



Recommendations to the 87th Meeting of the Inter-American Tropical Tuna Commission

14-18 July 2014, Lima, Peru

The Inter-American Tropical Tuna Commission (IATTC) is responsible for the conservation and management of tuna and other marine resources in the eastern Pacific Ocean. It is the obligation of Member States to enforce strict compliance with measures passed by the Commission.

The Pew Charitable Trusts calls on the Members and cooperating Non-Members at the 87th meeting of the IATTC to take these critical actions:

- Implement strong conservation and management measures for tuna species.
 - Adopt an effective rebuilding plan for Pacific bluefin tuna.
 - Electronically track fish aggregating devices and manage their use effectively.
 - Establish appropriate target and limit reference points for albacore, skipjack, yellowfin, bigeye, and Pacific bluefin tuna.
 - Increase observer coverage on longline vessels.
- Adopt conservation and management measures to protect sharks.
 - Prohibit the retention of biologically vulnerable shark species, particularly silky and hammerhead sharks.
 - Limit the mortality of other shark species, including blue and shortfin mako sharks, to sustainable levels.
 - Require best practices for reducing bycatch.
- Improve compliance and target illegal, reported and unregulated fishing.
 - Strengthen port State measures.
 - Require International Maritime Organization numbers for authorized fishing vessels.
 - Ban all forms of transshipment at sea.

Recommendations

Implement strong conservation and management measures for tuna species

Pew is increasingly concerned about the health of tuna populations in the eastern Pacific Ocean. The current catch and effort-based limits have failed to protect the populations of several commercially and ecologically important stocks of tuna. Recent stock assessments show that management measures must be taken to reduce fishing pressure on yellowfin, bigeye, and Pacific bluefin tuna. **Precautionary, science-based catch limits and gear controls are critical to safeguarding these depleted tuna populations.**

Adopt an effective rebuilding plan for Pacific bluefin tuna

The 2014 updated stock assessment for Pacific bluefin, performed by the International Scientific Committee (ISC) for Tuna and Tuna-like Species in the North Pacific Ocean, confirms the dire state of this species: Bluefin are overfished and undergoing overfishing, and the population is at just 4.2 percent of its unfished level. Catch rates for the youngest fish are unsustainably high, and current management measures will fail to rebuild the population. As part of the assessment, the ISC's analysis of seven management scenarios and their effect on future population size found that only one would promote growth in the population. This scenario included a hard catch limit of 2,750 metric tons in the eastern Pacific Ocean and a 50 percent reduction in juvenile catch in the western and central Pacific, along with limits on the overall fishing effort.

Current management measures are not sufficient to reverse the decline of this population. The IATTC should take the following actions based on the latest scientific information:

- **Adopt a yearly catch limit of not more than 2,750 metric tons, which includes the catches of minor harvesters, recreational fisheries, and dead discards.**
- **Set a minimum size limit of 20 kilograms to protect future generations by reducing the mortality of juvenile Pacific bluefin.**
- **Implement strong monitoring and enforcement measures, including a catch documentation system, full observer coverage at transfer to ranches and at harvest, and authorized vessel lists.**
- **Work with the Western and Central Pacific Fisheries Commission (WCPFC) to develop and implement a comprehensive, basinwide rebuilding plan for Pacific bluefin tuna that returns the population to 25 percent of the unfished size within 10 years. Ensure that management measures are effective and complementary and are applied consistently on both sides of the Pacific, as required in Article XXIV of the Antigua Convention.**

