologies to monitor compliance with conservation and management measures (CMMs).
- Seek adoption of stronger port State controls in all nations.
- Adopt shark conservation measures, including measures to prohibit removal of any of the fins of a shark (including the tail) and discard of the carcass of the shark at sea.
- Adopt and expand the use of market-related measures to combat IUU fishing, including import prohibitions, landing restrictions, and catch documentation schemes (CDSs).

The Secretary of Commerce is also to encourage other nations to take all steps necessary, consistent with international law, to adopt measures and policies that will prevent fish or other living marine resources harvested by vessels engaged in IUU fishing from being traded or imported into their nations or territories. The Act calls on the Secretary of Commerce, to the greatest extent possible based on availability of funds, to provide assistance to nations identified for certain activities, so that they may qualify for positive certifications.

On November 15, 2015, President Obama signed into law the IUU Fisheries Enforcement Act, which amended several statutes that implement U.S. obligations for several RFMOs – for example, the North Pacific Anadromous Stocks Act, the Antarctic Marine Living Resources Convention Act, and the North Pacific Halibut Act. The amendments harmonize the enforcement provisions, particularly the penalties, of the various statutes with those found in the Magnuson-Stevens Fishery Conservation and Management Act (MSA). The new statute also

amended the Moratorium Protection Act to increase to three years the allowable time period for consideration of activities for identification of nations for IUU fishing or bycatch of PLMRs. Finally, the Act provided authority to implement two new international agreements: the Antigua Convention, which revised the Convention for the Establishment of an Inter-American Tropical Tuna Commission; and the PSMA, which restricts the entry into U.S. ports by foreign fishing vessels that are known to be, or are suspected of, engaging in IUU fishing.

In December 2016, Congress passed and the President signed the Ensuring Access to Pacific Fisheries Act, which further amended the Moratorium Protection Act to bring the period for identification of a country for certain shark fishing activities into line with the three-year periods for IUU fishing and certain bycatch activities. The new Act also changed the deadline for submission of the biennial report to Congress, from January 12 to June 1.

Past biennial reports and the current one survey efforts by the United States to strengthen its leadership toward improving international fisheries management and enforcement, particularly with regard to IUU fishing, bycatch of PLMRs, and certain shark fishing practices. They also describe progress in the international arena to deal with these issues. The reports address the status of international living marine resources and contain information on actions taken to assist other countries in achieving sustainable fisheries and minimizing bycatch and discards.

As the Moratorium Protection Act emphasizes the importance of addressing IUU fishing, PLMR bycatch, and certain shark fishing practices, the sections below provide background information on those activities, as well as a brief discussion of other U.S. statutes and undertakings that are useful in managing U.S. fisheries responsibly and in addressing unsustainable practices in international fisheries.

A. Illegal, Unreported, and Unregulated (IUU) Fishing

The international community uses the term “IUU fishing” to describe fishing activity that does not comply with national, regional, or global fisheries conservation and management obligations, wherever such fishing occurs. Unregulated fishing also may occur where no management authority or regulation is in place.¹

IUU fishing activity affects fisheries of all types – from small-scale to industrial. Shipment, processing, landing, sale, and distribution of IUU fish and fish products perpetuate the financial

¹ The use of the term in U.S. legislation is more circumscribed and complicated; see Part II.A for definitional details. Section 402 of the MSRA, codified at 16 U.S.C. 1801(a)(12), contains a finding that international cooperation is necessary to address “illegal, unreported, **and** unregulated fishing” (emphasis added). On the other hand, Section 609 of the Moratorium Protection Act, which establishes the standards for identification and certification of nations whose vessels engage in IUU fishing, uses a disjunctive formulation of the term, referring to nations whose vessels are engaged in “illegal, unreported, **or** unregulated fishing” (emphasis added). The FAO and other international bodies generally employ the conjunctive formulation of the term in publications, plans of action, and related materials. In this report, we use the phrase “IUU fishing” without indicating whether the conjunctive or disjunctive formulation is intended, but with the understanding that where identification and certification determinations are at issue under the Moratorium Protection Act, the term is to be understood and employed in the disjunctive. We do not intend any particular legal meaning or consequence to flow from the use of the term in this report.

reward from illegal harvests. IUU fishing undermines efforts of nations and RFMOs to manage fisheries in a responsible manner. It also affects the ability of governments to support sustainable livelihoods of fishermen and, more broadly, to achieve food security.

Because IUU fishing activities are generally carried out covertly, monitoring and detection are difficult. This makes quantification of the problem difficult. The United Nations Food and Agricultural Organization (FAO) considers IUU fishing a serious threat to high-value fisheries that are already overfished; to marine habitats, including vulnerable marine ecosystems (VMEs); and to food security and the economies of developing countries. IUU fishing activities have widespread economic and social consequences, including depriving legitimate fishermen of harvest opportunities. IUU fishing also deprives fisheries managers of information critical to accurate stock assessments. It exacerbates the problem of discards and bycatch, because vessels engaged in illegal activities are likely to engage in unsustainable fishing practices and use non-selective gear.

IUU fishing activities tend to be dynamic, adaptable, highly mobile, and increasingly sophisticated as IUU fishermen attempt to find and exploit weak links in the international fisheries regulatory system. The use of flags of convenience, as well as ports of convenience, facilitates the wide scope and extent of IUU fishing activities.

Since IUU fishing activities are complex, a broad range of governments and entities must be involved to combat them. These include flag States, coastal States, port States, market States, international and intergovernmental organizations, the fishing processing, distribution, and retail industries, non-governmental organizations (NGOs), financial institutions, insurers, and consumers. The United States is a member of or has substantial interests in numerous international fisheries and related agreements and organizations (see Annex 1 for a list of those most relevant to this report). U.S. involvement in international efforts to combat IUU fishing covers tools such as IUU vessel lists; stronger port State controls; improved monitoring, control, and surveillance (MCS); market-related measures to help ensure compliance; and capacity-building assistance.

B. Bycatch of Protected Living Marine Resources (PLMRs)

The bycatch of PLMRs, such as incidentally caught or entangled sea turtles, sharks, dolphins, and other marine mammals, is also a serious issue in international fisheries. Insufficiently regulated and managed bycatch of PLMRs undermines the ability of the United States and other nations to conserve these resources. Fisheries bycatch can lead to injury or mortality of protected species, and can also have significant negative consequences for marine ecosystems and biodiversity. NMFS has developed a list of PLMRs, available online at http://www.nmfs.noaa.gov/ia/iuu/msra_page/msra.html.

In enacting the MSRA, Congress recognized the importance of U.S. leadership in establishing international measures to end or reduce the bycatch of PLMRs. The United States is party to a number of international agreements related to the protection of living marine resources, as well as many global, regional, and bilateral fisheries agreements (see Annex 1). This report, in Part

VIII, describes recent actions the United States has taken in these forums to pursue strengthened bycatch reduction measures comparable to those of the United States.

Although the statutory definition of PLMRs does not include seabirds, they are an international living marine resource that is impacted by fishing activity and for which conservation is an issue of global concern, and an issue in which NMFS has been actively involved internationally.² Section 316 of the MSA highlights the need for the Secretary of Commerce to work cooperatively with the Secretary of the Interior and industry, and within international organizations, to seek ways to mitigate seabird bycatch. Annex 3 to this report highlights recent efforts to protect this international living marine resource.

C. Shark Conservation and Protection

Sharks are an ancient and highly diverse group of fish that present an array of issues and challenges for fisheries conservation and management due to their biological and ecological characteristics and the lack of reliable data reported on the catch of each species. Many shark species are characterized by relatively slow growth, late maturity, and low reproductive rates, which can make them particularly vulnerable to overexploitation and slow to recover once stocks are depleted. Concern has grown regarding the status of many shark stocks and the sustainability of their exploitation in world fisheries, due to the increase in exploitation rates for some shark species, and particularly the demand for fins.

The United States continues to be a leader in promoting shark conservation and management globally through ongoing consultations regarding the development of international agreements consistent with the Shark Finning Prohibition Act of 2000, the SCA, and the Moratorium Protection Act. The United States is committed to working bilaterally and multilaterally to promote shark conservation and management and to prevent shark finning, so that legal and sustainable fisheries are not disadvantaged by these activities. For example, within the RFMO context, the United States has focused on efforts to improve data collection for sharks, develop species-specific conservation and management measures (CMMs), promote fins-attached policies globally, and review compliance with agreed measures.

D. Other U.S. Statutes that Address IUU Fishing, PLMR Bycatch, and Shark Conservation

In addition to the Moratorium Protection Act, the United States has numerous legal tools to address IUU fishing, shark conservation, and PLMR bycatch, both domestically and internationally. These include the MSA, Lacey Act, Pelly Amendment to the Fishermen's Protective Act of 1967, MMPA, Endangered Species Act (ESA), and the International Dolphin Conservation Program Act.

As discussed above, the newest such statute is the IUU Fisheries Enforcement Act. NMFS is

² Bycatch of seabirds may not serve as the basis for identification of a nation under the PLMR provisions of the Moratorium Protection Act, but violations of seabird measures adopted by RFMOs of which the United States is a member could serve as the basis for identification under the Act's IUU fishing provisions.

preparing a proposed rule that would make conforming amendments to regulations implementing those statutes amended by the Act, and would also implement the PSMA, which requires the collection of certain information from foreign-flagged fishing vessels requesting permission to use U.S. ports. The rule would include procedures to designate and publicize the ports to which foreign-flagged fishing vessels may seek entry, and procedures for conducting inspections of those foreign-flagged vessels accessing U.S. ports. Furthermore, the rule would address notifications of denial of port entry or port services for a foreign-flagged vessel; withdrawal of the denial of port services, if applicable; enforcement action taken with respect to a foreign-flagged vessel; and communication of the results of any inspection of a foreign-flagged vessel to the flag nation of the vessel and other competent authorities, as appropriate. Regulations to implement the Antigua Convention were issued in a separate final rule published on August 1, 2016 (81 Federal Register 50401).

Through the MSA, the United States has issued comprehensive regulations that govern all of the major fisheries in the Exclusive Economic Zone (EEZ). These regulations are based on fishery management plans developed by the eight Regional Fishery Management Councils. In the U.S. Atlantic EEZ, however, NMFS directly manages sharks and other highly migratory species, except for spiny dogfish (which are jointly managed by the Mid-Atlantic and New England Fishery Management Councils). The MSA also requires the Secretaries of State and Commerce to seek to secure international agreements with standards and measures for bycatch reduction comparable to those applicable to U.S. fishermen.

The MSA, as amended by the SCA, prohibits any person subject to U.S. jurisdiction from removing any of the fins from a shark (including the tail) at sea, having custody of a shark fin not naturally attached to the carcass, or transferring or landing any such fin, with the exception noted below.³ In addition, it prohibits landing a shark carcass without its fins naturally attached. NMFS issued the final rule implementing the statutory amendments on June 29, 2016 (81 Federal Register 42285).

U.S. law and policy establish a number of domestic requirements designed to reduce bycatch and other harmful effects of fishing activities on PLMRs by vessels subject to U.S. jurisdiction. U.S. fishermen are subject to requirements concerning the taking of marine mammals under the MMPA, and to rules governing fishing and related actions that affect species listed as endangered or threatened under the ESA. In addition, the MMPA requires the Secretary of Commerce, working through the Secretary of State, to develop bilateral or multilateral agreements with other nations to protect and conserve marine mammals. Section 101(a)(2) of

³ The prohibition does not apply to individuals engaged in commercial fishing for smooth dogfish, under certain conditions and circumstances. NMFS published a final rule (80 Federal Register 73128, November 24, 2015) to implement the exception. Under the rule, fishermen may remove the fins of smooth dogfish if they meet certain criteria regarding the percentage of smooth dogfish on board, a state commercial fishing license for smooth dogfish, distance from shore, and fin-to-carcass ratio. Fishermen who do not meet these criteria can still harvest smooth dogfish, but must maintain all fins naturally attached to the carcass through offloading.

the MMPA requires the banning of imports of fish caught with commercial fishing technology that results in the incidental kill or serious injury of ocean mammals in excess of U.S. standards.⁴

Under the International Dolphin Conservation Program Act, an affirmative finding by the NOAA Assistant Administrator for Fisheries allows a nation to export to the United States yellowfin tuna harvested with purse seine nets in the Eastern Tropical Pacific.⁵ Ecuador, El Salvador, Guatemala, Mexico, and Spain currently have affirmative findings. The affirmative finding process is explained in the Report to Congress under Section 305 of the Marine Mammal Protection Act (16 U.S.C. 1415).

The Pelly Amendment to the Fishermen's Protective Act provides for the possibility of trade-restrictive measures when the Secretary of Commerce certifies to the President that nationals of a foreign country are, directly or indirectly, conducting fishing operations in a manner or under circumstances that diminish the effectiveness of an international fishery conservation program, or the Secretary of Commerce or the Secretary of the Interior certifies that nationals of a foreign country are engaging in trade or taking that diminishes the effectiveness of any international program for endangered or threatened species. The President has discretion in whether to direct the Secretary of the Treasury to prohibit the importation of products from the certified country.

An important enforcement tool is the Lacey Act, which prohibits interstate and foreign trafficking in fish or wildlife taken in violation of domestic or foreign law. It also prohibits the import, export, transport, sale, possession, or purchase of any fish or wildlife taken, possessed, transported, or sold in violation of any law, treaty, or regulation of the United States or in violation of any Indian tribal law. The Lacey Act provides for both civil and criminal sanctions.

Regulations under other statutes, such as the Atlantic Tunas Convention Act and the Western and Central Pacific Fisheries Convention Implementation Act, ensure that U.S. fishermen are subject to the conservation measures adopted under international agreements to which the United States is a party. For example, regulations effective March 23, 2015, apply to U.S. commercial vessels in Western and Central Pacific fisheries for highly migratory species, regarding incidental take of oceanic whitetip sharks and silky sharks, and deliberate or incidental take of whale sharks.

In 2015, NMFS published a final rule amending regulations that govern all fishing by U.S. vessels on the high seas, pursuant to the High Seas Fishing Compliance Act (HSFCA). The rule improves administration of the HSFCA program through adjustments to permitting and reporting procedures. It also includes requirements for the installation and operation of enhanced mobile transceiver units for vessel monitoring, carrying observers on vessels, reporting of transshipments on the high seas, and protection of VMEs.

See Annex 2 for further information on these and other U.S. statutes.

⁴ NMFS issued the final rule implementing this provision on August 15, 2016 (see Part VIII.C).

⁵ See regulations at 50 CFR 216.24(f)(8) for specific requirements related to an affirmative finding.

E. Presidential Task Forces on IUU Fishing and Wildlife Trafficking

1. IUU Fishing

In 2014, the White House released a Presidential Memorandum establishing the Presidential Task Force on Combating Illegal, Unreported, and Unregulated (IUU) Fishing and Seafood Fraud, and directing the Task Force to report to the President “recommendations for the implementation of a comprehensive framework of integrated programs to combat IUU fishing and seafood fraud that emphasizes areas of greatest need.” NOAA and the Department of State (DOS) co-chaired the Task Force. In addition to summarizing the 15 recommendations, the 2015 report detailed the interagency membership of the Task Force, as well as the process by which the Task Force developed its recommendations.

After publishing an action plan to implement its recommendations in April 2015, the Task Force became a standing committee of the National Ocean Council (NOC) to oversee implementation. The NOC Committee’s current efforts include effectively implementing the PSMA; analyzing best practices in MCS measures of RFMOs; developing a strategic plan to build international capacity to combat IUU fishing and strengthen fisheries management; working with trade partners to combat IUU fishing through existing and future free trade agreements; optimizing information sharing across enforcement agencies; and incorporating IUU fishing threat analysis and monitoring as part of U.S. and international efforts to increase maritime domain awareness. Information about the NOC’s efforts in implementing the Task Force recommendations can be found on the NOC website: <http://www.iuufishing.noaa.gov/>.

An important aspect of the Task Force’s recommendations is the development of a risk-based traceability program that will track seafood from harvest or production to entry into U.S. commerce by establishing permitting, data-reporting, and record-keeping requirements relating to the importation of certain “priority” fish and fish products identified as being particularly vulnerable to IUU fishing and/or seafood fraud. The United States has a strong interest in ensuring that IUU fishing does not undermine efforts to sustainably manage the world’s fisheries and to provide consumers with legally harvested and produced seafood. Led by NOAA, this program will be phased in, starting with a set of priority species: abalone, Atlantic cod, blue crab, dolphinfish, grouper, king crab (red), Pacific cod, red snapper, sea cucumber, sharks, shrimp, swordfish, albacore tuna, bluefin tuna, bigeye tuna, skipjack tuna, and yellowfin tuna.⁶ The goal is eventually to expand the program to all seafood. While the rule described below applies only to imported seafood, the program itself applies to all seafood. Traceability information is already being collected for domestic harvests of the priority species through a variety of federal and state fishery management and reporting programs.

⁶ Current data collection for U.S. aquaculture-raised shrimp and abalone is not equivalent to the data that are required to be collected for imports under the Traceability Rule. Consequently, the effective date of the rule for all imported shrimp and abalone products – wild-capture and aquaculture-raised – is stayed indefinitely, until commensurate reporting and/or record-keeping requirements have been established for domestic aquaculture-raised shrimp and abalone production. At such time, NMFS will lift the stay of effectiveness and announce a compliance date for shrimp and abalone.

NMFS published a rule to establish the Seafood Import Monitoring Program on December 9, 2016 (81 Federal Register 88975). The rule requires that, at the point of entry into U.S. commerce, importers must report information on:

- the entities harvesting or producing the fish, including, as applicable: name and flag State of the harvesting vessel(s) and evidence of authorization, unique vessel identifier, type of fishing gear, and name of farm or aquaculture facility;
- the fish that was harvested/processed, including species of fish (scientific and acceptable market name); product description; name of product; quantity and/or weight of the product;
- where and when the fish was harvested and landed, including, as appropriate: area of wild capture or aquaculture facility, point/date of first landing; and
- the importer of record.

The information to be reported and retained, as applicable, under this rule will help authorities verify that fish or fish products were lawfully acquired, by providing information to trace each import shipment back to the initial point of harvest or production. Collection of this information will be achieved through the U.S. government-wide International Trade Data System maintained by Customs and Border Protection. The importer of record will need to keep records regarding the chain of custody of the fish or fish product to point of entry into U.S. commerce, and make those records available to NOAA upon request. Such information must be maintained by the importer of record for two years from the date of import, and will include records on transshipment of product (declarations by harvesting/carrier vessels, bills of lading) and records on processing, re-processing, or commingling of product.

Once the initial phase of the traceability program is implemented, the NOC Committee will evaluate the program's development and use lessons learned to outline next steps for program expansion to other seafood entering U.S. commerce. The NOC Committee will again evaluate progress in implementing the program and the steps outlined in the previous report after one full year of program implementation. As set forth in the Federal Register notice that relayed the Task Force's recommendations to the President, it is the goal of the U.S. government "to eventually expand the program to all seafood at first point of sale or import." The process for expansion will account for, among other factors, consideration of authorities needed, stakeholder input, and the cost-effectiveness of program expansion.

2. Wildlife Trafficking

Trafficking in illegally harvested wildlife, including trade in protected marine species and illegally caught fisheries products, is a multibillion-dollar business that compromises the sustainability of wild populations of the targeted species. Furthermore, wildlife trafficking undermines food security and political stability in communities dependent on these resources for their livelihoods. In 2013, President Obama issued Executive Order 13648 to more effectively mobilize government-wide efforts to combat wildlife trafficking. The order established the Presidential Task Force on Wildlife Trafficking, a high-level group co-chaired by the Departments of the Interior, State, and Justice, with participation from NOAA.

In early 2014, the President announced the National Strategy for Combating Wildlife Trafficking, which is based on three pillars: strengthening domestic and global enforcement; reducing demand for illegally traded wildlife at home and abroad; and strengthening partnerships with international partners, local communities, NGOs, private industry, and others to control illegal wildlife poaching and trade. In October 2016, President Obama signed into law the Eliminate, Neutralize, and Disrupt Wildlife Trafficking Act, P.L. 114-231, which requires agencies to build upon and strengthen the work of the Wildlife Trafficking Task Force, including by designating major wildlife trafficking nations and providing support to assist them in combating poaching and illegal trafficking in wildlife.

II. Identification and Certification Provisions

In 2011, NMFS published a final rule establishing procedures to implement the identification and certification provisions of the Moratorium Protection Act for IUU fishing, and for bycatch of protected species and shark catch on the high seas without regulatory programs comparable in effectiveness to those of the United States. NMFS amended those procedures, primarily to revise the definition of IUU fishing and to implement the identification and certification provisions of the SCA amendments, through a final rule published January 16, 2013. Those procedures are described below for each type of identification.

The IUU Fisheries Enforcement Act amended the Moratorium Protection Act by prescribing that three years of data be used as the basis for determining identifications under the IUU fishing and bycatch provisions. For instance, for this report, NMFS collected and reviewed data from 2014, 2015, and 2016 under those two provisions.

At the beginning of each identification process, NMFS gathers information from many sources relevant to determining whether a nation's vessels have been engaged in activity that could lead to an identification. One data source NMFS uses is the request for public input through a Federal Register notice. For this report, NMFS published, on March 8, 2016, a request for information on IUU fishing, PLMR bycatch activities, and shark fishing. Following data collection and analysis of those data, NMFS contacts nations that have activities that may qualify for identification under the Moratorium Protection Act. NMFS seeks corroboration or refutation from each nation on those activities. In deciding whether to make such an identification, NMFS considers a number of factors, as outlined in the rule.

The rule details the post-identification notification and consultation process, after which NMFS provides a preliminary certification to a nation identified for having vessels engaged in IUU fishing, PLMR bycatch activities, or certain shark fishing activities. An identified nation has the opportunity to respond before the final certification is issued. The rule lists factors NMFS considers in making a final certification decision, including the effectiveness of any corrective actions taken by the identified nation.

If an identified nation takes appropriate actions, it receives a positive certification. If it receives a negative certification, the High Seas Driftnet Fisheries Enforcement Act prescribes sanctions, including prohibitions on importation of certain fish and fish products into the United States, denial of port privileges, and other measures, under specified circumstances. The rule describes how NMFS's recommendations on import restrictions will be made and any sanctions implemented, in the event a nation receives a negative certification.

A. IUU Fishing

Section 609(a) of the Moratorium Protection Act, as amended by the IUU Fisheries Enforcement Act, requires the Secretary of Commerce to identify a nation whose vessels are engaged, or have been engaged in the preceding three years, in IUU fishing, taking into account whether the relevant international organization has failed to implement effective measures to end IUU

fishing, or where no international fishery management organization with a mandate to regulate the fishing activity exists.

As Section 609(a) refers to activities of “vessels,” a nation must have more than one vessel engaged in IUU fishing activities during the three years preceding the date of submission of the biennial report to Congress, to be identified for fishing in violation of international measures. Information concerning activities outside that time period cannot form the basis for an identification decision. Previously, activities during the two-year time period that were not discovered or reported before the end of the year preceding submission of the report to Congress could not form the basis for an identification. Now, with expansion of the time period to three years, undiscovered activities during the final year preceding submission may provide a basis for a subsequent identification. For example, an activity that occurred in the fall of 2014 but was not discovered until after the 2015 Report was submitted could be the basis for an identification in this report.

Section 609(e)(3) of the Moratorium Protection Act requires the Secretary of Commerce to publish a regulatory definition of “illegal, unreported, or unregulated fishing” that includes, at a minimum, certain elements. NMFS broadened and clarified its 2011 regulatory definition through the January 2013 final rule (50 CFR 300.200-209). The elements set out below are those considered under the IUU fishing definition.

Fishing in Violation of International Measures. The first prong of the IUU fishing definition covers activities that violate measures required of a party under an international fishery management agreement to which the United States is also a party. NMFS’s analytical team gathered information on incidents where RFMO compliance measures may have been violated. The team began with a search of available RFMO materials, including annual reports, compliance committee meeting summaries, and IUU vessel lists. The team also searched reports from the United States Coast Guard (USCG), foreign governments, media, and NGOs, and considered information submitted in response to the Federal Register notice request.

The team then synthesized these data by: current flag, flag at listing, vessel name (current and previous), specific RFMO infractions and dates, additional infractions, and comments. Once these data were entered into a compendium, the team identified information gaps. For example, the RFMO report might not have included the International Maritime Organization (IMO) number for a specific vessel, or may not have identified the specific RFMO measure violated.

To fill these gaps and where possible to verify existing information, the team reviewed applicable measures and identified the specific violations that occurred. Although the team drew together the reporting and knowledge of IUU fishing activities from numerous organizations and people with years of experience in these matters, some information gaps still existed.

Based on the analysis of all available information, NMFS determined five nations to be of interest for having unresolved allegations of violating international measures during the relevant time period (2014, 2015, and 2016), and therefore considered them for potential identification. Through diplomatic channels, NMFS contacted these nations to verify information regarding alleged IUU fishing activities by their vessels. From the responses of three of the five countries

and from other sources, NMFS collected information that either refuted the allegations or showed that corrective actions had been taken to address the IUU fishing activities of concern. Information provided by the remaining two nations failed to demonstrate that sufficient corrective action had been taken to address all of the potential violations.

In a case where action taken by a nation was pending against a vessel, but no resolution had been reached to exonerate or sanction the vessel, NMFS considered the activities of the vessel to be a basis for identification. NMFS also considered the activities of a vessel as a basis for identification when it was unable to ascertain why a case against the vessel suspected of IUU fishing had been closed.

Detailed information on the two countries identified for this type of IUU fishing appears below in Part III.A; information on countries of interest that were not identified is found in Part III.B.

Undermining RFMO Conservation by Non-Parties. Under this aspect of the IUU fishing definition, a nation may be identified for fishing activities that undermine the conservation of resources under an international fishery management agreement to which the United States is a party, despite the fact that the nation is not a party to the agreement. NMFS is not identifying any country for this type of IUU fishing.

