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Picton Regional Forum held at Picton Emergency Centre, Memorial Park, Picton, on Monday 3 July 2023, at 1.30 pm

Present

Clr Barbara Faulls (Chairperson), Clr Ben Minehan (Marlborough District Council), and Clr Raylene Innes (Marlborough District Council).

Group Representatives

Raewyn Buchanan (Karaka Point & Environs Residents Association), Beryl Bowers (Picton Historical Society), Brian Henstock (Marlborough Sounds Vehicle Trust), Stuart Eyes (Bike Walk Picton), Graham Gosling (Picton Business Group), Nicola Neilson (Marlborough District Council), and Laurie Stevenson (Marlborough Recreational Fishers Association), Bosun Huntley (Marlborough Recreational Fishers Association), Stacey Boswell (Marlborough District Council), Chris Davies (Waikawa Ratepayers Association), Connie Smith (Port Marlborough), Peter Beech (Guardians of the Sounds), Diane Livingston (iReX Project Communications Advisor, KiwiRail).

Guest Speakers

Tim Newsham (Bay of Many Coves Association), Jane Tito (Marlborough District Council), and Jake Oliver (Marlborough District Council, Harbours), Rose Prendeville (Port Marlborough) and Wen Wang (KiwiRail).

Attending

Kirsty Baldwin (Marlborough District Council Secretary)

1. Apologies

Dean Heiford (Marlborough District Council), Clr Allanah Burgess (Marlborough District Council), Margaret McHugh (Picton, Marlborough Sounds Tourism), Monyeen Wedge (Queen Charlotte Sounds Residents Association), Rebecca Woledge (Karaka Point & Environs Residents Inc), and Valerie Kenny (Picton Historical Society).

It was moved that the apologies be accepted, and the motion was carried.

2. Confirmation of previous meeting minutes

Moved by: Clr Ben Minehan Seconded by: Nicci Neilson

That the minutes of the meeting held on 1 May 2023 be confirmed.

3. Marlborough Sounds Ungulate Update (Tim Newsham, Bay of Many Coves Association)

- Tim Newsham did a presentation on the above topic. The presentation is attached as Appendix A.
- The Marlborough Sounds and Taranaki are the two worst hit areas for ungulates in New Zealand recognised by government.
- We need to get the population of ungulates down to regenerate the forest to have an abundant dawn chorus and to work toward returning the mana to the forest to return it to what it was.

Questions/Answers

- At the end of the discussion Tim raised the point that we do not know yet what the effects of leaving that number of dead carcasses in the bush is. Whether this will cause a spike in the number of rodents or mustelids and weka, or possibly give a boost to the flora from the added mineral input. However, Councillors have been informed that the meat was being utilised and given to local marae and whanau and not being wasted, as well as Johns Kitchen and Salvation Army being beneficiaries of the meat.
- Is Tim in contact with the Marlborough Sounds Conservation Trust run by Bryn Williams and James Wilson? They are considering starting a conservation trust for the entire Marlborough Sounds. There could be some crossover in the various groups.
 - No. He was not aware they existed.
- Laurie Stevenson queried bach owners opposing people shooting animals on their property? This has been brought up from customers at his sports shop.
 - It would be useful if bach owners were more supportive in allowing hunting on their properties. This would help ease the problem. Tim noted they had done a consultation process in the Bay of Many Coves to get bach owners onboard with the project. A small minority said no, but 95% were in favour.
- At the next Assets and Services Council Committee meeting there is a paper going to Council about ungulate control that we are working on with DoC, for recreational hunters, and also a targeted one that will attempt to acquire an experienced and licensed hunter or group to do the Essons Valley.
 - Pig hunting permits are available through Council, but not for shooting, but for other means of hunting.
- Cllr Ben Minehan pointed out the difference between goats and deer reproduction rates, in that deer usually have one fawn a year, whereas a goat could have two sets of twins. Goats are probably the priority animal, in terms of ungulate control, in terms of forest regeneration.
- There was surprise that there are only two thermal imaging cameras for this issue in New Zealand.
- Bosun Huntley thanked Tim Newsham, on behalf of his grandchildren, on the work Tim and his group have done.
 - Bosun said they never had these problems with goats or deer, to the extent we do now, until the deer farming and goat farming came.

4. London Quay Project Update (Jane Tito, Marlborough District Council)

- The presentation is attached as Appendix B.
- Consultation was done approximately 15 months ago. Council have met with iwi, local stakeholder groups and the Picton Business Group for input. Public meetings were held in the library, as well as online consultation process and feedback.
- The goal is to have one level all the way across from the cafes to the Foreshore for accessibility and access.
- Council is meeting with Te Ātiawa on 5 July for their cultural guidance.
- The build was initially to be this year but will be pushed back until next year to decrease disruption due to iReX works in Picton.
- There will be more public space available, not just what is leased by the café owners currently.
- The speed limit will stay at 30 km/hour. The style of the road will encourage and force people to slow down due to being in a shared space and keep to that speed limit.
- There will be access for two-way traffic for vehicles and buses still. Further work will be done on how the bus travel will work, specifically for ferry bus shuttles.
- There will be a second round of consultation in this project in the next couple of months.

Questions/Answers

It was asked whether the Picton Historical Society can be contacted for these consultations.

Jane Tito agreed to that.

• Funding for this project has been supplied by central government a few years ago called Innovating Streets. Central government did not allow this funding, so Council was approached and agreed to fund the project, based on the plan.

Changes to the left side going down to Auckland Street could be part of the second part of the plan, as it is not currently part of the plan. There is a vision for the whole of the Foreshore.

• The issue of tiles being slippery and dangerous along High Street in Picton.

A lot of money has been brought in to Picton from the Cruise Ships but where has that money gone to? It should be going into improvements for Picton. This has been raised for the Annual Plan budgeting meetings.

Do we know when the Picton Foreshore Reserve Management Plan will be updated and reviewed?

Not for at least three years, as it was previously done in 2014.

Jane Tito exited the meeting at 2.30 pm.