Electronically track fish aggregating devices and manage their use effectively

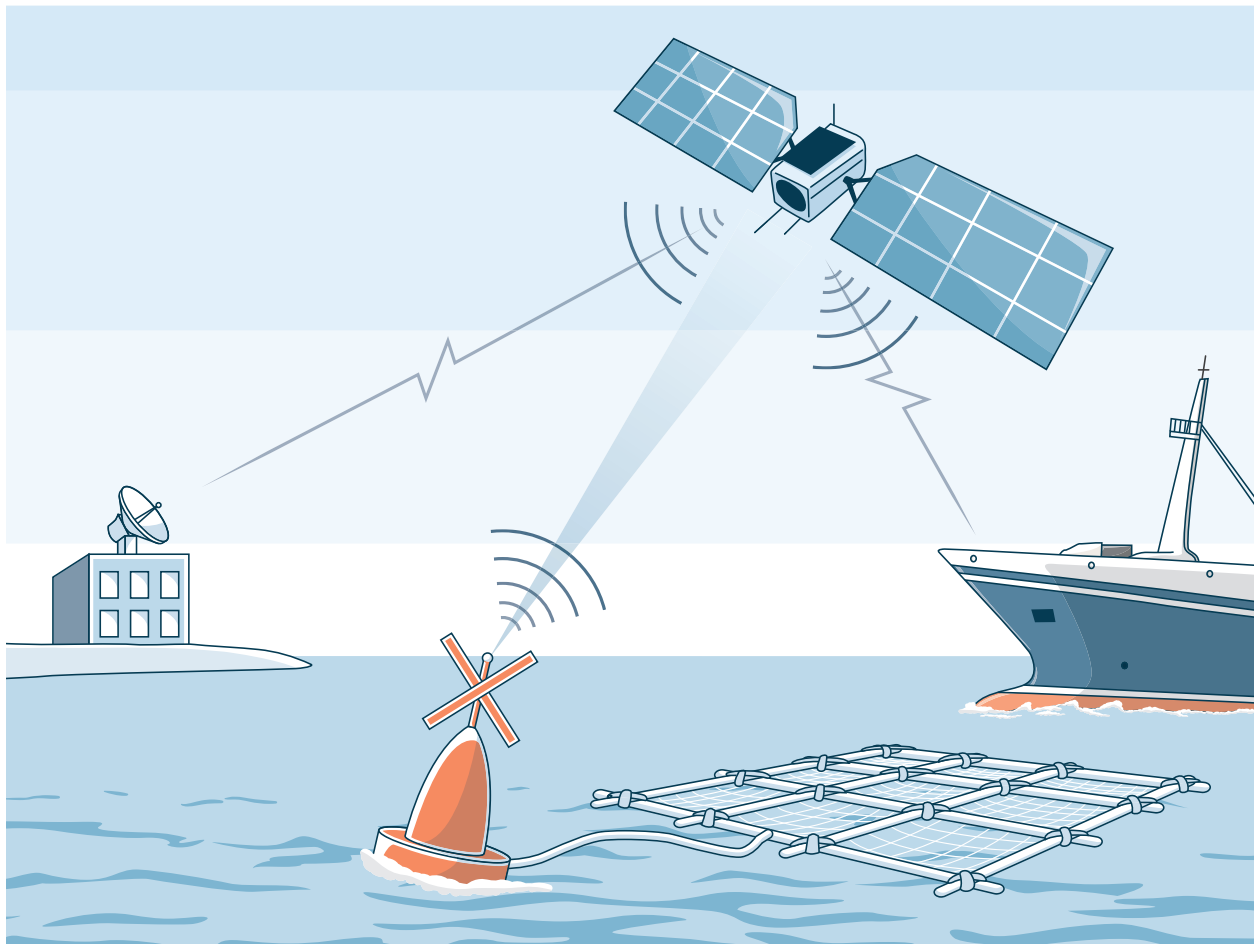
Purse seine fisheries using drifting fish aggregating devices (FADs) snare many juvenile tuna and other marine species such as billfish, sharks, and turtles. In fact, bigeye tuna are likely overfished, mainly because of the catch of juveniles in the FAD fishery. No limits on FAD use have been established, however. In addition, the thousands of FADs in these waters could act as "ecological traps" for open-ocean species by altering their natural distribution patterns, habitat associations, migration, and residence periods.¹

Resolution C-13-04 requires that IATTC Members begin gathering information by January 2015 on the deployment, use, and collection of all FADs used in the Convention area. The resolution also requires that FADs be marked to help with identification and tracking. **Based on the near-universal use of satellite buoys on FADs in the eastern Pacific, and drawing from similar tracking programs in the western and central Pacific, the Commission should:**

- **Adopt an electronic tracking system that would collect information about the locations and uses of FAD satellite buoys.**
- **Share this tracking information with the Commission’s scientific staff in order to improve stock assessments, determine the extent of FAD use, and inform scientists about the potential impact on the ecosystem.**

Given the uncontrolled proliferation of FADs in the eastern Pacific and the likely ecological consequences, IATTC Members should take the following actions to better manage FAD fisheries:

