

**Marine Spatial Plan (Bermuda Ocean Prosperity Plan)
Panel Review of Submissions
October 4th, 2024**

In an April 2024 press release, a government spokesperson said, “The Ministry of Home Affairs announces an extension of an additional week for consultation on the draft Blue Prosperity Plan. The consultation will now close on Tuesday, 7th of May. The intent of this consultation was to provide additional time for all stakeholders and the public to review the draft Plan, offer feedback, and contribute their perspectives to the Independent Review Panel (“the Panel”) for consideration”.

In May, Minister the Hon. Walter Roban, appointed a seven (7) member Panel, tasking them with reviewing all submissions for the purpose of issuing recommendations, if possible, on how to incorporate these submissions into the proposed Marine Protected Area Network and Potential Use Areas (aka Spatial Objectives) identified in Bermuda’s Draft Marine Spatial Plan (MSP).

The Panel comprised of:

1. Dr Harold Frith
2. Ms. Suzanne Mayall
3. Mr. Maxwell Burgess JP
4. Mr. William Campbell
5. Ms. Rachael Gosling
6. Mr. Joseph Robinson
7. Mr. Randolph Rochester
8. Ms. Amanda Outerbridge - alternate

The Panel was provided four weeks to review all recommendations and to submit their Report by June 14th. However, as the submissions were quite complex, the Panel determined it would require an extension so a thorough review could be undertaken. To that end, an additional four (4) weeks were provided, with the new deadline of July 15th, 2024, first thing.

While many submissions addressed issues other than the Spatial Objectives of the MSP, all the issues were relevant to the successful implementation of a Blue Ocean Prosperity Plan (BOPP) and MSP for Bermuda. The Panel read all of the submissions and made recommendations where appropriate in order to acknowledge and respect all the remaining concerns and outstanding issues expressed by submitters.

The Panel reviewed a total of 182 pages from 30 submissions by 20 individual contributors and conducted a number of interviews with the submitters. Many of the submissions were from commercial fishers encompassing 123 pages and 18 submissions from 8 submitters made up of individual commercial fishers and commercial fisher organizations. The remainder of the submissions came from a mix of infrastructure interests, divers, recreational fishers, boaters, conservationists and concerned citizens.

The Findings

A. Spatial Objectives of the MSP

1. Commercial Fishers Main Concerns and Complaints

Comments: The submissions from commercial fishers were from Fishermen's Association Bermuda (FAB), individual executives from FAB and the Commercial Fisheries Council (CFC), commercial bait fishers, and other individual commercial fishers. The main concerns, comments and opinions expressed by the majority of commercial fishers were as follows:

- The majority of the commercial fisher submissions were **not in favor** of no take Marine Protected Areas (MPA).
- The proposed no take MPAs would reduce their available fishing grounds and significantly impact their income.
- They are the only stakeholder with impacts on their livelihood if no take MPAs are put in place.
- An economic study on the impact of MPAs on commercial fishers' income should be carried out and the economic impacts considered as part of the MPA plan including location and size of MPA's and no take vs other options.

In overview, the FAB were of the view that commercial line fishing should be allowed in MPAs until improved enforcement is implemented and recreational fishing licensing is put in place. In the meantime, a consultative process between government and commercial fishers can be developed and common ground established for how to move forward with MPAs.

Panel Recommendations: the Panel was unanimous that buy-in from commercial fishers is critical to moving forward with BOPP MSP plans and therefore recommend that government engage meaningfully with commercial fishers (FAB) with the intent of finding common ground with regards to enforcement, recreational licensing and MPA management plans plus other issues.

2. Commercial Bait Fishers Concerns

Comments: Commercial bait fishers were concerned that the additional restrictions on fishing areas and the 2m no-fishing buffer around mangroves would significantly impact their livelihoods. Again, no study has been done to evaluate the economic impact on commercial bait fishers of the BOPP MSP, a necessary requirement to assess impacts of no fishing areas on bait fishers.

Some commercial bait fishers were of the view that the new rules will put them out of business. In addition, commercial bait fishers would like to see scientific data showing that bait fish are at risk of overfishing.

With regards to the mangrove buffer, some commercial bait fishers need to anchor nets close to the mangroves to avoid fish escaping the net. They rarely observe bycatch and thus the risk to juveniles in the mangroves is minimal to non-existent. Scientific studies are needed to support governments claims of bycatch by bait fishers. In addition, the lack of enforcement to protect mangroves from direct damage or removal due to punt storage, boat access, and other destructive activities should be a priority.

