Northern Brazil Caribbean red snapper - pot/trap Three-Year Evaluation Report

Version 1.3, November 2022

Purpose

The three-year evaluation report template was developed by FishChoice. The objectives of the three-year evaluation report are:

1. *To assess the fishery's MSC performance indicator scores*
2. *To verify the results of the FIP's environmental workplan progress as reported on FisheryProgress*
3. *Optional: To provide recommendations to the FIP on environmental workplan actions that should be modified, including recommendations for additional actions/tasks that should be taken or suggested changes to timelines, to help the FIP achieve their stated objectives.*

Completing and Submitting the Evaluation

Once the evaluation is complete, the FIP should update all relevant data fields on FisheryProgress based on the evaluation report.

FIP Information

Target species scientific name(s) and common name(s) [state target stock(s), if relevant]	*Lutjanus purpureus*: Caribbean Red Snapper, Pargo Colorado
Fishery location	Western Atlantic Ocean
Gear type(s)	Pot/ Traps
Estimated FIP Landings (weight in tons)	2,000
Vessel type(s) and size(s)	The fleet is artisanal, mainly made of wood (the longest ones can be made of metal), with an average length of 12 meters where approximately 80% of the fleet is less than 12 meters. The tonnage varies between 4.9 and 19.2 tons.
Number of vessels	250 (total estimated fleet)
Management authority	Ministério da Pesca e Aquicultura (MPA) e Ministério do Meio Ambiente (MMA) (Ministry of Fisheries and Aquaculture MPA and Environment Ministry MMA)
Assessor name(s)	Ernesto Godelman
Assessor Organization/Affiliation	CeDePesca

Date of report completion	February, 20th, 2025

Stakeholder Consultation & Meetings

Name	Affiliation	Date and Subjects Discussed
André Bruger	Netuno USA Inc	8th February 2025 ● General situation of the FIP and late developments ● Advances on social indicators ● Details of the innumerous meetings held with the Brazilian fishing authority to encourage improvements ● Difficulties faced, such as continued changes at government level and the impact of the 2020 pandemic ● Current discussion about the establishment of a TAC at the Management Committee
Roberto Gallucci- General Coordinator of Fisheries Management and Planning at the MMA Adrian da Silva- Environmental analyst at the MMA	Ministry of Environment, members of the Management Committee	11th February 2025 ● Value of the FIP on management/research advances ● Situation of the stock as “threaten species” at the MMA level ● Update of the Recovery Plan ● Necessary improvements still to be made such as TAC, MCS system and a discussion about minimum size
Sandra Silvestre - Director of the Industrial Fishing Department at the Ministry of Fisheries and Coordinator of the Permanent Management Committee (CPG) for North/Northeast Demersal Fisheries	Ministry of Fisheries and Aquaculture, member of the Management Committee	16th February 2025 ● Assessment of the FIP role on the advances of the management and research system ● Clarification about the relationship of the Recovery Plan with the CPG role ● Measures to be adopted soon by the CPG and the MPA/MMA
Martín Dias - Diretor Científico da Oceana e membro do CPG demersais Norte e Nordeste	Oceana – ONG	19th February 2025 ● Assessment of the FIP role on the advances of the management and research system

		• Need for adoption of stock recovery measures such as a TAC and a minimum size

Summary of Findings and Recommendations

From the available information it is possible to observe that the main advance directions were: On **Principle 1**, the monitoring has improved through logbooks and a public panel to follow up on reported landings started in 2023 and fully operative since 2024; also, a thorough stock assessment has been executed by renown local scientists of Brazilian universities through the REPENSAPESCA project in 2022. On **Principle 2**, there were no significant advances since 2021, being the surveys conducted under the REPENSAPESCA project in 2016 and 2017 the main achievement, reflected into the Recovery Plan background in 2018. On **Principle 3**, the most significant advance was the reestablishment of the CPG since 2022, which dynamized the possibility for further advances. Behind all those improvements, the FIP partners have been proactive to get them done through innumerous meetings with the different officials that were occupying the decision positions along all this time.

Nevertheless, some of the stakeholders interviewed along the audit suggested that the FIP should be more active at the CPG meetings, pushing for regular stock assessments and measures that expectedly will get a recovery of the stock, aligned with scientific recommendations.

