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BRINGING SOUTHERN BLUEFIN TUNA BACK FROM THE BRINK: ENHANCING UNDERSTANDING OF THE SCIENTIFIC PROCESS IN THE WESTERN AND CENTRAL PACIFIC FISHERIES COMMISSION

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Abstract: The Commission of the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western Pacific Ocean, or the WCPFC, manages fish stocks of significant financial and ecological value across a vast area of the Pacific Ocean. WCPFC members, however, have disagreed sharply over management measures for tuna, sharks, and other species. These disagreements have arisen due to ambiguous text in the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western Pacific Ocean regarding the roles of the Convention's subsidiary bodies and providers of scientific advice. Some members argue that only the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean, or the ISC, and the Northern Committee may provide scientific and management advice for those fish stocks occurring north of twenty degrees north latitude. Other members, however, believe that the Convention's Scientific Committee has the ultimate responsibility to provide advice to the WCPFC for all stocks. These institutional disagreements are having profound, adverse impacts on species. This Article concludes that the

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† Portions of this article are drawn from a paper prepared by the author and two of his students as a legal clinic project of IELP, to be presented by the WWF at two meetings of the Western and Central Pacific Fisheries Commission in August and December 2014. See CHRIS WOLD ET AL., A REVIEW OF THE PROVISION OF SCIENTIFIC ADVICE IN THE WESTERN AND CENTRAL PACIFIC FISHERIES COMMISSION, WCPFC-SC10-2014/MI-IP-03 (2014), available at https://www.wcpfc.int/system/files/WCPFC11-2014-OP02%20Review%20of%20provision%20of%20scientific%20advice%20in%20WCPFC_paper%20submitted%20by%20WWF.pdf, archived at <https://perma.cc/W4XU-X3HM>.

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Convention grants the Scientific Committee the authority to review the assessments and other work of the providers of scientific information and make recommendations to the Commission concerning conservation and management of all stocks in the Convention Area. This gives the Scientific Committee the authority and the duty to review the ISC's scientific advice and recommendations deriving from it. To clarify any ambiguity, this Article recommends that the WCPFC revise the rules of procedure of the Northern Committee, the memorandum of understanding between the WCPFC and the ISC, and the WCPFC's resolution on best available science.

INTRODUCTION

The Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western Pacific Ocean (the "WCPF Convention" or the "Convention")¹ establishes the Western and Central Pacific Fisheries Commission (the "WCPFC") to manage and conserve tuna and other fish stocks of significant financial² and ecological value across a huge swath of the Pacific Ocean—an area covering about twenty percent of Earth's surface.³ The WCPFC is one of five tuna commissions—known as regional fisheries management organizations ("RFMOs")—that manage fisheries throughout the world's oceans.⁴ Despite being a relatively new RFMO,⁵ WCPFC members have already disagreed sharp-

¹ Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean, Sept. 5, 2000, 2275 U.N.T.S. 40532 [hereinafter WCPF Convention] (entered into force June 19, 2004). "WCPF" stands for Western and Central Pacific Fisheries.

² Quentin Hanich et al., *Oceans of Opportunity? The Limits of Maritime Claims in the Western and Central Pacific Region*, in NAVIGATING PACIFIC FISHERIES: LEGAL AND POLICY TRENDS IN THE IMPLEMENTATION OF INTERNATIONAL FISHERIES INSTRUMENTS IN THE WESTERN AND CENTRAL PACIFIC REGION 21, 25–26 (Quentin Hanich & Martin Tsamenyi eds., 2009). "[I]n 2007, the tuna catch in the [western and central Pacific Ocean] was estimated at 2,396,915 tons and worth approximately [U.S. \$3895] million." *Id.* "These tuna fisheries represent the primary economic opportunity for many of the region's small island developing [s]tates." *Id.*

³ *Frequently Asked Questions and Brochures*, WCPFC, <http://www.wcpfc.int/frequently-asked-questions-and-brochures> (last updated Mar. 3, 2010), archived at <http://perma.cc/CCT5-6LAR>.

⁴ *FAQ: What Is a Regional Fishery Management Organization?*, PEW CHARITABLE TRUSTS (Feb. 23, 2012), <http://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2012/02/23/faq-what-is-a-regional-fishery-management-organization>, archived at <http://perma.cc/LZW4-DRQF>. The other four tuna RFMOs are the International Tropical Tuna Commission, the Inter-American Tropical Tuna Commission, the Indian Ocean Tuna Commission, and the Commission for the Conservation of Southern Bluefin Tuna. *Id.* Many other RFMOs exist that manage other resources, such as the Northwest Atlantic Fisheries Commission and the Commission for the Conservation of Antarctic Marine Living Resources. *Regional Fisheries Management Organisations (RFMOs)*, EUROPEAN COMM'N, http://ec.europa.eu/fisheries/cfp/international/rfmo/index_en.htm (last updated May 11, 2014), archived at <http://perma.cc/4N47-NFFC>. For general information on the tuna RFMOs, see the European Commission website. *See id.*

⁵ Whereas the WCPF Convention entered into force in 2004, other RFMOs have been in force for decades. *See, e.g.*, Convention on the Conservation of Antarctic Marine Living Resources, May 20, 1980, 33 U.S.T. 3476, 673 U.N.T.S. 63 (entered into force Apr. 7, 1982); Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries, Oct. 24, 1978, 1135 U.N.T.S. 369 (entered

ly over management measures for tuna, sharks, and other species, no doubt due to the great value of the fisheries resources in the WCPFC Convention's broad geographic area.

The establishment of catch limits for bluefin tuna perhaps best illustrates the continuing tensions among WCPFC members.⁶ In 2012, for example, the WCPFC's Scientific Committee reported that Pacific bluefin tuna "is heavily overfished"⁷ and that its "biomass level is near historically low levels and experiencing high exploitation rates above all biological reference points commonly used by fisheries managers."⁸ In fact, the most recent stock assessment estimates the Pacific bluefin tuna population at just 3.6 percent of historic biomass.⁹ Nonetheless, the Scientific Committee could not reach consensus on management advice to provide to the WCPFC. The "majority view" recommended that "fishing mortality on Pacific bluefin tuna be immediately reduced, especially on juveniles, in order to reduce the risk of recruitment collapse and allow the spawning stock to rebuild."¹⁰ Japan, however, could not support the majority view, stating that the Scientific Committee did not have competence to provide advice on this species, which is designated as a northern stock subject to advice from the WCPFC's Northern Committee.¹¹ Instead, Japan supported the "minority view" endorsed by the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean ("ISC"), which provides scientific and

into force Jan. 1, 1979); International Convention for the Conservation of Atlantic Tunas, May 14, 1966, 20 U.S.T. 2887, 673 U.N.T.S. 63 (entered into force Mar. 21, 1969); Inter-American Tropical Tuna Convention, May 31, 1949, 1 U.S.T. 230 (entered into force Mar. 3, 1950).

⁶ See *infra* notes 8–17 and accompanying text.

⁷ SCIENTIFIC COMM., WCPFC, SUMMARY REPORT: SCIENTIFIC COMMITTEE NINTH REGULAR SESSION, § 4.2.2.2, ¶ 194 (2013) [hereinafter SCIENTIFIC COMM., NINTH REGULAR SESSION SUMMARY REPORT], available at <https://www.wcpfc.int/meetings/9th-regular-session-scientific-committee>, archived at <https://perma.cc/4U5U-SMZE>.

⁸ *Id.* ¶ 195.

⁹ See SYLVAIN BONHOMMEAU, CIE INDEPENDENT PEER REVIEW REPORT ON THE STOCK ASSESSMENT OF PACIFIC BLUEFIN TUNA 23 (2013), available at https://swfsc.noaa.gov/uploadedFiles/Divisions/DO/2013_06_28%20Bonhommeau%20PBFT%20review%20report.pdf, archived at <http://perma.cc/6SAH-66UZ> (stating that the "[r]esults of the 2012 assessment indicate that the 2010 biomass is near the lowest since 1952 (22,606 mt) and at about 3.6% of the unfished levels").

¹⁰ SCIENTIFIC COMM., NINTH REGULAR SESSION SUMMARY REPORT, *supra* note 7, ¶ 196.

¹¹ *Id.* ¶ 198. Japan specifically stated,

Given that the current framework of management of the northern stocks[—]namely that [the] N[orthern] C[ommittee] formulates the draft [conservation and management measures] ["CMM[s]"] based on the conservation advice from [the] ISC[—]is working quite well, the recommendations from [the] ISC should be sufficient for the work of the [WCPFC]; it is not necessary for [the] S[cientific] C[ommittee] to revise nor restate conservation advice made by [the] ISC. This is why Japan supports the advice that states [the] S[cientific] C[ommittee] endorsed the conservation advice put forward by [the] ISC.

Id.

management advice to the Northern Committee regarding northern stocks.¹² In contrast to the majority view, which recommended allowing spawning levels to rebuild, the ISC called for “strengthening the monitoring of recruitment to comprehend the trend of recruitment in a timely manner.”¹³ A number of other members responded to Japan by arguing that the Scientific Committee provides “scientific advice for all WCPFC stocks”¹⁴ and “does not exist to simply endorse the work of another group.”¹⁵ Against this conflicting advice and institutional conflict, the WCPFC failed to reduce fishing mortality for Pacific bluefin tuna at its December 2013 meeting.¹⁶

These disagreements arise due to the WCPF Convention’s ambiguous text, which lacks clarity with respect to the roles of the WCPF Convention’s subsidiary bodies and providers of scientific advice. For example, in advising the WCPFC on the management of “northern stocks,”¹⁷ some WCPFC members argue that the Northern Committee should have sole authority to advise the WCPFC,¹⁸ whereas others argue that the Scientific Committee also has a role to

¹² See *id.*; Memorandum of Understanding, WCPFC-Int’l Scientific Comm. for Tuna & Tuna-like Species in the N. Pac. Ocean, Dec. 2005, at pt. 1 [hereinafter WCPFC-ISC MoU], available at https://www.wcpfc.int/system/files/0_MOU%20between%20WCPFC%20and%20ISC%20-%20effective.pdf, archived at <https://perma.cc/T45R-9GGB>.

¹³ See SCIENTIFIC COMM., NINTH REGULAR SESSION SUMMARY REPORT, *supra* note 7, ¶ 196.

¹⁴ *Id.* ¶ 200 (summarizing the statement of Australia).

¹⁵ *Id.* ¶ 201 (summarizing the statement of Papua New Guinea, Palau, and Cook Islands).

¹⁶ See WCPFC, SUMMARY REPORT: TENTH REGULAR SESSION OF THE COMMISSION FOR THE CONSERVATION AND MANAGEMENT OF HIGHLY MIGRATORY FISH STOCKS IN THE WESTERN AND CENTRAL PACIFIC OCEAN, at Agenda Item 4, §§ 4.1 to .2 (2013) [hereinafter WCPFC TENTH REGULAR SESSION SUMMARY REPORT], available at https://www.wcpfc.int/system/files/WCPFC%2010%20FINAL%20RECORD_1.pdf, archived at <https://perma.cc/5G4X-U33J>. Instead, the WCPFC adopted a new conservation and management measure (“CMM”) calling for a new management objective to ensure the current level of fishing mortality rate “is not increased.” WCPFC, CMM 2013-09, CONSERVATION AND MANAGEMENT MEASURE FOR PACIFIC BLUEFIN TUNA ¶ 1 (2013) [hereinafter CMM FOR PACIFIC BLUEFIN TUNA], available at <https://www.wcpfc.int/doc/cmm-2013-09/conservation-and-management-measure-pacific-bluefin-tuna>, archived at <https://perma.cc/5TRS-7VKH>. Conservationists called on the WCPFC to reject the Northern Committee’s recommendation, which contained a recommendation that the Northern Committee develop a rebuilding plan for Pacific bluefin tuna for adoption at the WCPFC’s December 2014 meeting. *Id.* (noting the Northern Committee’s goal of returning the Pacific bluefin tuna population to twenty-five percent of its original population size within the next ten years).

¹⁷ Northern stocks are stocks found north of twenty degrees north latitude. WCPF Convention, *supra* note 1, art. 11(7).

¹⁸ See SCIENTIFIC COMM., NINTH REGULAR SESSION SUMMARY REPORT, *supra* note 7, § 4.2.2.2. Japan, for example, has stated that,

[T]he recommendations from ISC should be sufficient for the work of the [WCPFC]; it is not necessary for [the] S[cientific] C[ommittee] to revise nor restate conservation advice made by ISC. This is why Japan supports the advice that states [the] S[cientific] C[ommittee] endorsed the conservation advice put forward by ISC.

Id. ¶ 198.

play.¹⁹ In addition, the WCPFC has agreements with the Secretariat of the Pacific Community (“SPC”) and the ISC to provide scientific advice and, in the case of the SPC, scientific data.²⁰ Again, disagreements exist over the respective roles of the ISC, the Northern Committee, and the Scientific Committee to provide advice or recommend management measures concerning northern stocks.²¹ In addition, the SPC and the ISC overlap in providing scientific information to the subsidiary bodies of the WCPFC.²² For example, both bodies provide advice to the WCPFC with respect to Pacific bluefin tuna and blue sharks.²³ At times, these bodies have provided fundamentally different advice on how to manage stocks in the WCPF Convention Area,²⁴ leading to disputes over which body should provide advice to the WCPFC and on whose advice the WCPFC must rely.

Despite these disputes and the unusual provisions of the WCPF Convention, the WCPF Convention is, in fact, clear that the Scientific Committee has the authority to review the assessments and other work of the providers of scientific information,²⁵ to review the results of research and analysis on target and non-target species,²⁶ and to make recommendations to the WCPFC concerning

¹⁹ See *id.* ¶¶ 199–201. Australia, for example, has stated that “the role of [the] S[cientific] C[ommittee] (consistent with the Convention and its objective) is to provide scientific advice in respect of Pacific bluefin tuna. Australia’s position is that scientific advice for all WCPFC stocks comes from [the] S[cientific] C[ommittee].” *Id.* ¶ 200.

²⁰ See generally WCPFC-ISC MoU, *supra* note 12 (memorializing an agreement between WCPFC and the ISC to provide scientific advice).

²¹ See *supra* notes 18–20 and accompanying text.

²² See, e.g., N. COMM., WCPFC, SUMMARY REPORT: EIGHTH REGULAR SESSION OF THE NORTHERN COMMITTEE ¶ 36 (2012) [hereinafter N. COMM., EIGHTH REGULAR SESSION SUMMARY REPORT], available at <https://www.wcpfc.int/meetings/8th-regular-session-northern-committee>, archived at <https://perma.cc/38AY-XPSG> (stating that Japan and the ISC showed concern that the ISC and SPC might be performing duplicative work in assessing the status of blue sharks).

²³ See, e.g., ISC & WCPFC, GN-IP-02, REPORT OF THE THIRTEENTH MEETING OF THE INTERNATIONAL SCIENTIFIC COMMITTEE FOR TUNA AND TUNA-LIKE SPECIES IN THE NORTH PACIFIC OCEAN §§ 7.2, 7.6 (2013) [hereinafter REPORT OF THE THIRTEENTH MEETING OF THE ISC] (assessing the stock status of Pacific bluefin tuna and blue shark); *SPC Scientists Tackle Stock Assessment for Blue Sharks in the North Pacific Ocean*, SPC OCEANIC FISHERIES PROGRAMME, <http://www.spc.int/oceanfish/en/ofpsection/sam/400-spc-scientists-tackle-stock-assessment-for-blue-sharks-in-the-north-pacific-ocean> (last visited Mar. 27, 2015), archived at <http://perma.cc/ME79-FRPF> (describing the SPC’s work assessing populations of blue shark); *Tuna Fisheries of the Western and Central Pacific Ocean*, SPC OCEANIC FISHERIES PROGRAMME, <http://www.spc.int/Oceanfish/en/tuna-fisheries/overview-tuna-fisheries/170-tuna-fisheries-of-the-western-and-central-pacific-ocean> (last visited Mar. 27, 2015), archived at <http://perma.cc/SUY9-KT2C> (describing the SPC’s work assessing populations of Pacific bluefin and other tuna species).

²⁴ See *infra* notes 68–70 and accompanying text (describing the Convention Area).

²⁵ WCPF Convention, *supra* note 1, art. 12(2)(b).

²⁶ *Id.* art. 12(2)(d). Non-target species are those unintentionally caught as part of fishing for targeted species. *Threats: Bycatch*, WORLD WILDLIFE FUND, <https://www.worldwildlife.org/threats/bycatch> (last visited Mar. 27, 2015), archived at <https://perma.cc/LT2C-WUED>.

conservation and management of all stocks in the Convention Area.²⁷ Thus, although the ISC provides information and advice to the Northern Committee,²⁸ and the Northern Committee submits recommendations to the WCPFC,²⁹ the Scientific Committee has the authority and the duty to review the work of the ISC and the recommendations of the Northern Committee.³⁰ Given the contentious and political nature of this issue, it is less clear how the WCPFC can definitively resolve it.

To determine how scientific advice should be provided to the WCPFC, this Article assesses the WCPF Convention and other documents establishing the WCPFC, its subsidiary bodies, and its relationships with providers of scientific information. Part I begins by briefly introducing the WCPF Convention and describing the basic functions of the WCPFC, its subsidiary bodies, and its providers of scientific information.³¹ Part II identifies the legal hierarchies of these institutions as well as their roles in providing oversight of other Convention bodies.³² It concludes that the Scientific Committee has an important role to play in ensuring that the WCPFC receives the best available scientific information and reviewing the assessments of the ISC and the recommendations of the Northern Committee.³³ In light of the ongoing disputes over the Scientific Committee's role, Part III reviews the WCPF Convention's mechanisms for dispute settlement.³⁴ It also describes how disputes in other conventions have been resolved.³⁵ Part IV concludes by recommending specific revisions to the Rules of Procedure for the Northern Committee, the memorandum of understanding ("MoU") between the WCPFC and the ISC, and the WCPFC's resolution on best available science.³⁶

I. OVERVIEW OF THE WCPF CONVENTION AND THE WCPFC

The construction of the WCPF Convention was a challenging one, and some of the problems identified in this Article originate from this difficult birth. The challenges began with the enormous value of this region's fisheries. Between 1980 and 2000, the annual harvest of tuna species—including yellowfin,

²⁷ WCPF Convention, *supra* note 1, art. 12(2)(g).

²⁸ WCPFC-ISC MoU, *supra* note 12, pt. I.

²⁹ WCPF Convention, *supra* note 1, art. 11(7); WCPFC, COMMISSION-01, RULES OF PROCEDURE, at Annex I, ¶ 2 (2004) [hereinafter WCPFC, RULES OF PROCEDURE], available at <https://www.wcpfc.int/doc/commission-01/rules-procedure>, archived at <https://perma.cc/ZEP4-GE6D>.

³⁰ WCPF Convention, *supra* note 1, art. 12(2)(b).

³¹ See *infra* notes 37–150 and accompanying text.

³² See *infra* notes 151–300 and accompanying text.

³³ See *infra* notes 151–300 and accompanying text.

³⁴ See *infra* notes 301–422 and accompanying text.

³⁵ See *infra* notes 301–422 and accompanying text.

³⁶ See *infra* notes 423–427 and accompanying text.

bluefin, skipjack, bigeye, and albacore—in the Western and Central Pacific Ocean increased from approximately 440,000 tonnes to 1.8 million tonnes.³⁷ The landed value of this tuna (as opposed to the retail value) is estimated at roughly \$3.8 billion per year.³⁸

Despite this massive catch of highly migratory species, the fishery was not managed under a single institution or agreement.³⁹ Roughly fifty percent of this catch was, and continues to be, taken within the exclusive economic zones of the region's Pacific island developing states.⁴⁰ Much of that catch, however, was caught by distant water fishing nations⁴¹ subject to fisheries access agreements,⁴² through which a foreign fishing nation enters into a contractual agreement to access fish for a particular price.⁴³ In addition, the portion of this catch that occurred on the high seas (marine areas beyond national jurisdiction) was unregulated.⁴⁴

³⁷ SECRETARIAT OF THE WCPFC, REVIEW CONFERENCE ON THE AGREEMENT FOR THE IMPLEMENTATION OF THE PROVISIONS OF THE UNITED NATIONS CONVENTION ON THE LAW OF THE SEA OF 10 DECEMBER 1982 RELATING TO THE CONSERVATION AND MANAGEMENT OF STRADDLING FISH STOCKS AND HIGHLY MIGRATORY FISH STOCKS 2 (2006), available at http://www.un.org/depts/los/convention_agreements/reviewconf/wcpfc_reviewconference.pdf, archived at <http://perma.cc/SU76-3P8D>.