Panel Recommendations: Commercial bait fishers should be allowed to fish in protected areas including the 2m mangrove buffer until clear scientific evidence is available to show that bait fish are at risk of overfishing and that setting the nets within the 2m buffer does in fact result in significant by catch of juveniles rearing in mangroves.

3. Many Commercial Fishers would like the Government to Carry Out an Economic Study of the Impact of Proposed MPAs on Fishers Livelihood

Comments: Commercial Fishers are concerned that the economic impact of no take MPAs as proposed in the final draft, has not been taken into account in making decisions and are strongly in favor of an economic study of the potential impact of the proposed MPAs on their incomes. Some fishers and non-fishers suggested that compensation should be provided where restrictions have a material financial impact.

Panel Recommendation: That Government prepare a comprehensive study of the economic impact of the proposed MPAs on the incomes of commercial fishers in order to clarify the degree of the impacts on their livelihood and contribute to meaningful dialogue with commercial fishers about the best path forward including size and location of protected areas.

4. Commercial Fisher Opinion on the Selection of MPAs in the EEZ

Comments: With regards to the EEZ, the majority of commercial fishers including FAB prefer the 25 km outer ring design in order to address illegal fishing by international fishers. Commercial fishers are interested in the further development of the offshore long lining fishing industry. Fishers tend to follow the fish rather than concentrate in one area and also fish at depth but well off the bottom. As a result, fishers feel long line fishing should be allowed within offshore protected areas as there is no impact on the benthos.

Other submissions questioned the value of MPAs in the EEZ given the migratory nature of pelagic fish. Some suggested these large offshore MPAs would be difficult to monitor and enforce given the available manpower and infrastructure. And some suggested the offshore MPA area should be increased to 30% to match IUCN goals. The latter could be achieved by increasing the width of the perimeter ring and including some seamounts.

Some panellists were concerned about bycatch, particularly for seabirds. Others found the ecological criteria used to designate MPAs in the Offshore Network (A13 and A14) lacked sufficient information to understand selected location of protected areas and felt with a full understanding, the outer ring design favored by commercial fishers could be modified to satisfy ecological values.

Panel Recommendation: that the Government engage in further consultation with stakeholders including commercial fishers on the rationale for offshore MPA size and location including the scientific evidence to support the ecological values used and come to an agreement on the best size and location for offshore MPAs and their protective status.

5. Many Commercial Fishers Expressed Concern About Impact of No Take MPAs on the Guinea Chick Pot Fishery

Concerns: The Guinea Chick pot fishery is a separate fishery from the spiny lobster fishery and has different and specific habitat characteristics. A number of high value Guinea Chick fishing areas are now within the proposed no take MPAs. In particular, MPA's B7, A5, A10 and A11.

Panel Recommendations: Government consult with Guinea Chick fishers and come to an agreement on MPA boundaries and protective measures to ensure that this fishery is not unfairly impacted by proposed MPAs. Concessions which have already been made regarding the Guinea Chick fishery should be taken into account.

6. Bermuda National Trust Proposes No Fishing in Foot of the Lane

Comment: The Bermuda National Trust expressed a concern, shared by the Panel, about protecting the Foot of the Lane marine area from fishing pressure given the nursery function of the area for spotted eagle rays, turtles and other marine life. Mangroves are common along the shore and serve as a refuge for juvenile fish and other marine life. The area highlighted for protection extends east from a line drawn between the corner of BUEI property east of the Boathouse across to the western boundary of Waterville property off of Pomander Gate (map shown in Appendix 1).

Panel Recommendations: The shoreline and waters of the Foot of the Lane marine area, as shown by the Trust, be protected from shoreline and boat fishing by hook and line or bait net after consultation with landowners and the National Trust.

7. Submitter Suggestion that DENR Marine Resources Section Be Able to Rapidly Adjust Boundaries to Grouper Spawning Areas

Comments: The suggestion was made that DENR Marine Resources Section should be able to adjust the boundaries for grouper spawning areas and create new fish spawning protected areas on short notice in response to new information. If existing legislation requires a lengthy approval process or a need for new legislation each time adjustments or new protected areas are needed, new legislation should be drawn up and approved to facilitate rapid decision making followed by action. Additionally, it was suggested that increases in seawater temperatures may result in an earlier start to the spawning season and so the dates of the protected periods may need to be adjusted.