Overfishing of Shared Stocks. This element of the definition of IUU fishing includes overfishing of stocks shared by the United States in areas without international measures or management organizations. As of June 30, 2016, NMFS has assessed the following five highly migratory stocks as both overfished and shared by U.S. and foreign fleets: Atlantic blue marlin, western Atlantic bluefin tuna, Atlantic white marlin, Pacific bluefin tuna, and central western Pacific striped marlin. The first three stocks are subject to management measures adopted by the International Commission for the Conservation of Atlantic Tunas (ICCAT). The Western and Central Pacific Fisheries Commission (WCPFC) and the Inter-American Tropical Tuna Commission (IATTC) have adopted specific management rules for Pacific bluefin tuna. The WCPFC has management measures for central western Pacific striped marlin, but the IATTC does not. NMFS is not identifying any country as conducting this type of IUU fishing for these particular stocks in 2014-2016. Another shared stock assessed as overfished is red snapper in the Gulf of Mexico. NMFS has identified one country whose vessels were found with red snapper aboard and fishing illegally in U.S. waters.

Destructive Fishing Practices on VMEs. This part of the definition includes fishing activity that has a significant adverse impact on VMEs, including seamounts, hydrothermal vents, and cold water corals, located in areas beyond national jurisdiction, for which there are no applicable conservation or management measures or in areas with no applicable international fishery management organization or agreement. Currently seven RFMOs actively manage bottom fishing. Nations fishing in accordance with the rules of these organizations, by definition, would not meet the criteria for IUU fishing identification under the Moratorium Protection Act.

The Southwest Atlantic Ocean and a small portion of the Pacific Ocean⁷ are the only areas of the high seas where bottom fishing is not being managed under an RFMO.⁸ To avoid identification

⁷ The gap between the convention areas of the North Pacific and South Pacific RFMOs.

under the Moratorium Protection Act, States with vessels known to be fishing in these areas in 2014-2016 must have had measures in place to prevent significant adverse impacts to known or likely VMEs.

In response to the 2009 United Nations General Assembly (UNGA) review of Resolution 61/105, the FAO maintains a list of vessels authorized for bottom fishing on the high seas. In 2014-2016, only Korea reported having authorized vessels to bottom fish in areas outside of RFMO convention areas, although a number of States, including the Russian Federation and Spain, had previously reported having authorized vessels for bottom fishing on the high seas. Those nations informed the UN, and confirmed through previous consultations with NMFS, that all fishing activities were being conducted in accordance with Resolution 61/105. NMFS therefore concludes that they would not qualify as IUU fishing under the VME part of the IUU fishing definition.

As none of these managed activities qualifies as IUU fishing, NMFS is not identifying any nation under this element of the definition. NMFS will continue to work with international partners to strengthen implementation of and compliance with existing RFMO management measures. NMFS will also continue to support scientific research to identify VMEs on the high seas and gear modifications to reduce the impact of bottom-tending gears on vulnerable habitats.

Foreign Fishing in U.S. Waters. This aspect of the IUU fishing definition allows for identification of a nation when its vessels fish without authorization in U.S. waters. NMFS has determined that two countries are being identified under this prong of the definition; details appear in Part III.A.

B. Bycatch of PLMRs

Section 610(a)(1) of the Moratorium Protection Act requires the Secretary of Commerce to identify a nation for bycatch activities if:

- fishing vessels of that nation are engaged, or have been engaged during the preceding three years, in fishing activities or practices in waters beyond any national jurisdiction that result in bycatch of a protected living marine resource, or beyond the exclusive economic zone of the United States that result in bycatch of a protected living marine resource shared by the United States;
- the relevant international organization for the conservation and protection of such resources or the relevant international or regional fishery organization has failed to implement effective measures to end or reduce such bycatch, or the nation is not a party to, or does not maintain cooperating status with, such organization; and

⁸ In 2016, members of the South Indian Ocean Fisheries Agreement finalized a number of important administrative and financial issues, thereby becoming an operational RFMO. They also agreed on management measures to restrict the expansion of fisheries, regulate bottom fishing activities, protect VMEs, and contribute to the fight against IUU fishing. In particular for VMEs, all parties are required to complete assessment of their fishing activities by 2018 and develop a fisheries footprint.

- the nation has not adopted a regulatory program governing such fishing practices designed to end or reduce such bycatch that is comparable to that of the United States, taking into account different conditions.

The regulations define “bycatch” to mean “the incidental or discarded catch of protected living marine resources or entanglement of such resources with fishing gear” (50 CFR 300.201). For purposes of the Moratorium Protection Act, the term “PLMR”:

- includes non-target fish, sea turtles, or marine mammals that are protected under U.S. law or international agreement, including the MMPA, ESA, Shark Finning Prohibition Act, and CITES, but
- does not include species, except sharks, managed under the MSA, the Atlantic Tunas Convention Act, or any international fishery management agreement.

Since the MSRA was enacted, NMFS has collected significant amounts of information on activities from numerous sources, including government and academic studies, relevant international organizations, NGOs, and the media. NMFS’s team of subject matter experts examined the bycatch in question and any relevant regulations or management measures. As explained in past reports, however, data from the calendar year preceding the report to Congress were always sparse, and rarely proved adequate to support an identification for bycatch activities.

As noted above, in November of 2015, the IUU Fisheries Enforcement Act extended the time period for considering PLMR bycatch, from one year to three years prior to the report to Congress. Previously, there were challenges in obtaining actionable data when NMFS had only one year of data for consideration. Many of these challenges still exist, even with the expansion to consideration of three years of data. For example, data on bycatch in coastal fisheries are often not collected; data that are collected are not always publicly available. In RFMOs, there can be disparities both within and across bycatch data collection and analysis. For example, some RFMOs have mandatory bycatch reporting requirements, while others do not. In addition, some RFMOs treat bycatch reporting inconsistently, with mandatory reporting requirements for one or two taxa but not others.

To bolster efforts to reduce bycatch globally, NMFS will make concerted efforts within RFMOs to adopt and strengthen bycatch measures. It will also continue to notify nations of the changes to this provision, and the process generally. Working with our international partners, NMFS will focus on three main objectives:

Data and Assessment. NOAA will work with international partners to promote the establishment, reestablishment, or strengthening, as necessary, of a bycatch working group or scientific sub-committee in all RFMOs in which we are members. The purpose of the group would be to regularly review and analyze bycatch data, including information provided by observers, and develop recommendations on measures for consideration by managers, including appropriate data collection requirements, standards, and methods.

Mitigation. NOAA, in collaboration with our international partners, will advocate that RFMOs review the effectiveness of measures in longline fisheries for mitigating bycatch of all non-target taxa and, where appropriate, adopt binding management measures or enhancements of existing measures designed to avoid bycatch of, and where not possible to avoid, minimize impacts to, PLMRs. These measures could include changes to the operational characteristics of the fishery, time/area closures, and safe handling and release procedures.

Compliance. NOAA, in cooperation with international partners, will advance the strengthening of RFMO compliance processes, including by advocating that relevant committees evaluate implementation of bycatch measures, as appropriate, and that RFMOs have, and use, the necessary tools to address any issues of non-compliance. In addition, NOAA will work with developing nations to support and enhance their capacity to effectively implement RFMO management measures.

NOAA envisions that these goals will guide priority setting in RFMOs, and result in measurable successes in reducing bycatch globally. NOAA will ensure that these efforts do not duplicate or undermine other ongoing bycatch initiatives in RFMOs – such as those to implement the international provisions of the MMPA – but rather complement and support them.

Our work within RFMOs will be supported by NMFS’s work in other bilateral and multilateral forums. For example, NMFS has carried out assistance and outreach programs with a number of nations, through cooperative research or other capacity-building activities, to reduce and mitigate bycatch. NMFS intends to continue to support existing capacity-building efforts, where appropriate, and to initiate additional programs with other nations based on the nature of their PLMR bycatch interactions, need for assistance, and willingness to work cooperatively with the United States. NMFS will also continue to promote comprehensive CMMs through international organizations to reduce bycatch of PLMRs, work with international partners to improve assessment of the impact of fisheries on bycatch taxa, and support research into gear modifications and alternative gear types.

In addition to these efforts, NMFS will continue to collect information for possible identification of nations for PLMR bycatch under the provisions of the MSRA. To support this work, NMFS will collaborate with international partners to improve reporting and collection of bycatch incidents within relevant international conservation organizations. NMFS will encourage RFMOs to improve their data collection requirements and processes. In addition, NMFS will also support the institutional capacity of nations to collect and report bycatch data in their own waters.

C. Shark Conservation and Protection

Under the Moratorium Protection Act as amended by the 2006 MSRA, sharks fell implicitly within the definition of “IUU fishing” and explicitly within the PLMR definition. As mentioned above, the SCA amended the guidelines for defining IUU fishing to specify that violation of shark conservation measures is included in that definition. The Moratorium Protection Act now requires the Secretary of Commerce to identify nations whose vessels are engaged, or have been engaged during the preceding calendar year, in fishing activities or practices on the high seas that target or incidentally catch sharks, and where the nation has not adopted a regulatory program for

the conservation of sharks, including measures to prohibit removal of any of the fins of a shark (including the tail) and discarding the carcass of the shark at sea, that is comparable to that of the United States, taking into account different conditions.⁹

Identification of nations under these provisions may be based only on activities occurring on the high seas during the calendar year preceding submission of the biennial report to Congress; thus for the 2017 report the activities must have occurred during 2016.¹⁰ During the past two years, NMFS analyzed information from the websites of many international organizations: the FAO, ICCAT, the IATTC, the WCPFC, the Indian Ocean Tuna Commission (IOTC), NAFO, the General Fisheries Commission for the Mediterranean, the South East Atlantic Fisheries Organization (SEAFO), and CCAMLR. A number of nations reported catching sharks, but none of the activities met the Moratorium Protection Act criteria because they took place prior to 2016. Normally, nations report the prior year's catch to RFMOs. For example, at the 2016 annual meeting of ICCAT, the catch reported by members was for 2015. Therefore, NMFS does not have any applicable data for shark catch on the high seas and is not identifying any nation under Section 610(a)(2) of the Moratorium Protection Act.

⁹ Sharks that are shared PLMRs and are incidentally caught in another nation's EEZ would be considered as a basis for identification under Section 610(a)(1).

¹⁰ The IUU Fisheries Enforcement Act expanded to three years the period for which countries may be identified for IUU fishing and bycatch; however, the statute did not revise the one-year period for an identification for shark fishing activities. In December 2016, the Ensuring Access to Pacific Fisheries Act (P.L. 114-327) expanded to three years the period for which countries may be identified for shark fishing activities in future reports.

III. Identifications under Section 609

A. Nations Identified

1. Ecuador

Bases for Identification. NMFS is identifying Ecuador for having 25 vessels acting in violation of IATTC resolutions in 2014 and 2015.¹¹ Several of these vessels include repeat offenders from the 2015 and prior rounds of identification. The following vessels discarded tuna in violation of IATTC resolution C-13-01, which requires all purse-seine vessels to first retain on board and then land all bigeye, skipjack, and yellowfin tuna caught, except fish considered unfit for human consumption or during the final set of the trip when there is insufficient well space to accommodate all the tuna caught in that set. All but the last three are subjects of an ongoing administrative process.

- In 2015, during IATTC trip number 147131, the *Alize* discarded 0.03 ton of skipjack in set 11 and 1 ton of skipjack in set 14.
- In 2015, the *Cap. Berny B* discarded 1 ton of skipjack tuna during IATTC trip number 147705, set 13.
- The *Carmen D* discarded tuna in 2015 during IATTC trip number 147567. The vessel discarded 1 ton of skipjack in set 4, 0.5 ton of skipjack in set 8, and 1 ton of yellowfin plus 2 tons of skipjack in set 11
- The *Delia* discarded tuna in 2015. During ECU trip number 1266, the vessel discarded 33 tons of skipjack in set 5.
- The *Don Antonio* discarded 2 tons of yellowfin in 2015 during IATTC trip number 148528, set 7.
- The *Lizi* discarded tuna in 2015. During IATTC trip number 147419, the vessel discarded 1 ton of skipjack in set 20. During ECU trip number 1203, the vessel discarded 0.7 ton of skipjack in set 1, 0.12 ton of skipjack in set 27, 0.12 ton of skipjack in set 28, and 2 tons of skipjack plus 2 tons of bigeye in set 32.
- The *Marujita* discarded tuna in 2015, during ECU trip number 1322. The vessel discarded 3 tons of skipjack in set 1 and 7 tons of skipjack in set 13.
- The *Pacific Tuna* discarded 15 tons of skipjack in 2015, during ECU trip number 1273, set 2.
- The *Panchito L* discarded 1 ton of skipjack in 2015 during ECU trip number 1258, set 22.
- The *Patricia* discarded tuna in 2014 during IATTC trip number 145997. The vessel discarded 1 ton of skipjack plus 2 tons of yellowfin in set 11. During PNE trip number 1138, the vessel discarded 0.4 ton of skipjack in set 20, 0.7 ton of skipjack in set 24, 2 tons of skipjack in set 25, and 1.7 tons of skipjack and 0.3 ton of bigeye in set 26.
- The *Rossana L* discarded 2 tons of skipjack in 2015 during IATTC trip number 147424, set 21.

¹¹ The sources of information about Ecuador's fishing activities are IATTC documents on compliance and non-compliance cases in 2014 and 2015, and communications from NOAA's National Data Buoy Center.

- The *Marujita* discarded 0.2 ton of skipjack tuna during IATTC trip number 147236, set 6.¹²
- In 2015, The *Rocio* discarded 0.1 ton of yellowfin plus 0.1 ton of skipjack during ECU trip number 1285, set 4.¹²
- The *Sansun Ranger* discarded 0.2 tons of yellowfin and 0.1 ton of skipjack during IATTC trip number 146722, set 5.¹²

The following vessels discarded tuna and discarded plastic in 2015, violating IATTC resolutions C-13-01 governing tuna discards, and C-04-05 concerning bycatch, which requires contracting parties to prohibit their vessels targeting species covered by the Convention from disposing of salt bags or any other type of plastic trash at sea, to prevent sea turtle mortality. Ecuador reports these cases are subjects of an ongoing administrative process.

- During IATTC trip number 147134, the *Don Mario* discarded 1 ton of skipjack in set 1, as well as salt bags or plastic trash at sea.
- During IATTC trip number 147282, the *Emilio* discarded 0.1 ton of skipjack in set 1, 0.1 ton of skipjack in set 3, 5 tons of skipjack in set 6, 0.1 ton of skipjack in set 8, 5 tons of skipjack in set 13, 0.1 ton of skipjack in set 15, and 0.5 ton of skipjack in set 23. During IATTC trip number 147282 and PNE trip number 148334, the vessel discarded salt bags or plastic trash at sea.
- During IATTC trip number 147421, the *PS-1* discarded 2 tons of skipjack in set 21, as well as salt bags or plastic trash at sea.

The following fishing vessels improperly rescued turtles in 2015, violating IATTC resolution C-04-05. Ecuador reports these cases are the subjects of an ongoing administrative process.

- During set 31 of ECU trip number 1211, the *Chiara* encircled one turtle and did not prevent it from entanglement.
- The *Monteneme* improperly rescued a turtle in set 12 of IATTC trip number 147572.

The *Ginno D* discarded tuna and improperly rescued a turtle in 2015, violating IATTC resolutions C-13-01 and C-04-05. During IATTC trip 147508, the vessel discarded 0.5 ton of tuna in set 1. During the same trip, the vessel had one turtle encircled and not released in set 6. Ecuador reports this case is the subject of an ongoing administrative process.

The following fishing vessels discarded plastic in 2015, violating IATTC resolution C-04-05. Ecuador reports these cases are the subjects of an ongoing administrative process.

- During PNE trip number 1310, the *Giulietta* discarded salt bags or plastic trash at sea.
- Plastic discards were recorded during the *Milenka C*'s PNE trip number 1217.
- Plastic discards were recorded during the *Ocean Lady*'s PNE trip number 201504.

¹² Ecuador does not consider these discards to be violations, as they are 0.5 ton or less, but there is no such exception under C-13-01.

The *Jocay*, during set 3 of PNE trip number 1613, made a purse seine set on tuna associated with a live whale shark, when the animal was observed before the start of the set, in violation of IATTC resolution C-15-03. Ecuador reports this case is the subject of an ongoing administrative process.

The *Julia D* possibly transited without a waiver to allow it not to carry an observer in 2015, violating IATTC resolution C-13-01. The vessel departed Posorja on November 29, 2015, and arrived in Manta on the same day. The vessel made this transit without notification to the IATTC Secretariat, so it is not known whether the vessel had been granted a waiver exempting it from the requirement to carry an observer, in accordance with the resolution. Ecuador reports this case is the subject of an ongoing administrative process.

The *La Negra Francisca Duarte* tied off to a data buoy on June 7, 2016, in violation of IATTC resolution C-11-03, which prohibits fishing vessels from interacting with data buoys in the Antigua Convention Area. Evidence from NOAA's National Data Buoy Center indicates a fishing vessel with this name, and the registration number ending in 95 painted on the hull, tied off to Tropical Atmosphere Ocean Station 32332. An Ecuadorian-flagged fishing vessel by this name, with registration number P-04-0595, appears in the IATTC Regional Vessel Register. Ecuador reports this case is the subject of an ongoing administrative process.

Other Fishing Activities Not Completely Resolved. Ecuador provided information on two cases reported as “resolved,” but without details on whether the vessels were sanctioned:

The *Florentino* discarded tuna and improperly rescued a turtle in 2015, in violation of IATTC resolutions C-13-01 and C-04-05. During IATTC trip number 147972, the vessel discarded 2 tons of yellowfin plus 1 ton of skipjack in set 1, 1 ton of yellowfin in set 3, 2 tons of skipjack in set 4, 2 tons of skipjack in set 13, 3 tons of skipjack in set 16, and 2 tons of skipjack in set 18. One turtle was reported encircled and not released in set 10 of the same trip.

The *Ugavi* discarded tuna and discarded plastic in 2014, in violation of IATTC resolutions C-13-01 and C-04-05. During PNE trip number 1163, the vessel discarded 1 ton of skipjack in set 12 and 1 ton of skipjack in set 26. Ecuador reports this was not considered a violation because the discards in question were in poor condition and unfit for human consumption. During IATTC trip number 146515, the vessel discarded salt bags or plastic trash at sea.

Other Fishing Activities that Did Not Form the Basis of Identification. Ecuador provided information on the following investigations which, as appropriate, resulted in sanctions.

The *Adriana* discarded plastic bags or salt bags in 2014, violating IATTC resolution C-04-05, during IATTC trip number 146007. Ecuador reports the vessel was fined \$4,080 and suspended for five days. In 2014, during IATTC trip number 146545, the *Alize* discarded 1 ton of skipjack in set 19 in violation of IATTC resolution C-13-01. Ecuador reports the vessel was fined \$3,600 for this violation. In 2015, during ECU trip number 1297, the vessel reportedly discarded 0.4 ton of bigeye in set 33. Ecuador reported that its compliance registry showed no violations for this trip, indicating that it had no information to pursue an investigation.

The *Charo* improperly rescued a turtle in 2014, in violation of IATTC resolution C-04-05, during set 1 of IATTC trip number 146620. Ecuador reports the turtle was released unharmed with no apparent injuries, and that the crew took all necessary actions to avoid hurting the turtle. The *Chiara* improperly rescued turtles in 2014, in violation of IATTC resolution C-04-05, during sets 2 and 20 of IATTC trip number 147123. The vessel entangled a turtle. Ecuador reports this was not considered a violation because the turtle was released unharmed with no apparent injuries, and that the crew took all necessary actions to avoid hurting the turtle.

In 2014, the *Don Alvaro* transited without a waiver exempting the vessel from the requirement to carry an observer, in violation of IATTC resolution C-13-01. The vessel departed Guayaquil on December 9, 2014, and arrived in Manta on December 10, 2014. In addition, the vessel departed Guayaquil on December 31, 2014, and arrived in Manta the same day. On both occasions, the vessel transited without notification to the IATTC Secretariat, as required under the resolution. Ecuador reports the vessel was fined \$3,600 for these violations.

The *Dona Roge* improperly rescued a turtle in 2014, in violation of IATTC resolution C-04-05, during set 11 of PNE trip number 1089/145837. Ecuador reports this was not considered a violation because the captain ordered the maneuver to stop, and the turtle was released in good condition with no apparent injury. The *Eileen Marie* discarded plastic in 2014 in violation of IATTC resolution C-04-05, during PNE trip number 1094. Ecuador reports the vessel was fined \$3,660 for this violation.

The *Giulietta* improperly rescued a turtle in 2014, in violation of IATTC resolution C-04-05. During IATTC trip number 147005, the vessel had one turtle encircled and not prevented from entanglement in set 6. Ecuador reports the vessel was fined \$3,660 for this violation. The *Lizi* improperly rescued a turtle and made fishing sets near a buoy in 2014, in violation of IATTC resolutions C-04-05 and C-11-03. During IATTC trip number 146809, the vessel had one turtle encircled and not prevented from entanglement in set 4. Ecuador reports this was not a violation because the crew took all necessary actions to avoid hurting the turtle, and it was released unharmed with no apparent injuries. During the same trip, the vessel made sets near a buoy. Ecuador reports the vessel was fined \$7,320 and suspended for 30 days for this violation.

The *Marujita* fished during the second closure period and stored fish in sealed wells in 2014, in violation of IATTC resolutions C-13-01 and C-12-08. In December 2014, this vessel stored fish in sealed wells B1, B3, and E2 in violation of C-12-08. Ecuador reports the vessel was fined \$3,540 for this violation. Regarding unauthorized fishing during the second closure period of 2014, Ecuador reports the vessel was fined \$3,540 for that violation.

The *Panchito L* improperly rescued a turtle in 2014 in violation of IATTC resolution C-04-05. During IATTC trip number 147138, the vessel had one turtle encircled and not prevented from entanglement in set 5. Ecuador reports this was not considered a violation because the turtle was released by dip net, processed by the observer, and released with no apparent injuries. The *Rocio* possibly transited without a waiver exempting the vessel from the requirement to carry an observer in 2014, in violation of IATTC resolution C-13-01. The vessel departed Manta on December 14, 2014, and arrived in Guayaquil on December 15, 2014. The vessel made this transit without notification to the IATTC Secretariat. Ecuador reports the vessel requested

permission for this transit from the Fisheries Authority of Ecuador, which is working with the IATTC Secretariat to clarify any confusion regarding observer requirements.

The *Rossana L* improperly rescued a turtle in 2014, violating IATTC resolution C-04-05. During IATTC trip number 146537, the vessel had one turtle encircled and not prevented from entanglement. Ecuador reports this was not considered a violation because the crew took all necessary actions to avoid hurting the turtle and released it unharmed without apparent injuries.

During IATTC trip number 146395, the *Sansun Ranger* discarded salt bags or plastic trash at sea. Ecuador reports the vessel was fined \$3,660 and suspended for five days for this violation. Also during IATTC trip number 146395, the vessel had turtles encircled and not prevented from entanglement (two in set 5 and one in set 28). Ecuador reports this was not considered a violation because the crew took all necessary actions to avoid hurting the turtles and released them unharmed without apparent injuries. IATTC trip number 146398, set 23 was a purse seine set on tuna associated with a live whale shark when the animal was observed before the start of the set. Ecuador reports this was not considered a violation because the captain stopped the maneuver upon detection of the whale shark and proceeded to take steps to release it.

The *Ugavi Dos* improperly rescued a turtle in 2014, in violation of IATTC resolution C-04-05. During PNE trip number 1133, the vessel had one turtle that was not properly rescued in set 9. Ecuador reports the vessel was fined \$3,660 for this violation. The *Yelisava* discarded tuna in 2014, in violation of IATTC resolution C-13-01. During PNE trip number 11121, the vessel discarded 1 ton of skipjack in set 25. Ecuador reports this was not considered a violation because the discards in question were in poor condition and unfit for human consumption.

The *Yolanda L* discarded tuna and improperly rescued turtles in 2014, reportedly in violation of IATTC resolutions C-13-01 and C-04-05. During PNE trip number 1103, the vessel discarded 2 tons of skipjack in set 21; 3 tons of skipjack in set 23; 0.25 ton of skipjack in set 29; 0.2 ton of skipjack and 0.4 ton of bigeye in set 32; 1 ton of yellowfin, 1 ton of skipjack, and 1 ton of bigeye in set 33; 0.5 ton of skipjack and 0.5 ton of bigeye in set 34; 0.3 ton of yellow-fin, 1 ton of skipjack, and 1 ton of bigeye in set 35. Ecuador reports these were not considered violations because the discards in question were in poor condition and unfit for human consumption. During IATTC trip number 146427, the vessel had five turtles encircled and not prevented from entanglement (one turtle each in the following sets: 8, 10, 19; and two turtles in set 13). Ecuador reports this was not considered a violation because the compliance registry for this trip showed no record of a violation. During PNE trip number 1103, the vessel had two sea turtles not prevented from entanglement (one in set 27 and one in set 35). Ecuador reports this was not considered a violation because the net was stopped to get the turtles down, and they were released without apparent injuries.

Outreach to Ecuador. NMFS sent a letter to Ecuador dated September 19, 2016, and received a response letter dated October 31, 2016, with information on the status on the vessels cited in the NMFS letter.

2. Mexico

Bases for Identification. Mexico is being identified for having vessels fishing illegally in U.S. waters and for overfishing of a stock shared by the United States, in areas without applicable international measures or management organizations, which has adverse impacts on such stocks. Records from the USCG indicate that a number of Mexico's fishing vessels fished illegally in the EEZ of the United States in the Gulf of Mexico in 2014 and 2015.¹³ The catches documented aboard the apprehended vessels included red snapper, which was determined to be an overfished stock of the United States as of September 30, 2016.¹⁴ No international organization manages red snapper in the Gulf of Mexico. NMFS is concerned about the adverse impacts of Mexican vessels fishing within the U.S. EEZ, especially given the status of red snapper and the large amount of catch documented.

