NPFC-2021-SSC BFME02-WP03 (Rev. 1)

**Five-Year Work Plan of the SSC BF-ME**

Abstract: The Five-Year Work Plan of the SSC BF-ME has been updated by the SSC BF-ME Chair. Members have reviewed and revised the work plan during the SSC BF-ME02 meeting. The final work plan will then be submitted to the SC06 meeting for endorsement.

Priority list:

1. NPA and SA: Develop catch and CPUE time series for commercial fisheries
2. NPA: Review survey
3. NPA: Conduct comprehensive stock assessment and provide management advice
4. SA: Conduct comprehensive stock assessment and provide management advice
5. NPA, SA and Sablefish: Develop and implement harvest control rule
6. Sablefish: Evaluate historical harvest relative to trip limits and update trip limits if necessary
7. Sablefish and VME: Conduct trade-off analysis between commercial fishing and VME protection
8. VME: Collect and share fishing footprint data
9. VME: Develop a process for establishing quantitative definitions of VMEs
10. VME: Develop standardized approach to SAI determination

| ITEM | SSC BFME02 (2021) | SSC BFME03 (2022) | SSC BFME04 (2023) | SSC BFME05 (2024) | SSC BFME06 (2025) |
| --- | --- | --- | --- | --- | --- |
| North Pacific Armorhead |   |   |   |   |  |
| Assess and monitor status of stock | Update catch data and CPUE index for NPA | Update catch data and CPUE index for NPA | Update catch data and CPUE index for NPA | Update catch data and CPUE index for NPA | Update catch data and CPUE index for NPA |
|   | Review results of NPA monitoring surveys | Review results of NPA monitoring surveys | Review results of NPA monitoring surveys | Review results of NPA monitoring surveys | Review results of NPA monitoring surveys |
|   | Integrate CPUE index and NPA surveys (acoustic and pre-fishery) into preliminary stock assessment or simulation approach using DLM tools | Life history based DLM approach | Update status of stock | Update status of stock | Update status of stock |
|   | Review acoustic survey and research | Review acoustic survey and research |  |  |  |
|   | Conduct analysis of historical patterns in NPA recruitment and oceanography; Identify and conduct additional research on NPA | Identify and conduct additional research on NPA | Identify and conduct additional research on NPA | Identify and conduct additional research on NPA | Identify and conduct additional research on NPA |
|   | Review fisheries observer program data collection for adequacy to produce data streams to support management advice | Review fisheries observer program data collection for adequacy to produce data streams to support management advice | Review fisheries observer program data collection for adequacy to produce data streams to support management advice | Review fisheries observer program data collection for adequacy to produce data streams to support management advice | Review fisheries observer program data collection for adequacy to produce data streams to support management advice |
| Conserve stock | Develop conservation objective(s) |   | Develop conservation objective(s) |   |  |
|   |  |   | Implement adaptive management |   |  |
|   |  | Refine harvest control rule if needed | Refine HCR and implement | Update data and implement HCR | Update data and implement HCR |
| Splendid alfonsino |   |   |   |   |   |
| Assess and monitor status of stock | Update catch data and CPUE index for SA | Update catch data and CPUE index for SA | Update catch data and CPUE index for SA | Update catch data and CPUE index for SA | Update catch data and CPUE index for SA |
|   |
|   | Develop monitoring plan for SA |  |  |  |  |
|   | Conduct comprehensive stock assessment or data limited approach | DLM approach life history | Update comprehensive stock assessment or data limited approach, and provide management advice | Update comprehensive stock assessment or data limited approach, and provide management advice | Update comprehensive stock assessment or data limited approach, and provide management advice |
|   |   |   |   |   |  |
|   | Review fisheries observer program data collection for adequacy to produce data streams to support management advice | Review fisheries observer program data collection for adequacy to produce data streams to support management advice | Review fisheries observer program data collection for adequacy to produce data streams to support management advice | Review fisheries observer program data collection for adequacy to produce data streams to support management advice | Review fisheries observer program data collection for adequacy to produce data streams to support management advice |
