



Permission Decision Support Document

Application Details

Decision Maker	Andy Thompson, Operations Manager, Mahaanui
Applicant	Jet Junkies Limited
Permission Number	97340-MAR
Permission Type	Permit under the Marine Mammals Protection Regulations 1992

Key Dates

Application received	30/9/2021
Task Assignment assigned	15/10/2021
Context Meeting	27/10/2021
Check-In Meeting	10/11/2021
Decision due	Overdue

Resources

Permissions Advisor	Michael Dine
District Office/s	Thomas MacTavish, Mahaanui
Marine	Dave Lundquist

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1. Purpose

To make a decision on the application.

2. Context

“Commercial operation” or “operation” means an operation carried on for any form of hire or reward in which persons are transported, conveyed, conducted, or guided where a purpose is to view or come into contact with any marine mammal in New Zealand or in New Zealand fisheries waters.”

This proposal to operate a commercial marine mammal watching operation requires a permit under the Marine Mammals Protection Regulations 1992 (MMPR). Regulation 5 makes it an offence to carry out a commercial operation without a permit.

Summary of operation:

The Department has received an application from Jet Junkies Limited for the commercial viewing of all species of whale, seal, and dolphins in Whakaraupō/Lyttelton Harbour. The application is novel, in the sense that nobody else in New Zealand has applied to view marine mammals from a Jet Ski with a Sealver attachment (Pictured below). Jet Junkies have been operating their business out of Lyttelton Harbour for 3 years, and frequently encounter marine mammals. They currently have a disclaimer at the start of their tours saying that they're not marine mammal tours. The operation applied for is to view marine mammals in a different tour, that is a slow speed tour with the purpose of viewing marine mammals.

Currently there is one commercial operator in the Harbour, Black Cat.



Figure 1 Rear view of Sealver without Jet Ski



Figure 2 Front side view of Sealver with Jet Ski

Application Update - 04/04/2022

Details of original and amended applications:

	Original Application	Amended Application
Applicant	Jet Junkies Limited	Jet Junkies Limited
Area of Operation	Lyttelton Harbour and surrounding heads (see map)	Lyttelton Harbour and surrounding heads (see map)
Base of Operations	Naval Point Club, Lyttelton (see map)	Naval Point Club, Lyttelton (see map)
Species sought	All species of whale (including orca and pilot whales) All species of seal All species of Dolphins	All species of whale (including orca and pilot whales) All species of seal All species of Dolphins
Type of Activity	Marine mammal viewing from Jet Skis	Marine mammal viewing from Jet Ski using a Sealver attachment
Max Number of Trips / day	5	3
Max duration of trips	1 hour	1 hour
Max duration of contact with any marine mammal or group of marine mammals	Individual encounter: 10 minutes per trip Cumulative encounters: 20 minutes per trip	Individual encounter: 10 minutes per trip Cumulative encounters: 20 minutes per trip
Max Number of Vessels to be used at any one time	3 vessels	1 Jet Ski with a Sealver attachment (essentially a boat propelled by a Jet Ski, driven by staff)
Max number of passengers	10	10
Term applied for	5 years	5 years

Map

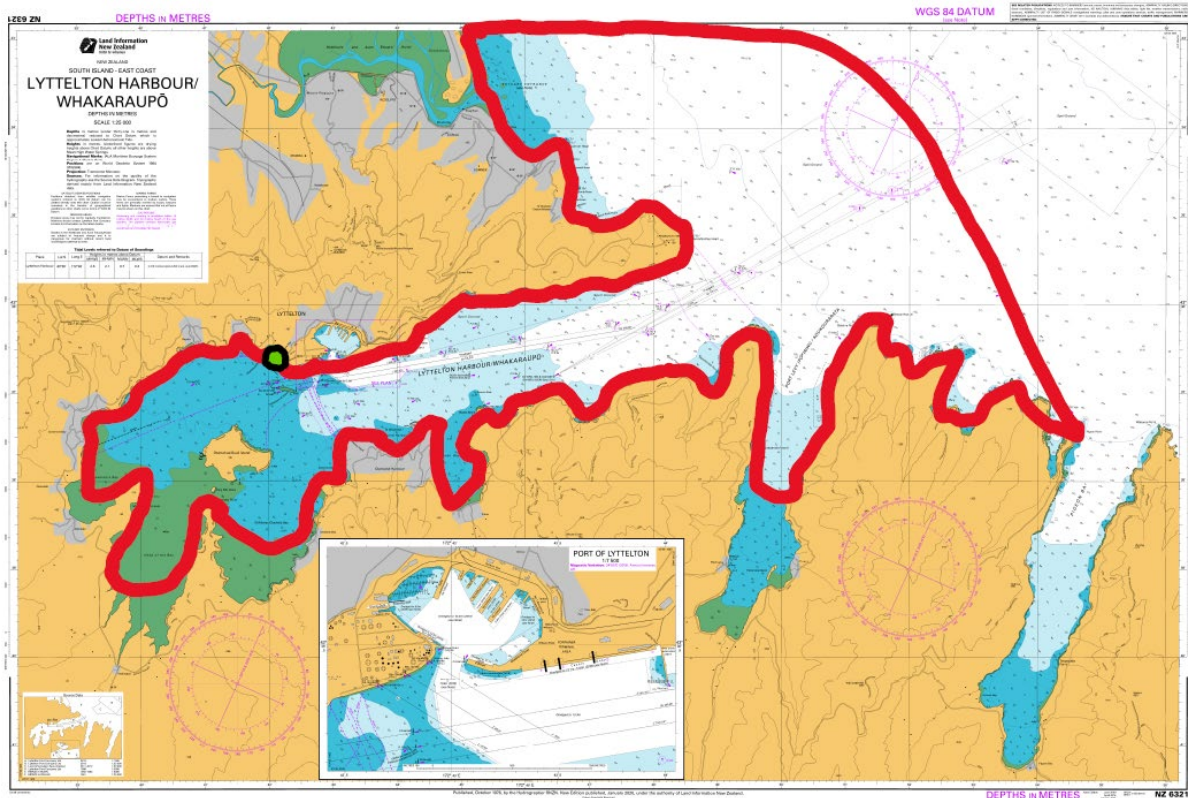


Figure 3 Base and Area of Operation

Relevant details about the Applicant

Credit check result	Not required, considered low risk
Compliance with previous permission conditions	Applicant has not held a permit before
CLE Check	Nothing in the CLE database for Jet Junkies Limited.

3. Contributions

3.1 Marine Technical Advice

Summarised by Michael Dine, Permissions Advisor

The full advice can be found in Appendix Three.

The technical advice is split into three sections, comments on the original application, comments on technical submissions based on the original application, and comments on the amended application. The summarised comments mainly focus on the amended application, as this is the version of the application that is under consideration.

Comments on the potential speed and manoeuvrability of the proposed vessel have not been included in the summary. Regardless of whether a permit is granted or not, Jet Junkies are required to adhere to the Marine Mammals Protection Regulations 1992, which include travelling at no wake speed when within 300m of a marine mammal.

Summary

The application under consideration is for a permit to use a jet ski with a sealver attachment to interact with marine mammals in an area where there is currently no moratorium on permits. The most likely animals for the applicant to interact with are Hector's dolphins, a vulnerable species.

It is unclear how dolphins in the proposed area might respond to increased levels of vessel interactions. Recent research from Akaroa suggests that 12 vessel interactions per day may be a threshold beyond which dolphins are significantly impacted, but this may vary depending on the location and context. In this area, it is unknown how the dolphins may respond to increased levels of vessel interactions.

The jet ski and sealver combination are a novel vessel for marine mammal viewing, and it is also unknown how dolphins may respond to this vessel. At a high level, many of the same responses seen to tourism vessels in Akaroa can be anticipated in Lyttelton. That is, we can expect some behavioural changes from vessel interactions, but are uncertain whether these will have a significant adverse effect on marine mammals, or alternatively be relatively innocuous.

The cumulative effects on marine mammals (specifically Hector's dolphin) from non-tourism activities in the Lyttelton Harbour area are unknown. Several examples of these threats are listed, and the mechanisms by which they are managed have been identified.

The effects on marine mammals by the noise of the vessel was raised as a concern in the public submissions on the application. The technical advice clarifies that jet propelled motors are substantially quieter under water than propeller-driven motors because most of the underwater noise comes from cavitation at the propellor. While the effects of noise on marine mammals are a concern a jet ski driven at an appropriate speed is unlikely to create noise in the water which is greater than a prop-driven vessel. In addition, it is noted that jet engines eliminate the potential for prop-strike.

Research in Akaroa (Carome et al.) demonstrated a shift in dolphin distribution from the cruise ships mooring in Akaroa Harbour, and the resulting increase in vessel traffic. The return of

cruise ships to Lyttelton Harbour is likely to create additional pressure on the local dolphin population.

The previously permitted operator in Lyttelton (Fox 2 Sailing) used a wind-powered craft. Comparing this activity to the proposed activity is difficult, given the differences in vessel and seasonality of effort. In general, motorised vessels would be expected to have a greater impact on dolphins due to the additional noise and ability to manoeuvre to approach animals closely. However, the proposed activity spreads a similar level of effort across an entire year, which may be less impactful than high-intensity effort within a single season.

The marine technical advice outlines two possible conservative approaches. The most conservative approach would be to decline the permit and focus tourism at a single location on Banks Peninsula. Alternatively, if a permit is to be issued, they recommend a conservative approach to granting the permit, taking measures to limit the effects of the activity. Possible measures to limit effects could include reducing the duration of the permitted interactions and/or the duration of the permit, while collecting data on the potential impacts.

3.2 Mahaanui District Office: Tom MacTavish, Ranger Marine Reserves

I endorse the comments from my colleague Dave Lundquist, who's provided very sound advice.

Based on my specific observations/management of the DOC permitted marine mammal operators in Akaroa Harbour and what I've learnt about Lyttelton Harbour, I believe that the decision maker should consider the following:

Will issuing a marine mammal permit that permits a new operator to seek marine mammal interactions on Lyttelton Harbour have a negative impact on the Hector's dolphins?

- No specific research has been done on the impact of Hector's dolphin tourism in Lyttelton Harbour; however, both old (e.g. Martinez, 2010) and new (e.g. Carome, in press) research in neighbouring Akaroa Harbour indicates that increased commercial dolphin tourism has an impact on Hector's dolphins
- Evidence suggests that these impacts are **short term** such that dolphins change their activity budget, behaviour and their presence/absence from an area on a daily/seasonal basis.
- But importantly, that research on Hector's dolphins has also demonstrated that the impacts from tourism do not occur in isolation. Recreational vessels and large ships (e.g. cruise ships) are also shown to have a short-term impact on Hector's dolphins. Moreover, a study in Lyttelton Harbour shows that general port activity (e.g. pile driving) can negatively impact dolphin activity (Leunissen et al., 2019). The scientific evidence therefore suggests that the issuing of any new permits for commercial Hector's dolphin tourism should consider, not just the specific impact of the proposed activity, but also the existing cumulative vessel traffic/port/tourism impacts at the place of the permit application (i.e. Lyttelton Harbour)
- The potential **long term** consequences of poorly managed increases in vessel traffic on Hector's dolphin has recently been demonstrated in Carome's Akaroa study, which has

linked vessel traffic and tourism on Akaroa Harbour with a long term reduction in the distribution and abundance of Hector’s dolphins in Akaroa Harbour.

- This research is significant in showing that short term vessel traffic impacts can have a ***long term negative impact*** on Hector’s dolphins, a Nationally Vulnerable species that are known to have restricted home ranges. In order to protect this species in the future, DOC should therefore take a precautionary approach when considering applications for new marine mammal tourism permits. This is particularly important in areas where there is limited information and the potential for cumulative impacts.