5. Marlborough Sounds Future Access Study Written Update (Neil Henry, Marlborough District Council)

- The written presentation from Neil Henry is attached below, which has been distributed to the members.
- Cllr Faulls also spoke to this.
- Group meetings have been held in various small communities over the last four weeks, as well as in larger communities such as Nelson.
- A Stakeholders meeting was also held in Blenheim to discuss the options.
- Marlborough Sounds Future Access Study (MSFAS) is a Council-led study to develop a business case to support the case for funding safe and resilient long-term access solutions for the Sounds, both for itself and to obtain funding assistance from Waka Kotahi and other government departments.
- The consulting, engineering and construction company Stantec is leading the MSFAS team.
 The Waka Kotahi business case process guides the study.
- The study is close to completion, and a range of options have been developed that are currently out for public engagement, including Preferred Emerging Option and the Hazard Adaptation Pathway Option.
 The second one is the worst-case scenario, or Plan B.
- A series of community drop-in meetings were held from 20 28 June and were very well attended.
 Various ideas were proposed that perhaps had not been thought about.
- There are things that need to be ironed out still. The Build Back with Targeted Improvements option was able to be explained in more detail by the engineers.
- A survey for people to provide their feedback was held and closed on 11 July. Council would like to hear
 from the whole Marlborough community as financial contributions will be required from all Marlborough
 residents towards the cost of the works.
- More information including the engagement document, videos and supporting documentation can be found on the Council website here: https://www.marlborough.govt.nz/services/roads-and-transport/marlborough-sounds-future-access-study
- Once the business case is completed, it will be presented for decision making by Council, Waka Kotahi
 and possibly other government departments. This process is likely to take some time. For Council, a
 further public consultation is likely due to the cost of the works and the potential changes to levels of
 service before any decision is made.

Questions/Answers

• The question was raised what the consensus from people seems to be?

People just want a road, something for access. It has been generally positive and supportive. There is some concern from Blenheim ratepayers about paying extra rates for these works and will have to be discussed at a full Council meeting in future.

Queen Charlotte Road has the highest level of improvement in the proposal as it is a backup highway route in case State Highway 1 is not accessible due to emergencies, etc, so is higher up in the hierarchy of roads.

- The Marlborough Community Vehicle Group have seriously been asked to look at basing a car at Havelock for bringing people into Blenheim and also taking them to Nelson. The group could put a car there but they would have to find drivers.
- Cllr Minehan stated that everyone in the Marlborough district is to share paying for the road repairs.

 Just like everyone in the Sounds helps pay for things in Blenheim, like libraries, etc, everyone contributes to the whole roading network in the Marlborough Sounds.
- A feasibility study was done a few years ago where someone walked a road from Port Underwood to come out at Mount Pleasant. It was surveyed. It might be worth looking at this again. It is still a possibility but comes down to cost.

There are issues with the Port Underwood Road in that it is very narrow and difficult at times when you meet big logging trucks. The Port Underwood Residents' Association are very active in talking to Marlborough Roads and trying to work out what we can do in terms of enhancing safety on that road for all users and whether we can possibly get more barge sites operating to take some of the logging traffic off the road.

- One of the things that has been looked at was the forestry road that comes out of Onapua Bay across to the top, in the Queen Charlotte Forest. The quality of the road is so good that it could become an alternate access road of some sort.
- Information on the Marlborough Sounds Future Access Study Survey is attached below: https://www.marlborough.govt.nz/your-council/latest-news-notices-and-media-releases/all-news-notices-and-media-releases?item=id:2kydkg23t1cxbyjolh2a

Marlborough Sounds Future Access Study (MSFAS)

- 1. MSFAS is a Council led study to develop a business case to support the case for funding safe and resilient long-term access solutions for the Sounds, both for itself and to obtain funding assistance from Waka Kotahi and other government departments.
- 2. Consulting, engineering and construction company Stantec is leading the Marlborough Sounds Future Access Study team. The Waka Kotahi business case process guides the study.
- 3. The study is close to completion, and a range of options have been developed that is currently out for public engagement.
- 4. A series of community drop-in meetings were held from 20- 28 June.
- 5. A survey for people to provide their feedback is currently open and closes on 11 July. Council would like to hear from the whole Marlborough community as financial contributions will be required from all Marlborough residents towards the cost of the works.
- 6. More information including the engagement document, videos and supporting documentation can be found on the Council website here (*from 16 June*): https://www.marlborough.govt.nz/services/roads-and-transport/marlborough-sounds-future-access-study
- 7. Once the business case is completed, it will be presented for decision making by Council, Waka Kotahi and possibly other government departments. This process is likely to take some time. For Council, a further public consultation is likely to be required due to the cost of the works and the potential changes to levels of service before any decision is made.

Neil Henry

6. Waikawa North West Marina Progress Plan Update (Connie Smith, Port Marlborough)

The presentation is attached as Appendix C.

Questions/Answers

When is it proposed to have the final berths open?

All jetties are open now. Berths are mostly allocated with some availability; please get in touch with the marina customer service team for more information. The official opening will be by invitation towards the end of September.

What did the full build cost?

The final build cost was unavailable.

Rose Prendeville entered the meeting at 2.50 pm

7. iReX Update (Rose Prendeville, Port Marlborough and Wen Wang, KiwiRail)

The presentation is attached as Appendix D.

Questions/Answers

Will the temporary ferry terminal building become car hire building in future, is that right?

No. The existing rental car hire kiosk buildings will soon be relocated to the lower car park, within the current rental car parking area.

Has the mechanical depot been closed?

No, not yet. The new one will be built before the old one is closed.

Where will the new one be built?

Closer to the eastern side of the rail site, not far from the railway station.

Will rail wagons still be serviced in Picton?

Yes.

Were all the different jobs open tendered?

Local contractors are being utilised as much as possible.

What is happening with the Aquarium land?

The land has been cleared. In the short-term we are leasing the Foreshore Site to the iReX contractors to locate temporary offices for the duration of the ferry precinct rebuild. There is no decision for the future use of the site as yet. Our focus is on deliver the new ferry infrastructure first and then see where to from there.

Will the Waitohi Culvert Upgrade work be completed before the busy summer tourist season?

The culvert works in the carparking area and around the temporary terminal will be finished before the busy season. Some work will be ongoing across the rail yard but will not impact the public. The Waitohi Culvert works are being done to help with flood protection as well as protecting against future climate change impacts.

• Will people walk from the temporary terminal to the ships, or be bused?

At the moment people are bused onto the ships, but later there will be a temporary walkway until the new ships arrive.

- There is short-term and long-term parking available near the temporary ferry terminal, as well as parking allowed for the new jetties in the parking layout.
- There will be a new Dublin Street overbridge, which will increase safety across the railway and ease traffic flow, as well as provide access for cycling across that area.
- Dublin Street works are well underway to relocate sewer pipes and then the overbridge build will start.
 Dublin is one-way for a short time and then will be fully closed for approximately 20 months.
 Broadway between Auckland and Kent Streets will be closed to through traffic but will still be accessible to pedestrians and cyclists. Diversions are in place and a map showing the routes will go in the local media and to the project board at Fresh Choice Picton from the weekend.
- Will the closure of Broadway be permanent? Or just while this development is being done?

That intersection has been highlighted by Waka Kotahi for a number of years as a dangerous intersection with the railway and the five-way intersection there. It is possible that it will remain closed but that is a decision for Waka Kotahi. It is the councillors' understanding that Waka Kotahi will consult the local community before anything is done permanently at that location. It is not part of the iReX team's role to make that decision.

• A number of statements were made by a meeting attendee about perceived shortcomings in preparation and planning for additional demands on the roading network once the new ships are in place.

