



**Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Northern Committee
Twentieth Regular Session**

**Kushiro, Japan (Hybrid)
15 – 16 July 2024**

SUMMARY REPORT

Acknowledgements

The financial, logistical and administrative support provided by the Western and Central Pacific Fisheries Commission Secretariat and all Members of the Northern Committee are gratefully acknowledged. Mr. Masanori Miyahara, who chaired the Twentieth Regular Session of the Northern Committee, and Mr. Alex Meyer, who served as the rapporteur for the meeting, are acknowledged with appreciation.

TABLE OF CONTENTS

AGENDA ITEM 1 — OPENING OF MEETING	4
AGENDA ITEM 2 — CONSERVATION AND MANAGEMENT MEASURES FOR THE NORTHERN STOCKS	9
AGENDA ITEM 3 — CONSERVATION AND MANAGEMENT MEASURES FOR OTHER STOCKS	11
AGENDA ITEM 4 — CLIMATE CHANGE.....	11
AGENDA ITEM 5 — REGIONAL OBSERVER PROGRAMME	12
AGENDA ITEM 6 — DATA.....	12
AGENDA ITEM 7 — COOPERATION WITH OTHER ORGANIZATIONS.....	13
AGENDA ITEM 8 — FUTURE WORK PROGRAMME	13
AGENDA ITEM 9 — ADMINISTRATIVE MATTERS	13
AGENDA ITEM 10 — ADOPTION OF THE SUMMARY REPORT OF THE 20TH REGULAR SESSION OF THE NORTHERN COMMITTEE	14
AGENDA ITEM 11 — CLOSE OF THE MEETING.....	14

ATTACHMENTS

Attachment A – List of Participants

Attachment B – Agenda

Attachment C – Chairs’ summary of the 9th Joint IATTC and WCPFC-NC Working Group meeting on the management of Pacific bluefin tuna

Attachment D – Draft Conservation and Management Measure for Pacific Bluefin Tuna

Attachment E – Draft Conservation and Management Measure for the Monitoring, Controlling, and Surveillance of Pacific Bluefin Tuna

Attachment F – Draft agreement between the SPC and the WCPFC/IATTC

Attachment G – Work Programme for the NC

**The Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Northern Committee
Twentieth Regular Session**

Kushiro, Japan (Hybrid)
15 – 16 July 2024

SUMMARY REPORT

AGENDA ITEM 1 — OPENING OF MEETING

1. The Twentieth Regular Session of the Northern Committee (NC20) took place in Kushiro, Japan, on 15 – 16 July 2024. The meeting was attended by Northern Committee (NC) members from Canada, China, Fiji, Japan, Republic of Korea (ROK), Philippines, Chinese Taipei, United States of America (USA) and Vanuatu and observers from Australia, the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC), Marine Stewardship Council (MSC), the Republic of the Marshall Islands (RMI), the Federated States of Micronesia (FSM), New Zealand, Ocean Governance Institute (OGI), Pacific Islands Forum Fisheries Agency (FFA), Tuvalu and World Wide Fund for Nature (WWF). The list of meeting participants is in **Attachment A**.

1.1 Opening of meeting

2. Mr. Masanori Miyahara, Chair of the NC, opened the meeting and invited the Executive Director, Ms. Rhea Moss-Christian, to give opening remarks.

3. The Executive Director thanked the Government of Japan for hosting the meeting in Kushiro City. She also reflected on the achievements and future tasks of the WCPFC, which marked the 20th anniversary of its entry into force this year. All tuna stocks under the WCPFC's competence are biologically healthy. This includes Pacific bluefin tuna (PBF), which is a testament to the work of the NC and the Inter-American Tropical Tuna Commission (IATTC). Nevertheless, there is a need to continue to work hard to maintain the healthy status of these stocks, including enhancing data collection, which will be supported by the development of a catch documentation scheme for PBF. At the same time, the world is undergoing significant environmental changes, and fisheries are taking on an ever more important role in global ocean health and oceans management. The WCPFC and the NC must be cognizant of this wider context and not work in isolation. They must also stay in touch with public sentiment. Lastly, the Executive Director reiterated the Secretariat's support for the work of the NC and wished the participants a successful meeting.

1.2 Adoption of agenda

4. The NC noted that NC14 had requested the ISC to conduct projections examining rebuilding scenarios for Western and Central North Pacific Ocean Striped Marlin (WCNPO MLS) that cover a range of rebuilding targets, timelines, and probabilities of each scenario to reach each target within different timelines. The NC noted that this work had been completed but had not been formally presented to the NC, and requested that it be presented under agenda item 1.4.1 alongside the report from the ISC.

5. The provisional agenda was adopted without modification (**Attachment B**).

1.3 Meeting arrangements

6. Japan, as the host of the meeting, outlined the meeting arrangements.
7. Mr. Alex Meyer (Japan) was appointed as rapporteur for the meeting.

1.4 Report from ISC and SC

1.4.1 Report from ISC

8. Dr. John Holmes, Chair of the ISC gave a presentation summarizing the outcomes of the ISC24 Plenary Meeting, which was held in person in Victoria, Canada. A benchmark stock assessment was conducted for Pacific bluefin tuna (PBF) this year. It indicated that the stock is rebuilding and exceeded the second rebuilding target ($20\%SSB_{F=0}$) in 2021 and was above the target with a 76% probability in 2022. The stock status is as follows: (1) no biomass-based or F-based reference points have been established for the PBF stock, (2) the stock is not overfished relative to $20\%SSB_{F=0}$, (3) overfishing is not occurring relative to F-based reference points, including $F_{20\%}$ corresponding to the second rebuilding target.

9. A benchmark stock assessment was conducted this year for shortfin mako shark (SMA). The stock status is as follows: (1) there is no biomass-based or F-based reference points established by either regional fisheries management organization (RFMO) for this stock; (2) recent median D ($D_{2019-2022}$) is estimated to be 0.60 (95% CI = 0.23-1.00) and is 1.17 times D_{MSY} (95% CI = 0.46-1.92), and the stock is likely (66% probability) not in an overfished condition relative to MSY based reference points; (3) recent U ($U_{2018-2021}$) is estimated to be 0.018 (95% CI = 0.004-0.07). $U_{(2018-2021)}$ and is 0.34 times (95% CI = 0.07-1.20) U_{MSY} , and overfishing is likely not occurring (95% probability) relative to MSY -based reference points; (4) the model ensemble results show that there is a 65% joint probability that the North Pacific Ocean (NPO) SMA stock is not in an overfished condition and that overfishing is not occurring relative to MSY -based reference points; and (5) key uncertainties may limit the interpretation of the assessment results including uncertainty in catch (historical and modeled period), uncertainty in biology and stock reproductive dynamics, and lack of CPUE indices that fully index the stock.

10. A stock assessment was conducted last year for North Pacific Ocean swordfish (NPO SWO) and the results were presented to ISC23. Its stock status is as follows: (1) when the status of NPO SWO is evaluated relative to MSY -based reference points, the 2021 SSB of 35,778 mt is 220% of SSB_{MSY} (16,000 mt) and the 2019-2021 F is about 49% below F_{MSY} ; and (2) relative to MSY -based reference points, overfishing is very likely not occurring (>99% probability) and the NPO SWO stock is very likely not overfished (>99% probability).

11. The ISC has made progress on work in response to requests from the NC. For North Pacific albacore, the ISC produced preliminary results on defining exceptional circumstances leading to the suspension or modification of the adopted harvest strategy in 2023 and completed this work in 2024, and provided advice that changes in fishing intensity can be translated to effort for surface fleets only under the adopted harvest strategy. For PBF, the ISC considered 6 additional harvest scenarios requested by the Joint IATTC-NC Working Group Meeting on PBF Management and found that the probability of falling below $20\%SSB_{F=0}$ is negligible for all additional scenarios. For WCNPO MLS, the ISC considered 10 projection scenarios (6 catch, 4 fishing mortality) to support rebuilding plans for the stock based on the

2023 assessment and found that 8/10 scenarios can meet the rebuilding target (rebuild to 20%SSB_{F=0} by 2034 with a 60% probability) with small decreases in catch relative to recent average levels, while F_{MSY} and F₂₀₁₈₋₂₀₂₀ failed to meet the rebuilding target and that new projection scenarios do not change existing stock status and conservation information.

12. The ISC's 2023 WCNPO MLS benchmark stock assessment underwent an external peer review to improve the stock assessment and the presentation of the results. Reviewers noted two key uncertainties: 1) an apparent change in the level of estimated recruitment (population scale) before and after the mid-1990s, and 2) insufficient age at length data for older fish to estimate the growth curve. The BILLWG has compiled responses and was tasked by ISC24 Plenary to present their responses and action plan to the ISC25 Plenary. ISC24 Plenary discussed institutionalization of the external peer review process and noted the close coordination with the WCPFC Secretariat as a potential model. The current approach to funding is ad hoc and a more permanent approach is needed. The next peer review will be conducted on PBF between completion of the MSE in 2025 and the start of the next benchmark stock assessment currently scheduled for 2027.

13. All ISC Member Countries have engaged in climate change research and adaptation. The ISC WGs have made efforts to incorporate climate change-related information into their work. They noted differences in effects related to differing life histories, that the lack of data is a major concern and may become more acute as fishery-dependent data becomes more limited for various reasons, and the need for greater collaboration in data-gathering to bridge these gaps. The WGs have been tasked by ISC24 Plenary with compiling information on (1) the ways in which they have begun to incorporate climate considerations into stock assessments, and (2) the data they believe would be required to do so in the future. This information will be presented at ISC25 and used to support framework development.

14. The ISC24 Plenary discussed a proposal for adopting an Open Science Framework for ISC Stock Assessments aimed at continuing the shift in methodology and culture surrounding stock assessments through the adoption of Open Science practices. Individual WGs are already implementing such practices in the stock assessment model development process. The ISC aims to establish ISC-wide guidelines, standardized workflows, and an ISC GitHub. The ISC24 Plenary endorsed a year-1 implementation plan, consisting of organizing training and scoping the governance and logistical requirements for implementing an Open Science framework. The ISC database will continue to house all stock assessment files and outputs to provide an authoritative record of the assessments used to generate stock status and conservation information.

15. The ISC24 Plenary elected Dr. Robert Ahrens (USA) to serve as the next ISC Chair and Dr. Shuya Nakatsuka (Japan) as the next ISC Vice-Chair.

16. The NC noted the Report of ISC24 (NC20-IP-02) as reviewed.

17. The NC expressed its deep appreciation to Dr. Holmes for his longstanding dedication, hard work, and excellent leadership as the ISC Chair, which has contributed greatly to the success of the NC's work.

18. The ISC Billfish Working Group (BILLWG) Chair, Dr. Michelle Sculley, reported on the work on projections examining rebuilding scenarios for NP MLS. Four F scenarios and six catch scenarios were run, of these all but two of the F scenarios meeting the rebuilding plan requirements. Scenarios had estimated catch or recent average F for 2021-2024, with management actions occurring beginning in 2025. Management actions could occur all at once or be phased in using either two or three time periods. Time

periods coincide with the next scheduled WCNPO stock assessments: 2027 and 2032. Two catch scenarios included a retention limit for small MLS (<120 eye fork length fish were discarded.) Two survivorship rates were considered: (1) survivorship probability of 0.4 (high) and (2) survivorship probability of 0.2 (low). 3 recruitment scenarios were used with weighting: (1) long term (0.04) – based on the stock recruitment curve; (2) medium term (0.84) – empirical distribution function using the recruitment from 2001 to 2020; (3) short term (0.12) – empirical distribution function using the recruitment from 2016 to 2020.

19. The ISC BILLWG Chair also presented the results of the 2023 stock assessment for WCNPO MLS. When the status of WCNPO MLS is evaluated relative to dynamic $20\%SSB_{F=0}$ based reference points, the 2020 spawning stock biomass of 1,696 t is 54% below $20\%SSB_{F=0}$ (3,660 t) and the 2018-2020 fishing mortality is about 28% above $F_{20\%SSB_{F=0}}$. Therefore, relative to $20\%SSB_{F=0}$ based reference points, the WCNPO MLS stock is very likely to be overfished (>99% probability) and is likely to be subject to overfishing (>66% probability). The ISC recommended that catch should be kept at or below the recent level (2018-2020 average catch = 2,428 t). The ISC also advised that the results of deterministic projections show that when catches are 2,400 t, or less, the stock is expected to recover above SSB_{MSY} and near the $20\%SSB_{F=0}$ reference level by 2040, or sooner at the lower catch levels under a low recruitment regime (3,660 t).

20. FSM expressed appreciation for the peer review conducted for the WCNPO MLS stock assessment and noted that the outcomes of this review provide direction for improving data inputs, modelling approaches and treatment of uncertainty for this assessment and, potentially, assessments of other stocks. FSM noted that despite the very high probability that this stock is overfished and is subject to overfishing relative to biomass-based reference points, the Commission at WCPFC20 “agreed to await the outcome of the peer review with a view to considering potential revisions to CMM 2010-01 at WCPFC21.” Based on the outcomes of peer review, FSM recommended that action is immediately taken to rebuild this stock, rather than waiting until the next stock assessment in 2027, and that the Commission adopt a more precautionary approach than that suggested by the BILLWG and reduce the catch to 2,300 mt or less. This is only 128 mt (or ~5%) lower than the 2018-2020 average catch, but projections show it will rebuild this unhealthy stock to the $20\%SSB_{F=0}$ reference level by 2026. FSM recommended that this be considered when revising CMM 2010-01.

21. The USA and Canada echoed the concerns expressed by FSM.

22. The USA requested that the WCNPO MLS analyses conducted by the ISC BILLWG also be presented to the WCPFC Scientific Committee (SC) and to the Commission. The USA emphasized the need for the Commission to take steps to ensure that the rebuilding target be met within the parameters already agreed to in the rebuilding strategy. To that end, the USA expressed its intention to work with interested CCMs to develop a proposal for rebuilding this stock and revising CMM 2010-01 accordingly.

23. Canada expressed support for the application of the precautionary approach, noting that the stock is very likely overfished and that there is an urgent need for action to rebuild this stock. Canada further noted that actual catch levels in recent years have not reached catch limits and that the implementation of limits under the scenarios that would see the rebuilding of the stock would likely not affect actual catch.

24. In response to a question from Japan regarding the change in the previously presented projections for the rebuilding scenarios, the BILLWG Chair explained that the projections that were previously presented were simple deterministic projections that did not include any uncertainty in initial conditions or recruitment. At the time they were presented, it was indicated that a full suite of projections

would be provided at a later stage when more time would be available. The new projections are based on 100 bootstraps of the stock assessment to quantify uncertainty in the initial conditions. They also include 10,000 iterations of a Bayesian analysis to fully include uncertainty not only in recruitment but also growth, natural mortality, and fishery components. The BILLWG considers the current projections to be a better representation of true uncertainty around the stock into the future.

25. Japan reiterated its longstanding concern regarding an aspect of the WCNPO MLS in that although the in accordance with the United Nations resolution on high seas driftnet fisheries in 1992, which resulted in a significant decline in fishing effort for WCNPO MLS, the stock assessment showed that F increased in 1992 – 1994. There is a significant gap in longline CPUE data between those before 1994 and after 1994. Furthermore, Japan also noted that the stock assessment did not include the shift to the use of nylon filament in the longline fishery from 1994 onwards, which resulted in improved catchability, even though similar technological advancements have been considered in the stock assessments of other tuna species. Japan expressed concern that the current stock assessment addressed neither of these three points identified by the peer review. Japan urged the ISC to further refine the stock assessment as soon as possible so that more reliable information is available to consider management measures.

26. The BILLWG Chair explained that, as the BILLWG has indicated previously, it believes that the high seas fishery was catching adult striped marlin. Meanwhile, data indicate that the longline fisheries that accounted for the majority of catch afterwards have been catching primarily juvenile striped marlin, which has a much higher relative mortality than catching adult fish. The BILLWG Chair also explained that the BILLWG will not conduct another stock assessment for WCNPO MLS until 2027. It is currently implementing a large-scale biological sampling program with the aim of developing a new growth curve by 2027, which is one of the main sources of uncertainty in the current stock assessment, and has agreed, based on the peer review and its own discussions, that it would not be advisable to conduct a new stock assessment until this work is complete.

27. The BILLWG Chair presented the results of the 2023 stock assessment for North Pacific (NP) swordfish (SWO). Estimates of female SSB have been flat to increasing since 1975, with a slight increase in the last five years. Current SSB is above 20% $SSB_{F=0}$ and MSY-based reference levels. Female SSB was estimated to be 35,778 mt in 2021, with a relative $SSB/SSB_{MSY} = 2.18$. Estimated F (arithmetic average of F for ages 1 – 10) averaged roughly $F=0.09$ during 2019-2021, with a relative fishing mortality of $F/F_{MSY} = 0.49$ in 2021. Relative to MSY-based reference points, overfishing is very likely not occurring (>99% probability) and the NP SWO stock is very likely not overfished (>99% probability). The stock has produced annual yields of around 11,500 mt per year since 2016, or about 2/3 of the MSY catch amount. The stock status is positive with no evidence of excess F above F_{MSY} or substantial depletion of spawning potential. Retrospective analyses show that the assessment model appears to underestimate spawning potential in recent years.

28. The BILLWG Chair also explained that in response to a request from NC18, the BILLWG used WCPFC and IATTC public domain data and yearbooks to compile catch and effort north and south of 20°N through 2020. The data indicated that much of the WPO catch is from longlines, and only longline data are available for effort. A large proportion of the effort south of 20°N includes Vietnam and Indonesia. The longline effort for Indonesia and Vietnam has been estimated because the logbook coverage for these fleets is believed to have variable coverage over time. Recently, catches of longline fishery in the 0°-10°N area of the Eastern Pacific have increased. The gillnet fishing conducted in the waters around Vietnam is also responsible for the increase in catch south of 20°N.

1.4.2 Report from SC

29. The 20th Regular Session of the WCPFC SC will be held on 14 – 21 August 2024. Therefore, relevant outcomes from SC20 may be reviewed at another separate NC20 online meeting later this year if necessary.

AGENDA ITEM 2 — CONSERVATION AND MANAGEMENT MEASURES FOR THE NORTHERN STOCKS

2.1 Pacific bluefin tuna (CMM 2023-02)

30. The Co-Chairs of the Joint IATTC and WCPFC-NC Working Group Meeting on the Management of Pacific Bluefin Tuna (JWG) presented the outcomes of the 9th JWG as outlined in the Chairs' Summary (**Attachment C**).

31. **The NC recommended that the Commission adopt the Conservation and Management Measure for PBF (Attachment D).**

32. **The NC recommended that the Commission adopt the Conservation and Management Measure for the Monitoring, Controlling, and Surveillance of Pacific Bluefin Tuna in (Attachment E)**

33. **The NC recommended that the Commission endorse the letter of agreement between the IATTC/WCPFC and the SPC, (Attachment F).**

34. The NC requested the ISC to conduct a peer review of the ISC PBFWG's 2024 stock assessment for PBF, subject to funding availability and expressed appreciation for the USA's possible offer for funding.

35. The NC reviewed the compiled catch and effort information for PBF in NC20-WP-02 (Rev.01).

2.2 North Pacific albacore (CMM 2019-03)

2.2.1 Reports from CCMs and Observers

36. The NC reviewed the compiled catch and effort information for North Pacific albacore in NC20-WP-01 (Rev.01).

37. Vanuatu presented its alternative baseline proposal for Vanuatu North Pacific albacore in NC20-DP-01. Vanuatu urged the NC to reconsider its proposal to use the average figures from 2004 to 2006 as an alternative baseline. Vanuatu acknowledged the limitations in obtaining historical data for the baseline due to the lack of a proper data collection system in the past but emphasized that the data from 2004 to 2006 are based on operational catch and effort data and that the data have been reviewed and submitted to the SPC.

38. After reviewing the licensing information on Vanuatu albacore longline vessels and their historical effort data, the NC noted that a tentative baseline of Vanuatu is 34 vessels and 2,753 days, which are the average figures for 2003 – 2005.

2.2.2 Application of Harvest Strategy for North Pacific Albacore Fishery

39. The Chair of the ISC Albacore Working Group (ALBWG), Dr. Sarah Hawkshaw, reported on the results of the ALBWG's work in response to requests from the NC. In response to advice on how fishing intensity should be interpreted to actual management under the adopted harvest strategy, the ALBWG Chair advised that the WCPFC NC Harvest Strategy 2023-01 and IATTC Resolution C-23-02 uses fishing intensity (F%SPR) in TRP and HCRs and that F%SPR is useful to indicate overall stock status and fishing impact on relative SSB. IATTC and WCPFC have traditionally used catch and/or effort to manage fisheries, and catch usually has a strong relationship with SPR, while effort has a less clear relationship with SPR. However, effort for the surface gear fleets, Japan Pole-and-line (JPPL) and Eastern Pacific Ocean Surface Fleet (EPOSF), exhibit moderately strong relationships with SPR, and the changes in fishing intensity required by the harvest strategy could potentially be translated into changes in effort for the management of these fleets.

40. Canada reiterated its continued support for an effort-based definition of fishing intensity for the EPOSF in the harvest strategy for North Pacific albacore.

41. Some Members noted that this analysis had only become available to the NC very recently and that Members required more time to review and discuss it. The NC agreed to revisit this issue and potential implications for the harvest strategy next year.

42. Japan noted that longliners operate in different areas when targeting North Pacific albacore, compared to when they target tropical tuna. Japan requested the ISC to try to separate out longliner operations for North Pacific albacore and analyze the correlation between SPR and effort in albacore longline fisheries.

43. In response to the request to update criteria for identifying exceptional circumstances for North Pacific albacore, the ALBWG Chair explained that the ALBWG had presented preliminary criteria for identifying exceptional circumstances to ISC23 and has since presented updated criteria to ISC24. The additional criteria were (1) if fishing intensity exceeds that simulated in the recent MSE; and (2) if a total allowable catch (TAC) or total allowable effort (TAE) is implemented, and the catch or effort exceeds that by >20%. The ALBWG will include exceptional circumstances analyses in the stock assessment process and review these criteria periodically.