Panel Recommendation: That DENR Marine Resources Section be authorized to adjust existing boundaries to grouper spawning areas or create new protected areas for fish spawning of any commercial species without hindrance and new legislation should be drafted if needed

to facilitate rapid decision making. Similarly, the dates and time periods of the restrictions should allow for responsive adjustments based on newly available data.

B. Non-spatial Objectives of the MSP

1. Commercial Fishers Main Concerns and Complaints

Comments: The submissions from commercial fishers were from the Fishermen's Association Bermuda (FAB), individual executives from FAB and the Commercial Fisheries Council (CFC), commercial bait fishers, and other individual commercial fishers. The main concerns, comments and opinions expressed with regards to non-Spatial Objectives of the MSP by the majority of commercial fishers were as follows:

- Artisanal hook and line fishing on and off the platform is sustainable at existing fishing levels.
- In order to embrace additional fisheries management goals, issues like effective enforcement, licensing of recreational fishers, including bag limits, minimum sizes and catch data records, and adequate data collection of commercial fish stocks need to be addressed first before MPAs can be considered.
- They were keenly aware that illegal fishing in the grouper spawning grounds is occurring and that unlicensed fishers are selling fish illegally - both without consequence.
- The FAB pulled out of the consultation process for BOPP MSP because despite expressing their concerns about MPA effectiveness, enforcement, recreational licensing and other issues, they were unable to effect change within the policy process, and felt their perspectives were not being adequately considered by the BOPP MSP committees.
- The FAB as representative of commercial fishers want a co-operative management process for Bermuda's fisheries management where commercial fishers are part of the decision making. The FAB has prepared a Fisheries Management Plan for Bermuda outlining their preferred approach. The inclusion of commercial fishers in the planning and management of MPAs has been hugely beneficial to the success of MPAs in other countries.

In overview, the FAB were of the view that commercial line fishing should be allowed in MPAs until improved enforcement is implemented and recreational fishing licensing is put in place. In the meantime, a consultative process between government and commercial fishers can be developed and common ground established for how to move forward with MPAs.

Panel Recommendations: the Panel was unanimous that buy-in from commercial fishers is critical to moving forward with BOPP MSP plans and therefore recommend that government engage meaningfully with commercial fishers (FAB) with the intent of finding common ground with regards to enforcement, recreational licensing and MPA management plans plus other issues.

2. Concerns About Illegal Fishing in the Grouper Spawning Grounds

Comments: A number of submissions by fishers and non-fishers were concerned about illegal fishing in grouper spawning grounds and felt that banning fishing in all Bermuda waters for black groupers and red hinds during the spawning season would be beneficial to the fish stocks and allow for more effective enforcement.

Panel Recommendation: The banning of fishing for black grouper and red hind inside and outside of grouper spawning areas during the seasonal closure be considered in consultation with commercial and recreational fishers.

3. Concern that Enforcement for Fisheries Violations is Not Effective

Comments: Most submitters expressed concern about the lack of effective enforcement of existing fisheries legislation and thus the ability to take on an additional enforcement challenge and effectively enforce new MPAs. Many commercial fishers and other submitters stated that Fisheries Wardens were hampered by a lack of funding, there was a need for more wardens, and the need for training and support for dealing with aggression when performing their duties. The main issues expressed were illegal fishing in the grouper spawning grounds and illegal sale of fish by unlicensed fishers.

Panel Agreed: that effective enforcement is critical to achieving fisheries management goals in Bermuda and enforcement needs to be more effective in order to support existing fisheries legislation and any new legislation that may be enacted. The Panel is aware of the enforcement action plan included in the BOPP MSP supporting documentation.

Panel Recommendation: that an enforcement plan is put in place and demonstrates successful outcomes before moving forward with new fisheries management plans. The Panel unanimously recommends that the Bermuda Coast Guard should be actively enforcing all marine legislation.

4. Many submitters in Favor of Recreational Fishing Licensing

Comments: Many submitters are in favor of licensing of recreational fishing including bag limits, minimum sizes and the requirement for submission of catch data. The recreational fishery is estimated to represent approximately 30 to 50% of total catch. Given the substantial size of the fishery, many felt strongly that catch data from the recreational fishery is critical for management of Bermuda fish stocks.