Roading operations are the business of Waka Kotahi and neither Port Marlborough nor KiwiRail can speak for them regarding detailed roading mitigations. However, Waka Kotahi have confirmed that they have identified the need for improvements at the intersections of Wairau Road and Kent Street; Lagoon Road and Dublin Street; Auckland and Dublin Street; as well as maintenance and upgrades to Kent Street. Waka Kotahi is identifying the best options for making these improvements and will be able to provide more detailed information once decisions are finalised.

- Cllr Faulls will follow up with Waka Kotahi in getting a representative to attend the next meeting.
- Public information about the iReX project in Waitohi Picton can be found at www.irex.co.nz/picton and email the communications team at info@pictonferryprecinct.co.nz. If people have any pressing concerns, please get in touch with the iReX team or Rose Prendeville or Connie Smith.

8. Navigational Bylaw Update (Jake Oliver, Marlborough District Council, Harbours)

- The presentation is attached as Appendix E.
- The Navigational Bylaw is currently out for consultation.
- Information on the Proposed Marlborough District Council Navigation Bylaw 2023 Submission is attached below:

https://www.marlborough.govt.nz/repository/libraries/id:2ifzri1o01cxbymxkvwz/hierarchy/documents/your-council/proposed-navigation-bylaw-list/3_Navigation_Bylaw_2017_%20Submissions.pdf

Questions/Answers

Will the submissions cover the Wairau River?

Yes. The whole Bylaw is open for consultation so people can submit on anything that is in there. On the Council website it lists all the changes that are proposed. It is not specifically mentioned but it is in the home page of the website where you can have your say.

Does it include all the rivers, including the Pelorus and Wairau?

At the moment it includes the mouth of the river, quite low down, out to a distance offshore. Those are the areas being focused on. We are not at the point looking to change all brown rivers.

Who covers jet skis and speed boats up the river?

Maritime New Zealand. We would like to have a system that is easy for people to operate in so they know very clearly where they stand.

9. Actions from the previous meeting

	Action	Person Responsible
1.	Sarah Brand will send information to the Picton Business Group via Graham Gosling around the Freshwater Management Plan so his members can make submissions on the Plan. Completed.	Sarah Brand
2.	The Councillors will speak to Mayor Taylor and write to Stuart Smith about concerns around dialysis patients being transported to Nelson three times a week by the MCVG. Completed.	Clr Faulls / Clr Minehan / Clr Innes
3.	To coincide with the King's Coronation, on 6 May, the movie <i>Making Marlborough</i> will be screened at the Picton Library. Further information will be distributed. <i>Completed</i> .	Beryl Bowers
4.	Update on the future of the Picton Powerhouse Reserve. Pending.	Nicci Neilson
5.	Invite Betty Whyte, the Head Mistress at Queen Charlotte College, to attend and address a future meeting. <i>Completed</i> .	Clr Faulls / Kirsty Baldwin

	Action	Person Responsible
6.	It was requested by members to have a mid-meeting coffee break.	Clr Faulls

10. General Business

Marlborough Recreational Fishers Association

• This is an advocacy group to deal with issues concerning fisheries in the Marlborough Sounds. Sedimentation in the Sounds is a big issue but it has never been addressed. Things under water are not very good. When it rains the water goes brown from local rivers. It is quite a problem. The Havelock area, and Pelorus Sound in the Mahau Sound, are quite bad underwater. There is a similar problem in Queen Charlotte Sounds.

One of the big problems is forestry, due to runoff into the sea. It needs to be addressed. Studies may have been done in the past, but no further action has occurred.

If you go to any barge sites, the water is black and there is an excess of tannins.

Mussel farms are another cause of sedimentation. They need to be managed in an ecologically-friendly manner.

The group just need to be aware of these issues.

Cllr Innes noted that Oliver Wade is well aware of these issues and is keeping an eye on the situation.

There are also problems with the scallops in the Marlborough Sounds, which are not breeding as expected, probably due to sedimentation, possibly along with water temperatures rising.

- It was suggested to invite Katie Littlewood, Marine Coastal Scientist, to do a presentation on this at a future meeting.
- It was queried why the Mussel Farms and Salmon Farms are not being charged rates?

Councillors reported the option of a water usage fee has been bandied around.

• It may be useful to get Eric Jorgensen, of Sustainable Seas, who has been doing a lot of research, to present on this topic at a future meeting. There may also be a meeting set up in future for recreational fishing.

Forestry

• The Marlborough Environment Plan allows Council, when the new Resource Consent for harvesting comes through, to be a lot more stringent in terms of the conditions. There is a National Policy Statement for production forestry, which central government are looking at, to make possible tweaks to it. Forestry owners are asked to stick with existing forestry roads for their work, rather than creating new ones. Buffer zones are expected to be kept around creeks.

Marlborough District Council and Kaikoura Council share the ownership of forestry. This creates a huge income which helps reduce our rates.

Annual Plan

• People who have made submissions for the Annual Plan will be receiving letters soon.

11. Actions from the meeting

	Action	Person Responsible
1.	Send out a list of group members for the Councillors to review. Completed.	Kirsty Baldwin
2.	Invite Cllr Burgess to these future meetings. Completed.	Kirsty Baldwin
3.	Councillor Faulls to invite Laura Skilton or Emma Speight from NZTA/Waka Kotahi to the next meeting. <i>Completed</i> .	Clr Faulls / Kirsty Baldwin
4.	Invite Katie Littlewood to speak on reef re-seeding issues. Completed.	Clr Faulls / Kirsty Baldwin
5.	Invite Henry Morris from PF Olsen Limited to speak at a future meeting.	Clr Faulls / Kirsty Baldwin

12. Future Speakers

- Picton Sewerage Update Stephen Rooney.
- KiwiRail Update.
- Dublin Street Overbridge Traffic Management Plan Update (Laura Skilton / Emma Scape / Steve Murrin).
- Queen Charlotte College Update (Betty Whyte, Queen Charlotte College).
- Future of the Powerhouse Reserve Update (Nicola Neilson, Marlborough District Council).
- Forestry Update (Henry Morris, PF Olsen Limited OR Jeremy Patterson-Green, Green Forest & Resource Solutions Ltd).
- North West Waikawa Marina Update (Gavin Beattie, Port Marlborough)
- Fishing Update (Eric Jorgensen, Sustainable Seas).
- Reef re-seeding issues Update (Kate Littlewood, Coastal Scientist).
- Marlborough Conservation Trust Update (James Wilson, Bryn Williams, Picton Dawn Chorus)
- Mayor Taylor, One Year in the Role Update (Marlborough District Council).

13. Proposed Meeting Dates for 2023

Picton Regional Forum

- 4 September 2023
- 6 November 2023

The meeting closed at 4.25 pm.