³⁸ Hanich et al., *supra* note 2, at 25–26. A separate estimate valued the fishery at \$2.2 billion per year. Pepe Clarke, *Management of Tuna Fisheries in the Western and Central Pacific*, in SHARED RESOURCES: ISSUES OF GOVERNANCE 199, 203 (Sharelle Hart ed., 2008). The “landed value” of fish is the value of the fish as they first leave the boat. ANDREW DYCK & U. RASHID SUMAILA, PEW ENVTL. GRP., OCEAN SCI. SERIES: MARINE FISHERIES AND THE WORLD ECONOMY 1 (2010), available at <http://www.pewtrusts.org/~media/legacy/uploadedfiles/peg/publications/report/PewOSSWorldEconomy.pdf>, archived at <http://perma.cc/SS72-SCZZ>.

³⁹ SECRETARIAT OF THE WCPFC, *supra* note 37, at 2 (noting that fishing was conducted under a variety of bilateral and multilateral negotiated fisheries access arrangements).

⁴⁰ *Id.*

⁴¹ A “distant water fishing nation” or “distant water fishing fleet” is a general reference to a country or group of vessels that fish outside its national waters. RAMÓN BONFIL ET AL., WORLD WILDLIFE FUND ENDANGERED SEAS CAMPAIGN, THE FOOTPRINT OF DISTANT WATER FLEETS ON WORLD FISHERIES 11 (1998), available at http://awsassets.panda.org/downloads/distant_water1.pdf, archived at <http://perma.cc/WK6E-WKCH>.

⁴² *Id.*

⁴³ MARCOS A. ORELLANA ET AL., TOWARDS SUSTAINABLE FISHERIES ACCESS AGREEMENTS: ISSUES AND OPTIONS AT THE WORLD TRADE ORGANIZATION, at ix (2008), available at <http://www.unep.ch/etb/publications/FS%20Access%20Agreements/Inside%20FS%20Access%20Agreements.pdf>, archived at <http://perma.cc/D97X-W6AN>. These fisheries access agreements are typically very beneficial to fishing nations, as opposed to those granting access. STEPHEN MBITHI MWIKYA, FISHERIES ACCESS AGREEMENTS: TRADE AND DEVELOPMENT ISSUES 1 (2006), available at http://www.ictsd.org/downloads/2008/04/mbithi_2006.pdf, archived at <http://perma.cc/F2NY-FBBP> (“[F]inancial compensation in fisheries access agreements rarely exceed [ten] percent of the value of the catch.”).

⁴⁴ MWIKYA, *supra* note 43, at 1.

Beginning in 1979 with the establishment of the Pacific Islands Forum Fisheries Agency (“FFA”),⁴⁵ Pacific island states harmonized the provisions of fisheries access agreements and began coordinating the collection, compilation, and assessment of fisheries data through the SPC.⁴⁶ Distant water fishing nations with significant financial and commercial interests in these fisheries—both within the exclusive economic zones of Pacific island states and on the high seas—could not become members of the FFA or the SPC.⁴⁷ Yet, the treaty establishing the FFA recognized that “additional international machinery” would eventually be necessary “to provide for co-operation between all coastal states in the region and all states involved in the harvesting of [living marine resources] in the region.”⁴⁸

The early 1990s then saw the successful negotiation of several important agreements relating to the conservation and management of fisheries resources. These included the 1995 U.N. Fish Stocks Agreement,⁴⁹ the 1993 U.N. Food and Agriculture Organization (“FAO”) Compliance Agreement,⁵⁰ and the 1995 FAO Code of Conduct for Responsible Fisheries.⁵¹ Against this background, the Pacific island states and distant water fishing nations met in 1994 to negotiate new arrangements for the conservation and management of fish stocks in the Western and Central Pacific Ocean under the auspices of the Multilateral High Level

⁴⁵ The member nations of the FFA are Australia, the Cook Islands, the Federated States of Micronesia, Fiji, Kiribati, the Marshall Islands, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Samoa, the Solomon Islands, Tokelau, Tonga, Tuvalu, and Vanuatu. *FFA Members*, PAC. ISLANDS FORUM FISHERIES AGENCY, <https://www.ffa.int/members> (last visited Mar. 27, 2015), *archived at* <https://perma.cc/ST2Y-P99R>.

⁴⁶ FFA, FFC77, THE HARMONISED MINIMUM TERMS AND CONDITIONS FOR FOREIGN FISHING VESSEL ACCESS (1997), *available at* http://www.ffa.int/system/files/HMTC%20FFC77%20Approved_0.pdf, *archived at* <http://perma.cc/P6TV-EKEA>; *see also* SECRETARIAT OF THE WCPFC, *supra* note 37, at 2 (describing the background of access agreements).

⁴⁷ The treaty establishing the FFA limits membership to South Pacific Forum members and other states or territories in the region (on the recommendation of the Committee and with the approval of the Forum). South Pacific Forum Fisheries Agency Convention art. II, July 10, 1979, 1579 U.N.T.S. 316, *available at* <https://treaties.un.org/doc/Publication/UNTS/Volume%201579/volume-1579-I-27574-English.pdf>, *archived at* <https://perma.cc/5YEV-CFD6>.

⁴⁸ *Id.* art. III(2); *see supra* note 45 and accompanying text (identifying the members of the FFA); *infra* notes 84–85 and accompanying text (identifying the members of the SPC).

⁴⁹ United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks, New York, U.S.A., July 24–Aug. 4, 1995, *Agreement for the Implementation of the Provisions of the United Nations Convention of the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks*, U.N. Doc. A/CONF.164/37 (Sept. 8, 1995) [hereinafter U.N. Fish Stocks Agreement] (entered into force Dec. 11, 2001).

⁵⁰ Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, Food and Agriculture Organization of the United Nations, Nov. 24, 1993, 2221 U.N.T.S. 91.

⁵¹ FAO, CODE OF CONDUCT FOR RESPONSIBLE FISHERIES (1995), *available at* <http://www.fao.org/docrep/005/v9878e/v9878e00.htm>, *archived at* <http://perma.cc/7LXH-2WU9>.

Conference on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean.⁵²

The negotiations took six years to complete, and it took another four years for the WCPF Convention to enter into force.⁵³ The Convention's provisions and four-year delay for entry into force tell much about the difficulties of reaching an agreement. The WCPF Convention provides that the Convention will not enter into force until ratified or acceded to by three states situated north of the twenty degree parallel of north latitude ("northern states") and seven states situated south of the twenty degree parallel of north latitude ("southern states").⁵⁴ The WCPF Convention, however, included a back-up plan: If the Convention was not ratified by three of the northern states, then the Convention would enter into force six months after ratification or accession by any thirteen states.⁵⁵ With no northern states ratifying, the WCPF Convention entered into force in 2004 pursuant to the back-up plan, with ratification by thirteen southern states.⁵⁶

These provisions concerning entry into force reflect the different interests of the northern and southern fishing states. Historically, Japan, Taiwan, South Korea, and the United States—all distant water fishing nations—caught approximately ninety percent of the total tuna catch in the Western and Central Pacific Ocean.⁵⁷ These countries had an interest in the fisheries resources that differed substantially from those of the Pacific island developing states. Whereas the Pacific island developing states wanted greater economic benefits from their tuna fisheries, the distant water fishing nations wanted the fish for commercial sale at extreme profit margins.⁵⁸ In fact, the distant water fishing nations were paying

⁵² See SECRETARIAT OF THE WCPFC, *supra* note 37, at 2.

⁵³ *About WCPFC*, WCPFC, <http://www.wcpfc.int/about-wcpfc> (last updated Mar. 25, 2015), archived at <http://perma.cc/3H27-MQPE>. The negotiating states were Australia, Canada, China, the Cook Islands, the Federated States of Micronesia, the Fiji Islands, France, Indonesia, Japan, the Republic of Kiribati, the Republic of the Marshall Islands, the Republic of Nauru, New Zealand, Niue, the Republic of Palau, the Independent State of Papua New Guinea, the Republic of the Philippines, the Republic of Korea, the Independent State of Samoa, the Solomon Islands, the Kingdom of Tonga, Tuvalu, the United Kingdom of Great Britain and Northern Ireland in respect of Pitcairn, Henderson, Ducie and the Oeno Islands, the United States of America, and the Republic of Vanuatu. SECRETARIAT OF THE WCPFC, *supra* note 37, at 2–3 n.2.

⁵⁴ WCPF Convention, *supra* note 1, art. 37. The WCPF Convention was opened for signature on September 5, 2000. *Id.* art. 34. It entered into force on June 19, 2004. See *About WCPFC*, *supra* note 53.

⁵⁵ WCPF Convention, *supra* note 1, art. 36(2).

⁵⁶ The thirteen states are Australia, the Cook Islands, the Federated States of Micronesia, the Fiji Islands, Kiribati, the Marshall Islands, Nauru, New Zealand, Niue, Papua New Guinea, Samoa, the Solomon Islands, and Tonga. See WCPFC, WCPFC2-2005-REV2, STATUS OF THE CONVENTION 2–3 (2013) [hereinafter WCPFC, STATUS OF THE CONVENTION], available at <https://www.wcpfc.int/node/1115>, archived at <https://perma.cc/N8W9-L8QC>.

⁵⁷ Clarke, *supra* note 38, at 203.

⁵⁸ *Id.* at 204.

access fees of, on average, approximately three to four percent of the gross revenue from the tuna catch.⁵⁹ As a result, the WCPF Convention creates provisions that apply to all WCPFC members through the whole Convention Area,⁶⁰ as well as provisions that seek to balance the commercial interests of the distant water fishing nations with the economic and conservation interests of the Pacific island developing states.⁶¹

The WCPF Convention sets an overall goal to “ensure, through effective management, the long-term conservation and sustainable use of highly migratory fish stocks in the [W]estern and [C]entral Pacific Ocean.”⁶² The Convention, which currently includes twenty-six members,⁶³—seven participating territories⁶⁴ and ten cooperating non-members⁶⁵—establishes the WCPFC to adopt conservation and management measures (“CMMs”) for all stocks of highly migratory fish, such as tunas, billfish, and other species except saurians,⁶⁶ found in the Convention Area.⁶⁷ The Convention Area covers almost twenty percent of Earth’s surface,⁶⁸ ranging from Australia and the East Asian seaboard—excluding the South China Sea—in the west, to east of Hawaii in the east.⁶⁹ The southern boundary of the Convention Area borders the Southern Ocean at sixty

⁵⁹ *Id.*

⁶⁰ See, e.g., WCPF Convention, *supra* note 1, art. 5 (providing that “the members of the Commission shall” undertake a number of obligations).

⁶¹ MICHAEL POWLES, WCPFC, WCPFC/PREP/CON/1, OPENING REMARKS BY THE CHAIRMAN OF THE PREPARATORY CONFERENCE 1 (2001), available at https://www.wcpfc.int/system/files/WCPFC_PrepCon_1.pdf, archived at <https://perma.cc/K3KP-7X4N> (stating that the WCPF Convention “was the product of five years of painstaking negotiations between coastal States and distant water fishing nations”).

⁶² WCPF Convention, *supra* note 1, art. 2.

⁶³ The members are Australia, Canada, China, the Cook Islands, the European Union, the Federated States of Micronesia, Fiji, France, Indonesia, Japan, Kiribati, the Republic of Korea, the Republic of Marshall Islands, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Philippines, Samoa, the Solomon Islands, Chinese Taipei, Tonga, Tuvalu, the United States of America, and Vanuatu. *About WCPFC*, *supra* note 53. Indonesia recently became the twenty-sixth member of the WCPFC. WCPFC, STATUS OF THE CONVENTION, *supra* note 56, ¶¶ 1–2.

⁶⁴ The participating territories are American Samoa, the Commonwealth of the Northern Mariana Islands, French Polynesia, Guam, New Caledonia, Tokelau, and Wallis and Futuna. *About WCPFC*, *supra* note 53.

⁶⁵ The cooperating non-members are Belize, the Democratic People’s Republic of Korea, Ecuador, El Salvador, Mexico, Panama, Senegal, St Kitts and Nevis, Thailand, and Vietnam. *Id.* The website has not yet been updated to reflect Indonesia’s ratification of the Convention, which made it a full member of the WCPFC. See WCPFC, STATUS OF THE CONVENTION, *supra* note 56, ¶¶ 1–2.

⁶⁶ WCPF Convention, *supra* note 1, art. 3(3). The Convention defines highly migratory fish as “all fish stocks of the species listed in Annex 1 of the 1982 Convention occurring in the Convention Area, and such other species of fish as the Commission may determine.” *Id.* art. 1(f).

⁶⁷ *Id.* arts. 3(3), 9(1).

⁶⁸ *Frequently Asked Questions and Brochures*, *supra* note 3.

⁶⁹ For a map of the Convention Area, see *Convention Area Map*, WCPFC, <http://www.wcpfc.int/convention-area-map> (last updated Mar. 23, 2015), archived at <http://perma.cc/SFG2-PBHL>.

degrees south latitude and the northern boundary reaches to Alaska and the Bering Sea.⁷⁰

To help fulfill the WCPF Convention's conservation and management goals, WCPFC members must (a) adopt measures to ensure optimum utilization of fish stocks, (b) apply the precautionary approach,⁷¹ (c) minimize discards of target and non-target species, (d) protect marine biodiversity, and (e) implement and enforce CMMs through effective monitoring, control, and surveillance, among other things.⁷² In applying the precautionary approach, WCPFC members must adopt measures to ensure that a stock does not fall below a particular management goal (e.g., a specific population level), known as a "reference point"; the reference point shall not be exceeded, but if it is, the WCPFC members must take action "without delay" to restore the stocks.⁷³

The WCPF Convention directs members to implement these measures within their respective areas of national jurisdiction,⁷⁴ which includes each member's exclusive economic zones.⁷⁵ It further provides that CMMs for fish stocks on the high seas shall be compatible with those established in areas under

⁷⁰ Specifically, the Convention's jurisdiction ranges,

From the south coast of Australia due south along the 141 [degree] meridian of east longitude to its intersection with the 55 [degree] parallel of south latitude; thence due east along the 55 [degree] parallel of south latitude to its intersection with the 150 [degree] meridian of east longitude; thence due south along the 150 [degree] meridian of east longitude to its intersection with the 60 [degree] parallel of south latitude; thence due east along the 60 [degree] parallel of south latitude to its intersection with the 130 [degree] meridian of west longitude; thence due north along the 13 [degree] meridian of west longitude to its intersection with the 4 [degree] parallel of south latitude; thence due west along the 4 [degree] parallel of south latitude to its intersection with the 150 [degree] meridian of west longitude; thence due north along the 150 [degree] meridian of west longitude.

WCPF Convention, *supra* note 1, art. 3(1).

⁷¹ The WCPF Convention does not define the term "precautionary approach." Instead, it establishes a set of principles to guide members as they apply it. *See id.* art 6, Annex II.

⁷² *Id.* art. 5.

⁷³ *Id.* art. 6(2).

⁷⁴ *Id.* art. 7(1).

⁷⁵ *Id.* The United Nations Convention on the Law of the Sea ("UNCLOS") defines an exclusive economic zone as the area up to 200 nautical miles from the baselines from which the breadth of the territorial sea is measured in which coastal States have, among other things, "sovereign rights for the purpose of exploring and exploiting, conserving[,] and managing the natural resources, whether living or non-living, of the waters superjacent to the sea-bed and of the sea-bed and its subsoil." U.N. Convention on the Law of the Sea arts. 55–57, Dec. 10, 1982, 1833 U.N.T.S. 3 [hereinafter UNCLOS] (entered into force Nov. 16, 1994).

national jurisdiction⁷⁶ and that WCPFC member states “have a duty to cooperate for the purpose of achieving compatible measures in respect of such stocks.”⁷⁷

To fulfill its conservation and management goals, the WCPF Convention also establishes subsidiary bodies to provide scientific advice, make recommendations to the WCPFC, and assist with implementation of the Convention.⁷⁸ As described below, the different interests of the distant water fishing nations and the Pacific island developing states take shape within the different ways in which scientific advice is obtained and management advice is given to the WCPFC.

A. The WCPFC

The WCPFC, which includes all fishing entities⁷⁹ that have agreed to be bound by the WCPF Convention,⁸⁰ is the decision-making body of the WCPF Convention and is charged with ensuring the conservation and management of fish stocks in the Convention Area.⁸¹ To implement its conservation and management duties, the WCPFC meets once a year to determine catch limits for target species within the Convention Area and adopt other CMMs for target and non-target species.⁸² The CMMs the WCPFC establishes may include setting catch limits and catchable size limits for particular species, restricting the types and sizes of vessels allowed to fish, establishing geographical areas and times of year during which fishing may or may not occur, and specifying the technology that fishing operations may use.⁸³ The WCPFC has used this authority to adopt a large number of CMMs relating to catch limits for various stocks,⁸⁴ bycatch of

⁷⁶ WCPF Convention, *supra* note 1, art. 8(1).

⁷⁷ *Id.* An important legal question, unrelated to the issues discussed in this article, relates to the nature of this compatibility requirement. Article 7 appears to grant coastal States sovereign rights to adopt measures in areas of national jurisdiction, but Article 10 directs the WCPFC to adopt CMMs for all areas under the WCPFC’s authority, which includes areas of national jurisdiction. See WCPFC, WCPFC8-2011/12, REVIEW OF THE PERFORMANCE OF THE WCPFC § 3.4.1 (2012) [hereinafter REVIEW ON THE PERFORMANCE OF THE WCPFC], available at <http://www.wcpfc.int/system/files/WCPFC8-2011-12%20WCPFC%20Performance%20Review%20Report.pdf>, archived at <http://perma.cc/HMB3-K73G>.

⁷⁸ WCPF Convention, *supra* note 1, art. 9(2), Annex I.

⁷⁹ The WCPF Convention allows non-States, such as Taiwan, to participate in the WCPFC. *Id.* These are known as “fishing entities.” *Id.*

⁸⁰ *Id.*

⁸¹ *Id.* arts. 9–10.

⁸² *Id.* art. 10(1)–(3). Items may be included in the agenda for discussion and adoption based simply on a proposal from any WCPFC member, as well as from a recommendation of the Scientific Committee, Technical and Compliance Committee, and the Executive Director of the Secretariat. WCPFC, RULES OF PROCEDURE, *supra* note 29, Annex I, ¶ 2.

⁸³ WCPF Convention, *supra* note 1, art. 10(2).

⁸⁴ See, e.g., WCPFC, CMM 2005-03, CONSERVATION AND MANAGEMENT MEASURE FOR THE NORTH PACIFIC ALBACORE (2005), available at <https://www.wcpfc.int/node/922>, archived at <https://perma.cc/ACQ9-XBTK>.

sea turtles,⁸⁵ marking of vessels,⁸⁶ and many other matters.⁸⁷ The WCPFC may also enter into agreements with scientific experts and institutions to provide scientific information on fish stocks.⁸⁸

The WCPFC must also encourage conservation and cooperation among its members; compile; evaluate; and disseminate data; implement international standards for responsible fishing operations; and establish mechanisms to monitor enforcement of CMMs.⁸⁹ In addition, it must consider reports and recommendations of the Scientific Committee and the Technical and Compliance Committee “on matters within their respective areas of competence”⁹⁰ when setting total allowable catch levels or limitations on the total level of fishing effort.⁹¹

Further, WCPFC members must provide to the WCPFC annual data on fish catches, information on steps taken to implement CMMs, and measures for regulating fishing activities.⁹² The WCPFC Convention also created a regional observer program to collect verified catch data and other scientific and management information and to monitor the implementation of CMMs adopted by the WCPFC.⁹³ This program involves the use of impartial observers and ensures that the WCPFC receives sufficient data on catch levels.⁹⁴

B. The Subsidiary Bodies of the WCPFC

The WCPFC Convention establishes three subsidiary bodies to aid the WCPFC in carrying out its functions: (1) the Scientific Committee, (2) the Tech-

⁸⁵ WCPFC, CMM 2008-03, CONSERVATION AND MANAGEMENT OF SEA TURTLES (2008), available at <https://www.wcpfc.int/doc/cmm-2008-03/conservation-and-management-sea-turtles>, archived at <https://perma.cc/H7SH-QKR5>.

⁸⁶ WCPFC, CMM 2004-03, SPECIFICATIONS FOR THE MARKING AND IDENTIFICATION OF FISHING VESSELS (2004), available at <https://www.wcpfc.int/doc/cmm-2004-03/specifications-marking-and-identification-fishing-vessels>, archived at <https://perma.cc/5RNY-MDU4>.

⁸⁷ See, e.g., *Conservation and Management Measures*, WCPFC, <http://www.wcpfc.int/conservation-and-management-measures> (last updated Feb. 9, 2015), archived at <http://perma.cc/LY2W-Z4DV>. WCPFC Convention, *supra* note 1, arts. 9(5), 13(1), 22(5).

⁸⁸ WCPFC Convention, *supra* note 1, arts. 9(5), 13(1), 22(5).

⁸⁹ *Id.* art. 10(1).

⁹⁰ *Id.* art. 10(5).

⁹¹ *Id.* art. 10(3). The WCPFC Convention does not define “fishing effort,” but the term generally refers to “a given combination of inputs into the fishing activity, such as the number of hours or days spent fishing, numbers of hooks used (in long-line fishing), kilometres of nets used, etc.” *Fishing Effort*, ORG. FOR ECON. CO-OPERATION & DEV., <http://stats.oecd.org/glossary/detail.asp?ID=994> (last updated Mar. 5, 2003), archived at <http://perma.cc/DM8U-6P5E>.