In 2014, the USCG apprehended 26 open-hulled vessels (known locally as *lanchas*) in the U.S. EEZ. A total of 100 Mexican nationals were apprehended aboard these vessels and repatriated. Apprehensions occurred in U.S. waters, with incursions up to 92 nautical miles inside the U.S. EEZ in the Gulf of Mexico. The USCG documented 4,401 red snapper and smaller numbers of at least 15 other species aboard the apprehended *lanchas*.

In 2015, the USCG apprehended 25 *lanchas* in the U.S. EEZ. A total of 98 Mexican nationals were apprehended aboard these vessels and repatriated. Apprehensions occurred in U.S. waters with incursions up to 32 nautical miles inside the U.S. EEZ in the Gulf of Mexico. The USCG documented 98 red snapper and smaller numbers of at least nine other species aboard the apprehended *lanchas*.

While the USCG continued to apprehend Mexican *lanchas* in 2016, at the time of the 2017 Biennial Report compilation, summary statistics could not be generated. Occurrences of illegal fishing that take place in 2016 may also be considered in the 2019 Biennial Report, as applicable.

Outreach to Mexico. NMFS sent a letter to Mexico dated November 3, 2016. Mexico sent a response dated December 23, 2016, which explained enforcement actions it is taking to address illegal fishing in foreign waters.

3. Russian Federation

Bases for Identification. CCAMLR records indicate that vessels flagged to the Russian Federation reportedly violated CCAMLR conservation measures in 2014, 2015, and 2016. In

¹³ The sources of information on Mexico's fishing activities are 52 case package reports from USCG District Eight transmitted to the Director General de Inspeccion y Vigilancia, Comision Nacional de Acuicultura y Pesca, dated between May 29, 2014, and April 25, 2016.

¹⁴ http://www.nmfs.noaa.gov/sfa/fisheries_eco/status_of_fisheries/archive/2016/third/q3-2016-stock-status-update.png

addition, the United States has documented a Russian-flagged vessel fishing in U.S. waters without authorization in 2014.¹⁵

The *Oladon 1* reportedly violated Conservation Measure 26-01 (general environmental protection during fishing) in 2014 and 2015. The vessel fished during the 2015-2016 season without the Commission having been properly notified (violation of CM 21-02). It was licensed by the Russian Federation in potential violation of CM 10-02; and, when it was inspected in 2015, its vessel markings did not meet size requirements (violation of CM 10-01).

Observer reports from one cruise of the *Oladon 1* indicate that, while longline fishing in subareas 88.1 and 88.2 between November 2, 2014, and February 27, 2015, the vessel violated provisions of CM 26-01 by using plastic packaging bands to secure bait boxes. In addition, the observer reported that the vessel occasionally discharged organic waste without any maceration or screening, as required by CM 26-01. During the 2015 annual CCAMLR meeting, the Russian Federation reported that an investigation was under way, and that it would provide a report to the Secretariat once the investigation was complete. As no further information was provided, the issues were raised again during the 2016 annual meeting. The Russian Federation committed to provide the CCAMLR Secretariat further information regarding this matter within 90 days of CCAMLR-XXXV.

The data reported by the *Oladon 1* (when it was named *Yantar 35*) during the 2012-2013 and 2013-2014 fishing seasons were quarantined (deemed unsuited for stock assessments or statistical analyses) by the CCAMLR Scientific Committee because of inconsistencies between reported haul locations and vessel monitoring system track-lines, in catch-size distribution, in the relationship between hauling speed and catch per unit effort, and in hauling times as related to catches. As these inconsistencies appear to reflect misreporting, illegal transshipment, or other violations of CCAMLR measures, in 2014 the Scientific Committee and the Commission asked Russian officials to investigate the activities of the vessel and, if appropriate, to bring enforcement action against the vessel and the Russian Federation committed to do so.

On October 14, 2015, the Russian Federation submitted a report concluding that there were a number of inconsistencies in the data, and stated that it had taken the responsive action of rejecting “the vessel owner’s application for the vessel to participate in exploratory fishing for toothfish and in CCAMLR’s scientific research programs” for the 2015-2016 season. The Commission noted that the information provided was incomplete. Russian officials agreed to conduct a more thorough investigation and to report back to CCAMLR within six months or inform the Commission that it required more time. Despite the fact that the Russian Federation had indicated that the vessel would not participate in CCAMLR exploratory fisheries during the 2015-2016 season, on November 20, 2015, it issued a notification that the *Oladon 1* would replace the *Yantar 33*, whose participation in fishing during the 2015-2016 season had been notified to the Commission.

¹⁵ The sources of information on Russian fishing activities are various CCAMLR reports and communications, and a notice of violation and assessment for case AK1403590, appended to a letter from the NOAA Office of General Counsel to a Russian fishing company, April 17, 2015.

On April 29, 2016, the Russian Federation informed the Commission that it required more time to conduct the investigation; a final report was submitted for consideration at the annual meeting. This report indicates that new laws have been put into place to address activities like those of the *Oladon 1*, and that sanctions have been applied.

The United States and a number of other CCAMLR members raised concerns that replacement of the *Yantar 33* with the *Oladon 1*, and the *Oladon 1*'s subsequent participation in CCAMLR exploratory fisheries, was in violation of CM 21-02 (exploratory fisheries). These members have also raised questions with respect to Russian compliance with CM 10-02 (licensing and inspection). The notification provided by the Russian Federation to replace the *Yantar 33* with *Oladon 1* was incomplete. CM 21-02 requires full details of the replacement vessel and "a comprehensive account of the reasons justifying the replacement and any relevant supporting evidence or references."

The notification, however, did not provide complete information (including the prior vessel name, *Yantar 35*, and information for blocks 3.4 and 3.17), nor any justification for the replacement; rather, it included a conclusory statement regarding the reason for replacement with the *Oladon 1*. In addition, the replacement notification appears to be invalid because the initial notification of the *Yantar 33* was invalid. CM 21-02 only allows a member to notify a vessel that is flagged to it, or to another member, at the time of the notification. The evidence indicates that the *Yantar 33* was scrapped sometime between December 2014 and March 2015, months before the *Yantar 33* was notified on May 22, 2015, and so was not flagged to the Russian Federation or to another CCAMLR member at the time of the notification. Further, CM 10-02 stipulates that a member may only issue a license to fish in the Convention Area to a vessel flying its flag if the member is satisfied of the vessel's ability to exercise its responsibilities under the Convention and its conservation measures. Given the Russian Federation's investigation into the activities of the *Oladon 1* during the 2012-2013 and 2013-2014 seasons, which were still ongoing at the time it was licensed to fish during the 2015-2016 season, it is difficult to see how this obligation could have been met.

New Zealand CCAMLR inspectors on December 3, 2015, noted the International Radio Call Sign painted on the side of the *Oladon 1* was only 0.6 meter high. CM 10-01 requires that the markings on either the hull or the superstructure (both port and starboard) be 1 meter high. The Standing Committee on Implementation and Compliance (SCIC) agreed that the *Oladon 1* was noncompliant with CM 10-01 because the vessel did not have its sign marked on the hull and that the markings on the superstructure were undersized. SCIC requested that Russian officials undertake further action to ensure compliance with the vessel marking requirements.

The Secretariat issued a fishery closure notification for Subarea 88.1 SSRU H on January 17, 2016. The Russian-flagged *Palmer's* daily catch and effort reports indicate that the vessel set three lines within 24 hours of the notified closure and retrieved a line two hours after the closure date and time, in violation of CM 31-02. The SCIC agreed that the vessel had been non-compliant, and requested that Russian officials undertake further action to ensure full compliance with CM 31-02 by the vessel, including training the crew.

On August 26, 2014, a USCG helicopter on routine patrol near the U.S.-Russian maritime boundary line encountered the Russian-flagged *Admiral Kolchak*, a factory trawler operating approximately 0.5 nautical mile inside the U.S. EEZ, with fishing gear readily available for fishing and a net full of catch clearly visible on deck. Vessel crew members appeared to be sorting fish. The vessel was not authorized to fish inside U.S. waters. On April 17, 2015, the United States issued the vessel owner a Notice of Violation and Assessment of civil penalty for violating the MSA. In accordance with international law, the United States sent the notice to the Russian Ministry of Justice for service of process on the vessel owner. The Russian Ministry of Justice returned the charging document unserved, without explanation. To the best of our knowledge, the Russian Federation has not undertaken an investigation or taken any domestic enforcement action against the owner of the *Admiral Kolchak*.

Outreach to the Russian Federation. NMFS sent a letter to the Russian Federation dated November 21, 2016, requesting information about the activities of these vessels. The Russian Federation's response to the letter did not provide additional information regarding their activities.

B. Countries “of Interest” Not Identified

1. Costa Rica

Photos of the fishing vessels *Cabo Kiyoni*, *Hillary*, and *El Gavilan Marino* indicated that they are equipped with longline fishing gear commonly used to catch species covered by the IATTC Convention. The vessel names were not in the IATTC Regional Vessel Register, which may have represented a violation of resolution C-14-01. Costa Rica's response stated that the vessels are not in the register because it is migrating a database and the registry is undergoing a deputation process, which means that not all of the vessels authorized by Costa Rica to carry out fishing activities are part of the registry. Costa Rica sent the updated list of fishing vessels to the IATTC Director on December 23, 2016.

Records from NOAA's National Data Buoy Center indicated that vessels flagged to Costa Rica may have violated IATTC measures in 2014, 2015, or 2016. Fishing vessels *Coopepes XIII*, *Cado Kiyoni*, *El Guerrero*, *La Foca*, *Hillary*, *Gavilan Marino*, *Odisea*, *Modesta III*, and two unidentified Costa Rican-flagged fishing vessels tied up to data buoys in the Antigua Convention Area, in violation of IATTC resolution C-11-03 (prohibiting fishing on data buoys). The vessels' identity and/or flag were determined from hull markings visible in photographs taken by cameras mounted on the Tropical Atmosphere Ocean data buoys during 2016.

Costa Rica provided NMFS with a copy of a new law issued July 15, 2016, enacting provisions of IATTC resolution C-11-03 prohibiting certain fishing vessel interactions with data buoys. Costa Rica also provided documentation of warning letters that have gone out to the owners of these vessels warning them that they were observed doing what is now illegal under the newly enacted law.

Since Costa Rica has adopted new legislation to address the data buoy protection concerns raised by these observations, and Costa Rica is taking corrective actions to ensure full compliance with the IATTC resolution on a regional vessel register, Costa Rica is not being identified.

2. Italy

Records from The Black Fish, an NGO, indicated that vessels flagged to Italy may have violated ICCAT measures in 2014 or 2015. Three longline fishing vessels that are authorized to participate in ICCAT-managed fisheries, *Emilia*, *Giorgia*, and *Nicola Padre*, may have violated ICCAT recommendation 03-04, which requires ICCAT parties to prohibit the use of driftnets for fisheries targeting large pelagic species in the Mediterranean. The vessels were photographed with what were described as *spadare* nets (drifting gillnets with mesh size between 340 and 460 mm) onboard; they were fitted with metal rings in a possible attempt to disguise them as surrounding nets. The observations were made between July 23 and July 27, 2015, in the port of Sant'Agata di Militello where the vessels were docked.

Italy provided information that these vessels were inspected and, where appropriate, sanctioned. The *Emilia* was fined 4,000 euros for having illegal driftnet onboard. The *Giorgia* and *Nicola Padre* were inspected, but no infringements related to illegal driftnets were observed. Further, Italy enacted a Ministerial Decree designed to prevent having illegal driftnets onboard (Ministerial Decree July 21, 2016, published in the Italian Official Journal on September 9, 2016, and entered into force on the same date).

Since Italy indicates these vessels were inspected and sanctioned where appropriate, and since it has adopted legislation to address these concerns, Italy is not being identified.

3. Panama

Records from the IATTC indicated that its fishing vessels *Txopituna*, *Tiuna*, *Lautaro*, and *Jane IV* reportedly violated IATTC resolutions in 2014 and 2015, including discard of salt bags or plastic trash at sea (C-04-05), tuna discards (C-13-01), and an improper turtle rescue (C-04-05). The *Txopituna* was sanctioned \$15,000 on December 1, 2016, for discarding plastic in violation of IATTC resolution C-04-05 in 2014. The *Tiuna* discarded tuna in 2015, in violation of IATTC resolution C-13-01. During IATTC trip number 1487597, the vessel allegedly discarded 5 tons of skipjack in set 4 and 2 tons of skipjack in set 10. Panama reports the vessel was sanctioned on May 29, 2015, with a \$10,500 fine.

The *Lautaro* allegedly discarded tuna in 2015 in violation of IATTC resolution C-13-01. Panama reports this case is still in the administrative process of sanction. While the evidentiary and allegation stages are finished, no final resolution has yet been issued. The *Jane IV* improperly carried out a turtle rescue and discarded plastic in 2014, both violations of IATTC resolution C-04-05. During IATTC trip number 146335, the vessel is alleged to have had two turtles improperly rescued. During the same trip, the vessel allegedly discarded salt bags or plastic trash at sea. The vessel was sanctioned \$15,000 for the improper turtle rescue and discard of plastic. The case is currently under appeal.

Since Panama indicates that it sanctioned three of the four vessels NMFS inquired about, and the threshold for a vessel-based identification is two vessels, Panama is not being identified.

IV. Certifications under Section 609

NMFS identified six countries in the 2015 Report to Congress as having vessels engaged in IUU fishing activity. Many of the incidents of IUU fishing involved a violation of the rules of an international fishery management organization in 2013 or 2014. NMFS also identified one of those nations for fishing illegally in the EEZ. Under Section 609 of the Moratorium Protection Act, the Secretary of Commerce must certify biennially in the report to Congress whether an identified nation has taken appropriate corrective action to address the activities for which it has been identified.

After notifying the six countries of their identifications early in 2015, the U.S. Government consulted extensively with those governments, through face-to-face meetings, teleconferences, and correspondence, through early 2017. The governments that received positive certifications provided information that falls into two categories:

- For each of the acknowledged violations, the nations took punitive action against the vessels or persons (captains or vessel owners) involved, or explained why such action was not taken. The sanctions included fines, revocation of licenses, and forfeiture of catch and gear. An example is Nicaragua, which imposed monetary fines on four vessels that committed violations of IATTC measures.
- As applicable and pertinent, the nations produced documentation of laws and regulations designed to combat IUU fishing, including measures that had recently been enacted or amended to give the nations more authority over their fishing fleets. For example, Colombia issued a regulation to prohibit interactions with data buoys by its flagged vessels.

The remainder of this section sets out in detail the information supplied by the identified nations about corrective actions taken – including penalties, withdrawal of fishing authorizations, and new fisheries management laws adopted – and NMFS’s certification decisions for each nation. This process, as in past cycles of identifications and certifications, continues to operate as Congress intended: it is promoting compliance with international fisheries measures.

A. Colombia

Bases for 2015 Identification. NMFS identified Colombia for having four vessels that violated IATTC resolutions in 2013 or 2014. The fishing vessel *Grenadier* interacted with a data buoy, in violation of IATTC resolution C-11-03. On June 4, 2014, the fishing vessel was identified via Automatic Identification System data near a buoy and was photographed by a camera mounted on the buoy.

Fishing vessels *Patricia Lynn* and *Dominador I* made transits during a closure period without having a permit exempting them from carrying an observer, in violation of IATTC resolution C-12-01. The *Patricia Lynn* transited within Ecuador from Manta to Guayaquil on July 31, 2013, and then from Guayaquil to Manta from August 18 to August 20, 2013. The *Dominador I* transited between the ports of Flamenco (Panama) and Manta in November 2013. The

Secretariat did not receive notice that the vessels had permits exempting them from observer coverage requirements during these transits.

The fishing vessel *Amanda S* was alleged to have discarded plastic bags or salt bags in July 2013, violating IATTC resolution C-04-05 Rev. 2, which requires that contracting parties prohibit their vessels targeting species covered by the Convention from disposing of salt bags or any other type of plastic trash at sea, in order to prevent sea turtle mortality.

Notification and Consultation. Colombia was notified through a diplomatic note from DOS and a letter from Ms. Eileen Sobeck, NOAA Assistant Administrator for Fisheries, both dated February 9, 2015, regarding its identification as a nation whose vessels engaged in IUU fishing activity. The Embassy of Colombia in Washington, D.C., was the primary entity involved in the consultation.

The following lists the key communications between Colombia and the United States during the consultation:

- On March 20, 2015, officials from NMFS and DOS met with officials at the Colombian Embassy to discuss the identification of Colombia and actions it was taking.
- On July 22, 2015, the Deputy Chief of Mission of the Colombian Embassy, Washington, D.C., sent a letter to Ms. Sobeck outlining the status of each of the four cases for which Colombia was identified, all of which were pending.
- On November 10, 2015, U.S. officials met with the Deputy Chief of Mission at the Colombian Embassy to discuss the case status of the vessels.
- On June 28, 2016, Colombia sent an email to U.S. officials, updating the status of the cases.
- On June 30, 2016, U.S. officials met with Colombian officials on the sidelines of the IATTC meeting to discuss the status of current cases, and the new data buoy regulations that Colombia promulgated at the end of 2015.
- On October 12, 2016, Colombia sent a letter to NMFS on the remaining cases, including information on case closures.

Vessel-Specific Actions. On October 8, 2015, Colombia issued a data buoy regulation, *Resolución 1806*. It prohibits scientific data buoy interactions by any Colombian-flagged vessel, regardless of where they operate; or by foreign-flagged vessels linked to Colombian companies fishing in Colombian territorial waters. The measure obligates vessels and crew to take all reasonable measures to avoid contact and interaction with data buoys anchored or floating during any type of fishing activity. The regulation also stipulates that noncompliance with the obligations will result in sanctions pursuant to Law 13 of 1990 (General Fishing Statute) and Decree 1071 of 2015. Since the resolution was passed in 2015, after the *Grenadier* data buoy interaction took place in 2014, Colombia is not able to apply sanctions to the vessel retroactively.

In the case of *Dominador I*, Colombia contacted the Government of Panama to inquire about the case. Panama reported that its archives contained no information on this vessel. Documentation shared with NMFS included the observer's report of the transit, indicating that he was on board the vessel from November 19 through November 21, 2013, when it arrived in Manta, and certifying that no fishing took place. Colombia maintained this case in a preliminary inquiry

stage, but could not open an administrative investigation due to insufficient evidence. The applicable administrative act under which sanctions can be applied to vessels allows the closure of cases three years after the date of the acts if insufficient evidence has been collected to proceed. In the case of *Dominador I*, this occurred on November 21, 2016.

In the case of *Patricia Lynn*, Colombia confirmed that the vessel transited without authorization and notification by the Government of Colombia to the IATTC. The owner of the company and vessel operator submitted a document to Ecuador's fisheries ministry that indicated the date of departure of the vessel and purpose of the trip (maintenance), including information that no fishing gear was onboard, but did not submit such information to the Colombian fisheries ministry. An administrative investigation determined that, while the transit did take place, no fishing occurred. The penalty imposed was a written warning requiring the vessel operator to comply with applicable provisions.

Colombia reported that a preliminary investigation was opened for the *Amanda S*, but the case was closed on June 16, 2016, because there was insufficient evidence to file charges.

Certification. On the basis of information provided, NMFS has determined that the Government of Colombia has taken appropriate corrective action to address the IUU fishing activities for which it was identified in the 2015 Report. Based on this finding, NMFS has made a positive certification determination for Colombia.

B. Ecuador

Bases for 2015 Identification. NMFS identified Ecuador for having a number of Ecuadorian-flagged vessels that violated IATTC resolutions in 2013 or 2014. Ecuador had provided information indicating that many of these vessels were under investigation or appeal. The *El Conde* and *Mariella* fished near data buoys in violation of IATTC Resolution C-11-03.

The *Mariajose* had been fined \$1,700 for tuna discards. According to Ecuador, 16 metric tons of tuna were discarded due to small size not suitable for market, which is not allowable under IATTC's resolution C-12-01. The fine was under appeal at the time of the 2015 report.

Ecuador investigated the *Yelisava* for tuna discards and determined there was no violation of C-12-01 since the discarded tuna was used as bait. That resolution, however, does not allow "use of bait" as an acceptable discard justification, but rather requires all purse-seine vessels to first retain on board and then land all bigeye, skipjack, and yellowfin tuna caught, except fish considered unfit for human consumption for reasons other than size.

The following vessels discarded plastic bags or salt bags, violating IATTC Resolution C-04-05 Rev. 2, which requires contracting parties to prohibit their vessels targeting species covered by the Convention from disposing of salt bags or any other type of plastic trash at sea in order to prevent sea turtle mortality: the *Malula*, *Adriana*, *Don Mario*, *Alina*, and *Lizi* (two trips).

The following vessels carried out improper turtle rescues, violating IATTC Resolution C-04-05 Rev. 2: the *Elizabeth F*, *Don Mario*, and *Chiara*.

NMFS was also concerned that Ecuadorian law, which was understood to require that an action be brought no later than 60 days from the date of notification of a violation, prevented the effective enforcement of domestic laws implementing RFMO measures.

Notification and Consultation. Ecuador was notified through a diplomatic note from DOS and a letter from Ms. Sobeck, both dated February 9, 2015, regarding its identification as a nation whose vessels engaged in IUU fishing activity. The Embassy of Ecuador in Washington, D.C. and the Ministry of Agriculture, Livestock, Aquaculture, and Fisheries were the primary entities involved in the consultation. The following lists the key communications between Ecuador and the United States during the consultation:

- On March 11, 2015, the Vice Minister of Aquaculture and Fisheries sent a letter to NMFS stating that the agency would work to address the cases for which Ecuador was identified with priority, and had appointed a high-level commission.
- On June 30, 2015, U.S. and Ecuadorian officials met on the sidelines of the IATTC annual meeting in Guayaquil, Ecuador, to discuss actions Ecuador was taking to resolve the cases for which it was identified.
- On October 20, 2015, Ecuadorian officials provided documents to U.S. officials on the sidelines of a fisheries meeting in La Jolla. The documents described actions taken for the data buoy violations.
- On April 5, 2016, Ecuador sent a letter to the United States outlining steps taken to address several of the cases for which it was identified.
- On May 26, 2016, U.S. officials met with Ecuadorian officials in Washington to discuss the status of fisheries cases and the statutory limitation.
- On June 30, 2016, officials from the U.S. and Ecuadorian delegations met on the sidelines of the IATTC meeting in La Jolla to further discuss the statutory limitation.
- On August 2, 2016, Ecuador sent a letter to NMFS that included documentation of the status of the outstanding cases and a copy of Ministerial Agreement No. 174 of October 2013.
- On September 19, 2016, Ecuador sent NMFS documentation of the resolution of many of the cases for which it had been identified.
- On November 21, 2016, Ecuador sent additional documentation regarding actions taken to address some of the outstanding cases.
- On December 12, 2016, U.S. officials met with the Embassy of Ecuador in Washington to discuss the remaining unresolved cases.
- On December 21, 2016, Ecuador sent additional documentation regarding actions taken to address the remaining outstanding cases.
- On January 9, 2017, Ecuador provided updated information on the case regarding the *Malula*.

Legislative Actions. Decree No. 852 (Article 67.7), signed by President Correa on December 28, 2015, and published on February 19, 2016, allows 12 months from the day the fisherman or vessel owner is notified of the initiation of a disciplinary procedure for Ecuador to complete the proceedings. Given NMFS's concern with the short amount of time that Ecuador previously had to bring an action against violators – 60 days from the date of notification of a violation – this is a significant accomplishment. NMFS had observed in the previous identification of Ecuador that

cases were being appealed and dismissed based on the 60-day constitutional statute of limitations. Ecuador has since closed that loophole. Decree No. 852 also requires, *inter alia*: satellite tracking devices on industrial fishing vessels; that protocols of RFMOs be followed for transshipments at sea; and that the Under Secretariat of Fishing Resources can temporarily suspend authorized activities of violators depending on the violation type, vessel classification, and number of violations committed.

In addition, Ecuador's Ministerial Agreement No. 174 (October 7, 2013) implements nationally many IATTC conservation and management measures, including the prohibition of tuna discards, trash and salt bag discards, fishing during a closure, and interacting with a data buoy. It also institutes requirements for sea turtle releases and states that those who violate the Agreement's provisions will be sanctioned according to the Fishing and Fisheries Development Act.

Vessel-Specific Actions. Ecuador sanctioned the *Mariella* for interacting with data buoys in 2012 and 2013. The vessel was identified under the Moratorium Protection Act for the 2013 violation, but the Act did not permit the 2012 violation to be part of the basis for identification. A document dated August 17, 2015, outlined the violations committed by the *Mariella*, the claims of exemption by the vessel operator, the reasons why the exemptions would not hold up, and the sanctions issued against the vessel. Ecuador imposed a financial penalty equivalent to \$3,540 and a suspension of fishing activities for 15 days, which was effective immediately, but could not occur during the closed season or during vessel repairs. The financial sanction was paid on August 25, 2015. Ecuador sanctioned the *El Conde* for a violation of IATTC Resolution C-11-03, interaction with data buoys. The fine of \$1,700 was paid by the ship owner on February 10, 2015.

The case against the *Mariajose* for tuna discards had been appealed, but settled with payment of a fine of \$1,360 on August 11, 2016. On December 21, 2016, Ecuador penalized the *Yelisava* with an administrative fine of \$7,320 and a determination that this was a repeat offense.