Panel Recommendation: The development of a recreational fishing licensing system with bag limits, minimum sizes and a requirement for recreational fishers to submit catch data as soon as possible after consultation and agreement with the recreational and commercial fishing industry.

5. Many Submitters Expressed Concern About Pollution in the Marine Environment

Comments: Pollution issues were highlighted as an area of concern by many submitters. The main concerns were (1) pollutants leaching into Castle Harbour from the airport dump impacting corals, mangroves, seagrass, fish and other marine life, (2) sediment disturbance by the BIOS research vessel upon departure and arrival at the BIOS dock in Ferry Reach potentially impacting seagrass, mangroves, corals, fish and other marine life within the area of disturbance, (3) potential leaching of pollutants from government lands such as Sally Port and Public Works quarry and (4) high *E. coli* readings in Mills Creek near the Pembroke Canal inflow.

Panel Agreed: The Panel acknowledges and shares the concern of commercial fishers and the general public about pollutants leaching into the marine environment potentially causing harm to marine life.

Panel Recommendation: That Government prepare a report detailing the data presently available and the rationale for the present management practices in place and plans for future monitoring and assessment with regards to the point sources mentioned above. Such a report would improve public awareness of the issue, allow the public to better understand the risks and improve trust.

6. Concern About the Lack of Scientific Fish Stock Data Collected by and/or available to DENR Marine Resource Section

Comments: Many commercial fishers and some non-fishers were concerned that Department of Environment and Natural Resources (DENR) Marine Resource Section has insufficient data to analyse commercial fish stocks and determine sustainable fish catches. The most common suggestion was that DENR needs financial and personnel support to carry out scientific sampling for commercial fish stock data required for assessing abundance, age, and size structure of population and other measures.

Panel Agreed: The Panel acknowledges the importance of collecting scientific data on commercial fish stocks to support and guide management goals.

Panel Recommendation: DENR Marine Resources Section be allocated additional funding for equipment and personnel as needed for the collection of fish stock data in house or by contract research scientists.

7. Many Submitters in Favor of a Ticketing System for Fisheries Violations

Comments: Many fishers and non-fishers are in favor of a ticketing system for fisheries violations reducing court delays. DENR proposed a ticketing system at least 14 years ago but a system was never implemented.

Panel Recommendation: that a ticketing system to enforce fisheries violations be implemented as soon as possible.

8. A Number of Submitters Proposed a System to Track Fish Sales

Comments: A number of submitters, fishers and non-fishers, proposed a system to track legal sales of fish from a licensed commercial fisher to a restaurant, store or individual. Such a system would provide proof that a sale was legal. Penalties for not showing proof of legal sale would be subject to a fine and discourage illegal sales.

Panel Recommendation: That the Government undertake additional consultation with commercial fishers and agree on a proof of legal sales system for fish caught and sold by licensed commercial fishers.

9. Concerns About the Present Low Biomass of Fish and Other Marine Life

Comments: Concerns about the present low biomass of commercial fish stocks was expressed by a number of submitters. The observation that historically turtles, groupers, sharks, lobsters and shellfish were substantially more abundant in Bermuda waters than at present. The present biomass is perceived by some to be historically low and implies over exploitation. Some submitters proposed a moratorium on fishing for five years.

Panel Recommendations: A study of the historic record of marine biomass and abundance for fish, shellfish, turtles, sharks and other marine life be prepared to be used as an educational product for local schools and the general public.

10. Proposal for Development of Fish Hatcheries to Supplement Fish Stocks in Bermuda

Comments: Some submitters proposed hatcheries as a potential solution to enhance existing fish stocks. Salmon hatcheries on the west coast of the US were highlighted as an example of successful employment of this technology.

Panel Recommendations: Recognising the potential value of hatchery technology to enhance fish stocks, the DENR Marine Resources Section scientists should explain their position and knowledge on the suitability of hatcheries for Bermuda fish stocks in the form of a report made available to the Bermuda public. The report would inform the public of the potential for hatcheries in Bermuda given the available science and previous local research on this issue.

11. Submitter Suggestion to Allow Permitted Scientific Research in Protected Areas

Comments: The suggestion was made that scientific research including limited extractive sampling should be allowed when and where appropriate in fully protected areas. Scientific research in protected areas should require a permit in which specific rules and guidelines can be specified.

Panel Recommendations: Scientific research including limited extractive sampling should be allowed in protected areas but require a permit specifying rules and guidelines.