44. Canada and the USA expressed support for the inclusion of the updated exceptional circumstances in the harvest strategy. Japan requested more time to review the updated exceptional circumstances and requested that the NC revisit this issue next year.

45. The NC agreed to defer discussion of the updated exceptional circumstances to its next meeting.

2.2.3 Review of the CMM for North Pacific Albacore (CMM 2019-03)

46. There were no proposals to amend CMM 2019-03.

2.3 North Pacific swordfish (CMM 2023-03)

47. The NC reviewed the compiled catch and effort information for NP swordfish in working paper NC20-WP-03.

48. The NC requested all members to review their reported catches and correct them, if necessary, before the WCPFC21.

2.3.1 Review of CMM for NP Swordfish (CMM 2023-03)

49. The NC noted the request from the Commission to consider the deleted preambular paragraph 2 of CMM 2022-02 and the scientific advice at NC20 and provide a further recommendation to the Commission at WCPFC21.

50. New Zealand explained that the FFA had expressed reservation about the deletion of preambular paragraph 2 of CMM 2022-02 at WCPFC20 because there was an intention to propose a revision to the CMM this year and considered the deletion of the paragraph to be premature. However, New Zealand advised that Australia no longer intends to propose a revision to the CMM and therefore does not have concerns about the current CMM.

51. In this respect, the NC agreed to maintain the CMM as it is.

52. There were no other proposed amendments to CMM 2023-03.

2.3.2 Development of a management framework

53. The NC requested the ISC to explore the feasibility of implementing an MSE for NPO SWO, including its potential timeline and needs for human and financial resources, and present its views at NC21.

AGENDA ITEM 3 — CONSERVATION AND MANAGEMENT MEASURES FOR OTHER STOCKS

3.1 North Pacific striped marlin (CMM 2010-01)

54. The NC noted the USA's intention to present a proposal to revise CMM 2010-01 at WCPFC21 and encouraged interested Members to work with the USA to develop the proposal. Japan and Chinese Taipei expressed their intentions to do so.

AGENDA ITEM 4 — CLIMATE CHANGE

55. The Co-leads of the WCPFC climate change workplan, RMI and the USA, presented a summary of the climate change-related tasks that have been set by the Commission and the work conducted by the Co-leads to date. The Co-leads have developed a draft Workplan for addressing climate change on WCPFC fisheries in the Convention Area, developed a draft Terms of Reference for the CMM Climate Assessment, met with WCPFC Secretariat and the SSP to discuss both draft documents and the process for introducing them at each subsidiary body to seek input, and met with the NC Chair to discuss the process for introducing and discussing the documents during NC20.

56. The Co-leads presented a draft Climate Change Workplan, which sets out the tasks and responsibilities to organize and monitor WCPFC work on climate change across the Commission. The Workplan will be reviewed by subsidiary bodies and CCMs, is open for input, and is intended to be a starting point and a living document.

57. The NC reviewed the Workplan and supported the proposed task of coordinating with the ISC as it considers how to incorporate climate change advice into management recommendations to NC. The NC also noted the importance of cooperation with other organizations including not only the ISC and tuna RFMOs, but also RFMOs that manage species such as sardine and mackerel in the NPO that are an important part of the ecosystem of northern stocks. The NC therefore agreed to request the Chair to contact the North Pacific Fisheries Commission on potential cooperation in relation to climate change.

58. The WCPFC Secretariat presented the findings of their review, conducted along with the Scientific Services Provider (SSP) in response to a tasking from WCPFC20, of the scope and feasibility of assessing active CMMs to determine specific CMM provisions that may be susceptible to the impacts of climate change. Findings from the CMM assessment could provide additional data and information needed to supplement CMMs and the incorporation of climate change impacts into the WCPFC harvest strategy framework. One option for progressing this work is through a consultancy, for which the Climate Co-leads have submitted a draft TOR. The Secretariat's review considered that a comprehensive assessment of all active CMMs could also include possible actions in response to an obligation's level of vulnerability to climate change, and that such a review would likely take place over 2–3 years due to the number of active obligations. A key consideration in undertaking a full assessment would be whether the current level of data and information is sufficient to meet perceived needs. It was also important to note that the current assessment framework focuses on how climate change impacts might affect existing CMM provisions, not how those changes may affect the subsidiary body's ability to assess compliance with them. It would therefore be necessary to consider the criteria for the selection of CMMs that are explicitly susceptible to the impacts of climate change. A preliminary assessment of CMM 2023-01 and CMM 2018-03 conducted by the SSP suggests that the comprehensive CMM assessment would guide the Commission's next steps by providing recommended actions that could help mitigate the potential impacts of climate change on WCPFC-managed fisheries. The Secretariat noted that should a full assessment of CMMs move forward, consideration for appropriate resources to enable the Secretariat, including the SSP, to adequately contribute to the assessment would be necessary.

AGENDA ITEM 5 — REGIONAL OBSERVER PROGRAMME

59. The USA expressed its continued concern about the lack of observer coverage north of 20⁰N in the Convention Area due to the deferment of observer requirements in CMM 2018-05 for small vessels and troll and line vessels used for fishing skipjack tuna or albacore. The USA expressed its hope that these vessels will eventually be monitored through coverage in the regional observer programme or via electronic monitoring.

60. The NC noted that work is ongoing on the development of an e-monitoring system in the WCPFC and agreed to revisit this issue at NC21.

AGENDA ITEM 6 — DATA

6.1 Review of the status of data and data gaps for northern stocks

61. No discussion was held on this agenda item.

AGENDA ITEM 7 — COOPERATION WITH OTHER ORGANIZATIONS

7.1 ISC

62. The NC requested Members to consult each other and consider ways to streamline the ISC's work in relation to NC work and strengthen their support for the ISC.

63. The NC thanked the ISC for accommodating the NC's requests and adjusting the timing of its plenary meeting this year as well as responding in a short period of time to the request for analysis for additional scenarios for future projection of the PBF stock. The NC requested the ISC to continue to hold its plenary meeting ahead of the meetings of the JWG and the NC.

7.2 IATTC

64. The NC noted the importance of continued cooperation with the IATTC through the JWG.

AGENDA ITEM 8 — FUTURE WORK PROGRAMME

8.1 Work Programme for 2024-2026

65. The NC reviewed and revised the 2024-2026 Work Programme for the Northern Committee (**Attachment G**).

AGENDA ITEM 9 — ADMINISTRATIVE MATTERS

9.1 Election of Officers

66. The NC agreed to re-elect Mr. Masanori Miyahara to serve as its Chair for 2025 and 2026.

9.2 Administrative arrangements for the Committee

9.2.1 Secretariat functions and costs

67. No specific issues were raised.

9.2.2 Rules of Procedure

68. No proposals were received on this matter.

9.3 Next meeting

69. Japan offered to host the NC21 meeting, tentatively scheduled for July 14 to 15, in conjunction with the JWG10 meeting. The arrangement of the next meeting will be notified well in advance.

9.4 Other business

70. No other business was discussed.

**AGENDA ITEM 10 — ADOPTION OF THE SUMMARY REPORT OF THE 20TH REGULAR SESSION OF THE
NORTHERN COMMITTEE**

71. The NC reviewed and adopted the Summary Report.

AGENDA ITEM 11 — CLOSE OF THE MEETING

72. The meeting was brought to a close at 10:40 am on 16 July 2024.

Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean

NORTHERN COMMITTEE
TWENTIETH REGULAR SESSION

Kushiro, Japan (Hybrid)
15 – 16 July 2024

LIST OF PARTICIPANTS

CHAIR

Kristen.Cote@dfo-mpo.gc.ca

Masanori Miyahara

Fisheries Agency of Japan
Advisor to the Minister of Agriculture, Forestry
and Fisheries
masamiyafaj1@gmail.com

Sarah Hawkshaw

Fisheries and Oceans Canada
Biologist
sarah.hawkshaw@dfo-mpo.gc.ca

AUSTRALIA

James Van Meurs

Australian Government Department of
Agriculture, Fisheries and Forestry
Assistant Director
james.vanmeurs@agriculture.gov.au

CHINA

Li Yan

China Overseas Fisheries Association
Coordinator
liyan@cofa.net.cn

Lara Ainley

AFMA
Tuna Manager

Liu Xiaobing

Shanghai Ocean University
Visiting Professor
xiaobing.liu@hotmail.com

Selina Stoute

Australian Fisheries Management Authority
Senior Manager

FEDERATED STATES OF MICRONESIA

Eugene R. Pangelinan

Norma
Consultant
e.pangelinan@norma.fm

CANADA

Amber Lindstedt

Fisheries and Oceans Canada
Deputy Director International Fisheries Policy
Amber.Lindstedt@dfo-mpo.gc.ca

FIJI

Moses Nainoka Mataika

Ministry of Fisheries Fiji
Fisheries Officer Offshore Fisheries
Management Division
mataika.moses@gmail.com

Kristen Côté

Fisheries and Oceans Canada
Senior Policy Analyst, International Fisheries
Policy

Epi Qalobula Batibasaga

Ministry of Fisheries
Fisheries Officer Industry and Trade
batibasaga@gmail.com

JAPAN

Takumi Fukuda

Fisheries Agency of Japan
Resource Management Department
takumi_fukuda720@maff.go.jp

Masahide Kannou

Fisheries Agency of Japan
Staff, International Affairs Division
masahide_kanno210@maff.go.jp

Akari Onami

Fisheries Agency of Japan
staff
akari_onami830@maff.go.jp

Akihito Fukuyama

Japan Far Seas Purse Seine Fishing Association
Managing Director
fukuyama@kaimaki.or.jp

Alex Meyer

Fisheries Agency of Japan
Staff
Meyer@urbanconnections.jp

Anna Inomata

Fisheries Agency of Japan
Staff
anna_inomata570@maff.go.jp

Atsushi Sawada

Shimokita Regional Administration Bureau,
Regional Agriculture, Forestry and Fisheries
Department, Shimokita Regional Fisheries
Office, Fisheries Management and
Development Division
Technical Staff
atsushi_sawada@pref.aomori.lg.jp

Chisa Okamatsu

International Exchange Promotion Division,
Overseas Fishery Cooperation Foundation of
Japan
Senior Staff
okamatsu@ofcf.or.jp

Daisuke Nakamura

Kochi Offshore Tuna Fisheries Association
Advisor
k-nakamura@kogyoren.jf-net.ne.jp

Eihachiro Matsuzawa

Kochi Offshore Tuna Fisheries Association
President
k-gyoren3@kogyoren.jf-net.ne.jp

Goichi Musashi

Fisheries Affairs Division, Department of
Industrial Promotion, Kushiro General
Subprefectural Bureau, Hokkaido Government
Director
musashi.goichi@pref.hokkaido.lg.jp

Haruo Tominaga

Fisheries Agency of Japan
Director for International Fisheries Coordination
haruo_tominaga170@maff.go.jp

Haruto Nomura

Kyowa Fishery co., Ltd. Purse Seiner Operations
Department
Staff
h-nomura@kyowacom.co.jp

Hidefumi Kawamoto

Japan Sea Coastal Purse Seiners Association
Secretary General
kawamoto@sanmaki.jp

Hideki Miura

National federation of fisheries co-operative
associations
Managing Director
h-miura@zengyoren.jf-net.ne.jp

Hidetada Kiyofuji

Fisheries Resources Institute

Highly Migratory Resource Division, Fisheries
Stock Assessment Center
kiyofuji_hidetada20@fra.go.jp

Hidetoshi Ito

Ishinomaki Fishery Co.,Ltd.
Director,
hid-itou@maruha-nichiro.co.jp

Hirofumi Niiyama

Fisheries Management Division, Department of
Fisheries and Forestry, Hokkaido Government
Chief Coordinator
niiyama.hirofumi@pref.hokkaido.lg.jp

Hiromu Fukuda

Fisheries Research and Education Agency of
Japan, Fisheries Resources Institute
Head, Bluefin Tunas Group, Highly Migratory
Resources Division
fukuda_hiromu57@fra.go.jp

Hiroshi Hashizu

Kyowa Fisheries Co, Ltd
Representative Director
h-hashizu@kyowacom.co.jp

Hiroshi Moriwaki

Wakaba Fishery Co., Ltd.
President
wakaba-hm@lily.ocn.ne.jp

Hirosuke Tominaga

Ministry of Economy, Trade and Industry
Officer
Tominaga-hirosuke@meti.go.jp

Isao Ishii

Japan Sea Coastal Purse Seiners Association
Vice Chairman
maru.wa@giga.ocn.ne.jp

Jun Takahashi

Overseas Fishery Cooperation Foundation of
Japan (OFCE)
Advisor
jun@ofcf.or.jp

Junsei Kometani

Wajima Fishery Production Association
Union President
maru.wa@giga.ocn.ne.jp2

Kaoru Kawamoto

Fisheries Agency of Japan
Interpreter
dvorjakkawamoto@ybb.ne.jp

Kazushige Hazama

National Offshore Tuna Fisheries Association of
Japan
Manager
hazama@kinkatsukyo.or.jp

Kei Hirose

Director,
Ishinomaki Fishery Co.,Ltd.
k-hirose@maruha-nichiro.co.jp

Kei Sonezaki

Ishinomaki Fishery Co., Ltd.
Chief
k-sonezaki@maruha-nichiro.co.jp

Keiko Imoto

"Sanin purse seine Fisheries cooperative
association"
Associate Director
imoto@sanmaki.jp

Kenji Aoki

Nitto Suisan
Managing Director
kenji.aoki@nittosuisan.com

Kirara Nishikawa

Fisheries Resources Institute, FRA
Scientist, Bluefin Tunas Group, Highly Migratory
Resource Division
nishikawa_kirara68@fra.go.jp

Kotaro Harada

Ishikawa Prefecture
Chief Engineer
kharada@pref.ishikawa.lg.jp

Mako Iioka

Fisheries Agency of Japan
Assistant Director
mako_iioka540@maff.go.jp

Masaaki Toma

Agricultural and Marine Products Office, Trade
Control Department, Ministry of Economy,
Trade and Industry
Deputy Director
toma-masaaki@meti.go.jp

Masahiro Akiyama

Shimane Prefectural Government
Staff
akiyama-masahiro@pref.shimane.lg.jp

Masahiro Kuboshi

Kyowa Fishery co., Ltd. Purse Seiner Operations
Department
Chief
m-kuboshi@kyowacom.co.jp

Masahito Takemura

Kochi Offshore Tuna Fisheries Association
Board member
385878miamaru@gmail.com

Masakatsu Irei

National Offshore Tuna Fisheries Association of
Japan
President
zenkinjp@kinkatsukyo.or.jp

Masakazu Shirado

Suya Co., Ltd
Staff
suya.shirado@gmail.com

Masako Uchino**Masatake Kato**

Federation Of North Pacific District Purse Seine
Fisheries Cooperative associations of Japan
Executive Managing Director
moka.kitamaki210@gmail.com

Masatoshi Ooyama

Ishinomaki Fishery Co., Ltd.
President
m-ooyama@maruha-nichiro.co.jp

Meiko Kawahara

Taiyo A & F Co., Ltd.
Deputy General Manager
m-kawahara@maruha-nichiro.co.jp

Muneharu Tokimura

JOP (The Overseas Fishery Cooperation
Foundation of Japan)
Adviser
tokimura@ofcf.or.jp

Naruhito Okuda

Japan Far Seas Purse Seine Fishing Association
Advisor
n-okuda@kaimaki.or.jp

Ryusuke Sakamoto

Ishikawa Prefecture Fisheries Division
Chief Engineer
ryu-saka@pref.ishikawa.lg.jp

Satoshi Miyazaki

Agricultural and Marine Products Office, Trade
Control Department, Ministry of Economy,
Trade and Industry
Assistant Director
miyazaki-satoshi@meti.go.jp

Shingo Fujita

National federation of fisheries co-operative
associations
Assistant to Director
s-fujita@zengyoren.jf-net.ne.jp

Shinji Hiruma

Fisheries Agency of Japan
International Affairs Division
shinji_hiruma150@maff.go.jp

Shuya Nakatsuka

Fisheries Resources Institute
Deputy Director, Highly Migratory Resources
Division
nakatsuka_shuya49@fra.go.jp

Susumu Oikawa

Ishinomaki Fishery Co.,Ltd.
Chairman,
s-oikawa@maruha-nichiro.co.jp

Takao Matsuo

Fisheries Development Division, Fisheries
Department, Nagasaki Prefectural Government
Staff
takao_matsuo@pref.nagasaki.lg.jp

Takashi Hiratsuka

Ishinomaki Fishery Co., Ltd.
Manager
t-hiratsuka@maruha-nichiro.co.jp

Takashi Koyama

Taiyo A & F Co., Ltd.
Deputy General Manager
t-kouyama@maruhn-nichiro.co.jp

Tetsuro Doita

Kyowa Fishery co., Ltd. Purse Seiner Operations
Department
Chief
t-doita@kyowacom.co.jp

Tetsuya Kunito

Federation of North Pacific District Purse Seine
Fisheries Cooperative Associations of Japan
Section Manager
tetsuya_kunito920@kitamaki.jp

Tomohiro Ito

Fisheries Agency of Japan
staff
tomohiro_ito400@maff.go.jp

Tomohiro Kondo

Ministry of Foreign Affairs
Assistant Director, Fishery Division
tomohiro.kondo-2@mofa.go.jp

Toshinori Tanaka

National federation of fisheries co-operative
associations
Executive General Manager

to-tanaka@zengyoren.jf-net.ne.jp

Toshitsugu Higashino

Fisheries Promotion Division, Bureau of
Fisheries, Department of Agriculture, Forestry
and Fisheries, Aomori Prefectural Government
of Japan
Chief Editor
toshitsugu_higashino@pref.aomori.lg.jp

Yoko Yamakage

Fisheries Agency of Japan
Interpreter
yamakageyoyo@gmail.com

Yoshihiro Notomi

National Offshore Tuna Fisheries Association of
Japan
Managing Director
notomi@kinkatsukyo.or.jp

Yoshiki Shimizu

Section Chief
Kyowa Fishery co., Ltd. Purse Seiner Operations
Department
y-shimizu@kyowacom.co.jp

Yoshinobu Umazume

Kochi Offshore Tuna Fisheries Association
Member
tosayo_yoshinobu@sweet.ocn.ne.jp

Yuhei Takeya

Aomori Prefecture Government
Department of Agriculture, Forestry and
Fisheries, Fisheries Bureau, Fisheries Promotion
Division, The Chief Examiner
ut0829@gmail.com

Yuji Iwata

San-In Purse Seine Fisheries Cooperative
Union President
iwata@sanmaki.jp

Yuji Uozumi

Japan Tuna Fisheries Co-operative Association
Adviser

NEW ZEALAND

Arthur Hore

Ministry for Primary Industries
Manager, Offshore Fisheries

Hilary Ayrton

Ministry for Primary Industries
Senior Fisheries Analyst

PHILIPPINES

Isidro Tanangonan

Bureau of Fisheries and Aquatic Resources
Aquaculturist II
itanangonan@bfar.da.gov.ph

REPUBLIC OF KOREA

Ilkang Na

Ministry of Oceans and Fisheries
Policy Officer / Multilateral Fisheries Negotiator
ikna@korea.kr

Jae-geol Yang

Korea Overseas Fisheries Cooperation Center
Policy Analyst
jg718@kofci.org

REPUBLIC OF MARSHALL ISLANDS

Berry Muller

Marshall Islands Marine Resources Authority
Deputy Director - Oceanic and Industrial Affairs
Division
bmuller@mimra.com

CHINESE TAIPEI

Joy Hsiangyi Yu

Fisheries Agency, Ministry of Agriculture
Section Chief, Pacific Ocean Fisheries
Management Section, Distant Water Fisheries
Division
hsiangyi@ms1.fa.gov.tw

Joseph Chia-Chi Fu

Overseas Fisheries Development Council

Director

joseph@ofdc.org.tw

Shao-Wei Lu

Fisheries Agency, Ministry of Agriculture
Associate Technical Specialist, Pacific Ocean
Fisheries Management Section, Distant Water
Fisheries Division
shaowei0220@ms1.fa.gov.tw

Shui-Kai Chang

National Sun Yat-sen University
Professor
skchang@faculty.nsysu.edu.tw

Tzu-Ching Yu

Overseas Fisheries Development Council
Secretary
evan@ofdc.org.tw

UNITED STATES OF AMERICA

Alex Kahl

NOAA Fisheries
Resource Management Specialist
alex.kahl@noaa.gov

Amanda Munro

NOAA Fisheries
Policy Analyst
amanda.munro@noaa.gov

Celia Barroso

NOAA Fisheries
Fishery Policy Analyst
celia.barroso@noaa.gov

Christa Svensson

Pacific Fishery Management Council
Alternate- U.S. Commissioner
csvensson@trimarinegroup.com

Christine Bertz

U.S. Department of State
Foreign Affairs Officer
bertzca@state.gov

Christopher Dahl

Pacific Fishery Management Council
Staff Officer - HMS
kit.dahl@noaa.gov

Dorothy Lowman
Lowman and Associates
Owner/ Consultant
dmlowman01@comcast.net

Douglas H Fricke
PFMC HMSAS
Member
fricked@comcast.net

Eleanor Bors
NOAA Fisheries
International Affairs, Trade, and Commerce
eleanor.bors@noaa.gov

Emily Reynolds
NOAA Fisheries
Fishery Policy Analyst
emily.reynolds@noaa.gov

Huihua Lee
NOAA Fisheries
Research Mathematical Statistician
huihua.lee@noaa.gov

Jason Philibotte
NOAA Fisheries
International Fisheries, Division Chief
jason.philibotte@noaa.gov

John Zuanich
JZ Trading
U.S. Commissioner
jztrading@aol.com

Josh Madeira
Monterey Bay Aquarium
Director of Policy & Stakeholder Engagement
jmadeira@mbayaq.org