The *Adriana* was found to have violated the IATTC resolution on discarding salt bags or plastic bags. The ship owner paid a fine of \$2,040 on October 15, 2014. The *Don Mario* was found to have violated the same IATTC resolution. The case is resolved. The *Alina* was found to have violations during two cruises. Ecuador sanctioned the vessel \$3,660 for the first cruise. The proceedings for the second cruise will conclude at the end of January 2017. Ecuador has committed in writing to supply documentation of the findings once the case concludes. The *Lizi* had two incidences of trash discards, both of which were appealed. The first case was resolved by imposing a sanction of \$1,700. In the second case, a fine of \$2,380 was imposed.

The case against the *Malula* regarding discards of trash was not initially considered an infringement. Ecuador investigated further and determined that a case should be initiated. It intends to reach resolution within two months and will report on the findings.

The *Elizabeth F* was found to have carried out an inappropriate turtle rescue. The ship owner paid a fine of \$680 on November 5, 2014. The *Don Mario* and the *Chiara* released turtles unharmed, according to Ecuador's "Resolution of Alleged Violations of IATTC" report.

Certification. Ecuador made procedural changes to its fisheries legislation to allow a full year for completion of a case. NMFS has seen this result in cases Ecuador has prosecuted. In addition, Ecuador has resolved the cases for the *Mariella* and *El Conde* for interactions with data buoys and supplied documentation of the monetary sanctions placed on the vessels, along with a fishing suspension for the *Mariella*. The *Mariajose* and *Yelisava* were issued monetary fines for discarding tuna. The *Adriana* and *Lizi* were also issued monetary fines for discards of trash or plastic. The cases for the *Don Mario* and *Chiara* were investigated by Ecuador, which reported that the turtles were released unharmed. Documentation for the *Don Mario* is in transit. Once the re-opened case against the *Malula* concludes, Ecuador will send documentation of resolution of that case. Ecuador has ensured in writing that it will provide documentary evidence of the conclusion of the *Alina*'s case once it is finalized in late January 2017.

As Ecuador made changes to its legislation, resolved the cases for which it was identified, and will supply documentation of the remaining cases in process, NMFS is issuing a positive certification for Ecuador.

C. Mexico

Bases for 2015 Identification. Mexico was identified for having vessels fishing without authorization in U.S. waters, and for overfishing of stocks shared with the United States, in areas without applicable international measures or management organizations, that has adverse impacts on such stocks. While foreign fishing without authorization in the U.S. EEZ has been illegal since 1977, the definition of IUU fishing under the Moratorium Protection Act was revised only in the 2013 regulations to include such activity (see 50 CFR Part 300 Subpart N). The United States and Mexico have worked to address unauthorized fishing by Mexican vessels in the U.S. EEZ of the Gulf of Mexico over many years, but violations of this type continue to occur.

In 2013, the USCG apprehended 24 open-hulled vessels powered by outboard motors (known locally as *lanchas*) in the U.S. EEZ with 82 Mexican nationals onboard, along with evidence of fishing activity. The vessels had made incursions as far as 41 nautical miles into the U.S. EEZ. The USCG documented a total of 1,418 red snapper, five gag grouper, and four gray triggerfish onboard the *lanchas*; these three species are from stocks shared with the United States and have been determined to be overfished by the United States. Mexico had reported to NMFS that it considers red snapper to be fully exploited. NMFS is concerned about the adverse impacts of this fishing activity, particularly on red snapper, given the status of that stock and the large amount of catch documented.

Notification and Consultation. Mexico was notified through a diplomatic note from DOS, dated February 11, 2015, and a letter from Ms. Sobeck, dated February 9, 2015, regarding its identification as a nation whose vessels engaged in IUU fishing activity. The Embassy of Mexico in Washington, D.C., and the Comisión Nacional de Acuacultura y Pesca were the primary entities involved in the consultation. The following lists the key communications between Mexico and the United States during the consultation:

- On February 9, 2015, a U.S. delegation met with the Government of Mexico at the Embassy of Mexico to discuss the delay in certification for North Pacific loggerhead sea turtle bycatch, and the new IUU fishing identification for *lanchas*.
- During the week of April 20, 2015, the United States held two meetings with Mexico to discuss the *lancha* issue and the Moratorium Protection Act consultation.
- On July 2, 2015, NMFS sent a detailed letter to Mexico requesting answers to questions regarding surveillance of vessels, Mexican laws that might be able to address the issue, vessel registration, and stock assessments.
- On October 27, 2015, a U.S. official attended a meeting with Mexican officials at the Embassy of Mexico to discuss, *inter alia*, the *lancha* identification. Mexico gave a presentation on the status of the issue and targets it is working toward to address *lancha* incursions into U.S. waters.
- On April 1, 2016, Mexico sent an email with a list of vessel incursions attached and asked NMFS to confirm that the cases were those for which Mexico had received case packages from the USCG.
- On June 27, 2016, NMFS responded to the April email request with a spreadsheet of the list of incursions by year for 2010-2015.
- On September 8, 2016, U.S. and Mexican officials met during a bilateral meeting in Campeche to discuss the issue of *lanchas*.
- On November 3, 2016, U.S. and Mexican officials met in Washington to discuss actions that Mexico has taken to address *lancha* incursions.
- On December 30, 2016, Mexico sent responses to the United States' questions from the September 2016 preliminary certification letter.
- On January 9, 2017, NMFS received information regarding the initiation of enforcement cases.

Corrective Actions. Mexico agreed during the September 2016 fisheries bilateral meeting to provide NOAA with more detailed information on its enforcement activities. Mexico stated that it would charge five to 10 priority *lancha* cases, and indicated that it intended to charge the cases in groups since each person would have multiple charges. Mexico stated that charging these cases could have a large effect on the fishery since it is relatively small (approximately 140 vessels). In early January 2017, Mexico initiated enforcement cases against those individuals involved in the *lancha* operations. However, those cases have not yet been resolved (i.e., sanctions imposed).

Mexico is also conducting additional activities to assist in monitoring the *lancha* fleet. Mexico is conducting joint inspections through three institutions to verify *lancha* registrations, fishing permits, the use of authorized fishing gear, and license authorization to fish certain species. Inspections are also conducted to deter illegal activities.

The navy conducts maritime surveillance patrols along the north coast of Tamaulipas using speed “defender” vessels and aerial units. In addition, the navy conducts oceanic patrols in the Mexican territorial sea and EEZ of this area. Surface units of the Naval Command in Tampico, Tamaulipas, have also increased from 35 to 70 percent coverage. Automatic identification system devices have been installed on all of the registered *lanchas* in Playa Costa Azul, Matamoros, Tamaulipas.

Mexico also reported that it has suspended the engine and gas subsidies of a fishing cooperative with repeated U.S. EEZ incursions.

Certification. While Mexico has taken several actions to address the *lancha* incursions, including increasing surveillance patrols, curtailing engine subsidies, and initiating enforcement cases against those individuals involved in the *lancha* operations, those cases have not yet been resolved. Mexico, therefore, is being issued a negative certification because appropriate corrective action has not yet occurred.

D. Nicaragua

Bases for 2015 Identification. NMFS identified Nicaragua for having four vessels that violated IATTC conservation measures in 2013. The *Olivia* improperly handled a turtle entanglement, violating IATTC resolution C-04-05 Rev. 2 (on bycatch). The *Lucile* made fishing sets near a data buoy in August and September 2013, violating IATTC resolution C-11-03 (prohibiting fishing on data buoys).

The following vessels discarded tuna in violation of IATTC resolution C-12-01, which requires all purse seine vessels to first retain on board and then land all bigeye, skipjack, and yellowfin tuna caught, except fish considered unfit for human consumption for reasons other than size. The *Olivia* discarded tuna on August 7, 2013: 2 tons of yellowfin and 2 tons of skipjack. The *Lucile* discarded 0.1 ton of skipjack on September 20, 2013, and on September 27, 2013, discarded 0.01 ton of yellowfin and 0.01 ton of skipjack. The *Emilio* discarded 0.5 ton of skipjack on August 16, 2013. The *Capt. Joe Jorge* discarded 2.5 tons of yellowfin on November 11, 2013.

Notification and Consultation. Nicaragua was notified through a diplomatic note from DOS and a letter from Ms. Sobeck, both dated February 9, 2015, regarding its identification as a nation whose vessels engaged in IUU fishing activity. The Nicaraguan Institute of Fisheries and Aquaculture was the primary entity involved in the consultation.

The following lists the key communications between Nicaragua and the United States during the consultation:

- On February 26, 2015, the Embassy of the Republic of Nicaragua in the United States sent a diplomatic note to DOS regarding the completed administrative processes for the four vessels for which Nicaragua was identified.
- On July 2, 2015, officials from the United States met with Nicaraguan officials on the sidelines of the IATTC annual meeting in Guayaquil, Ecuador. Nicaragua brought copies of its resolutions establishing sanctions on vessels found to be in violation of IATTC measures.

Vessel-Specific Actions. Nicaragua investigated the allegation against the *Olivia* for improperly handling a sea turtle entanglement, but released the vessel from liability due to discrepancies in the observer report regarding the number of times the turtle was brought onboard before being released, and uncertainty about whether the crew initially knew the sea turtle was entangled. The crew released the sea turtle once the entanglement was known.

The *Lucile* was released from liability for the data buoy case because the observer form was blank with regard to any data buoy violations. The observer did not note any sets around data buoys, nor did s/he include comments about a possible data buoy interaction. Nicaragua states that it was not possible to verify that there was a violation.

Nicaragua sanctioned the *Olivia* February 18, 2015, for violation of its decree on discarding tuna because of its size, in accordance with the IATTC measure. The company that owns the vessel stated it has a policy preventing discards of tuna, and that discards only occur if the fish is unfit for human consumption, per the IATTC resolution. The observer, however, had noted in two documents that tuna were discarded due to their small size. Nicaragua issued the owner a fine equivalent to \$10,000. A March 27, 2015, administrative document outlines the payment installments and timeline. It also states that a breach of those arrangements will result in licenses being canceled for the company that owns the vessel.

Nicaragua sanctioned the *Lucile* February 18, 2015, for violation of the same decree. The company that owns the vessel stated that the observer forms were not consistently filled out and that some required information was not provided. The observer, however, had stated in both Marine Fauna Records that the reason for the discards was either size or unfitness of the fish for market. Nicaragua fined the company the equivalent of \$10,000.

Nicaragua sanctioned the *Emilio* on February 18, 2015, for the same offense. The company that owns the vessel stated it has a policy preventing discards of tuna, and that discards only occur if the fish is unfit for human consumption, per the IATTC resolution. While the company stated that the observer did not report any discards of tuna in the Record of Compliance, the Government of Nicaragua stated that the observer did, in fact, report the discard in the Daily Report and in the Marine Fauna Record, and that the average size of the fish was 1 kg. Nicaragua fined the company the equivalent of \$10,000. Proof of payment was provided in the documentation supplied for this vessel.

Nicaragua sanctioned the *Capt. Joe Jorge* on February 18, 2015, for the same offense. The company that owns the vessel attempted to refute the claim that discards took place, but during the administrative proceeding the Government of Nicaragua determined that discards did occur. The company was fined the equivalent of \$10,000. The company appealed the case, questioning evidence provided by the Government of Nicaragua, and arguing that the initial fine imposed was for discarding of bycatch rather than target species. The fish, in fact, were target species. Nicaragua upheld the determination that the evidence it used was valid, but agreed that there was no discard of bycatch, but rather of target species. The fine was re-issued at the equivalent of \$5,000; proof of payment was provided.

Certification. On the basis of information provided, NMFS has determined that the Government of Nicaragua has taken appropriate corrective action to address the IUU fishing activities for which it was identified in the 2015 Report. Based on this finding, NMFS has made a positive certification determination for Nicaragua.

E. Nigeria

Bases for 2015 Identification. NMFS identified Nigeria because at least two of its vessels undermined the effectiveness of CCAMLR conservation measures in 2013 and 2014. The *Thunder*, placed on the CCAMLR NCP-IUU Vessel List in 2006, was observed inside the Convention Area in February 2013. In August 2013, a French surveillance team sighted this vessel fishing in the Convention Area. An NGO reported seeing the vessel fishing inside the Convention Area in December 2013. In April 2013, the vessel was inspected in the port of Benoa, Bali, Indonesia, where the master of the vessel produced a certificate of registration indicating that the vessel was flagged to Nigeria. Press reports indicated the vessel (using the name *Ming 5*) was detained by Malaysian authorities. According to the report, 100 to 150 tons of fish were found onboard and were believed to have been caught in violation of CCAMLR conservation measures. Australian authorities reported that they asked Nigeria to clarify this vessel's registration and received confirmation of Nigerian registration. Australian authorities noted that this vessel has a long history of association with IUU fishing. It was the subject of an INTERPOL Purple Notice published December 5, 2013, at the request of New Zealand.

The *Viking*, placed on the CCAMLR list in 2004, was observed inside the CCAMLR Convention Area in January 2014, reportedly fishing with gillnets. This vessel was also the subject of an INTERPOL Purple Notice published September 6, 2013.

Other Information and Fishing Activities that Did Not Form the Basis of Identification.

While the following vessels were not sighted in the Convention Area and did not form the basis for identification, their continued sightings along routes commonly used to transit to and from the fishing grounds were of concern to the United States. The *Lana*, placed on the CCAMLR NCP-IUU Vessel List in 2007, was observed by Australian authorities on three occasions (in September and November 2013, and in February 2014). The *Perlon*, placed on the CCAMLR NCP-IUU Vessel List in 2003, was observed by Australian authorities on two occasions in July 2014. Australian authorities noted that, while these sightings were outside the Convention Area, these vessels have a long history of association with IUU fishing inside the Area, and continue to undermine conservation measures established by CCAMLR.

Notification and Consultation. Nigeria was notified through a diplomatic note from DOS and a letter from Ms. Sobeck, both dated February 9, 2015, regarding its identification as a nation whose vessels engaged in IUU fishing activity. The Nigerian Maritime Administration and Safety Agency was the main entity involved in the consultation.

The following lists the key communications between Nigeria and the United States during the consultation:

- On March 10 and 11, 2015, DOS and Nigerian officials met in Abuja and in Lagos.
- On March 19, 2015, Nigeria sent the *Thunder*'s de-registration certificate to the U.S. Consulate in Lagos.
- On April 8, 2015, Nigeria sent the *Lana*'s de-registration certificate to the U.S. Consulate in Lagos.
- On December 21, 2015, NMFS received confirmation through the U.S. Consulate that the *Viking* is not on Nigeria's vessel registry.

Fisheries Management Measures. The Federal Ministry of Transport, through the Nigerian Maritime Administration and Safety Agency, registers vessels, while the Federal Department of

Fisheries licenses fishing vessels. Through the U.S. Consulate in Lagos, NMFS learned that the latter agency has instituted a policy, implementing a 2007 statute, to de-register any vessel found to be conducting illegal fishing operations worldwide. The agency does not, however, have legal authority to pursue illegal fishing activities unless there is a clear violation of the vessel's registration.

Vessel-Specific Actions. The *Thunder* was registered in Nigeria, but was not licensed to fish in Nigerian, or other, waters. The *Thunder* violated its registration in numerous ways: trading with false ship documentation, fishing on the high seas, and revising its condition of registration from operating in "Nigerian Territorial Waters" to "Nigerian Territorial Waters & Foreign Waters." The vessel also forged many required certificates. Nigeria de-registered the *Thunder* on March 18, 2015.

While no longer registered to Nigeria, the *Thunder* was followed by Sea Shepherd for 110 days. The crew deliberately scuttled the vessel in the waters of Sao Tome and Principe, which nation convicted the captain and two crew members of pollution, recklessness, forgery, and negligence. Sao Tomean authorities cooperated with Nigerian authorities to determine that the ship's documents were fraudulent, including a false fishing license and a non-existent Nigerian-registered company listed as the ship's owner.

In its December 18, 2014 letter in response to the United States' letter of concern, Nigeria explained that the *Octopus*, the former name for the *Viking*, was not a Nigerian-registered vessel. Upon further inquiry into whether the *Viking*, under its specific IMO number, was registered to Nigeria, officials confirmed that the *Viking* was not on Nigeria's vessel registry. Indonesia's Navy seized the vessel in late February 2016, when it was discovered in Indonesian waters, and sank it on March 14, 2016. The captain and crew have been detained in Indonesia and charged with fisheries crimes.

The *Lana* was registered but not licensed to fish in Nigerian, or other, waters. Nigeria stated that the vessel was allegedly involved in illegal fishing in other nations' territorial waters and EEZs. Nigeria revoked the *Lana*'s registration on April 8, 2015.

The *Perlon* was registered in Nigeria but not licensed to fish in Nigerian, or other, waters. Nigeria informed the United States that the vessel's registration was to expire and that it would not be renewed.

Certification. On the basis of information provided, NMFS has determined that the Government of Nigeria has taken appropriate corrective action to address the IUU fishing activities for which it was identified in the 2015 Report to Congress. Based on this finding, NMFS has made a positive certification determination for Nigeria.

F. Portugal

Bases for 2015 Identification. Portugal was identified for having three vessels that violated NAFO conservation measures in 2013 and 2014. The *Calvao* misrecorded catch in its fishing logbook and daily catch report, violating Article 28 of the NAFO Conservation and Enforcement Measures. The *Coimbra* reportedly committed violations of mesh sizes, violating Chapter I Article 13.2(d) and Annex III.B.2 of the NAFO Conservation and Enforcement Measures. A

Portuguese fishing vessel, the *Santa Isabel*, misreported catch, mislabeled product, and tampered with seals, violating Articles 28.1, 38.1, 27.1, and 38.1(n) of the NAFO Conservation and Enforcement Measures.

Notification and Consultation. Portugal was notified through a diplomatic note from DOS, dated February 13, 2015, and a letter from Ms. Sobeck, dated February 9, 2015, regarding its identification as a nation whose vessels engaged in IUU fishing activity. The Portuguese Directorate-General for Natural Resources, Security, and Maritime Services was the primary entity involved in the consultation. The following lists the key communications between Portugal and the United States during the consultation:

- On February 24, 2015, officials from NMFS and DOS met with the Portuguese Embassy to discuss the identification of Portugal and current actions it was taking.
- On July 31, 2015, Miguel Sequeira, Director General of the General Directorate of Natural Resources, sent a letter to Ms. Sobeck outlining the status of the three cases for which Portugal was identified.
- On January 11, 2016, NMFS sent a letter to the General Directorate of Natural Resources requesting additional information on the two unresolved cases.
- On January 26, 2016, Portugal sent a response to NMFS regarding the status of the cases for the *Calvao* and *Santa Isabel*.
- In July 2016, Portugal supplied additional details on the status of the case for the *Calvao* to the U.S. Embassy in Lisbon.
- On August 19, 2016, Mr. Sequeira sent a letter to NMFS that included the documentation of fines levied against the *Calvao*.

Vessel-Specific Actions. Portuguese and European Commission inspectors investigated the *Calvao* in the port of Aveiro, Portugal, in May 2014. The inspection resulted in notice of several infractions. Administrative proceedings concluded in January 2016 resulted in the following sanctions: a 25,000 euro fine plus fees on the owner of the vessel; a 5,000 euro fine plus fees on the captain of the vessel; and an accessory sanction on the owner of approximately 200,000 euros, which is equivalent to the value of the economic benefit of the illegal fishing. The August 19, 2016, letter from Portugal reported that the case has been closed and the fines paid.

An inspection of the *Coimbra* was carried out in July/August 2014 in the port of Aveiro, Portugal. The inspection verified that the vessel's gear had an average mesh size that conformed with permissible limits in the NAFO Regulatory Area. Since there was no evidence of an illegal net, no violation took place.

The *Santa Isabel* was inspected by Spanish authorities in the port of Cangas, Spain, in April 2013, and was alleged to have three violations: mislabeling, breaking or tampering with seals, and under-reporting of catch of roundnose grenadier and monkfish. Spanish authorities levied a 5,000 euro fine for the mislabeling and a 3,000 euro fine for under-reporting catch. The alleged infraction regarding tampering with seals was annulled by a judicial decision issued on October 14, 2015. Spain prosecuted the case under a European Union (EU) regulation that allows a flag member State to transfer proceedings related to an infringement to the inspecting member State, with the agreement of the member State, and on the condition that the transfer is more likely to

achieve results proportional to the seriousness of the infringement, and therefore discourage further similar offenses.

Certification. On the basis of the information provided, NMFS has determined that the Government of Portugal has taken appropriate corrective action to address the IUU fishing activities for which it was identified in the 2015 Report to Congress. Based on this finding, NMFS has made a positive certification determination for Portugal.

V. State of Knowledge on the Status of International Living Marine Resources

Section 607 of the Moratorium Protection Act requires an accounting of the state of knowledge on the status of international living marine resources shared by the United States or subject to treaties or agreements to which the United States is a party, including a list of all fish stocks that are classified as overfished, overexploited, depleted, endangered, or threatened with extinction by any international or other authority charged with their management or conservation.¹⁶ NMFS has updated the list that was cited in the 2015 Report to Congress, including links to the latest (as of fall 2016) status reviews of species. For each species, the table shows the status of each stock, the organization(s) that made the assessment, and applicable treaties. The revised list is available online at http://www.nmfs.noaa.gov/ia/iuu/msra_page/msra.html.

The list includes resources over which an international treaty or agreement, to which the United States is a party, has explicit conservation or management authority, has in place measures designed to control fishing mortality, or has directed the collection of fisheries data, including bycatch, to inform assessments of status. It also includes other resources shared by the United States, including U.S. territories, on which a directed fishery exists or which are taken as bycatch that are significant either in absolute numbers or because of the sensitivity of the international living marine resources, such as seabirds, sea turtles, marine mammals, or sharks, but which are not subject to an international treaty or agreement to which the United States is a party.

¹⁶ The term “international living marine resources,” as described in this sentence, is much more inclusive than the term “protected living marine resources.” The latter includes only non-target species protected under U.S. law or international agreement that, except for sharks, are not managed under the MSA, the Atlantic Tunas Convention Act, or any international fishery management agreement.

VI. International Actions to Address IUU Fishing

Global international organizations have acted in recent years to create many tools to combat IUU fishing and promote sustainable fisheries. This Part updates the descriptions of these activities from the 2015 Report to Congress. While the United States is not a member of IOTC, NEAFC, SEAFO, or CCSBT, it does have significant interest in these organizations and reports on some of their activities below. Also, while NMFS does not maintain a comprehensive record of efforts intended to combat IUU fishing, the following sections provide illustrative examples of measures taken by a variety of RFMOs.

Food and Agriculture Organization. Established in 1945, the FAO has a mandate to raise levels of nutrition and standards of living, improve agricultural productivity, and better the condition of rural populations. Today, the FAO is the largest autonomous agency within the UN system, with 192 member countries plus the EU and one associate member (Faroe Islands). The FAO employs 1,600 professional staff and 2,000 general services staff.

The FAO's Committee on Fisheries (COFI), established in 1965, constitutes the only global intergovernmental forum other than UNGA where major international fisheries and aquaculture problems and issues are examined and recommendations addressed to governments, regional fisheries bodies, NGOs, fish workers, and the international community on a worldwide basis. COFI is also a forum in which global instruments, binding and non-binding, are negotiated. At the 32nd session of COFI in 2015, the United States announced that it would fund an expert workshop to review the findings of recent international marine mammal bycatch workshops.

United Nations General Assembly. The UNGA 2016 Sustainable Fisheries Resolution urges flag States to strengthen effective jurisdiction and control over vessels flying their flag, and to exercise due diligence, including by developing or amending national rules and regulations, where needed, to ensure that such vessels do not engage in IUU fishing. The 2016 Resolution also notes the challenges posed by vessels fishing on the high seas that are determined under international law to be without nationality; by definition, they are engaged in IUU fishing. The 2016 Resolution encourages States to take necessary measures against them, where appropriate and consistent with international law, including by enacting domestic legislation to prevent and deter vessels without nationality from engaging in or supporting IUU fishing.

Western Central Atlantic Fisheries Commission. WECAFC is a regional body established in 1973 under article VI(1) of the FAO Charter. As such, it does not have management authority for fisheries in the region, but helps members to promote effective conservation, management, and development of living marine resources in accordance with the FAO Code of Conduct for Responsible Fisheries. The Commission also addresses common problems of fisheries management and development faced by its members. WECAFC is composed of all 33 countries in the Wider Caribbean region and the EU.

WECAFC held its 16th biennial meeting in Gosier, Guadeloupe, in June 2016. Although the status of many fisheries in this region warrants concern, there is clearly reason for optimism as evidenced by increased national and regional efforts for the management and conservation of certain species, many coordinated by WECAFC.

European Union-United States Bilateral Engagement. As two of the three top seafood importers in the world, the EU and the United States recognized their responsibility to protect the oceans' vital food and biodiversity resources in a historic statement signed in 2011 pledging bilateral cooperation to combat IUU fishing. Since then, the United States and the EU have worked together to support adoption of effective management measures in regional and international organizations, promote tools that prevent IUU fishing operators from benefiting economically from their illegal activities, exchange information on IUU fishing activities, and promote the sustainable use of fisheries resources while preserving marine biodiversity. U.S. and EU officials continued, throughout 2015 and 2016, including through regular meetings of an informal working group, to coordinate their joint efforts to combat IUU fishing by identifying specific activities, dates, and points of contact, and through extensive discussion of regional and global fisheries issues.

The sections in this Part focus on particular approaches (such as port State control measures) and specific tools (such as monitoring, vessel lists, and a global record of fishing vessels) that are being developed and implemented to deter IUU fishing activities.

A. Port State Measures

The reason IUU fishing continues despite decades of effort to curb the problem is the economic incentive that makes such activities cost-effective and financially viable for many fishermen and, indeed, investors. Removing or disrupting the economic drivers of IUU fishing promotes eradication of this global activity. FAO members in 2009 completed a global agreement designed to deflate those economic drivers.