What do we know about existing vessel traffic in Lyttelton Harbour and how does it compare to Akaroa Harbour?

- I’m not aware of any specific studies on total vessel traffic in Lyttelton Harbour and/or comparisons with Akaroa Harbour and I do not work enough in Lyttelton Harbour to personally judge. However, colleagues at the Environment Canterbury Harbourmasters Office work across both harbours and are probably best placed to judge. Accordingly, the Regional Harbourmaster and Deputy Harbourmaster Operations have provided their expert estimations in the table below
- In summary, they consider that Lyttelton Harbour has (and will have) considerably more general commercial vessel traffic than in Akaroa and likely more recreational traffic too (see table below)
- Therefore, when considering cumulative impacts on Hector’s dolphins, these numbers demonstrate that, while Akaroa Harbour has more permitted dolphin tourism, existing general vessel traffic is considerably higher

	Akaroa	Lyttelton
Commercial Ships >24m length	Nil movements	6 movements daily
Cruise ships 2022-23	40 movements annual Oct-Apr (max 260m)	180 movements annual Oct - Apr (max 345m)
Commercial Vessels <24m length	40-60 movements daily (seasonal)	100 movements daily (all year)
Recreational Boating Summer Weekend	40-60 vessels per day	>100 vessels per day
Recreational Boating Summer Week Day	20-30 vessels per day	20-30 vessels per day
Recreational Boating Winter Weekend	10-20 vessels per day	<20 vessels per day
Recreational Boating Winter Week Day	<10 vessels per day	<10 vessels per day
Activities	Fishing 70%	Fishing 20%

What do we know about Hector's dolphin presence in Lyttelton Harbour and how does it compare to Akaroa Harbour?

- There is a long-term dolphin monitoring dataset for Hector's dolphins that the University of Otago began in the 1980s and has continued until the present. Monitoring has included both Lyttelton and Akaroa Harbours
- Hector's dolphins are consistently seen in both harbours, which, in the context of dolphins in heavily people-dominated places (e.g. harbours) is globally uncommon (Emeritus Prof Steve Dawson, personal communication)
- However, the most recent published comparison (Brough et al., 2019) demonstrates that, over the past 30 years, Hector's dolphin densities have been considerably lower in Lyttelton Harbour than in Akaroa Harbour (see Figure below)

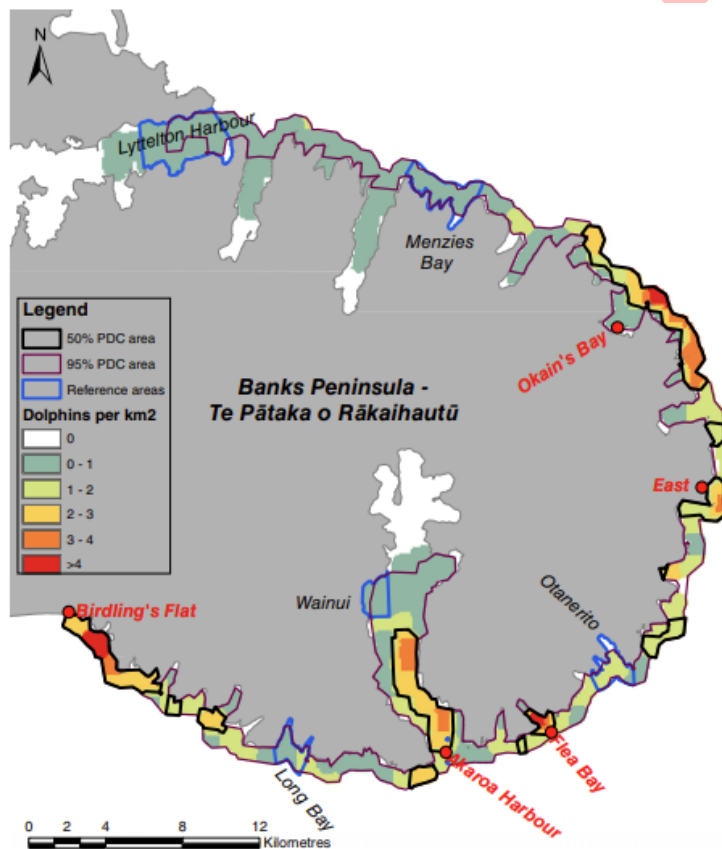


Figure 2. Kernel density analysis of effort weighted dolphin sightings ($n = 9,026$) at Banks Peninsula between 1988 and 2016, showing 50% and 95% percentage density contours (PDC). The five hotspot locations are indicated in red adjacent to the respective polygons and the five reference areas are outlined in blue.

- It's not known why Hector's dolphins have been at lower densities in Lyttelton Harbour than Akaroa Harbour in recent decades. It may have always been that way (i.e. linked to oceanographic factors or food supply), or it may be a consequence of human factors, which from recent research (see above) we now know would have include port/shipping activities and their associated impact on Hector's dolphin activity. Regardless, the lower densities of dolphins in Lyttelton Harbour will likely make their ongoing presence more

vulnerable to further increases in vessel traffic/tourism pressure (e.g. the issuing of new permits)

- In summary, our knowledge of the lower relative Hector's dolphin densities in Lyttleton Harbour further emphasises the need for caution when considering any new Hector's dolphin permits in this harbour

If research from Akaroa and elsewhere suggests that the impact of permitting commercial dolphin tourism interactions can be negative, could that be balanced by any positive impact?

- The assumption is generally made that permitted marine mammal tourism has a conservation benefit through education. But this assumption may not stand objective scrutiny. The positive conservation impact associated with marine mammal tourism is often said to be centred on the opportunity for the public to see and experience dolphins. However, people in/visiting Canterbury currently have six or seven opportunities at Banks Peninsula (1.5 hours drive from the applicant's location) to take a DOC permitted trip to engage with and learn about Hector's dolphins.

Does DOC Mahaanui have the capacity and capability to properly manage more permitted operators in Lyttleton Harbour?

- Given the above information, I consider the issuing of any new permit for Lyttleton Harbour would be irresponsible without the establishment of proper industry management
- Managing dolphin tourism properly (i.e. educating, ensuring compliance with regulations, accurately measuring and analysing operator effort and dolphin activity and then using that information to assess impact and then regulate the industry takes a lot of time.
- DOC Mahaanui is currently making a reasonable fist of managing the DOC permitted marine mammal tourism industry in Akaroa Harbour, but has underestimated the time commitment. In 2019 we estimated and now cost recover for 0.3 FTE (\$20,000), but if we factored in the contribution of back-office staff (e.g. for recent effort analyses and maintaining the systems and processes for cost recovery) it may be more like 0.5. In 2019 we also developed a contract with the University of Otago for \$30,350 per annum, which allows them to help collect and analyse the data that we've used to make appropriate decisions. That means we cost recover a total of \$50,350 per annum to manage the Akaroa industry.
- Similar management in Lyttleton may not require quite the degree of effort, but when one corrects for under-estimates in DOC FTE and significant recent inflation, one imagines the costs could be comparable
- It would seem unlikely that these costs would be viable for the one existing permit holder and one new permit holder

Are there other benefits to the operator becoming permitted?

- The operator will continue to take tours on the water anyway and is likely to encounter Hector's dolphins. If the operator is permitted, then DOC is better able to exercise some control over the impact of the tours (either now or in the future). However, a permit allows an operator to actively seek out Hector's dolphins, which will have a different type of impact than chance encounters.

Other comments

I'd end by acknowledging that my field observations suggest that the applicants are highly professional people who are acting in good faith and trying to do the right thing. That should be acknowledged regardless of the decision.

References cited above:

Martinez, E.; Orams, M. B.; and Stockin, K. A. (2010) Responses of South Island Hector's dolphins (*Cephalorhynchus hectori hectori*) to vessel activity in Akaroa Harbour, Banks Peninsula, New Zealand. Final report submitted to the Department of Conservation, Canterbury Conservancy. Contract 2006/08. Massey University. DOCDM-657299.

Carome, W.J. (2021). Examining the relationship between tourism and Hector's dolphins (*Cephalorhynchus hectori*) at Akaroa Harbour. MSc Thesis, University of Otago 167 pp.

Leunissen, E.M., Rayment, W.J. & Dawson, S.M. (2019). Impact of pile-driving on Hector's dolphin in Lyttleton Harbour, New Zealand. *Marine Pollution Bulletin* 142: p. 31-42.

Brough, T., Rayment, W., Slooten, E & Dawson, S. (2019). Fine scale distribution for a population of New Zealand's only endemic dolphin (*Cephalorhynchus hectori*) shows long-term stability of coastal hotspots. *Marine Mammal Science* 35(1): p 140-163.

3.3 Canterbury/Aoraki Conservation Board

Comments provided by Michael Dine, Permissions Advisor

Comments on the original application

This application triggered consultation with the Canterbury/Aoraki Conservation Board (the Board).

Summary and discussion

The Board are opposed to this application. They state that they do not believe that Jet Skis are suitable vessels for marine mammal watching and cite guidelines from the World Cetacean alliance and the United Nation's Environmental Programme, Convention on Migratory Species, however noting that the Regulations in New Zealand do not restrict vessel types.

The Board goes on to discuss the operations that are already underway in the port that are stressful to marine mammals, and that there is a gap in knowledge of all the resident and migratory species. They urge a precautionary approach. This is reflected in the marine technical advisor contributions.

The Board also discusses the Hector's and Maui Dolphin Threat management plan (TMP). They highlight that "dolphin watching and vessel traffic" are considered threats to dolphins in this plan, resulting in a range of adverse effects, such as disturbance, displacement, reduced foraging success and more. The potential impacts of tourism were identified as a threat in need of management during the TMP review. The solution was to deal with this threat through the existing permitting process, such as this one.

The Board details several points regarding this application. They note a lack of engagement by the applicant with Te Rūnanga o Koukourarata (TROK).

Under the Takutai Moana Act 2011, the Applicant is required to engage with affected iwi, hapū, or whānau. Affected iwi, hapū, or whānau are defined as iwi, hapū, or whānau that exercise kaitiakitanga in a part of the common marine and coastal area where a conservation process is being considered.

Notice was not given to TROK by the Applicant (as DOC had not yet identified TROK as affected iwi, hapū or whānau) and the process doesn't fit the statutory requirements. We consider the conservation process participation purpose has been achieved through engagement by DOC, however this could be challenged.

DOC has engaged with TROK directly as part of its s 4 Conservation Act obligations, and on behalf of the applicant's te Takutai Moana Act obligations. TROK have provided their views on the application, which are discussed further below in this report.

The Board discusses the noise of jet skis on adjacent public conservation land in relation to two specific points of the Conservation General Policy (CGP), 9.1(f)(ii) and (iii).

9.1(f) Recreational opportunities at places should be managed to avoid or otherwise minimise any adverse effects (including cumulative effects) on:

- ii. the qualities of peace and natural quiet, solitude, remoteness and wilderness, where present; and*
- iii. the experiences of other people.*

The proposed area of operation is part of the Banks Peninsula and the Coastal Land and Marine Ki Tai Place identified in the CMS. The Board members have observed existing noise from Jet Skis in these adjacent pieces of public conservation land, so natural quiet may not present in these areas at present.

DOC manages recreational opportunities resulting in interactions with marine mammals under the Marine Mammals Protection Act and Regulations. The criteria under the Regulations don't extend to noise effects in places.