Kelly Kryc
National Oceanic and Atmospheric
Administration

Deputy Assistant Secretary for International
Fisheries
kelly.kryc@noaa.gov

Mark Fitchett
Western Pacific Regional Fisheries Management
Council (WPRFMC)
Pelagic Ecosystem Fisheries Scientist
mark.fitchett@wpcouncil.org

Michelle Sculley
NOAA
Stock Assessment Scientist
michelle.sculley@noaa.gov

Mike Conroy
West Coast Fisheries Consultants
Principal/president
Mike@wecofm.com

Rachel Ryan
U.S. Department of State
Foreign Affairs Officer
RyanRL@state.gov

Roger Dang
Fresh Island Fish Co.
Owner
Roger.dang@gmail.com

Ryan Wulff
NOAA Fisheries
Assistant Regional Administrator for Sustainable
Fisheries
ryan.wulff@noaa.gov

Shana Miller
The Ocean Foundation
Project Director International Fisheries
Conservation
smiller@oceanfdn.org

Steven L. H. Teo
NOAA Fisheries
Research Fisheries Biologist
steve.teo@noaa.gov

Stuart Chikami

Western Pacific Fisheries, Inc.
Manager
schikami@westpacfish.com

Theresa Labriola
Wild Oceans
Pacific Program Director
tlabriola@wildoceans.org

Valerie Post
NOAA Fisheries
Fishery Policy Analyst
valerie.post@noaa.gov

Yonat Swimmer
NOAA Fisheries
Fisheries Biologist
yonat.swimmer@noaa.gov

VANUATU

Jeyalda Ngwele
Vanuatu Fisheries Department
Senior Data Officer (International)
njeyalda@fisheries.gov.vu

Lucy Andrea Joy
Vanuatu Fisheries Department
Principal Data Officer
ljoy@fisheries.gov.vu

May Mei-chin Juan
Ming Dar Fishery (Vanuatu) Co. Ltd.
Executive Assistant to the President
meichin.mdfc@gmail.com

Tony Taleo
Vanuatu Fisheries Department
Deputy Director Offshore
ttaleo@fisheries.gov.vu

AUSTRALIAN NATIONAL CENTRE FOR OCEAN RESOURCES AND SECURITY (ANCORS)

Adam Ziyad
University of Wollongong
PhD Student
az653@uowmail.edu.au

Bianca Haas
Australian National Centre for Ocean Resources
and Security
Research Fellow
bhaas@uow.edu.au

INTERNATIONAL SCIENTIFIC COMMITTEE FOR TUNA AND TUNA-LIKE SPECIES IN THE NORTH PACIFIC OCEAN (ISC)

John Holmes
International Scientific Committee for Tuna and
Tuna-like Species in the North Pacific Ocean
Chair
john.holmes@dfo-mpo.gc.ca

MARINE STEWARDSHIP COUNCIL

Bill Holden
Marine Stewardship Council
Senior Tuna Fisheries Outreach Manager
bill.holden@msc.org

OCEAN GOVERNANCE INSTITUTE (OGI)

Hiroshi Ohta
The Ocean Governance Institute (OGI)
Director-General
hohta21@gmail.com

Isao Sakaguchi
Gakushuin University
Professor
isao.sakaguchi@gakushuin.ac.jp

Yasuhiro Sanada
Ocean Governance Institute
Chief Research Officer

PACIFIC ISLANDS FORUM FISHERIES AGENCY (FFA)

Adele Dutilloy
FFA
Fisheries Management Advisor
adele.dutilloy@ffa.int

Lianos Triantafillos

Pacific Islands Forum Fisheries Agency (FFA)
Fisheries Management Advisor
lianos.triantafillos@ffa.int

Marina Abas

Pacific Islands Forum Fisheries Agency (FFA)
Fisheries Management Advisor
marina.abas@ffa.int

Nikai Naoki**SHARKPROJECT INTERNATIONAL****Laura Brown**

Sharkproject
International Cooperation Team
l.brown@sharkproject.org

WORLD WIDE FUND FOR NATURE (WWF)**Chisato Jono**

World Wide Fund for Nature (WWF) Japan
Communications Officer
chisato.jono@wwf.or.jp

Shuhei Uematsu

WWF Japan
Manager of Anti-IUU Fishery Project &
Manager of Fisheries Resources Management,
Oceans and Seafood Group
uematsu@wwf.or.jp

WCPFC SECRETARIAT**Aaron Nighswander**

Western and Central Pacific Fisheries
Commission (WCPFC)
Finance and Administration Manager
aaron.nighswander@wcpfc.int

Eidre Sharp

Western and Central Pacific Fisheries
Commission (WCPFC)
Deputy Compliance Manager

Eidre.Sharp@wcpfc.int

Elaine G. Garvilles

Western and Central Pacific Fisheries
Commission (WCPFC)
Assistant Science Manager
Elaine.Garvilles@wcpfc.int

Lara Manarangi-Trott

Western and Central Pacific Fisheries
Commission (WCPFC)
Compliance Manager
Lara.Manarangi-Trott@wcpfc.int

Lucille Martinez

Western and Central Pacific Fisheries
Commission (WCPFC)
Administrative Officer
lucille.martinez@wcpfc.int

Rhea Moss-Christian

Western and Central Pacific Fisheries
Commission (WCPFC)
Executive Director
rhea.moss-christian@wcpfc.int

Samuel T. Rikin

Western and Central Pacific Fisheries
Commission (WCPFC)
IT Officer
samuel.rikin@wcpfc.int

SungKwon Soh

Western and Central Pacific Fisheries
Commission (WCPFC)
Science Manager
sungkwon.soh@wcpfc.int

Tim Jones

Western and Central Pacific Fisheries
Commission (WCPFC)
IT Manager
tim.jones@wcpfc.int

**Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**NORTHERN COMMITTEE
TWENTIETH REGULAR SESSION**

Kushiro, Japan (Hybrid)
15 – 16 July 2024

AGENDA

AGENDA ITEM 1 – OPENING OF MEETING

- 1.1 Opening of meeting**
- 1.2 Adoption of agenda**
- 1.3 Meeting arrangements**
- 1.4 Report from ISC and SC**
 - 1.4.1 Report from ISC
 - 1.4.2 Report from SC

AGENDA ITEM 2 – CONSERVATION AND MANAGEMENT MEASURES FOR THE NORTHERN STOCKS

- 2.1 Pacific bluefin tuna (CMM 2023-02)**
- 2.2 North Pacific albacore (CMM 2019-03)**
 - 2.2.1 Reports from CCMs and Observers
 - 2.2.2 Application of Harvest Strategy for North Pacific Albacore Fishery
 - 2.2.3 Review of the CMM for North Pacific Albacore (CMM 2019-03)
- 2.3 North Pacific swordfish (CMM 2023-03)**
 - 2.3.1 Review of CMM for NP Swordfish (CMM 2023-03)
 - 2.3.2 Development of a management framework

AGENDA ITEM 3 – CONSERVATION AND MANAGEMENT MEASURES FOR OTHER STOCKS

- 3.1 North Pacific striped marlin (CMM 2010-01)**

AGENDA ITEM 4 – CLIMATE CHANGE

AGENDA ITEM 5 – REGIONAL OBSERVER PROGRAMME

AGENDA ITEM 6 – DATA

- 6.1 Review of the status of data and data gaps for northern stocks**

AGENDA ITEM 7 – COOPERATION WITH OTHER ORGANIZATIONS

- 7.1 ISC**

7.2 IATTC

AGENDA ITEM 8 – FUTURE WORK PROGRAMME

8.1 Work Programme for 2024-2026

AGENDA ITEM 9 – ADMINISTRATIVE MATTERS

9.1 Election of Officers

9.2 Administrative arrangements for the Committee

9.2.1 Secretariat functions and costs

9.2.2 Rules of Procedure

9.3 Next meeting

9.4 Other business

AGENDA ITEM 10 – ADOPTION OF THE SUMMARY REPORT OF THE 20th REGULAR SESSION OF THE NORTHERN COMMITTEE

AGENDA ITEM 11 – CLOSE OF MEETING

Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean

NORTHERN COMMITTEE
TWENTIETH REGULAR SESSION

Kushiro, Japan (Hybrid)
15 – 16 July 2024

CHAIRS' SUMMARY OF THE 9TH JOINT IATTC AND WCPFC-NC
WORKING GROUP MEETING ON THE MANAGEMENT OF PACIFIC BLUEFIN TUNA

JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE
MANAGEMENT OF PACIFIC BLUEFIN TUNA

NINTH SESSION (JWG-09)

Kushiro, Japan (Hybrid)
10 – 13 July 2024

AGENDA ITEM 1 OPENING OF THE MEETING

1. The 9th Session of the Joint IATTC and WCPFC-NC Working Group Meeting on the Management of Pacific Bluefin Tuna (JWG09) was held on 10 – 13 July 2024. The meeting was opened by co-chairs Mr. Masanori Miyahara (Japan, Northern Committee Chair) and Ms. Dorothy Lowman (USA, IATTC).
2. Japan presented a video message from Mr. Tetsushi Sakamoto, Minister of Agriculture, Forestry and Fisheries of Japan, welcoming the participants to the meeting and highlighting the importance of the JWG's work for the conservation and management of Pacific bluefin tuna (PBF).
3. Mr. Masaki Kondo, Director General, Fisheries Bureau, Hokkaido Prefectural Government, welcomed the participants to Kushiro. He commended the JWG on its contribution to the recovery of the PBF stock, which is of great importance to the local fishing community, and hoped that the JWG would continue its work for the long-term conservation and sustainable use of PBF.
4. A list of participants to the JWG09 is included in **Annex A**.

AGENDA ITEM 2 ADOPTION OF AGENDA AND MEETING PROCEDURES

5. Co-Chair Lowman welcomed participants and outlined the meeting procedures and the agenda.

6. The provisional agenda was adopted (**Annex B**).
7. Mr. Alex Meyer (Japan) was appointed as rapporteur for the meeting.

AGENDA ITEM 3 SCIENTIFIC INFORMATION ON PACIFIC BLUEFIN TUNA

3.1 Updates on the stock status of Pacific bluefin tuna

8. Dr. Hiromu Fukuda, the lead modeler for the ISC Pacific Bluefin Tuna Working Group (PBFWG), reported on the latest benchmark stock assessment for Pacific bluefin tuna (PBF), which was conducted in 2024. The PBFWG critically reviewed all aspects of the model, and some modifications were made to improve the model, while maintaining the internal consistency of the model shown in previous assessments. One of the major changes made in this assessment is that the PBFWG decided to shorten the stock assessment model by starting in 1983 instead of 1952, because more reliable data are available after 1983. The stock assessment was conducted based on updated data, including a 2-year data update for all fleets (up to June 2023) and a shortened recruitment index time series.

9. After conducting thorough reviews and implementing necessary modifications, the PBFWG found that the 2024 base-case model is consistent with the previous assessment results, that it fits the data well, that the results are internally consistent among most of the data sources, and that the model has improved overall by addressing the issues previously identified. Upon review of these findings at its plenary meeting, the ISC concluded that the 2024 assessment model reliably represents the population dynamics and provides the best available scientific information for the PBF stock.

10. The base-case model results show that: (1) spawning stock biomass (SSB) fluctuated throughout the assessment period (fishing years 1983-2022); (2) the SSB steadily declined from 1996 to 2010; (3) the SSB has rapidly increased since 2011; (4) fishing mortality ($F_{\%SPR}$) decreased from a level producing about 1% of SPR in 2004-2009 to a level producing 23.6% of SPR in 2020-2022; and (5) SSB in 2022 increased to 23.2% of $SSB_{F=0}$, achieving the second rebuilding target by WCPFC and IATTC in 2021.

11. No biomass-based limit or target reference points have been adopted for PBF, but the PBF stock is not overfished relative to $20\%SSB_{F=0}$, which has been adopted as a biomass-based reference point for some other tuna species by the IATTC and WCPFC. SSB of PBF reached its initial rebuilding target ($SSB_{MED} = 6.3\%SSB_{F=0}$) in 2017, 7 years earlier than originally anticipated by the RFMOs, and its second rebuilding target ($20\%SSB_{F=0}$) in 2021.

12. No fishing mortality-based reference points have been adopted for PBF by the IATTC and WCPFC. The recent (2020-2022) $F_{\%SPR}$ is estimated to be 23.6% and thus the PBF stock is not subject to overfishing relative to some of F-based reference points proposed for tuna species, including $F_{20\%SPR}$.

13. The PBF stock is recovering from the historically low biomass in 2010 and has exceeded the second rebuilding target ($20\%SSB_{F=0}$). The risk of SSB falling below $7.7\%SSB_{F=0}$ (interim LRP for tropical tunas in IATTC) at least once in 10 years is negligible. The projection results show that increases in catches are possible. However, the risk of falling below the second rebuilding target will increase with larger increases in catch.

14. The projection results assume that the CMMs are fully implemented and are based on certain

biological and other assumptions. For example, these future projection results do not contain assumptions about discard mortality. Discard mortality may need to be considered as part of future increases in catch.

15. Given the uncertainty in future recruitment and the influence of recruitment on stock biomass as well as the impact of changes in fishing operations due to the management, monitoring recruitment and SSB should continue. Research on a recruitment index for the stock assessment should be pursued, and maintenance of a reliable adult abundance index should be ensured. In addition, accurate catch information is the foundation of good stock assessment.

16. Dr. Shuya Nakatsuka, the Chair of the ISC PBFWG, noted that the ISC had received a request to run projections for additional harvest scenarios at a very late stage in the assessment process. Although the ISC was able to conduct and review the projections, the ISC PBFWG Chair cautioned that having to do so in such a short period of time not only increases the burden on the ISC, but also increases the risk of mistakes, and urged the JWG to endeavor to avoid repeating such a situation.

17. The JWG noted the ISC PBFWG Chair's concern and expressed its appreciation to the ISC for accommodating its late request.

18. In response to a question regarding the ISC's plans to focus its next peer review on PBF, the ISC PBFWG Chair said that the ISC PBFWG would welcome a peer review of the PBF stock assessment and suggested that an appropriate timing would be 2026, between the work to complete the PBF management strategy evaluation (MSE) in 2025 and the next PBF stock assessment in 2027.

3.2 Reports from WCPFC-Scientific Committee (SC) and IATTC-Scientific Advisory Committee (SAC)

19. The JWG acknowledged that a report from the 20th WCPFC-SC is not available because the meeting is to be held from 14 to 21 August 2024.

20. The IATTC Secretariat reported the recommendations pertaining to PBF from the 15th IATTC-SAC meeting: (1) that CPCs and IATTC staff collaborate with the ISC to improve monitoring of discards and the recruitment monitoring index for PBF; (2) that the JWG and the Commission consider the importance of the adult longline index in any future management measures; and (3) recognizing that the Commission adopted an interim harvest strategy to maintain the stock above 20%SSB₀ and that the MSE results are expected in 2025, that the Commission consider a long-term harvest strategy with reference points at that time.

21. The IATTC Secretariat summarized the IATTC scientific staff recommendations for PBF: (1) Preferably, interim reference points should be adopted. In the absence of adopted reference points, choose one of the catch scenarios requested by the Joint IATTC-WCPFC-NC Working Group, considering performance relative to the possible future reference points for bluefin tuna; (2) Continue the MSE work.

AGENDA ITEM 4 REPORTS ON THE IMPLEMENTATION OF PACIFIC BLUEFIN TUNA MEASURES

22. The JWG reviewed WCPFC and IATTC members' implementation reports on CMM 2021-02 and Resolution C-21-05.

23. In response to a question from the USA, Japan explained its efforts to monitor catch reporting

for its sport fisheries. Japan has instructed commercial sport fishery conductors to report catches of PBF. Japan also conducts monitoring and surveillance of major fishing ports through cooperative efforts between the central and prefectural governments, including the dispatch of inspectors, as well as by entrusting such efforts to a private company. Japan has detected some violations and has responded to each case. In addition, Japan sets and monitors a 40-ton large fish catch limit for sport fisheries and splits that over several seasons.

24. Responding to a question from Japan, Korea explained that it did not include information about total set net sites in its report because it believes that the fishing effort limit provision does not apply to its set net fishery.

25. In response to a question from Korea, Chinese Taipei explained that its longliners target not only PBF but also other species, and that these vessels must apply for advance authorization to fish for PBF.

26. Following New Zealand's implementation report, Australia explained that it faces similar issues to New Zealand in that its longline fishery has experienced an unexpected and significant increase in PBF bycatch, resulting from the increased abundance of PBF in Australian waters.

27. In response to a question from Mexico, the USA explained that the increase in PBF catch from its recreational fishery, in spite of regulatory changes that reduced daily bag limits from 10 fish to 2 fish per day per fisher up to a maximum to 6 per trip, was initially due to the increased size of the PBF caught and more recently also due to increased numbers of trips. The USA stated that it would continue to monitor the situation, while reminding the JWG that this fishery was severely impacted by the low stock status of PBF in the past and that the level of catch has always been correlated with PBF abundance.

28. Japan expressed concern regarding the high level of PBF catch from the USA's recreational fishery and pointed out that Resolution C-21-05 stipulates that each CPC shall continue to ensure that catches of PBF by sportfishing vessels operating under its jurisdiction are reduced in a manner commensurate with reductions in commercial catches. Japan pointed out that contrary to many other Members' small and artisanal fisheries, which are controlled by effort limits, the catch in the USA's recreational fishery continues to increase. Japan suggested that the USA's bag limit has become ineffective in controlling catch as the average size of PBF in the Eastern Pacific Ocean (EPO) has increased and urged the USA to consider other management measures as well.

29. The USA agreed with Japan's summary of paragraph 3 of Resolution C-21-05, but noted that commercial catch limits had increased in this measure and had to be taken into account. It also pointed out that the current catch levels by its sports fishery are as expected under the ISC's status quo projections. Furthermore, the USA reminded the JWG that its sport fishery is one of its oldest fisheries and that the USA is currently the only Member in the EPO that reports its recreational catch.

30. No further discussions were held on the reports submitted by other members.

AGENDA ITEM 5 REVIEW OF CONSERVATION AND MANAGEMENT MEASURES FOR PACIFIC BLUEFIN TUNA

31. Japan gave a presentation on the need for timely adjustment of catch limits for PBF at a scale that corresponds to the significantly increased stock level under the conservation requirements in

accordance with Harvest Strategy 2023-02 Pacific Bluefin Tuna. The SSB of PBF has been rapidly increasing during the past 10 years, and its speed is accelerating. According to the latest stock assessment by the ISC in 2024, the initial rebuilding target of the Harvest Strategy for PBF (HS 2021-01) was achieved in 2017, and the second rebuilding target of HS 2021-01 (20%SSB_{F=0}) was achieved already in 2021, 13 years earlier than originally anticipated in the Harvest Strategy. Under this rapid increase in PBF biomass, Japanese fishermen have been observing more frequent and bigger migrations of PBF in almost all fisheries, including passive ones such as the Japanese set net fishery, in various parts of Japan. The WCPFC and the IATTC increased the catch limits of large PBF (30 kg or larger) by 15% since 2022, but this increase appears to have fallen behind the rapid increase of the PBF stock. As a result, Japanese fishermen are increasingly forced to release PBF to comply with the catch limits. When they release PBF, they also have to release other target fish species from their nets, causing operational burdens and economic losses.

32. Mexico noted that a key difference between the catch composition in the EPO and the WPO is the high level of age-0 fish among catches of PBF less than 30 kg in the WPO. Mexico emphasized the importance of minimizing the catch of age-0 fish for ensuring the long-term health of the PBF stock.

33. Korea noted that Japan faces the same kind of situation that Korea has mentioned at several previous JWG meetings, in that there is an increasing number of instances where PBF are incidentally caught in set net fisheries and have to be released, together with other fish species. Korea expressed its intention to work with Japan and other interested Members to address this issue.

34. Japan presented proposed amendments to CMM 2023-02 to: (1) increase catch limits in accordance with harvest scenario 7 in the ISC PBFWG stock assessment, (2) make technical amendments to the carry-over rule of unused catch limits and the rule of the use of the conversion factor 0.68, (3) include a new rule to allow a CCM to catch PBF up to 5% of its initial catch limit, and (4) recognize the need to discuss how to handle small scale fisheries in the southern hemisphere.

35. Korea made a statement urging the WCPFC, through the Northern Committee, to reconsider the framework for setting catch limits for PBF. PBF stocks are showing signs of rapid recovery. Despite having the least impact by a large margin on PBF resources, Korea willingly joined the mandatory restriction of catch limits and subsequent 50% reduction of juvenile fish a decade ago to support stock recovery. As a coastal State through whose waters PBF migrate, Korea implemented a zero-catch limit for adult fish due to the absence of established data from 2002 – 2004, which dates back 20 years. Over the past decade, Korea refrained from exercising its rights as a coastal State to contribute to stock recovery. Clearly, Korea did not contribute to the stock decline, yet bore a disproportionate burden alongside much larger harvesters by tolerating an inequitable allocation of the recent increase in adult PBF catch limits compared to other harvesters in 2021. The current framework undermines Korea's coastal State rights. Korea is seeking fair resource allocation within its national waters. Allocation should not be based solely on historical catch but also take into account coastal State rights, fishing capacity, resource distribution, and other relevant factors.

36. Korea presented proposed amendments to CMM 2023-02 to: (1) amend levels of catch limit increases for small PBF and large PBF, (2) reconsider catch limits for the CCMs who are not included in the table under para. 3, (3) amend the maximum level of overage, (4) abolish the limit in applying the conversion factor, (5) stipulate that the principle in para. 17 needs to also be applied to other coastal CCMs at least in areas under their national jurisdiction, (6) explicitly include consideration of the impact of climate change in reviews of the CMM, and (7) make other minor editorial changes/updates.