⁹² WCPFC Convention, *supra* note 1, art. 23.

⁹³ *Id.* art. 28(1).

⁹⁴ *Id.* art. 28.

nical and Compliance Committee, and (3) the Northern Committee.⁹⁵ Each subsidiary body makes recommendations to the WCPFC within their “respective areas of competence.”⁹⁶ Based on these recommendations, the WCPFC makes conservation and management decisions to achieve the WCPF Convention’s goals.⁹⁷

1. The Scientific Committee

The Scientific Committee ensures that the WCPFC has the “best scientific information available.”⁹⁸ To provide such information, the Scientific Committee “review[s] the assessments, analyses, other work[,] and recommendations prepared for the [WCPFC] by the scientific experts prior to the consideration of such recommendations by the [WCPFC].”⁹⁹ The Scientific Committee then provides “information, advice[,] and comments” about the results of research and analyses of target and non-target stocks in the Convention Area.¹⁰⁰ It also recommends a research plan to the WCPFC, encourages coordination of scientific research in the Convention Area, reports to the WCPFC on its findings on the status of stocks in the Convention Area, and “make[s] reports and recommendations to the [WCPFC] as directed, or on its own initiative, on matters concerning the conservation and management of and research on . . . species in the Convention Area.”¹⁰¹

2. The Technical and Compliance Committee

The Technical and Compliance Committee provides the WCPFC with technical advice on implementation of CMMs.¹⁰² In particular, it ensures implementation of CMMs by WCPFC members by monitoring compliance, and it

⁹⁵ *Id.* art. 11(1), (7). The WCPFC also established the standing Finance and Administration Committee (“FAC”) as a subsidiary body pursuant to article 11(6) of the WCPF Convention. WCPFC, THIRD REGULAR SESSION ¶ 181 (2006) [hereinafter WCPFC, THIRD REGULAR SESSION], available at <http://www.wcpfc.int/system/files/WCPFC3%20-Summary%20Report%20Consolidated%20report.pdf>, archived at <http://perma.cc/YC9M-QHAJ>. The FAC, however, is beyond the scope of this Article.

⁹⁶ WCPF Convention, *supra* note 1, art. 11(1).

⁹⁷ *Id.* arts. 10(5), 11(7).

⁹⁸ *Id.* art. 12(1).

⁹⁹ *Id.* art. 12(2)(b).

¹⁰⁰ *Id.* art. 12(2)(d). The WCPFC must “tak[e] into account any recommendation of the Scientific Committee” when “engag[ing] the services of scientific experts to provide information and advice on the fishery resource covered by [the] Convention.” *Id.* art. 13(1). All reports and recommendations prepared by scientific experts “shall be provided to the Scientific Committee[,]” as well as “reports on the results of [the expert’s] scientific work, advice and recommendations in support of the formulation of conservation and management measures[,] and other relevant matters.” *Id.* art. 13(2)(d), (5).

¹⁰¹ *Id.* art. 12(2)(a), (e), (g).

¹⁰² *Id.* art. 14(1).

makes additional recommendations to the WCPFC if further cooperative measures are necessary.¹⁰³ To carry out these functions, it receives reports relating to monitoring and investigation of, and punishment for, violations of the WCPF Convention;¹⁰⁴ makes recommendations to the WCPFC on, among other things, fishing gear and technology that fishing operations may use;¹⁰⁵ reports to the WCPFC its findings and conclusions relating to the extent of compliance with CMMs; makes recommendations to the WCPFC on matters relating to monitoring, control, surveillance, and enforcement;¹⁰⁶ and considers other matters as referred to it by the WCPFC.¹⁰⁷ Significantly, the Technical and Compliance Committee does not have independent authority to sanction members for non-compliance; instead, if it concludes that a member is in non-compliance with a CMM, it can make recommendations to the WCPFC for addressing that non-compliance.¹⁰⁸

3. The Northern Committee

The Northern Committee recommends CMMs to the WCPFC concerning “stocks which occur mostly” in the area north of twenty degrees north latitude.¹⁰⁹ It comprises those WCPFC members situated or fishing in this area¹¹⁰—mostly distant water fishing nations.¹¹¹ The WCPFC has identified only three stocks—Pacific bluefin tuna, northern albacore, and the northern stock of swordfish—as occurring primarily north of twenty degrees north latitude.¹¹² It has designated those stocks as “northern stocks” within the jurisdiction of the Northern Committee.¹¹³ Based on the advice of the Scientific Committee, the WCPFC may add species to the list of northern stocks,¹¹⁴ but it has never done so.¹¹⁵

¹⁰³ *Id.*

¹⁰⁴ *Id.* art. 14(2)(b).

¹⁰⁵ *Id.* art. 14(2)(f).

¹⁰⁶ *Id.* art. 14(2)(h).

¹⁰⁷ *Id.* art. 14(2)(d).

¹⁰⁸ *See generally id.* art. 14(1)–(2) (describing the functions of the Technical and Compliance Committee).

¹⁰⁹ *Id.* art. 11(7); WCPFC, RULES OF PROCEDURE, *supra* note 29, Annex I, ¶ 2 (naming of the Northern Committee). The Northern Committee comprises WCPFC members situated north of twenty degrees north latitude and members fishing in this area. WCPF Convention, *supra* note 1, art. 11(7); WCPFC, RULES OF PROCEDURE, *supra* note 29, Annex I, ¶ 1.

¹¹⁰ WCPF Convention, *supra* note 1, art. 11(7).

¹¹¹ The members of the Northern Committee are Canada, the Cook Islands, Japan, Korea, Chinese Taipei, the United States of America, and Vanuatu. N. COMM., WCPFC, NORTHERN COMMITTEE SECOND REGULAR SESSION 10–19 (2006), *available at* <https://www.wcpfc.int/system/files/Northern%20Committee%20Final%20Report%20-%20Second%20Regular%20Session.pdf>, *archived at* <https://perma.cc/5GJN-BM2J>.

¹¹² WCPFC, RULES OF PROCEDURE, *supra* note 29, Annex I, ¶ 5.

¹¹³ *Id.*

¹¹⁴ *Id.*

In contrast with the Scientific Committee, the Northern Committee lacks an express mandate to review scientific assessments of any stocks within the purview of the WCPFC.¹¹⁶ Instead, it reviews scientific information on fish stocks that it requests from the ISC.¹¹⁷ Also unlike the Scientific Committee, which is charged with reviewing scientific information and making recommendations to the WCPFC with respect to all stocks within the Convention Area, the Northern Committee may make recommendations only with respect to specified “northern” stocks.¹¹⁸

The creation of two pathways for providing scientific advice was a key compromise among the negotiators of the WCPF Convention¹¹⁹ as they sought to balance the interests of distant water fishing nations and the Pacific island states in whose waters the migratory species managed by the WCPF Convention inhabit.¹²⁰ As explained in Part III, by creating two pathways for providing scientific advice to the WCPFC, the WCPF Convention and the WCPFC members have created confusion as to whose advice the WCPFC must follow.¹²¹

C. The Scientific Service Providers

In addition to relying on its subsidiary bodies, the WCPFC may obtain information and advice from outside scientific experts.¹²² Before contracting with scientific experts, however, the WCPFC must take into account any recommendation of the Scientific Committee.¹²³ All reports and recommendations of scien-

¹¹⁵ See N. COMM., WCPFC, SUMMARY REPORT: NORTHERN COMMITTEE NINTH REGULAR SESSION § 2.3 (2013) [hereinafter N. COMM., NINTH REGULAR SESSION SUMMARY REPORT], available at <https://www.cpf.int/meetings/9th-regular-session-northern-committee>, archived at <https://perma.cc/869S-6K6L> (summarizing the discussions of the Northern Committee for northern stocks). At its tenth meeting, however, the WCPFC directed the Scientific Committee to determine whether the blue shark qualified as a “northern stock.” WCPFC TENTH REGULAR SESSION SUMMARY REPORT, *supra* note 16, ¶ 217.

¹¹⁶ Compare WCPF Convention, *supra* note 1, art. 12 (establishing the functions of the Scientific Committee), with *id.* art. 11(7) (establishing the functions of the Northern Committee), and WCPFC, RULES OF PROCEDURE, *supra* note 29, Annex I (establishing the procedural rules by which the Northern Committee must execute its functions).

¹¹⁷ See *infra* notes 139–150 and accompanying text.

¹¹⁸ WCPF Convention, *supra* note 1, art. 11(7).

¹¹⁹ See REVIEW OF THE PERFORMANCE OF THE WCPFC, *supra* note 77, § 5.6 (stating that “[t]he Panel understands the present WCPFC structure was a compromise from the negotiations that created the Commission, particularly with respect to its subsidiary bodies”).

¹²⁰ See DELEGATION OF THE UNITED STATES OF AM., PREPARATORY CONFERENCE FOR THE COMMISSION FOR THE CONSERVATION & MGMT. OF HIGHLY MIGRATORY FISH STOCKS IN THE W. & CENT. PAC., WCPFC/PREP/CON/DP.18, NORTHERN COMMITTEE PROPOSAL: VIEWS OF THE UNITED STATES (2003), available at https://www.wcpfc.int/system/files/WCPFC_PrepCon_DP18%28US_comments_on_N_Committee%29.pdf, archived at <https://perma.cc/TV6R-RDYN>.

¹²¹ See *infra* notes 301–422 and accompanying text.

¹²² WCPF Convention, *supra* note 1, art. 13(1).

¹²³ *Id.*

tific experts must be provided to both the Scientific Committee and the WCPFC.¹²⁴ The WCPFC may also make other arrangements for the periodic review of information provided by scientific experts.¹²⁵

The WCPF Convention allows outside scientific experts to provide an array of research and analysis in support of the WCPFC's work.¹²⁶ For example, scientific experts may develop stock-specific reference points and assess the status of stocks.¹²⁷ They may also provide the WCPFC and the Scientific Committee with reports and provide advice and recommendations on conservation measures.¹²⁸ Using this authority, the WCPFC has entered into agreements with the SPC and the ISC.

1. The Secretariat of the Pacific Community

The Pacific Community—formerly known as the South Pacific Commission—is a regional organization established in 1947 by six “participating governments” who administered territories in the Pacific.¹²⁹ Now including twenty-six members,¹³⁰ the Pacific Community engages its members in a variety of is-

¹²⁴ *Id.* art. 13(5).

¹²⁵ *Id.* art. 13(4).

¹²⁶ *Id.* art. 13(2). Specifically, experts may:

- (a) undertake the collection, compilation[,] and dissemination of fisheries data according to agreed principles and procedures established by the Commission, including procedures and policies relating to the confidentiality, disclosure[,] and publication of data;
- (b) conduct assessments of highly migratory fish stocks, non-target species, and species belonging to the same ecosystem or associated with or dependent upon such stocks, within the Convention Area; (c) assess the impacts of fishing, other human activities[,] and environmental factors on target stocks and species belonging to the same ecosystem or dependent upon or associated with the target stocks; (d) assess the potential effects of proposed changes in the methods or levels of fishing and of proposed conservation and management measures; and (e) investigate such other scientific matters as may be referred to them by the Commission.

Id.

¹²⁷ *Id.*

¹²⁸ *Id.*

¹²⁹ Agreement Establishing the South Pacific Commission art. I, Feb. 6, 1947, 2 U.S.T. 1787, 97 U.N.T.S. 227, available at http://www.spc.int/images/stories/About_SPC/Canberra-Agreement.pdf, archived at <http://perma.cc/HQ5E-4PXV> (entered into force July 29, 1948); *History*, SECRETARIAT OF THE PAC. CMTY., <http://www.spc.int/en/about-spc/history.html> (last visited Mar. 27, 2015), archived at <http://perma.cc/SX2G-FYBR>. The six countries are Australia, France, New Zealand, the Netherlands, the United Kingdom, and the United States of America. *History*, *supra*.

¹³⁰ Twenty-two Pacific Island countries and territories and Australia, France, New Zealand, and the United States. The twenty-two Pacific Island countries and territories are: American Samoa, the Cooke Islands, the Federated States of Micronesia, Fiji, French Polynesia, Guam, Kiribati, the Marshall Islands, Nauru, New Caledonia, Niue, the Northern Mariana Islands, Palau, Papua New Guinea, the Pitcairn Islands, Samoa, the Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, and Wallis and Futuna. *Members of the Pacific Community*, SECRETARIAT OF THE PAC. CMTY., <http://www.spc.int/>

sues—including public health, economic and social development, climate change, and fisheries—to “help Pacific Island people achieve sustainable development.”¹³¹ Now more commonly referred to as the “SPC,” the Pacific Community constitutes the region’s primary technical and scientific organization.¹³²

The WCPFC’s MoU with the SPC calls on the SPC to provide scientific services, including data management services, to the WCPFC.¹³³ Under the MoU and accompanying triennial service agreement,¹³⁴ the SPC’s Oceanic Fisheries Programme collects, compiles, and disseminates fisheries data; undertakes regional stock assessments of key target and non-target species; conducts ecosystem analyses; and advises on the WCPFC’s strategies for monitoring and controlling fishing activities.¹³⁵ The range of fisheries data collected and compiled by the SPC’s Oceanic Fisheries Programme is immense and includes annual catch estimates, aggregated catch and effort data, and size composition data.¹³⁶ It also compiles observer data, port sampling data, tagging data, oceanographic data, and various types of biological data.¹³⁷ Neither the MoU nor the triennial service agreement describes how the SPC will communicate with WCPFC Convention bodies, although some specific elements of the work program specify that WCPFC members may request information from the SPC through the Executive Secretary of the Secretariat.¹³⁸

2. The International Scientific Committee for Tuna and Tuna-like Species in the Northern Pacific Ocean

Unlike the SPC, which predates the WCPFC Convention, the ISC was established by the United States and Japan in 1995 specifically to provide information on tuna and tuna-like species in the North Pacific Ocean to the Northern Com-

en/about-spc/members.html (last visited Mar. 27, 2015), *archived at* <http://perma.cc/2FFY-Z46R>. In 2004, the United Kingdom withdrew from the Pacific Community. *History*, *supra* note 129. The Netherlands withdrew in 1962. *Id.*

¹³¹ SECRETARIAT OF THE PAC. CMTY., <http://www.spc.int/en/index.php> (last visited Mar. 27, 2015), *archived at* <http://perma.cc/7KW5-8N4H>. The Pacific Community was originally established “to restore stability to a region that had experienced the turbulence of the Second World War, to assist in administering their dependent territories and to benefit the people of the Pacific.” *History*, *supra* note 129.

¹³² *Employment*, SECRETARIAT OF THE PAC. CMTY., <http://www.spc.int/en/recrutement.html> (last visited Mar. 27, 2015), *archived at* <http://perma.cc/M58C-WBS3>.

¹³³ Revised Memorandum of Understanding, WCPFC-Secretariat of the Pac. Cmty., Mar. 4, 2010 [hereinafter WCPFC-SPC MoU], *available at* <https://www.wcpfc.int/system/files/WCPFC-SPC%20MoU.pdf>, *archived at* <https://perma.cc/3TLB-RQDV>.

¹³⁴ *Id.* Annex I.

¹³⁵ *Id.*

¹³⁶ REVIEW OF THE PERFORMANCE OF THE WCPFC, *supra* note 77, § 5.5.1.

¹³⁷ *Id.*

¹³⁸ WCPFC-SPC MoU, *supra* note 133, Annex I, Activity iv.9.

mittee and the WCPFC.¹³⁹ As with the creation of the Northern Committee, the creation of the ISC was part of the package of compromises between distant water fishing nations and other WCPFC members.¹⁴⁰ The purposes of the ISC include “enhancing scientific research and cooperation for conservation and rational utilization of tuna and tuna-like species in the North Pacific Ocean” and “build[ing] and strengthen[ing] the regional scientific framework for conservation and rational utilization of these species.”¹⁴¹

The WCPFC’s MoU with the ISC calls for the ISC to provide scientific services to the WCPFC regarding northern stocks and bycatch of fish and non-fish species.¹⁴² Specifically, the Northern Committee “may request” scientific information and advice from the ISC regarding fish stocks.¹⁴³ The authority to provide advice regarding fish stocks distinguishes the ISC from the SPC.¹⁴⁴ The ISC provides this information and advice to the Northern Committee, the WCPFC, and the Scientific Committee.¹⁴⁵ In addition, the ISC provides its normal committee and working group reports “directly to” the Northern Committee, the WCPFC, and the Scientific Committee.¹⁴⁶ This information and advice is presented at the annual meetings of the Northern Committee and Scientific Committee and “may be” presented to the WCPFC.¹⁴⁷

The MoU does not expressly grant the WCPFC or the Scientific Committee the authority to request information from the ISC. This limitation on the WCPFC

¹³⁹ The two countries established the “Interim Scientific Committee.” Press Release, Int’l Scientific Comm. for Tuna & Tuna-like Species in the N. Pac. Ocean (Jan. 13, 1995), available at http://isc.ac.affrc.go.jp/about_isc/press_release.html, archived at <http://perma.cc/LG65-VFSA>. The name was changed to “International” in 2005. See *id.*

¹⁴⁰ REVIEW OF THE PERFORMANCE OF THE WCPFC, *supra* note 77, § 5.6.

¹⁴¹ JERRY AULT ET AL., INT’L SCIENTIFIC COMM. FOR TUNA & TUNA-LIKE SPECIES IN THE N. PAC. OCEAN, ISC/13/PLENARY/10, REPORT OF THE PEER REVIEW OF FUNCTION § 2.1 (2013) [hereinafter REPORT OF THE ISC PEER REVIEW OF FUNCTION], available at http://isc.ac.affrc.go.jp/pdf/ISC13pdf/Plenary%2010-%20Peer%20Review%20of%20Function_1.pdf, archived at <http://perma.cc/2SGE-JG97> (prepared for the Thirteenth Meeting of the ISC, held from 17–22 July 2013, in Busan, Korea).

¹⁴² WCPFC-ISC MoU, *supra* note 12, pt. I.

¹⁴³ *Id.*

¹⁴⁴ According to one report, this authority—to give advice on the management of fish stocks directly to the Northern Committee—gives the ISC “near-equivalent status” to the Scientific Committee. DAVID AGNEW ET AL., MRAG LTD. & WCPFC, WCPFC-SC5-2009/GN-WP-7, FINAL REPORT ON INDEPENDENT REVIEW OF THE COMMISSION’S TRANSITIONAL SCIENCE STRUCTURE AND FUNCTIONS § 5.2.1 (2009) [hereinafter REVIEW OF THE COMMISSION’S TRANSITIONAL SCIENCE STRUCTURE], available at <http://www.wcpfc.int/system/files/WCPFC-SC5-2009-GN-WP-7%20%28Project%20report%20on%20Independent%20Review%29.pdf>, archived at <http://perma.cc/4WTD-XCV6>. The authors disagree that the ISC has near-equivalent status to the Scientific Committee. More accurately, the ISC has functions similar to those of the Scientific Committee, but its legal status differs markedly from that of the Scientific Committee. See *infra* notes 304–337 and accompanying text.

¹⁴⁵ REVIEW OF THE COMMISSION’S TRANSITIONAL SCIENCE STRUCTURE, *supra* note 144, ¶¶ 1–2.

¹⁴⁶ *Id.* ¶ 3.

¹⁴⁷ *Id.* ¶ 4.

and the Scientific Committee “prevents a more fluent dialogue between the Commission and the Scientific Committee with the ISC.”¹⁴⁸ In some circumstances, the lack of transparency and fluid dialogue has resulted “in particular concerns with the assessments being undertaken by the ISC and their associated data inputs.”¹⁴⁹ It has also given rise to the question at the heart of this Article and addressed in Part II below: On whose information and advice must the WCPFC rely with respect to northern stocks, the SPC and Scientific Committee’s or the ISC and Northern Committee’s?¹⁵⁰

II. UNTANGLING THE INSTITUTIONAL ROLES WITHIN THE WCPFC

Although the description of the Western and Central Pacific Fisheries Commission’s (“WCPFC”) institutions in Part I of this Article appears relatively straightforward, it masks the underlying tension among the WCPFC members over the roles of the institutions and the corresponding challenge of managing this valuable fishery in a sustainable manner.¹⁵¹ Several recent incidents have brought these concerns to a troubling flashpoint. As described in the introduction, establishing the appropriate fishing mortality rate for Pacific bluefin tuna has been a continuing source of friction among WCPFC members.¹⁵² Although the 2012 stock assessment of the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (“ISC”) estimates the Pacific bluefin tuna population at just 3.6 percent of historic biomass,¹⁵³ the WCPFC’s Northern Committee recommended a measure that would allow overall catches to rise above levels seen in the last two years.¹⁵⁴ The Northern Committee did

¹⁴⁸ REVIEW OF THE PERFORMANCE OF THE WCPFC, *supra* note 77, § 5.6.