On February 26, 2016, the United States ratified the 2009 PSMA, which requires parties to take actions to prevent IUU fish and fish products from entering the stream of commerce. In recognition that all fish must pass through a port to get to market, the PSMA sets minimum standards for the conduct of port inspections and the training of inspectors. Parties must restrict port entry and access to port services to vessels that have engaged in IUU fishing, except when entry is allowed for the purpose of inspection, other enforcement actions, or circumstances of *force majeure*. The United States was a primary participant in the negotiation of the PSMA and one of the first countries to sign it.

The PSMA entered into force on June 5, 2016; as of November 2016 there are 41 parties representing 67 countries, but broader participation will be necessary for the agreement to be effective in combating IUU fishing. An initial meeting of parties is expected to occur early in 2017.

While many RFMOs have adopted port State measures, frequently in conjunction with the measures that establish their IUU vessel lists, the PSMA, as a global, legally binding instrument, has the potential to fill many of the gaps that enable IUU fishermen to profit from their activities. As a result, some RFMOs have adopted or amended existing port State measures to be consistent with the minimum standards set forth in the PSMA; others have failed to do so.

The IOTC first adopted a CMM implementing port State measures in 2010, following a program of port inspections established in 2005. In 2016, the IOTC adopted a new, comprehensive CMM

with extensive port inspection requirements. The IOTC has also held a number of capacity-building workshops to support contracting parties and cooperating non-contracting parties, entities, or fishing entities (CPCs) in their implementation of port State measures, and has developed an application for electronic reporting for its members.

ICCAT's Scheme for Minimum Standards for Inspection in Port obliges port States to designate and publicize their ports where foreign fishing vessels may land or transship fish; calls for advance notice from such vessels seeking to enter those ports; provides that a port State must decide whether to grant entry to such vessels in light of the information received; and requires inspection, once in port, of at least 5 percent of landing or transshipment operations by foreign vessels equal to or greater than 12 meters in length overall. ICCAT has established a special fund to provide technical assistance to port inspectors and other relevant enforcement personnel from developing coastal States. In 2016 the United States proposed and ICCAT adopted a measure establishing an experts group to adapt available port State measures training materials to ICCAT's port inspection measure, review requests for assistance, and facilitate capacity building efforts.

In 2015, the Commission for the Conservation of Southern Bluefin Tuna (CCSBT), in which the United States participates as an observer, adopted a scheme of minimum standards for inspection in port, largely modeled after ICCAT's measure; it took effect on January 1, 2017.

In 2016, SPRFMO discussed a proposal increasing the rate of inspections for its minimum standards of inspection in port, but it was not adopted. The United States continues to support adoption by the WCPFC of a port State scheme. Despite proposals by the EU and the Pacific Islands Forum Fisheries Agency to establish a port State inspection scheme at the regular sessions of the WCPFC from 2013 through 2016, no consensus was reached.

The IATTC has discussed port State measures since 2010. The most recent unsuccessful proposal, introduced at the 2016 annual meeting by the EU and supported by the United States, is modeled on the scheme adopted by ICCAT. It would have taken into account the needs of developing nations and the potential need for capacity building.

At its 2015 meeting, the North East Atlantic Fisheries Commission (NEAFC) expanded the scope of its port State control system, which is now fully aligned with the PSMA. NAFO, at its 2016 meeting, adopted additional changes to its 2017 conservation and enforcement measures to implement the PSMA more fully.

B. Market- and Trade-Related Measures

Market- and trade-related measures reduce opportunities for IUU fishing activities in a number of ways: by helping to ensure, in a manner consistent with international law, that only legally harvested or produced seafood is traded; by tracking movements of fish products to identify those involved in harvesting, transshipping, and marketing of IUU catch; by monitoring changes in the pattern of trade to identify flag, port, and market States that can contribute to effective implementation of CMMs; and by improving information on fishing mortality. Successful market measures are often based on information gathered from trade-tracking programs – systems that can help verify the origin, weight, and species composition of catch and indicate

whether the catch was taken in accordance with the conservation and management regime in force.

The United States routinely raises the need to prevent trade or import of IUU-caught fish and living marine resources in bilateral consultations and multilateral meetings and negotiations, as discussed throughout this report. In addition, the United States engages in the World Trade Organization and other trade-related bodies to eliminate subsidies that contribute to overfishing, overcapacity, or illegal fishing activities.

Convention on International Trade in Endangered Species. CITES is an international agreement among 183 member nations, with the purpose of ensuring that international trade in wild animals and plants does not threaten their survival. Species covered by CITES are listed in different appendices according to the level of protection needed. Species listed in Appendix I are threatened with extinction, so international commercial trade is prohibited; non-commercial trade is allowed only in exceptional circumstances. Species listed in Appendix II are not necessarily now threatened with extinction, but they may become so if international trade is not regulated. Commercial and non-commercial trade is permitted for Appendix II species if the exporting country is able to make certain determinations. Species are listed on Appendix I or II based on a two-thirds majority vote of the parties. Any CITES party may add a native species to Appendix III unilaterally, provided that party has domestic laws to protect the species. The U.S. Fish and Wildlife Service is the lead agency with responsibility for implementing CITES in the United States, under the authority of the ESA. Based on its expertise, NOAA provides guidance on marine issues.

The 17th meeting of the Conference of the Parties to CITES (CoP17) took place September 24-October 5, 2016, in Johannesburg, South Africa. Delegations considered proposals to include chambered nautilus, devil rays, several shark species, and several ornamental fish species in Appendix II of CITES. Countries also agreed on actions to address the illegal trade of sea turtles, totoaba, humphead wrasse, precious corals, and other marine species.

The United States, joined by Fiji, India, and Palau, submitted a proposal to list chambered nautilus out of concern that these species are significantly impacted by international trade, and current regulations do not adequately protect them. Their beautiful shells are heavily traded either as whole shells or partial shells, as souvenirs, jewelry, and home décor. Living animals are also taken for display in public aquariums and for research. Due to their life history characteristics, these species are extremely vulnerable to overharvest. Chambered nautilus are slow-growing, late-maturing, long-lived, and produce few young. They live in specialized habitats, found only within certain areas, at certain temperature and depth ranges. Parties approved the proposal by a wide margin.

Fiji submitted a proposal to include sicklefin devil rays and spinetail devil rays in Appendix II, with the inclusion of all other (seven) species of mobulid rays as look-alike species. The United States and many other parties co-sponsored the proposal. Targeted fisheries and incidental catch are driving declines of devil rays, whose gill plates supply an international market. The best scientific information indicates a fairly recent and substantial increase in harvests, resulting in declines in populations that threaten the survival of these species in the wild. Global measures to ensure the sustainability of that harvest are lacking, since few countries or RFMOs have enacted

regulations to protect devil rays. Like chambered nautilus, devil rays are slow-growing, produce few young, and occur only in fragmented habitats – making them extremely vulnerable to overexploitation. A very large majority of CITES parties approved the proposal, but delayed entry into effect by six months to resolve technical and administrative issues. See Part IX.A for details on the listing of shark species.

Not every proposal to list a marine species succeeded. The EU, supported by the United States, proposed to include Banggai cardinalfish in Appendix II. The United States had proposed such a listing in 2007, but agreed to withdraw the proposal after Indonesia (the only range State) committed to take actions in support of conservation of the species. Although Indonesia has been unable to fulfill those commitments, it strongly opposed the EU proposal at CoP17. The EU withdrew its proposal, but offered five draft “decisions” to promote sustainable trade in Banggai cardinalfish; all five were adopted.

Trans-Pacific Partnership. The TPP is a proposed free trade agreement that would liberalize trade and investment among 12 Pacific-rim countries: Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States, and Vietnam. After five years of negotiation, the TPP was completed in October 2015 and signed by the 12 countries in 2016, but has not yet entered into force.

The TPP’s environmental chapter builds on previous agreements and introduces pioneering commitments in key environmental areas, including:

- Prohibitions on some of the most harmful fisheries subsidies, as well as enhanced transparency requirements for fisheries subsidy programs.
- Broad commitments to promote sustainable fisheries management, which can support measures being developed or implemented through relevant RFMOs in the Asia-Pacific region; and to address illegal fishing as well as species-specific protections for ecologically critical and iconic marine species, such as whales and sharks.

RFMO Actions. ICCAT annually reviews fishery-related activities in its Convention Area by members and non-members. In accordance with ICCAT's recommendation concerning trade measures, if an ICCAT member or non-member is found to be diminishing the effectiveness of ICCAT, the Commission may “identify” that member or non-member. ICCAT then sends a letter notifying the party of the identification, including the reasons for it, and asking the party to rectify the situation. Failure to rectify the identified activity may result in the imposition of penalties, such as quota reduction or, as a last resort, non-discriminatory trade-restrictive measures. To date, trade-restrictive measures have been applied several times to non-members, and once to an ICCAT member.

In 2015, ICCAT identified one member (Trinidad and Tobago) for chronic overharvests, lack of a management framework, and failure to implement logbook requirements. In addition, ICCAT agreed to send 26 other members and one cooperating non-member letters of concern, noting specific but less serious issues that required correction. ICCAT also notified Mauritania and Nicaragua that, pursuant to an ICCAT data-reporting instrument, they were prohibited from catching species under ICCAT’s mandate until they submitted catch data for 2014 or until they

sent confirmation of zero catches to the Secretariat. Letters to non-members sought additional information about their catches and encouraged them to cooperate more fully with ICCAT.

In 2016, ICCAT identified four CPCs (Liberia, Sao Tome and Principe, Sierra Leone, and Trinidad and Tobago) and two non-members (Dominica and Grenada) pursuant to ICCAT's trade measures recommendation, due to significant and persistent lack of reporting and/or overharvest in some fisheries. Liberia was identified due to lack of sufficient actions to address unauthorized transshipment by a vessel flying its flag and concerns about Liberia's ability to effectively control its carrier vessels to ensure respect of ICCAT requirements. The Commission will notify those countries of their identifications; written responses explaining steps taken to rectify the compliance issues must be sent to ICCAT at least 30 days before its 2017 annual meeting. In addition, 27 members and two non-members with cooperating status will receive letters of concern about less serious issues that still need to be rectified during 2017.

Also at the 2015 meeting, ICCAT adopted a U.S. proposal to improve implementation of the recommendation on penalties applicable in the case of non-fulfillment of reporting obligations, through a protocol to distinguish reported zero catches from unreported catches in the official statistics. In 2016, this protocol was used successfully: ICCAT members were sent letters indicating that they are prohibited from catching certain species in 2017 unless and until they submit the required data or confirm zero catch for those species.

The United States strongly supports moving toward electronic implementation of ICCAT catch and trade documentation programs. In 2015 and 2016, ICCAT continued work on the development of its electronic Bluefin Catch Document program, which is designed to enable verification of the legitimacy of products in near real-time. The electronic system will reduce the implementation burden associated with a paper-based system on the seafood industry, governments, and the ICCAT Secretariat; minimize mistakes; and make it more difficult to falsify catch documents. ICCAT members were required to use the program as of May 1, 2016.

The WCPFC has discussed adoption of a CDS for several years, but with little progress. At its 2012 meeting, the Commission adopted terms of reference for a working group, which has met annually since 2013. In 2015, the Commission adopted a CDS work plan, which included development of CDS standards and a draft management measure, as well as a trial mass balance reconciliation of available data from 2013. The most recent meeting of the working group took place in October 2016, during which the group recommended that the mass balance reconciliation trial be suspended, due to problems obtaining the necessary data for evaluation. The Pacific Islands Forum Fisheries Agency presented a paper to the working group on the key elements of a future CDS conservation and management measure. A short paper providing an update on the status of work on the draft CDS standards was presented at the annual meeting in December 2016. The WCPFC intends to work electronically on the management measure with the goal of having a draft measure ready for consideration at the annual meeting late in 2017.

CCAMLR has agreed to make its toothfish CDS more transparent through the collection of information on the dates a vessel leaves and returns to port, along with GPS coordinates of any transshipment at sea. Technical experts are building a new platform for the CDS, which will be completed in February 2017. It will include more information on transshipments and give industry limited access to the system to submit catch information electronically. A CDS

workshop was held in Southeast Asia in 2016 for non-contracting parties participating in toothfish trade. More workshops are planned for 2017, including in South America. The Commission agreed at its 2016 meeting to a mechanism that will allow a party to assist a non-contracting party in selling or disposing of seized or confiscated toothfish. This assistance may give non-contracting parties an incentive to participate directly in the CDS.

U.S. Contributions to Trade Monitoring. President Obama, through an executive order, mandated the use of a single electronic system, the International Trade Data System (ITDS), to streamline transactions during the import and export of products regulated by any federal agency. ITDS is a U.S. government-wide initiative under the National Customs Automation Program. All U.S. agencies with a role in monitoring trade are partners in ITDS.

As part of its mission to sustainably manage fishery resources, NMFS implements international trade monitoring programs initiated by RFMOs or required by domestic law. With seafood imports currently representing approximately 90 percent of U.S. seafood supplies, these trade monitoring programs are a crucial tool to stop IUU fishery products from reaching U.S. consumers. NMFS helps ensure the legality of imported seafood through trade monitoring programs aimed at specific seafood products.

On August 3, 2016, NMFS published a final rule (81 Federal Register 51126) establishing regulations to integrate the collection of trade documentation under its current trade monitoring programs into the scope of the ITDS. The final rule, which took effect on September 20, 2016, enabled NMFS to meet the President's mandate by requiring that information be submitted through a single electronic portal. The regulation further meets the mandate by streamlining and consolidating NMFS's procedures and trade documentation requirements for certain fishery products, and by establishing processes that integrate the collection of trade data and image files of documentation within ITDS.

As part of the transition to electronic reporting through ITDS, NMFS will issue a single, consolidated permit that will replace the two separate international trade permits currently issued for the Highly Migratory Species and Antarctic Marine Living Resources programs. In addition, the new consolidated permit will be required of importers of products subject to documentation under the Tuna Tracking and Verification Program. A single consolidated permit will also provide a more streamlined and cost-effective approach for collecting import and export documentation. Integration with ITDS is an important step in the longer-term implementation of a risk-based approach to seafood traceability.

C. Monitoring, Control, and Surveillance

1. Information Sharing and Coordination

International information sharing and coordination aimed at deterring IUU fishing takes many forms: cooperation among national authorities to enforce regional and global measures, assistance to developing nations in protecting their own natural resources, and adoption of RFMO procedures to facilitate information sharing on enforcement matters.

NOAA and the USCG work closely with enforcement agencies from Canada, China, Japan, the Republic of Korea, and the Russian Federation to enforce the North Pacific Anadromous Fisheries Commission (NPAFC) prohibition on directed fishing for anadromous stocks in the high seas areas of the North Pacific Ocean. In 2015 and 2016, patrols by Canadian and U.S. fisheries enforcement aircraft from airports in Japan boosted operational effectiveness. The USCG continued to host Chinese Coast Guard officers aboard a USCG cutter to increase the efficacy of ship patrols, under the Chinese shiprider program established through a memorandum of understanding (MOU) signed in 1993. These combined multilateral efforts resulted in patrolling substantial portions of the NPAFC Convention Area in 2015. Since March 2015, parties conducted 180 ship patrol days (164 in the NPAFC Convention Area) and 551 aerial patrol hours in the Convention Area. They sighted more than 500 vessels, with no violations detected. The overall reduction in violations in recent years testifies to the effectiveness of the Commission's cooperative enforcement model.

The United States maintains bilateral shiprider agreements with nine Pacific Island and five West African nations to assist with enforcement in those countries' EEZs. In addition to conducting regular shiprider fisheries enforcement patrols in the Western and Central Pacific Ocean, the USCG collaborates with the U.S. Navy and the U.S. Pacific and Africa Commands in programs called the Oceania Maritime Security Initiative and the African Maritime Law Enforcement Partnership. These programs assist Pacific Island and West African nations in exercising sovereignty over their natural resources by merging USCG enforcement capabilities with Department of Defense resources.

Since March 2015, in the Western and Central Pacific Ocean, the USCG helped conduct 89 boardings (39 from U.S. Navy assets) under bilateral enforcement agreements with Pacific Island nations, with 19 violations documented. Of these, 10 involved WCPFC CMMs, while nine involved national laws applicable within the EEZs of Pacific Island nations. Some of the violations detected resulted in sanctions by the flag State: suspensions of fishing licenses and monetary penalties.

During that same timeframe, in Western Africa the USCG conducted 20 boardings under bilateral enforcement agreements with Cameroon, Ghana, and Senegal, with 46 violations of domestic law documented. Of note, during operations in 2016, a U.S. Navy ship shadowed a piracy case and coordinated effectively with African partner nations. African Nation partnership operations in 2016 also marked the first time a USCG law enforcement detachment deployed aboard an African partner nation vessel.

In the North Atlantic, Canadian Coast Guard ships patrolled the NAFO Regulatory Area between August 17-27, 2015, April 7-21, 2016, and September 19-30, 2016. The two ships carried a USCG NAFO inspector, who trained the Canadian crew on inspection procedures and NAFO forms. During the two patrols in 2016, the Canadians inspected seven NAFO contracting party vessels and found one potential violation.

The North Atlantic Salmon Conservation Organization (NASCO) requests information on the surveillance flights conducted by the Norwegian and Icelandic Coast Guards, as part of its effort to monitor for possible IUU fishing for Atlantic salmon on the high seas. Given the limited nature of this surveillance in recent years, other methods have been explored to better assess

whether IUU fishing of Atlantic salmon may be occurring in international waters. NASCO has requested the cooperation of NEAFC, NAFO, and ICCAT in reporting on suspected IUU fishing activities for salmon that may be detected in their MCS operations. No information related to such IUU fishing has been reported as part of any of these cooperative relationships.

Cooperation among CCAMLR members and globally has resulted in enforcement actions against five of the six known IUU vessels that have operated in the Convention Area in recent years. At the 2015 and 2016 meetings, Spain reported on “Operation Sparrow” and “Operation Sparrow II,” which investigated Spanish companies and citizens who allegedly managed IUU vessels through shell companies domiciled in third countries. The investigations resulted in the seizure of thousands of documents and the instigation of judicial proceedings for serious offenses. Additional proceedings are being scheduled for as many as 50 Spanish crew members of those IUU vessels. France reported on its pilot initiative using satellite surveillance to detect IUU fishing activity in the Convention Area.

2. IUU Vessel Lists

Many RFMOs have established IUU vessel lists as a way of publicizing vessels that have engaged in IUU fishing activities. In some organizations, restrictions may be imposed on vessels that are placed on the lists.

ICCAT reviews its IUU vessel list annually, and there is an intersessional process for cross-listing vessels on the IUU vessel lists of other tuna RFMOs. ICCAT members and cooperating non-members must take necessary measures not to support listed vessels, including by prohibiting imports, landings, or transshipments of ICCAT species. The IATTC and IOTC conduct similar reviews of their IUU vessel lists. At the 2015 meeting of the IATTC, the United States sponsored a proposal to clarify the procedures to add or remove a vessel to the IUU list, which was adopted. In 2016, ICCAT added a new vessel to its list.

CCAMLR did not consider any new vessels for its two IUU vessel lists at the 2015 meeting. In 2016, CCAMLR added three vessels to the non-contracting party list for mislabeling toothfish and other offenses. One vessel was removed from the list after Indonesian authorities sunk it.

The WCPFC first established a list of IUU vessels in 2007, and reviews the list annually. The list remained unchanged from 2013 to 2016, with three vessels listed. Two vessels were nominated to be added to the list in 2016, but both cases were resolved and the nominations withdrawn. SPRFMO has established a list of vessels presumed to have carried out IUU fishing activities in its Convention Area, and requires the collection, reporting, verification, and exchange of data, including a record of vessels authorized to fish in the Convention Area. In 2016, the Commission adopted a measure to recognize that vessels without nationality fishing in the Convention Area are engaged in IUU fishing, and to encourage that action be taken against such vessels. The NPFC adopted an IUU vessel list measure, based on those of the WCPFC and SPRFMO.

NEAFC inspectors observe and inspect vessels in the Regulatory Area in accordance with the NEAFC Scheme of Control and Enforcement. Those without the correct licenses are placed on the NEAFC A list, which entails certain restrictions on their activities. If no extenuating

circumstances emerge from investigations by the flag States, the vessels are placed on the B list, with more severe restrictions. If warranted, NEAFC can remove vessels from either list. NEAFC initiated this scheme in 2005; it has virtually eradicated illegal fishing by non-contracting party vessels in the Regulatory Area.

3. Global Record of Fishing Vessels

The FAO initiative to compile a Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels is intended to provide a tool to prevent, deter, and eliminate IUU fishing and related activities. A global database, where information from many sources will be gathered, will make it more difficult and expensive for vessels and companies acting illegally to do business. In 2014, COFI agreed that the IMO number should be used as the Global Record's Unique Vessel Identifier system for those vessels 100 gross tons or 100 gross registered tons and over, or 24 meters or more. Eventually, all vessels 10 gross tons or 10 gross registered tons or more, or 12 meters or more, will be included (an estimated 725,600 vessels). During the first phase, around 185,600 of the largest vessels (100 gross tons or 100 gross registered tons or more, or 24 meters or more) will enter the record. Spain pledged 250,000 euros toward the costs of the first phase. NMFS has also provided \$130,000 in support of the Global Record.

At its 2014 meeting, COFI recognized the need to establish an advisory process to clarify outstanding issues and to find a solution for the long-term financing of the Global Record. The Informal Open-Ended Technical and Advisory Working Group convened in February 2015 and again in March 2016 to provide guidance on a way forward. The Group recommended the creation of specialized working groups to deal with particular matters at the technical level. Three specialized groups are now addressing issues related to data requirements, data exchange, and third-party data. Their outputs are being consolidated in the form of draft guidelines that define the specifications for members to contribute to the Global Record.

Issuance of IMO numbers to fishing vessels is a critical step in combating IUU fishing. The seven-digit number, once assigned to a vessel, remains unchanged upon transfer of the ship to other owners or flags or upon changes in name. Assignment of an IMO number reduces the potential for IUU vessels to evade enforcement and prosecution through transfer to flags of convenience. The IMO, with U.S. support, in December 2013 amended one of its resolutions to enable fishing vessels to obtain IMO numbers.

Since 2013, and as a direct result of U.S. leadership, all tuna RFMOs to which the United States is a party (IATTC, ICCAT, and the WCPFC), as well as NAFO, SPRFMO, and CCAMLR, have adopted binding measures requiring all eligible vessels to have an IMO number. In the case of ICCAT, if a vessel included on ICCAT's record of vessels authorized to fish for tuna and tuna-like species in the Convention Area is unable to obtain an IMO number, the flag State must provide an explanation of this situation to ICCAT. The ICCAT and SPRFMO requirements for IMO numbers became effective January 1, 2016. At its 2015 meeting the CCSBT also adopted a requirement that all eligible vessels obtain an IMO number, effective January 1, 2017.

An example of a regional approach to a record of authorized vessels comes from the WCPFC, which in 2012 implemented a CMM establishing an interim register of non-member carrier and bunker vessels. The interim list expired in 2013, at which time non-member carrier and bunker

vessels were no longer allowed to operate in the WCPFC Area. This ban provided an incentive for carriers and bunkers to flag to WCPFC members, cooperating non-members, and participating territories. This action also encouraged flag States of carriers and bunkers to become cooperating non-members of the WCPFC. In 2013, after more than two years of negotiation, the WCPFC adopted a CMM to establish standards, specifications, and procedures for the WCPFC Record of Fishing Vessels. These are aimed at making the record as reliable as possible.

The NPFC has established a vessel registry that applies to members and cooperating non-contracting parties, as well as to vessels engaged in transshipment. The latter are required to submit information to the Commission regarding any transshipments occurring in Convention waters.

The Consolidated List of Authorized Vessels is a program begun through the Kobe Process, which began in 2009. A database of all the authorized vessels under each of the five tuna RFMOs, it has been hosted by the IOTC since 2010. Through a joint project of the FAO and the Global Environment Facility, the database is now online and updated in near real time rather than annually, making it a much more effective tool against IUU fishing. It also supports development of the Global Record.

4. Remote Sensing Technology, Observers, and Inspections

At the 2016 IATTC Compliance Committee meeting, various members discussed their difficulties in meeting the requirement for 5 percent observer coverage on longline vessels greater than 20 meters in length overall. Members decided that future compliance reports will show the implementation levels of longline observer coverage. In the near term, all CPCs will receive a letter regarding the observer requirements, with a request for data on observer coverage. Mexico proposed in both 2015 and 2016 to expand observer coverage on longline vessels to 20 percent, but no consensus was reached. An IATTC resolution on silky sharks requires effective monitoring measures to determine whether the bycatch limit is exceeded.

The IOTC adopted a similar measure, requiring 5 percent observer coverage for each gear type on all fleets for vessels over 24 meters, and for vessels under 24 meters that fish outside their own EEZs, effective January 2013. The sampling scheme for artisanal fisheries targets 5 percent coverage. A review of the implementation of the IOTC measure in 2016 indicates that 15 IOTC countries have accredited observers; however, the rate of compliance with the required coverage across IOTC members is only 20 percent. The IOTC endorsed a pilot project exploring whether electronic observation and observation in port could collect data matching IOTC standards, and how such techniques could be used to increase compliance.

At the 2016 annual meeting, ICCAT adopted improvements to its measure establishing minimum standards for national observer programs. The new measure adds obligations to help ensure the safety of observers and their ability to carry out their duties. For regional observer programs, however, ICCAT did not reach consensus on a U.S. proposal to adopt similar standards. The United States and several co-sponsors resubmitted a proposal that would modernize ICCAT's high seas boarding and inspection scheme. Strong opposition remains among some parties, but

the concept of a pilot program for inspector exchanges was well received. The United States will develop a proposal for consideration at a future ICCAT meeting.