37. Fiji respectfully conveyed its concerns regarding the proposal put forth by Korea for the inclusion of paragraph 19 of the draft CMM. Fiji reminded and reiterated to WCPFC Members the critical importance of the rights granted to SIDS under paragraph 17 of the current measure. These rights are essential for the sustainable development aspirations of SIDS, which are fundamental to the WCPFC as outlined in Article 30 of the Convention. Fiji expressed its concern that Korea's proposal might have jeopardized these vital development aspirations. Consequently, Fiji was unable to support the inclusion of this paragraph.

38. The USA presented proposed amendments to CMM 2023-02 to: (1) reflect the latest stock assessment advice, (2) adjust catch limits based on harvest scenario 13 in the ISC PBFWG stock assessment, (3) revert the carry-over percentage to 5%, (4) eliminate the provision for a conversion factor, and (5) make other editorial/technical updates.

39. The USA presented proposed amendments to Resolution C-21-05 to: (1) reflect the shift in the stock status from rebuilding to rebuilt, (2) rebalance the relative fishery impact between the EPO and WPO, (3) rebalance the relative fishery impact within the EPO, (4) remove the provision on reducing catches from sports fisheries, (5) remove the provision on managing catches of small fish, and make other editorial amendments.

40. Mexico emphasized the importance of stability and the need to take a stepwise approach, rather than drastically increasing catch limits, to provide the market and the fishing industry with time to adapt.

41. The USA expressed concern with proposing amendments to the CMM based on harvest scenarios that result in a high probability, in the long term, of overfishing occurring relative to the candidate reference points selected by the JWG for the PBF MSE.

42. Canada reiterated its support for allowing the PBF stock to continue to rebuild by taking a precautionary approach, given the uncertainties noted in the latest stock assessment. Canada expressed its preference for proposing amendments based on a harvest scenario where biomass is projected to increase and for encouraging the targeting of large fish over small fish.

43. The World Wide Fund for Nature (WWF) welcomed the recovery of the PBF stock and expressed appreciation for the efforts of Members and stakeholders. The WWF encouraged Members to exercise caution by reaffirming the existing catch quotas and only increasing quotas after the JWG has adopted reference points and an MSE for PBF. The WWF encouraged Members, if they wished to nevertheless increase quotas, to reconfirm adopting the MSE in 2025 and to limit the level to one at which the PBF stock continues on an increasing trend until the implementation of the MSE.

44. Co-Chair Miyahara reminded the JWG that the PBF MSE is scheduled to be completed in 2025, that the catch limits in a new CMM could be assessed and adjusted in 2 – 3 years based on the implementation of the MSE, and that harvest scenarios 13-17 project very similar increasing trends in SSB over the next 2 – 3 years. He therefore urged all Members to demonstrate maximum flexibility.

45. To guide the discussions, Co-Chair Miyahara presented a paper, prepared by the co-chairs, outlining the key issues for a new CMM for PBF. These key issues are: (1) level of increase in catch limits, (2) catch limits for major fishing members, (3) East/West balance, (4) sport fishing, (5) special provisions of catch limit adjustments, (6) research quota, (7) treatment of catches of southern hemisphere nations, and (8) period of application.

(1) Level of increase in catch limits

46. The JWG agreed to propose the following increases in catch limits: 10% for small fish and 50% for large fish in the WPO, and 50% in the EPO. The JWG agreed that the increase in the catch limit for small fish in the WPO is premised on Members' commitment to prevent increases in catches of age-0 fish, which is critical to ensuring the long-term health of the stock.

47. Japan made a statement expressing its commitment to prevent increases in catches of age-0 fish (less than 2 kg) in conjunction with paragraph 10 in **Annex C**. The statement is attached as **Annex D**.

48. The JWG requested that the ISC conduct two future projection scenarios based on the recommended CMM and Resolution in 2025, including any projected impacts from Japan's commitment to limit catch of age-0 fish, with and without unlimited use of the conversion factor, based on the 2024 assessment.

(2) Catch limits for major fishing members

49. The JWG agreed to propose the following catch limits for major fishing Members in the WPO as described in **Annex C**.

50. Upon the request from Korea, the JWG adjusted Korea's catch limit for small fish to increase its large fish catch limit. The JWG agreed to add 300 metric tons to Korea's large fish catch limit as well as the catch limit for the EPO fisheries. Additionally, the JWG allowed Korea to apply the 10% increase to its small fish catch limit, apply the conversion to 71 metric tons of small fish, and permanently transfer this to Korea's large fish total. As a result, the JWG agreed upon the Korean catch limits for small and large fish as shown in **Annex C**.

51. The JWG agreed to propose the following catch limits for major fishing Members in the EPO as described in **Annex E**.

52. Canada noted that Resolution C-21-05 does not have provisions for non-major fishing Members and proposed that the measure be amended to allow minimal catch for Members who are not considered major harvesters, in alignment with what is currently in place at the WCPFC in CMM 2023-02.

53. The JWG agreed to propose the inclusion of a provision to allow 10 metric tons of catch for non-major fishing Members in the EPO.

(3) East/West balance

54. The JWG agreed to continue discussions on this matter.

(4) Sport fishing

55. The JWG agreed to propose the inclusion of a provision in the IATTC measure that Members shall ensure that catches of PBF by sportfishing vessels operating under their jurisdiction are managed in a manner consistent with commercial fisheries.

(5) Special provisions of catch limit adjustments

56. The JWG agreed to maintain special provisions on carry-overs and the application of the conversion factor, while adjusting the percentage of the initial annual catch limit to which the underage may be carried over and removing the upper limit on the application of the conversion factor.

(6) Research quota

57. The JWG agreed to propose the inclusion of a provision, in CMM 2023-02, for the NC to be able to recommend a catch limit for research activities to collect reliable indices of recruitment stock and adult spawning stock. The JWG agreed that if a Member wishes to conduct such research activities, it shall submit a research plan to the ISC, the ISC shall assess the plan and provide its advice to the JWG, and the JWG shall review the plan together with the ISC's advice.

(7) Treatment of catches of southern hemisphere nations

58. New Zealand and Australia requested that, when considering amendments to CMM 2023-02, the JWG should take into account the unique circumstances that New Zealand and Australia are facing, whereby the increased abundance of PBF has resulted in a significant increase in incidental catches of PBF in their national waters and constrained the activities of their surface longline fisheries. New Zealand and Australia requested that the JWG consider including catch limits, for PBF 30 kg or larger, for New Zealand and Australia, respectively, with a carry-over provision.

59. Co-Chair Miyahara reminded the JWG of the history of the special Terms of Reference for the NC and stressed the need to ensure the measure does not affect the legitimate fishing activities by those Members of the Southern hemisphere.

60. The JWG agreed to the request from New Zealand and Australia and proposed the inclusion of catch limits for New Zealand and Australia as described in **Annex C**.

(8) Period of application

61. The JWG agreed to propose a period of application of two years.

62. The JWG combined and revised Japan and Korea's proposals to amend CMM 2023-02.

63. The JWG reached agreement on the proposed amendments to CMM 2023-02 described in **Annex C**.

64. The JWG reviewed and revised the USA's proposal to amend Resolution C-21-05.

65. The JWG reached agreement on the proposed amendments to Resolution C-21-05 described in **Annex E**.

AGENDA ITEM 6 CATCH DOCUMENTATION SCHEME

6.1 CDS

66. Mr. Shingo Ota (Japan), the Chair of the Catch Documentation Scheme (CDS) Working Group, presented the outcomes of the 5th CDS Technical Meeting. The Chair's Summary Report of the meeting is included as **Annex F**.

67. The JWG recommended that the NC and the IATTC review and endorse the draft agreement between the Pacific Community (SPC) and the WCPFC/IATTC (**Annex F, Appendix 2**).

68. Mr. Ota explained that following the CDS Technical Meeting, he spoke with the JWG co-chairs regarding the cover letter to be sent to the IATTC explaining the proposed way forward on the CDS and they recommended that it should be sent from the JWG co-chairs rather than the CDS Technical Meeting Chair.

69. The JWG agreed that the cover letter on the proposed way forward on the CDS should be sent from the JWG co-chairs.

70. Co-Chair Miyahara informed the JWG that ahead of the next JWG meeting, the JWG co-chairs, in consultation with the CDS Technical Meeting Chair, will consider whether the next CDS Technical Meeting should be half a day or a full day based on the intersessional progress and circulate their recommendation to Members.

71. The WCPFC Executive Director, Ms. Rhea Moss-Christian, expressed the WCPFC Secretariat's readiness to support the development of the electronic Pacific bluefin tuna CDS (ePBCD) and its intention to continue to review the roles expected of the WCPFC and IATTC Secretariats and the cost-sharing between the two RFMOs so as to ensure that the WCPFC Secretariat is positioned to support this work in the appropriate way.

72. The WWF welcomed the continued progress towards the establishment of the ePBCD and emphasized its importance as a monitoring, control and surveillance (MCS) tool.

6.2 Other MCS measures

73. Japan presented a proposal for the establishment of a new framework to strengthen MCS measures for PBF fisheries and farming in the WPO and the EPO, on the basis of the general requirements for CCMs to take measures to strengthen monitoring and data collecting system for Pacific bluefin tuna as stipulated in CMM 2023-02. The proposed framework consists of two components: 1) reporting requirements on the implementation of MCS measures that have been taken by each CCM, and 2) establishment of a review process whereby the JWG reviews the reports submitted by CCMs and considers necessary revisions of the relevant CMMs with a view to enhancing harmonized MCS measures for PBF fisheries and farms.

74. The JWG expressed support for the approach proposed by Japan of applying a harmonized framework across both sides of the Pacific and noted that the proposed framework would complement the establishment of an ePBCD.

75. The European Union (EU) presented a proposal for an IATTC Resolution on Monitoring and Control Measures for the PBF Fishery in the EPO with the aim of establishing minimum standards for the monitoring and control of PBF in accordance with paragraph 12 of Resolution C-23-01. The proposal was based on ICCAT's expertise and successful experience on bluefin tuna and establishes a number of minimum provisions to monitor and control the PBF fishery including a record of vessels and farms, catch and transshipment reports, general rules on by-catches, identification of designated ports, reporting of catches, and the future establishment of an observer program and a CDS. The EU suggested that it would be advisable to adopt consistent measures across the area of the distribution of the stock and that similar provisions could also be considered by the WCPFC.

76. The JWG noted that many elements of the EU proposal were already required under existing

IATTC and WCPFC measures. They also noted the need to hold further discussions on several elements to better understand the rationale behind their inclusion in the proposal.

77. The JWG endorsed Japan's proposal for the establishment of a new framework to strengthen MCS measures for PBF fisheries and farming and agreed to forward it to the NC for review and recommendation to the WCPFC and to the IATTC for adoption (**Annex G**).

78. The JWG noted that if the proposal is adopted, Members would report their MCS measures to the next JWG meeting and the JWG would begin discussions on the establishment of unified MCS measures. The JWG noted that it would also be able to consider the inclusion of elements of the EU proposal and encouraged the EU to participate in the next JWG meeting in person.

AGENDA ITEM 7 DEVELOPMENT OF LONG-TERM HARVEST STRATEGY

7.1 Progress and issues related to developing Management Strategy Evaluation

79. Dr. Nakatsuka provided an update on the ISC PBFWG's work to develop and improve the PBF MSE. The ISC PBFWG has been developing the PBF MSE package, with the final report and results to be available in 2025 (JWG 10) as requested by the JWG, with the assumption that it will start to be applied in 2026. The ISC PBFWG obtained all required inputs from the IATTC-WCPFC JWG. The technical work is proceeding according to the timeline. The general PBF MSE simulation framework has been developed and candidate harvest control rules have been implemented. An operating model (OM) based on the 2024 stock assessment has been developed and reference and robustness sets have been identified. A preliminary comparison of alternative estimation model (EM) formats has been carried out. A Fishery Impact performance metric has been implemented. A method to tune relative F to obtain the desired impact has been developed, and now it needs to be tested with the updated OM.

80. In light of this progress, Dr. Nakatsuka invited the JWG to consider two questions: (1) if the MP-derived TAC should be further subdivided, e.g., by Member or fleet; and (2) if the small:large allocation baseline (selectivities and relative F from 2015 to 2022) within the Western and Central Pacific Ocean (WCPO) currently used in the MSE needs to be tweaked. He also suggested that the JWG could consider holding an intersessional meeting in early 2025 to review progress in conducting the MSE and preliminary results before its finalization, and to further discuss the above questions.

81. In response to the questions from Dr. Nakatsuka, the JWG expressed its support for the current approach, i.e., producing a TAC by region and size category and maintaining the small:large allocation baseline within the WCPO that is currently used in the MSE.

82. The JWG requested the ISC to present the final results of the PBF MSE in 2025, to be applied from 2026.

7.2 Review of Interim Harvest Strategy

83. There were no proposals to amend Harvest Strategy 2023-02 or Resolution C-23-01.

7.3 Work Plan for Development of a Long-term Harvest Strategy for PBF (including MSE)

84. The JWG reviewed and reaffirmed the current Work Plan for Development of a Long-term

Harvest Strategy for PBF (including MSE) (**Annex H**).

AGENDA ITEM 8 NEXT JWG MEETING

85. Pending funding, the JWG agreed to hold an intersessional meeting in early 2025 to review progress in conducting the MSE and preliminary results.

86. Japan offered to host the next meeting of the JWG tentatively scheduled for July 9 to 12, 2025. The arrangement of the next meeting will be notified well in advance, taking into consideration other meeting dates.

AGENDA ITEM 9 OTHER BUSINESS

9.1 Election of Co-chairs

87. The JWG expressed its deep appreciation to Co-Chair Lowman for her dedication and hard work. The next co-chairs will be decided by each RFMO.

9.2 Other business

88. The JWG recognized the potential value of conducting a peer review of the ISC PBFWG's 2024 stock assessment for PBF and recommended that the ISC consider conducting such a review, subject to funding availability. The JWG welcomed the USA's offer to explore potential funding opportunities.

AGENDA ITEM 10 ADOPTION OF REPORT

89. The IATTC-NC JWG09 adopted the report.

AGENDA ITEM 11 CLOSE OF MEETING

90. The meeting was brought to a close at 9:30 am on 14 July 2024.

ANNEXES

Annex A – List of participants

Annex B – Agenda

Annex C – Recommended Conservation and Management Measure for Pacific Bluefin Tuna

Annex D – Japanese commitment on the prevention of increase of age-0 fish catch

Annex E – Recommended IATTC Resolution C-24-XX

Annex F – Chair’s Summary of 5th CDS Technical Meeting

Annex G – Recommended Conservation and Management Measure for the Monitoring, Controlling, and
Surveillance of Pacific Bluefin Tuna

Annex H -

**JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE
MANAGEMENT OF PACIFIC BLUEFIN TUNA
NINTH SESSION (JWG-09)**

Kushiro, Japan (Hybrid)
10 – 13 July 2024

LIST OF PARTICIPANTS

CO-CHAIR**Dorothy Lowman**

Lowman and Associates

Owner/ Consultant

dmlowman01@comcast.net

CO-CHAIR**Masanori Miyahara**

Fisheries Agency of Japan

Advisor to the Minister of Agriculture, Forestry
and Fisheries

masamiyafaj1@gmail.com

AUSTRALIA**James Van Meurs**

Australian Government Department of
Agriculture, Fisheries and Forestry

Assistant Director

james.vanmeurs@agriculture.gov.au

CANADA**Amber Lindstedt**

Fisheries and Oceans Canada

Deputy Director International Fisheries Policy

Amber.Lindstedt@dfo-mpo.gc.ca

Kristen Côté

Fisheries and Oceans Canada

Senior Policy Analyst, International Fisheries
Policy

Kristen.Cote@dfo-mpo.gc.ca

Sarah Hawkshaw

Fisheries and Oceans Canada

Biologist

sarah.hawkshaw@dfo-mpo.gc.ca

COOK ISLANDS**Tiare-Renee Nicholas**

Ministry of Marine Resources Cook Islands

Data Manager

t.nicholas@mmr.gov.ck

EUROPEAN UNION**Marco Valletta**

European Commission - DG MARE

Head of the EU delegation to the IATTC

marco.valletta@ec.europa.eu

FEDERATED STATES OF MICRONESIA**Eugene R. Pangelinan**

Norma

Consultant

e.pangelinan@norma.fm

FIJI**Moses Nainoka Mataika**

Ministry of Fisheries

Offshore Fisheries Management Division

Fisheries Officer

mataika.moses@gmail.com

Epi Qalobula Batibasaga

Ministry of Fisheries

Fisheries Officer Industry and Trade

batibasaga@gmail.com

JAPAN

Takumi Fukuda

Fisheries Agency of Japan
Resource Management Department
takumi_fukuda720@maff.go.jp

Hirosuke Tominaga

Ministry of Economy, Trade and Industry
Officer
Tominaga-hirosuke@meti.go.jp

Masahide Kannou

Fisheries Agency of Japan
Staff, International Affairs Division
masahide_kanno210@maff.go.jp

Suzuki Tomoyuki

Miyazaki Prefecture Bonito and Tuna
Fishermen's Association
Secretariat
to-suzuki@mzgyoren.jf-net.ne.jp

Takashi Chiyotani

Fisheries Management Division, Bureau of
Fisheries, Department of Fisheries and Forestry,
Hokkaido Government
Deputy Director
chiyotani.takashi@pref.hokkaido.lg.jp

Akari Onami

Fisheries Agency of Japan
staff
akari_onami830@maff.go.jp

Akihito Fukuyama

Japan Far Seas Purse Seine Fishing Association
Managing Director
fukuyama@kaimaki.or.jp

Alex Meyer

Fisheries Agency of Japan
Staff
Meyer@urbanconnections.jp

Anna Inomata

Fisheries Agency of Japan

Staff

anna_inomata570@maff.go.jp

Asuka Uetake

Japan Tuna Fisheries Cooperative Association
Assistant Chief/Guidance Division
uetake@japantuna.or.jp

Atsushi Sawada

Shimokita Regional Administration Bureau,
Regional Agriculture, Forestry and Fisheries
Department, Shimokita Regional Fisheries
Office, Fisheries Management and
Development Division
Technical Staff
atsushi_sawada@pref.aomori.lg.jp

Chisa Okamatsu

International Exchange Promotion Division,
Overseas Fishery Cooperation Foundation of
Japan
Senior Staff
okamatsu@ofcf.or.jp

Daisuke Nakamura

Kochi Offshore Tuna Fisheries Association
Advisor
k-nakamura@kogyoren.jf-net.ne.jp

Eihachiro Matsuzawa

Kochi Offshore Tuna Fisheries Association
President
k-gyoren3@kogyoren.jf-net.ne.jp

Goichi Musashi

Fisheries Affairs Division, Department of
Industrial Promotion, Kushiro General
Subprefectural Bureau, Hokkaido Government
Director
musashi.goichi@pref.hokkaido.lg.jp

Haruo Tominaga

Fisheries Agency of Japan
Director for International Fisheries Coordination
haruo_tominaga170@maff.go.jp

Hidefumi Kawamoto

Japan Sea Coastal Purse Seiners Association

Secretary General
kawamoto@sanmaki.jp

Hideki Miura
National federation of fisheries co-operative
associations
Managing Director
h-miura@zengyoren.jf-net.ne.jp

Hideki Nakao
Miyazaki Tuna Fisheries Association
Advisor
h-nakao@mzgyoren.jf-net.ne.jp

Hidetada Kiyofuji
Fisheries Resources Institute
Highly Migratory Resource Division, Fisheries
Stock Assessment Center
kiyofuji_hidetada20@fra.go.jp

Hidetoshi Ito
Ishinomaki Fishery Co., Ltd.
Director,
hid-itou@maruha-nichiro.co.jp

Hirofumi Niiyama
Fisheries Management Division, Department of
Fisheries and Forestry, Hokkaido Government
Chief Coordinator
niiyama.hirofumi@pref.hokkaido.lg.jp

Hiromu Fukuda
Fisheries Research and Education Agency of
Japan, Fisheries Resources Institute
Head, Bluefin Tunas Group, Highly Migratory
Resources Division
fukuda_hiromu57@fra.go.jp

Hiroshi Moriwaki
Wakaba Fishery Co., Ltd.
President
wakaba-hm@lily.ocn.ne.jp

Hiroto Shimada
Ishikawa Prefecture Fisheries Division
Specialist
hirotosh@pref.ishikawa.lg.jp

Hiroyuki Yoshida
Japan Tuna Fisheries Co-operative Association
Director
yoshida@japantuna.or.jp

Inada Shigeo
Miyazaki Prefecture Bonito and Tuna
Fishermen's Association
board member
to-suzuki2@mzgyoren.jf-net.ne.jp

Isao Ishii
Japan Sea Coastal Purse Seiners Association
Vice Chairman
maru.wa@giga.ocn.ne.jp

Jun Takahashi
Overseas Fishery Cooperation Foundation of
Japan (OFCF)
Advisor
jun@ofcf.or.jp

Junsei Kometani
Wajima Fishery Production Association
Union President
maru.wa@giga.ocn.ne.jp2

Kaoru Kawamoto
Fisheries Agency of Japan
Interpreter
dvorjakkawamoto@ybb.ne.jp

Kazushige Hazama
National Offshore Tuna Fisheries Association of
Japan
Manager
hazama@kinkatsukyo.or.jp

Kei Hirose
Director,
Ishinomaki Fishery Co., Ltd.
k-hirose@maruha-nichiro.co.jp

Kei Sonezaki
Ishinomaki Fishery Co., Ltd.
Chief
k-sonezaki@maruha-nichiro.co.jp

Keiko Imoto

"Sanin purse seine Fisheries cooperative association"
Associate Director
imoto@sanmaki.jp

Kengo Tanaka

All Japan Purse Seine Fisheries Association
Managing Director
zenmaki05@atlas.plala.or.jp

Kenji Aoki

Nitto Suisan
Managing Director
kenji.aoki@nittosuisan.com

Kenji Oguri

Japan Tuna Fisheries Cooperative Association
Director/Guidance Division
oguri@japantuna.or.jp

Kenji Takahashi

Department of Fisheries and Forestry, Hokkaido Government
Director
takahashi.kenji2@pref.hokkaido.lg.jp