Appendix A - Marlborough Sounds Ungulate Update

Ungulate Control Update, Queen Charlotte Sound





THE NEED FOR ONGOING DEER, GOAT AND PIG CONTROL IN THE MARLBOROUGH SOUNDS



Tom Stein. July 2021

Report prepared for: Bay of Many Coves Residents Association and the Marlborough Sounds Restoration Trust with funding from the Marlborough District Council.

What are we talking about?

This document describes the past and present distribution and population density of 3 species of feral ungulates (hoofed animals, in this case pigs, goats and red deer) in the Marlborough Sounds. It looks at the impact they are having on the natural, economic and cultural values in the Marlborough Sounds and the reasons these impacts need to be reduced. It briefly discusses some of the options currently available for reducing these impacts.

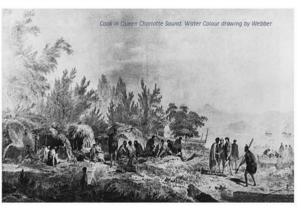
What's the history of pigs, goats and deer in the Marlborough Sounds?

Pigs have been present in the Pacific Islands for many centuries and would have been known to the early Polynesians that first arrived in Aotearoa/New Zealand. However, there is no evidence that they were ever successfully introduced into Aotearoa/New Zealand prior to the arrival of Europeans.

Animals and livestock were common cargo on many of the European ships, and so pigs and goats have been in the Marlborough Sounds since the time of the first contact between Maori and Europeans. Captains Cook and Furneaux released both pigs and goats into Queen Charlotte Sound during Cook's second voyage in 1773.

Clarke and Dzieciolowski¹ in their 1991 "Feral pigs in the northern South Island" describe the introductions like this:

"The first liberation (two sows and one boar, presumably of European origin) at Cannibal Cove was unsuccessful, as the sexes were separated in different Maori villages (on islands and the mainland) and could not breed. Later in



1773, Cook sailed to Tahiti and Tonga, and on his return three months later liberated another three sows and one boar at Endeavour Inlet (Beaglehole, 1961). Elaborate precautions were taken to safeguard the animals from the Maori inhabitants because of the failure of the earlier introduction. The third liberation, of a sow and a boar, was made soon after, near Cannibal Cove."

Pigs for the last two liberations were obtained by Cook during his voyage to Tonga and Tahiti and the pigs were of Pacific Island origin. The goats are thought to have been transported from Europe aboard the ships on Cook's second and third voyages. The pigs and goats were introduced to

provide food for future voyagers and as gifts and an item of trade with Maori. Cook's parties also established gardens of potatoes, carrots, parsnips, cabbages, onions, leeks, parsley, radish, mustard, broad beans, kidney beans, peas, turnips and wheat in Queen Charlotte Sound.

The red deer in the Marlborough Sounds are all primarily related to 3 deer that were released in Nelson in 1861² to establish sport hunting opportunities. Progeny of these deer spread slowly for the first 20 years or so but were first recorded in Pelorus Sound at around 1890.



By 1902 the Pelorus Guardian and Miners Advocate was reporting¹⁰:

SPORTING. - Deer are reported as being plentiful in the vicinity of Canvastown, small herds being frequently seen on the cleared flats. A party from Canterbury attracted by the promise of good sport, has intimated the intention of shortly visiting the district, and arrangements are being made by Mr A W. Dillon, of Canvastown, in the direction of ensuring the visitors a pleasurable and successful result.

In a report to the Forestry Commission in 1913¹¹ William Masefield, a farmer from Manaroa said *"Red deer were fairly numerous in his locality..."*

This is not surprising however when considered with an earlier report in the 1905 Pelorus Guardian and Miners Advocate¹²:

DEER ON MOUNT STOKE. - Mr Masefield, of Manaroa, associated with some other local gentlemen, has recently purchased, at considerable trouble and expense, a pair of red deer. They are fine specimens, and it is his intention shortly to liberate them on Mount Stoke, a country admirably adapted for them, with an abundant growth of suitable feed. It is hoped that they will form the foundation of a herd, the stalking of which will, in years to come, afford sport and amusement not only to the residents, but to tourists visiting the district, and form another source of attraction to our beautiful Sounds. In the meantime, it is scarcely necessary to point out to those living in the neighbourhood

or visiting Mount Stoke, the advisability of endeavouring to protect the beautiful animals about to be liberated.

Liberations such as the one described above were not uncommon. Over the ensuing years, from the first release of pigs and goats in the late 18th century and the arrival of red deer in the early 20th century, the populations of these animals have been boosted by the additional introduction of new animals. Whether accidentally, when livestock escaped from pens and paddocks, or deliberately, to provide readily available food (for sailors, whalers and settlers) or to improve the genetics of the wild strains, goats, pigs and red deer were soon found throughout the Marlborough Sounds. Deer are adept at swimming so there were few safe refuges, even on many of the inshore islands. By the 1930's and 40's deer (and goats) were having a significant impact on the natural values of the Sounds as their numbers peaked.³

Aren't goats and deer just filling an ecological gap left by Moa?

Unfortunately, no. It would be nice to think the introduction of these mammals into the bird dominated world of Aotearoa/New Zealand could be of benefit to the native plants and animals in the Marlborough Sounds, but research suggests otherwise.

While it is true that the current range of red deer and goats overlap considerably with that of moa, and that they are all browsers of the understorey, there are many differences between the physical makeup of moa and that of browsing mammals. Because of these differences the impact on the plants that they browse on are also very dissimilar.⁵

These differences include:

- The number of animals (with more deer or goats/km²) and the size of deer and goat herds.
- The lack of natural predators of deer and goats which allows the population to increase until the food runs out.
- The structure of their digestive systems. Deer and goats have teeth and ruminant stomachs which means the selection of favoured food plants is often different.
- Four legs with sharp hooves, as opposed to two large three toed feet led to the increased compaction and rutting of the soil by deer and goats, relative to moa.
- These can all be summed up by the main difference as being millions of years of co-evolution with the native understorey plants and moa.

What's the harm in having pigs, deer and goats in our forests? For some people deer, pigs and goats are a valuable resource as a source of food, recreation and as a visible 'connection' to the wild. However, when their populations get too large, they can have significant negative impacts on the ecological, economic and cultural values that enable the people and the native plants and animals in the Marlborough Sounds to thrive. Pigs, deer and goats each prefer somewhat different roles and habitats but when all three are found together it can create a much larger impact than any one of them on their own.

<u>Pigs</u> - Pigs are opportunist feeders and scavengers. While they do eat grass and some shrubby vegetation most of the damage we see, is due to the rooting up of the ground in search of roots, worms and invertebrates. They are omnivorous and so are happy to eat anything from the eggs and chicks of ground nesting birds through to new-born lambs.

