

Memo

To Hilary Lennox, Ahika Consulting

From Dr Hilke Giles, Pisces Consulting

Date 20 November 2020

Subject Comments on ecological effects assessment and effects monitoring and management proposed as part of resource consent application to Otago Regional Council by Port Otago Limited for the Te Rauone Beach Management Scheme

ORC Reference Application number RM19.441 (Port Otago)

Background and purpose

This memo provides an update of my previous memo (dated 17 April 2020), in which I had provided a review of the EIA and identified a number of issues related to effects monitoring and management proposed as part of the resource consent application by Port Otago Limited (Port Otago) for the Te Rauone Beach Management Scheme (application number RM19.441). Since that time, additional work has been commissioned by Port Otago (specifically the NIWA report), amendments have been made to the draft conditions and a draft EMP has been prepared. In addition, email correspondence and meetings have provided additional clarification.

This memo provides a brief update on the issues identified in my previous memo, and clearly identifies which issues have been resolved and which issues, in my view, require further consideration.

Information reviewed

To inform my review, I have reviewed the relevant sections of the following documents:

1. NIWA report, Version dated 28 October 2020 (received 16 November 2020), referred to as **NIWA report**¹
2. Draft Port Otago Limited Te Rauone Beach Project Environmental Management Plan, dated 13 November 2020 (received 16 November 2020), referred to as **draft EMP**
3. Goodwin and Tocher (2020) Ecological Impact Assessment for Te Rauone Beach Management Scheme (Revised), referred to as **EIA**
4. Proposed 'Regional Council Consent Conditions – November 2020', dated 11 November 2020, received on 13 November 2020 via email from Lezel Botha, referred to as **draft conditions**
5. Marine Mammal and Wildlife Sighting Form- Appendix 7, received on 13 November 2020 via email from Lezel Botha, referred to as **Marine Mammal and Wildlife Sighting Form**

¹ Tait L, Bulmer R, Pryor Rodgers L. 2020. Managing and mitigating impacts to seagrass beds Te Rauone erosion remediation. Prepared for Port Otago. NIWA Client Report No. 2020313CH. Version dated 28 October 2020.

Comments

The starting point for this memo is the list of key findings of the conclusion section of my previous memo. These findings are shown as the first column of Table 1. A detailed explanation of each finding is provided in my previous memo. Table 1 provides an update on the issue based on information currently available (see information reviewed), and conclusion on whether issues are still current.

Table 1. List of issue identified in my memo dated 17 April 2020, update on the issue based on information currently available, and conclusion on whether issues are still current?

Issue identified in my memo dated 17 April 2020	Update on the issue	Is this still a current issue?
1. Relating to effects on benthic communities (including cockles)		
No measures are proposed to determine whether identified potential positive effect will occur after consent has been granted	No change has been made by the applicant; however, since this issue has no consequences on potential adverse effects, no action is required.	No
I agree with the general assessment of the revised EIA that the effects of the scheme on benthic communities are no more than minor; however, my agreement is conditional on changes to the consent conditions relating to adaptive management and monitoring and incorporation of my related comments.	Based on the low level of predicted effects, challenges of designing meaningful monitoring and following the additional work, I agree with the removal of the benthic community monitoring for the proposed project.	No
2. Relating to effects on seagrass beds		
I am having serious concerns about the adaptive management and monitoring proposed for the seagrass beds of southern Te Rauone beach. In my	The NIWA report and planned amendments to the report provide the necessary information for an effective	There are a few outstanding issues relating to seagrass monitoring, specifically: <ul style="list-style-type: none"> The draft EMP contains some detailed information of the NIWA report without the associated contextual information. For example, Table 1 is a

<p>opinion, the proposed approach for adaptively monitoring effects on these seagrass beds is inadequate.</p>	<p>seagrass monitoring and management framework.</p> <p>Following discussions on 11 November 2020, amendments to the draft conditions and the EMP are planned by the applicant that are expected to address any remaining matters.</p>	<p>“guidance framework which will help establish the likelihood of natural vs construction-based impacts” that is to be “applied by suitably qualified ecologist(s) alongside as many lines of evidence as are available at the time of assessment” (NIWA report) but it is described in the draft EMP as “guidelines for determining the likelihood of multiple scenarios change relating to construction and other stressors”. This may result in confusion and I recommend removing all such detail from the draft EMP.</p> <ul style="list-style-type: none"> • The NIWA report does not provide a monitoring programme but, instead, a proposed monitoring programme containing suggestions and options for monitoring. This is highlighted by the frequent use of “should”, “it is suggested” and “ideally”. As a result, it is not clear what exact (or minimum) monitoring is proposed as part of the application. • While the illustration of monitoring and management actions in the draft EMP is helpful, this illustration does not include timelines relating to information exchanges between the science provider, the consent holder and contractors. As monitoring results may result in a need to halt operations, clarity of process and timelines is critical. • Condition 18 provides for a review of the trigger levels. It is not clear to me what regulatory oversight ORC will have for such reviews. • The draft EMP refers to four seagrass monitoring regions but the NIWA report includes five. <p>Overall, while the latest changes have improved the draft conditions and the draft EMP, in my opinion there still is a lack of clarity about process, timelines and responsibilities relating to monitoring and adaptive management of potential effects on seagrass that creates a risk of adverse effects not being managed in accordance with the framework described in the NIWA report.</p>
<p>Specifically, I do not agree with the conclusion drawn in the revised EIA that effects on seagrass beds are no more than minor. In my opinion, the proposed adaptive management approach is not</p>	<p>No amendments have been made to the EIA and I still do not agree with the conclusion drawn in the EIA that effects on seagrass beds are no more than</p>	<p>See outstanding issues described for the previous issue.</p>