The Board discusses health and safety, however, acknowledge that this is the responsibility of the Applicant. The Department agrees (though noting the Applicant also requires authorisation from Maritime NZ) and cannot consider this point under the Regulations.

The Board also has also provided some points which appear to be suggested conditions for the activity, such as not accessing areas with low water depths or high recreational value and limiting the trips to daylight hours. These are outside the scope of what can be considered when applying the Regulations, however the decision maker may request these be included in the application (i.e., amending the area of operation).

The Board has also proposed suggested conditions which impose restrictions beyond what is provided for in the Regulations. Restrictions beyond those in the Regulations were considered by the Nelson District Court in *Department of Conservation v Cougar Line Limited*¹ and deemed unlawful. None of these points can be considered when applying the Regulations.

¹ Nelson District Court, CRI-2010-006-1607, 19 December 2011, Judge CM Wainwright

The Board discusses multiple other points, such as extending the Akaroa moratorium, and list several points which are of importance to the Board. These are not copied here as they are outside the scope of a decision regarding an application for a permit under the Regulations.

Comments on amended application

The Conservation Board was provided with a copy of the amended application and provided comments on the amended application.

The Board's comments on the revised application state that their main concern is the type of vessel proposed to be used in this application. The Board notes that the high speed and manoeuvrability of jet skis is of concern to them. The Department notes that regardless of whether a permit is granted or not, Jet Junkies are required to operate under the MMPR. Specifically, they must adhere to no wake speed within 300m of a marine mammal.

The Board also comments on outcomes and implementation policies in the Canterbury (Waitaha) Conservation Management Strategy that pertain to the Banks Peninsula Place and the Coastal Land and Marine Ki Tai Place. In the statutory planning documents assessment below (section 4.4), the outcomes and policies highlighted by the Board have been assessed.

The Board concludes their revised submission by discussing the pressures on Hector's dolphins in Akaroa, and that unknown impacts of the proposed activity on marine mammal species is sufficient for concern and recommends the Department adopts a precautionary approach and does not permit this activity.

3.4 Statutory Analysis: Permit under Marine Mammals Regulations 1992

Michael Dine, Permissions Advisor

Statutory Basis for Decision Making

Regulation 6: Criteria for issuing permits

6(1) Before issuing a permit, the Director-General shall be satisfied that there is substantial compliance with the following criteria:

(a) The commercial operation should not be contrary to the purposes and provisions of the Act:

Discussion:

The purposes of the Marine Mammals Protection Act 1978 (the Act) are the protection, conservation, and management of marine mammals within New Zealand waters. The Marine Mammals Regulations 1992 were established under section 28 of the Marine Mammals Protection Act. The purpose of the Regulations is to make provision for the protection, conservation, and management of marine mammals, in line with the purpose of the Act. In Regulation 4(a), a particular purpose is “to regulate human contact or behaviour with marine mammals either by commercial operators or other persons in order to prevent adverse **effects** on and interference with marine mammals.”

When deciding on the application, the Director-General must consider the individual effects of the proposed activity, in combination with other existing effects.

“Effect” is not defined in the Marine Mammals Protection Act 1978 or in the Marine Mammals Protection Regulations 1992. However “Effect” is defined in the Conservation Act 1987, and imports the definition of [s3 of the Resource Management Act 1991](#):

“...the term effect includes - (d) any cumulative effect which arises over time or in combination with other effects - regardless of the scale, intensity, duration or frequency of the effect,...”

In short, in the Resource Management Act context, and likely in the Conservation Act context, “effects” includes effects created by other activities, to which the proposed activity is going to add to (even if only in a small way).

While the individual effects may be minor, there is a point at which the cumulative effects of commercial marine mammal viewing, in combination with other factors (such as viewing by recreational users), makes adverse effects on the marine mammals more likely.

The technical advisor has also noted that it is important to consider the cumulative effects of human activities in the area as well as the effects of the novel vessel. They recommend a conservative approach to decision making. At present, there is no way of empirically estimating what the sustainable level of activity is likely to be, nor is there recent research to understand the current levels of activity around marine mammals in Lyttelton. Previous levels of marine mammal viewing effort in Lyttelton Harbour were “not of concern”, and in 2012 the moratorium that included Lyttelton was not renewed.

The Department has also defined a Lyttelton operational area, which was included in the previous moratorium for marine mammal permits in Canterbury. Two operators hold permits for vessel-based viewing of Hector's dolphins at Lyttelton, with a maximum of six trips per day in summer approved across both permits. While these permits are still active, there has been very little commercial viewing activity at Lyttelton since the Christchurch earthquakes in 2010 and 2011, partly as a result of reduced use by cruise ships, which visit Akaroa as an alternative. Black Cat runs charter trips from Lyttelton on demand and may consider restarting scheduled trips if cruise ships were to return. Hence, the Lyttelton area is not included in this moratorium proposal as the levels of dolphin watching effort are not of concern.

Figure 4 relevant excerpt from DOC-2794456

The context regarding other harbour traffic that may have incidental contact with marine mammals goes towards the overarching effects assessment regarding the purpose of the legislation. We note there are estimated to be 180 cruise ship movements this season, returning to Lyttelton for the first time since the 2011 earthquakes. The level of vessel activity in Lyttelton Harbour at the time this application is being considered may differ materially to the context in 2012 when the Lyttelton area moratorium was not renewed.

Management of marine mammals includes taking into consideration the relationship of Māori to marine mammals as a taonga species and giving effect to principles of the Treaty such as active protection and informed decision making. More discussion regarding Treaty partner views is below.

(b) The commercial operations should not be contrary to the purposes and provisions of the general policy statements approved under section 3B of the Act, conservation management strategies approved under section 3C of the Act, or conservation management plans approved under section 3D of the Act:

Discussion:

Conservation General Policy 2005

The Conservation General Policy 2005 (CGP) was prepared to provide unified policy for the implementation of the Conservation Act 1987, the Wildlife Act 1953, The Marine Reserves Act 1971, the Reserves Act 1977, the Wild Animal Control Act 1977 and the Marine Mammals Protection Act 1978.

The CGP provides guidance for the administration and management of all lands and waters and all natural and historic resources managed for the purposes of the above Acts and provides guidance for consistent management planning.

Chapter 2 of the CGP covers Treaty of Waitangi Responsibilities, which have been satisfied via our engagement and analysis required under section 4 Conservation Act and Te Takutai Moana Act.

Chapter 4 of the CGP covers 'Conservation of Natural Resources'. Policy 4.4 - Marine species, habitats and ecosystems, contains a number of provisions relevant to this application:

- 4.4(f) *Marine protected species should be managed for their long-term viability and recovery throughout their natural range.*
- 4.4(j) *Human interactions with marine mammals and other marine protected species should be managed to avoid or minimise adverse effects on populations and individuals.*

- 4.4(l) *The Department should work with other agencies and interests to protect marine species.*

The Conservation General Policy defines “effect” in a similar way to the Resource Management Act – including “any cumulative effect which arises over time or in combination with other effects regardless of the scale, intensity, duration, or frequency of the effect...”

These policies inform the Canterbury (Waitaha) Conservation Management Strategy 2016, discussed below.

Canterbury (Waitaha) Conservation Management Strategy 2016 (CMS)

The CMS uses the phrase “Cumulative effect” and defines it as “an effect which arises over time or in combination with other effects (Resource Management Act 1991, section 3).” It also defines “effect” using the Resource Management Act definition referred to above. The effects-based assessment is limited by the lack of research available regarding effects on marine mammals in Lyttelton Harbour.

Outcomes described in the Coastal Land and Marine/Ki Tai Place for marine ecosystems and species in Part 2 of the CMS inform the relevant policies. Outcomes describe the future state of a ‘Place’, including its values and expected changes over the 10-year term of the CMS, and will be used for conservation management and decision-making. **This applies whether or not there is a relevant specific policy for a Place.**² The key outcomes here are:

The Hector’s dolphin/tūpoupou population is rebuilding, assisted by protection measures within the Banks Peninsula Marine Mammal Sanctuary and **research-based controls and education on viewing or contacting marine mammals.** New Zealand fur seals/kekeno are doing well in their interactions with people and domestic animals.

Commercial operator numbers viewing and interacting with Hector’s dolphins, whales and other marine mammals are limited to what is tolerable for the mammals. Permit holders operate mostly from Akaroa Harbour and from Kaikōura just north of Canterbury (Waitaha) and provide high-quality interpretive and educational information to their clients. (pp 125-126, emphasis added)

Policies [in the CMS] describe the course of action or guiding principles to be used for conservation management and decision-making.³ Policy 2.9.3 of the CMS requires the decision maker to take a precautionary approach to the number of commercial operators involved in marine mammal operations in the area, including seeking a moratorium on the issuing of new permits if research and monitoring indicate that this is required.

A “precautionary approach” is not defined in the CMS, CGP, or conservation legislation. In the absence of a definition in the CMS, this principle may be left open to interpretation. One interpretation is defined in the Auckland, Waikato, and Northland Conservation Management Strategies, that were all published in 2014:

“Precautionary principle: Taking a cautious approach to conservation management decisions when information is uncertain, unreliable or inadequate.”

² Canterbury (Waitaha) Conservation Management Strategy 2016. p 11, emphasis added

³ Ibid.

At the time of publication of the CMS (2016) there were two active permits within Lyttelton Harbour: Black Cat and Fox 2 Sailing. The Fox 2 Sailing permit permitted a maximum of 276 yacht trips between 1st October and 31st December as well as individual encounter times of 45 minutes per trip, and cumulative encounter times of 1.5 hours per trip. It expired in 2020 and was not renewed. This level of interaction amounted to an annual 414 hours of viewing condensed into a 3-month period. The amended application for Jet Junkies, if approved, would allow for 365 hours annually. At this time, it is unknown whether adverse effects on marine mammals in Lyttelton Harbour are “tolerable” with only one operator in the area.

At present, there is one permitted operator in the Lyttelton Harbour operational area (Black Cat).

The CMS specifically requires a precautionary approach to be taken to the number of operators in an area, but this doesn’t necessarily limit taking a precautionary approach to other factors within the scope of the Regulations.

In an effort to take a precautionary approach, and minimise any potential disruption to natural behaviour, the Department asked the Applicant to amend their application. The Applicant has reduced the number of active vessels from three to one (removing the self-drive element) and reduced the number of trips per day from five to three. As discussed by the marine technical advisor, the amended application has reduced the impacts on the target animals. The most precautionary approach to be taken where there is uncertainty regarding the effects on marine mammals, would be to decline the application.

An outcome on page 123 of the CMS regarding the Marine Mammals Protection Act and Banks Peninsula Marine Mammals Sanctuary also states that a “maximum amount of visitor viewing or contact with Hector’s dolphins, and hence commercial operations will need to be specified.”⁴ No such limit has been specified for Lyttelton Harbour at the time of this Application being considered.

Policy 2.9.6 requires DOC to provide information on means and opportunities to view marine mammals without disrupting the animal’s natural behaviour. DOC considers this opportunity is provided in Akaroa Harbour already. This policy does not specifically require DOC to make an assessment on whether sufficient opportunities have already been provided elsewhere, but the outcomes do prefer permit holders mostly operating from Akaroa. Policy 2.9.8 also seeks for kekeno to be able to carry out natural behaviours without human disturbance. Effects on behavioural patterns discussed further below in the discussion for Regulation 6(1)(c).