- **Limit FAD sets to levels that prevent overfishing of juvenile bigeye and yellowfin tuna.**
- **Ensure that compliance with FAD measures is reviewed annually and that action is taken in instances of noncompliance.**



Establish appropriate target and limit reference points for albacore, skipjack, yellowfin, bigeye, and Pacific bluefin tuna

The Antigua Convention, which entered into force in 2010, requires the IATTC to apply the precautionary approach, which includes setting target and limit reference points in accordance with the United Nations Fish Stocks Agreement and the Code of Conduct for Responsible Fisheries adopted by the U.N.'s Food and Agriculture Organization (FAO). These reference points, along with harvest control rules, should be designed to prevent overfishing and maintain tuna populations at healthy, sustainable levels.

The IATTC scientific staff has proposed maximum sustainable yield, or MSY, as the target reference point and limit reference points that are equivalent to allowing the biomass of tuna species to decline to 8 percent of their unfished biomass. Allowing a stock to decline to such a low level leaves little room to account for unanticipated changes in the fishery or the environment, as well as uncertainty in stock status estimates, and thus cannot be considered precautionary. **In accordance with the obligation to apply the precautionary approach, the Commission should:**

- **Seek the development of biologically based limit reference points, such as B_{MSY}, and target reference points that are consistent with the Antigua Convention, the U.N. Fish Stocks Agreement, and the FAO Code of Conduct for Responsible Fisheries.**
- **Agree to a process for consideration and adoption of reference points and harvest control rules to ensure that reference points are agreed to in 2015, and harvest control rules in 2016.**

Increase observer coverage on longline vessels

Scientists have identified several deficiencies in the quality of data provided by Members for longline fisheries in the Convention area, including poor availability, lack of spatial and temporal data, and inconsistencies in the types of data reported.² **To increase the accuracy and standardize the data collected, the IATTC should increase overall observer coverage. The Commission should:**

- **Ensure that all Members immediately implement observer coverage on 5 percent of longline vessels, with the intent to increase coverage to at least 20 percent by 2017, in accordance with current management measures and the best available scientific advice.³**
- **Develop standards for electronic reporting and electronic monitoring of longline fisheries and promote the use of such systems.**

Adopt conservation and management measures to protect sharks

Approximately 100 million sharks are killed in commercial fisheries every year, an unsustainable number.⁴ Whether this catch is unintended, unwanted, or highly sought after, the practice and its effect on ocean ecosystems require urgent action. **Sharks should be treated like the endangered marine species they are and released alive wherever possible.** Any targeted take should be permitted only when scientific advice has confirmed its sustainability.

Prohibit the retention of biologically vulnerable shark species, particularly silky and hammerhead sharks

Silky sharks (*Carcharhinus falciformis*) are the shark species most commonly caught in purse seines, though they are also caught in longline fisheries. The International Union for Conservation of Nature (IUCN), through its Red List of Threatened Species, has classified silky sharks as Near Threatened globally, but in the eastern-central and southeast Pacific, they are even more threatened and have been classified as Vulnerable to extinction.

At this year's Scientific Advisory Committee (SAC) meeting, further evidence was presented of the poor state of silky shark stocks. The latest science finds that the silky shark population is declining in all IATTC-managed fisheries; earlier evidence of a more positive stock status was found to be inaccurate. Because of the continued severe declines, silky sharks require immediate action to promote recovery of the stock. In addition, these sharks produce few young and are considered among the most vulnerable to both purse seine⁵ and longline fishing gear.⁶ Faced with similar information and advice about silky shark declines, the **WCPFC adopted a measure in December 2013 to prohibit all retention of these sharks. In response to the results of the SAC's 2014 advice**

on the state of the silky shark stock, IATTC should match this action and reduce silky shark mortality by prohibiting all retention of these sharks.

Hammerhead sharks are targeted for their highly valued fins and are also caught as bycatch. They are one of the top shark species caught in the eastern Pacific Ocean's purse seine and longline fisheries. In addition, juvenile and neonate hammerheads are being targeted in coastal fisheries, particularly with gillnets.

The IUCN Red List classifies scalloped (*S. lewini*) and great hammerheads (*S. mokarran*) sharks as Endangered and smooth hammerheads (*S. zygaena*) as Vulnerable, making them some of the most threatened shark species in the world.

The Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) recognized the need to protect scalloped, great, and smooth hammerheads. In March 2013, CITES adopted proposals to include them in Appendix II, which regulates international trade in such species and ensures that it is sustainable and legal. With the implementation deadline for this listing approaching in September 2014, IATTC has an opportunity to help Member countries meet the requirements of the new CITES listings. **Given the status and vulnerability of hammerhead sharks, and following the example of the International Commission for the Conservation of Atlantic Tunas (ICCAT), a prohibition on retention of all hammerhead sharks (*Sphyrna spp.*) should be adopted at this year's IATTC meeting. At the same time, the SAC should collect and analyze data to determine levels of catch and trade that could be sustainable.**

Pew calls on IATTC to:

- **Reduce silky shark mortality by prohibiting all retention of them.**
- **Adopt a prohibition on retention of all hammerhead sharks and request that the Scientific Advisory Committee collect and analyze data to determine levels of catch and trade that could be sustainable.**

Limit the mortality of other shark species, including blue and shortfin mako sharks, to sustainable levels

Other species, such as blue and shortfin mako sharks, also are being caught at unsustainable levels. For example, one recent study showed that standardized catch rates of longline fleets in the North Pacific declined significantly for blue sharks (by 5 percent per year) and mako sharks (by 7 percent per year).⁷ It is time for IATTC to put in place precautionary measures to limit mortality of these species. **Numbers of blue and shortfin mako sharks have declined significantly in recent years.**

Pew calls on IATTC to:

- **Implement precautionary measures to limit mortality of shark species, including blue and shortfin mako, to sustainable levels.**

Require best practices for reducing bycatch

Mobulid rays—part of the family Mobulidae, which includes manta rays and mobula rays—are extremely vulnerable to overfishing and are caught as bycatch in purse seines and longlines fishing for tuna. For example, 124 tonnes were caught in 2012 in tuna purse seine fisheries.

The SAC adopted recommendations in 2014 on these species, noting that retention of incidentally caught rays should be prohibited and that a range of techniques can be adopted to facilitate live release of any rays that are caught.

Because of the vulnerability of these rays, retention of all mobulid species should be prohibited and live release guidance should be adopted.

Shark bycatch in IATTC fisheries is also taking a toll on many populations. Shark bycatch is higher with longlines that use wire leaders (also known as steel traces), because sharks are unable to break the wires to escape.⁸ The use of wire leaders, therefore, creates a de facto targeted—but unregulated—shark fishery. A ban on wire leaders would help reduce shark bycatch in longline fisheries. Furthermore, the use of monofilament can actually increase the catch of some target species of tuna⁹ and swordfish¹⁰

As part of the requirements for establishing precautionary management measures, Pew calls on IATTC to establish the following best practices for reducing bycatch:

- **Prohibit the catch of mobulid rays.**
- **Ban the use of wire leaders.**



Improve compliance and target IUU fishing

Illegal, unreported, and unregulated (IUU) fishing is a threat around the globe,¹¹ and the eastern Pacific Ocean is no exception. Cases of noncompliance with IATTC rules by authorized vessels continue to arise; 13 vessels remain on the IATTC's list of known IUU vessels. To address some of the most critical loopholes in the IATTC's policies, Members should act at the 87th meeting to strengthen controls at port and ensure that fishing and support vessels are accurately identified and tracked.

Strengthen port State measures

Port State measures (PSMs) are globally recognized as a cost-effective method for combating IUU fishing. In addition to the 2009 adoption of the U.N. Agreement on Port State Measures to Prevent, Deter, and Eliminate IUU Fishing, a number of regional fisheries management organizations (RFMOs), have strengthened port State controls in recent years.¹² In other ocean regions, implementation of PSMs, combined with timely information-sharing, regional cooperation, and transparency, has demonstrated the effectiveness of port controls in keeping illegally caught fish out of international trade.¹³

Although other RFMOs are making progress on PSMs, IATTC does not have a port inspection scheme. It does not even require Members to inspect IUU-listed vessels if they are in port. Insufficient capacity to implement PSMs should not be a barrier to effective implementation of port controls. IATTC Members, particularly developed states, can and should initiate actions to assist developing States in implementing new PSMs.

