

To: Christin Atchinson
From: Helen McConnell
Company: Waikato Regional Council
SLR Consulting New Zealand
cc:
Date: 28 March 2024
Project No. 840.030063.00001

**RE: NWML Proposed Spat Farm
Review of Marine Wildlife Management Plan**

1.0 Introduction

A resource consent application has been lodged with the Waikato Regional Council (WRC) by North Western Mussels Limited (NWML) (the applicant). This application seeks to develop a new 700-hectare marine farm incorporating spat catching and nursery operations over four separate sites in the Tasman Sea off the west coast of the Waikato region (near Raglan).

For the purpose of this resource consent application, an assessment of effects on marine mammals was prepared by Jim Roberts, Anemone Consulting (Roberts, 2023). On 17 August 2023 I provided to WRC a peer review of this assessment. I herein refer to this peer review report as McConnell (2023).

I have recently been asked by WRC to review the draft Marine Wildlife Management Plan (MWMP) and relevant content in the associated draft Operational Management Plan (OMP) that has now been provided by the applicant. This memorandum sets out to review the marine mammal content of these draft plans by:

- Providing commentary on the content of the plans as it relates to marine mammals; and
- Providing any suggestions for improvement or clarification for the purpose of ensuring that the risk of adverse effects on marine mammals is sufficiently minimised.

In general, the draft MWMP addresses the topics that I would expect to see covered in a management plan. It is particularly encouraging to see that the draft plan follows the A+ Sustainable Framework for Greenshell Mussels and the national guidelines produced by Fisheries New Zealand to minimise and mitigate the interactions between finfish open ocean aquaculture and marine mammals (FNZ, 2021)¹.

The inclusion of the FNZ (2021) definitions relating to 'interactions' and 'incidents' (in Section 1 of the draft MWMP) is a valuable addition and I strongly support the differentiation between these terms. I do however note that some confusion arises in Sections 10, 11, and 13 of the draft plan with regard to the use of these terms and I offer specific suggestions presently to deal with the resultant ambiguity in operational requirements.

The draft MWMP also clearly sets out the obligations under the Marine Mammals Protection Act 1978 and Marine Mammals Protection Regulations 1992.

In keeping with my field of expertise, I did not review the seabird content of the draft MWMP.

¹ <https://www.mpi.govt.nz/dmsdocument/48007-AEBR-273-Best-practices-and-technologies-available-to-minimise-and-mitigate-the-interactions-between-finfish-open-ocean-aquaculture-and-marine-mammals>

2.0 Objective of the MWMP

Section 2 of the draft MWMP presents the objectives of the plan as follows:

- 1 Avoid adverse effects from the construction and operation of the spat/nursery farm on marine mammals, and where it is not practicable to avoid effects, to minimise those effects to the point that they are minor or less; and
- 2 Minimise the potential for interaction of marine mammals with the marine farm.

It is commendable that the Objective 1 sets out the intent that adverse effects on marine mammals are to be avoided (i.e. prevent the occurrence of). In keeping with this, I note that Policy 11(a) of the New Zealand Coastal Policy Statement (NZCPS) requires that effects on indigenous taxa listed as 'threatened' or 'at risk' by the New Zealand Threat Classification System or listed as 'threatened' by the International Union for Conservation of Nature and Natural Resources (IUCN) must be avoided.

Objective 1 also includes an additional caveat, that where it is not practicable to avoid effects, they must be minimised to being no more than minor. While this is a pragmatic way of recognising that it is simply not possible to eliminate all potential effects on all marine mammal species from farm construction and operation, the fundamental requirements of Policy 11(a) must be satisfied in that population levels effects on threatened species must be avoided. On this basis, the only effects that are permissible under the caveat of Objective 1 are minor effects on individuals. I agree that this is an appropriate level of acceptable risk.

Regarding Objective 2, and in addition to interactions, I would suggest that this objective is expanded on to also minimise the risk of incidents.