Kirara Nishikawa

Fisheries Resources Institute, FRA
Scientist, Bluefin Tunas Group, Highly Migratory Resource Division
nishikawa_kirara68@fra.go.jp

Kotaro Harada

Ishikawa Prefecture
Chief Engineer
kharada@pref.ishikawa.lg.jp

Mako Iioka

Fisheries Agency of Japan
Assistant Director
mako_iioka540@maff.go.jp

Makoto Hotai

JAPAN PURSU SEINER'S ASSOCIATION
General Manager
makoto-hotai@enmaki.jp

Masaaki Toma

Agricultural and Marine Products Office, Trade Control Department, Ministry of Economy, Trade and Industry
Deputy Director
toma-masaaki@meti.go.jp

Masahiro Akiyama

Shimane Prefectural Government
Staff
akiyama-masahiro@pref.shimane.lg.jp

Masahito Takemura

Kochi Offshore Tuna Fisheries Association
Board member
385878miamaru@gmail.com

Masakatsu Irei

National Offshore Tuna Fisheries Association of Japan
President
zenkinjp@kinkatsukyo.or.jp

Masakazu Shirado

Japan Sea Coastal Purse Seiners Association
Member
imoto2@sanmaki.jp

Masaki Kondou

Department of Fisheries and Forestry, Hokkaido Government
Senior Director, Bureau of Fisheries
kondou.masaki@pref.hokkaido.lg.jp

Masatake Kato

Federation Of North Pacific District Purse Seine Fisheries Cooperative associations of Japan
Executive Managing Director
moka.kitamaki210@gmail.com

Masatoshi Ooyama

President,
Ishinomaki Fishery Co., Ltd.
m-ooyama@maruha-nichiro.co.jp

Meiko Kawahara

Taiyo A & F Co., Ltd.
Deputy General Manager

m-kawahara@maruha-nichiro.co.jp

Muneharu Tokimura

JOP (The Overseas Fishery Cooperation
Foundation of Japan)

Adviser

tokimura@ofcf.or.jp

Naruhito Okuda

Japan Far Seas Purse Seine Fishing Association
Advisor

n-okuda@kaimaki.or.jp

Oishi Shu

Kochi Offshore Tuna Fisheries Association
Advisor

_210@maff.go.jp

Ryo Watanabe

Fisheries Management Division, Bureau of
Fisheries, Department of Fisheries and Forestry,
Hokkaido Government
Staff

watanabe.ryou1@pref.hokkaido.lg.jp

Ryusuke Sakamoto

Ishikawa Prefecture Fisheries Division
Chief Engineer

ryu-saka@pref.ishikawa.lg.jp

Satoshi Miyazaki

Agricultural and Marine Products Office, Trade
Control Department, Ministry of Economy,
Trade and Industry
Assistant Director

miyazaki-satoshi@meti.go.jp

Shingo Fujita

National federation of fisheries co-operative
associations

Assistant to Director

s-fujita@zengyoren.jf-net.ne.jp

Shingo Ota

Fisheries Agency of Japan
Special Adviser to the Minister of Agriculture,
Forestry and Fisheries

shingo_ota810@maff.go.jp

Shinji Hiruma

Fisheries Agency of Japan
International Affairs Division

shinji_hiruma150@maff.go.jp

Shuya Nakatsuka

Fisheries Resources Institute
Deputy Director, Highly Migratory Resources
Division

nakatsuka_shuya49@fra.go.jp

Susumu Oikawa

Ishinomaki Fishery Co., Ltd.
Chairman,

s-oikawa@maruha-nichiro.co.jp

Takao Matsuo

Fisheries Development Division, Fisheries
Department, Nagasaki Prefectural Government
Staff

takao_matsuo@pref.nagasaki.lg.jp

Takashi Hiratsuka

Ishinomaki Fishery Co., Ltd.
Manager

t-hiratsuka@maruha-nichiro.co.jp

Takashi Koyama

Taiyo A & F Co., Ltd.
Deputy General Manager

t-kouyama@maruhn-nichiro.co.jp

Tawara Shinji

Miyazaki Prefecture Bonito and Tuna
Fishermen's Association
board member

to-suzuki1@mzgyoren.jf-net.ne.jp

Tetsuya Kunito

Federation of North Pacific District Purse Seine
Fisheries Cooperative Associations of Japan
Section Manager

tetsuya_kunito920@kitamaki.jp

Tokushin Yamauchi

Okinawa Tuna Fisheries Association
Chairman

okimaguro@shirt.ocn.ne.jp

Tomohiro Ito

Fisheries Agency of Japan
staff

tomohiro_ito400@maff.go.jp

Tomohiro Kondo

Ministry of Foreign Affairs
Assistant Director, Fishery Division

tomohiro.kondo-2@mofa.go.jp

Toshihito Okajima

Japan Sea Coastal Purse Seiners Association
Member

taiyu@isis.ocn.ne.jp

Toshinori Tanaka

National federation of fisheries co-operative
associations
Executive General Manager

to-tanaka@zengyoren.jf-net.ne.jp

Toshitsugu Higashino

Fisheries Promotion Division, Bureau of
Fisheries, Department of Agriculture, Forestry
and Fisheries, Aomori Prefectural Government
of Japan

Chief Editor

toshitsugu_higashino@pref.aomori.lg.jp

Yoko Yamakage

Fisheries Agency of Japan
Interpreter

yamakageyoyo@gmail.com

Yoshihiro Notomi

National Offshore Tuna Fisheries Association of
Japan

Managing Director

notomi@kinkatsukyo.or.jp

Yoshinobu Umazume

Kochi Offshore Tuna Fisheries Association
Member

tosayo_yoshinobu@sweet.ocn.ne.jp

Yousuke Nakata

Hinode-Ooshikiami Corporation
President

japan_delegation@yahoo.co.jp

Yuhei Takeya

Aomori Prefecture Government
Department of Agriculture, Forestry and
Fisheries, Fisheries Bureau, Fisheries Promotion
Division, The Chief Examiner

ut0829@gmail.com

Yuji Iwata

Sanin purse seine Fisheries cooperative
association
union leader

iwata@sanmaki.jp

Yuji Uozumi

Japan Tuna Fisheries Co-operative Association
Adviser

NEW ZEALAND

Arthur Hore

Ministry for Primary Industries
Chief Fisheries Advisor
arthur.hore@mpi.govt.nz

Hilary Ayrton

Ministry for Primary Industries
Senior Fisheries Analyst
hilary.ayrton@mpi.govt.nz

REPUBLIC OF KOREA

Ilkang Na

Ministry of Oceans and Fisheries
Policy Officer / Multilateral Fisheries Negotiator
ikna@korea.kr

Il-do Ma

MA ILL DO
Large Purse-Seine Fisheries Cooperative
Team Leader
sabasuki@suhyup.co.kr

Jae-geol Yang

Korea Overseas Fisheries Cooperation Center
Policy Analyst

jg718@kofci.org

Jung-re Riley Kim

Ministry of Oceans and Fisheries
Head of Fisheries Negotiation Unit
riley1126@korea.kr

Kim Kwangsu

National Fishery Products Quality Management
Service (NFQS)
Deputy director

Kim Min-kyung

National Fishery Products Quality Management
Service (NFQS)
Assistant director
kyung91206@korea.kr

Soomin Kim

Korea Overseas Fisheries Cooperation Center
Policy Analyst
soominkim@kofci.org

Youjung Kwon

National Institute of Fisheries Science
Scientist
kwonuj@korea.kr

REPUBLIC OF MARSHALL ISLANDS

Berry Muller

Marshall Islands Marine Resources Authority
Deputy Director - Oceanic and Industrial Affairs
Division
bmuller@mimra.com

CHINESE TAIPEI

Joy Hsiangyi Yu

Fisheries Agency, Ministry of Agriculture
Section Chief, Pacific Ocean Fisheries
Management Section, Distant Water Fisheries
Division
hsiangyi@ms1.fa.gov.tw

Joseph Chia-Chi Fu

Overseas Fisheries Development Council
Director

joseph@ofdc.org.tw

Shao-Wei Lu

Fisheries Agency, Ministry of Agriculture
Associate Technical Specialist, Pacific Ocean
Fisheries Management Section, Distant Water
Fisheries Division
shaowei0220@ms1.fa.gov.tw

Shui-Kai Chang

National Sun Yat-sen University
Professor
skchang@faculty.nsysu.edu.tw

Tzu-Ching Yu

Overseas Fisheries Development Council
Secretary
evan@ofdc.org.tw

UNITED STATES OF AMERICA

Alex Kahl

NOAA Fisheries
Resource Management Specialist
alex.kahl@noaa.gov

Amanda Munro

NOAA Fisheries
Policy Analyst
amanda.munro@noaa.gov

Celia Barroso

NOAA Fisheries
Fishery Policy Analyst
celia.barroso@noaa.gov

Christa Svensson

Pacific Fishery Management Council
Alternate- U.S. Commissioner
csvensson@trimarinegroup.com

Christine Bertz

U.S. Department of State
Foreign Affairs Officer
bertzca@state.gov

Christopher Dahl

Pacific Fishery Management Council

Staff Officer - HMS
kit.dahl@noaa.gov

Emily Reynolds
NOAA Fisheries
Fishery Policy Analyst
emily.reynolds@noaa.gov

Huihua Lee
NOAA Fisheries
Research Mathematical Statistician
huihua.lee@noaa.gov

Jason Philibotte
NOAA Fisheries
International Fisheries, Division Chief
jason.philibotte@noaa.gov

John Zuanich
JZ Trading
U.S. Commissioner
jztrading@aol.com

Josh Madeira
Monterey Bay Aquarium
Director of Policy & Stakeholder Engagement
jmadeira@mbayaq.org

Kelly Kryc
National Oceanic and Atmospheric
Administration
Deputy Assistant Secretary for International
Fisheries
kelly.kryc@noaa.gov

Mark Fitchett
Western Pacific Regional Fisheries Management
Council (WPRFMC)
Pelagic Ecosystem Fisheries Scientist
mark.fitchett@wpcouncil.org

Mike Conroy
West Coast Fisheries Consultants
Principal/president
Mike@wecofm.com

Mike Thompson
Alternate US Commissioner / IATTC

REC fisheries rep
thompsonmike148@gmail.com

Paul Ortiz
NOAA/Office of General Counsel
paul.ortiz@noaa.gov

Rachel Ryan
U.S. Department of State
Foreign Affairs Officer
RyanRL@state.gov

Ryan Wulff
NOAA Fisheries
Assistant Regional Administrator for Sustainable
Fisheries
ryan.wulff@noaa.gov

Shana Miller
The Ocean Foundation
Project Director International Fisheries
Conservation
smiller@oceanfdn.org

Steven L. H. Teo
NOAA Fisheries
Research Fisheries Biologist
steve.teo@noaa.gov

Theresa Labriola
Wild Oceans
Pacific Program Director
tlabriola@wildoceans.org

Valerie Post
NOAA Fisheries
Fishery Policy Analyst
valerie.post@noaa.gov

Yonat Swimmer
NOAA Fisheries
Fisheries Biologist
yonat.swimmer@noaa.gov

VANUATU

Jeyalda Ngwele
Vanuatu Fisheries Department

Senior Data Officer (International)
njeyalda@fisheries.gov.vu

Lucy Joy
Vanuatu Fisheries Department
Principal Data Officer
ljoy@fisheries.gov.vu

May Mei-chin Juan
Ming Dar Fishery (Vanuatu) Co. Ltd.
Executive Assistant to the President
meichin.mdfc@gmail.com

Tony Taleo
Vanuatu Fisheries Department
Deputy Director Offshore
ttaleo@fisheries.gov.vu

INTER-AMERICAN TROPICAL TUNA COMMISSION (IATTC)

Brad Wiley
IATTC
Policy Officer
bwiley@iattc.org

INTERNATIONAL SCIENTIFIC COMMITTEE FOR TUNA AND TUNA-LIKE SPECIES IN THE NORTH PACIFIC OCEAN (ISC)

John Holmes
International Scientific Committee for Tuna and
Tuna-like Species in the North Pacific Ocean
Chair
john.holmes@dfo-mpo.gc.ca

MARINE STEWARDSHIP COUNCIL

Bill Holden
Marine Stewardship Council
Senior Tuna Fisheries Outreach Manager
bill.holden@msc.org

Sayuri Ichikawa
Marine Stewardship Council
WCPO Tuna Project Manager
sayuri.ichikawa@msc.org

MEXICO

Christian Antonio Alcaraz Ortez
Baja Aqua-Farms
Fishery Director

José Carlos Gonzalez Iriarte

Manuel Heriberto Vazquez Escudero

Martha Betancourt

Michel Dreyfus Leon
FIDEMAR
In charge of research
mchldryfs@gmail.com

Takafumi Misawa

OCEAN GOVERNANCE INSTITUTE (OGI)

Hiroshi Ohta
The Ocean Governance Institute (OGI)
Director-General
hohta21@gmail.com

Isao Sakaguchi
Gakushuin University
Professor
isao.sakaguchi@gakushuin.ac.jp

Yasuhiro Sanada

PACIFIC ISLANDS FORUM FISHERIES AGENCY (FFA)

Lianos Triantafillos
Pacific Islands Forum Fisheries Agency (FFA)
Fisheries Management Advisor
lianos.triantafillos@ffa.int

Marina Abas
Pacific Islands Forum Fisheries Agency (FFA)
Fisheries Management Advisor
marina.abas@ffa.int

WORLD WIDE FUND FOR NATURE (WWF)

Shuhei Uematsu

World Wide Fund for Nature (WWF)
Manager of Anti-IUU Fishery Project & Manager
of Fisheries Resources Management Oceans
and Seafood Group
uematsu@wwf.or.jp

WCPFC SECRETARIAT

Aaron Nighswander

Western and Central Pacific Fisheries
Commission (WCPFC)
Finance and Administration Manager
aaron.nighswander@wcpfc.int

Eidre Sharp

Western and Central Pacific Fisheries
Commission (WCPFC)
Assistant Compliance Manager
Eidre.Sharp@wcpfc.int

Elaine G. Garvilles

Western and Central Pacific Fisheries
Commission (WCPFC)
Assistant Science Manager
Elaine.Garvilles@wcpfc.int

Lara Manarangi-Trott

Western and Central Pacific Fisheries
Commission (WCPFC)
Compliance Manager
Lara.Manarangi-Trott@wcpfc.int

Lucille Martinez

Western and Central Pacific Fisheries
Commission (WCPFC)
Administrative Officer
lucille.martinez@wcpfc.int

Rhea Moss-Christian

Western and Central Pacific Fisheries
Commission (WCPFC)
Executive Director
rhea.moss-christian@wcpfc.int

Samuel T. Rikin

Western and Central Pacific Fisheries
Commission (WCPFC)
IT Officer
samuel.rikin@wcpfc.int

SungKwon Soh

Western and Central Pacific Fisheries
Commission (WCPFC)
Science Manager
sungkwon.soh@wcpfc.int

Tim Jones

Western and Central Pacific Fisheries
Commission (WCPFC)
IT Manager
tim.jones@wcpfc.int

**JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE
MANAGEMENT OF PACIFIC BLUEFIN TUNA
NINTH SESSION (JWG-09)**

Kushiro, Japan (Hybrid)
10 – 13 July 2024

AGENDA

- 1. Opening of the meeting**
- 2. Adoption of Agenda and Meeting Procedures**
- 3. Scientific Information on Pacific Bluefin Tuna**
 - 3.1 Updates on the stock status of Pacific bluefin tuna
 - 3.2 Reports from WCPFC-Scientific Committee (SC) and IATTC-Scientific Advisory Committee (SAC)
- 4. Reports on the implementation of Pacific bluefin tuna measures**
- 5. Review of Conservation and Management Measures for Pacific Bluefin Tuna**
- 6. Catch Documentation Scheme**
 - 6.1 CDS
 - 6.2 Other MCS measures
- 7. Development of Long-Term Harvest Strategy**
 - 7.1 Progress and issues related to developing Management Strategy Evaluation
 - 7.2 Review of Interim Harvest Strategy
 - 7.3 Work Plan for Development of a Long-term Harvest Strategy for PBF (including MSE)
- 8. Next JWG meeting**
- 9. Other business**
 - 9.1 Election of Co-chairs
 - 9.2 Other business
- 10. Adoption of Report**
- 11. Close of meeting**

**JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE
MANAGEMENT OF PACIFIC BLUEFIN TUNA
NINTH SESSION (JWG-09)**

Kushiro, Japan (Hybrid)
10 – 13 July 2024

Recommended Conservation and Management Measure for Pacific Bluefin Tuna

The Western and Central Pacific Fisheries Commission (WCPFC):

Recognizing that WCPFC6 adopted Conservation and Management Measure for Pacific bluefin tuna (CMM 2009-07) and the measure was revised twelve times since then (CMM 2010-04, CMM 2012-06, CMM 2013-09, CMM 2014-04, CMM 2015-04, CMM 2016-04, CMM2017-08, CMM 2018-02, CMM 2019-02, CMM 2020-02, CMM 2021-02 and CMM 2023-02) based on the conservation advice from the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC) on this stock;

Noting the latest stock assessment provided by ISC in 2024, indicating the following:

- Spawning stock biomass (SSB) has increased substantially in the last 12 years, and achieved its second rebuilding target (20%SSB_{F=0}) in 2021;
- A substantial decrease in estimated F has been observed in ages 0-2 in 2020-2022 relative to 2002-2004 and 2012-2014;
- Since the early 1990s, the WCPO purse seine fisheries, in particular those targeting small fish (age 0-1) have had an increasing impact on the spawning stock biomass, but its impact has reduced in recent years;
- Harvesting small fish has a greater impact on future spawning stock biomass than harvesting large fish of the same amount;
- The projection results indicate that increases of catch limits are possible while maintaining SSB greater than 20%SSB_{F=0} with a 60% probability under several scenarios requested by JWG8, and while allowing SSB to steadily increase above the second rebuilding target under additionally requested certain scenarios ; and
- The projection results also indicate that the maximum allowable transfer from small fish catch limits to large fish catch limits utilizing the conversion factor has a positive effect on future SSB.

Noting the conservation advice from the ISC that research on a recruitment index for the stock assessment should be pursued, and maintenance of a reliable adult abundance index should be ensured;

Recalling that paragraph (4) of the Article 22 of the WCPFC Convention, which requires cooperation between the Commission and the IATTC to reach agreement to harmonize CMMs for fish stocks such as Pacific bluefin tuna that occur in the convention areas of both organizations;

Also recalling Article 10 (1) (a) of the WCPF Convention, which provides that the Commission may determine the total allowable catch or total level of fishing effort within the Convention Area for such highly migratory fish stocks and decide and adopt such other conservation and management measures and recommendations as may be necessary to ensure the long-term sustainability of such stocks without

prejudice to the sovereign rights of coastal States for the purpose of exploring and exploiting, conserving and managing highly migratory fish stocks within areas under national jurisdiction;

Conscious of the need to identify, analyze and respond to the impacts of climate change on the tuna and tuna- like species in the North Pacific Ocean in a timely manner to enhance the effectiveness of the conservation and management for the species;

Adopts, in accordance with Article 10 of the WCPFC Convention that:

General Provision

1. This conservation and management measure has been prepared to implement the Harvest Strategy for Pacific Bluefin Tuna Fisheries (Harvest Strategy 2023-02), and the Northern Committee shall periodically review and recommend revisions to this measure as needed to implement the Harvest Strategy.

Management measures

2. CCMs shall take measures necessary to ensure that total fishing effort by their vessel fishing for Pacific bluefin tuna in the area north of the 20° N shall stay below the 2002–2004 annual average levels.
3. Japan, Korea and Chinese Taipei shall, respectively, take measures necessary to ensure that its catches of Pacific bluefin tuna less than 30 kg and Pacific bluefin tuna 30 kg or larger shall not exceed the annual catch limits in the tables below, without prejudice to future agreement on allocation of TAC.

Pacific Bluefin tuna less than 30kg

	2002-2004 average annual level	Annual initial catch limit
Japan	8,015 metric tons	4,407 metric tons
Korea	1,435 metric tons	718 metric tons

Pacific Bluefin tuna 30kg or larger

	2002-2004 average annual level	Annual initial catch limit
Japan	4,882 metric tons	8,421 metric tons
Korea	0 metric tons	501 metric tons
Chinese Taipei	1,709 metric tons	2,947 metric tons

4. CCMs with a base line catch (2002-2004 average annual level) of 10 tons or less of Pacific bluefin tuna 30 kg or larger may increase their catch as long as it does not exceed 10 metric tons per year. The catch limit of Pacific bluefin tuna 30 kg or larger for New Zealand shall be 200 metric tonnes per year and for Australia 40 metric tonnes per year, taking into account their nature as bycatch fisheries conducted in their waters in the Southern hemisphere.¹

¹ New Zealand and Australia may carry forward up to 35 tonnes per year and 10 tonnes per year, respectively, from 2019, 2020, 2021 and 2022 to 2023 and 2024. This special arrangement does not create any precedent in future management.