To stop IUU fishing vessels at port, Pew calls on IATTC to:

- **Adopt minimum standards for port inspections and require effective follow-up actions and communications between the flag and port States involved and the IATTC Secretariat.**
- **Help developing States conduct port inspections.**

Require International Maritime Organization numbers for authorized fishing vessels

To support the responsible and transparent operation of fishing vessels and to ensure compliance with conservation and management measures, vessels need to be readily identifiable through unique numbers that are verifiable worldwide. Because of disparities among systems, many fishing vessels are not adequately identified by national authorities. Further, many vessel owners, especially those involved in illegal activities, repeatedly change their vessels' names and flags. The only unique and permanent identifier, providing an independent and continually updated audit trail of data, is the International Maritime Organization (IMO) number.

In 2013, the international community made significant progress toward mandating the use of the IMO number as the standard identifier for fishing vessels when the IMO General Assembly extended application of the voluntary IMO Ship Identification Number Scheme to fishing vessels.¹⁴ At the same time, ICCAT and the WCPFC adopted measures requiring IMO numbers for larger vessels, and the Commission for the Conservation of Antarctic Marine Living Resources established such measures for all vessels under its jurisdiction.¹⁵ The unique and universal identification of fishing vessels will help enforcement officials track them, share information, and take appropriate steps.

Pew calls on IATTC to undertake the following actions:

- **Require that IATTC records include IMO numbers for vessels that already have them and amend IATTC Resolutions C-11-05, C-11-06, and C-12-07 to include a vessel's IMO number as mandatory information.¹⁶**
- **Require that all vessels at least 24 meters in length or operating in waters outside the exclusive economic zone of the flag State—and authorized to fish in the IATTC's area of competence—have IMO numbers by Jan. 1, 2016. That number would be reported in all records and relevant communications and be permanently marked in a visible place on the hull.**

Ban all forms of transshipment at sea

Transshipment continues to provide loopholes for proper catch reporting and opportunities to launder IUU-caught fish. The IATTC should introduce a ban on all forms of transshipment until the Commission has clear evidence that such operations do not assist IUU fishing. This measure would require a robust monitoring system that ensures full transparency and would include, but not be limited to, requiring observers aboard offloading and receiving vessels and comprehensive oversight by the Commission of *all* transshipment operations in the Convention Area.

