Canada Redfish (Unit 1 & 2) - trawl

Fishery Improvement Project (FIP) Workplan

Table 1: Workplan Overview

Workplan Version and Date	**V.0824 30 August 2024**
Start date (expected)	**End date** (anticipated month/year)
April 2018	**December 2027**
FIP Lead (organization/individual responsible for Action Plan)	**Improvements recommended by** (meeting/group that supported the development)
AGC/ Steve Devitt	**FIP Participants**
FIP Coordinator (organization/individual responsible for reporting on FisheryProgress)	**Workplan developed by** (consultant or person)
AGC/ Steve Devitt	**Steve Devitt**

Unit of Assessment(s)

Table 2. Unit(s) of Assessment (UoA)

UoA 1	**Description**
Target species (common and scientific name)	Acadian Redfish (*Sebastes fasciatus*),
Stock	Unit 1 & 2, NAFO 3Psn4RSTVns
Geographical area	The exclusive economic zone (EEZ) of Canada, Gulf of St. Lawrence and Laurentian Fan

Fishing method or gear type	Bottom and mid-water Trawl
Fishing fleet or group of vessels, or individuals fishing operators pursuing stock	Mobile Gear Licence holders
UoA 2	**Description**
Target species (common and scientific name)	Deepwater redfish (*Sebastes mentella*)
Stock	Unit 1 & 2, NAFO 3Psn4RSTVns
Geographical area	The exclusive economic zone (EEZ) of Canada, Gulf of St. Lawrence and Laurentian Fan
Fishing method or gear type	Bottom and mid-water Trawl
Fishing fleet or group of vessels, or individuals fishing operators pursuing stock	Mobile Gear Licence holders

Context

The MSC pre-assessment identified a number of issues related to performance against MSC Principle 1 (target species stock health), Principle 2 (Other Ecosystem Components) and Principle 3 (management system). As noted in the action plan, most identified actions relate to improving stock health status information, stock management actions and gathering information relative to bycatch species. At the time of completion of the pre-assessment, the main identified strengths and weaknesses of the Unit 1 & 2 Acadian and deepwater redfish fisheries relative to the MSC fishery certification requirements were:

Table 2: Strengths and Weaknesses of the Unit 1 & 2 Redfish Fisheries (from MSC Pre-assessment Report)

Strengths	Weaknesses
● DFO and GEAC research surveys. ● Redfish conservation and management measures are in place. ● There is a partial strategy in place to ensure that the fishery does not hinder the recovery of main primary and secondary species. ● Interactions with ETP species are low. ● The is a robust governance and policy ● The are robust consultation and decision-making processes ● Clear long-term objectives are explicit within the management system. ● There is a system for monitoring and evaluating the performance of the fishery-specific management system.	● It is unlikely that redfish stocks are above the point where recruitment would be impaired. ● A rebuilding timeframe is not specified for redfish stocks. ●It cannot be said that the elements of the harvest strategy work together toward achieving stock management objectives. In addition, there is no evidence of a regular review of potential effectiveness and practically of alternative measures to minimize the fishery related mortality of unwanted catch of the target stocks. ● Well-defined harvest control rules that are likely robust to main uncertainties are not in place. ● There is an absence of identification of species in the commercial fishery which is a major gap in the monitoring of both species removals. ● The stock assessment does not take uncertainty into account. ● Information on bycatch and interaction with ETP species is not available by fishing gear. ●Fishery-specific objectives expressed by MSC's Principles 1 and 2 are not explicit within the fishery's management system.

Proposed Action Plan

October 2024 Revised Actions are highlighted yellow.

MSC Requirements (SG80)	Related Action Plan Tasks	Budget	Responsibility	Target Completion Date
FIP Action 1: MSC PI 1.1.1 Stock Status **Issue:** Both stocks are currently below Blim and do not meet the requirements of PI 1.1.1. Stock status must be monitored in accordance with defined methodologies to confirm growth trends.	**Proposed FIP Action -** Periodic stock status updates are required to confirm when stock is greater than Blim and approaching greater than 70% above the point of recruitment impairment (PRI). **Task 1 –** Annually, DFO Science will evaluate fishery dependent and independent data collected through on-going monitoring and survey programs to determine stock status through interim updates or full assessment. FIP participants (and other stakeholders) will review assessment results and provide feedback through Regional Advisory Process.	**NA**	**DFO Science (Lead Biologist) will lead stock status update process.** **FIP participants attend and contribute to stock status update process through RAP.**	**On-going (annual or biannual)/ when fishery enters MSC assessment.**
FIP Action 2: MSC PI 1.1.2 Stock Rebuilding **Issue:** As both Acadian and deepwater redfish stocks are currently below Blim and are not fluctuating around a level consistent with MSY, a rebuilding timeframe must be specified for each stock that is the shorter of 20 years or 2 times its generation time.	**Proposed FIP Action –** The Unit 1&2 redfish MSE process will provide stock rebuilding projections and an operational model is expected to provide stock projections under different harvest scenarios. **Task 1 –** Complete MSE including review the simulation runs of the Management Procedures on a set of core and stress-test Operating Models (OMs) for each species	**NA**	**DFO Science (Lead Biologist) is leading MSE review process.** **FIP participants attend and contribute to regional peer review of MSE.**	**Completed: September 2019**