5. Any overage or underage of the catch limit shall be deducted from or may be added to the catch limit for the following year. The maximum underage that a CCM may carry over in any given year shall not exceed 17% of its annual initial catch limit.
6. CCMs described in paragraph 3 may use part of the catch limit for Pacific bluefin tuna smaller than 30kg stipulated in paragraph 3 above to catch Pacific bluefin tuna 30kg or larger in the same year. In this case, the amount of catch 30kg or larger shall be counted against the catch limit for Pacific bluefin tuna smaller than 30kg.² CCMs shall not use the catch limit for Pacific bluefin tuna 30kg or larger to catch Pacific bluefin tuna smaller than 30kg.
7. CCMs are encouraged to conduct research activities to collect reliable indices of recruitment stock and adult spawning stock. Notwithstanding paragraph 3 and 4, setting a catch limit dedicated for research activities to develop and maintain indices may be considered by WCPFC through the Northern Committee based on research plans reviewed and supported by the ISC.
8. All CCMs except Japan shall implement the limits in paragraph 3 on a calendar-year basis. Japan shall implement the limits using a management year other than the calendar year for some of its fisheries and have its implementation assessed with respect to its management year. To facilitate the assessment, Japan shall:
 - a. Use the following management years:
 1. For its fisheries licensed by the Ministry of Agriculture, Forestry and Fisheries, use the calendar year as the management year.
 2. For its other fisheries, use 1 April – 31 March as the management year.³
 - b. In its annual reports for PBF, for each category described in a.1 and a.2 above, complete the required reporting template for both the management year and calendar year clearly identifying fisheries for each management year.
9. CCMs shall report to the Executive Director by 15 June each year their fishing effort and <30 kg and >=30 kg catch levels, by fishery, for the previous 3 years, accounting for all catches, including discards. CCMs shall report their annual catch limits and their annual catches of PBF, with adequate computation details, to present their implementation for paragraph 5 and 6, if the measures and arrangements in the said paragraphs and relevant footnotes applied. The Executive Director will compile this information each year into an appropriate format for the use of the Northern Committee.
10. CCMs shall intensify cooperation for effective implementation of this CMM, including juvenile catch reduction. For this purpose, CCMs will make every effort to prevent their catch of age-0 fish (less than 2kg) from increasing beyond their 50% of 2002-2004 levels.
11. CCMs, in particular those catching juvenile Pacific bluefin tuna, shall take measures to monitor and obtain prompt results of recruitment of juveniles each year.
12. Consistent with their rights and obligations under international law, and in accordance with domestic laws and regulations, CCMs shall, to the extent possible, take measures necessary to prevent commercial transaction of Pacific bluefin tuna and its products that undermine the effectiveness of this CMM, especially measures prescribed in the paragraph 3 above. CCMs shall cooperate for this purpose.

² A CCM may count the amount of catch 30kg or larger adjusted with the conversion factor 0.68 (catch 30kg or larger multiplied by 0.68) against the catch limit for Pacific bluefin tuna smaller than 30kg.

³ For the category described a.2 of paragraph 7, the TCC shall assess in year 20XX its implementation during the management year that starts 1 April 20XX-1 (e.g., in the 2020 compliance review, the TCC will assess Japan's implementation for its fisheries licensed by the Ministry of Agriculture, Forestry and Fisheries during calendar-year 2019 and for its other fisheries during 1 April 2019 through 31 March 2020.

13. CCMs shall cooperate to establish a catch documentation scheme (CDS) to be applied to Pacific bluefin tuna in accordance with the **Attachment** of this CMM.
14. CCMs shall also take measures necessary to strengthen monitoring and data collecting system for Pacific bluefin tuna fisheries and farming in order to improve the data quality and timeliness of all the data reporting.
15. CCMs shall report to Executive Director by 15 June annually measures they used to implement paragraphs 2, 3, 4, 8, 9, 10, 11, 12, 14 and 17 of this CMM. CCMs shall also monitor the international trade of the products derived from Pacific bluefin tuna and report the results to Executive Director by 15 June annually. The Northern Committee shall annually review those reports CCMs submit pursuant to this paragraph and if necessary, advise a CCM to take an action for enhancing its compliance with this CMM.
16. The WCPFC Executive Director shall communicate this CMM to the IATTC Secretariat and its contracting parties whose fishing vessels engage in fishing for Pacific bluefin tuna in EPO and request them to take equivalent measures in conformity with this CMM.
17. To enhance effectiveness of this measure, CCMs are encouraged to communicate with and work with the concerned IATTC contracting parties through the Joint IATTC and WCPFC-NC Working Group on the Management of Pacific Bluefin Tuna or bilaterally.
18. The provisions of paragraphs 2 and 3 shall not prejudice the legitimate rights and obligations under international law of those small island developing State Members and participating territories in the Convention Area whose current fishing activity for Pacific bluefin tuna is limited, but that have a real interest in fishing for the species, that may wish to develop their own fisheries for Pacific bluefin tuna in the future.
19. The provisions of paragraph 18 shall not provide a basis for an increase in fishing effort by fishing vessels owned or operated by interests outside such developing coastal State, particularly Small Island Developing State Members or participating territories, unless such fishing is conducted in support of efforts by such Members and territories to develop their own domestic fisheries.
20. This CMM replaces CMM 2023-02. On the basis of a new stock assessment conducted by ISC, the harvest strategy based on the management strategy evaluation expected to be completed in 2025, fair and equitable balance of fishing opportunities between the WCPO and the EPO as well as among Members, and other pertinent information such as the impact of climate change, as appropriate, this CMM shall be reviewed and may be amended as appropriate in 2026.

Development of a Catch Document Scheme for Pacific Bluefin Tuna

Background

At the 1st joint working group meeting between NC and IATTC, held in Fukuoka, Japan from August 29 to September 1, 2016, participants supported to advance the work on the Catch Documentation Scheme (CDS) in the next joint working group meeting, in line with the development of overarching CDS framework by WCPFC and taking into account of the existing CDS by other RFMOs.

1. Objective of the Catch Document Scheme

The objective of CDS is to combat IUU fishing for Pacific Bluefin Tuna (PBF) by providing a means of preventing PBF and its products identified as caught by or originating from IUU fishing activities from moving through the commodity chain and ultimately entering markets.

2. Use of electronic scheme

Whether CDS will be a paper based scheme, an electronic scheme or a gradual transition from a paper based one to an electronic one should be first decided since the requirement of each scheme would be quite different.

3. Basic elements to be included in the draft conservation and management measure (CMM)

It is considered that at least the following elements should be considered in drafting CMM.

- (1) Objective
- (2) General provision
- (3) Definition of terms
- (4) Validation authorities and validating process of catch documents and re-export certificates
- (5) Verification authorities and verifying process for import and re-import
- (6) How to handle PBF caught by artisanal fisheries
- (7) How to handle PBF caught by recreational or sport fisheries
- (8) Use of tagging as a condition for exemption of validation
- (9) Communication between exporting members and importing members
- (10) Communication between members and the Secretariat
- (11) Role of the Secretariat
- (12) Relationship with non-members
- (13) Relationship with other CDSs and similar programs
- (14) Consideration to developing members
- (15) Schedule for introduction
- (16) Attachment
 - (i) Catch document forms
 - (ii) Re-export certificate forms
 - (iii) Instruction sheets for how to fill out forms
 - (iv) List of data to be extracted and compiled by the Secretariat

4. Work plan

The following schedule may need to be modified, depending on the progress on the WCPFC CDS for tropical tunas.

- 2017 The joint working group will submit this concept paper to the NC and IATTC for endorsement. NC will send the WCPFC annual meeting the recommendation to endorse the paper.
- 2018 The joint working group will hold a technical meeting, preferably around its meeting, to materialize the concept paper into a draft CMM. The joint working group will report the progress to the WCPFC via NC and the IATTC, respectively.
- 2019 The joint working group will hold a second technical meeting to improve the draft CMM. The joint working group will report the progress to the WCPFC via NC and the IATTC, respectively.
- 20XX The joint working group will hold a third technical meeting to finalize the draft CMM. Once it is finalized, the joint working group will submit it to the NC and the IATTC for adoption. The NC will send the WCPFC the recommendation to adopt it.

**JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE
MANAGEMENT OF PACIFIC BLUEFIN TUNA
NINTH SESSION (JWG-09)**

Kushiro, Japan (Hybrid)
10 – 13 July 2024

Japanese commitment on the prevention of increase of age-0 fish catch

In seeking understanding from the JWG Members on an increase for the small fish catch limit in the WCPFC Conservation and Management Measures for Pacific bluefin tuna, Japan makes its commitment to preventing its catch of age-0 fish (less than 2kg) from increasing beyond 50% of 2002-2004 level, even after the catch limit increase is adopted and implemented. Japan's efforts for this commitment include, but not limited to:

- The Fisheries Agency will give instructions to its authorized purse seine fishing vessels not to land age-0 fish (less than 2kg), except in case of bycatch.
- The Fisheries Agency will consult with relevant prefectural governments to seek their efforts to prevent increases of age-0 fish (less than 2kg) catch.
- The Fisheries Agency will give due consideration so that the increase of the small fish catch limit will not lead to increases of age-0 fish (less than 2kg) catch.

**JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE
MANAGEMENT OF PACIFIC BLUEFIN TUNA
NINTH SESSION (JWG-09)**

Kushiro, Japan (Hybrid)
10 – 13 July 2024

Recommended IATTC Resolution C-24-XX

**INTER-AMERICAN TROPICAL TUNA COMMISSION
102ND MEETING**

(Panama City, Panama)
02 – 06 September 2024

PROP X-X RESOLUTION C-24-XX

**MEASURES FOR THE CONSERVATION AND MANAGEMENT OF PACIFIC BLUEFIN
TUNA IN THE EASTERN PACIFIC OCEAN**

The Inter-American Tropical Tuna Commission (IATTC), gathered virtually, on the occasion of its 102nd Meeting:

Taking into account that the stock of Pacific bluefin tuna is caught in both the western and central Pacific Ocean (WCPO) and the eastern Pacific Ocean (EPO);

Recognizing that the 2024 stock assessment of Pacific bluefin tuna by the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC) shows the following:

- *Spawning stock biomass (SSB) has increased over the last twelve years, and reached the second rebuilding target (20%SSB_{F₀}) in 2021;*

Taking into consideration that IATTC Members, through resolutions and voluntary actions, have, from 2012 to 2021, effected 40% reductions in the catch of Pacific bluefin tuna across the entire range of age classes available in the EPO;

Taking into consideration that the IATTC adopted an interim harvest strategy to maintain the stock above 20%SSB_{F₀}, the IATTC scientific staff recommended that catch increases consider the performance relative to possible future reference points to be evaluated in a management strategy evaluation; and the Scientific Advisory Committee further recommended that the Commission consider a long-term harvest strategy with reference points after the MSE is completed;

Recalling that Article VII, paragraph 1(c) of the Antigua Convention provides that the Commission shall “adopt measures that are based on the best scientific evidence available to ensure the long-term conservation and sustainable use of the fish stocks covered by this Convention and to maintain or restore the populations of harvested species at levels of abundance which can produce the maximum sustainable yield...”;

Urging all IATTC Members and Cooperating Non-Members (CPCs) involved in this fishery to participate in a fair and equitable manner, and without exceptions, in the discussion and adoption of conservation measures applicable to the stock throughout its entire range;

Mindful that these measures are intended as an interim step towards assuring sustainability of the Pacific bluefin tuna resource, consistent with the precautionary approach, and the objectives of the

long-term management framework for the conservation and management of Pacific bluefin tuna in the EPO;

Noting that the IATTC has adopted mandatory conservation and management measures for Pacific bluefin tuna for 2012-2024, and that the measures resulted in reducing catches in the EPO;

Resolves as follows:

1. Any future catch limits shall be considered in cooperation between the IATTC and the WCPFC taking into account the historical proportional fishery impacts on SSB between fisheries in the EPO and fisheries in the WCPO, and the IATTC shall consider a more equitable balance of catch among Members that is reflective of historical harvest in Members' respective EEZs in the EPO.

The following paragraphs apply to 2025-2026:

2. The Commission shall implement this Resolution in accordance with the long-term management objectives of Pacific bluefin tuna in paragraph 4 of Resolution C-23-01 [Amendment to Resolution C-21-01].
3. Each CPC shall report its sport fishery catches annually by June 30. Each CPC shall ensure that catches of Pacific bluefin tuna by sportfishing vessels operating under its jurisdiction are managed in a manner consistent with commercial fisheries.
4. During 2025-2026, in the IATTC Convention Area, combined total commercial catches of Pacific bluefin tuna by all CPCs shall not exceed the catch limit of 12,585 metric tons. The biennial catch limits for each CPC are specified below in paragraph 5. Within each biennium, CPCs also shall not exceed a one-year maximum catch limit, as specified below in paragraph 5.⁴

5.

	Mexico	United States
2025-2026 biennial limit	10,763 mt	1,822 mt
One-year maximum for 2025-2026	6,296 mt	1,285 mt

- a. During 2025-2026, the United States may catch up to 1,822 metric tons for both years combined (biennial limit), and up to 1,285 metric tons in either year (one-year maximum). The catch limits for the United States will be subtracted and reserved from the total catch limits in paragraph 4 for the exclusive use of the United States.
- b. During 2025-2026, Mexico may catch up to 10,763 metric tons for both years combined (biennial limit), and up to 6,296 metric tons in either year (one-year maximum). The catch limits for Mexico will be subtracted and reserved from the total catch limits in paragraph 4 for the exclusive use of Mexico.

⁴ Notwithstanding paragraph 5, CPCs not referenced in paragraph 4 may catch Pacific bluefin tuna so long as their catch does not exceed 10 metric tons per year.

6. Any over-harvest shall be deducted from the catch limit in the following year in accordance with Paragraph 5 of Resolution C-23-01. Over-harvest of the 2023-2024 biennial catch limits established in Resolution C-21-05 shall be deducted from 2025-2026 catch limits applicable to this Resolution.
7. Under-harvest of 2023-2024 biennial catch limits established in Resolution C-21-05 shall be added to catch limits in this Resolution applicable to 2025-2026 in accordance with Paragraph 6 of Resolution C-23-01.
8. CPCs should endeavor to manage catches by vessels under their respective national jurisdictions in such a manner and through such mechanisms as might be applied, with the objective of reducing the proportion of fish of less than 30 kg in the catch toward 50% of total catch, taking into consideration the scientific advice of the ISC and the IATTC staff. At the annual meeting of the IATTC in 2025 and 2026, the Scientific Staff shall present the results of the previous year's fishing season in this regard for the Commission's review.
9. In each year in 2025-2026, each CPC shall report its commercial catches to the Director weekly after 50% of its annual catch limit in each year is reached.
10. The Director will send out notices to all CPCs when 75% and 90% of the limits in Paragraphs 4 or 5 have been reached. The Director will send out a notice to all CPCs when the limits in Paragraphs 4 or 5 have been reached.
11. By 31 January of each year in 2025-2026, the Director shall notify all CPCs of the catch limit for each year in 2025-2026 established in Paragraphs 4 and 5 of this resolution that accounts for any over-harvest or under-harvest in accordance with Paragraphs 6 and 7 of this Resolution, and Paragraphs 5 and 6 of Resolution C-23-01.
12. In each year in 2025-2026, the IATTC Scientific Staff shall present an assessment to the Scientific Advisory Committee of the effectiveness of this resolution also taking into consideration the results of the ISC's latest Pacific bluefin tuna stock assessment, harvest scenario projections performed by the ISC, and conservation and management measures for Pacific bluefin tuna adopted by the WCPFC. The Commission shall review and consider revising the management measures established in this Resolution based on the best available information, including the harvest strategy based on the management strategy evaluation expected to be completed in 2025, the latest assessment, recruitment information, projections or other relevant information, as well as outcomes of the Joint IATTC-WCPFC NC Working Group on Pacific bluefin tuna.

**JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE
MANAGEMENT OF PACIFIC BLUEFIN TUNA
NINTH SESSION (JWG-09)**

Kushiro, Japan (Hybrid)
10 – 13 July 2024

**CHAIR'S SUMMARY OF THE
5TH CATCH DOCUMENTATION SCHEME (CDS) TECHNICAL MEETING**

1. OPENING OF MEETING

1.1 Welcome

1. Mr. Shingo Ota, Chair of the CDS Working Group, opened the meeting and welcomed the participants.

1.2 Selection of rapporteur

2. Mr. Alex Meyer of Japan was appointed the rapporteur for the meeting.

1.3 Adoption of the agenda

3. The provisional agenda was adopted without any change (**Appendix 1**).

1.4 Meeting arrangements

4. The Chair explained the meeting arrangements.

2. DEVELOPMENT OF A CATCH DOCUMENTATION SCHEME FOR PACIFIC BLUEFIN TUNA

2.1 Review of the 4th CDS Technical Meeting and intersessional work

5. The Chair briefly reviewed the results of the 4th CDS Technical Meeting and intersessional work.

2.2 Budgetary and administrative consideration

6. Japan presented the options for budgetary and administrative considerations for the development of the electronic Pacific bluefin tuna CDS (ePBCD) system as described in the paper IATTC-NC-CDS05-2024/02.

7. The participants revisited and reaffirmed the conclusions drawn at the 4th CDS Technical Meeting except for the demarcation of responsibility between the IATTC and WCPFC Secretariats in the operational work for the development and maintenance of the system. As to the demarcation of responsibility between the two Secretariats, the participants shared a common understanding about the need to have coordination between WCPFC and IATTC for the ePBCD. For this purpose,

the CDS Technical Meeting will continue to work to craft the framework and elements to be included in the ePBCD. However, there were two differing views about the development of system. One view was to develop one system for both organizations, while the other was that each organization develops a separate but harmonized system. The participants agreed to continue to discuss these two views alongside ongoing discussions on the elements to be included in the ePBCD.

8. The participants agreed on the need to keep the IATTC informed of the ongoing discussions at the CDS Technical Meeting and to seek the IATTC's feedback. The participants suggested that the upcoming annual meeting of the IATTC would be an opportune time to seek such feedback.

2.3 Discussion on the draft CMM

9. As requested by the 4th CDS Technical Meeting, Korea presented a paper (IATTC-NC-CDS05-2024/03) on elements to be included in the draft CMM and potential discussion points related to each element.

10. Japan, on behalf of the Small Working Group under the CDS Technical Meeting, presented a draft CMM/Resolution for PBCD (IATTC-NC-CDS05-04).

11. The participants reviewed the elements to be included in the draft CMM and concluded the following.

- (1) General Provisions and Application

The participants tentatively agreed to take a stepwise approach to determining the scope of application and to initially set the scope as covering international transactions. The participants also agreed to exclude heads, eyes, roes, guts and tails from the scope of the production coverage as in the case of the Atlantic bluefin tuna.

- (2) Registers Required

The participants agreed to mandate registration of fishing vessels targeting PBF and farms. The participants agreed that further discussion on the treatment of vessels not targeting PBF is required, including looking at examples from other regional fisheries management organizations (RFMOs).

- (3) Documents and Information Required

The participants agreed to include vessel, catch, trade, caging, harvesting and transshipment. However, regarding transfers, the participants agreed on the need to continue to discuss the exact definition, looking at the actual transfer practice in the Pacific Ocean.

- (4) Tagging

The participants agreed that tagging should be an option, rather than mandatory, and that tagged fish could be exempt from government validation.

- (5) Validation

The participants agreed to follow the same process as in other RFMOs, whereby validation must be conducted by government authorities or organizations to which government authorities

have delegated this responsibility. If validation has been delegated to an organization, said organization needs to be registered with the applicable RFMO.

(6) Data Sharing and Confidentiality

The participants agreed on the need to continue to discuss data confidentiality arrangements and what kind of contribution can be made to the International Scientific Committee for Tuna and Tuna-Like Species in the North Pacific Ocean (ISC) through the CDS system.

(7) Verification

The participants agreed that the verification system for PBF will generally follow that of other RFMOs, particularly the International Commission for the Conservation of Atlantic Tunas (ICCAT), whereby validation of catch, farm or export information is conducted by the flag Member, farming Member or exporting Member, while verification is conducted by the importing Member. If the importing Member has any doubts, it will communicate with the exporting Member, and, for that purpose, each Member will register a contact point for the CDS.

(8) Communication

The participants agreed to hold further discussions on the appropriate kinds of communication and means of communication, taking into account discussions on the overall framework for the CDS system.

(9) Interaction with Domestic Program

The participants agreed to keep discussions on this item open, noting that the necessity of such a provision will depend on ongoing discussions on the overall CDS system.

(10) Exceptional Arrangements

The participants agreed on the need to continue to discuss potential exceptional arrangements, including the case of the malfunction of the ePBCD, looking at the practices of other RFMOs.

(11) Implementation and Review

The participants agreed to discuss this point further at a later stage, pending further progress in the discussions on the overall CDS system.

(12) Reconciliation process for any data discrepancies

The participants agreed that a reconciliation process for checking the validity of data entered into the CDS system is required and that such a process is expected to be carried out by the system automatically.

(13) CDS Forms (Annexes)

The participants agreed on the need to discuss what kind of form(s) would be most appropriate at a later stage, pending further progress in the discussions on the overall CDS system.

12. The participants agreed to task the Small Working Group under the CDS Technical Meeting to produce an amended draft CMM based on the above discussions and to present it at the next CDS Technical Meeting.

2.4 Discussion on a draft letter of agreement with the SPC

13. The participants reviewed and finalized the draft letter of agreement between the IATTC/WCPFC and the Pacific Community (SPC). **The participants recommended that the Joint IATTC and WCPFC-NC Working Group Meeting (JWG) on the Management of Pacific bluefin tuna review and endorse the draft letter of agreement (Appendix 2).**

3. NEXT MEETING

14. The participants recommended convening the next CDS Technical Meeting in conjunction with the next JWG meeting. The participants requested that the JWG discuss the appropriate duration for the next CDS Technical Meeting.

4. OTHER BUSINESS

15. At the request of the participants, the Chair agreed to write a cover letter to accompany his summary of the CDS Technical Meeting when it is submitted to the IATTC. The letter will explain the proposed way forward, which will respect the mandates and decision-making processes of the IATTC and the WCPFC, and the process for drafting and adopting a CMM/Resolution for PBCD. The letter will also highlight a draft letter of agreement among the SPC, the IATTC and the WCPFC on which further discussion and input by the IATTC is required.

16. The participants agreed that the Small Working Group under the CDS can begin informal communication with the external company (Shore informatics) contracted to develop the Commission for the Conservation of Southern Bluefin Tuna's (CCSBT's) e-CDS system regarding the feasibility of developing an ePBCD based on the CCSBT's CDS system.