Policy 2.9.7 of the CMS requires that educational material and interpretation must be of a high standard. Under the Regulations, the sufficiency of the educational value of the operation is a criterion for issuing a permit. The educational material that the Applicant is proposing to use is sourced from DOC. Historically, DOC has accepted that references to DOC publications is “sufficient” for the purposes of the Regulations and may be considered to be a “high standard” for the purpose of the CMS. The operator is also SMART trained and has the resources and knowledge available from the SMART course. If a permit is granted, part of the monitoring may include the monitoring of this standard of education and interpretation on trips.

⁴ Page 123 of the Canterbury (Waitaha) Conservation Management Strategy 2016

(c) The commercial operation should not have any significant adverse effect on the behavioural patterns of the marine mammals having regard to, among other things, the number and effect of existing commercial operations:

Discussion:

There is one existing commercial operation in Lyttelton Harbour, Black Cat Group 91146-MAR.

As discussed above, a precautionary approach to commercial viewing permits is required by the CMS, and two precautionary approaches have been proposed. One approach involved the Applicant amending their application to reduce the number of trips per day. Three trips per day was considered appropriate, to match with the number of permitted trips held by Black Cat. The Applicant was also asked to amend their application, reducing the number of active vessels from three to one, removing the self-drive element of the application and limiting the number of vessel interactions with marine mammals.

These amendments address and eliminate some of the concerns raised by the marine technical advisor and by the public during the public submissions that pertain to Regulation 6(1)(c) regarding the effects of operating multiple vessels around marine mammals on every encounter as well as the number of interactions per day with Hector's dolphins (cumulative effects).

Extensive consideration has been given to the effects on marine mammals by both the marine technical advisor and district office. The marine technical advice notes that the amendments to the application described in the above paragraph has reduced many of their concerns with the application and the potential impacts on the target impact.

However, the marine technical advice has also noted that the cumulative effect of marine mammal viewing permits on marine mammals in Lyttelton Harbour is currently unknown. Though, it must be emphasised that until 2020, and while there was a moratorium in place in Lyttelton, there were two commercial operators permitted in Lyttelton Harbour. As discussed by the marine technical advisor, the return of cruise ships to Lyttelton Harbour may have substantial impacts on marine mammals, as was recently shown in Akaroa where the presence of cruise ships disrupted the distribution of marine mammals as the overall amount of vessel traffic increased. The marine technical advisor notes the same is likely to be observed in Lyttelton Harbour. We understand Lyttelton Port has wharf berths available for cruise ships, which is different to Akaroa Harbour where tenders are used to ferry cruise passengers to shore, which is likely to create more disturbance. Tom MacTavish's advice above summarises that Lyttelton Harbour has (and will have) considerably more shipping vessel traffic than in Akaroa and likely more recreational traffic too. However, there is only one commercial operator in Lyttelton Harbour who may take paying passengers out to view marine mammals, as opposed to Akaroa where there is a large amount of marine mammal tourism impacting the marine mammals there.

The marine technical advice also notes the unknown impacts of the vessel type. Combined with the uncertainty of the effects surrounding the return of cruise ships the harbour, a reduced term of three years is recommended to allow time for the Department to properly understand the effects of the activity. It is also proposed that the Department perform more monitoring than we usually do for other marine mammal viewing permits if the decision is made to grant the permit.

Robust research to comprehensively describe any potential behavioural impacts is recommended, but as noted above, would require significant time and funding. A higher than usual number of monitoring (mystery shopping) trips per year have been proposed in order to source some information regarding operator compliance but will be of limited use for assessing impacts on marine mammals.

Regulation 6(1)(c) requires that the activity should not have any significant adverse effects on the behavioural patterns of marine mammals. Inferring research from Akaroa suggests there is a threshold at which interactions with vessels will significantly affect the behavioural patterns of marine mammals, however, this threshold is unknown in Lyttelton. The technical advice cautions against applying the same threshold as Akaroa where the context is different. Therefore, it can be expected that there will be some behavioural changes from vessel interactions, but it is uncertain whether or not these will have a significant adverse effect on the dolphins.

As noted by the marine technical advisor, DOC decision makers have typically applied conditions on permits to limit disturbance. In this case, such restrictions have been incorporated in the amended application. The levels of activity in the amended application are lower than those of the existing permitted operator, with decreased interaction times and number of active vessels.

(d) That it should be in the interests of the conservation, management, or protection of the marine mammals that a permit be issued:

Discussion: The Applicant has stated that their primary goal will be to educate the customers about marine mammals through a talk on the tour so that they are better informed on how marine mammals live, behave and act. The Department considers education as a mechanism to promote conservation of species but must be balanced with protecting the marine mammals. The CMS outcomes require high quality education, with permitted activities mostly operating from Akaroa Harbour and Kaikōura.

As discussed above the potential impacts of tourism were identified as a threat in need of management during the Threat Management Plan review. The existing permitting regime was identified as a solution to managing this threat. Where appropriate, a carefully considered permit may allow for DOC to manage impacts and protect marine mammals by having improved visibility of tourism activities that involve marine mammals and allow DOC to monitor these activities in terms of both compliance with the Regulations and the effects of the activity.

(e) The proposed operator and such of the operator's staff who may come into contact with marine mammals, should have sufficient experience with marine mammals:

Discussion: The proposed operators and their staff have both indicated in the application form that they have 10 years of experience each operating around marine mammals. The proposed operator has also completed the DOC SMART course. This experience is considered sufficient.

(f) The proposed operator and such of the operator's staff who may come into contact with marine mammals, should have knowledge of the local area and of sea and weather conditions:

Discussion: The proposed operators and their staff have both indicated in the application form that they have 10 years of experience each operating in the area. This is considered sufficient local knowledge of the sea and whether conditions.

(g) The proposed operator, and such of the operator's staff who may come into contact with marine mammals, should not have convictions for offences involving the mistreatment of animals:

Discussion: The proposed operators and their staff have not declared that they have any prior convictions for offences involving the mistreatment of animals in the application form. This requirement has been met.

(h) The commercial operation should have sufficient educational value for participants or the public:

Discussion: The Applicant has stated that they will be compiling educational material in the form of a leaflet, as well as talks on the tours. The source material for this information comes from DOC pamphlets. The Operator is also SMART trained and has the resources and knowledge available from this training. The Department accepts this as sufficiently high-quality educational value.

6(2) Section 76 of the Marine and Coastal Area (Takutai Moana) Act 2011 applies to any application under these regulations for a permit to watch marine mammals within a customary marine title area.

Discussion: There have been no declarations of a customary marine title in this area. There are some pending applications for customary marine title, detailed below.

Regulation 7: Requirements to be satisfied before a permit for commercial vessel-based operation is issued

7 Every applicant for a permit for a commercial vessel operation shall submit to the Director-General for approval an application in writing setting out the following:

- (a) details of the proposed operation, including –*
- (i) the type and number of vessels intended for use;*
 - (ii) any known information relating to the noise level of each vessel both above and below the sea;*
 - (iii) the proposed area of operation, including a map showing the boundaries of the proposed area of operation and, where appropriate, the specific locations where contact with marine mammals is proposed;*
 - (iv) the maximum number of vessels the operator proposes to operate at any one time;*
 - (v) the proposed base of operation;*
 - (vi) the duration of trips proposed;*
 - (vii) the frequency of trips proposed;*
 - (viii) the proposed kind of contact with marine mammals;*
 - (ix) the maximum numbers of passengers intended to be taken at any one time;*
 - (x) the species of marine mammals with which the operation would have contact;*
 - (xi) the masters proposed to be engaged in the commercial operation*

Regulation 7(b) requires the applicant to submit information pertaining to their experience with marine mammals.

Regulation 7(c) requires the applicant to submit information pertaining to its experience with local area, sea and weather conditions.

Regulation 7(d) requires the applicant have no previous convictions against the Act or involving the mistreatment of animals.

Regulation 7(e) requires the applicant to submit details of educational material.

Discussion: The details supplied in the application form have met the requirements of Regulation 7.

Regulation 10: Requirements to be satisfied before a permit issued

Regulation 10(1) requires the decision-maker to determine whether the application is “acceptable to him or her” and provides discretion to the Director-General to require the application be amended by the applicant to incorporate further matters specified in writing.

Regulation 10(2) results in the application becoming part of a permit and complied with accordingly, if a permit is granted.

Discussion: Considering the contributions from the marine technical advisor and the submissions made through notification, it was suggested that the Applicant amend their application to reduce the number of vessels operating at any one time from three to one, only allowing for the proposed operator or the operator’s staff to be in control of the vessel. In this instance, the vessel is still a Jet Ski with the Sealver attachment (essentially a boat propelled by a Jet Ski, driven by the staff on the application form). This is still novel, as the primary propulsion of the vessel is a Jet Ski. Under the revised application members of the public do not drive the vessel, and instead are chartered on the Sealver – this reduces the number of vessels operating at any one time from three to one. The number of trips per day was also reduced from five to three. These amendments can be found in the amended application form. Adequate information has been provided in the application. The relevant application sections are included as Schedule 4 of the draft permit.

Regulation 11 – Advertising application

Regulation 11 requires applications to be advertised before a permit can be granted. The Director-General is required, before deciding whether or not to grant a permit, to consider every submission.

Discussion: The application was publicly advertised on the 17th of January 2022 in accordance with regulation 11 and 216 submissions were received. See Section 5 for a summary of submissions and the Applicant’s response.

Regulation 12 - Permits

Under Regulation 12(3)(a), the Director-General must not issue a permit unless he or she is satisfied that the proposed operation would not have, or be likely to have, any adverse effects on the conservation, protection, or management of marine mammals; that regulation 6 has been substantially complied with, and that sufficient information has been received in respect of the application under regulation 7.

Discussion:

The marine technical advice relating to this application highlights that there is no research specific to Lyttelton Harbour and infers the likely effects from other research. The Department has requested the application has been amended to address the initial concerns noted by the marine technical advisor. The amended application addresses many of the concerns held by the marine technical advisor by significantly reducing the levels of interaction with marine mammals. There are still concerns around the novelty of the vessels and the unknown cumulative impact on marine mammals in the Harbour.

There have been no recent studies in Lyttelton to inform an understanding of the effects of the levels of activity in Lyttelton Harbour on marine mammals. Most recently the 2016 memo to inform the renewal of the Akaroa moratorium stated that the levels of dolphin watching effort were not of concern in Lyttelton, where there was two active permits (relevant excerpt in figure 4 above).

Research in Akaroa Harbour indicates there may similarly be a risk of adverse effects on the behavioural patterns of the marine mammals in Lyttelton Harbour. This research is applicable to Lyttelton at a high level. While Lyttelton Harbour contains significantly less tourism activities, it has increased levels of other vessel traffic. It is likely that there will be behavioural changes from vessel interactions. As noted in the marine technical advice, it is not certain whether these effects will cause a significant change in behavioural patterns for the purposes of Regulation 6(1)(c). The CMS directs a precautionary approach to increasing the number of operators.

It should also be noted that every commercial operation will likely effect marine mammals to some degree, and previous decision makers under the Regulations have consistently applied controls to minimise the disturbance to marine mammals, taking the “management” option.

3.5 Analysis of the Principles of the Treaty of Waitangi and te Takutai Moana Act 2011

Michael Dine, Permissions Advisor

Section 4 of the Conservation Act 1987 states ‘This Act shall be so interpreted and administered as to give effect to the principles of the Treaty of Waitangi’.

The key principles of the Treaty of Waitangi that apply to DOC’s work are:

1. Partnership – mutual good faith and reasonableness: The Crown and Māori must act towards each other reasonably and in good faith;
2. Informed decision-making: Both the Crown and Māori need to be well informed of the other’s interests and views;
3. Active protection: The Crown must actively protect Māori interests retained under the Treaty as part of the promises made in the Treaty for the right to govern;
4. Redress and reconciliation: The Treaty relationship should include processes to address differences of view between the Crown and Māori.