One important observation that arises from the documents under examination is that previous evaluations against the version 2.01 of the MSC standard have not been accurate enough about following the PIs requirements, so the action plan reflects those loopholes and seems not to be sufficiently developed. We strongly recommend that a new version of the Action Plan is prepared, based on the following recommendations for the PIs that have been scored under 80 by the audit:

Principle	Component	Performance Indicator		Current Score [2025]	Recommendations
1	Outcome	1.1.1	Stock status	60-79	Define a Recovery Plan with explicit goals and tools to achieve them, and where the TAC cannot overcome 3500 tones.
		1.1.2	Stock rebuilding	<60	
	Management	1.2.1	Harvest strategy	<60	
		1.2.2	Harvest control rules and tools	<60	Define explicit HCRs within the recovery plan.
		1.2.3	Information and monitoring	60-79	Data collection on catch and effort, and fishery independent surveys must be regular.
		1.2.4	Assessment of stock status	60-79	Assessment need to be regularly conducted as a tool of the recovery plan, consideration of uncertainty need to be demonstrated and a peer review should be conducted.
2	Secondary species	2.2.1	Outcome	RBF	With the information collected by the 2016-2017 surveys a PSA should be conducted.
		2.2.2	Management strategy	60-79	Measures such as use of a biodegradable window should be considered.
		2.2.3	Information	>80	Data collection on impacts should be regularly conducted.
	ETP species	2.3.3	Information	60-79	Data collection on impacts should be regularly conducted.
		2.4.3	Information	60-79	Data collection on impacts should be regularly conducted.
		2.5.3	Information	60-79	Data collection on impacts should be regularly conducted.
3	Governance and Policy	3.1.1	Legal and customary framework	<60	Consecutive stock assessment and data collection for ecosystem impacts should demonstrate that the management system is effective to achieve outcomes consistent with P1 and P2.
	Fishery specific management system	3.2.1	Fishery specific objectives	60-79	The Recovery Plan need to define the fishery specific objectives and provide the tools to achieve them.
		3.2.2	Decision making processes	<60	It is necessary to demonstrate that the CPG responds to the serious issues that need solutions in the fishery.
		3.2.3	Compliance and enforcement	60-79	Compliance with the current and future rules of the fishery need to be demonstrated as effective and deterrent of violations.
		3.2.4	Management performance evaluation	60-79	The CPG should establish some regularity to the evaluation of the management performance.

The PI 2.2.3 is a particular case given that using the RBF to score the PI 2.2.1 it automatically grants an 80 to the respective information PI. Nevertheless, as this is a FIP, improvements need to be made to data collection in general regarding the impacts in the ecosystem, and that is more necessary if, as it has been mentioned at the interviews, the FIP partners are considering enhancing the FIP to other fishing gears.

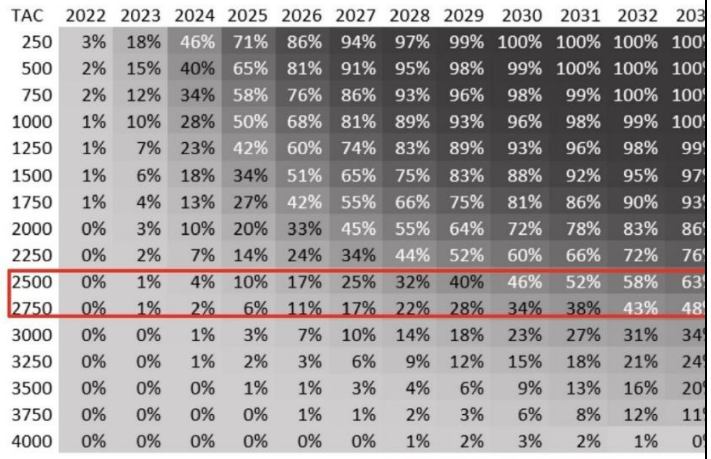
Additionally, as it seems that the fishery will not be certified within the period of validity of the version 2.01 of the MSc standard, it seems advisable to update the pre-assessment to the version 3.1, currently in place.

Regarding the definition of the Unit of Certification, it would be very useful for raising the score of the compliance indicators in P3 and data collection indicators in P2 to focus the improvement activities on the boats currently involved with the FIP and listed in Fishery Progress.