¹⁴⁹ *Id.*

¹⁵⁰ See *infra* notes 151–300 and accompanying text.

¹⁵¹ See *supra* notes 37–150 and accompanying text.

¹⁵² See N. COMM., WCPFC, SUMMARY REPORT: NORTHERN COMMITTEE SIXTH REGULAR SESSION ¶¶ 17–30 (2010) [hereinafter N. COMM., SIXTH REGULAR SESSION SUMMARY REPORT], available at <https://www.wcpfc.int/meetings/6th-regular-session-northern-committee>, archived at <https://perma.cc/D4Y2-P9Q6> (summarizing the debate concerning bluefin tuna); SCIENTIFIC COMM., WCPFC, SUMMARY REPORT: SCIENTIFIC COMMITTEE SIXTH REGULAR SESSION ¶ 333 (2010) [hereinafter SCIENTIFIC COMM., SIXTH REGULAR SESSION SUMMARY REPORT], available at <https://www.wcpfc.int/meetings/6th-regular-session-scientific-committee>, archived at <https://perma.cc/A44J-5YZN> (noting that in 2010 the Scientific Committee “remained concerned that the impact of the new measure in reversing trends in spawning stock biomass and fishing mortality of this species, particularly on juvenile age classes (ages 0–3), remains to be seen”).

¹⁵³ See *Pacific Bluefin Tuna Working Group*, INT’L SCIENTIFIC COMM. FOR TUNA & TUNA-LIKE SPECIES IN THE N. PAC. OCEAN, http://isc.ac.affrc.go.jp/working_groups/pacific_bluefin_tuna.html (last updated July 1, 2014), archived at <http://perma.cc/Q24U-8SHB> (stating that “[c]urrent spawning stock biomass is near their lowest level (3.6%) and has been declining for over a decade”).

¹⁵⁴ CONSERVATION AND MANAGEMENT MEASURE FOR PACIFIC BLUEFIN TUNA, *supra* note 16, at 1 (noting that the ISC stated that a “[f]urther reduction of fishing mortality, especially for juvenile

this despite recommendations from both the ISC and the WCPFC's Scientific Committee to reduce fishing mortality to limit the risk of further population declines.¹⁵⁵ Nonetheless, the WCPFC failed to reduce fishing mortality for Pacific bluefin tuna at its December 2013 meeting.¹⁵⁶

The Pacific bluefin tuna is not the only flashpoint. In 2011, for example, neither the Secretariat of the Pacific Community ("SPC") nor the ISC provided a stock assessment for North Pacific striped marlin.¹⁵⁷ The stock is not designated as a "northern stock," but the ISC indicated that it would complete a stock assessment in 2011—it did not.¹⁵⁸ As a consequence, the Scientific Committee, at its seventh annual regular meeting, recommended an immediate reduction in fishing mortality,¹⁵⁹ to which the WCPFC agreed.¹⁶⁰ The WCPFC further recommended that the SPC undertake the stock assessment for North Pacific striped marlin if the ISC failed to provide stock assessment results to the Scientific Committee before its eighth annual regular meeting.¹⁶¹ The WCPFC members "called into question the ability of the ISC process to deliver on this issue," and,

fish[,] is needed to reduce the risk of [spawning stock biomass] falling below its historically lowest level").

¹⁵⁵ SCIENTIFIC COMM., NINTH REGULAR SESSION SUMMARY REPORT, *supra* note 7, ¶ 196 (noting the majority view that, "the fishing mortality on Pacific bluefin tuna be immediately reduced, especially on juveniles, in order to reduce the risk of recruitment collapse and allow the spawning stock to rebuild").

¹⁵⁶ Instead, the WCPFC adopted a new conservation and management measure ("CMM") calling for a new management objective to ensure the current level of fishing mortality rate "is not increased." CMM FOR PACIFIC BLUEFIN TUNA, *supra* note 16, ¶ 1. Conservationists called on the WCPFC to reject the Northern Committee's recommendation, stating,

[T]he WCPFC should recommend that the Northern Committee develop a rebuilding plan for Pacific bluefin tuna for adoption by the 11th Regular Session of the WCPFC that includes catch limits that would return the population to . . . [twenty-five] percent of the original population size . . . within the next [ten] years.

PEW CHARITABLE TRUST, RECOMMENDATIONS TO THE 10TH REGULAR SESSION OF THE WESTERN AND CENTRAL PACIFIC FISHERIES COMMISSION 4 (2013), *available at* http://www.pewtrusts.org/~media/Assets/2013/11/14/Pew-WCPFC-Policy-Brief_2013.pdf, *archived at* <http://perma.cc/2D2H-RKRT>.

¹⁵⁷ See REVIEW OF THE PERFORMANCE OF THE WCPFC, *supra* note 77, § 5.2.

¹⁵⁸ *Id.*

¹⁵⁹ SCIENTIFIC COMM., WCPFC, SUMMARY REPORT: SCIENTIFIC COMMITTEE SEVENTH REGULAR SESSION ¶ 50 (2011) [hereinafter SCIENTIFIC COMM., SEVENTH REGULAR SESSION SUMMARY REPORT], *available at* <https://www.wcpfc.int/meetings/7th-regular-session-scientific-committee>, *archived at* <https://perma.cc/B3LP-HU7Y>.

¹⁶⁰ WCPFC, CMM 2010-01, CONSERVATION AND MANAGEMENT MEASURE FOR NORTH PACIFIC STRIPED MARLIN (2010) [hereinafter WCPFC, NORTH PACIFIC STRIPED MARLIN CMM], *available at* <https://www.wcpfc.int/doc/cmm-2010-01/conservation-and-management-measure-north-pacific-striped-marlin>, *archived at* <https://perma.cc/3FQ5-ZATK>.

¹⁶¹ SCIENTIFIC COMM., SEVENTH REGULAR SESSION SUMMARY REPORT, *supra* note 159, ¶ 51.

consequently, recommended that the SPC perform a new stock assessment in 2012.¹⁶²

Another flashpoint over a question of authority recently emerged with respect to the blue shark stock assessment. In 2012, Japan and the ISC noted that the work plans of both the SPC and ISC included an assessment of blue shark populations and expressed concern about duplication of effort if the work was not coordinated.¹⁶³ An ISC representative echoed this concern, and noted that originally the SPC and ISC had agreed that the ISC would undertake assessments of both blue sharks and shortfin mako sharks, but that the position of the SPC “appeared to have changed.”¹⁶⁴ According to the ISC, it and the WCPFC, along with the Inter-American Tropical Tuna Commission,¹⁶⁵ agreed that the ISC would be responsible for undertaking a stock assessment for blue shark stocks in the North Pacific.¹⁶⁶ Later, however, the SPC stated that it would also assess North Pacific blue shark.¹⁶⁷ The SPC and ISC shared some catch and other information and even agreed that the blue shark assessment would be a joint SPC-ISC product that the ISC’s shark working group and Plenary would review before submission to the WCPFC.¹⁶⁸ The SPC, however, did not complete the assessment in time for review by the ISC’s shark working group.¹⁶⁹

These conflicts over which body is the key supplier of scientific advice to the WCPFC have resulted in a “particularly caustic atmosphere and high and palpable degree of animosity between [the] ISC and the [Scientific] Committee” that must be repaired to manage fish stocks properly.¹⁷⁰ To ensure the effective management of these valuable fish stocks, the WCPFC must resolve these tensions by identifying clearly the lines of communication and decision-making authority, particularly with respect to the northern stocks. This Part untangles the lines of communication and decision-making between and among the WCPFC, the Scientific Committee, the Northern Committee, the SPC, and the ISC, as established in the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western Pacific Ocean (the “WCPF Convention” or

¹⁶² Further, they recommended that the SPC perform a new stock assessment in 2012. *Id.* ¶ 267.

¹⁶³ N. COMM., EIGHT REGULAR SESSION SUMMARY REPORT, *supra* note 22, § 2.4.3.

¹⁶⁴ *Id.*

¹⁶⁵ “The IATTC is responsible for the conservation and management of tuna and other marine resources in the eastern Pacific Ocean.” INTER-AMERICAN TROPICAL TUNA COMM’N, <http://www.iattc.org/Homeeng.htm> (last updated Mar. 2, 2015), *archived at* <http://perma.cc/NJM6-NZZM>. Its members are Belize, the European Union, Nicaragua, Canada, France, Panama, China, Guatemala, Peru, Colombia, Japan, Chinese Taipei, Costa Rica, Kiribati, the United States, Ecuador, Korea, Vanuatu, El Salvador, Mexico, and Venezuela. *Id.*

¹⁶⁶ REPORT OF THE THIRTEENTH MEETING OF THE ISC, *supra* note 23, § 5.1.

¹⁶⁷ *Id.*

¹⁶⁸ *Id.*

¹⁶⁹ *Id.*

¹⁷⁰ REPORT OF THE PEER REVIEW OF FUNCTION, *supra* note 141, § 6.2.

the “Convention”) and other relevant agreements. In particular, this Part answers the following questions:

Which body has the authority to advise the WCPFC about conservation and management measures (“CMMs”) for the northern stocks, the Scientific Committee or the Northern Committee?

When the Scientific Committee has concerns about the scientific information provided to the Northern Committee by the ISC, may the Scientific Committee seek additional information or advise the WCPFC to reject a CMM proposed by the Northern Committee? If it does, then what, if anything, is the WCPFC required to do in response?

A. The WCPFC’s Decision-Making Hierarchy

The WCPF Convention clearly establishes a three-tiered legal hierarchy among the Convention’s institutions.¹⁷¹ The functional hierarchy of the Convention’s institutions is not, however, so clearly established. It is this hierarchy that has led to tensions between the Scientific Committee on the one hand and the ISC and Northern Committee on the other hand. This functional hierarchy, which lies at the heart of this Article, is described in Section 2, below.

1. The Legal Hierarchy of WCPFC Bodies

The WCPF Convention establishes a clear, three-tiered hierarchy for decision-making authority among the WCPFC, the subsidiary bodies, and scientific experts such as the SPC and the ISC.¹⁷² The WCPFC sits at the top of the hierarchy.¹⁷³ The WCPF Convention specifically makes the WCPFC responsible for adopting the CMMs to further the goals of the WCPF Convention.¹⁷⁴ It is the only WCPF Convention entity with an international legal personality.¹⁷⁵

The three subsidiary bodies—the Northern Committee, the Scientific Committee, and the Technical and Compliance Committee—sit in the middle of the hierarchy.¹⁷⁶ Although these committees might be on an equivalent hierarchical plane, their roles are distinct.¹⁷⁷ Moreover, the Scientific Committee’s ob-

¹⁷¹ WCPF Convention, *supra* note 1, arts. 9, 10, 11, 16; *see infra* notes 172–181 and accompanying text.

¹⁷² WCPF Convention, *supra* note 1, arts. 9–10.

¹⁷³ *Id.*

¹⁷⁴ *Id.*

¹⁷⁵ *See id.* art. 9(6) (describing the WCPFC’s international legal personality).

¹⁷⁶ *Id.* art. 11.

¹⁷⁷ *See id.*

ligation to review assessments, analyses, and recommendations prepared for the WCPFC by scientific experts gives it an important role in overseeing the quality and veracity of information provided to the WCPFC.¹⁷⁸

The institutions providing scientific services to the WCPFC—the SPC and the ISC—sit at the bottom of the hierarchy.¹⁷⁹ The Convention does not define the role of these institutions. Rather, the WCPFC may enter into contractual or other arrangements with external institutions to provide it specified services.¹⁸⁰ In the absence of such arrangements, these institutions have no WCPF Convention-mandated role.¹⁸¹

2. The Functional Hierarchy of WCPFC Bodies

Although the legal hierarchy of WCPF Convention bodies is clear, the terms of reference included in the foundational documents for these bodies create confusion as to the functional roles and the scope of authority of each body.¹⁸² Despite this confusion, an interpretation of the foundational documents based on their ordinary meaning leaves no doubt of the following: (1) the WCPFC has broad—although bounded—authority to make decisions and seek information it believes it needs to make decisions for the conservation and management of fish stocks within the Convention Area, and (2) the Scientific Committee has overall responsibility to provide advice to the WCPFC, even when recommendations arise out of the ISC and the Northern Committee.

a. The WCPFC Decision-Making Process

The WCPFC is the decision-making body instructed by the WCPF Convention to adopt CMMs for highly migratory fish stocks in the Convention Area.¹⁸³

¹⁷⁸ *Id.* art. 12.

¹⁷⁹ *Id.* art. 16.

¹⁸⁰ *Id.* arts. 9(5) (granting the WCPFC authority to enter into “contractual arrangements with relevant institutions to provide expert services necessary for the efficient functioning of the WCPFC and to enable it to carry out effectively its responsibilities under this Convention”), 13(1) (granting the WCPFC the authority to “engage the services of scientific experts to provide information and advice on the fishery resources covered by this Convention and related matters that may be relevant to the conservation and management of those resources”), 22(2) (directing the WCPFC to make “suitable arrangements for consultation, cooperation[,] and collaboration with other relevant intergovernmental organizations”), 22(5) (granting the WCPFC authority to enter into relationship agreements with organizations, “with a view to obtaining the best available scientific and other fisheries-related information to further the attainment of the objective of [the] Convention and to minimize duplication with respect to [its] work”).

¹⁸¹ See generally *supra* note 180 and accompanying text (illustrating the structure by which the scientific-service-providing institutions—the SPC and the ISC—fit into the WCPF Convention).

¹⁸² WCPF Convention, *supra* note 1, arts. 9, 10, 11, 16; see *supra* notes 172–181 and accompanying text.

¹⁸³ WCPF Convention, *supra* note 1, art. 5.

The WCPFC's discretion to adopt CMMs, however, is bounded by the Convention's geographic scope,¹⁸⁴ voting rules,¹⁸⁵ and other provisions.¹⁸⁶ In addition, the WCPFC must follow a specified decision-making approach with respect to northern stocks.¹⁸⁷

The WCPFC's decision-making and voting rules begin to untangle the confusion established by the various foundational documents. As a general matter, the WCPFC makes decisions by consensus.¹⁸⁸ If the WCPFC members cannot reach a consensus, the WCPFC may make a decision on a procedural issue with approval by a simple majority.¹⁸⁹ With regard to substantive issues, the WCPFC may adopt the decision by a "three-fourths majority of those present and voting,"¹⁹⁰ although some "substantive" decisions require consensus.¹⁹¹ When a vote is taken, the three-fourths majority must include within it both a three-fourths majority of the members of the South Pacific Forum Fisheries Agency ("FFA") and a three-fourth majority of non-members of the FFA that are present and voting.¹⁹² In addition, a proposal may not be defeated by two or fewer votes of either voting bloc.¹⁹³ If, however, the WCPFC Convention expressly provides that a decision must be by consensus, the WCPFC may appoint a conciliator to reconcile the differences in order to achieve consensus.¹⁹⁴ All decisions become binding sixty days after the WCPFC adopts them,¹⁹⁵ at which point members of the WCPFC must implement and enforce the measures.¹⁹⁶

¹⁸⁴ *Id.* art. 3.

¹⁸⁵ *Id.* art. 20; *see infra* notes 310–321 and accompanying text.

¹⁸⁶ WCPF Convention, *supra* note 1, art. 10 (describing the functions of the WCPFC and, for example, describing the criteria that the WCPFC should take into account when allocating total allowable catch).

¹⁸⁷ *Id.* art. 11(7).

¹⁸⁸ *Id.* art. 20; *see also* WCPFC, RULES OF PROCEDURE, *supra* note 29, Rule 22(1) (stating that, as a procedural rule, generally all decisions are made by consensus).

¹⁸⁹ WCPF Convention, *supra* note 1, art. 20(2); *see* WCPFC, RULES OF PROCEDURE, *supra* note 29, Rule 22(2). This provision applies except where the Convention expressly provides that a decision must be by consensus. WCPF Convention, *supra* note 1, art. 20(1), (4). If a decision must be by consensus, the WCPFC can appoint a mediator to reconcile differences to reach a consensus. *Id.*

¹⁹⁰ WCPF Convention, *supra* note 1, art. 20(2); WCPFC, RULES OF PROCEDURE, *supra* note 29, Rule 22(2).

¹⁹¹ WCPFC, RULES OF PROCEDURE, *supra* note 29, Rule 23. These decisions include, for example, adoption of the budget and amendments to the Convention. WCPF Convention, *supra* note 1, art. 18(1).

¹⁹² WCPF Convention, *supra* note 1, art. 20(2).

¹⁹³ *Id.*

¹⁹⁴ *Id.* art. 20(4). Also, a party that votes against a decision or that is absent during a vote may seek review of any decision by a review panel within thirty days. *Id.* art. 20(6); *see also id.* art. 20(7)–(9) (establishing the review procedures).

¹⁹⁵ *Id.* art. 20(5).

¹⁹⁶ *Id.* arts. 23, 25. Members must, for example, collect evidence of and prosecute offenses of such measures, keep records of all vessels authorized to fly their flags, and provide these records to

Applying these rules is straightforward with respect to fish stocks not designated as northern stocks, such as South Pacific albacore.¹⁹⁷ For these stocks, the SPC evaluates their status,¹⁹⁸ and the Scientific Committee then uses the evaluation to provide recommendations to the WCPFC.¹⁹⁹ The WCPFC then uses the process described above to adopt CMMs.

The decision-making process differs with respect to northern stocks. For these stocks, the decision of the WCPFC must “be based on any recommendations of the [northern] committee,”²⁰⁰ recommendations which are based on scientific information provided by the ISC.²⁰¹ The WCPFC “shall not take a decision with regard to any such measure without a recommendation concerning such measure from the Northern Committee.”²⁰² For example, with respect to the most recent CMM for North Pacific albacore, the Northern Committee observed that the best scientific evidence from the ISC “indicates that the species is either fully exploited, or may be experiencing fishing mortality above levels that are sustainable in the long term.”²⁰³ The Northern Committee thus recommended that fishing effort not exceed current levels.²⁰⁴ The WCPFC then adopted a CMM to maintain fishing effort for North Pacific albacore in the Convention Area north of the equator at current levels.²⁰⁵

If the WCPFC does not accept the Northern Committee’s recommendation, it “shall return the matter to the committee for further consideration” and the Northern Committee “shall reconsider the matter in light of the views expressed by the [WCPFC].”²⁰⁶ This apparently has never happened, although the WCPFC has asked the Northern Committee to review its advice concerning particular stocks.²⁰⁷

the WCPFC, and, where necessary, board and inspect vessels to ensure that all vessels are following the above stated requirements. *Id.* arts. 24(6)–(8), 25.

¹⁹⁷ See *supra* notes 95–120 and accompanying text (describing the distinction between northern fish stocks and other stocks).

¹⁹⁸ WCPFC-SPC MoU, *supra* note 133, at 3.

¹⁹⁹ WCPF Convention, *supra* note 1, art. 12(2).

²⁰⁰ *Id.* art. 11(7).

²⁰¹ WCPFC, RULES OF PROCEDURE, *supra* note 29, Annex I, ¶ 2; see *supra* notes 25–30 and accompanying text.

²⁰² WCPFC, RULES OF PROCEDURE, *supra* note 29, Annex I, ¶ 2.

²⁰³ See WCPFC, WCPFC-NC1-REPORT, SUMMARY REPORT OF THE FIRST REGULAR SESSION OF THE NORTHERN COMMITTEE, DECEMBER 2005, ¶ 13, Attachment 5 (2005), available at <http://www.wcpfc.int/meetings/1st-regular-session-0>, archived at <http://perma.cc/86J5-BWET>.

²⁰⁴ *Id.*

²⁰⁵ WCPFC, STATUS OF THE CONVENTION, *supra* note 56, ¶ 1.

²⁰⁶ WCPFC Convention, *supra* note 1, art. 11(7).

²⁰⁷ For example, the WCPFC asked the Northern Committee to review its advice concerning the North Pacific albacore at its second meeting. See WCPFC, THIRD REGULAR SESSION, *supra* note 95, ¶ 57. After review, the Northern Committee advised that no change in the CMM was needed. *Id.* ¶ 58(a).