Te Takutai Moana Act 2011

Section 62(3) of te Takutai Moana Act requires the Applicant to notify customary marine title applicants of their application in the coastal marine area which they have applied and seek their views. The Applicant completed this as noted in their application form, and no responses were received from either group. When the application was amended significantly, the Department notified both customary marine title applicant groups.

Section 47 of te Takutai Moana Act 2011 gives affected iwi, hapū, or whānau have the right to participate in conservation processes in the common marine and coastal area. Affected iwi, hapū, or whānau means iwi, hapū, or whānau that exercise kaitiakitanga in a part of the common marine and coastal area where a conservation process is being considered. Applications made under the Marine Mammals Protection Regulations are considered a conservation process under this Act.

Section 48 requires the Applicant to notify affected iwi, hapū, or whānau of the application, and seek their advice on the application. In this instance, the Applicant notified all customary marine title applicants. This did not cover all affected iwi, hapū, or whānau.

The process followed does not meet the statutory requirements of te Takutai Moana Act. In the spirit of the purpose of te Takutai Moana Act, the Department stepped in on the Applicant's behalf and sought views, which also formed part of the Department's obligations to give effect to the principles of the Treaty under section 4 of the Conservation Act.

Section 49 requires the decision maker to have **particular regard** to the views of affected iwi, hapū, or whānau. The direction to have particular regard to does not amount to 'give effect to', but it is a stronger direction than 'consider'. You must fully inform yourself of the views of affected iwi, hapū and whānau and recognise those views as important in considering the Application.

Note that giving effect to the principles of the Treaty and the Department's obligations under Te Takutai Moana Act does not result in a right of veto for iwi, hapu and whanau.

Discussion of Treaty principles and views to have particular regard to:

Partnership and informed decision-making

The Department has engaged with Te Hāpu o Ngāti Wheke (THONW) and Te Rūnanga o Koukourarata (TROK) on this application in order to understand their interests and views, and received confirmation from Te Rūnanga o Ngai Tahu that they support those views. This engagement shows the Department has given effect to the principles of partnership and informed decision-making.

THONW and TROK were provided a copy of the amended application and met with the District Office to discuss their views.

In this meeting, THONW clarified their original views on the application. Initially it was understood that THONW were interested in applying for a marine mammal viewing permit of their own but have since clarified that they do not endorse any operations that solely focuses on viewing marine mammals, including one of their own.

THONW and TROK both raised concerns about the effects on taonga species. They consider protecting taonga species is of highest priority and that a precautionary approach should be taken. Similar potential effects were raised in the public submissions and have been considered in depth by the marine technical advisor.

Principle of Active Protection

Despite the amended application, Rūnanga still raised concerns with the targeted viewing of a taonga species. Both THONW and TROK have raised concerns with the impact on marine mammals. Active protection extends to the Crown's responsibility to protect taonga species. As identified in the Maui and Hector's Dolphin Threat Management plan, the existing permitting regime was identified as a solution to manage the threat from tourism. Where appropriate, a carefully considered permit may allow for DOC to manage impacts and protect marine mammals by having improved visibility of tourism activities that involve marine mammals and allow DOC to monitor these activities in terms of both compliance with the Regulations and the effects of the activity. Furthermore, Part 3 of the Regulations includes specific behaviours that must be followed by permitted commercial operators as well as members of the public that recreationally use boats or other vessels. These arguably function to actively protect taonga species.

The Principle of Active Protection also extends to actively protecting the cultural association with the species, i.e. protect dolphins so that they are present in the harbour and THONW and TROK's cultural association with the taonga remains relevant, in that members are still able to see and associate their identity with them, and share stories about them.

TROK also commented that DOC has obligations to give effect to the principles of the Treaty to allow for the Rūnanga to exercise kaitiakitanga and rangatiratanga within the takiwā.

A precautionary approach has been adopted through the amended application, and proposals for reduced term and increased monitoring. It is the Department's view that the principle of Active Protection has been observed in this instance. Furthermore, should any further applications be received for the same area, THONW will be engaged on each and able to provide their views on these applications as well.

Redress and reconciliation have largely been achieved through the Ngāi Tahu Claims Settlement Act.

Te Rūnanga o Ngāi Tahu (TRONT)

TRONT have highlighted the significance of Whakaraupō / Lyttelton Harbour and Port Levy. They comment that the adverse effects of the activity may be too great for Whakaraupō and Port Levy, though are non-specific about what the adverse effects may be. They also comment that they support the views of both THONW and TROK. Under section 49 of te Takutai Moana Act, the decision maker must have particular regard to these comments.

4. Submissions

4.1 Submissions discussion

Submissions General Discussion

The Application was notified in The Press on Monday the 17th of January 2022. Submissions were accepted until 11.59pm on Tuesday the 15th of February 2022.

A total of 216 submissions were received before the closing date. A further 10 were received after this date. The content of the late submissions is generally reflected by the content of the 216 submissions that were received on time.

Out of the 216 submissions, 7 were in support of the application, 2 were neutral, and 207 were opposed, or negative towards the proposal. The Regulations do not provide for any consideration to be given to public opposition or support on an application and only matters relating to the protection, management, and conservation of marine mammals can be considered when deciding on the application. This extends to the submissions.

Some submitters have commented on topics such as climate change and regenerative tourism. Such topics are outside the criteria of Regulation 6 and are not a relevant consideration. The submissions were summarised in a spreadsheet and assessed to whether they contained relevant points under the Regulations. This spreadsheet was provided to the Applicant, who under the Regulations was given 10 working days to respond to submissions. Both the submissions (that contain relevant points under the Regulations) and the Applicant's comments must be considered under the Regulations.

Black Cat Group have stated that the proposed activity may limit their current operations. This cannot be considered as it is of a commercial / competitive nature and only effects on the marine mammals should be considered. If approved, it's recommended that this is explained to the Black Cat Group.

Many of the submissions incorrectly assume that DOC is the authority who will be allowing Jet Junkies to operate their business of Jet Ski tours. This is incorrect as Jet Junkies does not require the marine mammal viewing permit to operate on the Harbour and they have been for the past three years.

Many of the submissions also comment on the speed of Jet Skis. The permit, if granted, does not permit the proposed operator to act outside of Part 3 of the Regulations. When within 300m of any marine mammal, a vessel, regardless of if it is private or commercial, must not travel faster than the slowest marine mammal or at no wake speed. Speed of a vessel is not a relevant consideration when deciding upon a marine mammal permit.

Some submissions have also incorrectly identified the location as Akaroa Harbour. These submissions must be disregarded as they have incorrectly identified the area of which the activity is proposed, and it is not possible to tell if the same submission would have been made if they were aware the activity was proposed in Lyttelton Harbour.

Some submissions also comment on the health and safety aspect of the operation. Health and safety are not things that can be considered under the Regulations. Maritime NZ and Worksafe are the regulatory body that these topics concern.

Some submissions also discuss the potential effects on seabirds and other life. Again, these are outside the scope of what can be considered under the Regulations.

One submitter cites a lack of information in the application form. The application was assessed against Regulation 7, which details the requirements to be satisfied before a permit for a commercial vessel-based operation is issued and was considered to contain the relevant information pursuant to the Regulations. The Department does not accept this assessment of the application form.

Some submitters also have deemed the 'donation to DOC' stated in the application form to be a 'bribe'. Any proposed donation to DOC or charity is not a relevant consideration for the purposes of the Regulations. This has since been amended and taken out of the application form.

Of the 216 submissions, there was 53 submissions that did not contain points pertaining to the protection, management, and conservation of marine mammals for the purposes of the MMPA and MMPR, and therefore those points cannot be considered for this decision.

8 out of the 163 remaining submissions were considered to have contained technical information. These were differentiated by submissions that provided evidence (i.e., links to scientific papers, etc.) to back up the claims made in the submission. These were sent to the marine technical advisor, who has summarised and discussed them above in section 5 of this report. The submissions were categorised based on points that can be considered under the Regulations.

Some submitters stated that attempts to engage with iwi were superficial, and that there needs to be engagement. Outside of Te Takutai Moana Act engagement, this is not the responsibility of the Applicant and engagement has been undertaken by the Department as detailed in section 5.

Noise

Noise was by far the topic that contained the most submissions. 131 submissions raised concerns about the noise of Jet Skis, and the effect that noise may have on marine mammals. Many of these submissions that comment on noise appear to contain the same information and wording. In this response, the submitters state that:

"Sound is amplified underwater and the noise alone could drive marine mammals out of the area, in search of safer, quieter habitat"

In general, most of the submissions pertaining to noise discuss the noise of Jet Skis having a negative effect on marine mammals. This is summarised by Forest and Birds submission, where they state that:

"New data demonstrate how noise from small vessels can impact underwater soundscapes and how marine animals will have to adapt to ever-growing noise pollution."

Noise has been discussed by the marine technical advisor in section 4 of this report. The advice from the marine technical advisor is contrary to the submissions. The marine technical advisor concluded that the noise from jet skis underwater being amplified is a misunderstanding, and the underwater noise from Jet Skis is generally quieter than propeller driven boats as most of the sound occurs above the water. They also concluded that a jet ski driven at an appropriate speed is unlikely to create noise in the water which is greater than a prop-driven vessel. This is reflected by some of the submissions that are in support of the application.

Several submissions that are concerned with noise are concerned in the context of the effects of the noise above the water on the surrounding environment. This does not relate to the protection, conservation, or management of marine mammals and thus cannot be considered when deciding upon this application.

Behavioural Patterns

14 of the submissions contained concerns regarding the behavioural patterns of marine mammals. These submissions make statements discussing the potential effects on feeding patterns, behaviour, breeding and resting. One submitter has stated:

“The activity of water craft can negatively impact on the feeding patterns and sleeping habits of marine mammals”

One submitter compares the potential impact of the proposed activity, to what has been observed in the Bay of Islands, stating:

“...mothers would often neglect their babies to interact with the public”

Significant effects on the behavioural patterns of marine mammals are something that must be considered pursuant to Regulation 6.

The marine technical advisor also discusses the potential effects on behaviour. To summarise their points, it is unknown how the marine mammals in Lyttelton will respond to an increase in vessel interactions. They may or may not have strong reactions, and the best we can do is assume it's similar to what has been observed in Akaroa. They go on to discuss the threshold in which vessel interactions effected behaviour, but again state that it's a different location, with different levels of activity. The same logic may be applied to statements such as in this submission i.e., the proposed activity may or may not result in changes to behaviour, however the significance of effects is unknown.

Another submitter states that:

“Studies have shown that jet skis have a more dramatic effect on dolphins than motorboats, more often affecting a change in behavior, or change in direction”

The application has been amended to only include the use of a jet ski with the sealver attached. Furthermore, if granted, a permit does not permit the proposed operator from acting outside of part 3 of the Regulations. Additional monitoring trips could be factored in to ensure compliance with the Regulations.

Cumulative Effects

Many of the submitters also point to the proposed activity adding to the cumulative effects on dolphins in the harbour. Many submitters point out that Lyttelton is an operational port. One submitter has stated that:

“The cumulative effects of the wide range of past and present industrial activities are already significant for the local Hector's dolphins”

Another submitter details several activities that may impact marine mammals in the harbour:

“During the past few years, the dolphins have had to navigate a vast array of industrial activities, from recreational boating, commercial and industrial shipping, operations, channel deepening and dredging, full cruise ship berth development and associated rammed and hammer piling, land reclamation, and the daily container wash down contaminants from the operational port and associated activities.”