A third objective could also be considered as follows: "To describe protocols and procedures for the management of marine mammal interactions and incidents."

While I did not review the draft MWMP in terms of seabird content, I did note that the objectives in the draft plan appear to have no relevance to seabirds and this seems a little at odds with the plan content.

3.0 Roles and Responsibilities

The clear delegation of roles and responsibilities as presented in Section 3 of the draft MWMP is a critical component of a management plan. I note that before the plan is finalised, additional roles will need to be defined for vessel skippers, and general farm staff, as it is these positions that will be responsible for the day-to-day implementation of the MWMP. Reporting functions will also need to be delegated to appropriate personnel.

4.0 Marine Mammals in the Proposed Area

I generally do not have an issue with the inclusion of this content and note that the photos of those species that are likely to occur in and around the farm will serve a useful purpose in assisting farm staff with species identification. However, and in keeping with the operational focus of the MWMP, I would suggest that this content be reduced/condensed to focus only on those species that farm staff are likely to encounter, e.g.:

- Māui/Hector's dolphins (odontocete);
- Common dolphins (odontocete);



- Killer whales (odontocete);
- Southern right whales (baleen whale);
- Humpback whales (baleen whale); and
- New Zealand fur seals (pinniped).

With regard to blue whales, if this species is included (noting that McConnell (2023) concluded that this species has little relevance to this proposed marine farm), I suggest that the second table in section 4 of the draft MWMP be updated to note that they are classified as NZCPS Policy 11(a)(ii) species (being classified as 'endangered' by the IUCN).

5.0 Potential Effects on Marine Mammals

I have reviewed the content of Section 6 of the draft MWMP for accuracy and have identified no issues with this content. I wonder however if this detail is necessary in an operational plan and, in the interest of brevity, would urge the applicant to consider moving the majority of this content to an appendix and simply presenting the summary list of potential effects in the body of the MWMP.

6.0 General Protocols

Section 9 of the draft MWMP clearly sets out the requirements of the Marine Mammals Protection Act 1978 and Marine Mammals Protection Regulations 1992, correctly noting that these are legal obligations that must be followed.

In the subsection 'Compliance with the A+ Sustainable Management Framework for Greenshell Mussels', I note that there is a commitment that all vessels abide by the rules detailed in the Department of Conservation (DOC) pamphlet 'Sharing our Coasts with Marine Mammals'. I suggest this pamphlet is included as an appendix to the MWMP.

7.0 Specific Marine Mammal Management Protocols

In terms of importance of content, Section 10 of the draft MWMP is where the main focus should be placed. This section sets out the actual procedures to be followed by the applicant to ensure that the risk of adverse effects on marine mammals is sufficiently managed in accordance with the plans objectives. I have comprehensively reviewed the content of Section 10 and have recorded my comments and suggestions for improvement in **Table 1** below. Note that the first three columns in **Table 1** replicate those of Table 10.1 in the draft MWMP; with the addition that I have numbered the Implementation Strategies for ease of reference.