Ecologically, in the Marlborough Sounds, pigs are known to endanger populations of the threatened giant native Powelliphanta snails ¹⁴. They do this by both eating the snails and by disturbing the soil, so the snail eggs are broken or dry out. Pigs are very likely to be having a similarly devastating effect on populations of native earthworms, reptiles and other soil invertebrates and competition for this food resource may also be affecting the population of weka*.



Pig crushed Powelliphanta snail

Historically the loss of the eggs and chicks and the destruction of burrows are very likely to have seriously reduced the populations of ground nesting birds and seabirds in the Sounds¹³. Fences are currently required to keep pigs out of the gannet colony on Arapawa Island⁶.

In areas where the soil is constantly turned over by pigs, native seedlings struggle to establish but hardier weeds readily germinate. Pigs are known

^{*}Ralph Powlesland pers comm

to spread the seeds of some weeds, such as banana passionfruit, in their faeces.

The impact of pigs rooting on farmland is well known. When pig populations are high, large areas of pasture can be lost. Fodder crops can similarly be destroyed by rooting or direct consumption. Extensive areas of pig rooting on hill country can destabilise slopes, and lead to erosion during significant rainfalls.

Pigs are not averse to helping themselves to the lawns and gardens of residents and bach owners either and can cause a frustrating amount of damage in a very short period of time.

<u>Deer and Goats</u> - The ecological damage caused by deer and/or goats browsing on a wide range of understorey plant species is widely reported. When the populations of deer and/or goats are high most plants within reach will be eaten. This will prevent the regeneration of canopy tree species such as broadleaf and kamahi. These trees will not be replaced as mature examples die or fall over in storms and this leads, eventually, to grassy tree-lands establishing where once there were forests.

In regenerating forests, the composition of the plants can be completely changed as only less favoured species are able to survive to adulthood. Consequently, a less diverse range of forest trees develop that support a more limited range of native birds and animals.

Often the damage isn't as direct. Possum free Arapaoa Island is a stronghold for the threatened Tupia mistletoe. Recently, increasing numbers of goats have ringbarked most of the five finger trees they grow on, killing both the host tree and the mistletoe.*



Arapaoa Island Tupia mistletoe on five finger.

^{*} Phillip Clerke (Senior Ranger Biodiversity DOC) pers comm.

Deer and goats gain a lot of their nourishment from eating fallen leaves and leaf litter leading to a shallower and drier leaf litter that is less hospitable for native reptiles, snails and insects. These animals are also more likely to be discovered and killed by predators.



Forest becoming tree land on Mt Cullen

Finally, the compaction of the soil by their hooves slows the establishment of seedlings and can lead to increased erosion as the soil no longer absorbs and holds as much water. ³



Ring barking of five finger. Miro Bay

Economically, deer and goats compete directly for food with farmed livestock and can significantly damage fodder crops. A damaged understorey, especially when combined with significant pig rooting, can lead to increased erosion on steep country.

Like pigs, as the numbers of deer and goats increase, and food gets short they move into residents' and bach owners' gardens and orchards where they can do significant damage.

Impacts on the climate?

Recently there has been an increased interest in the probable impact that pest animals are having on the climate. Forest and Bird have produced a report outlining the impact of feral browsing animals in New Zealand on the levels of CO_2 in the atmosphere⁶. This CO_2 release is due to the methane they produce as part of the ruminant digestive process (the average deer produces $410 \text{kg/CO}_2\text{e*/year}$, the average goat produces $250 \text{kg/CO}_2\text{e/year}$), the reduction of CO_2 stored in the understorey and the compaction of soils preventing bacterial transformation of methane to less harmful gasses. It suggests that feral browsers in New Zealand could be responsible for an equivalent CO_2 output of up to 60% of that produced by road transport in New Zealand in 2018. Just the methane production alone is significant. Removing 4 deer saves the equivalent of one year of CO_2 emissions from the family car.



A recent report highlighted in the Guardian 9 newspaper outlines research undertaken that suggests that globally the increased CO_2 produced by bacteria through the ploughing of the ground by feral pigs is equivalent to that produced by 1.1 million cars. 8

There seem to be more deer and goats around now.

going on?

There is currently no formal monitoring of deer or goat numbers or the damage they are doing in the Marlborough Sounds. However, trials with Thermal Animal Detection Systems have indicated that in some places the density of deer is very high. Damage to the understorey is now very obvious and is found in many more areas, than it has been in the recent past.

The reason for this is simple. More of these animals are being born than are dying.

Humans are the only predators of deer and goats in Aotearoa/New Zealand and in the majority of the Marlborough Sounds recreational hunting is currently the only means of controlling the population.

^{*}CO2e means CO2 equivalent. 1kg of methane is equivalent to 25kg of CO2.

Previously the Department of Conservation (DOC) played a very active role in wild animal population management. In the 2004/5 financial year goat hunters employed by DOC spent around 3700 hours in 13 separate areas controlling primarily goats but also shooting pigs and deer if they were encountered. Successive budget cuts and re-prioritising of work schedules saw this fall to a low point in 2012/13 when only 350 hours were spent hunting and only on Arapaoa Island and Mt Stokes. Slowly the hours have been increasing again so that in 2020/21 1300 hours were spent hunting in Arapaoa Island, Ship Cove, Mt Stokes and Tennyson Inlet.*



Heavily grazed "forest" near Ruakaka Bay

Anecdotally, recreational hunting pressure has also decreased. As the numerous grass areas found in the Marlborough Sounds until the 1990's have reverted to native forest or have been planted in commercial forests, most Marlborough Sounds hunting has now become 'bush' hunting. It is much harder to hunt in regenerating forest than it is in open pasture or scattered trees. Most hunters prefer rough pasture, scattered trees and open tops and with deer numbers also building up in pastural farming areas such as in South Marlborough many recreational hunters have turned their backs on the Sounds as a desirable place to hunt

^{*} Unpublished DOC goat hunting data.



A relaxed looking billy goat on Arapaoa Island.

Previously, there were many areas of private land in the Sounds where hunting was encouraged. Now it is more common to see 'No Hunting' signs. The reasons for this are varied but is perhaps a reflection on the changing demographics of Marlborough Sounds residents. Where previously there were larger properties and farmland there are now fewer farms. Land values have increased, large blocks of land have been subdivided so there are more and smaller land titles. As property is built on there are more holiday houses and permanent residents and a corresponding increase in the seasonal population. Often goats and deer are seen less as a pest and more of an aesthetic attraction.

Finally, as with the rest of the country, significant numbers of deer were removed via helicopter recovery during the 1970's. This was an era when there were still plenty of grassy clearings and so the deer could be easily located from the air. As has been found in much of the rest of the South Island deer populations have only now started to fully recover.

What about pigs?