The Northern Committee may request scientific advice from the ISC.²⁰⁸ Interestingly, neither the WCPFC nor the Scientific Committee has that authority, although the ISC must send any information requested by the Northern Committee directly to the WCPFC and the Scientific Committee.²⁰⁹ The WCPFC may revise its memorandum of understanding (“MoU”) with the ISC—with the ISC’s agreement, of course—to allow the WCPFC and the Scientific Committee to request information from the ISC, such as the data sets on which the ISC has performed stock assessments or made recommendations to the Northern Committee. In fact, two independent reviews of the WCPFC have recommended that the WCPFC revise this MoU to do just that.²¹⁰ Nonetheless, the Scientific Committee has an important role to play in the WCPFC’s decision-making process with respect to all fish stocks found in the Convention Area, including northern stocks.

b. The Scientific Committee’s Role in the WCPFC’s Decision-Making Process

The Scientific Committee has a duty to “review the assessments, analyses, other work[,] and recommendations prepared for the WCPFC by the scientific experts” and to review the results of research and analyses of target and non-target stocks and associated or dependent species.²¹¹ The Scientific Committee, thus, has a duty to review the work of the ISC, either because the ISC is a body of scientific experts or because the ISC conducts research and analyses on various fish stocks in the Convention Area.²¹² In addition, the Scientific Committee has a duty to provide information, advice, and comments on that work, and to make reports and recommendations to the WCPFC—either at the direction of the WCPFC or on its own initiative—on matters concerning the conservation and management of, and research on, species in the Convention Area.²¹³

As a consequence, the Scientific Committee has the duty to review the work of the ISC and the Northern Committee.²¹⁴ In particular, the Scientific Committee must review whether the information used by the Northern Committee and the ISC is based on the best scientific information available to “ensure that the [WCPFC] obtains for its consideration the best scientific information

²⁰⁸ WCPFC-ISC MoU, *supra* note 12, at 2.

²⁰⁹ See *supra* notes 139–150 and accompanying text.

²¹⁰ REVIEW OF THE COMMISSION’S TRANSITIONAL SCIENCE STRUCTURE, *supra* note 144, ¶ 4.3.2.1; REVIEW OF THE PERFORMANCE OF THE WCPFC, *supra* note 77, § 5.6. The WCPFC has not, however, acted upon these recommendations.

²¹¹ WCPF Convention, *supra* note 1, art. 12(2)(b), (d).

²¹² *Id.* art. 12(2)(d).

²¹³ *Id.* art. 12(2)(b), (d), (g).

²¹⁴ *Id.*

available.”²¹⁵ The WCPF Convention, the WCPFC Rules of Procedure, and the WCPFC decisions do not define or require the WCPFC to make decisions based on “best scientific information available,” but the Convention does require the Northern Committee to make recommendations consistent with the “best scientific information available” and other principles of the Convention.²¹⁶ Thus, the Scientific Committee has the authority and the responsibility for determining what constitutes the “best scientific information available” generally, and for determining whether the WCPFC is receiving the “best available scientific information” from the ISC and the Northern Committee.²¹⁷ The Scientific Committee could best include a determination of whether the information provided by the Northern Committee or the ISC constitutes the “best available scientific information” in its review of assessments and recommendations from scientific experts or its review of research and analyses of target and other stocks.²¹⁸ In light of the Scientific Committee’s duty to review the ISC’s work, the WCPFC should defer to the advice given to it by the Scientific Committee when faced with uncertainty regarding measures recommended by the Northern Committee. The WCPF Convention does not, however, require that the WCPFC do so.²¹⁹

Moreover, the separate structure established by Article 11(7) of the WCPF Convention—for the Northern Committee to provide scientific and management advice to the WCPFC for northern stocks—does not, despite the belief of some WCPFC members, obviate the duty of the Scientific Committee to provide its own independent advice for northern stocks.²²⁰ First, although Article 11(7) provides a role for the Northern Committee with respect to northern stocks, Article 12 explicitly directs the Scientific Committee to review the results of research and analyses of “target stocks or non-target or associated or dependent species *in the Convention Area*.”²²¹ It also directs the Scientific Committee to make reports and recommendations to the WCPFC on matters concerning the conservation

²¹⁵ *Id.* art. 12(1).

²¹⁶ *Id.* art. 11(7). Notably, the WCPFC’s resolution on best available science does not establish standards for what “best science information available” means. WCPFC, RESOLUTION 2012-01, RESOLUTION ON THE BEST AVAILABLE SCIENCE (2012) [hereinafter WCPFC, RESOLUTION ON THE BEST AVAILABLE SCIENCE], available at <https://www.wcpfc.int/doc/resolution-2012-01/resolution-best-available-science>, archived at <https://perma.cc/22BA-V5W9>.

²¹⁷ See WCPF Convention, *supra* note 1, art. 11(7).

²¹⁸ See *id.* art. 12(2)(b), (d).

²¹⁹ For example, although WCPFC members have the obligation to use best available scientific information, the WCPFC itself does not. *Id.* art. 5.

²²⁰ See *supra* note 11 and accompanying text (quoting Japan’s views concerning the roles of the Scientific Committee and Northern Committee with respect to northern stocks); see also SCIENTIFIC COMM., NINTH REGULAR SESSION SUMMARY REPORT, *supra* note 7, ¶ 198 (reiterating Japan’s aforementioned views by inserting a direct quote into the summary report record of the Ninth Regular Session of the WCPFC).

²²¹ WCPF Convention, *supra* note 1, art. 12(2)(d) (emphasis added).

and management of, and research on, “target stocks or non-target or associated or dependent species *in the Convention Area*.”²²² In addition, the Scientific Committee must report its findings and conclusions on the status of “target stocks or non-target or associated or dependent species *in the Convention Area*” to the WCPFC.²²³ Nowhere does the WCPF Convention limit the authority of the Scientific Committee to species not under the jurisdiction of the Northern Committee.²²⁴ Instead, the Convention *requires* the Scientific Committee to review species found *anywhere* in the Convention Area.²²⁵

Second, the WCPF Convention does not prohibit or otherwise prevent the Scientific Committee from reviewing the assessments and recommendations of the Northern Committee or the ISC. Instead, the Convention requires the Scientific Committee to “review the assessments, analyses, other work[,] and recommendations” prepared by scientific experts, such as those of the ISC.²²⁶ The Scientific Committee is also required to review the results of research and analyses of species found in the Convention Area and make reports and recommendations on matters concerning the conservation and management of species in the Convention Area—a duty that requires the Scientific Committee to review recommendations of the Northern Committee.²²⁷ Only by reviewing the recommendations of the Northern Committee, as well as the underlying science provided to the Northern Committee by the ISC, can the Scientific Committee fulfill its duty to ensure that the WCPFC obtains for its consideration the best scientific information available.

The review function accorded to the Scientific Committee does not undermine the role of the Northern Committee or eliminate the WCPFC’s duty to base its decisions with respect to northern stocks on recommendations of the Northern Committee. The WCPFC still receives recommendations for northern stocks from the Northern Committee and is still required to base its decisions on those recommendations.²²⁸ The WCPFC, however, would also have a duty to review the Scientific Committee’s assessment of whether the advice provided by the Northern Committee is based on the best scientific information available.²²⁹ If it is not, then the WCPFC must send the recommendation back to the Northern

²²² *Id.* art. 12(2)(g) (emphasis added).

²²³ *Id.* art. 12(2)(d) (emphasis added).

²²⁴ *See, e.g., id.* art. 12 (describing the functions of the Scientific Committee).

²²⁵ *Id.* art. 12(2)(d), (g).

²²⁶ *Id.* art. 12(2)(b), (d), (g).

²²⁷ *Id.* art. 12(2)(d), (g).

²²⁸ *Id.* art. 11(7).

²²⁹ *Id.* art. 10(1)(e) (providing that the WCPFC shall “compile and disseminate accurate and complete statistical data to ensure that the best scientific information is available”).

Committee for reconsideration, according to the process described in Article 11(7).²³⁰

B. The Authority to Direct the Actions of Other Bodies

The description of this legal and functional hierarchy provided above does not necessarily fully describe the ways in which certain bodies may or may not direct the actions of, or request information from, other Convention bodies. The WCPF Convention and the MoUs established between the WCPFC and the SPC and the ISC, for example, establish some limits. Based on a review of these documents, this Article makes three conclusions. First, the WCPFC has the authority to reject the Northern Committee's management advice and seek reconsideration.²³¹ Second, the WCPFC may enter into agreements with scientific experts to request scientific services, and it has the authority to set the terms of those agreements, subject to the provisions of the WCPF Convention and the mutual agreement of the other party involved.²³² Third, the Northern Committee has the power to request scientific information and services from the ISC, but the WCPFC and the Scientific Committee currently do not.²³³

1. The WCPFC's Authority to Reject Management Advice

The WCPFC has the ultimate authority to determine whether a recommended CMM is appropriate to further the goals of the WCPF Convention.²³⁴ It is not required to adopt a recommendation from either the Scientific Committee or the Northern Committee.²³⁵

Although the WCPFC must adopt a CMM for the northern stocks "based on any recommendations" from the Northern Committee, it also has the authority to reject the recommendation.²³⁶ To reject the measure, the WCPFC must follow specified rules.²³⁷ If the WCPFC rejects the Northern Committee's advice and returns the matter to the Northern Committee, then the Northern Committee

²³⁰ See *id.* art. 11(7).

²³¹ *Id.*; see *infra* notes 234–243 and accompanying text.

²³² WCPF Convention, *supra* note 1, art. 9(5); see *infra* notes 246–278 and accompanying text.

²³³ WCPFC-ISC MoU, *supra* note 12, at 2; see *infra* notes 279–300 and accompanying text.

²³⁴ WCPF Convention, *supra* note 1, art. 10(2).

²³⁵ *Id.* art. 10(5) ("The Commission shall take into account the reports and any recommendations of the Scientific Committee and the Technical and Compliance Committee on matters within their respective areas of competence."), 11(7) ("If the Commission, in accordance with the rules of procedure for decision-making on matters of substance, does not accept the recommendation of the [Northern] committee on any matter, it shall return the matter to the committee for further consideration.")

²³⁶ *Id.* art. 11(7); see *infra* notes 238–243 and accompanying text.

²³⁷ See *infra* notes 238–243 and accompanying text.

“shall reconsider the matter in light of the views expressed by the Commission.”²³⁸

Consistent with the conclusions in Part II.A above, the WCPFC may solicit the advice of the Scientific Committee before sending the matter back to the Northern Committee.²³⁹ In addition, the Scientific Committee may make recommendations to the WCPFC concerning the recommendations of the Northern Committee on its own accord.²⁴⁰

Moreover, the WCPFC’s obligation to *base* its decisions on recommendations of the Northern Committee does not require the WCPFC to adopt the Northern Committee’s recommendation *verbatim*. The Appellate Body of the World Trade Organization (the “Appellate Body”)—the leading international forum for interpreting international law over the last twenty years²⁴¹—had the opportunity to interpret the phrase “based on” in the 2008 *Hormones II* dispute.²⁴² In that dispute, the Appellate Body stated that the phrase “based on” does not mean “conform to”; instead, the phrase “based on” implies a rational relationship between two things.²⁴³

Applying the Appellate Body’s interpretation to the context of the WCPFC Convention, the WCPFC may not ignore the recommendation of the Northern Committee if it decides to adopt a CMM for a northern stock, but neither must it adopt the recommendation without alteration.²⁴⁴ The WCPFC, however, must

²³⁸ WCPF Convention, *supra* note 1, art. 11(7).

²³⁹ *Id.* art. 12(2)(g); *see supra* notes 171–230 and accompanying text.

²⁴⁰ WCPF Convention, *supra* note 1, art. 12(2)(g).

²⁴¹ As one scholar and trade lawyer notes,

The profile of [World Trade Organization (“WTO”)] law has never been higher. Panels and the Appellate Body have clarified the meaning of WTO law and their jurisprudence has penetrated other fields of international economic law and international law in general. It is hard to deny that the WTO dispute settlement system, and in particular the Appellate Body, has become “an international tribunal of historic global achievement.”

ISABELLE VAN DAMME, TREATY INTERPRETATION BY THE WTO APPELLATE BODY 3 (2009).

²⁴² Appellate Body Report, *United States—Continued Suspension of Obligations in the EC—Hormones Dispute*, ¶ 528, WT/DS320/AB/R (*adopted* Nov. 14, 2008) [hereinafter Appellate Body Report, *Hormones Dispute*]. The Appellate Body was interpreting Article 5.1 of the Agreement on the Application of Sanitary and Phytosanitary Measures, known as the SPS Agreement. VAN DAMME, *supra* note 241, at 3. The SPS Agreement sets forth rules for the establishment and implementation of “SPS measures” such as food safety requirements. *Id.* Article 5.1 of the SPS Agreement requires SPS measures to be “based on” a risk assessment. *Id.* The WTO Appellate Body noted that,

This does not mean that SPS measure have to “conform to” the risk assessment. Instead, “the results of the risk assessment must sufficiently warrant—that is to say, reasonably support—the SPS measure at stake.” Put differently, there must be a “rational relationship” between the SPS measure and the risk assessment.

Id. (citations omitted).

²⁴³ Appellate Body Report, *Hormones Dispute*, *supra* note 242, ¶ 528.

²⁴⁴ *Id.*

adopt a CMM that bears some rational relationship to the Northern Committee's recommendation.²⁴⁵

2. The WCPFC's Authority to Enter into Agreements with Independent Bodies

The WCPF Convention includes four different provisions that allow the WCPFC to enter into relationships with independent bodies.²⁴⁶ Because the provisions are largely redundant, it is difficult to determine exactly how they differ. Nonetheless, they clearly provide the WCPFC with authority to enter into arrangements to obtain a wide array of information from bodies outside the WCPF Convention regime—authority that the WCPFC has used to enter into arrangements with the SPC and the ISC.²⁴⁷ Of course, because any arrangement is subject to mutual agreement, the WCPFC may not direct independent bodies to undertake specific activities. The agreements could, however, establish an open-ended invitation for one of the WCPF Convention's bodies to request information from a non-WCPF Convention body.

a. Defining the WCPFC's Authority to Enter into Agreements

Article 9(5) of the WCPF Convention includes the first grant of authority to the WCPFC to enter into agreements with independent bodies.²⁴⁸ Article 9(5) allows the WCPFC to “enter into contractual arrangements with relevant institutions to provide *expert services* necessary for the efficient functioning of the Commission and to enable it to carry out effectively its responsibilities under [the] Convention.”²⁴⁹ It does not stipulate that the expert services must be of a scientific nature, but it does not preclude such services.²⁵⁰

The second grant of authority, in Article 13(1), allows the WCPFC to “enter into administrative and financial arrangements” to “engage the services of *scientific experts* to provide information and advice on the fishery resource covered by this WCPF Convention and related matters that may be relevant to the conservation and management of those resources.”²⁵¹ Article 13 does not specify whether or how “contractual arrangements” identified in Article 9(5) differ from “administrative and financial arrangements” of Article 13(1).²⁵² Article 13(1)

²⁴⁵ WCPF Convention, *supra* note 1, art. 11(7).

²⁴⁶ *Id.* arts. 9(5), 13(1), 22(2), 22(5).

²⁴⁷ WCPFC-ISC MoU, *supra* note 12; WCPFC-SPC MoU, *supra* note 133.

²⁴⁸ WCPF Convention, *supra* note 1, art. 9(5).

²⁴⁹ *Id.* (emphasis added).

²⁵⁰ *See id.*

²⁵¹ *Id.* art. 13(1) (emphasis added).

²⁵² *See id.* art. 13.

makes clear, however, that the scientific experts are not limited to individuals.²⁵³ Thus, the WCPFC Convention leaves open the possibility that the WCPFC could consult with the SPC and/or the ISC under Article 13(1).²⁵⁴

Article 13(1) more precisely specifies the role experts may play than Article 9(5). As directed by the WCPFC and in support of the WCPFC's work, scientific experts may (a) conduct scientific research and analyses, (b) develop and recommend to the WCPFC and the Scientific Committee stock-specific reference points, (c) assess the status of stocks against the reference points established by the WCPFC, (d) provide the WCPFC and the Scientific Committee with reports on the results of their scientific work, advice, and "recommendations in support of the formulation of [CMMs] and other relevant matters,"²⁵⁵ and (e) perform other specified tasks.²⁵⁶ In providing these services, the scientific experts may compile fisheries data and may conduct assessments of fish stocks, impacts of various factors (including fishing and other human or environmental factors) on fish stocks, and the impacts of proposed fishing and management changes, among other things.²⁵⁷

The WCPFC Convention, however, provides several important checks on the information provided by Article 13(1) scientific experts. For example, it allows the WCPFC to arrange for peer review of this information and advice.²⁵⁸ In addition, the scientific experts must provide all of their reports and recommendations to the Scientific Committee and the WCPFC.²⁵⁹ The Scientific Committee must then review such reports and recommendations prior to the WCPFC's consideration of them, and "provide information, advice and comments" on this information "if necessary."²⁶⁰

The third grant of authority, in Article 22(2), authorizes the WCPFC to make "suitable arrangements for consultation, cooperation[,] and collaboration with other relevant intergovernmental organizations" that can help the WCPFC Convention meet its objectives, including with other tuna-related bodies.²⁶¹ The phrase "suitable arrangements" would seem to include both the "contractual arrangements" and "administrative and financial arrangements" covered by Articles 9(5) and 13(1), respectively. Moreover, Articles 9 and 13 allow "contractual

²⁵³ The WCPFC must "to the greatest extent possible, utilize the services of existing regional organizations and . . . consult, as appropriate, with any other fisheries management, technical or scientific organization with expertise in matters related to the work of the Commission." *Id.* art. 13(1).

²⁵⁴ *Id.*

²⁵⁵ *Id.* art. 13(2)(d).

²⁵⁶ *Id.* art. 13(2).

²⁵⁷ *Id.* art. 13(3)(a)–(e).

²⁵⁸ *Id.* art. 13(4).

²⁵⁹ *Id.* art. 13(5).

²⁶⁰ *Id.* art. 12(2)(b).

²⁶¹ *Id.* art. 22(2).

arrangements” and “administrative and financial arrangements” with other organizations, including tuna-related bodies.²⁶² As a result, Article 22(2) appears redundant.²⁶³

The fourth grant of authority, in Article 22(5), authorizes the WCPFC to enter into “relationship agreements” with “other organizations . . . with a view to obtaining the best available scientific and other fisheries related information to further the attainment of the objective of this Convention.”²⁶⁴ Notably, Article 22(5) specifically authorizes the WCPFC to enter into a “relationship agreement” with the SPC.²⁶⁵ The WCPFC Convention, however, is again silent as to whether and how “relationship agreements” differ from other types of arrangements the WCPFC may establish.²⁶⁶

b. Implementing the WCPFC’s Authority to Enter into Arrangements

Using its authority to enter into arrangements, the WCPFC has entered into agreements with both the SPC and the ISC. In fact, the WCPFC has entered into several agreements with the SPC, including the MoU that outlines the general types of scientific services that the SPC provides to the WCPFC,²⁶⁷ an accompanying triennial service agreement,²⁶⁸ and a separate data exchange agreement.²⁶⁹ The WCPFC has also adopted an MoU with the ISC to provide, at the request of the Northern Committee, scientific information and advice to the Northern Committee.²⁷⁰

The WCPFC entered into the MoU with the SPC to take advantage of the SPC’s extensive database and array of scientific information.²⁷¹ Under the 2010 to 2012 triennial services agreement between the WCPFC and the SPC, the SPC

²⁶² *Id.* arts. 9(5), 13.

²⁶³ *See id.*

²⁶⁴ *Id.* art. 22(5).

²⁶⁵ Article 22(5) of the Convention states:

The Commission may enter into relationship agreements with the organizations referred to in this article and with other organizations as may be appropriate, such as the Pacific Community . . . with a view to obtaining the best available scientific and other fisheries related information to further the attainment of the objective of this Convention and to minimize duplication with respect to their work.

Id. (referring to the SPC by its previous name: the Pacific Community).

²⁶⁶ *See id.*

²⁶⁷ *See* WCPFC-SPC MoU, *supra* note 133.

²⁶⁸ *Id.* at Annex I.

²⁶⁹ Data Exchange Agreement, WCPFC-Secretariat of the Pac. Cmty, Aug. 27, 2009, *available at* <http://www.wcpfc.int/doc/wcpfc-spc-ofp-data-exchange-agreement>, *archived at* <http://perma.cc/7YUR-MCVM>.

²⁷⁰ WCPFC-ISC MoU, *supra* note 12, at pt. I.

²⁷¹ WCPFC-SPC MoU, *supra* note 133, at 2.

agreed to provide data management, statistical analysis, stock assessments, management analyses, ecosystem analyses, capacity building of small island developing states, research services, and other advisory and technical services.²⁷² The SPC also compiles data upon which the WCPFC bases its management decisions.²⁷³ The SPC receives data from both WCPFC members and SPC members.²⁷⁴ It then compiles this data into stock assessments and research reports that it provides directly to the Scientific Committee.²⁷⁵ In light of these tasks, an Independent Review of the WCPFC's Transitional Science Structure and Functions notes that the SPC is the WCPFC's "chief scientific services provider" as well as its data service provider.²⁷⁶

The WCPFC's MoU with the ISC is more limited, focusing on providing scientific information and advice on northern stocks to the Northern Committee.²⁷⁷ The ISC "enhance[es] scientific research and cooperation for conservation and rational utilization of tuna and tuna-like species in the North Pacific Ocean."²⁷⁸ It uses this expertise to provide scientific information and advice to the Northern Committee.