| Conserve stock |  |  | Develop conservation objective(s);Define and implement harvest control rule | Update data and implement HCR | Update data and implement HCR |
|   |   |   |   |   |   |
| Sablefish |   |   |   |   |   |
| Assess and monitor status of stock | Update catch data and CPUE index | Update catch data and CPUE index | Update catch data and CPUE index | Update catch data and CPUE index | Update catch data and CPUE index |
|   |
|   | Provide an update on USA-Canada stock assessment models for Sablefish and joint research on Sablefish | Provide an update on USA-Canada stock assessment models for Sablefish and joint research on Sablefish | Provide an update on USA-Canada stock assessment models for Sablefish and joint research on Sablefish | Provide an update on USA-Canada stock assessment models for Sablefish and joint research on Sablefish | Provide an update on USA-Canada stock assessment models for Sablefish and joint research on Sablefish |
|   | Review fisheries observer program data collection for adequacy to produce data streams to support management advice | Review fisheries observer program data collection for adequacy to produce data streams to support management advice | Review fisheries observer program data collection for adequacy to produce data streams to support management advice | Review fisheries observer program data collection for adequacy to produce data streams to support management advice | Review fisheries observer program data collection for adequacy to produce data streams to support management advice |
| Conserve stock | Evaluate catch limits relative to stock status | Update catch limits relative to stock status |  |  |  |
|  | Summarize harvest control rules and stock status |  |  |  |  |
| Other research |  |  Conduct analysis of sablefish associations with VME (intersessional) |   |   |  |
|   |  |  Conduct trade-off analysis for Sablefish fishing and VME protection (intersessional) |   |   |  |
| Vulnerable marine ecosystems |   |   |   |   |  |
| Defining and Identifying VMEs | Map the distribution of VME indicator taxa (model, kernel density estimates, observation data); | Bring together VME indicator taxa observation data from various sources and map for NPFC area |   |   |  |
|   | Determine a quantitative definition of VMEs | Determine a quantitative definition of VMEs | Review and apply quantitative definition of VMEs |  |  |
| Identifying and defining SAI's | Determine data requirements and resolution for SAI assessment | Determine data requirements and resolution for SAI assessment | Conduct integrated SAI assessment | Conduct integrated SAI assessment | Conduct integrated SAI assessment |
|   | Apply the standardized approach for SAI assessments and conduct integrated SAI assessment | Apply the standardized approach for SAI assessments and conduct integrated SAI assessment |  |  |  |
|  |  | Discuss VME indicator taxa and whether species/taxa should be added/subtracted |  |  |  |
| Quantifying interactions between fisheries and VMEs | Update spatially explicit fishing effort data | Update spatially explicit fishing effort data | Update spatially explicit fishing effort data | Update spatially explicit fishing effort data | Update spatially explicit fishing effort data |
|   | Implement timely reporting and action protocol when VME sites or recovering sites are identified |   |   |   |  |
|   | Review fisheries observer program data collection for adequacy to produce data streams to support management advice | Review fisheries observer program data collection for adequacy to produce data streams to support management advice | Review fisheries observer program data collection for adequacy to produce data streams to support management advice | Review fisheries observer program data collection for adequacy to produce data streams to support management advice | Review fisheries observer program data collection for adequacy to produce data streams to support management advice |
| Conserving VMEs |  | Develop management objectives for recovering VME sites | Develop management objectives for recovering VME sites | Periodic review of VME management | Periodic review of VME management |
|   | Refine the exploratory fishing protocol and consider banning exploratory fishing in VME closed areas |   |   |   |  |
|   | Review and refine the encounter protocol if necessary |   |   |   |  |
|  |  | Literature review on impacts and impact rates by fishing gears |  |  |  |
| Other ecosystem components |   |   |   |   |  |
|   | Approval of fish ID guide for scientific observers in the NW Pacific Ocean | Publication of fish ID guide for scientific observers in the NW Pacific Ocean |   |   |  |