Since at least the middle of the 19th century, pigs have been in high numbers in the Marlborough Sounds¹. The large amount of remote underdeveloped farmland with areas of scrub and fern, low human population and low hunting pressure suited them perfectly. In 1988 pig densities in the Marlborough Sounds were described as some of the highest in the country. Anecdotally pig numbers have not increased over the last few years and may even be decreasing. This may be as a result of the change from areas of

pasture and fern to forest and holiday homes. Pig hunting is still a popular pastime in the Marlborough Sounds and the use of GPS tracked dogs means that 'bush' hunting is less of an issue. In many places the current level of hunting pressure is enough to keep the population in check.



Pig Rooting on the forest edge in Kenepuru Sound

So, what can be done to stop the damage?

The unescapable truth is that more deer and goats are going to need to be culled if we are to protect our native forests, the native species they support and our livelihoods and lifestyles in the Marlborough Sounds.

The widespread use of poisons or the introduction of diseases or wolves or even robotic killing drones is unlikely to be an available or acceptable option for quite some time.

So, the best technology currently available still means that a human will need to get close enough to an animal to identify it, and then despatch it. Human hunters on their own, with relatively poor hearing and sense of smell, are not particularly well suited to hunting animals in dense forest and so some form of outside assistance is usually required.

Specially trained dogs are very effective in assisting a hunter in tracking and locating an animal which can then be dispatched. As the training of a dog can take many years, commercial hunters are more likely to make use of these dogs than recreational hunters.

New technologies in the form of thermal imaging and the use of helicopters as a hunting platform is a rapidly developing tool for efficiently culling large

numbers of animals in forests in a short amount of time. As the effectiveness of this style of hunting is reduced in the dense canopy of mature forests it is likely that both traditional hunters with dogs and hunters in helicopters will be needed to achieve sufficient levels of control over large areas.



Above: Nothing to see here Below: Same scene, Goats highlighted by a thermal camera



It is unlikely that the use of recreational hunters alone will ever provide sufficient control. This is because as the animals get harder to find the people that are hunting for fun become less enthusiastic as it takes more time and effort to catch an animal.

When is enough, enough?

It is very important that before any control operation commences that there is a goal in mind of what is to be achieved and how it is to be measured. Examples of goals include:

- Let's just spend all the money we have this will require accurate
 measuring of the bank balance. It is likely to lead to an empty bank
 account with no actual long-term reduction in the damage the animals
 are causing because there is no indication if enough animals have been
 removed to make a difference.
- Killing as many animals as we can this will require measuring the numbers of animals killed. It is unlikely to lead to a reduction in the amount of damage as it is not how many animals are killed that makes a difference, it is how many are left behind. There is always a temptation to shoot the easy animals leaving a pool of hard to hunt animals.
- Reducing the animal population until there are very few left this will
 require measuring how many animals are left behind. If there is a way
 of determining the population remaining after a control operation this
 goal can enable good results. The tricky bit is measuring the animals
 you can't find when you are hunting.
- Reducing the animal population until the negative impacts become negligible. Such as the native vegetation recovers, or the rose garden flourishes or animal droppings are no longer all over your lawn. - this will require measuring the recovery of whatever it was that was inspiring you to undertake the control in the first place and is the most effective way of determining if your control operation is a success.

Without a goal and a way of measuring success it will not be possible to know whether the money and effort spent have been well used. It may mean that a number of different goals and measuring methods are used over several years to get a final successful result.

Once the goals have been set, a control plan can be created. This will ensure that enough resources are secured and techniques available are deployed to achieve the desired goals within an acceptable time frame. Regardless of which goal is chosen if not enough resources are allocated to achieve the desired results, then it is likely that the operation will be a failure.

After the gun smoke clears what can be expected?

As described above the outcome of any control operation will depend on the goal that was chosen, and the amount of effort put into achieving that goal.

If, as is most often the case, the restoration of a natural native forest understorey is the desired goal, and if all goes to plan, then the rapid recovery of an understorey full of a wide range of native plants can be expected within 5 to 15 years. In turn, this healthy and thriving understorey will support a wide range of birds and invertebrates and allow a rich humus and soil, full of bacteria and fungi, which encourages native forest trees to establish and grow to maintain an intact and healthy canopy¹⁴.

However, there are several factors that can slow or even prevent this from occurring.

First and foremost, often not enough browsing mammals are killed to allow a natural range of both favoured and not favoured plants to survive. Usually when there are a lot of animals in a forest a wide range of plants are eaten with all the most favoured delicious plants being taken first then over time less and less favourable plants are added to the menu. Eventually an understorey made up of only the least favoured species remains. Even if most of the browsing mammals are removed the few that do remain continue to seek out the few remaining delicious plants. Unless the browsing animals are kept in low enough numbers so that the delicious plants can grow faster than they are being eaten then those plants will always be rare in the understorey ¹⁶.

In many areas a forest has grown up in the presence of browsing mammals. This will often happen in areas of reverting farmland where the browsing animals were originally farm stock but are now deer and/or goats. In these situations, the canopy and understorey are mostly made up of plants that aren't eaten by browsing animals and there is no longer a ready seed source for the more delicious tree and understorey plants. So even if the browsing animals are reduced to a very small number, it can take decades for the understorey to recover to a natural and varied condition.

Sometimes the cause of a sparse understorey isn't just the presence of deer and/or goats. Removing deer and goats from a forest will not lead to the restoration of the understorey if sheep or cattle still have access. In some areas, particularly very dry sites or in places where the forest canopy is particularly dense there would not naturally have been a dense understorey.



Denise Harvey surveys the recovery of understorey vegetation after 5 years (above) and 15 years (below) following fencing to exclude goats on her property at Port Gore.



What are the locals saying?

"Deer are regularly seen on Moetapu Bay Road. Deer damage along Moetapu Bay Road is significant and increasing. Deer are eating everything in the gardens including ivy and agapanthus" "Live capture with helicopters was taking place in the late 1970's. 19 deer taken off Mt Cawte in one day."

Michael Smith and Helen Lenni, Mahakipawa

"Nine years ago, there were very few goats. In the last couple of years mobs of 5 or 6 are regularly seen. The kanuka forest has hardly any understorey. There aren't many deer in Maraetai"

Phil Wright, Maraetai

"Been here about 40 years. Deer started appearing about 5 years ago. Damage astronomical. Previously couldn't see through the under growth. Now it is all open. Completely ruined the garden everything chewed down to the roots. No goats in Blackwood Bay. There are a few pigs but there used to be more."

John Fisher, Blackwood Bay



"Deer numbers are increasing. You can see where they come down onto the road. There were lots around in the 1960's when there was a lot more grass around. Used to see mobs on the grass clearings on Mt Cawte."

Peter Wells, Moetapu Bay

"We are certainly seeing far more goats along Kenepuru Road ... than we did previously. And I think there is good evidence that there is more deer (and fewer pigs) from the tallies of game bought into the hunting competition here at Manaroa over the years."