Summary of MSC Performance Indicator Scores

The following summary is based on the requirements of the MSC Fisheries Standard *v2.01*

Principle	Component	Performance Indicator		Original score [2013]	Previous Score [2021]	Current Score [2025]	Rationale or Key Points
1	Outcome	1.1.1	Stock status	<60	60-79	60-79	In 2022 there was a stock assessment for *Lutjanus purpureus* with the framework of the project Repensapesca. The conclusion of the authors, based on a model Stock Synthesis v3 and using data from the period 1962-2021, was that the stock is over-exploited, with the biomass 29% under the MSY level, and also heavily overfished, with the fishing mortality 175% over the MSY level. Nevertheless, from the estimation that the biomass is over a theoretical critical point (50% of Bmsy), it is possible to conclude that the PRI could have not be reached and therefore, the SG60 is achieved for SI a). All this ratify the preliminary conclusions from the first triannual audit conducted in 2021, based on an exercise conducted by the FIP based in 2 years of data.
		1.1.2	Stock rebuilding	<60	60-79	<60	In this case, SG60 is not achieved for SI a), given that the “Recovery Plan” published in 2018 does not establish a timeframe goal nor measures aligned with the requirements of the MSC standard. This plan is going to be updated and complemented by measures to be adopted by the CPG in 2025.

							On other angle, the stock assessment defined an MSY of 3,474 tones and a maximum catch of 3,500 tones to have some recovery expectation in the long term, but the recorded removals of the fishery in 2024 were almost 4,000 tones, which inhibits any recovery expectation. Tabela 9.2.3.2. Matriz de incerteza Kobe do tipo 2 (probabilidade do estoque se situar no quadrante verde) com as probabilidades de não estar sobreexplotado e não estar sofrendo sobrepesca ($SSB/SSB_{MSY}>1$ e $F/F_{MSY}<1$) para as projeções estocásticas considerando um intervalo de 12 anos (2022-2033) e diferentes níveis de Captura Total (TAC) de Pargo no Norte-Nordeste do Brasil. O retângulo vermelho indica os níveis de capturas constantes que recuperariam o estoque com um nível de probabilidade aceitável. 
	Management	1.2.1	Harvest Strategy	<60	60-79	<60	The SG60 for the SI a) asks that “the harvest strategy is expected to achieve stock management objectives reflected in PI 1.1.1”. The current harvest strategy is based on an effort limit (number of licensed vessels and a closure season) and, to some extent, on a minimum size, which has been varying throughout the time and is not currently enforced. With the knowledge recently acquired, it is not possible to assert that the current harvest strategy is expected to achieve the P1.1.1 objectives. The same applies to SI b) which estimates if “the harvest strategy is likely to work”. Rather on the contrary, so in the audit consideration, this PI is under 60.
		1.2.2	Harvest control rules and tools	<60	<60	<60	The last stock assessment has defined some reference points (MSY and f_{msy}) but they have not been adopted for the management of the stock. The

TAC	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	203
250	3%	18%	46%	71%	86%	94%	97%	99%	100%	100%	100%	100
500	2%	15%	40%	65%	81%	91%	95%	98%	99%	100%	100%	100
750	2%	12%	34%	58%	76%	86%	93%	96%	98%	99%	100%	100
1000	1%	10%	28%	50%	68%	81%	89%	93%	96%	98%	99%	100
1250	1%	7%	23%	42%	60%	74%	83%	89%	93%	96%	98%	99
1500	1%	6%	18%	34%	51%	65%	75%	83%	88%	92%	95%	97
1750	1%	4%	13%	27%	42%	55%	66%	75%	81%	86%	90%	93
2000	0%	3%	10%	20%	33%	45%	55%	64%	72%	78%	83%	86
2250	0%	2%	7%	14%	24%	34%	44%	52%	60%	66%	72%	76
2500	0%	1%	4%	10%	17%	25%	32%	40%	46%	52%	58%	63
2750	0%	1%	2%	6%	11%	17%	22%	28%	34%	38%	43%	48
3000	0%	0%	1%	3%	7%	10%	14%	18%	23%	27%	31%	34
3250	0%	0%	1%	2%	3%	6%	9%	12%	15%	18%	21%	24
3500	0%	0%	0%	1%	1%	3%	4%	6%	9%	13%	16%	20
3750	0%	0%	0%	0%	1%	1%	2%	3%	6%	8%	12%	11
4000	0%	0%	0%	0%	0%	0%	1%	2%	3%	2%	1%	0