The WCPFC Convention requires that all vessels fishing for highly migratory fish stocks on the high seas in its Convention Area participate in a VMS operated by the Commission. The system has been in place since 2013. At the request of any coastal State member, the WCPFC's VMS may also include waters under the member's national jurisdiction. This feature, unique to the WCPFC, greatly expands the utility of the VMS and provides coastal States with enhanced ability to detect foreign vessels fishing illegally in their waters. Fourteen members, including the United States, have chosen to include waters under their jurisdiction in the Commission VMS.

In 2015, CCAMLR adopted many of the recommendations from the technical working group on VMS, including: increased VMS position-reporting frequency for finfish vessels; a reduction in time for contracting parties to forward position reports from toothfish vessels, from four hours to one hour; and adoption of minimum standards for automatic location communicators. One member prevented a similar increase in VMS position-reporting frequency for non-fish (krill) vessels from taking effect until December 1, 2019. The same member blocked another proposal to shorten the time for forwarding position reports for non-toothfish vessels.

NAFO established a 100-percent compliance-based observer program in 1998, which requires all contracting party vessels to carry at least one observer when operating in its Regulatory Area. More recently, NAFO introduced an electronic reporting system, under which observer coverage may be reduced to 25 percent for vessels that implement daily electronic reporting of catches. NAFO has been considering expanding observers' duties to include scientific functions, but a 2015 review highlighted concern among some NAFO parties that a dual role for observers might be untenable. NAFO also requires 100-percent VMS coverage for all vessels fishing in its Regulatory Area. NAFO took further steps in 2015 and 2016 to improve the accuracy of catch reporting data from all sources and to enhance its utility for both compliance and science.

NEAFC requires its parties to implement a VMS for vessels of a certain size that fish, or plan to fish, in its Regulatory Area. The Commission also requires parties to ensure that all of their vessels in the Area carry scientific observers qualified by the flag State. In 2015, NEAFC discussed, but ultimately rejected, the possibility of expanding observer duties to serve a compliance function.

SEAFO requires 100-percent observer coverage. The current program is primarily scientific, collecting comprehensive fishing activity information and biological data. It also requires reporting of IUU fishing activity. Although the SEAFO Convention explicitly includes a compliance role for observers, that function has not yet been implemented.

SPRFMO is developing a Commission VMS, with a working group established in 2015 and making progress before the 2016 meeting. There, SPRFMO agreed that the working group should develop a call for proposals for a VMS service provider. The Commission also adopted terms of reference for a working group to develop an observer program.

Last, at the 2015 Our Ocean conference, President Obama announced NOAA's commitment to

support global efforts with a near-real time data source that can be used to detect boats that may be engaged in IUU fishing practices by the end of 2017. NOAA's new Boat Detection products detect vessels that are lit or use lights, including fishing vessels using lights to attract fish. As such, the product can detect human activity in marine protected areas. These products use data collected by the Visible Infrared Imaging Radiometer Suite (VIIRS) instrument on board Joint Polar Satellite System satellites.

5. Safe Ocean Network

At the 2015 Our Ocean Conference in Chile, Secretary of State John Kerry introduced the Safe Ocean Network, an initiative designed to create a global community to strengthen all aspects of the fight against IUU fishing. The program builds on existing efforts by its partners, through enhanced regional and global integration of existing and emerging technologies, the use of internet-based tools, improved coordination, and capacity building. Participants include national governments, international organizations, NGOs, industry, and other stakeholders. A committee of eight U.S. agencies works to develop and execute the network's global outreach and coordination efforts.

The Safe Ocean Network is identifying or developing a group of pilot projects within areas relating to detection, enforcement, and prosecution of IUU fishing. It is also establishing a framework in which the network's partners could collaborate and share information, identify tools for improving at-sea monitoring, and focus resources and efforts to combat IUU fishing. In 2016, the United States hosted the two-day Counter Illegal Fishing Initiative Planning Meeting, the Safe Ocean Network's first international effort. Eighty international fisheries experts from 16 countries, 14 NGOs, various intergovernmental organizations, and other interested stakeholders highlighted major international projects devoted to detecting, enforcing, and prosecuting IUU fishing. At the 2016 Our Ocean Conference held in Washington, D.C., the Safe Ocean Network identified more than 40 such projects, with funding of more than \$82 million.

D. Destructive Fishing Practices and Vulnerable Marine Ecosystems

The United States and the international community have taken a number of actions in recent years to mitigate the adverse impacts from fishing on VMEs (see Part II.A for the statutory definition). These actions built on guidance from several UNGA resolutions on sustainable fisheries, specifically Resolutions 61/105, 64/72, and 66/88.

In 2015, UNGA agreed to initiate a process to create a legally binding instrument on the conservation and sustainable use of biodiversity in waters beyond national jurisdiction, also known as the high seas. The resolution established a preparatory committee that will meet for two years with the goal of developing elements of a draft text for the agreement. The committee met twice in 2016 and will meet twice in 2017. Any new instrument would likely be an implementing agreement under the Law of the Sea Convention. One element would focus on strengthening conservation of biodiversity on the high seas, including through establishing marine protected areas and new requirements for environmental impact assessments. The second would address sharing of benefits from the use of marine genetic resources found in these areas.

The NPFC adopted measures in 2016 for management of bottom fishing in the Convention Area. They limit the harvest of Pacific armorhead on several seamounts near the EEZ off Hawaii, and require vessels to move at least 2 km when they encounter 50 kg or more of deep sea corals in a set. Other indicator species that represent VMEs could be added to the encounter protocols in the northeastern part of the Convention Area.

The United States has taken a strong role in NAFO to protect VMEs. In 2015 and 2016, NAFO continued to enhance this protection by closing a number of VME areas within its Regulatory Area to all fishing. In 2016, NAFO completed a comprehensive re-assessment of the impacts of all its bottom fisheries and closed an additional 239 km² to protect significant concentrations of sea pens (a VME indicator species). This closure brings the total area protected from bottom fishing to about 280,511 km², representing around 15 percent of the Regulatory Area.

Similarly, NEAFC has closed a number of areas in an effort to protect VMEs, and is taking a close look at the potential effects of exploratory fisheries on these resources.

SEAFO has made progress in protecting seamounts and vulnerable marine habitats from significant adverse fishing impacts. SEAFO has defined its fishing footprint, closed 11 areas to bottom-contact gears, and implemented protocols for exploratory fishing and for encounters with VME indicator species. Furthermore, new fishing areas are subject to scientific assessment prior to approval. SEAFO has closed approximately 505,000 km² to bottom fishing.

Fourteen notifications of encounters with potential VMEs during exploratory bottom fisheries in the Convention Area were submitted to CCAMLR during the 2014-2015 and 2015-2016 seasons, making a total of 169 notifications since the program began in 2008. These notifications have led to the declaration of 76 VME risk areas and nine fine-scale rectangles closed to fishing.

SPRFMO adopted a measure for the management of new and exploratory fisheries in 2016. It requires specific information to be submitted to the Scientific Committee, which is to develop a data collection plan, as well as observer coverage. SPRFMO also adopted a measure for exploratory fishing for toothfish, which allows for bottom longlining by New Zealand vessels in 2016 and 2017 to obtain scientific data. The measure includes specific catch and effort controls, bycatch mitigation measures, and observer requirements.

VII. Strengthening Fisheries Organizations to End IUU Fishing Activities

The United States aggressively combats IUU fishing through global bodies such as UNGA and the FAO, regionally through RFMOs, and through bilateral engagement. The United States is a member of numerous multilateral RFMOs, in addition to many global and bilateral agreements and arrangements. In recent years, the international community increasingly has recognized that successful action against IUU fishing activities and related problems would require strengthening existing regional fisheries institutions. This Part highlights the enhancement of RFMOs in ways that induce their members to be more accountable, and influence non-members to be more cooperative, in managing fisheries on a sustainable basis. The United States has pushed for improved governance systems in RFMOs to bring them into closer conformity with the provisions of the United Nations Fish Stocks Agreement (UNFSA). Some RFMOs have been updated through renegotiation of their underlying agreements or negotiation of new protocols. Others are finding ways to improve management and compliance without renegotiating their agreements. While the United States is not a member of IOTC, it does have significant interest in this organization and reports on some of its activities below.

A. Renegotiation or Amendment of Underlying Agreements

After several years of discussion, informed by an independent performance review in 2008, ICCAT agreed at its 2012 meeting to launch a process to develop Convention amendments concerning species scope, decision-making procedures, and non-party participation, among other subjects. The United States hosted the third meeting of the working group in 2015; a fourth meeting was held in 2016. ICCAT was expected to finalize amendments to its Convention during the 2016 annual meeting, as only two issues remained unresolved. A significant difference of view came to light, however, which precluded resolution of the last two issues. Efforts will continue in 2017.

U.S. officials were heavily involved in negotiating an agreement to update and modernize the guiding principles, mandate, and functions of the IATTC, a body established in 1949 to manage tuna fisheries in the Eastern Pacific Ocean. The new agreement – the Antigua Convention – entered into force on August 27, 2010. Title II of the IUU Fisheries Enforcement Act provides for implementation of the Convention, including appointment of U.S. commissioners, an advisory committee, and a committee of scientific advisers, as well as authority for rulemaking. The President signed the instrument of ratification for the Antigua Convention on February 10, 2016; the United States deposited the instrument two weeks later. NMFS has published regulations in accordance with the Act.

NAFO in 2007 adopted comprehensive amendments to its Convention that will enter into force once nine contracting parties deposit their instruments of ratification. To date, Canada, Cuba, Denmark, the EU, France, Iceland, Norway, and the Russian Federation have done so. The Senate gave its advice and consent to the amendments on April 3, 2014. The Ensuring Access to Pacific Fisheries Act revises the Northwest Atlantic Fisheries Convention Act of 1995, allowing the United States to ratify the amendments and bring the them into force.

B. Performance Reviews

Many RFMOs have undertaken performance reviews to bolster their organizations. The Review Conference on the Fish Stocks Agreement at its meeting in May 2010 urged all RFMOs that had not undertaken performance reviews, including some element of independent evaluation, to do so no later than 2012.

At its 2015 annual meeting, ICCAT adopted terms of reference for its next performance review. The independent review panel presented its report to the Commission during its 2016 meeting. ICCAT took immediate action with respect to a few of the panel's recommendations. ICCAT also agreed to convene a working group during 2017 to consider further the issues and recommendations stemming from the panel's report, with a view to referring them, as appropriate, to the relevant bodies of ICCAT for possible action.

A report of the IATTC performance review was given at the 2016 annual meeting. Findings and recommendations were grouped into three categories: governance, management, and science. An action plan has been circulated to members for comment. The IOTC undertook a second performance review of its operations between 2014 and 2016, resulting in recommendations that focus on resolving structural weaknesses that impede the Commission's ability to achieve its conservation and management objectives. Such resolution may require amendment of the IOTC Agreement. In 2016, the IOTC endorsed these recommendations and established a program of work to implement them, including drafting text for a revised agreement. The Commission agreed that a performance review would be carried out every five years.

In 2011, the WCPFC received a set of 79 recommendations from an independent performance review conducted by representatives of members and independent experts. Subsidiary bodies continue to consider relevant recommendations. During 2015 and 2016, NAFO continued to implement the recommendations of its 2011 Performance Review Panel. At its 2016 meeting, NAFO agreed to undergo a second performance review, to be completed by the next meeting in 2017. The EU offered terms of reference for the next CCAMLR performance review. The Commission adopted the proposal at its 2016 meeting. The review, involving a panel of nine experts, will be completed prior to the 2017 meeting. The SPRFMO Convention includes a requirement for a performance review every five years (Article 30).

C. Bolstering Responsibilities of Members and Non-Members

While the IOTC has a compliance scheme in place, the 2016 Compliance Committee meeting noted low levels of member compliance with CMMs. Compliance rates have improved slightly over the past couple of years, particularly for those CPCs that have received support missions from the Secretariat; however, the overall compliance rate of CPCs is just 57 percent – very low compared with other RFMOs.

In 2015 and 2016, CCAMLR continued to evaluate members' compliance with its conservation measures. Some changes to the process were agreed, including an initial self-assessment by members, addition of all the remaining conservation measures, aspects of the scientific observer scheme, and revised compliance status categories. The Commission also considered revisions,

proposed by the United States, to conservation measures on licensing and transshipment. The purpose was in part to monitor and control transshipment of Antarctic marine living resources by non-contracting parties, but the complexity and scope of the proposals prevented their acceptance by some members. In 2016, the United States, joined by Australia, tried a somewhat different approach, with a proposal to establish a record of carrier vessels to control transshipments. Again, lack of agreement on key elements of the proposal blocked its adoption.

In 2011, the WCPFC initiated a trial scheme for compliance monitoring. The scheme continues to improve after six years of implementation. In 2015, the United States developed a Secretariat proposal for a more robust, multi-year scheme that included revisions to provide a special compliance status in cases where investigations may be outstanding, and to accommodate capacity assistance needs where appropriate. The United States intended for the measure to be permanent, but the Commission adopted it for only a two-year period. The United States also developed a list of obligations to be assessed through the compliance monitoring process in 2016-2018, which was adopted. The first year of implementation of the revised measure was very successful, with further improvement expected in its second year and an independent review of the scheme to occur in 2017-2018.

Based on recommendations from its internal and external performance review processes on ways to strengthen the organization, NASCO adopted an action plan that includes establishing an annual review of actions taken by parties to implement NASCO agreements and to fulfill their treaty obligations. The objective is to help ensure accountability by the parties and create an incentive for further action where needed. Starting in 2014, the organization has streamlined its work to allow more time for discussion of annual progress reports from each jurisdiction and to hold focused, theme-based special sessions. The 2015 special session on hydropower and the 2016 special session on aquaculture highlighted several examples of best practices, while also discerning areas of improvement needed for alignment with NASCO's agreements.

The IATTC Compliance Committee decided in 2016 to consider an agenda item at the 2017 meeting to develop criteria to identify inadequate compliance with all IATTC measures, with the purpose of fashioning action plans, as necessary, for individual members.

In 2015, SPRFMO adopted a measure to assess compliance of members and cooperating non-contracting parties with their obligations under the Convention and SPRFMO decisions, identify areas in which technical assistance or capacity building may be needed, find aspects of measures that may require improvement to facilitate implementation, and take action against non-compliance.

D. Steps to Enhance Participation by Non-Members

Consistent with the provision of the UNFSA relating to the duty of non-members to cooperate in the conservation and management of fish stocks, RFMOs are working toward enhanced participation by non-members in their organizations.

The IATTC has four cooperating non-parties: Bolivia, Honduras, Indonesia, and Liberia. The IOTC has four cooperating non-contracting parties: Bangladesh, Djibouti, Liberia, and Senegal. At the 2015 annual meeting, ICCAT renewed the cooperating status of Bolivia, Chinese Taipei,

Guyana, and Suriname. Costa Rica applied for cooperating status, which was granted in 2016. Through the process to amend the ICCAT Convention, ICCAT is considering approaches to enhance the participation of non-members in Commission activities.

The NPFC discussed rules for cooperating non-contracting parties in 2016 and will continue at its 2017 meeting. The United States, a signatory to the Convention, currently participates as an observer, along with Vanuatu. SPRFMO adopted rules for cooperating non-contracting parties in 2013. As it has not yet acceded to the Convention, the United States is currently in that status, along with Colombia, Liberia, and Panama. The Ensuring Access to Pacific Fisheries Act will make it possible for the United States to become parties to both conventions.

In CCAMLR, States that have acceded to the Convention but have not applied for membership in the Commission are obligated to abide by all the conservation measures adopted by the Commission and may not fish in the Convention Area. Currently there are 11 such non-members. In addition, any non-cooperating party may cooperate with CCAMLR by participating in its CDS; Seychelles is the only country with that status, but Ecuador has recently applied to participate. Singapore has been provided limited access to the CDS for monitoring of its toothfish trade.

Following a substantial revision of the WCPFC measure pertaining to cooperating non-member status in 2008, the Commission again amended these provisions in 2009 to add a requirement that an applicant for this status must make financial contributions commensurate with what it would be assessed should it become a contracting party. The WCPFC approved cooperating non-member status for 2016 for seven applicants: Ecuador, El Salvador, Liberia, Mexico, Panama, Thailand, and Vietnam.

VIII. International Efforts to Reduce Impacts of Fishing on PLMRs

The United States continues to work actively within the international community to promote measures that will protect and conserve PLMRs from bycatch or other harmful activities. U.S. bilateral and multilateral efforts include direct advocacy as well as training and other assistance. To date, U.S. efforts and RFMO actions concerning PLMRs have generally concentrated on the impacts of fishing on sea turtles, sharks (see Part IX), dolphins, and some other marine mammals. This Part describes the actions taken by international bodies with regard to these PLMRs, and U.S. involvement in those actions. While the United States is not a member of IOTC, it does have significant interest in this organization and reports on some of its activities below.

A. Global Forums

United Nations General Assembly (UNGA). As a direct result of U.S. leadership, the UNGA 2011 Sustainable Fisheries Resolution called for States and RFMOs to establish or strengthen existing data collection programs on the bycatch of marine mammals, sea turtles, seabirds, and sharks, in addition to supporting research on and development of appropriately selective gears. The 2016 Sustainable Fisheries Resolution calls on States and RFMOs to coordinate in developing and implementing clear and standardized bycatch data collection and reporting protocols for non-target species. It encourages States to ensure proper implementation and enforcement of measures they have taken with regard to bycatch and discards. The 2016 Resolution also calls on States to encourage full utilization of sharks caught in sustainably managed fisheries and notes the continuing practice of fins being removed from sharks while the rest of the carcass is discarded at sea.

International Whaling Commission (IWC). To address bycatch of large whales entangled in fishing gear, an IWC expert advisory group, including members from Australia, Canada, New Zealand, South Africa, and the United States, enhances response and reporting capabilities in developing countries. An IWC Secretariat staff member conducts entanglement response training at the request of member nations. The first entanglement response training workshop was held in March 2012. Since then, the initiative has reached more than 700 fishermen, conservationists, scientists, and government representatives from more than 22 countries on four continents. In 2015 and 2016, the IWC held seven training workshops in countries including Greenland, Japan, and Oman. In 2015, two trainees got on-the-water training in New England, during an 11-hour operation to free a humpback whale. In 2016, the Commission endorsed the establishment of a standing working group on bycatch under the Conservation Committee and the development of a bycatch mitigation initiative supported by an expert panel. Over the next two years, the IWC will continue to build entanglement response capacity, help to collect better data through a global database on entanglement, and help to advance work generated from the 2016 IWC workshop on entanglement prevention.

Convention on the Conservation of Migratory Species of Wild Animals (CMS). Also known as the Bonn Convention, the CMS aims to conserve terrestrial, marine, and avian migratory species throughout their range. The United States is not a party to CMS, but attends meetings as a non-party. The 12th Meeting of the Conference of Parties to CMS will take place in 2017.

B. RFMOs

Adopted by CCAMLR at its October 2016 meeting, the enormous Ross Sea marine protected area reserve will safeguard marine species, biodiversity, and habitat such as foraging and nursery areas. Initially proposed by the United States and New Zealand in 2012, the measure was approved after China, in 2015, and the Russian Federation, in 2016, joined the other parties in consensus. The area is composed of a general protection zone, a special research zone, and a krill research zone, each designed to achieve certain protection and scientific objectives. The marine protected area will enter into force on December 1, 2017, and will expire in 2052 unless the Commission reaffirms or modifies it.

ICCAT directs members and cooperating parties to require collection of bycatch and discard data through existing logbook and observer programs, and to report these data in a standardized electronic form. ICCAT has also adopted minimum standards for observer coverage, including 5 percent minimum coverage (as measured in effort) for pelagic longline, purse seine, bait boat, trap, gillnet, and trawl fisheries. For artisanal fisheries that are not subject to these standards and requirements, CPCs are required to collect bycatch data through other means and to describe their efforts in annual reports. Since 2012, CPCs are also required to report on steps taken domestically to mitigate bycatch and reduce discards.

Under its Convention, the WCPFC is to adopt measures to minimize waste, discards, catch by lost or abandoned gear, catch of non-target species, and impacts on associated or dependent species. Another mandate is to promote the development and use of selective, environmentally safe, and cost-effective fishing gear and techniques. The WCPFC has adopted a number of tax-specific measures to meet these obligations, as described in the following sections. In 2016, the WCPFC, funded by the Common Oceans partnership, convened two four-day workshops designed to conduct a joint analysis of the effectiveness of sea turtle mitigation in Pacific longline fisheries. Held in Honolulu, Hawaii, they were attended by 38 experts from 16 countries, along with invited NOGs and intergovernmental organizations. The results will be presented to the WCPFC Scientific Committee.

During its 2016 meeting, the IATTC, following a presentation by the United States on the status of Pacific leatherback sea turtles, agreed to reconvene a bycatch working group in 2017. Initial efforts will focus on those turtles, but may include other species such as sharks and mobulid rays.

During its 2016 annual meeting, NAFO supported continuation of the working group focusing on bycatch. In 2017, this working group will finalize a strategy to improve bycatch management within NAFO.

C. Specific Taxa

1. Sea Turtles

The United States has listed all sea turtles as either threatened or endangered under the ESA. The U.S. Fish and Wildlife Service and NMFS jointly manage sea turtles domestically and collaborate regularly on international conservation activities. The most up-to-date information

on the current listing status and designation of critical habitat is available at www.nmfs.noaa.gov/pr/species/turtles.

Throughout their range, sea turtles are incidentally caught or entangled in fishing gear including pelagic longline, purse seine, trawl, gillnet, pound net, hook and line, and trap/pot fisheries. Sea turtles migrate vast distances over the course of their lives, making them vulnerable to interactions with fishing gear in coastal areas as well as on the high seas.

The United States has several mechanisms to work with countries to mitigate these interactions. For instance, the Shrimp-Turtle Law (Section 609 of P.L. 101-162) requires other nations to take comparable regulatory measures to reduce sea turtle bycatch in their wild-caught shrimp fisheries if they want to import their product to the United States. Over the past two decades, the United States has worked with many governments to establish turtle excluder device (TED) programs that are comparable to the U.S. program. Each year DOS and NMFS experts carry out TEDs inspections and training across the globe. On May 3, 2016, DOS certified to Congress that the following 14 nations have regulatory programs to reduce sea turtle bycatch comparable to those of the United States: Colombia, Costa Rica, Ecuador, El Salvador, Gabon, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Nigeria, Pakistan, Panama, and Suriname.

Twenty-six nations and one economy have shrimp fishing environments that do not pose a danger to sea turtles. Of these, 10 nations and one economy harvest shrimp using manual rather than mechanical means, or use other shrimp fishing methods not harmful to sea turtles. They are the Bahamas, Belize, the Dominican Republic, Fiji, Hong Kong, Jamaica, Oman, the People's Republic of China, Peru, Sri Lanka, and Venezuela. The 16 other nations have shrimp trawl fisheries in cold waters, where the risk of taking sea turtles is negligible: Argentina, Belgium, Canada, Chile, Denmark, Finland, Germany, Iceland, Ireland, the Netherlands, New Zealand, Norway, the Russian Federation, Sweden, the United Kingdom, and Uruguay. Specific fisheries in Australia, France, and Spain have been deemed eligible to export product to the United States.

In addition to the Shrimp-Turtle Law, NMFS has also taken steps around the world to protect sea turtles. For instance, in 2015 NMFS launched the Species in the Spotlight Initiative to highlight eight species, including Pacific leatherbacks, likely to go extinct without significant conservation intervention. Pacific leatherbacks continue to face significant threats, across their range, from bycatch in coastal and high seas fisheries. As a result of this bycatch, nesting has declined by 80 percent in the Western Pacific and by 97 percent in the Eastern Pacific. Through multilateral agreements, as well as through RFMOs and fisheries bilateral agreements, the United States is collaborating with other range States to stop the decline by reducing sea turtle bycatch in fisheries.

Multilateral Sea Turtle Arrangements. With U.S. leadership, two multilateral arrangements are in place to conserve and protect sea turtles. The Inter-American Convention for the Protection and Conservation of Sea Turtles (IAC), as a binding treaty, serves as an important vehicle for countries in the Americas to coordinate their conservation and recovery efforts. Parties are obliged to reduce, to the greatest extent practicable, incidental capture, retention, harm, or mortality of sea turtles in the course of fishing activities. Given the different capacities of parties in the region, the IAC has focused on building national capacities to conserve and recover sea turtle species. For instance, at the Conference of Parties in Mexico City in June

2015, the parties approved recommendations to improve Costa Rica's management of exceptions from the Convention's harvest prohibitions. An exception allows for domestic egg harvest for traditional, subsistence communities under very specific conditions. At this conference, the IAC adopted resolutions to improve conservation of Eastern Pacific leatherbacks and loggerheads in the Convention Area. A task force is working to foster implementation of the resolution on Eastern Pacific leatherbacks.

The Indian Ocean Southeast Asian Marine Turtle MOU, a non-binding instrument, recommends conservation actions, such as measures to prevent bycatch of sea turtles, but cannot place binding measures on its Signatory States. The 35 Signatory States meet biennially to evaluate implementation of the Conservation and Management Plan, as well as to identify new actions for the work program. The meeting in 2014 launched the Network for Sites of Importance to Marine Turtles, with 10 sites in nine countries. The next Signatory States meeting should be in 2017 or 2018, but may be delayed since the Secretariat is in the process of recruiting a new coordinator.

ICCAT's Standing Committee on Research and Statistics (SCRS), through its Subcommittee on Ecosystems, continued work to evaluate the impact of ICCAT fisheries on sea turtles, focusing first on estimating turtle bycatch in the pelagic longline fishery. The Subcommittee in 2016 obtained information on the area of operation and reported fishing effort of 16 Atlantic longline fleets from the effort distribution database. The Subcommittee identified sea turtle bycatch rates for six fleets, and assigned bycatch rates to others. The scientists estimated the total number of sea turtle interactions, using the bycatch rates per fleet multiplied by the total reported fishing effort. This work is expected to continue in 2017.