Ralph and Mary Powlesland Manaroa

"... deer were being helicoptered out in maybe 1976/77 or perhaps 78/79. The valley was dramatically quiet and has been for years since then. It is really only the last three or so years that I have started to hear the roar and to actually see the deer coming out onto the paddocks."

Barbara Faulls, Linkwater

"Massive increase in deer as there is not much hunting pressure as it is hard work. Pigs used to be a bigger issue but not so many now. Goat numbers are on par with what they have always been where they are being hunted but if there is no hunting pressure then goats numbers will rapidly rise."

Cody Weller, ex DOC Hunter

"Heaps more deer seen in heaps more places. Goats are turning up where they didn't used to be. Not as many pigs though now"

Anonymous recreational hunter

"...when I went for an early morning walk about two months ago, it was really quite magical to see two does and their fawns up on one of the top paddocks (don't tell anyone that I had a Bambi moment!!)"

Anonymous resident.

"Dad (John Harvey) said deer were few and far between when he was growing up in Manaroa – 1920's – 60's. But by the late 1970's when Mike and his family bought this farm, the place had been over-run with deer. A previous landowner at Hopai recalled seeing herds of them – enough to create stock tracks around the hills. Then the helicopter live capture programme started and made a huge impact on numbers. I have been on this farm since 1983, and we hardly ever saw deer then. It was a red-letter day if we did, very exciting!

In the next 20 years as the hills regenerated, the habitat changed with lots of fern and tahinu and the number of pigs rose. During this time many farms completely reverted, or disappeared, especially the hill county. Later as the regen progressed, and got taller, it wasn't so good for the pigs, but the deer numbers started to rise again. It's easy to hunt pigs when the cover is low, and dogs can track them quickly. But it's almost impossible to hunt deer with dogs, or by stalking when the cover is dense.

Our family are all keen hunters, in the peak years getting around 100 pigs/year just stalking the edges of our paddocks. We also had a regular hunter (with dogs) who was taking out at least that every year too.

Our local Sounds Pig Hunting Competition started in 1988. Just for the locals, it was an eagerly anticipated event, with keen competition between the local hunters and farms. It soon expanded to include deer, goats and possums.

Having been involved since the beginning, Mike and I have seen the gradual change from predominantly a pig- event, to recent years where the deer numbers have been the talking point, and pigs harder to find.

Nowadays, with thermal imagery, locals are telling us they are often seeing mobs of up to 20 deer around their farms (Waitaria, Manaroa, Clova bay, and even in the bush on the way into Port Gore!) Our Hunting Competition records show that in the first 20 years there were only 18 deer weighed in. After 2006 these numbers increased dramatically, to the point where we are weighing in at least 10 deer/competition.

This is just a small local event, with around 15 hunters, over a weekend. (Nothing like the big events in town!)"

Kristen and Mike Gerard, Hopai.



Giant broadleaf tree, Waitaria Bay, with no saplings to replace it this species is doomed.

Summary

Pigs and goats have been present in the Marlborough Sounds for more than 200 years and red deer for more than 100 years. Without ongoing hunting pressure populations of these animals can build to very high numbers. Currently, probably due to recreational hunting pressure, pig numbers are remaining relatively static, however the populations of goats

and in particular red deer are both expanding and increasing in numbers rapidly.

While for some people they are a valuable resource and are aesthetically pleasing, at the current population levels they are having a detrimental impact on the natural, economic and cultural values of many areas in the Marlborough Sounds. Recently it has also been shown that the contribution these animals make to climate change is not insignificant. This increase in population size and the damage caused are concerning to many residents and landowners in the Marlborough Sounds.

To reduce the damage these animals are causing, their current high population numbers will need to be reduced over moderately large areas of difficult country. This will require the production a well-designed control plan with achievable goals and the use of the latest technologies by skilled hunters. Effective monitoring of the results is essential to assure stakeholders and the general public that their money spent on the control of these animals was well spent.



Understorey response in an exclosure plot on Arapaoa Island.

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- *All photographs are by Tom Stein except historic photos on page 1 which was taken from www.visitpicton.co.nz and page 2 taken from "Wild Animal Control Huts, Historic Heritage Assessment by Michael Kelly (2007) Department of Conservation". The photograph on page 6 was taken and modified from advertising material for HollyWild Animal Park (https://stayhappening.com/e/drive-through-deer-park-2021-EZISTLCB2WK), the thermal image photographs on page 10 are from a report "Blackwood Bay Aerial Deer Control Trial" prepared by Trap And Trigger Ltd (2021) and the page 13 security camera photo was supplied by John Fisher of Blackwood Bay.

Note from the Author

I have lived and worked in the Marlborough Sounds for more than 25 years. First for the Department of Conservation managing possum control programmes and then for the last 13 years as the QEII National Trust Regional Representative, liaising with landowners to ensure that the ecological values of their privately owned and managed land are protected. (See www.geiinationaltrust.org.nz for more information) This has enabled me to visit many of the more out of the way places in the Sounds on both private and public land. I have seen first-hand the changes that have taken place in the forests, shrublands, grasslands and wetlands throughout the Sounds. Based on what I have seen over the last few years I have become very concerned about the increasing impacts that browsing ungulates are having in the Marlborough Sounds.

Ungulate Control Update August 14, 2022



Keeping our Objective Squarely in Mind

The Ungulate Control operation is just that - substantially reducing the number of ungulates to achieve an Ungulate Reset - a level at which the impact on flora is minimal. We know that ungulate numbers will gradually come back such that in say three years another Reset may be needed.

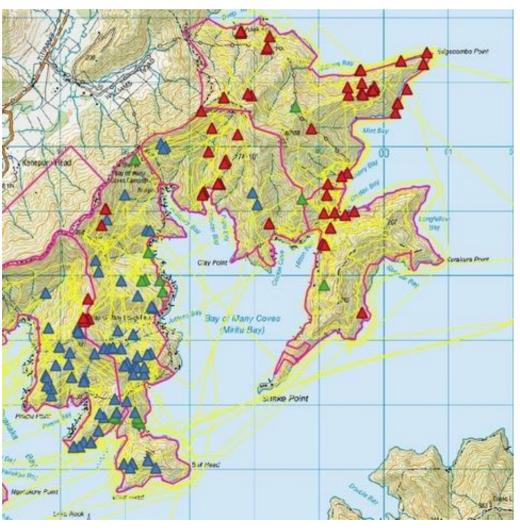


Phase 1 Operations Outcome

Ungulate Control Phase one was completed on June 1 resulting in:

	BOMC & Endeavour Sth	Total (Lochmara to Endeavour Sth)
Deer	50	269
Goats	75	104
Pigs	12	30
Total	137	403
_		

On the conclusion of this phase Andrew Macalister stated that there were still some ungulates, including goats around Dryden Bay. These would be targeted in a phase two follow up in Spring. This all to be done within our BOMC \$40k budget.