							situation has not changed since the audit in 2021, and there is not yet a HCR, implicit or explicit, in place.
		1.2.3	Information and monitoring	<60	>80	60-79	The SGs 60 and 80 for SIs a) and b) seem to be satisfied. The SI b) has even improved since there is now a public website to monitor removals. Nevertheless, it is not possible to assert that SG80 is achieved for SI c), which requires that “there is good information on all other fishery removals from the stock”. Therefore, this PI would be at 75 points.
		1.2.4	Assessment of stock status	60-79	>80	60-79	Given the stock assessment conducted in 2022, we could say that SGs 80 are achieved for SIs a) and b). For SI c), which requires uncertainty to be considered, at the moment of doing this audit it was not possible to access the full version of the assessment report and, therefore, it was not possible to verify if and how uncertainty was considered although Table 9.2.3.2 at the report mentions uncertainty. For getting SG80 met, SI g) requires that “the assessment of stock status is subject to peer review” which has not been yet conducted. Therefore, this PI should be scored within the range of 60-79.
2	Primary species	2.1.1	Outcome	<60	>80	>80	The Recovery Plan has highlighted a series of bycatch species from research conducted in 2016 and 2017 that are different in composition and proportion from those considered at the initial pre-assessment as an approximation. None of these species is currently managed under a reference points system, so they cannot be considered primary species. That is why this PI stays with a >80. Nevertheless, must be taken in account that this category has been suppressed by the new version of the MSC standard (3.1) and replaced by one that includes all within scope species, regardless of the way they are managed.
		2.1.2	Management strategy	>80	>80	>80	As the UoC is the traps fishery, management measures to avoid this kind of bycatch could not be necessary, and therefore SG60 are achieved for SIs a) and b) and SG80 also for SIs a) b) and c). Therefore the >80 score stands.

		2.1.3	Information	<60	>80	>80	The information collected in 2016 and 2017 could be enough to do the qualitative analysis on impacts, when necessary, but must be considered that data collection should be a permanent activity to keep the PI >80.
	Secondary species	2.2.1	Outcome	<60	>80	RBF	With the information available it is possible now to separate main from minor species and to conduct a qualitative analysis on the impacts of the fishery on bycatch species before scoring this PI.
		2.2.2	Management strategy	<60	>80	60-79	If it is confirmed that the impacts are negligible, the "strategy" should be having a permanent monitoring system in place for bycatch for confirming such situation, which is not currently the case.
		2.2.3	Information	<60	>80	>80	If the RBF is used for scoring PI 2.2.1, this PI is automatically assigned 80. Nevertheless, as underlined in PI 2.2.2, it is necessary to have a permanent monitoring system to keep an eye on bycatch impacts of the fishery.
	ETP species	2.3.1	Outcome	>80	>80	>80	There were no changes regarding the last audit.
		2.3.2	Management strategy	>80	>80	>80	There were no changes regarding the last audit.
		2.3.3	Information	60-79	>80	60-79	As indicated in the original pre-assessment (2013): • Although there is no information available on the impacts of snapper fishing with traps on species in the ETP group for the fishing area and eligible fleet, there is documented evidence in the literature indicating extremely low levels of impact. • This information can be adapted to the local reality, as a way of justifying the scores of the "outcome" component (indicator 2.3.1) and supporting mitigation strategies. Thus, the fishery meets SG 80 of scoring issues "a" and "b". • However, the available information does not allow for measuring trends of increase or decrease in mortality of ETP species, which should be done through some type of monitoring. • Therefore, the fishery only reaches SG 60 of scoring issue "c".