2. Dolphins

The 2013 Report to Congress describes the history and objectives of the Agreement on the International Dolphin Conservation Program. Nations and entities that have acceded to or ratified the Agreement include Belize, Colombia, Costa Rica, Ecuador, El Salvador, the EU, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, the United States, and Venezuela. Bolivia and Vanuatu apply the Agreement provisionally. The observed dolphin mortality in the EPO purse seine fishery for 2014 was approximately 975; for 2015, it was approximately 765.

Since 2006, no fishery-independent surveys of dolphin abundance have been conducted. The IATTC hosted a workshop in 2016 with the goal of identifying options for developing indices with which to monitor dolphin stock status. The workshop brought together experts in line-transect surveys; mark-recapture studies; abundance estimation and population modeling; and imaging tagging, genetics, and life history data. A report of the meeting has been published.

3. Other Marine Mammals

The bycatch of marine mammals in fisheries is a significant factor in long-term conservation and management of marine mammal stocks worldwide. Hundreds of thousands of these animals are killed each year through entanglement in fishing gear. Marine mammals interact with or are bycaught in gillnet, trap, longline, and trawl fisheries. Accurate abundance and bycatch estimates for marine mammals are lacking in areas where marine mammal distribution overlaps

with coastal and international fisheries, which makes quantitative analysis of bycatch extremely difficult.

At the past three COFI meetings, the United States noted its ongoing efforts to assemble information on mitigation of marine mammal bycatch in commercial fisheries through a series of international workshops, and signaled its desire to develop international guidelines to reduce the bycatch of marine mammals in commercial fisheries, similar to existing guidelines for sea turtles and seabirds. In 2016, COFI meeting participants agreed to an expert workshop to review the findings of recent international marine mammal bycatch workshops, with an aim toward developing such guidelines.

In August 2015, the Permanent Commission for the South Pacific, with the cooperation of NMFS, convened a workshop to teach best practices for collecting data to estimate marine mammal abundance on oceanic surveys planned for the Pacific coast of South America. Marine mammal observers and other interested parties from Chile, Colombia, Ecuador, and Peru attended. The goal is to place marine mammal observers on regularly occurring oceanographic cruises conducted in the EEZs of these four countries.

In 2013, the IOTC adopted a CMM to prohibit vessels from setting purse seines on a school of tuna associated with a cetacean. In the event a cetacean is unintentionally encircled in a purse seine net, the vessel captain must take steps to ensure the cetacean's safe release. Compliance analysis in 2016 indicated that 74 percent of IOTC members were in compliance with these obligations. The United States introduced a similar measure at the 2016 annual meeting of ICCAT. In addition to prohibiting the intentional encirclement of cetaceans, the proposal called for development of best practices concerning safe handling and release of cetaceans in ICCAT fisheries. The proposal was not adopted.

MMPA Import Rule. NMFS published a final rule (81 Federal Register 54389, August 15, 2016) implementing the MMPA provisions related to the importation of fish and fish products from fisheries that have incidental or intentional mortality and serious injury of marine mammals. These regulations establish conditions for evaluating a harvesting nation's regulatory program for reducing marine mammal incidental mortality and serious injury in fisheries that export fish and fish products to the United States. Under this rule, harvesting nations must apply for and receive a comparability finding for each fishery identified by NMFS in the List of Foreign Fisheries, before they may import fish and fish products into the United States. The final rule establishes procedures that a harvesting nation must follow, and conditions to meet, to receive a comparability finding for a fishery. The final rule also establishes procedures for intermediary nations to certify that exports from those nations to the United States do not contain fish or fish products subject to an import prohibition. Agency actions and recommendations under this rule will be consistent with U.S. international trade obligations. At this time, the United States is not yet evaluating nations with respect to the applicability of these MMPA import provisions, but is requesting that nations provide information on each of their fisheries exporting fish and fish products to the United States. To ensure effective implementation, the rule establishes a five-year exemption period to allow foreign harvesting nations to develop, as appropriate, regulatory programs comparable in effectiveness to U.S. programs and to apply for comparability findings for their fisheries.

IX. Shark Conservation and Protection

The key components of a comprehensive framework for international shark conservation and management have already been established in global agreements and organizations, which have identified or adopted provisions or guidance to assist States and RFMOs in the development of measures to conserve and sustainably manage sharks. Some of these mechanisms have created international legal obligations with regard to shark conservation and management, while others are voluntary. While the United States is not a member of IOTC, it does have significant interest in this organization and reports on some of its activities below.

A. Global Forums

CITES. Two proposals to list shark species in Appendix II of CITES were considered and adopted at CoP17. These species were proposed for inclusion in Appendix II because some regional populations have experienced significant declines, and the species are known to be in international trade. The Maldives, with many co-sponsors, proposed to list the silky shark. Sri Lanka, also with many co-sponsors, submitted a proposal to include the bigeye thresher shark in Appendix II, with the inclusion of common and pelagic thresher sharks as look-alike species.

Parties in favor of the proposals cited the vulnerability of these shark species to overexploitation, declines in population, and concern regarding the levels of harvest and international trade. Some noted the listings would complement measures adopted by RFMOs. Those not supporting the proposals believe these species do not meet the criteria for listing in Appendix II, that RFMOs are the only bodies that should regulate the harvest and trade in these sharks, and that parties are still struggling to implement the shark listings adopted by CITES in 2013.

Both proposals were adopted by a large majority, with the United States voting in favor. Each carried an annotation to delay entry into effect by 12 months, to resolve technical and administrative issues.

Convention on the Conservation of Migratory Species of Wild Animals. The United States is not a party to the CMS; however, non-parties are able to participate in individual instruments – MOUs and agreements – concluded under the CMS umbrella. The MOU on the Conservation of Migratory Sharks is a non-binding MOU adopted in 2010; it provides an international framework for coordinating sustainable management and conservation efforts for migratory sharks. The Second Meeting of Signatories was held in February 2016 in San Jose, Costa Rica. The Signatories agreed to add 22 species of sharks to the MOU: five species of sawfish, three of thresher shark, nine species of mobulid ray, the reef manta ray, the giant manta ray, the silky shark, the great hammerhead, and the scalloped hammerhead. Signatories also adopted a three-year budget and comprehensive work program.

B. RFMOs

The IOTC has a measure in place for the conservation of whale sharks that prohibits setting purse seine nets around them and requires that all steps possible be taken for live release. There is also a measure prohibiting retention of oceanic whitetip and thresher sharks. Another more general measure requires collection of statistics on sharks, full utilization of shark catch, and live

release where possible. Compliance analysis in 2016 indicated that 74 percent of IOTC members were in compliance with their reporting obligations.

Every year since 2009, the United States has introduced a proposal at ICCAT to require that all sharks be landed with their fins naturally attached. At the 2015 and 2016 annual meetings, as in previous years, no consensus could be reached; however, support for the measure has increased substantially, with 30 of ICCAT's 50 members co-sponsoring the measure and others speaking in favor.

At its 2015 annual meeting, ICCAT adopted a measure requiring, among other things, fishing vessels to promptly release unharmed, to the extent practicable, porbeagle sharks caught in association with ICCAT fisheries. In addition, the measure requires ICCAT parties to provide information regarding discards and releases of porbeagle sharks. A final rule implementing this measure in U.S. commercial and recreational fisheries was published August 24, 2016. In 2016, ICCAT adopted a binding measure for North Atlantic blue sharks caught in association with ICCAT fisheries. It sets a harvest level of 39,102 tons and requires consideration of additional management measures if the average total catch of the stock exceeds this level in any consecutive two-year period beginning in 2017.

In 2004, NAFO set a 13,500 metric ton total allowable catch limit for thorny skates, a number far in excess of scientific advice for this stock. Although catches remain below the catch limit of 5,000 metric tons set in 2014, the potential for overharvest is considerable. The United States continued to advocate for greater protection for thorny skates in 2015 and 2016, but the catch limit remains at the 2014 level. In 2016, NAFO adopted a measure to ban shark finning; the United States sponsored the proposal, along with Cuba, the EU, and Norway.

The WCPFC has a CMM that includes a prohibition against shark finning, a list of "key shark species," and a research plan for conducting stock assessments for those species. Although these measures provide some protection, there is growing concern over the ability to assess compliance, most notably with the required 5 percent fins-to-carcass ratio. The United States has continued to support a move toward a measure requiring fins to be naturally attached, consistent with its domestic regulations.

While CCAMLR bans directed fishing for sharks, except for scientific research, and requires to the extent possible the live release of incidentally caught sharks, shark finning is not prohibited. The United States proposed, for the fourth and fifth time, requiring any retained sharks to be landed with all fins naturally attached. While many members supported the proposal, several blocked its adoption in 2015 and 2016, citing operational concerns regarding safety and storage of frozen sharks with fins naturally attached. The opponents suggested, instead, a ban on finning sharks and discarding carcasses at sea, or a "no retention" policy with respect to certain vulnerable shark species.

In 2015, the IATTC passed a resolution requiring CPCs to prohibit retention of any part or whole carcass of mobulid rays caught in the IATTC Convention Area, with the exception of mobulid rays unintentionally caught during purse seine operations. In these circumstances, the mobulid rays must be surrendered to the government authority. It also requires safe release procedures for mobulid rays. At the 2016 meeting, the IATTC amended an existing shark resolution and

adopted two new ones. The amended resolution adds language urging identification of research priorities on shark biology and mitigation techniques. One new resolution requires the IATTC scientific staff to develop a workplan for assessments of silky sharks and hammerhead sharks, establishes data-reporting requirements for these species and guidelines for handling and release of all sharks on purse seine vessels, and prohibits longline vessels from using “shark lines.” The other new resolution prohibits retention of silky sharks caught in purse seine gear in the EPO, requires longline vessels that do not target sharks to limit their catch of silky sharks to 20 percent per fishing trip by weight, provides further restrictions for silky sharks caught by “surface longliners,” and prohibits use of steel leaders during a three-month period.

X. International Cooperation and Assistance

The international community recognizes the importance of providing necessary tools and training to assist developing coastal and fishing States with management and monitoring of their fisheries and fishing vessels. Such assistance helps nations address IUU fishing activities, promotes the adoption of measures to mitigate the adverse impacts of fishing activities on PLMRs, and furthers shark conservation programs. The need for such cooperation and assistance is recognized in global and regional fisheries instruments, including the UNFSA.

A. International Institutional Efforts

ICCAT has several funds created specifically for scientific capacity building; these are used primarily to finance travel of scientists from developing States to participate in intersessional scientific meetings and the annual SCRS meeting. They are also used to support scientists from developing States to attend longer-term training programs. Separate ICCAT funds support the attendance of developing State members at meetings of the Commission and with carrying out their responsibilities under ICCAT's Port Inspection Scheme.

In 2015, Korean authorities contributed the proceeds from the sale of illegally harvested toothfish to the CCAMLR Secretariat. More than 3 million Australian dollars went to several funds for extra scientific, conservation, and other activities outside the annual budget. The WCPFC's budget contains a line item, funded by all members, to support the special needs of developing States parties.

In 2011, the IATTC created a fund for strengthening the scientific and technical capacity of developing countries, which will allow them to fully comply with their obligations under the Antigua Convention. In 2014, the IATTC amended this measure to require an annual contribution of 2 percent of its budget to this fund. The Administrative and Finance Committee in 2016 recommended that \$30,000 should support participation of members from developing States at annual meetings of the Commission and advisory groups. At its 2016 meeting, the Committee emphasized, however, that most of the fund should be used for capacity building rather than for attending meetings.

B. Bilateral and Regional Assistance

Through the MSA and other authorities, NMFS engages in international cooperation and assistance, with particular emphasis on efforts to combat IUU fishing, mitigate bycatch of PLMRs, and conserve sharks. The United States shares stocks of living marine resources, including protected resources, with other countries. Many living marine resources cross national maritime boundaries and venture into the high seas during their lives. Conservation activities or the lack thereof in countries other than the United States can either enhance or undermine our own conservation efforts. Management measures in other countries can directly affect the status of fish resources the United States harvests. In addition, lack of conservation efforts can interfere with the recovery of endangered or threatened species wherever they occur. Because the U.S. seafood market is increasingly reliant on foreign supplies of fish and fish products, it is in the U.S. interest to promote the sound conservation and management of all fisheries and aquaculture operations that supply the U.S. market.

The United States is a member of many global and regional marine conservation organizations. Decisions on management measures are made either by consensus or require a majority of the countries present to support the measure. By contributing to the capacity of member countries to manage marine resources sustainably, we increase the number of countries that will adopt and implement management measures to accomplish these goals.

More fundamentally, the dependence of the U.S. market on imports of wild-harvested and farmed seafood, and the growing demands of American consumers for assurance that fish are not the product of illegal or unsustainable practices, require the United States to address the lack of fisheries management and enforcement capacity in many developing countries. NMFS's assistance efforts strengthen international fishery management organizations; build strategic partnerships with other agencies, nations, and donors; level the playing field for U.S. fishermen; and enable other nations to become better stewards.

The program established by the NMFS Office of International Affairs and Seafood Inspection focuses on important programmatic issues. In carrying out the program, NMFS takes advantage of economies of scale where other work is already underway or funded. In West Africa, one of the areas where IUU fishing is most prevalent, DOS, NOAA, and the U.S. Africa Command provided funding and assets. In the Coral Triangle Region (Indonesia, Malaysia, Papua New Guinea, the Philippines, the Solomon Islands, and Timor Leste), the United States Agency for International Development (USAID) provided funding and sought NOAA as a partner for this work. As our nearest neighbors, Latin America and the Caribbean share with the United States many marine species, both targeted and taken as bycatch. Funding and other support for work in Central America is available from USAID, DOS (for work under the auspices of the Central America-Dominican Republic Free Trade Agreement), NOAA, and from the U.S. Southern Command for work in Colombia.

Capacity-building activities are undertaken within specific program areas, of which the chief ones are conservation of marine mammals, sea turtles, and sharks, particularly those species listed by CITES. This section sets forth some examples from among the many projects NMFS carried out during 2015 and 2016.

1. Strategies to Combat Illegal Fishing in the Americas

In 2015, NMFS provided funding to WECAFC to support the inaugural meeting of the Regional Working Group on IUU fishing. The objective for the group is to adopt terms of reference, agree on the working group modus operandi, initiate discussions of short-term measures, and agree on priority actions for the region.

NMFS also provided funding through a grant for the development and trial of technology to support the monitoring, control, and surveillance of small-scale fisheries in Honduras. This funding aims to provide a cost-effective mechanism to develop high-resolution data on small-scale fisheries, and to demonstrate that it is economically viable and technically feasible to do this across a wide geographic area. The project seeks to incorporate input from hundreds of fishermen in developing effective management strategies and strengthening a network of marine reserves.

NMFS also provided a grant in 2015 to assist with the development of genomic traceability tools in commercially important marine species. This grant funds the use of RNA-Seq technology to identify genome-wide population structure and signals of local adaptation, a first step toward the development of robust analytic tools that can combat IUU fishing by verifying the origin of a seafood product once it is in the market chain.

In 2016, NMFS provided funding for a number of projects to help combat IUU fishing. A project in Chile will build on technology through a mobile software application, CHILE ES MAR, to bridge the information gap observed among scientists, fishermen, and consumers in relation to the biology, natural availability, fishing regulations, market opportunities, and traceability of marine resources related to small-scale fisheries in Chile. The application will serve as a communication platform between fishermen and final consumers, aiming for bottom-up enforcement through empowering a society increasingly concerned with environmental sustainability. It will promote a fair and transparent trade system by directly linking fishermen and consumers.

Another project aims to improve research, policy, and advocacy in Colombia, Costa Rica, and Panama, to deter seafood fraud and the illegal international trade of shark products. The goals of this project are to improve knowledge on the international trade of sharks, skates, and rays originating in these three target supplier countries in the Eastern Tropical Pacific Marine Corridor, by analyzing the international trade routes of exported species and raising awareness among relevant regional and international stakeholders. The project also aims to analyze fishery product export codes utilized in Colombia, Costa Rica, and Panama; to monitor the international trade in shark, skate, and ray products; and to assist in the development of proposals for the adoption of harmonized codes in these countries. Finally, the project will improve awareness of the international trade of sharks, skates, and rays originating in the three target supplier countries by synthesizing and publishing the information and disseminating results among relevant stakeholders in regional and international forums.

2. Regional Collaboration on the Conservation of Queen Conch

International trade in queen conch is regulated under Appendix II of CITES. NMFS, by sponsoring workshops, has encouraged countries such as the Bahamas, Belize, and Colombia to promote coordination between CITES and regional fisheries authorities, and to further cooperation among range States in enforcement of national and CITES requirements. A WECAFC working group consisting of the Caribbean Fishery Management Council, OSPESCA (the regional fisheries organization in Central America), and the Caribbean Regional Fisheries Mechanism made recommendations for the sustainable and legal management of this species. At its 2016 meeting, WECAFC adopted a recommendation that outlines a regional plan for the management and conservation of queen conch in the WECAFC area.

3. Assistance for Shark Conservation

In fulfillment of commitments made at CoP16, NMFS provided support for several workshops to assist CITES parties with implementation of the shark listings that became effective in September 2014. These workshops brought together CITES and fisheries authorities to promote interagency collaboration and exchange of information.

NMFS provided a grant in 2016 for a regional workshop of the WECAFC/OSPESCA Working Group on Sharks, in which countries will examine current knowledge of elasmobranchs in the Wider Caribbean Area, and make recommendations for a regional plan of action to be endorsed by WECAFC at its next meeting in 2018. The project will collect and share catch and effort data for use in a population assessment of shark and ray populations in the Wider Caribbean Area, as well as increase awareness of shark status and management among fisheries sector stakeholders of the WECAFC member States.

To assist Latin American and Caribbean countries with the new CITES requirements, Peru hosted a domestic workshop, with funding from NOAA, in April 2016. Experts covered a range of topics at the workshop based on needs identified by Peru, including training on the use of tools and techniques for the identification of sharks and shark products in trade, demonstration of monitoring products from the point of harvest to the point of export through real-life examples, and information on international shark CMMs. The workshop identified domestic and regional needs and priorities for Peru and other Latin American countries for implementing the CITES shark listings, to help guide future activities.

4. Enhancing Fisheries Management and Enforcement in Africa

During 2015 and 2016, NOAA collaborated in efforts to train West African fisheries management and enforcement officials, as well as prosecutors, from Ghana, Liberia, and the seven member States of the Sub-Regional Fisheries Commission: Cape Verde, the Gambia, Guinea, Guinea Bissau, Mauritania, Senegal, and Sierra Leone. Also in attendance were officials from the six member countries of the Fisheries Committee for the West Central Gulf of Guinea: Benin, Cote d'Ivoire, Ghana, Liberia, Nigeria, and Togo. In 2016, NOAA assisted in a first-time training for the East African countries of Botswana, Comoros, Kenya, Mauritius, Mozambique, Seychelles, and Tanzania. The purpose of these workshops is not only to strengthen fisheries enforcement and prosecution, but to promote interagency cooperation and regional coordination.

In November 2016, Senegal organized a regional workshop with the support of NMFS. At the meeting, participants from nine West African countries shared information and received identification training and tools, building on the 2014 action plan that recommends how to address the priority needs of the region for the implementation and enforcement of the shark and ray species listed by CITES. This workshop facilitates future collaboration among West African countries to help ensure that trade of shark species in this region is sustainable and does not threaten their survival.

In 2015, NMFS provided assistance for Gabon to host a sub-regional TED training workshop for the region, including Cameroon, Equatorial Guinea, Ghana, and Nigeria. As Gabon has been operating a TED project for several years, the intent of the workshop was to allow Gabon to showcase its TED research results and the administrative strategy that contributed to a successful TED program.

NMFS also provided funding in 2015 to assist with improving Gabon's national capacity to reduce fishing infractions by supporting surveillance, centralizing data, and increasing stakeholder engagement with artisanal fishing communities. Gabon is trying to improve governance of artisanal fishing by working with fishing communities and government institutions to prepare fishing regulations and management plans for each zone and to increase MCS capabilities.

In 2016, NMFS fostered efforts to combat IUU fishing with several grants. One project supports the West Africa Task Force, which brings together the six member States of the West Central Gulf of Guinea. The objectives are to increase cooperation on a national and regional level, and to build capacity through training, practical tools, legal and technical support, and intelligence analysis to support detection and prosecution of IUU fishing.

IUU fishing occurs in the Ghanaian EEZ, in particular among the canoe and semi-industrial fleet. NMFS is funding a project that will characterize fisheries for elasmobranchs and billfish, identify data and information gaps in the shark fishery, and support improvement in regulatory measures. The project will use innovative participatory approaches, with fishermen collecting catch and socio-economic data.

5. Asia-Pacific Capacity Building

The interrelated themes of the Asia-Pacific capacity-building portfolio work toward mitigating the negative impacts of IUU fishing, seafood fraud, and the targeting of PLMRs through promoting the ecosystem approach to fisheries management. This effort requires both material development and application, at both regional and local levels. Projects undertaken during the past two years balance regional efforts with specific projects in individual countries, to deliver assistance where it is most needed.

To address Asian trawl fisheries, NMFS supported an FAO/Asia-Pacific Fishery Commission expert workshop in Thailand that developed practical, easy-to-read guidelines for managers of the Asian tropical trawl fishery, one of the most productive fisheries in the world. NMFS partnered with two other institutions to foster application of the guidelines by creating training materials; they are working toward at least one pilot project where several of the practices outlined in the guidelines can be applied simultaneously. A significant amount of the catch from this fishery ends up in fishmeal, fish oil, and surimi. In 2015 and 2016, IFFO The Marine Ingredients Organisation won a grant from NMFS to work on applying the new guidelines to the fishmeal sector. The first two workshops, focusing on Vietnam and Thailand, brought together fisheries managers and scientists as well as international experts on the trawl fishery.

To advance the ecosystem approach to fisheries management, NMFS, FAO, and the Bay of Bengal Large Marine Ecosystem Project developed a five-day course for middle-level managers from governments, NGOs, and other organizations that interact with fishermen. As a result of the success of this course, many of the participants asked for a shorter, overview course for senior officials. In 2015 and 2016, the same team created such a course. Materials include FAQ sheets, talking points, several videos, hot topic issues, and the half-day course, all of which are on a public website.

Through a partnership with the World Bank and Vietnam’s Ministry of Agriculture and Rural Development, NMFS continued to help Vietnam build capacity to manage its coastal resources. A NMFS team ran week-long exercises in the cities of Ca Mau Province in 2015; the team encouraged the participation of communities in the planning process, as well as stakeholder identification, prioritization, and engagement. In 2016, the team conducted a “train-the-trainer” session in Vinh. In total, since 2013, the NMFS project has trained nearly 200 provincial and commune-level resource managers.

In 2015 and 2016, NMFS completed its project to enhance management of Indonesia’s blue swimming crab fishery. A workshop in 2015 brought together communities at the University of Diponegoro to review challenges in implementing the comprehensive management framework that had been developed the year before. Meetings in 2016 ensured that the University is ready to take over the project and provide leadership for this kind of work throughout Indonesia.

6. Promoting Observer and Monitoring Programs

The International Fisheries Observer and Monitoring Conference provides a forum for observers, researchers, managers, and industry to collaborate on fisheries observer and monitoring systems. Topics at the conference held in San Diego in August 2016 included the role of electronic monitoring programs and observer safety. NOAA staff served on the steering committee and participated in several sessions; NMFS also provided funding for participants to attend from Peru and Sri Lanka.

7. Marine Mammal Capacity Building

Since 2014 NMFS has been supporting a program to support critical needs pertaining to the use of acoustic deterrents (pingers) in reducing bycatch of threatened cetaceans. The three components of this project are an acoustic pinger trial with at least one untested cetacean species, in this case Dall’s porpoise, using well-established scientific protocols for detecting any area avoidance behavior by comparing responses to active versus inactive pingers; a pinger trial in an artisanal gillnet fishery in Argentina to examine outstanding questions regarding the use of pingers with the franciscana dolphin; and establishing a web-based clearinghouse of information on acoustic devices as marine mammal bycatch deterrents, providing a resource for scientists, fisheries managers, NGOs, and fishermen. See <http://www.bycatch.org/project/acoustic-deterrents-marine-mammals>.

Since 2014, NMFS has also been supporting an Assessment of Priority Targets for Marine Mammal Bycatch Reduction in Asia and South America. The Consortium for Wildlife Bycatch Reduction has been collecting information on marine mammal bycatch within three nations, two (Chile and Ecuador) that are major seafood exporters to the United States, and one (Argentina) that is seeking to expand the market for its seafood in the United States. The goal is to identify fisheries within these countries that have high levels of marine mammal bycatch, which will provide a starting point for assisting them with evaluation of potential bycatch reduction techniques. NMFS will use this information to link the seafood coming into the United States to its source fishery, understand the degree of bycatch occurring within that fishery, and promote the evaluation of bycatch reduction methods within that fishery to help it become more ecologically sustainable.

In May of 2016, NMFS supported the International Workshop on Whale Entanglement Prevention held in Portsmouth, New Hampshire. The workshop mainly considered fixed fishing gear and aquaculture. The workshop was directed at evaluating the existing and potential efficacy of different prevention techniques from a technical point of view. The workshop included presentations on several new and on-going studies of potential prevention techniques, as well as a few regional case studies. The outcome was expert reviews of our understanding about different solutions to entanglement, and identification of research priorities.