3. Northern Committee's Authority to Request Information from the ISC

As noted in Part I.C.2, the Northern Committee "may request from the ISC scientific information and advice regarding fish stocks (generally [the northern stocks]) for response prior to each meeting of the Northern Committee."²⁷⁹ In 2013, for example, the Northern Committee requested a range of information from the ISC relating to rebuilding stocks of Pacific bluefin tuna.²⁸⁰ The ISC must provide the requested information to the Northern Committee, the Scientific Committee, and the WCPFC.²⁸¹

²⁷² WCPFC-SPC MoU, *supra* note 12, Annex 1, § 2.

²⁷³ *Id.*

²⁷⁴ REVIEW OF THE COMMISSION'S TRANSITIONAL SCIENCE STRUCTURE, *supra* note 144, ¶ 3.3.

²⁷⁵ *Id.*

²⁷⁶ *Id.* ¶¶ 3.1, 3.3.

²⁷⁷ WCPFC-ISC MoU, *supra* note 12, at pt. I.

²⁷⁸ REPORT OF THE PEER REVIEW OF FUNCTION, *supra* note 141, § 2.1.

²⁷⁹ WCPFC-ISC MoU, *supra* note 12, at pt. I, ¶ 1. The agreement states that species for which the Northern Committee may request reoccurring advice from the ISC include North Pacific albacore, Pacific bluefin tuna, swordfish and other billfishes, and bycatch (fish and non-fish species). *Id.* Annex 1.

²⁸⁰ N. COMM., NINTH REGULAR SESSION SUMMARY REPORT, *supra* note 115, at Attachment F.

²⁸¹ WCPFC-ISC MoU, *supra* note 12, at pt. I, ¶¶ 1, 2.

4. The WCPFC's and Scientific Committee's Authority to Request Information from the ISC

Although the Northern Committee may request information from the ISC, neither the Scientific Committee nor the WCPFC may request information from the ISC pursuant to the MoU between the WCPFC and the ISC.²⁸² This arrangement is problematic because the Scientific Committee is precluded from requesting information it needs to review the assessments and recommendations of the ISC, consistent with its duties under Article 12,²⁸³ including determining whether the information the ISC is using is the best scientific information available.²⁸⁴ As the subsidiary body charged with reviewing the work of the ISC and with ensuring that the WCPFC obtains the best scientific information available, the Scientific Committee should have the authority to seek information from the ISC. In addition, the data used by the ISC in its stock assessments is not held by the WCPFC or the SPC;²⁸⁵ it remains with the ISC or its members, and is consequently not subject to independent analysis by the Scientific Committee.²⁸⁶ As such, the Scientific Committee has been “asked to approve the stock assessments of the ISC and its advice resulting from these . . . but without the ability to fully review the stock assessments.”²⁸⁷

Three separate independent assessments underscored the need for the WCPFC and the Scientific Committee to be able to request information from the

²⁸² See *id.* at pt. I (laying out guidance for the provision of scientific advice in the MoU between the WCPFC and the ISC).

²⁸³ See *supra* notes 95–120 and accompanying text (describing the functions of the Scientific Committee under Article 12). The WCPFC's Resolution on the Best Available Science also specifically provides that the Scientific Committee will review the work of the ISC and the SPC that is prepared for the WCPFC. WCPFC, RESOLUTION ON THE BEST AVAILABLE SCIENCE, *supra* note 216, ¶ 2(ix). That Resolution acknowledges the “key role of the Scientific Committee” in “reviewing any relevant assessments, analyses, research or work, as well as recommendations prepared for the WCPFC by the SPC—[Oceanic Fisheries Programme] and the ISC prior to consideration of such recommendation by the Commission.” *Id.*

²⁸⁴ See *supra* notes 231–276 and accompanying text (describing the functions of the Scientific Committee under Article 12).

²⁸⁵ REVIEW OF THE COMMISSION'S TRANSITIONAL SCIENCE STRUCTURE, *supra* note 144, ¶ 4.3.2.1.

²⁸⁶ REPORT OF THE ISC PEER REVIEW OF FUNCTION, *supra* note 141, ¶ 4.1. This peer review noted that,

Data provided for use and held by the ISC remains the property of the ISC. Release of these data to the general public is governed by the policies of the contributor. [Catch-effort and biological data] contain proprietary information and there, shall be made available to contributors and members of the ISC working groups for use in the work of the Working Groups only. They are not to be retained or shared with non-members of the Working Groups.

Id.

²⁸⁷ REVIEW OF THE COMMISSION'S TRANSITIONAL SCIENCE STRUCTURE, *supra* note 144, ¶ 5.2.1.

Northern Committee. The *Review of the Performance of the WCPFC* expressed its concern that the current framework “prevents a more fluent dialogue between the Commission and the Scientific Committee with the ISC.”²⁸⁸ As a result, it recommended changes to the MoU to allow direct exchanges of scientific information among the ISC, the Scientific Committee, and the WCPFC.²⁸⁹

The WCPFC’s *Independent Review of the Commission’s Transitional Science Structure and Functions* (the “Independent Review”) noted the concern of “many” WCPFC members “over the lack of satisfactory review of ISC assessments by the [Scientific Committee] and the perceived closed nature of ISC assessment meetings.”²⁹⁰ The Independent Review also suggested that confidence in the ISC’s assessments is undermined because,

[M]ost [Scientific Committee] participants are not able to be present at the ISC stock assessment working groups, working papers presented to the working groups are not readily available, the data used in assessments are not accessible outside of the working groups, and there “is insufficient detail in reports to review the assessments in detail at the [Scientific Committee] meeting.”²⁹¹

Although no one questioned the scientific quality of the assessments, several WCPFC members emphasized the need for additional review by the Scientific Committee, external peer review, transparency, and validation.²⁹²

Further, the ISC’s *Report of Peer Review of Function*²⁹³ (the “Peer Review”) repeatedly warned that the “ISC must stay above the political fray and maintain a strong science focus.”²⁹⁴ The Peer Review acknowledged the ISC’s recent successes, but also its “setbacks that have the potential to seriously erode the scientific credibility of the organization.”²⁹⁵ It cautioned that “ISC scientists should strictly provide science, the core information to write management plans, but should not be involved in writing them.”²⁹⁶ Moreover, it warned against the reliability and accuracy of the ISC’s data, stating that “[p]ersonal or institutional opinions do not constitute [best available scientific information]” and that

²⁸⁸ REVIEW OF THE PERFORMANCE OF THE WCPFC, *supra* note 77, § 5.6.

²⁸⁹ *Id.*

²⁹⁰ REVIEW OF THE COMMISSION’S TRANSITIONAL SCIENCE STRUCTURE, *supra* note 29, ¶ 4.3.2.1.

²⁹¹ *Id.* ¶ 5.2.1.

²⁹² *Id.* ¶ 4.3.2.1.

²⁹³ This Peer Review, which the ISC conducted in 2013, is mandated by the ISC’s Rules of Procedure. A body of three peers with no committee affiliation (but from the member countries) carried out the review. REPORT OF THE ISC PEER REVIEW OF FUNCTION, *supra* note 141, § 1.0.

²⁹⁴ *Id.* at 3.

²⁹⁵ *Id.* ¶ 3.3.

²⁹⁶ *Id.*

“[d]ata that form the basis of stock assessments must absolutely be supported by scientific documentation of substance.”²⁹⁷ In addition, the Peer Review stated that “[t]here is great need to improve the evaluation of the accuracy and precision of input parameters and indices that are currently followed.”²⁹⁸ It stated that “[t]he process of independent stock assessment reviews will require improved documentation . . . especially in data review . . .” and that “[m]ore consistency is required in the quality of peer reviewers for stock assessment reviews that include more experts with sufficient knowledge of tunas and tuna stock assessment methodologies.”²⁹⁹ The Peer Review thus suggested that the ISC standardize statistical analyses and methods across working groups, provide third party training, improve transparency, and standardize data.³⁰⁰

All of this suggests that the WCPFC’s MoU with the ISC needs to be revised to ensure that the Scientific Committee and the WCPFC have the authority to request information from the ISC. In this way, transparency and confidence in the ISC assessments will be improved and the WCPFC can be assured that it is receiving recommendations based on the best scientific information available.

III. DISPUTE SETTLEMENT AMONG INSTITUTIONS AND MEMBERS

With tensions rising and disputes intensifying over decision-making authority, the Western and Central Pacific Fisheries Commission (“WCPFC”) and its members might choose to seek formal ways to resolve their disagreements. The Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western Pacific Ocean (“WCPF Convention” or the “Convention”) allows members to resolve their disagreements in several ways. Section A of this Part assesses whether a subsidiary body or a member may reject or seek review of a legal interpretation with which it disagrees.³⁰¹ As described in Section B of this Part, members may, as a last resort, use the WCPF Convention’s dispute settlement procedures if an agreement cannot be reached.³⁰² Finally, Section C of this Part reviews disputes in other similarly situated multi-stakeholder international management regimes to identify solutions and best practices for resolving disagreements.³⁰³

²⁹⁷ *Id.* ¶ 4.3.

²⁹⁸ *Id.* ¶ 3.2.

²⁹⁹ *Id.*

³⁰⁰ *Id.* ¶ 5.0.

³⁰¹ See *infra* notes 304–337 and accompanying text.

³⁰² See *infra* notes 338–388 and accompanying text.

³⁰³ See *infra* notes 389–422 and accompanying text.

A. Disagreements on Legal Interpretation of WCPFC Convention Policy or Procedure

As a general matter, the WCPFC retains absolute authority over the interpretation of WCPFC Convention policy or procedure.³⁰⁴ Thus, if the WCPFC interprets a provision of the WCPFC Convention through a binding conservation and management measure (“CMM”), the subsidiary bodies and the individual members may not reject it or substitute their own legal interpretation.³⁰⁵ For example, the WCPFC has adopted a CMM that creates a narrow set of exemptions³⁰⁶ from the prohibition against transshipment at sea by purse seine vessels.³⁰⁷ Each member bears the responsibility to implement and enforce such measures as adopted.³⁰⁸ They may not carve out, in the case of transshipment, an exemption not established in the CMM.³⁰⁹

As exemplified by the disputes over bluefin tuna and blue shark, disagreements over legal interpretation might arise in at least three different ways. First, members or the WCPFC might lack a clear understanding and interpretation of a provision of the WCPFC Convention or of a memorandum of understanding (“MoU”) or another document relevant to the implementation of the WCPFC Convention and its CMMs. Second, an individual member might disagree with an interpretation of the WCPFC Convention adopted by the WCPFC. Third, the WCPFC might not agree with a recommendation of the Northern Committee. As described below, these disagreements can be addressed by (1) seeking a legal opinion and adopting a common understanding through a decision or CMM, (2)

³⁰⁴ See generally WCPFC Convention, *supra* note 1, art. 9.

The Commission shall have international legal personality and such legal capacity as [might] be necessary to perform its functions and achieve its objectives. The privileges and immunities which the Commission and its officers shall enjoy in the territory of a Contracting Party shall be determined by agreement between the Commission and the member concerned.

Id.

³⁰⁵ CMMs are binding on the Parties, and the WCPFC Convention does not allow a member to opt out of them. *Id.* art. 22(5).

³⁰⁶ WCPFC, CMM 2009-06, CONSERVATION AND MANAGEMENT MEASURE ON THE REGULATION OF TRANSSHIPMENT § 2, ¶ 25 (2009), available at <https://www.wcpfc.int/doc/cmm-2009-06/conservation-and-management-measure-regulation-transshipment-0>, archived at <https://perma.cc/5563-UTRE>.

³⁰⁷ WCPFC Convention, *supra* note 1, art. 29(5). A purse seine vessel uses purse seines to catch fish. *Fishing Gear Types: Purse Seines*, FOOD & AGRIC. ORG. OF THE UNITED NATIONS, <http://www.fao.org/fishery/geartype/249/en> (last visited Mar. 28, 2015), archived at <http://perma.cc/HSM7-KLPD>. A purse seine is a long wall of netting set vertically in the water. *Id.* A purse seine vessel encircles fish with the net. *Id.* The net includes gear that allows it to close at the bottom and the top so when the fish are finally enclosed, the net looks like a purse. *Id.*

³⁰⁸ WCPFC Convention, *supra* note 1, art. 5(j).

³⁰⁹ *Id.* art. 37.

using the review procedure under Article 20 of the WCPF Convention, and (3) rejecting a recommendation of the Northern Committee and requesting reconsideration of the matter. A fourth option, requesting the Technical and Compliance Committee to review the dispute, does not appear to be viable.

1. Seeking a Legal Opinion and Adopting a Common Understanding

If the provisions of the WCPF Convention or a CMM are unclear, the members may, of course, clarify the meaning of terms by adopting an official interpretation.³¹⁰ This practice has been widely used in many multilateral environmental agreements. For example, the parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (“CITES”)³¹¹ have defined “personal and household effects,”³¹² “hunting trophy,”³¹³ and many other terms through resolutions of the parties.³¹⁴ The parties to the U.N. Framework Convention on Climate Change (“UNFCCC”) have established entire mechanisms based on single words or phrases used in the UNFCCC.³¹⁵ As noted above, the WCPFC has used official interpretations to define a narrow set of exemptions from the ban on transshipment at sea by purse seine vessels.³¹⁶

Similarly, the WCPFC could adopt a decision that clearly elaborates on the role of the Scientific Committee vis-à-vis the Northern Committee and the ISC.³¹⁷ In the alternative, the WCPFC could rewrite the MoU between the WCPFC and the ISC and the terms of reference for the Northern Committee. Given, however, that others have made the same recommendation without the

³¹⁰ The WCPFC has the authority to “discuss any question or matter within the Competence of the Commission and adopt any measures or recommendations necessary for achieving the objective of this Convention.” *Id.* art. 10(1)(o).

³¹¹ Convention on International Trade in Endangered Species of Wild Flora and Fauna, Mar. 3, 1973, 27 U.S.T. 1087, 993 U.N.T.S. 243 [hereinafter CITES] (entered into force on July 1, 1975).

³¹² CITES, RESOLUTION CONF. 13.7 (REV. COP16), CONTROL OF TRADE IN PERSONAL AND HOUSEHOLD EFFECTS (2004), available at <http://cites.org/sites/default/files/eng/res/13/E-Res-13-07R16.pdf>, archived at <http://perma.cc/CU35-ZEQ7>.

³¹³ CITES, RESOLUTION CONF. 12.3 (REV. COP16), PERMITS AND CERTIFICATES (2002).

³¹⁴ See, e.g., CITES, RESOLUTION CONF. 10.10 (REV. COP16), TRADE IN ELEPHANT SPECIMENS (1997), available at <http://www.cites.org/eng/res/10/10-10R16.php>, archived at <http://perma.cc/87ML-L3ZP> (defining “raw ivory” and establishing special mechanisms for controlling illegal trade in ivory and poaching of African elephants).

³¹⁵ For example, the Parties have defined “afforestation,” “reforestation,” and “deforestation,” and then created accounting rules for determining greenhouse emissions from these activities. See Rep. of the Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol (CMP), 1st Session, Nov. 28–Dec. 10, 2005, U.N. Doc. FCCC/KP/CMP/2005/8/Add.3, 16/CMP.1, at 3, available at <http://unfccc.int/resource/docs/2005/cmp1/eng/08a03.pdf>, archived at <http://perma.cc/KT5V-PEE5> (containing CMP decision on “Land use, land-use change[,] and forestry”).

³¹⁶ WCPFC, CMM ON REGULATION OF TRANSSHIPMENT, *supra* note 306, § 2, ¶ 25.

³¹⁷ WCPF Convention, *supra* note 1, art. 10(1)(c).

WCPFC acting,³¹⁸ the WCPFC is unlikely to reach consensus to make these changes.

The WCPFC does have other options that may help it reach consensus. In the same way that it requested a review of the WCPF Convention³¹⁹ and its science arrangements,³²⁰ the WCPFC could seek a legal interpretation, either from the WCPFC's legal officer or from an independent consultant. To implement this approach, the WCPFC must first adopt a decision to seek a legal interpretation of the WCPF Convention's provisions. Based on that legal interpretation, the WCPFC would then adopt a second decision articulating its own legal interpretation, preferably by consensus, but if consensus cannot be achieved, then by a three-fourths majority vote.³²¹

2. Reviewing a WCPFC Decision Under Article 20(6)

When the WCPFC adopts a legal interpretation, as described above, or a CMM, the WCPF Convention allows a member to seek a review of the decision under limited circumstances.³²² Article 20(6) allows a member that voted against a decision or that was absent during the meeting in which the WCPFC adopted the decision to seek a review of the decision by a review panel.³²³ To initiate a review, a member must submit a written request for review to the WCPFC's Executive Director within thirty days of the adoption of the decision.³²⁴ The request must allege that the decision is inconsistent with the WCPF Convention or "un-

³¹⁸ REPORT OF THE ISC PEER REVIEW OF FUNCTION, *supra* note 114, ¶ 5.6; REVIEW OF THE COMMISSION'S TRANSITIONAL SCIENCE STRUCTURE, *supra* note 116, ¶ 5.2.2.2.

³¹⁹ REVIEW OF THE PERFORMANCE OF THE WCPFC, *supra* note 77. The WCPFC agreed to conduct a performance review at its fifth regular session. WCPFC, FIFTH REGULAR SESSION ¶¶ 283–286 (2009), available at <https://www.wcpfc.int/system/files/WCPFC5%20%5BSummary%20Report%20-%20Final%20May2009%5D.pdf>, archived at <https://perma.cc/2ELL-LGZA>.

³²⁰ REVIEW OF THE COMMISSION'S TRANSITIONAL SCIENCE STRUCTURE, *supra* note 144. The WCPFC agreed to conduct a review of the science arrangements at its fourth regular session. WCPFC, FOURTH REGULAR SESSION ¶ 108 (2007), available at <https://www.wcpfc.int/system/files/WCPF4%20Summary%20Report%20and%20Attachments.pdf>, archived at <https://perma.cc/89V6-CU5E>.

³²¹ WCPF Convention, *supra* note 1, art. 20(2). The percentage of the vote is determined based on "those [members, cooperating non-members, and participating territories (collectively, CCMs)] present and voting." *Id.* In addition, the three-fourths majority must represent three-fourths of those CCMs that are also members of the South Pacific Forum Fisheries Agency and three-fourths of the CCMs that are not. *Id.* The decision to seek a legal interpretation might be considered a "procedural matter" requiring only a simple majority, although if the CCMs disagree as to whether an issue is substantive or procedural, then they must treat the issue as one of substance requiring a three-fourths majority. *Id.*

³²² *Id.* art. 20(6).

³²³ *Id.* The review panel will consist of three members chosen from a list of experts in the field of fisheries drawn up and maintained by the United Nations Food and Agriculture Organization or a similar list maintained by the WCPFC's Executive Director. *Id.* Annex II(1).

³²⁴ *Id.* art. 20(6), Annex II(1).

justifiably discriminates in form or in fact against the member concerned.”³²⁵ For example, if the WCPFC adopts a decision based on a recommendation of the Northern Committee without a review by the Scientific Committee, a member might have an argument that the decision was made inconsistently with the requirements of the WCPF Convention because the Scientific Committee is obligated to make reports and recommendations to the WCPFC on matters concerning the conservation and management of, and research on, target and non-target stocks in the Convention Area.³²⁶

Once the member submits the request, “no member of the Commission shall be required to give effect to the decision in question” until the review panel provides its findings and recommendations.³²⁷ If the review panel agrees with the WCPFC’s decision, the decision becomes binding in thirty days from when the Executive Director communicates the review panel’s findings.³²⁸ If, however, the review panel recommends that the decision be modified, amended, or revoked, the WCPFC must modify or amend the decision to conform to the panel’s recommendation at the WCPFC’s next annual meeting.³²⁹ The WCPFC may also decide to revoke the decision with written requests from a majority of the members at a special meeting within sixty days from when the Executive Director communicates the panel’s findings.³³⁰

3. Requesting the Northern Committee to Reconsider a Matter

The Northern Committee may recommend a measure for a northern stock based on its own interpretation of the WCPF Convention (assuming the WCPFC has not adopted its own interpretation of the relevant provision) or the relevant science.³³¹ As noted above, the WCPFC retains the authority to return “any matter” to the Northern Committee, including the underlying legal interpretation used by the Northern Committee.³³² In such a case, the WCPFC may also seek advice from the Scientific Committee, given the Scientific Committee’s broad duty to provide reports and recommendations on matters concerning conservation and management of species in the Convention Area, review assessments and other work of the ISC, and ensure that the WCPFC obtains the best scientific information available.³³³ In cases where the WCPFC rejects the Northern Com-

³²⁵ *Id.* art. 20(6)(a)–(b).

³²⁶ *See id.* art. 12(2)(g).

³²⁷ *Id.* art. 20(7).

³²⁸ *Id.* art. 20(8).

³²⁹ *Id.* art. 20(9).

³³⁰ *Id.*

³³¹ *Id.* art. 11(7).