Other submitters discuss the activity adding to the cumulative noise of the harbour. Noise has been addressed above. A handful of submitters also point to Akaroa, and the cumulative effects of tourism in that area. Another submitter comments on the amount of vessel traffic in Lyttelton Harbour, and how it is greater than Akaroa Harbour. This information has been provided in the District Office contributions.

The number of trips was also a concern for some submitters. One submitter discusses how five trips a day may apply continuous pressure on the dolphins all day. Another submitter has calculated the number of vessel interactions per year:

“Jet Junkies have applied for 5 trips per day with 3 vessels on each trip and no seasonality adjustments. This equates to 5,475 permitted vessel interactions with dolphins in any given year. This application alone has requested more daily trips than the combined permitted watching activity of all permitted operators on Akaroa Harbour in the peak of summer.”

The same submitter goes on to state that the research findings in Akaroa should be applied to Lyttelton. The marine technical advisor concurs with this in their assessment. The marine technical advisor also comments on the cumulative effects of the activity. They state that consideration should be given to the fact that even if there is more vessel traffic in Lyttelton, there are more vessels in Akaroa that are seeking out dolphins as a commercial enterprise daily. It may be argued that additional permits in Lyttelton could alleviate pressure in Akaroa, by spreading out the effort.

To address these concerns, it was suggested the Applicant amend their application to remove the self-drive element (number of vessels active at any one time reduced to 1 from 3) as well as reducing the number of trips per day from five to three.

Existing commercial operations

The Regulations require the decision maker to consider the number and effects of existing commercial operations. There is currently one existing commercial operator in Lyttelton Harbour, Black Cat Group. Most submissions pertaining to the existing commercial operator simply state that they are an option for viewing marine mammals in the harbour already, rather than discussing any effects that the existing operation may have, that the proposed operation will add to.

Educational Value

Some submissions were concerning the Educational Value of the proposed operation. One submitter commented that there is:

“No details or even outline of proposed wildlife leaflet”

Another submitter comments:

“Any wildlife viewing proposal must credibly outline what’s in it for the wildlife targeted. The “educational content” of the tours, as outlined in the proposal, is

minimal. Their educational material is gleaned solely from DOC pamphlets, which cannot be described as adequate resources for professional delivery of the best information on Hector's dolphin. The applicants provide nothing on what information will be provided on the "talk on the tour". The operators appear to have made little attempt to get informed themselves."

And Black Cat Group states:

"The application from Jet Junkies highlights that each Jet Ski can accommodate 2 passengers with one possibly having 10 passengers. At best, this means that each trip operated by Jet Junkies will reach a maximum of 14 members of the public."

The educational value of the proposed operation is something that the decision maker must consider when deciding upon the application pursuant to Regulation 6(1)(h). This is discussed in the statutory analysis section of this report. The Department has accepted applications by proposed operators who use material or brochures sourced from the Department or the Department website as a tool to provide education to their clients, as this information may be considered to be of a high standard. Furthermore, Regulation 6(1)(h) requires "sufficient" educational value to be provided to participants or to the public. There is no specific number of people that the educational value should benefit.

Experience with marine mammals/sea and weather conditions

Some submitters commented on the operators experience with marine mammals. This is a point that must be considered under Regulation 6(1)(e) & (f).

One submitter has stated:

"I do not see any evidence that the operator and their staff has sufficient evidence of experience with marine mammals other than the operator completing a DOC course"

Another submitter has referenced a lack of information regarding the proposed operators experience.

Black Cat Group has stated:

Black Cat believe that anyone operating a vessel under a Marine Mammal Permit should need to meet the above criteria [referencing Regulations 6.1(e)-(g)]. As per the application submitted by Jet Junkies, the Jet Skis will be operated by customers and therefore DOC cannot have the confidence that the above criteria are being met.

The Regulations 6.1(e)-(g) are clear, in that they state reference an assessment the *proposed operator, and such of the operator's staff* in the criteria that can be considered. The closest example that the Department can draw from is permits to view marine mammals from kayaks where we do not assess each client's ability, we assess the guides ability to control the clients. It is acknowledged that the potential effects of these vessels are not comparable. Other submissions have also broached the topic of members of the public being in control of their own craft. The marine technical advisor has also raised concerns on the same topic in their contributions to this report. This matter must be considered under Regulation 6(1)(a). Following submissions and marine technical advisor review, the applicant has amended their application so that only Jet Junkies' approved staff will skipper the vessel, which must be a jet ski with a sealver attached (members of the public will not).

With regards to the proposed operators experience around marine mammals, and of the sea and weather conditions, the Applicant has provided this information in the application form.

One submitter has referenced the DOC SMART course, which is generally attributed toward their experience around marine mammals. Another submitter in support of the application has stated:

“During the trip, Kevin the guide spotted a dolphin in the distance, so stopped us all until the dolphin had moved on from the area and gave us instruction[sic] to continue slowly after this”

This may be attributed toward the operators’ competency at acting within part 3 of the Regulations. Generally, the number of years’ experience around marine mammals and of the sea and weather conditions has been accepted by the Department for other applications for a permit under the Regulations.

4.2 Comments received from Applicant

Summary of Applicant Response

The Applicant has responded to the points raised in the submissions broadly, rather than responding to individual submissions. They have highlighted that many of the submissions are repeat submissions that are opposed to the operation but acknowledges that the public submissions process is not a voting process. They have also highlighted the public attention that their application has got from various news outlets, however again acknowledging that the submissions can only be considered concerning the effects and welfare of marine mammals.

Noise

The Applicant has provided commentary on the submissions that pertain to the effects of noise on marine mammals.

The Applicant has acknowledged that Jet Skis have the potential to be noisy above the water where the Jet Skis are operating with *“constant slapping and rev changes tight turns and erratic behaviour.”*

They have also highlighted the current safety briefing of the operation, which instructs clients to operate in accordance with the Regulations should they encounter a marine mammal which involves idling within 300m of any marine mammal. They then go on to note that at idle Jet Skis are quieter than when running at full speed, and that customers Jet Skis are limited to 70% power (learner mode) so have less potential for noise.

They also refer to a study which found that Jet Skis are quieter than a boat underwater, which is consistent with the marine technical advice.

Such an assessment of the effects on noise is consistent with the marine technical advice.

Cumulative Effects

The Applicant has highlighted that as per their application they will monitor the cumulative effects of their activity. They also highlight that they may not use the full allocation of trips that was applied for as their work is seasonal being busier in summer and quieter in winter. When deciding on the application, the effects of the activity must be assessed as if the total allocation of trips were being used per year.

Effects on Behavioural Patterns

The operator has indicated that they will operate in accordance with the Regulations, and with the training received in the SMART course.

Educational Value

The applicant has highlighted that they will make a pamphlet from the material proposed in their application (DOC website, brochures, etc).

“These [referring to the pamphlets] will be professionally printed and promote awareness around marine mammals as well as educate clients on how we as humans can do better in the environment to support them.”

Conclusions

Jet Junkies have asked that the submissions in support of the Application be read. They also discuss how the business has been operating the last two years and how the permit, if granted, will help promote and educate the safe use of vessels around marine mammals.

They also go on to discuss the submissions regarding noise, and how some of the submissions regarding noise are discussing the effects of noise outside the context of the effects on marine mammals, i.e., the noise from houses on the harbour. They also point out that many submissions have not addressed that they are an existing operator on the harbour, that have never had a complaint made against them.

They also state that they regularly encounter dolphins and every customer to date has followed all the rules and instructions given to them.

The Applicant also highlights that one common cause for concern amongst submitters was the self-drive element of the application (members of public in control of their own Jet Skis). The proposal to use three jet skis has been amended out of the application. The amended application only includes the use of one jet ski and the sealver attachment at any one time, operated by the applicant.

5. Proposed Operating Conditions of Permit, if granted

5.1 Conditions

Standard conditions applicable to the proposed activity:

Any permit conditions which are more restrictive than those in Part 3 of the Regulations are unlawful. Conditions about the management or the welfare of the species are not provided for under the Regulations. Instead, if the application is approved, it shall be deemed to form part of the permit (Schedule 4 of the draft Permit) issued in respect of the application and shall be complied with accordingly. Schedule 1 of the draft permit is a summary of the application (not permit conditions).

However, conditions relating to reporting and monitoring are acceptable and have been included in the proposed permit.

Please see draft permit document for all standard conditions.

5.2 Monitoring

Generally, the Department requires two mystery shops per year on permits granted under the Regulations. In this instance it is recommended, if granted, that an additional two mystery shops are required to allow for increased monitoring of the activity given concerns from the marine technical advisor regarding the novel vessel, and existing factors that may be

impacting marine mammals in Lyttelton Harbour. As such a total of four mystery shops per year are recommended.

Furthermore, the following special conditions are included in the draft permit to allow for additional monitoring that is not undercover, and to ensure that all operators are using the same monitoring devices and software:

2. The Permit Holder must provide carriage free of charge to a departmental officer or representative, on normal trips, for the purpose of monitoring or research, provided that reasonable notice is given by the Department.

6. In order to fulfil Special Conditions 3 and 5 to the satisfaction of the Director-General, the Permit Holder must have a Department of Conservation-provided GPS tracking device installed and running on any vessel carrying out trips under the authority of this permit. Moreover, any Hector's dolphin encountered by any such vessel under the authority of this permit must be recorded using the Department of Conservation-provided marine mammal monitoring tablet and associated software application

5.3 Term

The decision maker may grant a permit for a period of time not exceeding 10 years under Regulation 12(4).

In this instance, a shorter term of three years is recommended if the permit is to be granted in order for the Department to gather information on this activity occurring in this area, given the uncertainty of the impacts mentioned throughout this report.

6. Decision Making

6.1 Recommendations: Proposed Permit under the Marine Mammals Protection Regulations 1992

The proposed activity involves viewing marine mammals from a jet ski with the Sealver attachment. This is a novel activity in that nobody has applied to view marine mammals from this style of vessel before in New Zealand. Part 3 of the Regulations outline the behaviours required around marine mammals, with provisions for both commercial operators and all persons. The Regulations do not dictate what vessel type can or cannot be used for a commercial operation.

The application was publicly notified as per Regulation 11, and 216 submissions were received. Submissions that contained points relating to the conservation, protection, or management of marine mammals were categorised and discussed in section 5 of this report. Alongside this is the Applicant's response to submissions, where they discuss withdrawing the self-drive aspect of the application after considering the public submissions. When deciding on the Application, the decision maker must also consider these submissions, as well as the Applicant's response and DOC's assessment.

Regulation 12(3)(b) and (c) state that the Director-General shall not issue a permit unless he or she is satisfied that the criteria specified in regulation 6 have been substantially complied with and sufficient information has been received in respect of the application under regulation 7. The decision maker should consider whether there is sufficient evidence to conclude that approving this activity will have significant adverse effects (Regulation 6(1)(c)), and if there has been substantial compliance with the criteria in Regulations 6 and 7. Information and data gathered on activity in Lyttelton Harbour can then be used to inform future decisions at this location but is unlikely to be comprehensive given the cost of research.

The Conservation General Policy and Canterbury (Waitaha) Conservation Management Strategy were assessed. The application is considered consistent with the Conservation General Policy. The Canterbury CMS directs decision makers to take a precautionary approach to the number of operators in an area. At the time of publication of CMS (2016) there were two active permits (as of 2020 only one permit) in Lyttelton Harbour. The amended application reduced the number of active vessels and interaction times.