	of Redfish for a time period of 40 years (2 generations). **Task 2 –** Report MSE review process through CSAS including Science Advisory Report, Proceedings report and detailed Research Document.			
FIP Action 3: MSC PI 1.2.1 Harvest Strategy **Issue:** Current harvest strategy elements (harvest control rule, management response to stock health changes, information base, monitoring of the fishery) are not considered to be working together effectively. Therefore, the harvest strategy is not considered to be achieving management objectives (i.e. stock in healthy zone).	**Proposed FIP Action –** The Unit 1&2 redfish MSE process will provide an operational model expected to generate stock projections under different harvest scenarios. **Task 1 -** Develop Limit Reference Points and recommended Upper Stock Reference Points for each Redfish species **Task 2 -** Evaluate Management Procedures against the objectives, performance metrics and acceptable thresholds established via the Redfish Working Group in 2017-2018, including identifying which Management Procedures are acceptable, and their recommended rank for further consideration. **Task 3 -** Evaluate the formulation and parameters of the Harvest Control Rule that will apply to each species of Redfish in the Unit 1+2 Redfish stock **Task 4 -** Provide advice on which Management Procedures pass objectives and under which OM assumptions, assuming a global catch limit for Units 1 and 2.	**NA**	**DFO Resource Managers (Gulf and 3Ps) are leading Harvest Strategy and Control Rules development** **FIP participants attend and contribute to development through peer review process.**	**Completed: October 2024**

	Task 5 – Report MSE review process through CSAS including Science Advisory Report, Proceedings report and detailed Research Document.			
FIP Action 4: MSC PI 1.2.2 Harvest Control Rules (HCRs) **Issue:** Well-defined harvest control rules, that are likely robust to main uncertainties for the stocks are not in place.	**UPDATED Action and Tasks –** DFO current operating under Phase 1 of the Unit 1 Fishery Reopening. In 2026, Phase 2 will evaluate the commercial fishery results from 2024 and 2025 and adjust long-term objectives and finalize an HCR. **Task 1 -** AGC, as the FIP Lead and representatives of the >100' vessel sector, will continue to participate in the Redfish Advisory Process and advocate for completion of the HCR on schedule.	**NA**	**DFO Resource Management is leading Harvest Strategy and Control Rules development** **FIP participants attend and contribute to development through peer review process.**	**Revised date: December 2027**
FIP Action 5: MSC PI 1.2.3 Information and Monitoring **Issue:** Lack of identification of redfish species composition in the commercial fishery does not allow monitoring of fishery removals at a level of accuracy and coverage consistent with the requirements of individual species stock assessments and management of the fishery to the defined HCRs.	**Proposed FIP Action –** Implement a commercial redfish fishery sampling and species identification program to collect required information. **Task 1** - DFO Science to provide an opinion on level of sampling required to provide adequate data to inform stock assessments. **Task 2 -** Confirm existing level of at-sea observer coverage and whether there is any scope within that program to collect samples. **Task 3 -** Confirm the expected landing ports and whether the current Dockside	**TBD**	**DFO Resource Management (Gulf) to confirm available scope within existing programs.** **FIP participants to contribute as necessary.**	**Completed: September 2019**

	Monitoring program has any scope within that program to collect samples. **Task 4 -** Confirm if the DFO Port Sampling program still exists and what percentage of landings does it sample in which fisheries. **Task 5 – If necessary -** FIP participants to discuss possible funding mechanisms to collect commercial samples if programs above not able to.			
FIP Action 6: MSC PI 1.2.4 Assessment of Stock Status **Issue:** Assessment does not take some uncertainty (e.g. species identification, total mortality (including catch and discards)) into account.	**Proposed FIP Action –** Evaluate assessment model through the MSE process to ensure that models consider main identified uncertainties and are capable of evaluating harvest strategies and proposed harvest control rules. **Task 1 –** In concordance with Actions 3 & 4 above, DFO Science will confirm appropriate assessment framework/ model as part of the MSE process.	**NA**	**DFO Science (Lead Biologist) is leading MSE review process.** **FIP participants attend and contribute to regional peer review of MSE.**	**Completed: September 2019**

FIP Action 7: MSC PI 2.1.3, 2.2.3, 2.3.3 Primary, Secondary, ETP Species Information **Issue:** The pre-assessment identified that current DFO statistics did not separate bycatch species catch by gear type, therefore preventing accurate evaluation of both the bottom trawl and mid-water trawl fishery impacts.	**Proposed FIP Action –** Contact known mid-water trawl harvesters and confirm likelihood of their return to fishing with that gear and attain permission from harvesters to allow data release of catch and discard information. **Task 1** – DFO Resource Management officer from Gulf Region to confirm potential for ongoing mid-water trawl harvesting and request permission for release of catch and data information.	**NA**	**DFO Resource Management (Gulf).**	**Completed: September 2019**
FIP Action 8: MSC PI 2.4.1 Habitat Status **Issue:** The pre-assessment indicated there was currently no definitive evidence specific to the UoA that it does not cause serious or irreversible harm to habitat structure and function, considered on the basis of the area(s) covered by the governance body(s) responsible for fisheries management.	**Proposed FIP Action –** GEAC will work with DFO to request relevant information and produce a fishery footprint relative to both sensitive and less sensitive benthic habitat.	**NA**	**AGC (in cooperation with DFO Resource Management).** **FIP to provide feedback on mapping outputs.**	**Completed: July 2022**

FIP Action 9: MSC PI 3.2.1 Fishery-specific Objectives **Issue:** Fishery-specific objectives have not been clearly defined.	**UPDATED Action and Tasks –** DFO current operating under Phase 1 of the Unit 1 Fishery Reopening. In 2026, Phase 2 will evaluate the commercial fishery results from 2024 and 2025 and adjust long-term objectives and finalize an HCR. **Task 1 -** AGC, as the FIP Lead and representatives of the >100' vessel sector, will continue to participate in the Redfish Advisory Process and advocate for completion of the HCR on schedule..	NA	**DFO Resource Managers .** **FIP participants attend and contribute to fishery specific objectives development through GAC process.**	**Revised date: December 2027**