Table 1 Review of Specific Marine Mammal Protocols in Draft MWMP

Effect	Protocol	Implementation	Evaluation Comments
Entanglement	All staff will be trained in all aspects of the marine farm operation that are required to mitigate the risk of entanglement.	1. Staff shall receive training at induction and every 6 months on all the aspects of this MWMP including how to identify and record marine mammals, to minimise interactions, and to respond appropriately to any marine mammal or seabird interactions.	The proposed training schedule is appropriate. Six monthly refreshers are sufficiently frequent to maintain training currency. Care needs to be taken with the terminology of 'interaction' versus 'incident' in keeping with the FNZ (2021) definitions. I would recommend that the Implementation Strategy is reworded to incorporate both as follows: Staff shall receive training at induction and every 6 months on all the aspects of this MWMP including how to identify and record marine mammals, to minimise interactions and incidents , and to respond appropriately to any marine mammal or seabird interactions or incidents .
	The farm layout will include sufficient spacing between the lines for dolphins to swim between them.	2. The line spacing will be at least 50 metres and the dropper spacing will be at least 600 mm apart. This provides sufficient space for dolphins and killer whales to safely swim through the farm.	Line spacing of 50 m is an important and relevant mitigation.
	The rope specifications shall be sufficient to ensure structural integrity and avoid breakage.	3. The warps will be 44 mm Durashield warps with a breaking strain of 31,000 kg. The backbone will be 40 mm with a breaking strain of 25,000 kg. The catching rope will have a diameter of 75/80 mm. These specifications are significantly higher than in normal marine farming operations. Where feasible, high-quality UV stabilised rope products will be used on the farm.	The proposed Implementation Strategy is appropriate to address this important and relevant mitigation.

Effect	Protocol	Implementation	Evaluation Comments
	Anchoring will be sufficient to ensure structural integrity.	4. Anchors will be installed by an experienced marine engineer with the use of a drill operating from a surface vessel. The anchors will be drilled to approx. 6-12 metres depth into the substrate (depending on the specifics of the chosen location).	
	Anchor warps shall not overlap or cross between blocks.	5. The warp layout will not enable cross over by virtue of the proposed layout. The line lengths are 300 metres at sites A – C and 400 metres at site D to account for the deeper water. The warp length will be between 60 to 80 metres depending on the water depth. The warp ratio will be in the order of 2.5:1. The spacing between lines will be at least 50 metres.	The proposed Implementation Strategy is appropriate to address this important and relevant mitigation.
	Warps and backbones will have adequate tensioning.	6. Anchor warps will be installed by an experienced marine engineer and hydraulic barge winches will be used at installation and in maintenance activities to ensure adequate tensioning.	The proposed Implementation Strategy is appropriate to address this important and relevant mitigation.
	Spat rope will be self-tensioned with added negative buoyancy.	7. Spat rope will have a lead core, which is self-tensioning with negative buoyancy as well as acting as a sonar deflection mechanism.	The proposed Implementation Strategy is appropriate to address this important and relevant mitigation.
	Infrastructure will be regularly inspected and maintained to ensure structural integrity including that ropes and lines remain adequately tensioned and secure.	8. The inspection schedule will be as follows: a. Fortnightly surface maintenance inspections to visually identify damage to backbone lines and floats. b. At least annual underwater maintenance inspections to visually check anchor warps for chafing and any other damage. c. Additional visual and underwater	The development of an appropriate inspection schedule is critical towards achieving the MWMP objectives. While the proposed inspection schedule is largely appropriate, I recommend the following edits: Regarding 8a. "Fortnightly surface maintenance inspections to visually identify damage to



Effect	Protocol	Implementation	Evaluation Comments
		maintenance inspections after any significant storm event. d. Annual visual check for wear on floats. A record of infrastructure inspections will be kept including where any remedial work is indicated and when it has been carried out.	backbone lines and floats and any loose or unsecure components." Regarding 8b. "At least annual underwater maintenance inspections to visually check anchor warps and other submerged components for chafing and any other damage." I note that Implementation Strategy 9. below, provides an appropriate timeframe in which repair or remedial work must occur.
	Farm structures and equipment shall be maintained to avoid free, loose, or floating lines or ropes capable of causing entanglement.	9. Any free, loose, or floating ropes will be cleared as soon as they are noticed. Any other maintenance issues identified during routine operations or targeted inspections will be remediated as soon as is practically possible.	The proposed Implementation Strategy is appropriate to address this important and relevant mitigation. Further to this, I would recommend that staff training should place high importance on immediately attending to any free, lose or floating ropes.
	Artificial lighting will be minimised to that necessary for navigational safety.	10. The navigational lighting system will be established in accordance with the Maritime New Zealand and/or the Harbour Master and checked by a suitably qualified marine scientist prior to implementation. Farming and maintenance operations will be restricted to daylight hours unless operational or safety requirements prevail.	The proposed Implementation Strategy is largely appropriate to address this important and relevant mitigation. However, I make the following suggestion to clarify the intention that no planned work should occur in the hours of darkness. Regarding 10. "The navigational lighting system will be established in accordance with the requirements of Maritime New Zealand and/or the Harbour Master and checked by a suitably qualified marine scientist prior to implementation. Farming and maintenance operations will be restricted to daylight hours unless unforeseen operational or safety requirements prevail."



