

WCNPO Swordfish MSE



Background

- NC20 requested the ISC BILLWG to provide information on the possibility of doing an MSE for WCNPO SWO and a potential timeline for the work
- ISC25 BILLWG responded that the work could be completed in 3-5 years, but would need NC to take on any stakeholder engagement and the BILLWG did not have the capacity to do it without funding for hiring technical expert
- NC21 the US indicated that it would possibly be able to provide the funding, and the BILLWG was tasked to
 - “begin technical work on a management strategy evaluation (MSE) for Western and Central North Pacific Ocean swordfish once additional capacity for MSE is provided;” and
 - “develop a detailed MSE workplan that will be presented to NC in 2026, outlining steps and timeline to conduct and complete an MSE.”
- In addition NC21 tasked itself with developing operational management objectives at NC22



Technical staff

- Thanks to generous funding from the MSC Ocean Stewardship fund with the Hawaii Longline Association and the Ocean Foundation and in-kind contributions from NOAA, we hired Adrian Hordyk from Blue Matter Science aided by Rebecca Scott from the Ocean Foundation to undertake the development of the MSE
 - Funding is available through March 2028
- A technical team from the BILLWG has been assembled to provide feedback, guidance, and direction to Adrian during the development
- Presentations to the WG in January 2026 and April 2026 on progress