NMFS's Southeast Fisheries Science Center has conducted collaborative research with Mexico's Instituto Nacional de Pesca for many years. Most recently, the focus of these collaborations has been gear studies and evaluations designed to reduce bycatch of vaquita in the Upper Gulf of California. In 2015, NMFS funded diver-assisted gear evaluations of three Mexican-designed experimental gear types. Evaluations revealed good gear configurations for both the fish trawl and fish pot/trap, while the stow net was not examined due to time constraints. The experimental stow net gear is similar to channel nets, which are used in the internal waters of North and South Carolina to target shrimp. In 2016, the Science Center led technology-transfer visits for Mexican staff and fishermen to North Carolina. Mexican researchers and fishermen were trained to identify potentially productive areas for stow net sets and proper techniques for establishing sets, deploying gear, retrieving catch, and retrieving sets. In turn, U.S. researchers and fishermen plan to travel to the Gulf of California, to examine proposed set locations and possibly recommend new locations. Mexican and U.S. researchers and fishermen will also collaborate on site-specific methods to deploy effective sets and retrieve gear at the end of the fishing season.

NOAA's Hawaiian Monk Seal Research Program has established a working partnership with Mediterranean monk seal researchers and managers from Greece, Mauritania, Portugal, and Spain. This group, the International Collaboration for the Conservation of Monk Seals, works to cross-train and share advances in techniques and technologies, to assist the various programs in their efforts to conserve the two remaining – and dwindling – populations of monk seals. In 2015, the group held its first meeting in Honolulu, followed by a week of field work conducting foraging and health studies of monk seals on Molokai. The workshop was partially funded by NMFS, and resulted in a number of conservation projects that would benefit from international collaboration. The Research Program has successfully implemented a cutting-edge translocation project to increase the survival of Hawaiian monk seals, and plans to work with the Spanish-Mauritanian programs to assist with modeling, planning, and possibly implementing the initial phases of a translocation program.

8. Sea Turtle Conservation

NMFS research has focused on the development and testing of technologies for gillnet fisheries and trawl fisheries in the Pacific, to help assess and reduce incidental bycatch of sea turtles as well as other protected species.

Working in the Eastern Pacific, NMFS scientists helped a Mexican commission, NGOs, and an artisanal fishing community develop and test sensory-based bycatch reduction technologies. Net illumination through the use of several different wavelengths of light-emitting diodes showed that sea turtle interactions could be reduced with no effect on target catch. In addition, NMFS

developed a novel bycatch reduction strategy by creating an acoustic deterrent device tuned specifically to turtle hearing.

In northern Peru, NMFS joined forces with NGOs and local fishing communities to test net illumination in a coastal gillnet fishery that has one of the highest documented rates of sea turtle bycatch. Results from the study show that using net illumination reduces bycatch rates by 64 percent, with no change to catch rates of target fish. The study also indicates that this technology can be used to reduce seabird bycatch by the same gillnet fleet.

Testing of net illumination expanded into driftnet fisheries in Peru and Chile. These fisheries target swordfish and shark species, but interact with many sea turtle species and marine mammals. Preliminary results suggest that net illumination strategies may be useful in reducing both kinds of bycatch. Working with these fisheries in South America as a research platform, NMFS and collaborators have successfully satellite-tagged 13 leatherback turtles (a critically endangered species) and 11 hawksbill turtles. This research will help with understanding post-fisheries interaction behaviors, such as rates of survival and movement patterns.

NMFS's efforts in the Western Pacific have focused on Indonesia, Japan, Malaysia, and the Philippines. As huge numbers of sea turtles are captured in Malaysian shrimp trawl fisheries, NMFS introduced TEDs into these fisheries by testing Malaysian-designed TEDs. NMFS worked with Malaysia to establish a national TED program, initiated conversations with DOS to begin the TED certification process, and helped establish a wide national implementation plan. In Japan, NMFS worked with the government, NGOs, and fishermen to develop escape devices for the coastal midwater pound net fisheries. NMFS worked with a local fishing company to test pound net escape devices, which were shown to be effective in maintaining fish catch in the commercial fisheries. In addition, aerial surveys conducted in southeastern prefectures led to better understanding of the distribution of underwater pound net systems.

In Indonesia, NMFS is collaborating with a government ministry and local universities to better understand the effects of the region's small-scale fisheries on protected marine megafauna. An assessment of the gillnet fisheries based in West Kalimantan, from 2013 through 2016, suggested that several hundred sea turtles are caught each year in those fisheries. Concurrently, the testing of illuminated gillnets indicated a 50 percent reduction in sea turtle bycatch, with an increase in catch rates of target fish. Beginning in 2015, NMFS has been working with Indonesia to expand this work into other coastal gillnet fisheries throughout the Indonesian archipelago. In 2016, NMFS initiated a collaboration to begin assessing bycatch in coastal gillnet fisheries in Palawan, the Philippines.

Finally, NMFS has worked since 2015 to develop a low-cost electronic monitoring system that provides high definition video linked to GPS, in order to augment the very limited observer coverage of small-scale fisheries. These systems have been tested on Indonesian, Mexican, and Peruvian small-scale fishing vessels, with early results indicating that such systems are a cost-effective tool in generating catch and bycatch data for these fisheries.

Annex 1: International Fisheries and Related Agreements and Organizations to which the United States Is a Party or in which the United States Has a Substantial Interest

To provide basic knowledge of the multilateral agreements, RFMOs, and related international organizations concerning living marine resources of which the United States is a member or that are of substantial interest to the United States, a list of many such organizations and agreements, with brief descriptions, is set forth below.

Global

United Nations Convention on the Law of the Sea. This treaty sets the rules for jurisdiction and management authority in the oceans, and establishes general requirements concerning conservation. The Convention currently has 168 parties; the United States is not yet a party, but operates consistent with the fisheries provisions of the Convention. President Clinton submitted the Convention to the Senate in 1994.

Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UN Fish Stocks Agreement or UNFSA). This agreement provides more specific rules for the conservation and management of straddling and highly migratory fish stocks, including application of the precautionary approach, ecosystem-based management, a requirement that nations with vessels fishing on the high seas either join the appropriate RFMO or apply the CMMs established by that RFMO to its fishing vessels, and other similar requirements. The 1995 agreement, which entered into force in 2001, now has 83 parties, including the United States.

Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (FAO Compliance Agreement). This agreement requires flag States to exercise control over their vessels on the high seas to ensure that they follow applicable conservation and management regulations. The agreement was adopted in 1993 and entered into force in 2003. It has 40 parties, including the United States.

FAO Code of Conduct for Responsible Fisheries. This non-binding document, prepared in 1995, sets forth principles and international standards of behavior for responsible fisheries practices, to ensure effective conservation, management, and development of living aquatic resources.

International Whaling Commission. The IWC was established under the International Convention for the Regulation of Whaling in 1946. The primary function of the IWC is to establish and revise measures that govern the conduct of whaling throughout the world. The Commission currently has 88 parties, including the United States.

Convention on International Trade in Endangered Species of Wild Fauna and Flora. CITES provides for the protection and regulation of certain species of wild fauna and flora, including certain living marine species, against over-exploitation, through limitations on international trade. Under CITES, species are listed in Appendices according to their conservation status:

Appendix I (“threatened with extinction”); Appendix II (may become threatened with extinction unless trade is strictly regulated); and Appendix III (species that any party identifies as being subject to regulation within its jurisdiction for the purpose of preventing or restricting exploitation, and that needs the cooperation of other parties in the control of trade). CITES currently has 183 parties, including the United States.

Agreement on the Conservation of Albatrosses and Petrels. ACAP, a legally binding agreement, was established under the CMS (see Part VIII.A); it has 13 parties. Its purpose is to enhance the understanding of the conservation status of albatrosses and petrels and their susceptibility to a range of threats, as well as to provide an effective means of mitigating those threats. Although not a party, the United States participates in ACAP meetings as an observer.

Memorandum of Understanding on the Conservation of Migratory Sharks. This non-binding agreement, negotiated under the auspices of the CMS, provides an international framework for coordinating sustainable management and conservation efforts for seven species of migratory sharks. The MOU has 40 signatories, including the United States, and two cooperating partners.

Atlantic

International Commission for the Conservation of Atlantic Tunas. ICCAT provides for international cooperation in conservation and management, including scientific research, for tunas and tuna-like species in the Atlantic. It covers all waters of the Atlantic Ocean, including the adjacent seas. ICCAT has 51 contracting parties, including the United States, plus five cooperating non-members.

North Atlantic Salmon Conservation Organization. NASCO has jurisdiction over salmon stocks that migrate beyond areas of coastal State jurisdiction in the Atlantic Ocean north of 36° N throughout their migratory range. It has six parties, including the United States.

Northwest Atlantic Fisheries Organization. NAFO’s Convention Area is located within the waters of the Northwest Atlantic Ocean roughly north of 35° N and west of 42° W. The principal species managed are cod, flounders, redfish, American plaice, Greenland halibut (turbot), capelin, shrimp, hake, and squid. NAFO has 12 contracting parties, including the United States.

Southeast Atlantic Fisheries Commission. The SEAFO Convention, which entered into force in 2003, regulates fisheries outside EEZs in the Southeast Atlantic Ocean. Species covered include fish, mollusks, crustaceans, and other sedentary species, except species subject to coastal State jurisdiction and highly migratory species. There are currently seven parties. The United States signed the Convention, but is not a party because no U.S. vessels fish in the area.

Pacific

Western and Central Pacific Fisheries Commission. The WCPFC manages tuna and other highly migratory species in the western and central Pacific Ocean. The Convention entered into force in

2004. It currently has 26 members, including the United States; seven participating territories; and seven cooperating non-members.

South Pacific Regional Fisheries Management Organization. The Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean entered into force on August 25, 2012. Its objective is to ensure the long-term conservation and sustainable use of fishery resources and to safeguard the marine ecosystems in which these resources occur. The Convention has 14 members; the United States, along with three other nations, is a cooperating non-contracting party. The Senate has given its advice and consent to U.S. accession, which will now be possible with passage of the Ensuring Access to Pacific Fisheries Act.

North Pacific Fisheries Commission. The goal of the NPFC is to ensure the long-term conservation and sustainable use of the fisheries resources in the high seas areas of the North Pacific Ocean, while also protecting the marine ecosystems in which these resources occur. It establishes a management framework for all fisheries not already covered under existing international instruments, with a particular focus on bottom fisheries. The NPFC has five members; Chinese Taipei is a Cooperating Fishing Entity. The United States participates as an observer, but legislation has now been enacted to allow full U.S. participation in the Commission.

South Pacific Tuna Treaty. This agreement provides U.S. tuna purse seine vessels access to fish in the waters of the Pacific Island parties to the treaty, including adjacent high seas areas in the central and western Pacific. Although not a fisheries management arrangement, it is referenced in this report because it contains some important and forward-looking monitoring and control provisions, including observer and VMS requirements. The treaty has 17 parties, including the United States. It is administered by the Forum Fisheries Agency, comprised of the 16 Pacific Island parties. In December 2016, the United States and Pacific Island parties signed a revised treaty that includes the terms of fishing access for the U.S. purse seine fleet to Pacific Island waters through 2022.

Inter-American Tropical Tuna Commission. The IATTC manages tunas, tuna-like species, and other species taken by tuna-fishing vessels in the EPO. The Commission has 21 members, including the United States, plus four cooperating non-members.

Agreement on the International Dolphin Conservation Program. This agreement establishes legally binding mechanisms to reduce incidental dolphin mortality in the tuna purse seine fishery in the EPO to levels approaching zero. The agreement has 14 parties, including the United States, plus two nations that apply the Agreement provisionally.

North Pacific Anadromous Fish Commission. The NPAFC promotes the conservation of anadromous stocks (salmon) and ecologically related species, including marine mammals, seabirds, and non-anadromous fish, on the high seas of the North Pacific, the Bering Sea, and the Sea of Okhotsk, north of 33° N. It has five parties, including the United States.

Convention on the Conservation and Management of Pollock Resources in the Central Bering Sea. This Convention was established to conserve and manage pollock resources in the high seas area of the Bering Sea (the “donut hole”). It has six parties, including the United States.

Pacific Salmon Commission. The PSC implements the United States-Canada Pacific Salmon Treaty. Four commissioners and four alternates from each nation represent the interests of commercial and recreational fisheries as well as federal, state, and tribal governments. The PSC provides regulatory advice and recommendations to the two parties with regard to salmon originating in waters of one country that are subject to interception by the other, salmon that affect the management of the other country’s salmon, and salmon that biologically affect the stocks of the other country.

International Pacific Halibut Commission. Established by a 1923 Convention between the United States and Canada, the Commission’s mandate covers research on and management of the stocks of Pacific halibut within Convention waters of both countries. The Commission consists of three government-appointed commissioners for each country.

Memorandum of Understanding for the Conservation of Cetaceans and their Habitats in the Pacific Islands Region. Negotiated under the auspices of the CMS, this non-binding MOU provides an international framework for coordinated conservation efforts for cetaceans and their habitats in the Pacific Islands Region. The MOU has 15 signatories, including the United States.

Southern Ocean

Commission for the Conservation of Antarctic Marine Living Resources. With the exceptions of any commercial seal hunt south of 60° S and all whaling activities, CCAMLR conserves and manages all marine living resources between the edge of the Antarctic continent and the Antarctic Polar Front (varying between 45° S and 60° S). There are 25 members of the Commission, including the United States. Another 11 countries have acceded to the Convention. They have agreed to be legally bound by its terms, but do not contribute to the budget or participate in decisions.

Convention for the Conservation of Antarctic Seals. The Convention is designed to promote and achieve the protection, scientific study, and rational use of Antarctic seals, and to maintain a satisfactory balance within the ecological system of Antarctica. It prohibits the killing or capture of seals in the area south of 60° S, except as specifically provided for in the Convention. It has 14 parties, including the United States.

Western Hemisphere

Inter-American Convention for the Protection and Conservation of Sea Turtles. The IAC is the only binding convention for the protection and conservation of sea turtles in the world. The IAC specifically protects six of the seven species of sea turtles: loggerhead, green, leatherback, hawksbill, olive ridley, and Kemp’s ridley. This Convention entered into force in 2001 and has 15 parties, including the United States.

Indian Ocean

Indian Ocean Tuna Commission. The aim of the IOTC is to conserve, and promote optimum utilization of, tuna and tuna-like species in the Indian Ocean and its adjacent seas. While there are general conservation, management, and rebuilding measures, the IOTC has yet to adopt any catch limitations. The IOTC has 31 parties, not including the United States, and four CPCs.

Indian Ocean-South East Asian Marine Turtle Memorandum of Understanding. This MOU operates as a non-binding agreement under the CMS. It provides a framework for the region to work together to conserve and replenish depleted marine turtle populations for which they share responsibility. The MOU has 35 signatories, including the United States.

Annex 2: United States Laws Addressing IUU Fishing, PLMR Bycatch, and Shark Conservation, including Summaries of Recent Enforcement Cases

Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006. The MSRA amended domestic provisions of the Magnuson-Stevens Fishery Conservation and Management Act, and directed substantial attention to fishing issues outside U.S. waters, particularly IUU fishing and bycatch of PLMRs. Title IV of the Act amended the Moratorium Protection Act to call on the Secretary of Commerce to urge other nations and RFMOs to address IUU fishing and to put into place regulatory measures to end or reduce bycatch of PLMRs comparable to those of the United States, taking into account different conditions. Title IV also established an identification and certification procedure for nations whose vessels engage in IUU fishing, bycatch of PLMRs, or certain shark fishing practices.

Shark Conservation Act of 2010. Enacted January 4, 2011, the SCA, 16 U.S.C. 1801 note, amended the Moratorium Protection Act to promote adoption by RFMOs of shark conservation measures, including banning removal of any of the fins of a shark and discarding the carcass at sea. The Act amended the Moratorium Protection Act's definition of IUU fishing to add an explicit reference to violation of international shark conservation measures, and to provide for identification of a nation for activities related to shark conservation.

Illegal, Unreported, and Unregulated Fisheries Enforcement Act of 2015. The IUU Fisheries Enforcement Act strengthened mechanisms to stop IUU fishing, 16 U.S.C. 1801 note, and implemented the PSMA, 16 U.S.C. 7401 *et seq.*, and the Antigua Convention, 16 U.S.C. 951 note.

Ensuring Access to Pacific Fisheries Act. Signed by the President on December 16, 2016, this statute, P.L. 114-327, amended the Moratorium Protection Act with technical changes to the identification and certification process, and with provisions allowing for enhanced participation by the United States in several RFMOs.

Magnuson-Stevens Fishery Conservation and Management Act. Originally enacted in 1976, the MSA, 16 U.S.C. 1801 *et seq.*, is the foundational legislation for the conservation and management of fisheries within the U.S. EEZ. Besides establishing the framework for regulating U.S. fisheries, the Act contains specific and extensive prohibitions and enforcement authorities to ensure a high rate of compliance with regulations governing both domestic and foreign fishing within the EEZ.

High Seas Driftnet Fishing Moratorium Protection Act. This Act, 16 U.S.C. 1826d-1826k, prohibits the United States from entering into international agreements that would prevent full implementation of the UN Moratorium on Large-Scale High Seas Driftnets. The MSRA and SCA added specific authorities and responsibilities to assist in reducing or eliminating IUU fishing, bycatch of PLMRs, and certain shark fishing practices.

High Seas Driftnet Fisheries Enforcement Act. This Act, 16 U.S.C. 1826a-1826c, seeks to end the use of large-scale driftnets by foreign fisheries operating beyond the EEZ of any nation. Among other provisions, the Act authorizes identification of nations whose vessels are engaging

in high seas fishing with large-scale driftnets; such identification may lead to limitations on port entry and on the importation of certain products from those nations.

High Seas Fishing Compliance Act. This Act, 16 U.S.C. 5501-5509, implements the FAO Compliance Agreement for vessels flagged in the United States. The HSFCA requires all U.S. vessels to obtain a permit before engaging in operations on the high seas; authorizes the Secretary of Commerce to issue such permits subject to conditions and limitations; and mandates sharing of information relating to permitted vessels with the FAO. The HSFCA also prohibits use of high seas fishing vessels in contravention of international CMMs recognized by the United States, or in a manner that would violate a permit condition.

Lacey Act. The Lacey Act, 16 U.S.C. 3371-3378, prohibits the import, export, transport, sale, possession, or purchase in interstate or foreign commerce of any fish or wildlife taken, possessed, transported, or sold in violation of any U.S. state law or regulation or of any foreign law. The two-part prohibition requires evidence of a violation of domestic or foreign law, and also evidence of trafficking. NMFS has used the law to prosecute foreign individuals who import fish caught without authorization in another country's EEZ.

Marine Mammal Protection Act. A goal of the MMPA, 16 U.S.C. 1361 *et seq.*, is to reduce the incidental kill or serious injury of marine mammals in the course of commercial fishing to insignificant levels, approaching zero. The Act prohibits "taking" (actual or attempted harassment, hunting, capture, or killing) and importation into the United States of marine mammals except where explicitly authorized. The MMPA also bans the importation of fish caught with commercial fishing technology that results in the incidental kill or serious injury of marine mammals in excess of U.S. standards.

Endangered Species Act. This Act, 16 U.S.C. 1531 *et seq.*, provides for the conservation of species that are in danger of extinction throughout all or a significant portion of their range. The Act lists species as either "threatened" or "endangered." When a species is endangered, it is protected from being "taken" through harassment, harm, injury, pursuit, hunting, killing, capturing, or collection. Similar prohibitions usually extend to threatened species. The Act also provides for U.S. implementation of limitations on trade of species listed under CITES.

International Dolphin Conservation Program Act. This Act, P.L. 105-42, amended the MMPA to provide that nations whose vessels fish for yellowfin tuna with purse seine nets in the Eastern Tropical Pacific are permitted to export such tuna to the United States only if the nation provides documentary evidence that it participates in the International Dolphin Conservation Program and is a member (or applicant member) of the IATTC, is meeting its obligations under the Program and the IATTC, and does not exceed certain dolphin mortality limits.

Shrimp-Turtle Law (Section 609 of P.L. 101-162). This law, 16 U.S.C. 1537, requires the United States to embargo wild-caught shrimp harvested with commercial fishing technology, such as trawl nets, that may adversely affect sea turtles. The import ban does not apply to nations that have adopted sea turtle protection programs comparable to those of the United States. Nations seeking to import shrimp must be certified by DOS as meeting the law's requirements on an annual basis.

Pelly Amendment. The Pelly Amendment to the Fishermen's Protective Act of 1967, 22 U.S.C. 1978, provides for the possibility of trade-restrictive measures, as described in Part I.D.

Summaries of Recent Enforcement Cases with an International Nexus

This section summarizes recent U.S. enforcement cases with an international nexus such as IUU fishing by a foreign-flagged vessel, international trafficking in seafood illegally harvested or fraudulently labeled, and U.S. assistance with another nation's investigation of a fisheries violation. NOAA and the USCG are actively engaged in monitoring fishing activity in the U.S. EEZ and in waters beyond our national jurisdiction. NOAA also works with U.S. Customs and Border Protection to monitor imports. These efforts not only help to protect global fish stocks and other marine resources, but also preserve the integrity of the U.S. domestic fish market and the safety of the U.S. food supply. Some of the more significant, or otherwise representative, cases since January 2015 are outlined below:

- On May 27, 2016, the U.S. District Court for the Central District of California ordered the forfeiture of \$1,230,488, the proceeds from the sale of 118,000 pounds of Patagonian toothfish imported illegally into the Port of Los Angeles in May 2014. The fish were imported without required landing certificates or export documents, in violation of regulations promulgated under the Antarctic Marine Living Resources Convention Act, including those implementing the CCAMLR catch documentation scheme.
- On May 6, 2016, NOAA charged a Florida company with four counts of importing shark fins without a federal international trade permit. The case, which involved 37 shipments totaling 6,567 kg of fish, was settled, with the company agreeing to pay a civil monetary penalty of \$45,090.
- In October 2015, 1,013 kg of fish product was seized at Seattle-Tacoma International Airport, and subsequently forfeited to the United States. The shipment, which entered the United States in transit from Guatemala to Hong Kong, included 70 kg of dried fish maw (swim bladders), as well as 84 kg of dried fins from hammerhead shark species listed on Appendix II of CITES. The fish were exported without a CITES export permit and in violation of Guatemalan labeling and documentation requirements.
- NOAA charged U.S. tourists for importing Bahamian spiny lobster or queen conch in excess of the limit. A \$3,000 penalty was assessed in each of three cases.
- NOAA issued written warnings in two cases involving importation of embargoed yellowfin tuna from Venezuela into the United States, via Vietnam, in violation of the MMPA.

Annex 3: Seabird Bycatch Issues

Seabirds are considered international living marine resources for purposes of Section 607 of the Moratorium Protection Act, but do not fall within the definition of protected marine living resources. Section 316 of the MSA highlights the need for the Secretary of Commerce to work cooperatively with the Secretary of the Interior, with regional fishery management councils, and within international organizations to seek ways to reduce seabird bycatch. NMFS has pushed hard internationally for action to protect seabirds, particularly measures to mitigate seabird bycatch in fisheries.

The Agreement on the Conservation of Albatrosses and Petrels (ACAP) coordinates international activity to mitigate known threats to albatross and petrel populations. The ACAP treaty was submitted to the Senate in 2008 for its advice and consent to ratification; draft implementing legislation was submitted to Congress in 2009. The United States participates in ACAP meetings as an observer due to its interest in seabird conservation and its status as a range State under ACAP. The United States participated in the 5th Meeting of the Parties in May 2015, and took part in the 9th Advisory Committee meeting of ACAP held in May 2016. NMFS contributed a summary of experiences with electronic monitoring in U.S. fisheries for consideration in ACAP's development of best practice guidelines on this topic.

Several RFMOs have considered or taken action concerning seabirds in 2015 and 2016:

CCAMLR. Observed seabird bycatch in the Convention Area is near zero in the legal fishery outside of the French EEZ. Seabird bycatch within the French EEZ, historically a problem, continues to decline significantly each year due to improved mitigation and management measures. The number of seabird bycatch mortalities during the 2014-2015 fishing season was the lowest recorded since the beginning of seabird bycatch observations in the Convention Area. In 2013, CCAMLR began implementing an evaluation procedure to examine compliance by member vessels with requirements, including those related to mitigation of seabird bycatch. This procedure has brought to the Standing Committee on Implementation and Compliance several cases of offal discharge or configurations on vessels that could lead to offal discharge. Offal discharge is prohibited in some fisheries and in areas south of 60° S. In addition to these issues, the Committee is examining whether marking hooks with vessel-specific identifications would be feasible, to trace the provenance of hooks found in seabird colonies.

ICCAT. To reduce incidental bycatch of seabirds, ICCAT requires the use of two of three measures (night setting, branch line weighting, and bird scaring lines) for longline vessels fishing south of 25° S, and recommends voluntary use of the measures in the Mediterranean and other areas as appropriate. In 2015, the SCRS Subcommittee on Ecosystems agreed to examine trends in bycatch of seabirds, as a first step in evaluating the effectiveness of these mitigating measures.

IATTC. In 2011, the IATTC adopted a measure to mitigate the effect of fishing on seabirds. Since 2014, the IATTC scientific staff has recommended revising the measure to be consistent with current advice regarding seabird mitigation techniques. The staff also recommended taking note of updated seabird density information and consideration of expansion of the area of application to include additional waters in the North Pacific (Mexico's EEZ, currently exempt).

The United States proposed updated seabird mitigation measures at both the 2015 and 2016 meetings, but the proposal has not reached consensus.

IOTC. In 2012, the IOTC adopted a resolution to reduce the incidental bycatch of seabirds in longline fisheries, which entered into force on July 1, 2014. Analysis in 2016 shows that 74 percent of IOTC members were in compliance with their reporting obligations.

SPRFMO. The Commission adopted a CMM requiring action to minimize bycatch of seabirds in demersal longline and trawl fisheries by July 31, 2015. At the 2015 meeting, SPRFMO amended its data standards measure to require more specific information regarding bycatch to be collected, including specific information on bycatch mitigation measures.



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