5. REPORT TO THE JOINT WG

17. The Chair will provide his summary of the CDS technical meeting to the JWG.

**JOINT IATTC AND WCPFC-NC WORKING GROUP
FIFTH CATCH DOCUMENTATION SCHEME TECHNICAL MEETING
(CDS-05)**

Kushiro, Japan
09:00 – 12:30, 10 July 2024

ANNOTATED AGENDA

1. OPENING OF MEETING

1.1 Welcome

Mr. Shingo Ota, Chair of the CDS Technical Meeting, will open the meeting.

1.2 Selection of rapporteur

A rapporteur will be appointed.

1.3 Adoption of the agenda

An agenda will be adopted.

1.4 Meeting arrangements

The Chair will explain the meeting arrangements.

2. DEVELOPMENT OF A CATCH DOCUMENTATION SCHEME FOR PACIFIC BLUEFIN TUNA

2.1 Review of the 4th CDS Technical Meeting and intersessional work

The Chair will briefly review the results of the 4th CDS Technical Meeting and intersessional work, including a draft letter of agreement with the SPC.

2.2 Budgetary and administrative consideration

The meeting participants will discuss pending budgetary and administrative matters, which could include:

- (1) Basis of the system development
- (2) Location of the system
- (3) Use of an external company in the development and maintenance of the system
- (4) Demarcation of responsibility between the IATTC and WCPFC Secretariats in the operational work for the development and maintenance of the system
- (5) Cost Sharing between the IATTC and WCPFC and/or among CPCs of each RFMO

2.3 Discussion on the draft CMM

The meeting participants will discuss elements to be included in the CMM submitted by the small working group.

2.4 Discussion on a draft letter of agreement with the SPC

The meeting participants will discuss a draft letter of agreement with the SPC and, if possible, finalize it to be sent to the Joint IATTC and WCPFC-NC Working Group Meeting on the Management of Pacific bluefin tuna.

3. NEXT MEETING

The participants will discuss the venue and timing of the next meeting.

4. OTHER BUSINESS

5. REPORT TO THE JOINT WG

The Chair will summarize the results of the CDS Technical Meeting to be reported to the Joint IATTC-WCPFC NC Working Group.

Draft Agreement
between
THE PACIFIC COMMUNITY (SPC)
and
THE INTER-AMERICAN TROPICAL TUNA COMMISSION (IATTC)
and
THE WESTERN AND CENTRAL PACIFIC FISHERIES COMMISSION (WCPFC)

RECOGNIZING that both the Western Central Pacific Fisheries Commission (WCPFC) and Inter-American Tropical Tuna Commission (IATTC) (hereinafter collectively “WCPFC/IATTC”) compile tuna fisheries data for the main purpose of research, conservation and management of respective stocks of oceanic tuna species;

RECOGNIZING that SPC has developed a comprehensive database system (TUFMAN 2[©]) for managing and integrating tuna fisheries data, and that WCPFC/IATTC recognise the efficiencies and synergies in using the core code of this system;

RECOGNIZING that the CCSBT has completed development of an online data management system using TUFMAN 2[©] that is actively being used by the CCSBT, and continues to develop a trial electronic Catch Documentation Scheme (eCDS) for southern bluefin tuna, and WCPFC-IATTC is seeking to utilize those resources as a basis for development of electronic Pacific Bluefin Catch Documentation (e-PBCD) of the Pacific bluefin tuna;

RECOGNIZING that SPC understands the benefits they will receive for the enhancements made to the TUFMAN 2[©] system by WCPFC/IATTC through written mutual agreement;

This Agreement (hereinafter “the Agreement”) sets out the agreement between SPC and WCPFC/IATTC regarding the provision of the SPC-developed TUFMAN 2^{5©} core code to WCPFC/IATTC and conditions for that.

I. Agreed activities and conditions

1. With respect to the use of the TUFMAN 2[©] core code:
 - (a) WCPFC/IATTC have responsibility for satisfying any licensing requirements with respect to third party code or software components that are incorporated into the TUFMAN 2[©] core code provided.
 - (b) WCPFC/IATTC acknowledge that SPC owns and retains the right to maintain the core code without consultation. The SPC will notify the WCPFC/IATTC in writing in advance where possible or within 30 days of any planned maintenance activities.
 - (c) WCPFC/IATTC will advise SPC on any requirements to change the TUFMAN 2[©] core code and that the decision to change the core code will be taken by written mutual agreement between SPC and WCPFC/IATTC.
 - (d) WCPFC/IATTC will not allow access or distribution of the TUFMAN 2[©] core code to any third party without the consent of SPC.

⁵ ‘TUFMAN 2’ is defined to be the code, any part of the code, or modification thereof; “TUFMAN 2 core code” refers the core component of the TUFMAN2 code, that will be shared with the Parties for their use based on this Agreement.

- (e) WCPFC/IATTC will ensure that the conditions for the use of the TUFMAN 2© core code by any third party does not allow them to use or distribute the TUFMAN 2© core code beyond their specific work for WCPFC/IATTC.
- (f) WCPFC/IATTC will acknowledge the use of the TUFMAN 2© core code by including the following text in the software 'ABOUT' form:
 - This system has been derived from TUFMAN 2© platform, developed by Oceanic Fisheries Programme of the Pacific Community*
- (g) WCPFC/IATTC will allow access to any code they are responsible for developing under the TUFMAN 2© core code, to SPC.

2. With respect to the Agreement:

- (a) SPC will allow access to the TUFMAN 2© code to WCPFC/IATTC for the period of the Agreement.
- (b) SPC has no liability or responsibility for any third-party code or software components that are incorporated into the TUFMAN 2© core code provided.
- (c) SPC will consider any requirements to change the TUFMAN 2© core code provided by WCPFC/IATTC, noting that the decision to change the core code will be taken by mutual agreement between SPC and WCPFC/IATTC.
- (d) SPC will maintain a log of modifications to the TUFMAN 2© core code.
- (e) SPC reserves the right to revoke⁶ WCPFC/IATTC access and continued use of the TUFMAN 2© core code if there is evidence that any conditions of this Agreement have been breached.

3. The following general conditions apply:

- (a) An informal annual review will be conducted, by email, to report: (i) general updates of TUFMAN 2© from SPC during the previous year, and (ii) general description of the use of TUFMAN 2© by WCPFC/IATTC during the previous year.
- (b) SPC shall not be liable for any errors/decisions/faults in the TUFMAN 2© core code.

4. All Parties agree to:

- a) communicate regularly with each other and provide timely information on matters relating to the activities; and
- b) raise any issues of concern with the relevant Party's nominated focal point in clause VIII

5. Additional responsibilities, or changes to these responsibilities, may be generated and agreed to by the Parties.

II. Budget

- 6. The only budget implication for the Agreement is that SPC requires a cost recovery mechanism for any questions/support related to TUFMAN 2© that exceed 2 person-hours per month at the rate of USD 120 per hour.
- 7. WCPFC/IATTC will be notified via email when the 2 person-hours of support per month jointly for WCPFC/IATTC has been utilised, at which point the cost recovery mechanism would be engaged. A monthly summary of support subject to cost-recovery, if

⁶ Removal or revoking of WCPFC/IATTC's access to TUFMAN 2© core code means the removal or revoking of access to code maintained by SPC. The WCPFC/IATTC may continue to use the version of the TUFMAN 2© core code that it has at that time, so that its system can continue to be used and further developed.

applicable, shall be provided to WCPFC/IATTC.

8. WCPFC/IATTC agree to make financial contributions to SPC at the end of each calendar year to cover support referenced above provided by SPC that exceed 2 person-hours per month throughout the year, beyond the in-kind support detailed above, as required.

III. Confidentiality and use of data

9. Each Party will ensure that its staffs, employees, and contractors will maintain the confidentiality of any information it receives from the other Party that has been designated as confidential or which by its nature is deemed to be confidential. All Parties will only use confidential information for purposes of this Agreement.

IV. Intellectual property rights and use of collected data

10. WCPFC/IATTC recognise the intellectual property rights of SPC to TUFMAN 2. Nothing in this Agreement is intended to affect any existing intellectual property (IP) rights. WCPFC/IATTC intend to consult on the allocation of rights to any IP created in the course of activities under this Agreement.

V. Child protection

11. WCPFC/IATTC acknowledge SPC's Child Protection Policy as updated from time to time and will use its best endeavours to act in accordance with those principles and to abide by other relevant international declarations, conventions and arrangements.

VI. Visibility

12. The Parties maintain sole authority over their respective names, logos and emblems. No Party is authorised to make use of the other Party's name, logo nor emblem, except as separately agreed in writing.

VII. Focal points

13. The focal points for this Agreement are as follows. Any subsequent changes or replacements shall be notified to other Parties in writing:

Mr Bruno Deprez Systems Development Manager Oceanic Fisheries Programme Pacific Community (SPC) Noumea, New Caledonia E: brunod@spc.int Ph: (+687) 26.20.00	TBD Inter-American tropical Tuna Commission (IATTC) La Jolla, CA, USA E: Ph:	TBD Western and Central Pacific Fisheries Commission (WCPFC) Pohnpei, Federated States of Micronesia E: Ph:
---	---	---

VIII. Resolution of disputes

14. All Parties shall make their best efforts to amicably settle any dispute, controversy or claim arising out of this Agreement. Any disputes that might arise from or in relation to this Agreement, if not settled by negotiation, shall be settled by arbitration in accordance with the Arbitration Rules of the United Nations Commission on International Trade Law (UNCITRAL). This Agreement will be governed by the general principles of international law.

IX. Privileges and immunities

15. Nothing in or relating to this Agreement shall be deemed a waiver of any Party's privileges and immunities.

X. Entry into force and term of agreement

16. This Agreement will enter into force on the date of its signature by all Parties and will remain in force until the Agreement is amended provided for in Clause XI or termination is triggered by a Party provided for in Clause XII.

XI. Amendment of the Agreement

17. This Agreement may be amended at any time by mutual consent among all Parties. The amendment will enter into force on the date of its signature by all Parties.

XII. Termination

18. Any Party may terminate this Agreement by giving a written notice to the other Parties. At the termination of the Agreement, SPC will remove access of the Parties to the TUFMAN 2 core code. Clause III will extend beyond the termination of the Agreement.

Dr. Paula Vivili
Deputy Director-General
Pacific Community (SPC)

Dr. Arnulfo Franco
Executive Director
IATTC

Ms. Rhea Moss-Christian
Executive Director
WCPFC

Date:

Date:

Date:

**JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE
MANAGEMENT OF PACIFIC BLUEFIN TUNA
NINTH SESSION (JWG-09)**

Kushiro, Japan (Hybrid)
10 – 13 July 2024

**Conservation and Management Measure for the
Monitoring, Controlling, and Surveillance of Pacific Bluefin Tuna**

The Western and Central Pacific Fisheries Commission (WCPFC):

Noting that, Conservation and Management Measure CMM2023-02 establishes annual catch limit of Pacific bluefin tuna for the management of the species,

Also noting that, Conservation and Management Measure CMM2023-02 paragraph 11 requires CCMs, to the extent possible, take measures necessary to prevent commercial transaction of Pacific bluefin tuna that undermine the effectiveness of the CMM,

Further noting that, Conservation and Management Measure CMM2023-02 paragraph 13 requires CCMs to take measures necessary to strengthen monitoring and data collecting system for Pacific bluefin tuna fisheries and farming,

Adopts, in accordance with Article 10 of the WCPFC Convention that:

1. Each CCM that has Pacific bluefin tuna fisheries and/or farming shall report to the Executive Secretary by 15 June each year on the implementation of its monitoring and control measures it has taken in the previous calendar year to ensure its compliance with CMM2023-02 that include the following components:

(1) Monitoring and control measures for fisheries

- a. Registration of commercial fishing vessels and set nets that are authorized to fish for Pacific bluefin tuna
- b. Allocation of catch limits by fishery within the CCMs, as appropriate
- c. Reporting requirements for catches for fisheries (targeted, incidental, and discards)
- d. Measures to monitor catch (e.g. landing receipts, landing inspection, observer program, etc.)
- e. Measures to monitor domestic transactions

(2) Monitoring and control measures for farming

- a. Registration of farms that are authorized to farm Pacific bluefin tuna
- b. Reporting requirements for caging of fish
- c. Reporting requirements for harvest of farmed fish
- d. Measures to monitor farmed fish (e.g. stereovideo camera)

2. The Joint IATTC-WCPFC NC Working Group shall review the implementation of monitoring, control and surveillance measures reported by CCMs in accordance with paragraph 1 and the outcomes of the review shall be reported to the Northern Committee for their consideration on necessary revisions of WCPFC Conservation and Management Measures.

**JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE
MANAGEMENT OF PACIFIC BLUEFIN TUNA
NINTH SESSION (JWG-09)**

Kushiro, Japan (Hybrid)
10 – 13 July 2024

WORK PLAN FOR DEVELOPMENT OF A LONG-TERM HARVEST STRATEGY FOR PBF (INCLUDING MSE)

The following is a proposed work plan for developing a long-term Harvest Strategy (including MSE) for Pacific bluefin tuna:

2024 (JWG9):

- ISC to complete a benchmark assessment for PBF and JWG may expect an update on progress of MSE.
- If additional information is requested by the ISC from the JWG relevant to the MSE, the JWG should task its members to solicit input from its stakeholders and task itself to address this at JWG10 in 2025, as appropriate.
- JWG recommends new management measures based on Interim Harvest Strategy.

2025 (JWG10):

- ISC presents results from the MSE to JWG10 in 2025
- JWG recommends a final HS to the WCPFC and IATTC for adoption.

Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean

NORTHERN COMMITTEE
TWENTIETH REGULAR SESSION

Kushiro, Japan (Hybrid)
15 – 16 July 2024

Draft Conservation and Management Measure for Pacific Bluefin Tuna

CMM 2024-XX

The Western and Central Pacific Fisheries Commission (WCPFC):

Recognizing that WCPFC6 adopted Conservation and Management Measure for Pacific bluefin tuna (CMM 2009-07) and the measure was revised twelve times since then (CMM 2010-04, CMM 2012-06, CMM 2013-09, CMM 2014-04, CMM 2015-04, CMM 2016-04, CMM2017-08, CMM 2018-02, CMM 2019-02, CMM 2020-02, CMM 2021-02 and CMM 2023-02) based on the conservation advice from the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC) on this stock;

Noting the latest stock assessment provided by ISC in 2024, indicating the following:

- Spawning stock biomass (SSB) has increased substantially in the last 12 years, and achieved its second rebuilding target ($20\%SSBF=0$) in 2021;
- A substantial decrease in estimated F has been observed in ages 0-2 in 2020-2022 relative to 2002-2004 and 2012-2014;
- Since the early 1990s, the WCPO purse seine fisheries, in particular those targeting small fish (age 0-1) have had an increasing impact on the spawning stock biomass, but its impact has reduced in recent years;
- Harvesting small fish has a greater impact on future spawning stock biomass than harvesting large fish of the same amount;
- The projection results indicate that increases of catch limits are possible while maintaining SSB greater than $20\%SSBF=0$ with a 60% probability under several scenarios requested by JWG8, and while allowing SSB to steadily increase above the second rebuilding target under additionally requested certain scenarios ; and
- The projection results also indicate that the maximum allowable transfer from small fish catch limits to large fish catch limits utilizing the conversion factor has a positive effect on future SSB.

Noting the conservation advice from the ISC that research on a recruitment index for the stock assessment should be pursued, and maintenance of a reliable adult abundance index should be ensured;

Recalling that paragraph (4) of the Article 22 of the WCPFC Convention, which requires cooperation between the Commission and the IATTC to reach agreement to harmonize CMMs for fish stocks such as Pacific bluefin tuna that occur in the convention areas of both organizations;

Also recalling Article 10 (1) (a) of the WCPFC Convention, which provides that the Commission may determine the total allowable catch or total level of fishing effort within the Convention Area for such highly migratory fish stocks and decide and adopt such other conservation and management measures and recommendations as may be necessary to ensure the long-term sustainability of such stocks without prejudice to the sovereign rights of coastal States for the purpose of exploring and exploiting, conserving and managing highly migratory fish stocks within areas under national jurisdiction;

Conscious of the need to identify, analyze and respond to the impacts of climate change on the tuna and tuna-like species in the North Pacific Ocean in a timely manner to enhance the effectiveness of the conservation and management for the species;

Adopts, in accordance with Article 10 of the WCPFC Convention that:

General Provision

21. This conservation and management measure has been prepared to implement the Harvest Strategy for Pacific Bluefin Tuna Fisheries (Harvest Strategy 2023-02), and the Northern Committee shall periodically review and recommend revisions to this measure as needed to implement the Harvest Strategy.

Management measures

22. CCMs shall take measures necessary to ensure that total fishing effort by their vessel fishing for Pacific bluefin tuna in the area north of the 20° N shall stay below the 2002–2004 annual average levels.

23. Japan, Korea and Chinese Taipei shall, respectively, take measures necessary to ensure that its catches of Pacific bluefin tuna less than 30 kg and Pacific bluefin tuna 30 kg or larger shall not exceed the annual catch limits in the tables below, without prejudice to future agreement on allocation of TAC.

Pacific Bluefin tuna less than 30kg

	2002-2004 average annual level	Annual initial catch limit
Japan	8,015 metric tons	4,407 metric tons
Korea	1,435 metric tons	718 metric tons

Pacific Bluefin tuna 30kg or larger

	2002-2004 average annual level	Annual initial catch limit
Japan	4,882 metric tons	8,421 metric tons
Korea	0 metric tons	501 metric tons
Chinese Taipei	1,709 metric tons	2,947 metric tons

24. CCMs with a base line catch (2002-2004 average annual level) of 10 tons or less of Pacific bluefin tuna 30 kg or larger may increase their catch as long as it does not exceed 10 metric tons per year. The catch limit of Pacific bluefin tuna 30 kg or larger for New Zealand shall be 200 metric tonnes per year

and for Australia 40 metric tonnes per year, taking into account their nature as bycatch fisheries conducted in their waters in the Southern hemisphere.¹

25. Any overage or underage of the catch limit shall be deducted from or may be added to the catch limit for the following year. The maximum underage that a CCM may carry over in any given year shall not exceed 17% of its annual initial catch limit.
26. CCMs described in paragraph 3 may use part of the catch limit for Pacific bluefin tuna smaller than 30kg stipulated in paragraph 3 above to catch Pacific bluefin tuna 30kg or larger in the same year. In this case, the amount of catch 30kg or larger shall be counted against the catch limit for Pacific bluefin tuna smaller than 30kg.² CCMs shall not use the catch limit for Pacific bluefin tuna 30kg or larger to catch Pacific bluefin tuna smaller than 30kg.
27. CCMs are encouraged to conduct research activities to collect reliable indices of recruitment stock and adult spawning stock. Notwithstanding paragraph 3 and 4, setting a catch limit dedicated for research activities to develop and maintain indices may be considered by WCPFC through the Northern Committee based on research plans reviewed and supported by the ISC.
28. All CCMs except Japan shall implement the limits in paragraph 3 on a calendar-year basis. Japan shall implement the limits using a management year other than the calendar year for some of its fisheries and have its implementation assessed with respect to its management year. To facilitate the assessment, Japan shall:
 - c. Use the following management years:
 2. For its fisheries licensed by the Ministry of Agriculture, Forestry and Fisheries, use the calendar year as the management year.
 3. For its other fisheries, use 1 April – 31 March as the management year.³
 - d. In its annual reports for PBF, for each category described in a.1 and a.2 above, complete the required reporting template for both the management year and calendar year clearly identifying fisheries for each management year.
29. CCMs shall report to the Executive Director by 15 June each year their fishing effort and <30 kg and >=30 kg catch levels, by fishery, for the previous 3 years, accounting for all catches, including discards. CCMs shall report their annual catch limits and their annual catches of PBF, with adequate computation details, to present their implementation for paragraph 5 and 6, if the measures and arrangements in the said paragraphs and relevant footnotes applied. The Executive Director will compile this information each year into an appropriate format for the use of the Northern Committee.
30. CCMs shall intensify cooperation for effective implementation of this CMM, including juvenile catch reduction. For this purpose, CCMs will make every effort to prevent their catch of age-0 fish (less than 2kg) from increasing beyond their 50% of 2002-2004 levels.
31. CCMs, in particular those catching juvenile Pacific bluefin tuna, shall take measures to monitor and obtain prompt results of recruitment of juveniles each year.

¹ New Zealand and Australia may carry forward up to 35 tonnes per year and 10 tonnes per year, respectively, from 2019, 2020, 2021 and 2022 to 2023 and 2024. This special arrangement does not create any precedent in future management.

² A CCM may count the amount of catch 30kg or larger adjusted with the conversion factor 0.68 (catch 30kg or larger multiplied by 0.68) against the catch limit for Pacific bluefin tuna smaller than 30kg.

³ For the category described a.2 of paragraph 7, the TCC shall assess in year 20XX its implementation during the management year that starts 1 April 20XX-1 (e.g., in the 2020 compliance review, the TCC will assess Japan's implementation for its fisheries licensed by the Ministry of Agriculture, Forestry and Fisheries during calendar-year 2019 and for its other fisheries during 1 April 2019 through 31 March 2020).