							The research conducted in 2016 and 2017 ratified these conclusions. It was an important step forward, but data collection need to be a permanent activity in order to satisfy SG80 requirements for SI c).
	Habitats	2.4.1	Outcome	>80	>80	>80	There were no changes regarding the last audit.
		2.4.2	Management strategy	>80	>80	>80	There were no changes regarding the last audit.
		2.4.3	Information	60-79	>80	60-79	As indicated in the original pre-assessment (2013): • Although there is basic knowledge about the types of habitats and their distribution, there is no sufficiently detailed information to identify the nature, distribution and vulnerability of habitats in fishing areas. It is therefore clear that the fishery only meets SG 60 of scoring issue “a”. • Similarly, the available information is only adequate to characterize in a generic way the characteristics of the seabed in the region where snapper fishing takes place. However, there is no information to identify the extent (dimension) of the interactions between fishing gear and the habitat. Furthermore, there is no information being collected continuously to detect an increase in the risk of habitat compromise. Therefore, it is clear that the fishery does not meet SG 80 of scoring issues “b” and “c” of this indicator.
	Ecosystem	2.5.1	Outcome	>80	>80	>80	There were no changes regarding the last audit.
		2.5.2	Management strategy	>80	>80	>80	There were no changes regarding the last audit.
		2.5.3	Information	<60	>80	60-79	The original pre-assessment considered that the available information was insufficient to meet SG60 in SI a), which requires that “information is adequate to identify the key elements of the ecosystem”. Since then, the surveys conducted under the REPENSAPESCA program allow to assert that the key elements of the ecosystem involved (such as the composition of species playing different functions into the ecosystem structure) could be in general recognized.

							Nevertheless, such information would not be adequate to “broadly understand the key elements of the ecosystem”, as required by SG80. The remainder conclusions of the original pre-assessment stand: • Although indicator 2.5.1 was evaluated positively due to the low probability of significant impacts occurring on the ecosystem, it is noted that the available information does not meet the requirements of SG 60 of scoring issue “a”. • Through more detailed research, it is possible to infer what impacts fishing has on the ecosystem, which meets the requirements of SG 60 of scoring issue “b”. However, SG 80 requires that some of these impacts have been assessed in detail, which is not the case here. • Regarding scoring issues “c”, “d and “e”, it is noted that the fishery does not reach SG 80 in any of them, since 1) the ecological functions of the main components of the affected ecosystems are not known; 2) available information on these components is not sufficient to infer the consequences of fishing on the ecosystem components and 3) there is no monitoring program that continuously collects information on the structure and function of these ecosystems and the impacts of fishing on them.
3	Governance and Policy	3.1.1	Legal and customary framework	<60	60-79	<60	Fishing in Brazil is regulated by Law No. 11,959 of 2009, which establishes the National Policy for the Sustainable Development of Aquaculture and Fisheries, with the aim of promoting: (I) the sustainable development of fishing and aquaculture as a source of food, employment, income and leisure, ensuring the sustainable use of fishing resources, as well as the optimization of the resulting economic benefits, in harmony with the preservation and conservation of the environment and biodiversity; (II)

							the management, promotion and monitoring of fishing activities; (III) the preservation, conservation and recovery of fishing resources and aquatic ecosystems and; (IV) the socioeconomic, cultural and professional development of those who engage in fishing activities, as well as their communities. The Law was articulated through various Ordinances, Decrees and Instructions. However, the legal system in Brazil cannot be considered yet **effective** in providing results consistent with principles 1 and 2 of the MSC as required by the standard. For example, there is no official statistics program in Brazil, there are no regular stock assessments, and there are no management measures regarding target stocks or other species impacted by fisheries. The fishery under analysis is a good example of how the management system has failed so far to provide a healthy or recovering stock, consistent with PI 1.1.1 requirements.
		3.1.2	Consultation, roles and responsibilities	<60	60-79	>80	The Management Committees have been reestablished since 2022 (SAP/MAPA Ordinance No. 554, of January 21, 2022), and they offer the opportunity for all interested parties to participate. The CPG Demersais Norte/Nordeste is currently composed of 9 members representing federal and state public administration bodies and entities and 13 members representing institutions in society involved in fishing activities (SAP/MAPA Ordinance No. 1.267 of September 16, 2022). Therefore, SG80 has been achieved.
		3.1.3	Long term objectives	>80	>80	>80	No changes in this PI.
	Fishery specific management system	3.2.1	Fishery specific objectives	60-79	60-79	60-79	The Recovery Plan establishes general objectives for the fishery and therefore SG60 is achieved, but those objectives are not explicitly defined yet, so SG80 is not met.
		3.2.2	Decision making processes	<60	60-79	<60	The standard requires (SG60 for SI a) that “there are some decision-making processes in place that result in measures and strategies to achieve the fishery-specific objectives”. Even if the processes have been