Endnotes

- 1 Alexia Morgan, Fish Aggregating Devices (FADs) and Tuna: Impacts and Management Options (Washington: The Pew Environment Group, 2011), http://www.pewenvironment.org/uploadedFiles/PEG/Publications/Report/PEG_OSD_FADs_English_Final.pdf.
- 2 Inter-American Tropical Tuna Commission (2012), Summary of Data Available for Yellowfin Tuna in the Eastern Pacific Ocean and Its Use in Stock Assessment, <http://www.iattc.org/Meetings/Meetings2012/Oct/PDFs/YFT-Meeting/YFT-01-01-Summary-of-data-presentation.pdf>.
- 3 Elizabeth Babcock and Ellen Pikitch, How Much Observer Coverage Is Enough to Adequately Estimate Bycatch? (Miami: Pew Institute for Ocean Science, 2003), [pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Protecting_ocean_life/oceana_bycatch_110403.pdf](http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Protecting_ocean_life/oceana_bycatch_110403.pdf).
- 4 B. Worm et al., "Global Catches, Exploitation Rates, and Rebuilding Options for Sharks," *Marine Policy* 40 (2013): 194-204.
- 5 H. Murua et al., Preliminary Ecological Risk Assessment for Shark Species Caught in Fisheries Managed by the Indian Ocean Tuna Commission (IOTC) IOTC-2012-WPEB-31, <http://ebfmtuna-2012.sciencesconf.org/file/23488>.
- 6 E. Cortés et al., "Ecological Risk Assessment of Pelagic Sharks Caught in Atlantic Pelagic Longline Fisheries," *Aquatic Living Resources* 23 (2010): 25-34, DOI: 10.1051/alr/2009044.
- 7 S.C. Clarke et al., "Population Trends in Pacific Oceanic Sharks and the Utility of Regulations on Shark Finning," *Conservation Biology* 27, no. 1 (2013): 197-209.
- 8 P. Ward et al., "Large-Scale Experiment Shows That Nylon Leaders Reduce Shark Bycatch and Benefit Pelagic Longline Fishers," *Fisheries Research* 90 (2008): 100-08.
- 9 E. Gilman et al., Shark Depredation and Unwanted Bycatch in Pelagic Longline Fisheries: Industry Practices and Attitudes and Shark Avoidance Strategies (Honolulu, HI, USA: Western Pacific Regional Fishery Management Council, 2007).
- 10 R. Vega and R. Licandeo, "The Effect of American and Spanish Longline Systems on Target and Non-Target Species in the Eastern South Pacific Swordfish Fishery," *Fisheries Research* 98 (2009): 22-32.
- 11 The United Nations General Assembly has repeatedly stated that "IUU fishing constitutes a serious threat to fish stocks and marine habitats and ecosystems, to the detriment of sustainable fisheries as well as the food security and the economies of many States, particularly developing States," UNGA Res. 68/71, para. 49.
- 12 See IOTC Resolution 10/11 from 2010; SEAFO Conservation Measure 2/11 from 2011, integrated in 2012 in Chapter VI of SEAFO's new system of observation, inspection, compliance, and enforcement of 2012, http://www.seafo.org/ConservationMeasures/2013%20CM/SEAFO_SYSTEM_2013.pdf; CCAMLR Conservation Measure 10-03 of 2012, http://www.ccamlr.org/sites/drupal.ccamlr.org/files//10-03_2.pdf; ICCAT Recommendation 12-07 of 2012, <http://www.iccat.int/Documents%5CReccs%5Ccompendiopdf-e%5C2012-07-e.pdf>; NEAFC's PSMA-aligned port state measures of 2013; http://www.neafc.org/system/files/NEAFC_Scheme_of_Control_and_Enforcement_2014_A4_Double_Sided.pdf; SPRFMO Conservation and Management Measure 2.07 of 2014, <https://www.southpacificfmo.org/assets/Commission-Meeting-2nd/Comm-02-report/Annex-Q-CMM-2.07-CMM-Port-Standards.pdf>. Earlier, NAFO adopted PSMs at its 30th Annual Meeting in 2008, <http://www.nafo.int/fisheries/frames/psm.html>.
- 13 After suspicious activities by the South Korean vessel Premier were observed in February 2012 in Liberia, the vessel was identified in the Indian Ocean, where it was inspected, and forged Liberian documents were found on board. This triggered activities within a regional network of southeastern African countries (FISH-i Africa). Because of the ongoing IUU case in Liberia, several FISH-i countries in the western Indian Ocean denied fishing licenses to the vessel, and finally the Premier was denied permission to offload its catch in the Seychelles port of Victoria. The denial of landing or transshipment was implemented pursuant to the Indian Ocean Tuna Commission's Port State Measures Resolution 10/11, Article 9.1 e). See: <http://www.pewenvironment.org/news-room/other-resources/a-successful-illegal-fishing-crackdown-85899465019>; http://www.stopillegalifishing.com/sifnews_article.php?ID=106.
- 14 IMO Resolution A.1078(28), adopted 4 December 2013, IMO Doc. A28/Res. 1078, 15 January 2014.
- 15 CCAMLR Conservation Measure 10-02 (2013), http://www.ccamlr.org/sites/drupal.ccamlr.org/files//10-02_5.pdf; ICCAT Recommendation 13-13, http://www.iccat.int/Documents/Reccs/6921-13_ENG.PDF; WCPFC Conservation and Management Measure 2013-10, <http://www.wcpfc.int/system/files/CMM%202013-10%20CMM%20to%20revise%20CMM%202009-01%20WCPFC%20RFV.pdf>.
- 16 Suggested amendments would be to add "IMO number (if any)" in para. 2.a) of Resolution C-11-05 on the Establishment of a List of Longline Fishing Vessels Over 24 Meters (LSTLFVs) Authorized to Operate in the Eastern Pacific Ocean; para. 2.a) of Resolution C-11-06 on a Regional Vessel Register; and para. 7 of Resolution C-12-07, Amendment to Resolution C-11-09 on Establishing a Program for Transshipments by Large-Scale Fishing Vessels.

Contact: Elizabeth Wilson, director of international ocean policy **Email:** ewilson@pewtrusts.org **Project website:** pewenvironment.org/ip

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