32. Consistent with their rights and obligations under international law, and in accordance with domestic laws and regulations, CCMs shall, to the extent possible, take measures necessary to prevent commercial transaction of Pacific bluefin tuna and its products that undermine the effectiveness of this CMM, especially measures prescribed in the paragraph 3 above. CCMs shall cooperate for this purpose.
33. CCMs shall cooperate to establish a catch documentation scheme (CDS) to be applied to Pacific bluefin tuna in accordance with the **Attachment** of this CMM.
34. CCMs shall also take measures necessary to strengthen monitoring and data collecting system for Pacific bluefin tuna fisheries and farming in order to improve the data quality and timeliness of all the data reporting.
35. CCMs shall report to Executive Director by 15 June annually measures they used to implement paragraphs 2, 3, 4, 8, 9, 10, 11, 12, 14 and 17 of this CMM. CCMs shall also monitor the international trade of the products derived from Pacific bluefin tuna and report the results to Executive Director by 15 June annually. The Northern Committee shall annually review those reports CCMs submit pursuant to this paragraph and if necessary, advise a CCM to take an action for enhancing its compliance with this CMM.
36. The WCPFC Executive Director shall communicate this CMM to the IATTC Secretariat and its contracting parties whose fishing vessels engage in fishing for Pacific bluefin tuna in EPO and request them to take equivalent measures in conformity with this CMM.
37. To enhance effectiveness of this measure, CCMs are encouraged to communicate with and work with the concerned IATTC contracting parties through the Joint IATTC and WCPFC-NC Working Group on the Management of Pacific Bluefin Tuna or bilaterally.
38. The provisions of paragraphs 2 and 3 shall not prejudice the legitimate rights and obligations under international law of those small island developing State Members and participating territories in the Convention Area whose current fishing activity for Pacific bluefin tuna is limited, but that have a real interest in fishing for the species, that may wish to develop their own fisheries for Pacific bluefin tuna in the future.
39. The provisions of paragraph 18 shall not provide a basis for an increase in fishing effort by fishing vessels owned or operated by interests outside such developing coastal State, particularly Small Island Developing State Members or participating territories, unless such fishing is conducted in support of efforts by such Members and territories to develop their own domestic fisheries.
40. This CMM replaces CMM 2023-02. On the basis of a new stock assessment conducted by ISC, the harvest strategy based on the management strategy evaluation expected to be completed in 2025, fair and equitable balance of fishing opportunities between the WCPO and the EPO as well as among Members, and other pertinent information such as the impact of climate change, as appropriate, this CMM shall be reviewed and may be amended as appropriate in 2026.

Development of a Catch Document Scheme for Pacific Bluefin Tuna

Background

At the 1st joint working group meeting between NC and IATTC, held in Fukuoka, Japan from August 29 to September 1, 2016, participants supported to advance the work on the Catch Documentation Scheme (CDS) in the next joint working group meeting, in line with the development of overarching CDS framework by WCPFC and taking into account of the existing CDS by other RFMOs.

1. Objective of the Catch Document Scheme

The objective of CDS is to combat IUU fishing for Pacific Bluefin Tuna (PBF) by providing a means of preventing PBF and its products identified as caught by or originating from IUU fishing activities from moving through the commodity chain and ultimately entering markets.

2. Use of electronic scheme

Whether CDS will be a paper based scheme, an electronic scheme or a gradual transition from a paper based one to an electronic one should be first decided since the requirement of each scheme would be quite different.

3. Basic elements to be included in the draft conservation and management measure (CMM)

It is considered that at least the following elements should be considered in drafting CMM.

- (1) Objective
- (2) General provision
- (3) Definition of terms
- (4) Validation authorities and validating process of catch documents and re-export certificates
- (5) Verification authorities and verifying process for import and re-import
- (6) How to handle PBF caught by artisanal fisheries
- (7) How to handle PBF caught by recreational or sport fisheries
- (8) Use of tagging as a condition for exemption of validation
- (9) Communication between exporting members and importing members
- (10) Communication between members and the Secretariat
- (11) Role of the Secretariat
- (12) Relationship with non-members
- (13) Relationship with other CDSs and similar programs
- (14) Consideration to developing members
- (15) Schedule for introduction
- (16) Attachment
 - (i) Catch document forms
 - (ii) Re-export certificate forms
 - (iii) Instruction sheets for how to fill out forms
 - (iv) List of data to be extracted and compiled by the Secretariat

4. Work plan

The following schedule may need to be modified, depending on the progress on the WCPFC CDS for tropical tunas.

- 2017 The joint working group will submit this concept paper to the NC and IATTC for endorsement. NC will send the WCPFC annual meeting the recommendation to endorse the paper.
- 2018 The joint working group will hold a technical meeting, preferably around its meeting, to materialize the concept paper into a draft CMM. The joint working group will report the progress to the WCPFC via NC and the IATTC, respectively.
- 2019 The joint working group will hold a second technical meeting to improve the draft CMM. The joint working group will report the progress to the WCPFC via NC and the IATTC, respectively.
- 20XX The joint working group will hold a third technical meeting to finalize the draft CMM. Once it is finalized, the joint working group will submit it to the NC and the IATTC for adoption. The NC will send the WCPFC the recommendation to adopt it.

**Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**NORTHERN COMMITTEE
TWENTIETH REGULAR SESSION**

Kushiro, Japan (Hybrid)
15 – 16 July 2024

**Draft Conservation and Management Measure for the
Monitoring, Controlling, and Surveillance of Pacific Bluefin Tuna**

CMM 2024-XX

The Western and Central Pacific Fisheries Commission (WCPFC):

Noting that, Conservation and Management Measure CMM2023-02 establishes annual catch limit of Pacific bluefin tuna for the management of the species,

Also noting that, Conservation and Management Measure CMM2023-02 paragraph 11 requires CCMs, to the extent possible, take measures necessary to prevent commercial transaction of Pacific bluefin tuna that undermine the effectiveness of the CMM,

Further noting that, Conservation and Management Measure CMM2023-02 paragraph 13 requires CCMs to take measures necessary to strengthen monitoring and data collecting system for Pacific bluefin tuna fisheries and farming,

Adopts, in accordance with Article 10 of the WCPFC Convention that:

1. Each CCM that has Pacific bluefin tuna fisheries and/or farming shall report to the Executive Secretary by 15 June each year on the implementation of its monitoring and control measures it has taken in the previous calendar year to ensure its compliance with CMM2023-02 that include the following components:

(1) Monitoring and control measures for fisheries

- a. Registration of commercial fishing vessels and set nets that are authorized to fish for Pacific bluefin tuna
- b. Allocation of catch limits by fishery within the CCMs, as appropriate
- c. Reporting requirements for catches for fisheries (targeted, incidental, and discards)
- d. Measures to monitor catch (e.g. landing receipts, landing inspection, observer program, etc.)
- e. Measures to monitor domestic transactions

(2) Monitoring and control measures for farming

- a. Registration of farms that are authorized to farm Pacific bluefin tuna
- b. Reporting requirements for caging of fish
- c. Reporting requirements for harvest of farmed fish
- d. Measures to monitor farmed fish (e.g. stereovideo camera)

2. The Joint IATTC-WCPFC NC Working Group shall review the implementation of monitoring, control and surveillance measures reported by CCMs in accordance with paragraph 1 and the outcomes of the

review shall be reported to the Northern Committee for their consideration on necessary revisions of WCPFC Conservation and Management Measures.

Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean

NORTHERN COMMITTEE
TWENTIETH REGULAR SESSION

Kushiro, Japan (Hybrid)
15 – 16 July 2024

Draft Agreement between the SPC and the WCPFC/IATTC

Draft Agreement
between
THE PACIFIC COMMUNITY (SPC)
and
THE INTER-AMERICAN TROPICAL TUNA COMMISSION (IATTC)
and
THE WESTERN AND CENTRAL PACIFIC FISHERIES COMMISSION (WCPFC)

RECOGNIZING that both the Western Central Pacific Fisheries Commission (WCPFC) and Inter-American Tropical Tuna Commission (IATTC) (hereinafter collectively “WCPFC/IATTC”) compile tuna fisheries data for the main purpose of research, conservation and management of respective stocks of oceanic tuna species;

RECOGNIZING that SPC has developed a comprehensive database system (TUFMAN 2[®]) for managing and integrating tuna fisheries data, and that WCPFC/IATTC recognise the efficiencies and synergies in using the core code of this system;

RECOGNIZING that the CCSBT has completed development of an online data management system using TUFMAN 2[®] that is actively being used by the CCSBT, and continues to develop a trial electronic Catch Documentation Scheme (eCDS) for southern bluefin tuna, and WCPFC-IATTC is seeking to utilize those resources as a basis for development of electronic Pacific Bluefin Catch Documentation (e-PBCD) of the Pacific bluefin tuna;

RECOGNIZING that SPC understands the benefits they will receive for the enhancements made to the TUFMAN 2[®] system by WCPFC/IATTC through written mutual agreement;

This Agreement (hereinafter “the Agreement”) sets out the agreement between SPC and WCPFC/IATTC regarding the provision of the SPC-developed TUFMAN 2¹⁰[®] core code to WCPFC/IATTC and conditions for that.

I. Agreed activities and conditions

1. With respect to the use of the TUFMAN 2[®] core code:

¹⁰ ‘TUFMAN 2’ is defined to be the code, any part of the code, or modification thereof; “TUFMAN 2 core code” refers the core component of the TUFMAN2 code, that will be shared with the Parties for their use based on this Agreement.

- (a) WCPFC/IATTC have responsibility for satisfying any licensing requirements with respect to third party code or software components that are incorporated into the TUFMAN 2© core code provided.
- (b) WCPFC/IATTC acknowledge that SPC owns and retains the right to maintain the core code without consultation. The SPC will notify the WCPFC/IATTC in writing in advance where possible or within 30 days of any planned maintenance activities.
- (c) WCPFC/IATTC will advise SPC on any requirements to change the TUFMAN 2© core code and that the decision to change the core code will be taken by written mutual agreement between SPC and WCPFC/IATTC.
- (d) WCPFC/IATTC will not allow access or distribution of the TUFMAN 2© core code to any third party without the consent of SPC.
- (e) WCPFC/IATTC will ensure that the conditions for the use of the TUFMAN 2© core code by any third party does not allow them to use or distribute the TUFMAN 2© core code beyond their specific work for WCPFC/IATTC.
- (f) WCPFC/IATTC will acknowledge the use of the TUFMAN 2© core code by including the following text in the software 'ABOUT' form:
 - This system has been derived from TUFMAN 2© platform, developed by Oceanic Fisheries Programme of the Pacific Community*
- (g) WCPFC/IATTC will allow access to any code they are responsible for developing under the TUFMAN 2© core code, to SPC.

2. With respect to the Agreement:

- (a) SPC will allow access to the TUFMAN 2© code to WCPFC/IATTC for the period of the Agreement.
- (b) SPC has no liability or responsibility for any third-party code or software components that are incorporated into the TUFMAN 2© core code provided.
- (c) SPC will consider any requirements to change the TUFMAN 2© core code provided by WCPFC/IATTC, noting that the decision to change the core code will be taken by mutual agreement between SPC and WCPFC/IATTC.
- (d) SPC will maintain a log of modifications to the TUFMAN 2© core code.
- (e) SPC reserves the right to revoke¹¹ WCPFC/IATTC access and continued use of the TUFMAN 2© core code if there is evidence that any conditions of this Agreement have been breached.

3. The following general conditions apply:

- (a) An informal annual review will be conducted, by email, to report: (i) general updates of TUFMAN 2© from SPC during the previous year, and (ii) general description of the use of TUFMAN 2© by WCPFC/IATTC during the previous year.
- (b) SPC shall not be liable for any errors/decisions/faults in the TUFMAN 2© core code.

4. All Parties agree to:

- a) communicate regularly with each other and provide timely information on matters relating to the activities; and
- b) raise any issues of concern with the relevant Party's nominated focal point in clause VIII

¹¹ Removal or revoking of WCPFC/IATTC's access to TUFMAN 2© core code means the removal or revoking of access to code maintained by SPC. The WCPFC/IATTC may continue to use the version of the TUFMAN 2© core code that it has at that time, so that its system can continue to be used and further developed.

5. Additional responsibilities, or changes to these responsibilities, may be generated and agreed to by the Parties.

II. Budget

6. The only budget implication for the Agreement is that SPC requires a cost recovery mechanism for any questions/support related to TUFMAN 2© that exceed 2 person-hours per month at the rate of USD 120 per hour.
7. WCPFC/IATTC will be notified via email when the 2 person-hours of support per month jointly for WCPFC/IATTC has been utilised, at which point the cost recovery mechanism would be engaged. A monthly summary of support subject to cost-recovery, if applicable, shall be provided to WCPFC/IATTC.
8. WCPFC/IATTC agree to make financial contributions to SPC at the end of each calendar year to cover support referenced above provided by SPC that exceed 2 person-hours per month throughout the year, beyond the in-kind support detailed above, as required.

III. Confidentiality and use of data

9. Each Party will ensure that its staffs, employees, and contractors will maintain the confidentiality of any information it receives from the other Party that has been designated as confidential or which by its nature is deemed to be confidential. All Parties will only use confidential information for purposes of this Agreement.

IV. Intellectual property rights and use of collected data

10. WCPFC/IATTC recognise the intellectual property rights of SPC to TUFMAN 2. Nothing in this Agreement is intended to affect any existing intellectual property (IP) rights. WCPFC/IATTC intend to consult on the allocation of rights to any IP created in the course of activities under this Agreement.

V. Child protection

11. WCPFC/IATTC acknowledge SPC’s Child Protection Policy as updated from time to time and will use its best endeavours to act in accordance with those principles and to abide by other relevant international declarations, conventions and arrangements.

VI. Visibility

12. The Parties maintain sole authority over their respective names, logos and emblems. No Party is authorised to make use of the other Party’s name, logo nor emblem, except as separately agreed in writing.

VII. Focal points

13. The focal points for this Agreement are as follows. Any subsequent changes or replacements shall be notified to other Parties in writing:

Mr Bruno Deprez Systems Development Manager Oceanic Fisheries Programme Pacific Community (SPC) Noumea, New Caledonia E: brunod@spc.int Ph: (+687) 26.20.00	TBD Inter-American tropical Tuna Commission (IATTC) La Jolla, CA, USA E: Ph:	TBD Western and Central Pacific Fisheries Commission (WCPFC) Pohnpei, Federated States of Micronesia E: Ph:
---	---	---

VIII. Resolution of disputes

14. All Parties shall make their best efforts to amicably settle any dispute, controversy or claim arising out of this Agreement. Any disputes that might arise from or in relation to

this Agreement, if not settled by negotiation, shall be settled by arbitration in accordance with the Arbitration Rules of the United Nations Commission on International Trade Law (UNCITRAL). This Agreement will be governed by the general principles of international law.

IX. Privileges and immunities

15. Nothing in or relating to this Agreement shall be deemed a waiver of any Party’s privileges and immunities.

X. Entry into force and term of agreement

16. This Agreement will enter into force on the date of its signature by all Parties and will remain in force until the Agreement is amended provided for in Clause XI or termination is triggered by a Party provided for in Clause XII.

XI. Amendment of the Agreement

17. This Agreement may be amended at any time by mutual consent among all Parties. The amendment will enter into force on the date of its signature by all Parties.

XII. Termination

18. Any Party may terminate this Agreement by giving a written notice to the other Parties. At the termination of the Agreement, SPC will remove access of the Parties to the TUFMAN 2 core code. Clause III will extend beyond the termination of the Agreement.

Dr. Paula Vivili
Deputy Director-General
Pacific Community (SPC)

Dr. Arnulfo Franco
Executive Director
IATTC

Ms. Rhea Moss-Christian
Executive Director
WCPFC

Date:

Date:

Date:

**Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**NORTHERN COMMITTEE
TWENTIETH REGULAR SESSION**

Kushiro, Japan (Hybrid)
15 – 16 July 2024

WORK PROGRAMME FOR THE NORTHERN COMMITTEE

Work areas	Objectives	Annual tasks		
	2025–2027	2025	2026	2027
1. Northern stocks				
a. Monitor status; consider management action	Review status and take action as needed for:			
	<p><u>North Pacific albacore</u> Tasks</p> <p>(A) Review members' reports on their implementation of CMM 2019-03.</p> <p>(B) Implement the Harvest Strategy, including:</p> <p>(1) monitor if LRP is breached;</p> <p>(2) continue to work on other elements of harvest strategies, if appropriate based on MSE;</p>	<p>Review the compiled members' reports and identify and rectify shortcomings.</p> <p>Further development of harvest strategy including review of exceptional circumstances and information from ISC on translating fishing intensity into management controls as appropriate to</p>	<p>Review the compiled members' reports and identify and rectify shortcomings.</p> <p>Continue to further development of harvest strategy to complete Task (B)(2).</p>	<p>Review the compiled members' reports and identify and rectify shortcomings.</p> <p>Continue to further development of harvest strategy to complete Task (B)(2).</p>

	(3) recommend any changes to CMM.	complete Task (B)(2).	Obtain the new assessment results from ISC and recommend any necessary changes to CMM. (Task (B) (3))	
	<p><u>Pacific bluefin tuna</u> Tasks</p> <p>(A) Review members' reports on their implementation of CMM on Pacific bluefin tuna.</p> <p>(B) Implement the Harvest Strategy including:</p> <ol style="list-style-type: none"> (1) monitor probability of second rebuilding target being achieved on schedule; (2) continue to work to establish LRP, TRP and other elements of harvest strategy; (3) recommend any changes to CMM; (4) support MSE development, including stakeholder workshops, considering recommendations of the NC-IATTC Joint Working Group on the Management of Pacific Bluefin Tuna (JWG). 	<p>Review the compiled members' reports and identify and rectify shortcomings.</p> <p>Work in the JWG to complete the harvest strategy for PBF through MSE.</p> <p>If additional information is requested by the ISC relevant to the MSE, solicit input from its stakeholders and task itself to address this at JWG10 in 2025, as appropriate.</p>	<p>Review the compiled members' reports and identify and rectify shortcomings.</p> <p>If additional information is requested by the ISC relevant to the MSE, solicit input from its stakeholders and task itself to address this at JWG11 in 2026, as appropriate</p> <p>Obtain further advice from ISC through MSE process, review CMM and recommend any necessary changes to CMM.</p>	<p>Review the compiled members' reports and identify and rectify shortcomings.</p> <p>Review the 2027 stock assessment results and recommend any necessary changes to CMM. (Task (B) (3)).</p>

	(C) Develop CDS	Complete development of CDS.		
	Swordfish Further develop the harvest strategy consistent with CMM 2014-06, including consideration of a target reference point and associated harvest control rule.	Consider appropriate amendment to the CMM. Consider responses from the ISC to NC requests on possible use of MSE and timeline for its introduction. Consider and recommend appropriate TRP and associated HCR.		
b. Data	Achieve timely submission of complete data needed for assessments, formulation of measures, and review of Commission decisions. Consider systems to validate catch data	CCMs participating in the NC submit complete data on fisheries for northern stocks to the Commission. Encourage submission to Commission of Pacific bluefin tuna, North Pacific albacore, North Pacific striped marlin and swordfish data from all CCMs and make available to ISC.	CCMs participating in the NC submit complete data on fisheries for northern stocks to the Commission. Encourage submission to Commission of Pacific bluefin tuna, North Pacific albacore, North Pacific striped marlin and swordfish data from all CCMs and make available to ISC.	CCMs participating in the NC submit complete data on fisheries for northern stocks to the Commission. Encourage submission to Commission of Pacific bluefin tuna, North Pacific albacore, North Pacific striped marlin and swordfish data from all CCMs and make available to ISC.
c. Scientific support	Provide support for scientific studies.			
2. Non-northern stocks				

	<u>Striped marlin</u>	Review information from ISC that may inform management advice for the rebuilding plan	Review information from ISC that may inform management advice for the rebuilding plan	Review the 2027 stock assessment results.
	<u>Blue shark</u>	Review information from ISC that may inform management advice	Review information from ISC that may inform management advice	Review information from ISC that may inform management advice
3. Non-target, associated, dependent species				
a. Seabirds	Evaluate effectiveness of current measures to minimize catch and mortality, and improve them as needed.	Review implementation of CMM 2018-03 in the northern area.	Review implementation of CMM 2018-03 in the northern area.	Review implementation of CMM 2018-03 in the northern area.
b. Sea turtles	Consider appropriate implementation of methods to minimize catch and mortality.	Review mitigation research results and consider management action.	Review mitigation research results and consider management action.	Review mitigation research results and consider management action.
c. Sharks	Consider appropriate implementation for CMM 2019-04 in the northern area.	Review scientific advice from ISC, if any, and consider management options as necessary. Encourage submission of all shark data to ISC.	Review scientific advice from ISC, if any, and consider management options as necessary. Encourage submission of all shark data to ISC.	Review scientific advice from ISC, if any, and consider management options as necessary. Encourage submission of all shark data to ISC.
4. Review effectiveness of decisions	Annually review effectiveness of conservation and management measures and resolutions applicable to fisheries for northern stocks.	Review effectiveness of North Pacific albacore measure (CMM 2019-03), including members' reports on their interpretation and implementation of fishing effort control. Review effectiveness of Pacific bluefin tuna measure.	Review effectiveness of North Pacific albacore measure (CMM 2019-03), including members' reports on their interpretation and implementation of fishing effort control. Review effectiveness of Pacific bluefin tuna measure.	Review effectiveness of North Pacific albacore measure (CMM 2019-03), including members' reports on their interpretation and implementation of fishing effort control. Review effectiveness of Pacific bluefin tuna measure.

		Review effectiveness of North Pacific swordfish measure.	Review effectiveness of North Pacific swordfish measure.	Review effectiveness of North Pacific swordfish measure.
5. ROP (Paragraph 9, Attachment C of CMM 2018-05)		Review implementation of ROP for fishing vessels operating in north of 20°N.	Review implementation of ROP for fishing vessels operating in north of 20°N.	Review implementation of ROP for fishing vessels operating in north of 20°N.
6. Cooperation with other organizations				
a. ISC		Consider action to support ISC.	Consider action to support ISC.	Consider action to support ISC.
b. IATTC	Following Article 22.4, consult to facilitate consistent management measures throughout the respective ranges of the northern stocks.	Have consultation to maintain consistent measures for North Pacific albacore and Pacific bluefin tuna. Hold a joint working group meeting on Pacific bluefin tuna management.	Have consultation to maintain consistent measures for North Pacific albacore and Pacific bluefin tuna. Hold a joint working group meeting on Pacific bluefin tuna management.	Have consultation to maintain consistent measures for North Pacific albacore and Pacific bluefin tuna. Hold a joint working group meeting on Pacific bluefin tuna management.
7. Climate Change	Develop a framework for how to include climate change analyses into NC processes.	Consider ISC advice and Commission requests to include climate change into its work.	Consider ISC advice and Commission requests to include climate change into its work.	Consider ISC advice and Commission requests to include climate change into its work.