Effect	Protocol	Implementation	Evaluation Comments
	All staff will be aware of, and follow where required, an emergency disentanglement protocol.	11. The MWMP will include an emergency disentanglement protocol developed by a suitably qualified marine scientist. All marine mammal or seabird entanglement incidents regardless of outcome will be recorded and reported immediately to DOC.	Implementation Strategy 11 is partially addressed by both Section 13 of the MWMP and flow chart in Appendix One of the MWMP. In my opinion, and as they stand, these Emergency Disentanglement Procedures are disjointed and difficult to follow and further procedural advice should be developed for inclusion in the MWMP as follows: - The paramount health and safety considerations that would need to be followed to ensure staff safety during any disentanglement attempt; - The recommended steps to take in order to disentangle a marine mammal (for an example see appendix 11 of the NZKS Blue Endeavor Marine Mammal Management Plan that forms part of Clement, 2021); and - The equipment required to facilitate a disentanglement attempt. Further to this I suggest that the Emergency Disentanglement Procedures are afforded their own section of the MWMP (they are currently combined with reporting requirements which conflates two separate issues). They need to be standalone and easy to find in the event of an emergency. Additional considerations include: - The existing procedure outlined in Section 13 implies that a disentanglement attempt can be made by staff, but bullet point 1 should be strengthened to explicitly state that a disentanglement attempt should be made if staff deem that is safe to do so. - The flow chart included in Appendix One of the MWMP provides some additional useful



Effect	Protocol	Implementation	Evaluation Comments
			information on the procedures to follow in the event of an entangled marine mammal, particularly with regard to notification procedures. I note however that the attributed source for this flow chart is incorrect as it does not originate from FNZ (2021) but instead appears in the Statement of Evidence prepared by Dr Deanna Clement for New Zealand King Salmon (Clement, 2021)². - I also note that some of the timeframes associated with the reporting requirements on the flow chart are at odds with Implementation Strategy 11 that requires immediate reporting of any entanglement incidents to DOC. These discrepancies need to be rectified. - In addition to an Emergency Disentanglement Procedure (which as it stands presumably applies for live marine mammals), the MWMP should also include procedures to be followed in the event of a dead marine mammal being found (entangled or otherwise) during the course of the proposed operations. These procedures must also include staff health and safety considerations, and carcass recovery or disposal procedures in consultation with DOC.
Marine Debris	All farm vessels shall have covered waste bins and debris retrieval nets onboard. All waste shall be collected, retained onboard and	12. Staff shall receive training at induction and every 6 months on all the aspects of this MWMP including the importance of retaining all waste onboard, ensuring infrastructure is secure and maintained	The proposed Implementation Strategy is appropriate to address this important and relevant mitigation. I also note that I have reviewed the relevant detail (Section 7) of the OMP and am satisfied that the content of the OMP broadly supports the protocol

² <https://eservices.marlborough.govt.nz/download/files/Y33E6KgLBjXZY6pi28WYFqgkln8B0FLUocwD2RboHBoY>