12. Concern Expressed about Subsea Cable Repairs Requiring an EIA

Comments: Two submitters with interests in subsea cable expressed concern over the requirement for an EIA with regards to new cable installations and repair of existing cable. Cable companies are willing to carry out an EIA for new cable installations but are concerned that the requirement for an EIA with regards to cable repairs would cause a disruption in services to island residents (e.g. internet service). Cable suppliers suggest cable repairs should not require an EIA. Data collection during repairs could be provided if needed.

Panel Recommendation: Subsea cable repairs within Bermuda waters be allowed without the requirement for an EIA. However, new cables should be routed outside of MPA's where possible.

General Observations

Despite the divide between those submitters wanting much greater conservation and those wanting relatively unimpeded access to fisheries resources, the Panel observed common concerns expressed by both parties. Those concerns are:

1. The lack of available and easily communicable baseline scientific research data on fish stocks, the necessity for data-driven policies, and the impact that the perceived lack of data had on the submitters' confidence in the proposed MSP plan.
2. The inadequacy of current enforcement efforts for existing marine resource legislation and the dire need to address and enhance this if the plan is to have meaningful impact towards the intended goal of increasing fish stocks.
3. The necessity of addressing additional factors other than commercial fishing that are impacting the marine environment, such as pollution, moorings, and destruction of mangroves and marine habitats through development.
4. The need to license and regulate recreational fishing, including collecting recreational catch data to support data-driven policy for future iterations of the MSP.

The Panel recommends that a phased approach to implementation be considered, prioritizing pre-emptive action and clear public communication on these common concerns before enacting no-take restrictions in the controversial areas of the MSP. This would allow for implementation of the agreeable areas of the MSP while bolstering stakeholder trust in further discussion on the more contentious areas of the plan while ongoing. The Government has expressed support for a phased approach but has not communicated clearly what the phases are. The Panel recommends that action on the principal crucial concerns of efficacy of existing enforcement and recreational licensing and regulation first would drastically improve stakeholder support for the proposed BOPP MSP.

It is strongly recommended that before the disputed no-take areas of the MSP are advanced, a concerted and genuine effort is undertaken to re-engage in consultation with the FAB, in particular addressing their core non-spatial concerns with respect to empowering existing enforcement efforts and regulating recreational fishing. The Panel observed a willingness by the FAB to collaborate and reach a plan agreeable to all parties. Developing an effective foundation for cooperative fisheries co-management is crucial to the success of the plan

going forward. The Panel therefore recommends that take-up of the proposed new MSP be pre-empted by a redoubled focus on successful, demonstrable, and clear publicly communicated enforcement of existing regulations to build fisher stakeholder trust in existing and proposed enforcement efforts. This would go a long way to restore the erosion of trust and assure the public that this has been an open and transparent process.

The Panel would like to emphasize that we believe strongly in the underlying goals of the MSP to support sustainable use of marine resources in the EEZ, protect Bermuda's marine ecosystem and facilitate the return of fish and other marine populations to more bountiful levels as observed historically. We also believe based on submissions and personal interviews that commercial fishers as well as recreational fishers and other resource users in Bermuda share that goal and feel they are important stewards of Bermuda's marine environment. In interrogating the reasoning for perceived opposition by fisher stakeholders to spatial aspects of the plan, the Panel found that those stakeholder groups are largely in agreement with the aims of the MSP but remain concerned that the aims of the MSP will not be successfully achieved without addressing the non-spatial legacy issues of enforcement and recreational regulation. While categorized as distinct Spatial and Non-Spatial issues, these aspects are ultimately inseparable in final consideration, as stakeholder agreement and cooperation with the resolution of Spatial Issues is contingent on addressing and resolving the highlighted Non-Spatial Issues. In pursuit of the common shared goals of effective, equitable, cooperative, and broadly beneficial co-management, we are hopeful that we have assisted in laying out a path forward for successful implementation of a spatial management plan for Bermuda.

Panel Signatures:

Dr. Harold Frith

Harold Frith

Ms. Suzanne Mayall

Suzanne Mayall

Mr. Maxwell Burgess JP

Mr. William Campbell

William Campbell

Ms. Rachael Gosling

R. R. Gosling

Mr. Joseph Robinson

Joseph Robinson

Mr. Randolph Rochester

Randolph Rochester

Date: 8 October 2024

Appendix 1



Proposed Protected Area in Foot of Lane (outlined in red)