³³² *Id.*

³³³ *Id.* art. 12(1), (2)(b).

mittee's recommendation, the Northern Committee shall reconsider the matter in light of the WCPFC's views.³³⁴

4. Requesting the Technical and Compliance Committee to Address the Issue

The Technical and Compliance Committee is charged with providing technical advice and recommendations relating to the implementation of, and compliance with, CMMs.³³⁵ This provision could, in theory, allow the Technical and Compliance Committee to respond to concerns that the Scientific Committee is not providing advice on recommendations provided by the Northern Committee or is not allowed to seek information from the ISC. This matter appears to be within the mandate of the Technical and Compliance Committee, as the failure of the Scientific Committee to make recommendations or obtain information relates to implementation of CMMs adopted without the Scientific Committee's consideration.

Nonetheless, getting the matter resolved—or even considered—by the Technical and Compliance Committee appears challenging. First, matters covered by the *Review of the Performance of the WCPFC*, such as clarifying the respective roles of the Scientific Committee, and the ISC in providing advice and information to the Northern Committee and the WCPFC, have been delegated to the Scientific Committee rather than the Technical and Compliance Committee.³³⁶

Second, it seems unlikely that implementation of a specific CMM would trigger a discussion of whether the WCPFC should have based its decision on the views of the Scientific Committee or whether the Scientific Committee should be allowed to request information from the ISC.

What might be possible is for the Technical and Compliance Committee to compare, within its discussion of the status of fisheries, actual catches versus hypothetical catches had the WCPFC adopted the recommendation of the Scientific Committee. Even if the Technical and Compliance Committee recommended that the WCPFC adopt the advice of the Scientific Committee, the WCPFC is under no obligation to adopt the Technical and Compliance Committee's recommendation—just as it is under no obligation to adopt the Scientific Committee's recommendation in the first place.³³⁷

³³⁴ *Id.* art. 11(7).

³³⁵ *Id.* art. 14(1)(a).

³³⁶ SECRETARIAT OF THE WCPFC, WCPFC-TCC8-2012/20_REV 1, RECOMMENDATIONS FROM THE WCPFC PERFORMANCE REVIEW 33 (2012). As such, this issue is expressly excluded from the Technical and Compliance Committee. WCPFC, WCPFC-TCC9-2013-20, MATRIX OF RECOMMENDATIONS FROM THE WCPFC PERFORMANCE REVIEW FOR TCC TO CONSIDER (2013).

³³⁷ See *supra* notes 234–243 and accompanying text.

B. Dispute Settlement Procedures

When the WCPFC does not officially adopt an interpretation of the WCPF Convention policy or procedure, disputes about such interpretation could arise among the members if they feel their interests are compromised by a CMM. The WCPF Convention does not provide its own dispute settlement provisions. Instead, it directs members to resolve their disputes using the dispute settlement provisions of the U.N. Fish Stocks Agreement (the “Fish Stocks Agreement”), regardless of whether the member is also party to the Fish Stocks Agreement.³³⁸ The Fish Stocks Agreement mandates that members “cooperate in order to prevent disputes” through non-adversarial processes such as negotiation or mediation.³³⁹ If the dispute becomes intractable, however, members also have the option to use the arbitration or dispute settlement provisions of the United Nations Law of the Sea Convention (“UNCLOS”)³⁴⁰ because the Fish Stocks Agreement expressly incorporates the dispute settlement provisions of UNCLOS.³⁴¹ Although none of these procedures have been invoked by WCPFC members, they could be used in the future to resolve questions concerning the provision of scientific advice to the WCPFC.

1. Negotiation, Mediation, and Conciliation

Consistent with other international agreements, whether relating to trade,³⁴² environment,³⁴³ or other matters,³⁴⁴ the WCPF Convention seeks to resolve dis-

³³⁸ WCPF Convention, *supra* note 1, art. 31.

³³⁹ U.N. Fish Stocks Agreement, *supra* note 49, arts. 27–28.

³⁴⁰ The UNCLOS establishes “a comprehensive regime of law and order in the world’s oceans and seas establishing rules governing all uses of the oceans and their resources. It enshrines the notion that all problems of ocean space are closely interrelated and need to be addressed as a whole.” *United Nations Convention on the Law of the Sea of 10 December 1982 Overview and Full Text*, UNITED NATIONS OCEANS & LAW OF THE SEA, http://www.un.org/depts/los/convention_agreements/convention_overview_convention.htm (last updated Aug. 22, 2013), *archived at* <http://perma.cc/P38S-ES64>.

³⁴¹ UNCLOS, *supra* note 75, art. 30(2) (identifying the dispute settlement provisions of Part XV of UNCLOS as applying *mutatis mutandis* to disputes relating to highly migratory and straddling fish stocks governed by regional agreements).

³⁴² *See, e.g.*, CITES, *supra* note 311, art. XVIII (directing the disputing parties to resolve their dispute through negotiation before seeking arbitration).

³⁴³ The World Trade Organization’s *Understanding on Rules and Procedures Governing the Settlement of Disputes* directs disputing parties to resolve their dispute through consultations, good offices conciliation, and mediation before seeking the establishment of a panel to resolve the dispute. Marrakesh Agreement Establishing the World Trade Organization, Annex 2 Understanding on Rules and Procedures Governing the Settlement of Disputes arts. 4, 5, Apr. 15, 1994, 1867 U.N.T.S. 154 (1994).

³⁴⁴ *See, e.g.*, Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction art. 10, Sept. 18, 1997, 2056 U.N.T.S. 211 (entered

putes through non-adversarial means. For example, the WCPF Convention, through the Fish Stocks Agreement, directs the members to attempt to resolve their disputes through “negotiation, inquiry, mediation, [or] conciliation.”³⁴⁵

Neither the Fish Stocks Agreement nor UNCLOS provide specific procedures for conducting negotiations. Nonetheless, WCPFC members might prefer negotiation to other dispute settlement approaches because negotiations are the least formal and the least resource-intensive process. When parties negotiate, they can converse informally and confidentially because the process does not involve a third party. Moreover, the parties might favor the flexibility to reach a mutually acceptable result tailored to the concerns and interests of parties representing different viewpoints. In other words, they can create a settlement that is not a “win” for one set of members and a “loss” for another set of members.

Mediation and conciliation draw on the expertise of a third party to act as a sounding board for the disputing parties and perhaps also to recommend solutions to the parties.³⁴⁶ Again, neither the Fish Stocks Agreement nor UNCLOS provide specific procedures for conducting mediation and conciliation, although UNCLOS does include guidance on conducting conciliation.³⁴⁷ With both mediation and conciliation, the record of the proceedings typically remains confidential—unless the parties agree otherwise—and the recommendations of the mediator or conciliator are non-binding.³⁴⁸

Because UNCLOS prefers conciliation to other compulsory procedures,³⁴⁹ disputing parties are encouraged to resolve the dispute through the conciliation process provided in UNCLOS or another conciliation process.³⁵⁰ For the conciliation procedure to apply to members, the disputing members must accept the invitation and agree upon a conciliation procedure.³⁵¹ Once the parties agree on the procedure, any party may submit the dispute to that procedure,³⁵² and the parties must follow the procedure to terminate the dispute.³⁵³ If, however, the

into force Mar. 1, 1999) (stating that parties “shall consult and cooperate with each other to settle any dispute that may arise with regard to the application or the interpretation of this Convention”).

³⁴⁵ U.N. Fish Stocks Agreement, *supra* note 49, art. 27.

³⁴⁶ Mediation and conciliation are often used interchangeably, although some consider conciliation to be more formal than mediation. See Linda C. Reif, *Conciliation as a Mechanism for the Resolution of International Economic and Business Disputes*, 14 *FORDHAM INT'L L. J.* 578, 584 (1990) (stating that “[a] mediation is more informal and the mediator, when making proposals, is expected to construct them based purely on the information provided by the parties”).

³⁴⁷ UNCLOS, *supra* note 75, art. 284, Annex V. Although the disputing parties may determine the procedures for conducting the conciliation, UNCLOS provisions describe the composition of the conciliation commission, payment of fees, and other aspects of conciliation. *Id.*

³⁴⁸ Reif, *supra* note 346, at 586.

³⁴⁹ UNCLOS, *supra* note 75, art. 286.

³⁵⁰ *Id.* art. 284(1).

³⁵¹ *Id.* art. 284(2).

³⁵² *Id.*

³⁵³ *Id.* art. 284(3).

disputing members do not accept the invitation or the parties cannot agree on a conciliation procedure, “the conciliation proceedings shall be deemed to be terminated,” and the members must use another form of dispute settlement.³⁵⁴

Under the UNCLOS conciliation procedure, a conciliation commission is created to reach “an amicable settlement” among the disputing parties.³⁵⁵ The conciliation commission consists of five members: two appointed conciliators from each of the disputing parties, and a chairman appointed by the other four conciliators.³⁵⁶ Upon examining each party’s claims and objections, the conciliation commission makes proposals to the parties.³⁵⁷ Although the conciliation commission’s recommendations are not binding on the parties,³⁵⁸ the parties can accept a recommendation to terminate the conciliation proceedings.³⁵⁹ If, however, one party rejects the recommendation by written notification to the U.N. Secretary-General, the conciliation process is terminated.³⁶⁰

2. Ad Hoc Expert Panels

Although negotiation, mediation, and conciliation are traditional forms of non-adversarial dispute settlement, the Fish Stocks Agreement also provides for a less well-known approach: the use of an ad hoc expert panel.³⁶¹ Under the Fish Stocks Agreement, a member may choose to resolve a dispute that “concerns a matter of a technical nature” through an ad hoc expert panel.³⁶² Acting as an unbiased third party in a non-binding process, the expert panel “confer[s]” with the disputing parties with the aim of resolving the dispute.³⁶³ Although the Fish Stocks Agreement does not define “a matter of a technical nature,”³⁶⁴ its language indicates that the use of an ad hoc panel is preferred to binding methods of dispute settlement—e.g., judicial settlement—because it reserves compulsory procedures to situations where the parties cannot reach a settlement through non-binding decisions.³⁶⁵

³⁵⁴ *Id.* art. 284(4).

³⁵⁵ *Id.* Annex V, art. 6.

³⁵⁶ *Id.* Annex V, art. 3(a)–(d).

³⁵⁷ *Id.* Annex V, art. 6. The commission submits its recommendations and conclusions in a report to the Secretary-General of the United Nations, who will transmit the report to the parties. *Id.* Annex V, art. 7(1).

³⁵⁸ *Id.* Annex V, art. 7(2).

³⁵⁹ *Id.* Annex V, art. 8.

³⁶⁰ *Id.*

³⁶¹ U.N. Fish Stocks Agreement, *supra* note 49, art. 29.

³⁶² *Id.*

³⁶³ *Id.*

³⁶⁴ *Id.*

³⁶⁵ UNCLOS, *supra* note 75, art. 286.

Within the context of the WCPF Convention, if a matter concerns any issue within the areas of competence of the Scientific Committee or the Technical and Compliance Committee, a member could legitimately argue that such matter is “of a technical nature” that requires the expertise of an ad hoc panel. If the ad hoc expert panel process is used to resolve the dispute over the provision of scientific advice in the WCPFC, the expert panel should consist of independent experts rather than members from the WCPFC’s subsidiary bodies to ensure an unbiased resolution to the dispute.

3. Arbitration and Judicial Settlement

If members cannot resolve their dispute through conciliation or negotiation, they might find that a binding procedure is necessary to resolve the dispute. Though formal international proceedings are rare and contentious, they might be the only viable option for members to reach a settlement. In such a case, the members also have the option to submit the dispute to one of four tribunals or courts: the International Tribunal for the Law of the Sea (“ITLOS”),³⁶⁶ the International Court of Justice (“ICJ”),³⁶⁷ an arbitral tribunal,³⁶⁸ or a special arbitral tribunal.³⁶⁹ The dispute, however, must be submitted to the arbitral tribunal unless the disputing parties have agreed on, or accepted, the same procedure for dispute settlement.³⁷⁰ In addition, the court or the tribunal may select two or more scientific experts to sit with the court or tribunal, without having the right to vote on disputes involving “scientific or technical matters.”³⁷¹

Because members may agree to submit to the jurisdiction of a court or tribunal they have not accepted through ratification of UNCLOS, disputing members might consider different characteristics of these courts and tribunals when deciding whether to submit to a court or tribunal’s jurisdiction. Members seeking more control over the dispute resolution procedure might opt to submit to one of the arbitral tribunals because of the tribunals’ greater flexibility compared to ITLOS and ICJ procedures.³⁷² For example, when members submit a dispute to an

³⁶⁶ This tribunal must be established in accordance with Annex VI of UNCLOS. *Id.* art. 287(1)(a).

³⁶⁷ *Id.* art. 287(1)(b).

³⁶⁸ This tribunal must be established in accordance with Annex VII of UNCLOS. *Id.* art. 287(1)(c).

³⁶⁹ This tribunal can only be formed for one or more of the categories of disputes specified in Annex VIII of UNCLOS. *Id.* art. 287(1)(d). In addition, the tribunal must be constituted in accordance with Annex VIII. *Id.*

³⁷⁰ *Id.* art. 287(4)–(5).

³⁷¹ The court or tribunal may select the experts “at the request of a party or proprio motu.” *Id.* art. 289.

³⁷² Samuel J. Zeidman, Note, *Sittin’ on the Dhaka the Bay: The Dispute Between Bangladesh and Myanmar and Its Implications for the International Tribunal for the Law of the Sea*, 50 COLUM. J. TRANSNAT’L L. 442, 479 (2012).

arbitral tribunal, they have control over the composition of the tribunal.³⁷³ In addition, they have more control over the questions addressed to the tribunal by avoiding third party interventions.³⁷⁴ On the other hand, if members cannot agree on the dispute settlement procedure, then they might elect to submit the dispute to the ITLOS or the ICJ and their established procedures.³⁷⁵

Although ITLOS has judges with extensive knowledge of law, some commentators have voiced concern that ITLOS judges might only have expertise in the law of the sea rather than in international law generally.³⁷⁶ ITLOS judges, however, have shown their ability to consider a range of issues covering different aspects of international law.³⁷⁷ In the *Southern Bluefin Tuna Cases*, for example, the ITLOS tribunal adeptly considered principles of international law and issues relating to specific provisions of UNCLOS and the Convention for the Conservation of Southern Bluefin Tuna (“CCSBT”).³⁷⁸ In addition, members might decide to bring the dispute to the ITLOS instead of the ICJ because the ITLOS has fewer cases pending before it, allowing for quicker adjudication.³⁷⁹

4. Provisional Measures

If members decide to submit the dispute to a court or tribunal, the formal nature of such proceedings could lead to a protracted dispute.³⁸⁰ Such a drawn out period of time can be problematic in the context of WCPF Convention disputes. For example, if members are disputing a decision that allows unsustainable harvest of a fish stock, then a drawn out dispute settlement process could cause great harm to the fish stocks.

To “prevent serious harm to the marine environment,” UNCLOS allows a disputing member to request provisional measures, including a court or tribunal imposed injunction of the decision under dispute.³⁸¹ In fact, upon receiving such

³⁷³ NATALIE KLEIN, DISPUTE SETTLEMENT IN THE UN CONVENTION ON THE LAW OF THE SEA 56 (2009).

³⁷⁴ *Id.*

³⁷⁵ *Id.*

³⁷⁶ *Id.* at 472.

³⁷⁷ *Id.*

³⁷⁸ *Southern Bluefin Tuna Cases (N.Z. v Japan; Austl. v. Japan) (Provisional Measures)*, Cases No. 3 & 4, Order of Aug. 27, 1999, 38 I.L.M. 1624, available at https://www.itlos.org/fileadmin/itlos/documents/cases/case_no_3_4/Order.27.08.99.E.pdf, archived at <https://perma.cc/5ZQN-2HPY>. The ITLOS tribunal’s order was later overturned by an arbitral tribunal, which concluded that it lacked jurisdiction to hear the case. *Southern Bluefin Tuna Cases (N.Z. v Japan; Austl. v. Japan)*, 23 R.I.A.A. 1, 65, ¶ 65 (Perm Ct. Arb. 2004), available at http://legal.un.org/riaa/cases/vol_XXIII/1-57.pdf, archived at <http://perma.cc/7QWT-8RJR>.

³⁷⁹ KLEIN, *supra* note 373, at 477–78.

³⁸⁰ The ICJ dispute concerning Japanese scientific research whaling took almost four years to resolve. See *infra* notes 399–416 and accompanying text.

³⁸¹ UNCLOS, *supra* note 75, art. 290(1).

a request, the court or the tribunal has authority to prescribe an appropriate provisional measure³⁸² pending a final decision.³⁸³ If the court or the tribunal imposes a provisional measure, the measure is binding on all parties to the dispute³⁸⁴ until circumstances justifying the measure have changed or ceased.³⁸⁵

In the *Southern Bluefin Tuna Cases*, for example, the ITLOS tribunal enjoined Japan from “authorising or conducting any further experimental fishing for [southern bluefin tuna] without the agreement of New Zealand and Australia.”³⁸⁶ In that dispute, Japan had unilaterally set itself an “experimental fishing” quota without the agreement of Australia or New Zealand, the two other parties to the CCSBT.³⁸⁷ The ITLOS tribunal held that Japan’s actions violated its obligations under UNCLOS to cooperate with Australia and New Zealand through the provisions of the CCSBT.³⁸⁸

C. Dispute Settlement in Other Treaties

Although no member has invoked the dispute settlement procedure under the WCPF Convention, interpretive disputes have arisen under other treaties that might be instructive for resolving disputes under the WCPF Convention. In particular, countries have argued for different interpretations of key terms in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (“CITES”) and the International Convention for the Regulation of Whaling (“ICRW”).³⁸⁹ This section describes a couple disputes and identifies and analyzes the lessons WCPFC members can learn in settling disputes under the WCPF Convention.

1. The Definition of “Whales” Under the ICRW

The ICRW establishes the International Whaling Commission (“IWC”) to regulate taking of “whales,” but the ICRW never defines the term.³⁹⁰ Some countries have argued that the IWC only has the authority to regulate the taking of large cetaceans, although others have argued that the definition of “whales”

³⁸² *Id.* art. 290(3).

³⁸³ *Id.* art. 290(1).

³⁸⁴ *Id.* art. 290(6).

³⁸⁵ *Id.* art. 290(2).

³⁸⁶ *Southern Bluefin Tuna Cases*, *supra* note 378, ¶ 28(2).

³⁸⁷ *Id.* ¶ 28.

³⁸⁸ *Id.* ¶ 28(1).

³⁸⁹ International Convention for the Regulation of Whaling, Dec. 2, 1946, 62 Stat. 1716, 161 U.N.T.S. 72 [hereinafter ICRW] (entered into force Nov. 10, 1948).

³⁹⁰ *Id.* art. IV.

includes small cetaceans.³⁹¹ A dispute arose in 1977 when the IWC's Scientific Committee recommended that the IWC regulate the taking of bottlenose dolphins, beaked dolphins, pilot whales, and orcas.³⁹² Pro-whaling countries, such as Japan, strongly opposed the proposal, asserting that the ICRW does not allow the IWC to regulate catches of small cetaceans.³⁹³ Tension between the members remains to this day because the IWC adopted an "ambiguous resolution" that is "little more than a pledge" to resolve the dispute sometime in the future.³⁹⁴ This "gentlemen's agreement" allows the Scientific Committee to review the conservation status of small cetaceans but prohibits the IWC from regulating catches of them.³⁹⁵

The failure to resolve this dispute is one reason why some scholars and others involved in IWC negotiations have called the IWC "dysfunctional."³⁹⁶ Although other issues contribute to that view, including the resort to the ICJ to resolve the issue of Japanese scientific research whaling discussed below, the dispute over the meaning of "whales" is a warning signal to the WCPFC that it should use the strategies provided by the WCPF Convention to resolve the dispute over scientific authority. As with the IWC's concerns regarding the definition of "whales," Japanese scientific research whaling, and the duration of the moratorium on commercial whaling, WCPFC members remain highly divided.

³⁹¹ See William C. Burns, *The International Whaling Commission and the Regulation of the Consumptive and Non-Consumptive Uses of Small Cetaceans: The Critical Agenda for the 1990s*, 13 Wis. INT'L L.J. 105, 127–28 (1994) (summarizing the positions of IWC members). There is no accepted definition of "small" or "large" cetacean. As the IWC Secretariat explains,

Traditionally, those species not considered to be one of the "Great Whales" are called "small cetaceans" even though some of them can be as large as a minke whale (the smallest Great Whale). Common names often end in "whale," "dolphin" or "porpoise[.]" although there is no formal definition of each—for example the killer whale, *Orcinus orca*, is in fact a member of the family Delphinidae.

Small Cetaceans, INT'L WHALING COMM'N, <https://iwc.int/smallcetacean> (last visited Mar. 29, 2015), archived at <https://perma.cc/X7JV-555C>.

³⁹² See Burns, *supra* note 391, at 127.

³⁹³ *Id.*

³⁹⁴ *Id.* at 128–29.