<p>effective in ensuring that effects are managed adequately and there thus is a risk of significant effects on seagrass.</p>	<p>minor. However, considering the improvements made to mitigating effects, monitoring seagrass beds and responding to potential actual adverse effects (see previous issue), no additional action is required on this issue.</p>	
<p>3. Relating to effects on marine mammals</p>		
<p>I recommend seeking advice from a suitably qualified expert on whether not allowing works in the period from mid-December to early February is adequate for protecting female sea lions during their time of potentially increased vulnerability to disturbance as this is outside my area of expertise.</p>	<p>This has been addressed through provisions in the draft EMP and draft conditions.</p>	<p>No</p>
<p>I recommend adding to the conditions (within the adaptive management approach) a process for addressing potential adverse effects on marine mammals during construction.</p>	<p>This has been addressed through provisions in the draft EMP and draft conditions.</p>	<p>There are a few outstanding issues, specifically:</p> <ul style="list-style-type: none"> • The Marine Mammal and Wildlife Sighting Form is very useful. However, at the moment it would not be clear to those receiving the form why the decision was made that management action was/was not required. I suggest adding to the form a field asking for information on whether there was an interaction with the groyne construction/beach replenishment works. This information would show whether any management actions were required. • In the draft EMP the purpose of marine mammal and wildlife effects adaptive management is to “avoid harm to marine mammals, and wildlife <u>during groyne construction operations</u>” (emphasis added). The draft conditions require reporting for the <u>duration of consent</u>. These timelines need to be aligned. • The draft EMP does not provide for training of contractors for completing the Marine Mammal and Wildlife Sighting Form.

		<ul style="list-style-type: none"> The draft EMP describes pre-determined visual monitoring areas. It is not clear to me why this is necessary. Why is this not specified as the area out to the maximum seaward extent of the works? The proposed approach appears unnecessarily complicated and would require detailed knowledge of construction activities, including travel routes of vehicles. A simplified approach might be more effective.
4. Relating to effects on seabirds		
I am not providing a definitive conclusion on the effects on seabirds as this is outside my area of expertise.	Based on the information provided by DOC and the provisions in the draft EMP and draft conditions I can now conclude that I have no outstanding concerns about effects on seabirds.	No but see comments relating to effects on marine mammals of which many also relate to wildlife (which includes seabirds)
I recommend seeking advice from a suitably qualified expert to confirm my indicative finding that effects on birds are not of concern.	The comments by DOC have provided the advice I had recommended.	No
5. Relating to effects on lizards (particularly the southern grass skink)		
I am not providing a definitive conclusion on the effects on lizards, including the southern grass skink, as this is outside my area of expertise.	Based on the comments by DOC, I have no further comments on potential effects on lizards.	No
As I noted in my original memo, I refer to DOC for an assessment of effects and to advise if effects are adequately managed.	Based on the comments by DOC, I have no further comments on potential effects on lizards.	No

6. Relating to the adaptive management approach (includes comments on draft conditions)		
The role of ORC in the adaptive management process needs to be strengthened to provide for effective regulatory oversight.	This has been addressed in the amendments to the draft conditions provided by Hilary Lennox.	No but see comment above relating the need for ORC to have regulatory oversight over potential changes to the seagrass monitoring thresholds.
I recommend considering specifying the interim adaptive management thresholds in the EMP instead of the conditions to avoid a s128 process if they require changes.	I expect this will be implemented as part of the planned amendments to the draft EMP and draft conditions upon receipt of the amended NIWA report.	No
The proposed adaptive management threshold for seagrass (condition 16 c)) is not acceptable because it represents "irreparable damage" or "physical limits to the point of concern" and thus allows for significant effects on seagrass. It is critical that it is replaced by threshold that represents a level of harm to seagrass that can effectively be addressed through a management response.	This has been addressed through the NIWA report and related changes to the draft EMP and draft conditions.	No
More supporting information is required to justify (revised) adaptive management threshold(s) for seagrass and benthic communities.	This has been addressed through the NIWA report.	No
In my opinion, the minimum two monitoring events (after 6 months and 1 year) proposed in the original EIA should be re-instated.	This is no longer relevant as benthic community monitoring is no longer planned.	No

<p>There needs to be a requirement for monitoring to continue if adaptive management thresholds are met and until the environmental objectives specified in the conditions are achieved.</p>	<p>I expect this will be implemented as part of the planned amendments to the draft EMP and draft conditions upon receipt of the amended NIWA report.</p>	<p>No, providing the link between the EMP and NIWA report is strengthened as described above (seagrass monitoring).</p>
<p>Inconsistencies between consent conditions and the revised EIA need to be clarified to avoid future confusion or misunderstanding.</p>	<p>I expect this will be implemented as part of the planned amendments to the draft EMP and draft conditions upon receipt of the amended NIWA report.</p>	<p>No, providing the inconsistencies identified in my comments above are resolved.</p>