The assessment of Regulation 6 was informed by advice provided by a marine species and threats advisor and contributions from the District Office. The marine technical advice discusses marine mammals in Lyttelton by drawing on research from Akaroa, though cautions against applying thresholds from Akaroa in a different location. The marine technical advisor also notes that research commissioned by DOC has always shown that dolphins are negatively impacted by tourism operations, but DOC decision makers have applied local controls to manage the effects of the activity. In this instance, the application was amended to levels less than those of the permitted operator, Black Cat and the previous permit held by Fox Sailing.

The district office supports the advice of the marine technical advisor and adds additional context regarding vessel traffic data that was provided by the harbourmaster in Lyttelton. In the absence of research specific to Lyttelton, both contributions are informed by the research and information we have from Akaroa. In this sense, we do not have a full understanding of the existing effects of the activity in Lyttelton but inferring from Akaroa suggests they may be negative.

Regulation 12(3)(a) requires the Director-General to be satisfied that the proposed commercial operation will not have or be likely to have any adverse effect on the conservation, protection and management of marine mammals. DOC decision makers have previously chosen to apply controls that manage disturbance rather than decline all permit applications.

The Department engaged with both Te Hāpu o Ngāti Wheke (THONW) and Te Rūnanga o Koukourarata (TROK) to understand their views on the application and the amended application. TRONW raised concerns with the application, specifically regarding effects on taonga species, and the belief that there should be no commercial operations in Lyttelton. TROK have raised similar concerns. Te Rūnanga o Ngāi Tahu supported TRONW and TROK's views. You must have particular regard to these views and incorporate them as part of informed decision making and partnership.

While this report does not concern the other commercial operation in the Harbour, the decision maker should consider what implications declining the application on this basis would mean for the existing permit in Lyttelton.

The relevant principles of the Treaty have been given effect to. The engagement process required by the Takutai Moana Act has flaws, but we consider the purpose has been achieved.

The Canterbury/Aoraki Conservation Board was also consulted regarding this application. Their submission was discussed in section 5 of this Report, and largely discussed topics that were beyond the scope of an application for a permit under the Regulations. They do however urge a precautionary approach be adopted, as required by the CMS.

Note that if the application is approved, should the Director-General believe on reasonable grounds that it is necessary for the protection, conservation, or management of any marine mammal or marine mammals of any class, the permit may be revoked as per Regulation 13(2).

6.2 Decision

It is recommended that you note this report and:

Either:

- ~~(a) Approve the permit application~~
- ~~(b) Endorse and sign the attached permit;~~

Or:

- (c) Decide whether to form a preliminary view to decline the permit application wholly or partly;
- (d) If you form a preliminary view to decline the permit application wholly or partly, the applicant is to be advised of that view and invited to provide any further information and/or submissions before you make a final decision.

~~Approve~~ / Preliminary Decline

Preliminary view

Local context

1. Upokohue/Hector's Dolphin are Nationally Vulnerable. The Māui and Hector's Dolphin Threat Management Plan 2020 recognises the impact of vessels and tourism on them.
2. The Minister of Conservation and the Minister of Fisheries have strengthened protection mechanisms for Upokohue/Hector's Dolphin by extending and banning seismic activity in the Banks Peninsula Marine Mammal Sanctuary via the 2020 review of the Māui and Hector's Dolphin Threat Management Plan review.
3. There have been seven young Upokohue/Hector's Dolphins deceased and recovered in the last twelve months in and around Banks Peninsula and Whakaraupō Harbour. At least one of these appears to have been killed by a vessel strike (Massey University necropsy report).
4. There are significant opportunities to view, swim with and be educated about Upokohue/Hector's Dolphin in nearby Akaroa Harbour.
5. In the past there were two marine mammal permits issued in Whakaraupō. However, it is likely that one of these never operated in this location (they are based in Akaroa). The other has only operated for short period.
6. Considerable research on the impact of tourism activities on Upokohue/Hector's Dolphins in Akaroa Harbour has resulted in several moratoriums (limits on growth) being put in place. The latest research clearly demonstrates that tourism is pushing Upokohue/Hector's Dolphin out of their traditional habitat in nearby Akaroa Harbour. This has been caused by tourism vessels including dolphin watching, swimming and cruise ships. The Department is actively working with the industry and regulators in Akaroa to reduce the impact of these activities.
7. Whakaraupō Harbour is already busier than Akaroa Harbour, and 75 cruise ships have returned Whakaraupō Harbour this summer.
8. The levels of vessel traffic including the return of cruise ships, our knowledge of the Harbour, impacts of tourism from recent research in Akaroa and threats to Upokohue/Hector's Dolphin outlined in the Threat Management Plan has changed considerably since two permits were allowed on the Whakaraupō Harbour and since the moratorium was not reviewed in 2012.

Issues in relation to this specific application

Regulation 6 Criteria for issuing permits – substantial compliance.

9. While Whakaraupō is a busy Harbour there are currently no vessels seeking out and following dolphins. The current threats and risks to this species are at such a point that even a relatively small operation such as this, which focuses on spending time with the marine mammals three times a day, could cause adverse effects through disturbance, displacement, reduced foraging success, reduced rest periods and potentially a direct strike from a fast-moving vessel especially on young and juveniles. Already the cumulative effects of activity in this busy harbour are considerable. These dolphins are local so they experience all of these conditions, and the effects of this proposal on a daily basis.

10. Regulation 6 (1)(b) states the commercial operation should not be contrary to the purposes and provisions of general policy statements approved under section 3B of the Marine Mammals Protection Act, and Conservation Management Strategies approved.
11. Granting this application with its adverse effects increases risks to dolphins. In Akaroa Harbour the situation is clearly inconsistent with (Conservation General Policy 4.4.(f)). I am concerned granting this permit could extend this threat to Whakaraupō Harbour where the vessel traffic is already greater. To their credit the applicant has altered their proposal to reduce the potential effects of their proposed operation. This has reduced some of the activity but three trips a day for 10-minute interaction periods are still being applied for. Avoiding effects (Conservation General Policy 4.4 (j)) and applying the precautionary principle suggests that if we are in any way concerned or in doubt as to the degree of effects, then the application should not be granted. I believe the best way to avoid the effects and apply the precautionary principle is to decline this application.
12. The Department lacks the research information to suggest that granting this permit will not have an adverse impact. Yet we have ample information to suggest tourism impacts Upokohue/Hector's Dolphin in nearby harbours. I have considered whether we could grant this permit for a short period and monitor the potential effects of the operation on Upokohue/Hector's Dolphin. However, twenty years of researching tourism impacts in Akaroa has taught us this is time consuming and expensive. For example, our recent research in Akaroa uses a twenty-year data set and has cost over \$50,000. This cost was recovered from the six operators. It is unreasonable to seek this type of research funding from one or two operators in Whakaraupō and regardless it takes a long time to collect meaningful information which can determine any real effects or otherwise. In my view, then it is often too late as the impact has become pronounced.
13. Regulations 6(1)(d) and (h) state that it should be in the interest of the conservation, management or protection that a permit should be issued and the commercial operation should have sufficient education value to participants or to the public. I acknowledge there are likely to be some benefits of having a permitted operator on the water to report on conservation interests, however, these do not and cannot be used to 'offset' the adverse effects of this activity. The benefit of public education is often a justification for issuing permits. However, on Banks Peninsula there are already six operators providing this benefit in Akaroa Harbour. The added educational benefit of this operation will be marginal.
14. I note:
 - a. Koukourarata and Ngāti Wheke Runanga do not support issuing this permit because they are concerned about the impact of this activity on their taonga species. Ngāti Wheke and Koukourarata play an active role in protecting the marine environment. I am required to give effect to Treaty principles of partnership and informed decisions making, and have particular regard to affected iwi views.
 - b. The Canterbury Aoraki Conservation Board opposes the grant of this permit because of concerns around the adverse effects of this activity.
 - c. When the application was publicly notified 216 submissions were received, 7 were supportive, 2 were neutral and 207 were opposed.
 - d. The two technical marine specialists advising on the application suggest this permit should not be issued.

Regulation 7

15. I am not concerned about the vessel type, the level of noise (below water) or the applicant and their ability to carry out the activity. The applicant has completed a DOC run SMART course.
16. Educational material has not been provided, however I understand the operator proposes to use information from the DOC website.

Summary

17. With the protection of the marine mammals foremost, and knowing what we do of the challenges they face with disturbance, habitat reduction, overfishing, water quality, by catch warming seas, toxoplasmosis and noise; allowing an activity which knowingly disturbs them further would have adverse effects in this busy but vital location for Upokohue/Hector's Dolphins. The benefits to conservation from granting this permit do not outweigh these adverse effects. Therefore, it is my view that the criteria for issuing permits in Regulation 6 cannot be substantially complied with.
18. I am satisfied that Regulation 7 has been complied with.

DRAFT

Appendix One – Public notification

As per regulation 11(1), the applicant is required to advertise details of this application. You must decide on the form of the newspaper advertisement, and which newspapers the advert shall appear in.

Format.

The format for the advertisement is attached for your consideration (Appendix 2).

Newspaper

- The Press

Recommendation:

It is recommended that the advertisement format, content and newspaper in which it should be placed be approved

Decision to approve the application for notification

Approve the application for notification:

Agree / Disagree



Signed by Judi Brennan, Permissions Manager
Pursuant to the delegation dated 9 September 2015

23 December 2021

Date

Appendix Two – Newspaper notice

MARINE MAMMALS PROTECTION REGULATIONS 1992

APPLICATION FOR A NEW MARINE MAMMAL PERMIT

Jet Junkies Limited have applied for a new permit to operate commercial tours to view Marine Mammals by motorised vessel (jet ski) in the Lyttelton Harbor and the surrounding heads.

Application details can be obtained online at www.doc.govt.nz/get-involved/have-your-say/, received by email on request from permissionschristchurch@doc.govt.nz or from a Department of Conservation office.

Any submissions on the application are to be sent to the Director-General, Department of Conservation, Christchurch Shared Services, Private Bag 4715, Christchurch Mail Centre, Christchurch 8140, Attention: Michael Dine, Permissions Advisor to be there by 11.59pm Tuesday 15 February 2022.

Note: Submissions are part of a statutory process and may be commented on by the applicant.

DRAFT

Appendix Three – Marine Technical Advice

Dave Lundquist: Marine Technical Advisor

Initial application

The below advice was written based off the initial application. Please see the bottom of this section for comments about the amended application.

Overarching this application is the fact that the most likely animals for the applicant to interact with are Hector's dolphins, a Nationally Vulnerable species. Impacts on these animals from vessel-based tourism at Akaroa have been described over the years, including changes in behaviour, movement patterns, dive times, and areas of residence. This has resulted in a range of management measures, including a moratorium on new permits in that area.

This application is for a different area, so is not affected by the Akaroa moratorium. It is unknown whether the effects of this activity on the dolphins will be similar to those observed in Akaroa, for several reasons: 1) the vessels used in the activity are different; and 2) the level of tourism activity is substantially less in Lyttelton Harbour.

With respect to the vessels, this application is novel in that to my knowledge the Department has never issued a tourism permit to use jet skis (or the 'jet ski boat' attachment) to interact with marine mammals. There is little or no research on the specific impacts of these sorts of personal watercraft on marine mammals, but they have several traits which mean they present a different risk than 'normal' vessels, mostly because they are capable of high speeds and are highly manoeuvrable.

Because of these traits, it may be difficult for animals to avoid them and therefore they have a potential to be used to chase or harass animals. High speeds may also make it more likely that they'll strike animals in the water, particularly if the jet skis are driven by inexperienced people. Perhaps the only advantage of these watercraft is that they are jet driven rather than propeller driven, so prop strike is eliminated, but a high-speed collision would be more than enough to cause fatal blunt-force trauma to a dolphin.