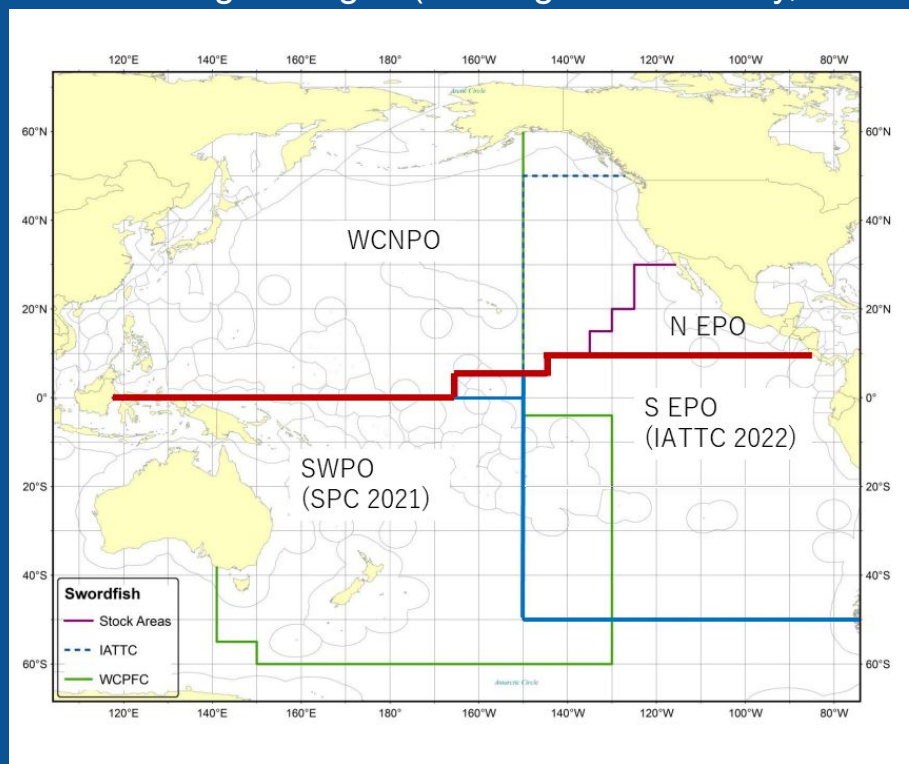
Technical developments

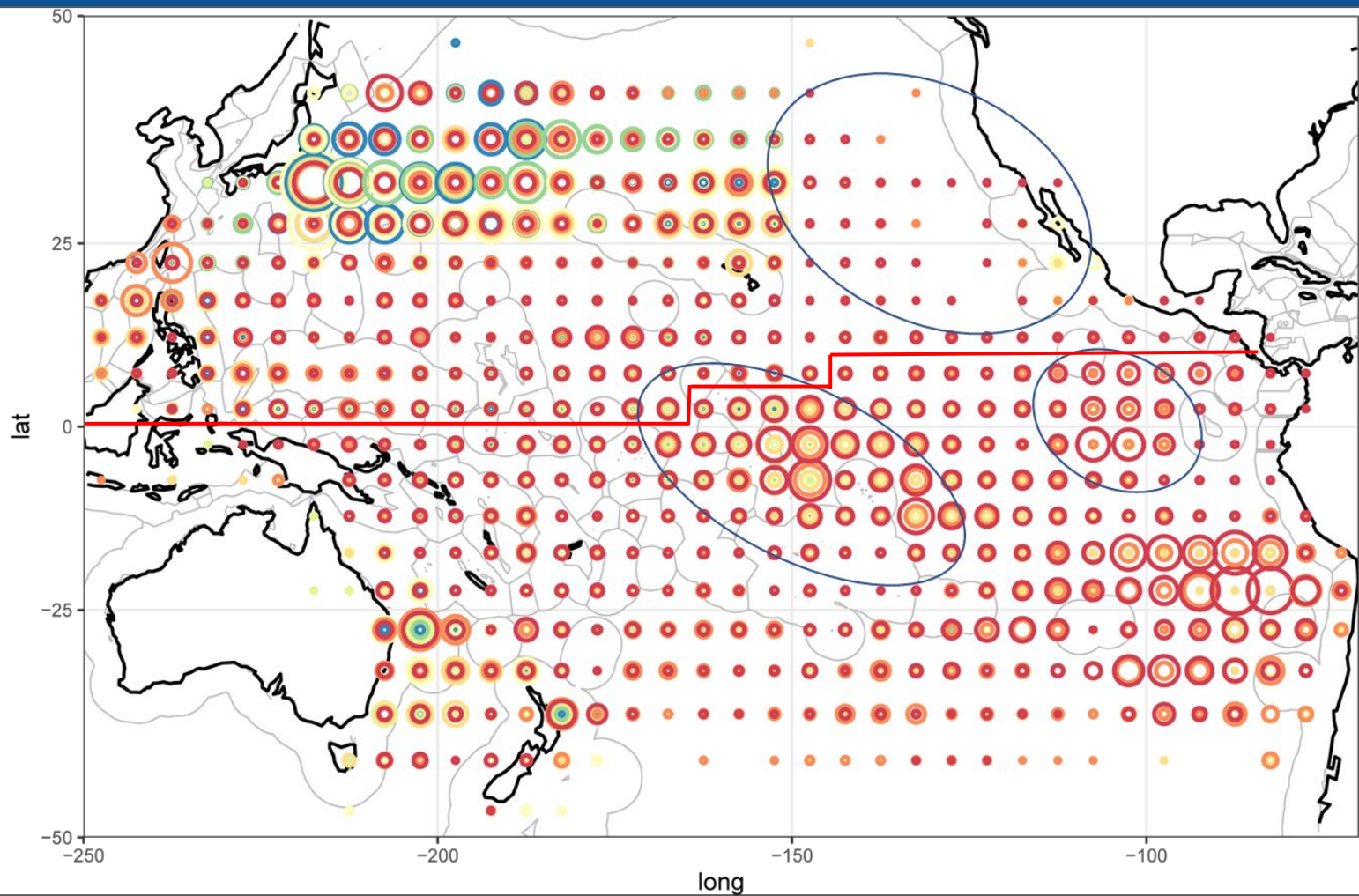
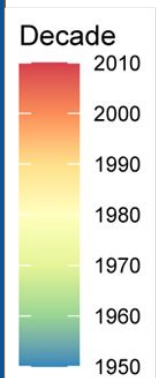
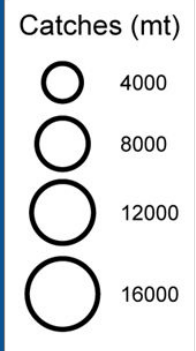
- Operating model based upon the 2023 NP SWO assessment
- Identifying major sources of uncertainty
 - Spatial structure - WCNPO only or whole NP
 - Biological uncertainty - growth, natural mortality, maturity, steepness
- Next steps:
 - Specify core assumptions: e.g., data lag, recent catches, fleet and seasonal allocations, management area & type
 - Define Reference and Robustness (stress-test) OMs
 - Specify management parameters: interval, advice type [NC Decision]
 - Determine data to use in CMPs – indices
 - Develop OMs and CMPs



What do we need from NC?