							reestablished, measures/strategies to recover the stock have not been adopted yet. Concurrently, the standard requires (SG60 for SI b) that the “decision-making processes respond to serious issues identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner”. Despite many serious issues (like the overfished situation of the stock) are currently being discussed at the Management Committee, none of them have been resolved yet. Therefore, the initial scoring (<60) should stand.
		3.2.3	Compliance and enforcement	<60	60-79	60-79	The MCS system has improved, particularly through the implementation of the public panel for following up landings reported in logbooks. Even if there is some under-reporting, the system is being reliable enough to reflect the real removals (SG60 for SI a is met). Nevertheless, it is not possible to assert that a “monitoring, control and surveillance **system** has been implemented in the fishery and has demonstrated an ability to **enforce** relevant management measures, strategies and/or rules”, therefore, SG80 for SI a) is not met. There is also a sanctions system and occasionally some news reveal that is being applied (SG60 for SI b is met), but it is not possible at this point to assert that sanctions “are consistently applied and thought to provide effective deterrence” (SG80 for SI b is not met). Also, the fishers linked to the UoC are thought to be generally in compliance with the rules and providing information when required, and there is some evidence of that, considering that the FIP partners have implemented a traceability system for their production (SG80 for SI c is met).
		3.2.4	Management performance evaluation	<60	<60	60-79	The standard requires (SG60 for SI a) that “there are mechanisms in place to evaluate some parts of the fishery-specific management system”. The reestablishment of the CPG has satisfied this requirement. And a second mechanism exists at the

							CMBIO, which regularly evaluates if the species is still under the threaten threshold. To meet SG60 for SI b) the standard requires that "The fishery-specific management system is subject to occasional internal review". The reading of the minutes of the last meetings of the CPG verify that the management system is being reviewed, and new measures (like a TAC) are going to be adopted soon. Therefore, the PI achieves a range of 60-79.

Environmental Workplan Results

Result	Related Action on FisheryProgress	Related MSC Performance Indicator	Explanation
Identify the existence of one or more snapper stocks on the North and Northeast coasts	1. Stock Assessment and Environmental impact	1.1.2, 2.5.3, 2.4.3, 2.1.3, 2.1.1	So far, the scientific group at the REPENSAPESCA project has considered that there is only one stock for the whole region and a stock assessment has been conducted with around 60 years of information. This action could be considered partially complete but needs to be continued regarding the status of the stock and complemented with regular data collection on the environments involved with the fishery.
Use new adopted Trace Register TR5 software to segregate data from official catch certificates (landing composition, effort, areas, by-catch/by-products, gears, bait used).	2. Fisheries data collection	1.2.3, 1.1.2, 1.1.1, 2.3.3, 2.5.3, 2.4.3, 2.1.3, 2.2.3, 2.2.2, 2.2.1	This private system is working already for the boats delivering to the partners of the FIP, so the action could be considered complete. There was also an improvement of the official logbooks system, including a public panel to monitor reported landings. It would be necessary to enhance the action (or create a new action) in the future to address the need of continued improving for the official MCS system.
Ensure that the management plan designed by the FIP stakeholders will be discussed and adopted by the management fisheries management committee (CPGs).	3. Management and Monitoring System	1.2.2, 1.2.1, 1.2.3, 1.1.2, 3.2.3, 3.1.2, 3.2.2, 3.2.1, 3.1.1, 3.2.4	There was a generic Recovery Plan proposed by the FIP, discussed and approved in 2018, so the action could be considered complete; but this Plan is more a "wishes list" and lack concrete goals and the respective tools. After achieving the reestablishment of the CPG in 2022, the FIP is pushing for this Plan to be revisited throughout 2025, which apparently will be achieved, and it is expected that these loopholes would be completed.

Implement a plan for the fishery defining clear objectives for management, defining a stock assessment method and verifying the current status of the stock in relation to reference points.	4. Management Plan	1.2.4, 1.1.2, 1.1.1, 3.1.2, 3.2.2, 3.2.1, 3.1.3, 3.1.1	As requested repeatedly by the FIP since 2016, The REPENSAPESCA project did an amazing job implementing a stock assessment in 2022 using the Stock Synthesis v3 model, integrating information from more than 60 years. This assessment defines reference points and shows the status of the stock against those points. This has been a significant advance for the FIP and for the fishery. Nevertheless, the Recovery Plan has not yet adopted the reference points and has not yet implemented the tools to conduct stock assessments regularly in the future nor a peer review. It is expected that these goals will be achieved in 2025.

Supporting References

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