With respect to the area, it is unknown how dolphins in the proposed area might respond to increased levels of vessel interactions. They may react strongly to a new experience (being approached by jet skis) or they may not react strongly (there are low levels of interaction). Unfortunately, there is no way of knowing their response in advance, so the best we can do is assume it will be similar to what has been observed in Akaroa: changes in behaviour associated with the presence of vessels and potential displacement from preferred habitat if vessel traffic occurs in those areas.

Recent research at Akaroa has suggested that 12 tour trips per day may be a threshold beyond which dolphins are significantly impacted. In my view we should be cautious about applying such a specific number to other locations, as any threshold is likely to be very context dependent. Industrial activity occurring in Lyttelton could lower this sort of threshold, or it could also mean

that any dolphins which use this area are already rather resilient to vessel impacts. We simply do not know.

To the applicant's credit, they seem to be genuine in acknowledging that they already encounter marine mammals in their operations and want to do the right thing by obtaining a permit (and attending SMART courses, etc.). They seem to have reasonable controls in place for ensuring that their clients do not operate the watercraft in an inappropriate manner around marine mammals, though of course this will depend on their willingness and ability to enforce these protocols.

Ultimately it seems the decision will come down to seeking a balance between conservative management of Hector's dolphins around Banks Peninsula and permitting activities which are ongoing and may have some unknown and currently unmanaged impact. In my view, issuing a new permit in a new area for a relatively novel activity may not be appropriate for a species which is known to be under pressure elsewhere. If it is to be issued, we should take a conservative approach to issuing it and monitoring in order to assess any impacts on the dolphins. This could include reducing the duration of the permitted interactions with dolphins and/or reducing the duration of the permit, if granted. The latter is only useful if we also collect data on the potential impacts.

Science/technical issues highlighted in submissions received (based off the initial application)

One submission was received from Maria Jesús Valdés, who undertook her PhD on Hector's dolphins at Banks Peninsula. She expressed concerns about the speed and manoeuvrability of jet skis, cumulative effects of this activity alongside vessel traffic associated with Lyttelton Harbour, limited experience of potential jet ski drivers (i.e. the public) and the limited educational potential of this operation.

A number of other submitters raised similar concerns. Of note among these is Steve Dawson, Professor Emeritus at the University of Otago, who (in addition to concerns mentioned above) also expressed concern about the level of potential disturbance associated with 3 sources of noise versus the small number of passengers (12 at most).

Will Carome, a student who recently undertook a PhD assessing impacts of vessels on Hector's dolphins at Akaroa expressed similar reservations as described above.

Akaroa Dolphins (a potentially competing tourism venture in nearby Akaroa) expressed objections to this application and noted that management of tourism in Akaroa was being tightened due to concerns about the dolphins, yet simultaneously being considered for expansion in Lyttelton, which was a busier harbour.

Black Cat Group (who hold an existing permit in the area) also objected to this application and in addition to concerns listed above, noted that the applicant was asking for more annual trips than all Akaroa permit holders combined. They also pointed out the small number of passengers means the educational benefit of the operation is limited. Most importantly, they submitted a view that members of the public operating jet skis were unlikely to be able to satisfy section 6(1) of the MMPR (see the text in the Statutory Analysis section below) with respect to operator

experience with marine mammals, local and sea conditions, and not having convictions for the mistreatment of animals. They also expressed concerns about the ability of the applicant to comply with the 3-vessel rule under the MMPR, given the permit, if granted, would allow 3 vessels to operate simultaneously and this does not account for the presence of other vessels near the marine mammals they may encounter.

Forest and Bird raised a series of concerns about the potential impact on the dolphins (as above), plus concerns that this application did not meet the requirements of the MMPA, regional Coastal Plans, and other conservation policy documents.

Comments on submissions

Concerns about vessel speed and manoeuvrability and the potential impact on marine mammals expressed by submitters simply underscore my previous comments on these topics, in my view. It is clear that this presents a somewhat novel risk to the animals in comparison to other vessel traffic. If such an operation were issued a permit, we would be depending on the operational policies implemented by Jet Junkies staff to ensure clients are not driving inappropriately near marine mammals. While they seem to want to do the right thing, the speeds these machines are capable of and the temptation of customers to test their limits means that a simple mistake (failure to spot an animal in the water) could have substantial consequences.

Many submissions (in addition to those above) mentioned the potentially excessive noise of jet skis as something which differentiates them from other vessels interacting with marine mammals. I understand where this concern comes from, as jet skis are notorious for being loud. In my view, this is something of a misunderstanding related to human hearing (in air) versus dolphin hearing (underwater). While jet skis sound much louder than boats above water, this is not the case underwater: a jet propulsion motor is generally substantially quieter than a propeller-driven motor, because most of the noise comes from cavitation at the propeller. Thus, while noise is a concern here (and is still the most likely source of disturbance of marine mammals), a jet ski driven at an appropriate speed is unlikely to create noise in the water which is greater than a prop-driven vessel.

I am not convinced as to submissions regarding the relevance of poor educational materials or the small number of customers per trip. While it is true that this will limit the educational reach and value, what is proposed here is consistent with what has been considered “sufficient” for the purpose of the MMPR in previous permitting decisions.

Several submitters noted potential cumulative effects associated with this activity, including one who claimed Lyttelton Harbour is significantly busier than Akaroa Harbour. This may well be true (I don't have personal knowledge either way), but some consideration must be given to the fact that the dolphins may experience the opposite because there are substantially more vessels at Akaroa actively seeking out dolphins as a commercial enterprise on a daily basis. That said, there is little doubt that an active port like Lyttelton means that dolphins in the area may be already substantially impacted by vessels and other activity and we should be careful about adding in new activities which may directly disturb the animals.

In my opinion, the most significant point raised in submissions that I hadn't already considered is whether this application can meet the criteria for issuing permits described in regulation 6(1)

of the MMPR. In particular, 6(1)(e-g) may be difficult to meet if customers are required to be considered. Clearly, we are unable to assess an unknown customer base as having sufficient experience with marine mammals, knowledge of the local area, and so forth.

This seems relevant in this case as customers will actually be operating the vessels. The closest comparison is kayak tours, but there is a clear difference in risk to the animals from jet skis than from kayaks. Another comparison might be swim-with tours, where we do not assess customers for their ability to behave appropriately around animals (i.e. to not touch them). Again, a swimmer in the water arguably presents less risk than a person on a jet ski. It would be worth seeking a view from Legal as to whether customers should be included in our assessment relative to 6(1)(e-g).

Amended Application

The above advice was written based off the initial application. The following comments are based on the amended application:

After consultation, the applicant has amended their application to remove the possibility of customers operating the jet skis while near marine mammals. This eliminates the concerns above regarding the experience and behaviour of vessel operators near the animals, which is good. Because the Sealver will be the only permitted vessel, the amended application also removes concerns about multiple simultaneous sources of noise/disturbance near the animals. In addition, the number of trips per day has been reduced from 5 to 3, which further reduces the potential impact on the target animals.

In my view, the revised application has clearly reduced some of the most concerning uncertainties about this application. Some concerns previously expressed remain, particularly with respect to the:

- Novelty of the Sealver/jet-ski vessel;
- Expansion of marine mammal tourism to Lyttelton when we are restricting it in Akaroa;
- Unknown cumulative effects of this operation alongside busy industrial port activities

Use of the Sealver rather than a collection of jet skis should result in less risk to the dolphins, but at a high level many of the same responses seen to tourism vessels in Akaroa can be anticipated in Lyttelton. That is, it is reasonable to expect dolphins to change their behaviour and movement patterns in response to interactions with the Sealver. If frequent enough, such changes can result in changes to areas of residence and other biologically significant effects. Whether the level of activity requested in this application is enough to result in significant effects is unknown, but the possibility warrants a cautious approach.

It is my understanding that the return of cruise ships to New Zealand waters will happen concurrently with a shift of cruise ship visits from Akaroa Harbour back to Lyttelton Port. Recent research in Akaroa (Carome et al.) demonstrated an overall increase in vessel traffic around the dolphins as the number of ships visiting increased. As a consequence, dolphins shifted their distribution away from a previous hotspot once ships started mooring nearby.

These documented effects suggest two things which should be considered in this application process:

1. The presence of the cruise ships transiting through the harbour is likely to create additional pressure on the local dolphin population, even without these proposed tours occurring; and
2. The return of cruise ships to Lyttelton means that this operator will have a steady stream of potential customers seeking interactions with dolphins, and therefore will likely use a large percentage of the capacity on any permit received.

In addition, there are a range of other threats to this threatened species, including pressure from a range of non-tourism human activities, including bycatch in fisheries, disease, and cumulative effects of coastal development resulting in habitat degradation (e.g. increased sedimentation and pollutants, etc.).

Specific decisions have been made under the Hector's and Māui dolphin Threat Management Plan to manage fisheries bycatch to a sustainable level, including significant closures of areas around Banks Peninsula to net fishing. Coastal development is largely managed independently via consenting processes under the Resource Management Act, which may or may not take appropriate account of cumulative effects on the marine environment. Reduction of risk from disease, primarily toxoplasmosis, remains a work in progress, with high uncertainty about whether there are effective management measures available. It is known that animals infected with the *Toxoplasma* parasite can be healthy and asymptomatic but develop fatal toxoplasmosis if they become ill or are otherwise under stress from natural or human-related factors.

Given these factors, the most conservative approach would be to decline the application and seek to keep the Hector's dolphin tourism industry focused on a single location around Banks Peninsula. This allows tourism to continue but limits the geographic scope of dolphins exposed to potentially disturbing activities. In this case, it may be sensible to look into declaring a moratorium on new permits in the Lyttelton area to ensure this geographic restriction is widely communicated.

Further expansion beyond Akaroa, if allowed, should be undertaken using a conservative approach with careful monitoring in order to assess any impacts on the dolphins. The details of monitoring are somewhat independent of the decision to issue a permit and can be worked out after the fact if a permit is issued. At the least, this should include collecting information on compliance with the permit (if granted); location, frequency, and duration of interactions; and behavioural responses of dolphins to Sealver interactions. Some of this information could be collected by sending staff onboard trips, or by requiring the applicant to provide details about their interactions but assessing behavioural responses or changes in distribution or population size would necessitate a dedicated research project.

Regarding research:

Research questions are always difficult and expensive to deal with. In order to comprehensively describe any potential behavioural impacts, it would require significant funding (6 figures) as it would require substantial investment of time to observe behaviour in the presence and absence

of these operations. This seems unlikely in the current funding climate and unlikely to be achieved via research levies on a relatively small operation.

We can collect levies from Jet Junkies, but not in sufficient amounts to fund a dedicated research project. Therefore, we may be limited to semi-regular monitoring trips by experienced (with Hector's) observers to see whether the dolphins respond differently to the Sealver than other types of vessels. This is likely to be qualitative judgement rather than quantitative assessment.

Regarding comparisons between wind-powered vs motorised craft:

I note in section 4 of this report some commentary on the level of previously permitted effort (Fox 2 Sailing) versus this application. These are not easily comparable, given differences in vessel type and seasonality of effort. In general, a motorised vessel would be expected to have a greater impact on dolphins due to the additional noise of the motor and increased ability to manoeuvre to approach animals closely. On the other hand, spreading a similar amount of effort across an entire year might be less impactful than high-intensity effort in a single season.

While there is no direct way of knowing which of these alternatives results in greater consequences for the dolphins, my inclination would be that the use of a motorised vessel is more likely to cause impacts, simply because dolphins will be able to detect it across a much larger area.