Effect	Protocol	Implementation	Evaluation Comments
	disposed of at an appropriate facility onshore. If any loose debris does enter the water around the marine farm, it must be promptly retrieved. All structures will be maintained to ensure that they are restrained, secure and in working order at all possible times so as not to create a navigational hazard or pose a risk to marine mammals or seabirds. Retrieval of any lost farm structures (e.g. anchors, lines, droppers, ties, or floats) from the seabed, water column or foreshore shall occur no later than one month from the date on which the material was lost.	and avoiding loss of non-organic material to the marine environment. 13. NWML will operate under an Operational Management Plan (OMP) which replicates the requirements to mitigate and, if necessary, remedy, loss of marine debris. Staff will receive OMP training in conjunction with training on the MWMP.	and Implementation Strategies 12 and 13 outlined in the MWMP.
Vessel Strike	Vessel operators shall maintain vigilance for marine mammals and seabirds during all on-water operations. All staff will be aware of the need for increased vigilance from June to November for southern right whale and humpback whale migrations	14. The following steps will be taken to ensure that all vessel protocols are followed: a. All shall receive training at induction and every 6 months on all the aspects of this MWMP including how to identify and record marine mammals, to minimise interactions, and to respond appropriately to any interactions. b. A vessel transit map shall be created that identifies any rock stacks, islets or	The MWMP notes in Section 6 that compliance with the Marine Mammal Protection Regulations 1992 is a legal requirement. To this end I note that the recommendations from McConnell (2023) have been incorporated as protocol in relation to reducing the risk of vessel strike in keeping with the regulatory requirements. In relation to the proposed Implementation Strategies, I make the following recommendations:



Effect	Protocol	Implementation	Evaluation Comments
	and from November to February for Maui dolphin breeding season. A dedicated staff member will have the responsibility to provide additional vigilance to support the vessel operator during these times.	islands used by seabirds which require a 100 m buffer for transiting.	Regarding 14a. "All staff shall receive training at induction and every 6 months on all the aspects of this MWMP including the requirements of the Marine Mammal Protection Regulations. Vessel skippers in particular, will need to demonstrate that they fully understand their obligations in this regard, along with the requirement that that maintain vigilance for marine mammals and seabirds at all times. "
	Vessel operators shall endeavour not to disrupt the normal movement or behaviour of marine mammals.	c. A copy of the key MWMP vessel protocols, including clear identification of vessel speeds, will be provided in easily accessible format on all marine farm vessels.	Regarding 14c. "A copy of the key MWMP vessel protocols will be provided in easily accessible format on all marine farm vessels. In particular, the maximum allowable vessel speed of 12 knots will be clearly displayed along with speed restrictions that apply within 300 m of marine mammals. "
	Care shall be taken not to separate any individuals from or scatter any groups of marine mammals and no vessel shall proceed through a pod of dolphins.	d. Any vessel interactions with marine mammals will be recorded and reported to DOC in accordance with the reporting protocols.	Further to these specific edits, an additional Implementation Strategy is required to address the role of the 'dedicated staff member' who will provide additional observational support for those periods when increased vigilance is required. The proposed Implementation Strategy is currently lacking in this regard and provides no additional details of how this protocol will be implemented.
	No sudden or repeated change in the speed or direction of any vessel shall occur in the vicinity of marine mammals (except in emergency circumstances).	e. All vessels will display the DOC sticker that sets out vessel rules in relation to approaching marine mammals.	As noted in McConnell (2023): procedures to facilitate increased vigilance (over and above the baseline requirement) should be outlined in the MWMP. To achieve this, I suggest that the MWMP be revised to provide additional information on 1) how and when the dedicated staff member will be appointed to this role and 2) what they will specifically be required to do in this role. For instance:
	No vessel shall cut off the path of a marine mammal.	f. All vessel operators will be aware of, have access to, and abide by the rules detailed in the DOC pamphlet 'Sharing our Coasts with Marine Mammals'.	
	Vessels shall not exceed 12 knots at any time during marine farming activities including moving between the farm and the shore.	g. DOC staff will be welcome to accompany the marine farm operators on board a vessel to view the implementation of the MWMP protocols.	