- Management Area
 - WCNPO or whole NP
 - Which fleets are being managed (i.e. longline fleets only, swordfish targeting fleets only)?





What do we need from NC?

- Operational management objectives
 - CMM-2023-03 uses effort based controls
 - HS 2016-01:
 - defines the management objective to “support thriving swordfish fisheries in the North Pacific while maintaining the stock size at levels capable of producing maximum sustainable yield.”
 - Sets a limit reference point for the exploitation rate of F_{MSY}



What do we need from NC?

- Management procedures:
 - Management interval and type (e.g., TAC every 3 years)
 - First MP Year
 - Other constraints (e.g., fleet allocation)
 - Which fleets will be managed
- Performance Indicators - e.g. Status, Safety, Yield, Stability, etc.
 - Primary summary statistics for comparing performance of candidate MPs
 - Minimum performance criteria



WCNPO SWO MSE Workplan - Option 1

2026 (NC22):

- ISC to provide an overview of their workplan and any progress on the MSE, including but not limited to clarifications needed.
- NC22 provides guidance on candidate **operational management objectives, performance indicators, reference points and harvest control rules** to ISC
- If additional information is requested by the ISC from the NC relevant to the MSE, the NC should task its members to solicit input from its stakeholders and task itself to address this at NC23 in 2027, as appropriate.



WCNPO SWO MSE Workplan - Option 1

2027 (NC23):

- ISC provides feedback on inputs and preliminary MSE results in 2027 to NC23
- NC23 reviews preliminary MSE results and may provide feedback to refine inputs to MSE in 2027
- If additional information is requested by the ISC from the NC relevant to the MSE, the NC should task its members to solicit input from its stakeholders and task itself to address this at NC24 in 2028, as appropriate.



WCNPO SWO MSE Workplan - Option 1

2028 (NC24):

- ISC presents results from the MSE to NC24 in 2028.
- ISC presents a new benchmark stock assessment for WCNPO SWO to NC24.
- NC considers and recommends revisions to HS 2016-01 and/or CCM 2023-03 based upon MSE results to the WCPFC for adoption.



WCNPO SWO MSE Workplan - Option 2

2026 (NC22):

- ISC to provide an overview of their workplan and any progress on the MSE, including but not limited to clarifications needed.
- NC discusses candidate operational **management objectives** for WCNPO swordfish for use in an MSE process.
- If additional information is requested by the ISC from the NC relevant to the MSE, the NC should task its members to solicit input from its stakeholders and task itself to address this at NC23 in 2027, as appropriate.



WCNPO SWO MSE Workplan - Option 2

2027 (NC23):

- NC provides candidate **performance indicators, reference points and harvest control rules.**
- If additional information is requested by the ISC from the NC relevant to the MSE, the NC should task its members to solicit input from its stakeholders and task itself to address this at NC24 in 2028, as appropriate.
- ISC provides feedback on inputs and preliminary MSE results as part of an intersessional meeting in 2027/2028



WCNPO SWO MSE Workplan - Option 2

2028 (NC24):

- ISC presents results from the MSE to NC24 in 2028.
- ISC presents a new benchmark stock assessment for WCNPO SWO to NC24.
- NC considers and recommends revisions to HS 2016-01 and/or CCM 2023-03 based upon MSE results to the WCPFC for adoption.



WCNPO MSE SWO Workplan

- The WG has expressed preference for option 1 so that initial results could be provided to NC23 and additional runs could be requested before NC24
- Option 2 would require the NC meet intersessionally in 2027-2028 to review initial results and make any requests for NC24
- Funding expires in March 2028, results will be presented to NC24 and further work will not be possible without additional capacity
- BILLWG would NC's endorsement to delay WCNPO SWO stock assessment to 2029 to help alleviate workload concerns.