³⁹⁵ INT'L WHALING COMM'N, TWENTY-SEVENTH REPORT OF THE COMMISSION 25, 480 (1977) (stating that the IWC agreed to recognize, "for administrative purposes," the list of smaller cetaceans of the world provided in a report of the Sub-Committee on Small Cetaceans, but that the issue of managing small cetaceans could be considered at a later time despite the Scientific Committee's view that there is an "urgent need for an international body to effectively manage stock of all cetaceans not covered by the present IWC Schedule"); see *Small Cetaceans*, *supra* note 391.

³⁹⁶ See, e.g., Hope M. Babcock, *Putting a Price on Whales to Save Them: What Do Morals Have to Do with It?*, 43 ENVTL. L. 1, 1 (2013); Joji Morishita & Dan Goodman, *Role and Problems of the Scientific Committee of the International Whaling Commission in Terms of Conservation and Sustainable Utilization of Whale Stocks*, 9 GLOBAL ENVTL. RES. 157, 157 (2005). Mr. Morishita is Japan's IWC Commissioner; Mr. Goodman has frequently represented Japan at IWC meetings. See Morishita & Goodman, *supra*.

Without a definitive resolution to the issue of which entity has ultimate responsibility for the provision of scientific advice, the WCPFC risks becoming another dysfunctional institution. In fact, the World Wildlife Fund has already placed the WCPFC “in the lowest ranks of other dysfunctional tuna Regional Fisheries Management Offices . . . that have also failed to adhere to science.”³⁹⁷ If, however, the WCPFC can find an “amicable settlement”³⁹⁸ through conciliation or negotiation, it can provide a model for other international institutions to resolve disputes.

2. The Scientific Research Exception Under the ICRW

Large-scale whaling by Japan under the ICRW’s exception for scientific research whaling has been the focus of criticism for years.³⁹⁹ In 2010, Australia finally turned this criticism into a legal dispute before the ICJ when it challenged Japan’s Antarctic whaling program, known as the Second Phase of the Japanese Whale Research Program Under Special Permit in the Antarctic (“JARPA II”).⁴⁰⁰ Since the 1985–1986 whaling season,⁴⁰¹ the IWC has imposed a moratorium on all commercial whaling.⁴⁰² Japan, however, has been granting permits to its nationals, pursuant to Article VIII of the ICRW, to kill whales for scientific research purposes.⁴⁰³ Pursuant to this exception, Japan killed 2595 minke whales and fourteen fin whales in the Southern Ocean from 2005 to 2009.⁴⁰⁴ Australia, however, contended that this killing is for commercial purposes, not scientific

³⁹⁷ *WCPFC Fails Yet Again to Save South Pacific Tuna Stocks*, WORLD WILDLIFE FUND (Dec. 11, 2010), <http://wwf.panda.org/?197833/WWF-fails-yet-again-to-save-south-pacific-tuna-stocks>, archived at <http://perma.cc/CBG4-7BQ3>.

³⁹⁸ UNCLOS, *supra* note 75, Annex V, art. 6.

³⁹⁹ For a short history of Japanese scientific research whaling, and criticism of it, see VASSILI PAPASTAVROU, *INT’L FUND FOR ANIMAL WELFARE, IN THE NAME OF SCIENCE?: A REVIEW OF SCIENTIFIC WHALING* (2006), available at <http://www.ifaw.org/sites/default/files/In%20the%20Name%20of%20Science%20A%20Review%20of%20Scientific%20Whaling.pdf>, archived at <http://perma.cc/RNN6-WGP8>; GREENPEACE, *SCIENTIFIC WHALING: THE TRUE STORY* (2002), available at <http://www.greenpeace.org/international/Global/international/planet-2/report/2002/5/scientific-whaling-the-true-s.pdf>, archived at <http://perma.cc/RD8L-RWBH>.

⁴⁰⁰ See *Application of Instituting Proceedings on Whaling in the Antarctic (Austl. v. Japan)*, 2010 I.C.J. 148 ¶ 2 (May 31, 2010) [hereinafter *Austl. v. Japan Brief*].

⁴⁰¹ *Commercial Whaling*, INT’L WHALING COMM’N, <http://iwc.int/commercial> (last visited Mar. 29, 2015), archived at <http://perma.cc/22YL-25GK>.

⁴⁰² Int’l Convention for the Regulation of Whaling, Schedule ¶ 10(d)–(e), Feb. 12, 1946, 62 Stat. 1716, 161 U.N.T.S. 72.

⁴⁰³ *Special Permit Whaling (Also Known as Scientific Whaling)*, INT’L WHALING COMM’N, <http://iwc.int/permits> (last visited Mar. 29, 2015), archived at <http://perma.cc/3KNA-P9GV>.

⁴⁰⁴ *Austl. v. Japan Brief*, *supra* note 400, ¶ 12.

purposes as Japan contends.⁴⁰⁵ Australia thus alleged that Japan was in breach of the duty to implement its obligations under the ICRW in good faith.⁴⁰⁶

In March 2014, the ICJ ruled that Japan's whaling program is not performed for "the purposes of scientific research."⁴⁰⁷ The court reached this conclusion because Japan failed to provide, among other things, sufficient scientific justification for its sample size and for increasing its sample size.⁴⁰⁸ Japan also failed to explain to the ICJ's satisfaction why it did not change its program, which was based on multi-species competition, when it decided not to hunt humpback whales.⁴⁰⁹

Although adjudication in the ICJ may resolve disputes with finality, the ICJ process lingers for many years, as evidenced by the nearly four years it took to resolve the JARPA II dispute.⁴¹⁰ The length of time for a resolution might leave many countries dissatisfied when the dispute involves possible ongoing, unsustainable killing. The WCPFC members could overcome this problem by requesting provisional measures under UNCLOS, as discussed previously.⁴¹¹ Even provisional measures, however, do not guarantee resource protection because the imposition of provisional measures is left to the discretion of the court or tribunal hearing the dispute.⁴¹²

Moreover, frustrated private citizens may take matters into their own hands if they perceive that the international body is not adequately performing its duties under a treaty. For example, the Sea Shepherd Conservation Society ("Sea Shepherd") has taken direct action against whalers by confronting and interfering with whaling vessels, claiming that the IWC is not capable of enforcing the moratorium.⁴¹³ It has expanded its efforts by launching a campaign to protect tuna.⁴¹⁴ Sea Shepherd has focused its campaign on the International Commission for the Conservation of Atlantic Tunas ("ICCAT"), alleging that ICCAT and the

⁴⁰⁵ See *id.* ¶ 34 (placing the word "scientific" in quotation marks).

⁴⁰⁶ *Id.* ¶¶ 35–37.

⁴⁰⁷ Whaling in the Antarctic (Austl. v. Japan: New Zealand Intervening), Judgment, ¶ 227 (Mar. 31, 2014), available at <http://www.icj-cij.org/docket/files/148/18136.pdf>, archived at <http://perma.cc/NU7N-X54R>.

⁴⁰⁸ *Id.* ¶¶ 195–196.

⁴⁰⁹ *Id.* ¶ 210.

⁴¹⁰ Australia filed its first brief in May 2000 and the ICJ issued its decision in March 2004. See generally Austl. v. Japan Brief, *supra* note 400 (illustrating a chronology of the case).

⁴¹¹ See *supra* notes 342–360 and accompanying text.

⁴¹² UNCLOS, *supra* note 75, art. 290(3).

⁴¹³ *The Whale's Navy: In Defense of Whales Worldwide*, SEA SHEPHERD, <http://www.sea-shepherd.org/whales/> (last visited Mar. 29, 2015), archived at <http://perma.cc/33QZ-YMWH>.

⁴¹⁴ See *Why Defend Bluefin Tuna*, SEA SHEPARD CONSERVATION SOC'Y, <http://www.sea-shepherd.org/blue-rage-2011/> (last visited Mar. 29, 2015), archived at <http://perma.cc/SB93-F5FL> (describing the campaign to protect bluefin tuna in 2011).

European Union (EU) have failed to protect bluefin tuna.⁴¹⁵ By voluntarily patrolling in Libyan fishing zones and cutting nets of illegal tuna poachers, Sea Shepherd claims it took the responsibility of “what should be the business of the ICCAT and the EU.”⁴¹⁶ Although extreme, this example shows that organizations like Sea Shepherd may target the WCPFC if disputes are not resolved expeditiously.

3. The Appendix II Listing Criteria Under CITES

CITES parties and organizations have long disputed the interpretation of Appendix II listing criteria under CITES.⁴¹⁷ Specifically, they disagree over the meaning of the word “reducing” as used in Annex 2(a)(B) of Resolution Conference 9.24, which includes the criteria for listing a species in Appendix II.⁴¹⁸ On one hand, the United Nations Food and Agriculture Organization (“FAO”) argues that “reducing” should have the same meaning as “decline,” which is defined as “a reduction in the abundance, or area of distribution, or area of habitat of a species.”⁴¹⁹ On the other hand, many CITES parties, as well as the CITES Secretariat, argue that “reducing” must be given its ordinary meaning (i.e. to make smaller) because “decline” has its own specific definition.⁴²⁰ Because the parties could not reach agreement on a common interpretation, they made the following compromise: when parties and organizations comment on a proposal

⁴¹⁵ Lamya Essemlali, *Sea Shepherd Campaign Status - Operation Blue Rage 2011*, SEA SHEPARD (June 23, 2011), <http://www.seashepherd.org/news-and-media/2011/06/23/sea-shepherd-campaign-status-operation-blue-rage-2011-6>, archived at <http://perma.cc/BDH3-5VEY>.

⁴¹⁶ *Id.*

⁴¹⁷ For a history of this dispute, see REBECCA HOYT & CHRIS WOLD, “REDUCE” VS. “DECLINE” PART I: ANNEX 2A OF RESOLUTION 9.24 (REV. COP14) ON CRITERIA FOR INCLUDING SPECIES IN APPENDIX II: ITS HISTORY AND LEGAL INTERPRETATION (2009) (on file with author).

⁴¹⁸ The relevant language of CITES is as follows:

A species should be included in Appendix II when, on the basis of available trade data and information on the status of the wild population(s), at least one of the following criteria is met . . . (B) It is known, or can be inferred or projected, that regulation of trade in the species is required to ensure that the harvest of specimens from the wild is not *reducing* the wild population to a level at which its survival might be threatened by continued harvesting or other influences.

CITES, RESOLUTION CONF. 9.24 (REV. COP16), CRITERIA FOR AMENDMENT OF APPENDICES I AND II, at Annex 2a (1994) (emphasis added), available at <http://cites.org/sites/default/files/eng/res/09/E-Res-09-24R16.pdf>, archived at <http://perma.cc/VJD5-W37A>.

⁴¹⁹ CITES, AC25 DOC. 10, CRITERIA FOR THE INCLUSION OF SPECIES IN APPENDICES I AND II (DECISIONS 15.28 AND 15.29), at Annex 2 (2011), available at <http://www.cites.org/eng/com/ac/25/E25-10.pdf>, archived at <http://perma.cc/P9PY-3DCH>.

⁴²⁰ *Id.* at 6, ¶ 15. See CITES, SC46 DOC. 14 ANNEX 3, REVISION OF RESOLUTION CONF. 9.24, at 56 (2002).

to include a species in Appendix II, they must identify on which interpretation of “reducing” they are basing their comments.⁴²¹

Although the compromise functions within the context of proposals to include a species in Appendix II of CITES, a similar compromise might not be feasible in the context of the WCPFC. Because the CITES parties ultimately vote if consensus cannot be reached to determine whether a species should be listed in Appendix II, after a consideration of comments and views presented,⁴²² the use of different standards does not interfere with the ultimate process of listing a species. In contrast, allowing WCPFC members to choose the scientific body on whose advice they should rely will simply lead to stalemate if the scientific bodies provide fundamentally different advice to the WCPFC. Under such circumstances, the members will not be able to reach consensus on a conservation and management measure for a stock. Therefore, the compromise that CITES parties resorted to cannot be applied to the WCPFC.

IV. RECOMMENDATIONS

This Article concludes that the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western Pacific Ocean (“WCPFC Convention” or the “Convention”) clearly provides the Scientific Committee of the Western and Central Pacific Fisheries Commission (“WCPFC”) with the authority and the duty to review the work of science providers and the WCPFC’s Northern Committee.⁴²³ Nonetheless, some WCPFC members believe that the WCPFC Convention grants the Northern Committee an autonomous role, free from review by the Scientific Committee.⁴²⁴ To eliminate the confusion concerning the roles of the Scientific Committee, the Northern Committee, and the subsidiary bodies of the Convention, the members should make three small, but significant, modifications to the current arrangements governing communication and decision-making among these bodies. These changes will clarify that the Scientific Committee has authority to review scientific information and recommendations of other bodies consistent with Article 12(2) of the WCPFC Conven-

⁴²¹ CITES, CRITERIA FOR THE INCLUSION OF SPECIES IN APPENDICES I AND II, *supra* note 419, ¶ 4; CITES, SC62 SUMMARY RECORD, SUMMARY RECORD: SIXTY-SECOND MEETING OF THE STANDING COMMITTEE ¶ 39 (2012), *available at* <http://www.cites.org/sites/default/files/eng/com/sc/62/E-SC62-SumRec.pdf>, *archived at* <http://perma.cc/TGQ9-M2VS> (recording that the Standing Committee “supported the recommendations of the Animals Committee in document SC62 Doc. 39 and stressed the need for Parties to explain clearly which approach they chose for applying Resolution Conf. 9.24 (Rev. CoP15), Annex 2 a, criterion B, when preparing their amendment proposals”).

⁴²² CITES, *supra* note 311, art. XV(1)(b); CITES, COP16 DOC. 4.1 (REV. 1), REPORT OF THE SECRETARIAT: RULES OF PROCEDURE, at Rule 23(1)–(2) (2013), *available at* <http://cites.org/sites/default/files/eng/cop/16/doc/E-CoP16-04-01.pdf>, *archived at* <http://perma.cc/4RNJ-FJD3>.

⁴²³ *See supra* notes 171–230 and accompanying text.

⁴²⁴ *See supra* note 10 and accompanying text.

tion and to ensure that such recommendations are based on the best scientific information available.

1. Revise the Northern Committee's Rules of Procedure

WCPFC members should revise the Northern Committee's Rules of Procedure to direct the Scientific Committee to determine the best available science underlying the Northern Committee's recommendations to the WCPFC. Although the WCPF Convention already directs the Scientific Committee to review the scientific information presented to the WCPFC,⁴²⁵ the political compromises that led to the creation of the Northern Committee⁴²⁶ perhaps prevent the Scientific Committee from fulfilling this duty. To allow the Northern Committee to utilize the best available science, the Scientific Committee must hold its annual meetings before the Northern Committee. This would allow the Scientific Committee to evaluate the information provided by the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (the "ISC") to the Northern Committee before the Northern Committee uses the ISC's information to propose conservation and management measures ("CMMs") to the WCPFC. The Northern Committee, however, currently does not have a required timeframe in which it holds its annual meetings. Thus, the Northern Committee's Rules of Procedure should be modified to ensure that the Northern Committee holds its annual meetings after the Scientific Committee. In addition, the Rules should require the Northern Committee to explain its reasons if it recommends measures that deviate from the Scientific Committee's recommendations. Implementing this relatively simple revision will enable both the Scientific Committee and the Northern Committee to fulfill their respective obligations under the Convention, and in addition, will enable the WCPFC to make reasoned decisions based on the best available scientific information.

2. Revise the WCPFC's MoU with the ISC

WCPFC members should revise the WCPFC's memorandum of understanding with the ISC to allow the Scientific Committee to request information from the ISC and to direct the Scientific Committee to review the data and recommendations that the ISC provides to the Northern Committee. For the Scientific Committee to review effectively the information the ISC provides to the Northern Committee, the ISC should provide such information before the Scientific Committee's annual meeting. In addition, the length of time between the ISC providing the information and the Scientific Committee's meeting should be

⁴²⁵ WCPF Convention, *supra* note 1, art. 12(b), (d).

⁴²⁶ See *supra* notes 151–300 and accompanying text.

sufficient to allow the Scientific Committee to request additional information as necessary. When the Scientific Committee requests additional information, the request must be for information related to making the best available science determination for the ISC's recommendations to the Northern Committee or to help the Scientific Committee complete an analysis, assessment, or review covered by Article 12 of the WCPF Convention. For example, if the ISC provides the information to the Northern Committee two months before the Scientific Committee's annual meeting, the Scientific Committee can determine whether it obtained sufficient information to make the best available science determination. In the event that the Scientific Committee requires additional information, the ISC can provide the additionally requested data one month before the Scientific Committee's annual meeting.

3. Revise the WCPFC Resolution on Best Available Science

WCPFC members should revise the Resolution on the Best Available Science⁴²⁷ to ensure that the Scientific Committee is the ultimate authority for ensuring that the best scientific information available is provided to the WCPFC. To accomplish this change, the Resolution should explicitly require the Scientific Committee to review the scientific data provided by the Secretariat of the Pacific Community (the "SPC") and the ISC. Moreover, the Resolution should also require the Scientific Committee to explain the underlying science and its reasoning if the Committee disagrees with any recommendations made by the SPC or the ISC. By modifying the Resolution as stated above, the Scientific Committee will have the authority to review the science provided by the ISC and SPC as required by the WCPF Convention, while maintaining transparency and scientific integrity.

CONCLUSION

The Western and Central Pacific Ocean is home to a tuna fishery valued at more than \$3.8 billion annually, but its tuna stocks are dwindling. Perhaps unsurprisingly, it is also now home to significant political and scientific disputes concerning how best to manage and conserve those valuable but dwindling resources.

These disputes are playing out in the Western and Central Pacific Fisheries Commission, or the WCPFC, the international institution charged with oversight of this vast fishery that covers approximately twenty percent of Earth's surface. Due to political compromises made during the negotiation of the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the West-

⁴²⁷ See *supra* note 216 and accompanying text.

ern Pacific Ocean, or the WCPF Convention, two subsidiary bodies were designated to provide recommendations to the WCPFC: the Scientific Committee for all fish stocks in the Convention Area and the Northern Committee for those stocks occurring mostly north of the twenty degree parallel of north latitude. With membership in the Northern Committee dominated by distant water fishing nations, many believe that the Northern Committee's conservation and management recommendations are inadequate to protect and restore valuable fish stocks, such as the Pacific bluefin tuna and the blue shark. Whereas some WCPFC members believe that the Scientific Committee has authority to review Northern Committee recommendations and that the WCPFC should rely on the views of the Scientific Committee, others believe that the Northern Committee is autonomous and that the Scientific Committee's review of North Committee recommendations is unwarranted.

This Article concludes that Article 12 of the WCPF Convention clearly authorizes the Scientific Committee to review the recommendations of the Northern Committee and mandates that the Scientific Committee review the underlying science provided to the Northern Committee by the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean ("ISC"). Article 12 requires the Scientific Committee to "review assessments, analyses, other work[,] and recommendations prepared for the [WCPFC] by . . . scientific experts." It further requires the Scientific Committee to "review the results of research and analysis and target stocks or non-target or associated or dependent species in the Convention Area"; it does not limit the Scientific Committee's mandate to those species south of twenty degrees parallel of north latitude. The Scientific Committee also has a duty to ensure that WCPFC "obtains for its consideration the best scientific information available."

To effectuate these duties, this Article recommends that the WCPFC make three consequential amendments to three different documents. First, the WCPFC should revise the Northern Committee's Rules of Procedure to direct the Scientific Committee to determine the best available science underlying the Northern Committee's recommendations to the WCPFC. Although the WCPF Convention already directs the Scientific Committee to review the scientific information presented to the WCPFC, the political compromises that led to the creation of the Northern Committee perhaps prevent the Scientific Committee from fulfilling this duty.

Second, WCPFC members should revise the WCPFC's MoU with the ISC to allow the Scientific Committee to request information from the ISC and to direct the Scientific Committee to review the data and recommendations that the ISC provides to the Northern Committee. As noted by one independent review, the Scientific Committee is often asked to review the science behind the ISC's work without the relevant science because it is not able to request information from the ISC. Currently, only the Northern Committee may do that.

Third, WCPFC members should revise the Resolution on the Best Available Science to ensure that the Scientific Committee is the ultimate authority for ensuring that the best scientific information available is provided to the WCPFC. To accomplish this change, the Resolution should explicitly require the Scientific Committee to review the scientific data provided by the SPC (which provides scientific information to the Scientific Committee) and the ISC (which provides scientific information to the Northern Committee). The Resolution should also require the Scientific Committee to explain the underlying science and its reasoning, if the Committee disagrees with any recommendations made by the SPC or the ISC. By modifying the Resolution as stated above, the Scientific Committee will have the authority to review the science provided by the ISC and SPC as required by the WCPF Convention, while maintaining transparency and scientific integrity.

Until these changes are made, the WCPFC will continue to be divided among those members wishing for a more conservation-oriented approach to fisheries management and those members apparently more concerned about their commercial interests. For species such as Pacific bluefin tuna—already depleted to just 3.6 percent of historic biomass—and other northern stocks such as blue sharks, the continuing debate and the resulting dysfunction greatly hinder their chances of being restored to levels that would make them valuable fisheries resources.