Effect	Protocol	Implementation	Evaluation Comments
	Vessels less than 300 m from a marine mammal shall move at a constant slow (no wake) speed. In the case of dolphins, vessels may exceed this speed in order to outdistance the dolphins but must increase speed gradually and shall not exceed 10 knots within 300 metres of any dolphin.		- whilst on-farm, implement a requirement for hourly scans with naked eye and good quality binoculars during the months of June to February; and
	No vessel shall approach within 50 m of a whale, and if a whale approaches a vessel, the vessel shall make every attempt to keep out of the path of the whale and to maintain a minimum distance of 50 m.		- whilst in transit, maintain a dedicated watch for marine mammals paying particular attention to the presence of Māui dolphins between Raglan and Site D during the breeding season months (Nov – Feb) as this is where most sightings of groups containing juveniles have been reported from.
	No vessel shall approach within 200 m of a baleen whale or sperm whale with a calf.		
	Vessels shall use routes that avoid rock stacks, islets and islands used by shags, terns and gulls for roosting by at least 100 m.		
	All staff shall be aware of and comply with the Marine Mammal Regulations 1992 with respect to vessel		



Effect	Protocol	Implementation	Evaluation Comments
	speeds, approach angles and proximity to marine mammals. All vessels shall display in a position visible to the skipper, the DOC sticker setting out vessel rules in relation to approaching marine mammals. All vessel operators shall be aware of, have access to, and abide by the rules detailed in the DOC pamphlet 'Sharing our Coasts with Marine Mammals'.		
Underwater Noise	Underwater noise will be minimised during the construction of the farm and during farm operations.	15. Staff shall receive training at induction and every 6 months on all the aspects of this MWMP including the importance of minimising underwater noise.	The proposed Implementation Strategy is appropriate to address this important and relevant mitigation.
	To ensure minimal underwater noise levels resulting from farming activities, regular maintenance will be conducted on all farming equipment and vessels. Proper upkeep measures will be implemented to minimise the generation of underwater noise and vibrations.	16. In addition to the farm infrastructure inspection and maintenance schedule all vessels will be inspected and maintained at least annually and more frequently if unusual noises are detected. A record of vessel inspections will be kept including where any remedial work is indicated and when it has been carried out.	The proposed Implementation Strategy is appropriate to address this important and relevant mitigation.



Effect	Protocol	Implementation	Evaluation Comments
	All noise suppression equipment on vessels, including mufflers and ventilation baffles, shall be consistently maintained in optimal working condition		
Lights	Navigation lights will be flashing or rotational lights rather than constant lights to reduce the potential for disorientation of seabirds.	17. NWML will provide evidence to WRC and DOC that the navigation lights meet this requirement once they have been installed.	No comment, not applicable to marine mammals.



8.0 Staff Training

The requirements for staff training are described in Section 11 of the MWMP. I consider that the proposed training schedule is appropriate. Six monthly refreshers are sufficiently frequent to maintain training currency.

I would recommend Section 11 of the MWMP be augmented with a list that outlines the marine mammal related topics that staff training must (as a minimum) address. The draft list below could be considered for inclusion; it presents the relevant staff training requirements from Table 1 and several additional topics of relevance:

- Key actions to minimise interactions³ with marine mammals, including that staff are not permitted to attract wildlife to farm sites (e.g. no fishing or feeding wildlife is permitted);
- Key actions to minimise incidents³ with marine mammals, including the requirement to immediately attend to any free, loose or floating ropes to reduce the risk of marine mammal entanglement;
- How to respond appropriately to any marine mammal interaction or incident, including awareness of the Emergency Disentanglement Procedures and health and safety protocols necessary for dealing with live or dead marine mammals;
- Awareness of and mandatory compliance with the Marine Mammal Regulations 1992 with respect to vessel speeds, approach angles and proximity to marine mammals, and any additional NWML procedures for safe operation of vessels around marine mammals (including maximum 12 knot speed limit for work vessels);
- Awareness of the need for increased vigilance from June to November for migrating southern right whales and humpback whales, and from November to February for Maui dolphins with calves, including the requirement for a dedicated staff member to provide additional vigilance to support the vessel operator during these times;
- How to identify, record and report marine mammal sightings, interactions and incidents, including reporting timeframes;
- Importance of retaining all waste onboard, ensuring infrastructure is secure and maintained, including OMP training; and
- Importance of minimising underwater noise.

9.0 Marine Mammal Monitoring

McConnell (2023) made the following recommendations with regard to marine mammal monitoring requirements:

- In addition to records of any incidents (e.g. injury or entanglement), data collection of non-injurious marine mammal interactions (e.g. animals bumping or rubbing on farm structures etc.) should occur;

³ Throughout the training material, care should be taken to ensure the correct use of the terms 'interaction' and 'incident' in keeping with the FNZ (2021) definitions.

- Daily marine mammal presence and absence data should be collected to facilitate increased understanding of how marine mammals utilise farm sites under different operating regimes and at different times of the year;
- Marine mammal sighting records should be made both at the farm sites and during transit to and from Raglan.
- Support was also indicated with regard to both passive acoustic monitoring (PAM) and toxoplasmosis sampling which were additional monitoring components proposed by Roberts (2023).

While the draft MWMP expands slightly on the recommendations listed above, Section 12 of the draft MWMP is currently inadequate; stating that a 'Marine Mammal Monitoring Programme' is yet to be developed. In the absence of further detail, it is impossible to fully understand and evaluate the proposed monitoring.

It is encouraging to see that that 1) NWML will support a toxoplasmosis monitoring programme; 2) that protocols for PAM are being developed as part of the Marine Mammal Monitoring Programme; and 3) a template sighting log has been developed. However, as indicated above further detail is required before a full evaluation of the proposed monitoring can be made.

10.0 Reporting and Response

As stated in Table 1 (in relation to Implementation Strategy 11), I strongly recommend that the Emergency Disentanglement Procedures are afforded their own section to ensure that they are easy to find and concisely presented in the event of an emergency. My other comments in relation to disentanglement procedures are also presented in Table 1 and are not repeated here.

With regard to the reporting requirements proposed in Section 13 of the draft MWMP, I make the following comments:

- Care should be taken to ensure the correct use of the terms 'interaction' and 'incident' in keeping with the FNZ (2021) definitions. Section 13 states that interactions with marine mammals will be reported to DOC in accordance with the Marine Mammals Protection Act 1978. I believe the intention here is for 'incidents' (entanglement or injury) to be reported to DOC and suggest that the timeframe within which these reports need to occur is also clearly stated here;
- Records of non-injurious marine mammal interactions should be provided to DOC on a quarterly basis as part of the collation of marine mammal sightings data; and
- Section 13 should also include details of how the results of the Marine Mammal Monitoring Programme will be reported (i.e. to whom, in what format, and how often).

11.0 Staged Development Plan

The intention to prepare a Stage Development Plan (SDP) is commendable. From Roberts (2023) I understand that the SDP is likely to defer the development of Site D (which perhaps represents habitat that is most suitable for Māui dolphin mother/calf pairs) until monitoring results are available for Sites A-C; although without further detail it is difficult to fully understand or evaluate this component of the draft MWMP.



The proposed involvement of DOC in appraising initial monitoring results and assessment of these results against predefined indicators of concern will be critical prior to the development of each stage.

12.0 Review

Section 15 of the draft MWMP describes the process and timeframe that will underpin the review of the MWMP. I consider the proposed review procedures to be acceptable.

13.0 Closure

I trust my comments and recommendations are beneficial and I look forward to seeing a revised version on the draft MWMP in due course.

Regards,

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(Reviewed 28 March 2024)