Interim Map of Unquiates Dispatched

Key Goats Deer Pigs

Note:

a) At some locations the symbol represents multiple animals.

Subsequent Ungulate Sightings

Since June 1 a number of ungulate sightings have been reported: two pigs on Snake Point; goats around Dryden Bay; pig rooting in Aratawa Bay; three deer and two pigs adjacent to and south of the Resort in Arthurs Bay; and deer in Ruakaka Bay.

If you see ungulates or clear evidence of the same over the next three to four weeks please email or text Judi. Let her know animal type, number and location. If you have photos send them as well.



Planned Phase 2 Operation



Andrew Macalister has advised that the second phase, Spring offensive will commence on Sept 12. This will involve a ground hunting team and the thermal imaging helicopter unit. The Ungulate sightings on our spread sheet will be used by the operations team to focus priority of both ground and air operations within the BOMC / Endeavour South Areas.

Funding and Cost update

To date your committee has paid \$34,000 to the Sounds Restoration Trust who are coordinating the whole operation. In addition, we expect to contribute up to a further \$6,000 toward the costs of phase two. Given that our final fundraising outcome was an amazing \$51,000, we will still have about \$11,000 in the Association's Ungulate Control Bank account at the end of phase two. Your committee proposes that these funds should be applied exclusively to future Ungulate Control Operations. Your views on this will be canvassed at our AGM on Tuesday January 3, 2023.



Your Feedback

Your Committee welcomes any questions, concerns, suggestions and particularly ungulate sighting information. Now is our real opportunity to influence the focus of the Ungulate Control Operation Team on the remaining ungulates that are still eating out our flora. Getting numbers down to around 10 – 15% of what they were on May 1 will substantially improve regeneration of the forest understory.

Final Operation Report

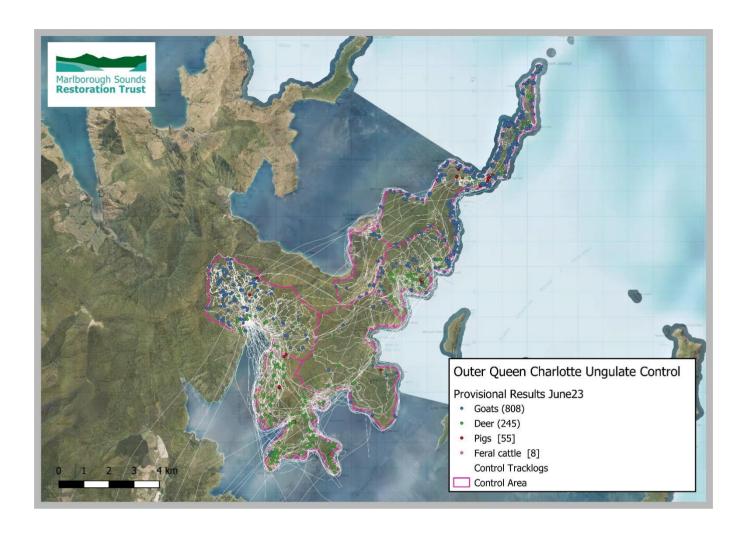


At the conclusion of the whole operation there will be a comprehensive report detailing the outcomes along with a larger scale map showing more detail of where ungulates were dispatched. This will be done post phase 2.

As soon as we have it we will circulate it to everyone on our contact list.

Rick Wells Chairperson BOMC Ratepayers & Residents Assn Inc.

Mobile 021 662.188





A PREDATOR FREE MARLBOROUGH SOUNDS?

For the past 150 years, the natural environment of the Marlborough Sounds has been gradually deteriorating. We have lost iconic species such as kiwi, kaka and robins from our forests, and the decline is continuing.

Introduced pests - primarily ship rats, possums and stoats - are the main culprits.

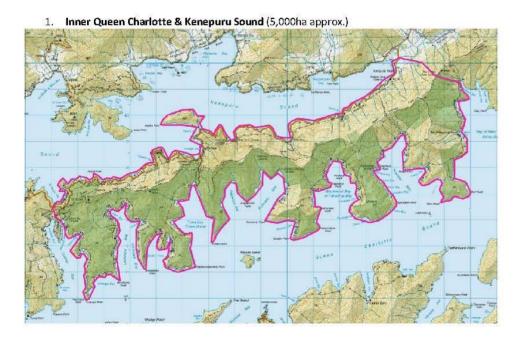
Is it possible to remove one or more of these pests from the Marlborough Sounds?

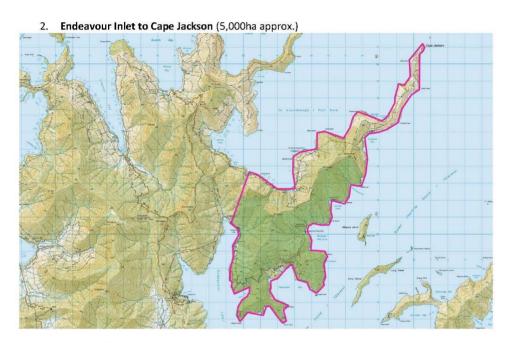
The Marlborough Sounds Restoration Trust is undertaking a feasibility study to see if it is possible to achieve predator freedom in some parts of the Sounds.

It will only be achievable, first and foremost, if the iwi, Crown agencies and the community fully support it. In particular, we would need to be able to undertake pest control on nearly all private land in any project area.

If we can demonstrate full support and 'predator free' proves to be technically feasible, the Trust will seek out the funding needed to make this possibility a reality.

There are two areas under consideration:





On both maps, public conservation land is shaded green.

Why get rid of predators?

Places like Zealandia Eco-Sanctuary in Wellington, Pukaha Mount Bruce in the Wairarapa and Motuara Island in the Sounds are proof that removing possums, rats and stoats can transform native habitats. With your help, we can see the same transformation right here:

- √ Abundant, diverse wildlife and a 'dawn chorus' like that Captain Cook encountered at Ship Cove 250 years ago
- Greater potential for connection, purpose and sense of identity by working together as a community
- ✓ Increased opportunity for iwi to exercise kaitiakitanga (guardianship)
- ✓ New employment opportunities as a result of increased visitors, tourism and pest control
- Reduced damage to bach properties, through rats getting inside houses and possum damage to gardens
- ✓ Enhanced attractiveness of our Sounds properties
- ✓ More enjoyable hunting, walking and tramping experiences in the bush
- ✓ Enhanced mental health and well-being resulting from the restorative effects of nature.

Who is involved?

The Trust was established in 2003 to "promote and protect the natural, cultural and historical values of the Marlborough Sounds for future generations, including, but not limited to, landscape, productivity and biodiversity values".

The Trust has a proven track record of success in the Sounds, particularly in controlling wilding pines and feral deer and goats with the support of local communities.

The Trust is working with Predator Free 2050 Limited (PF2050) on this project. PF2050 is a Crownowned charitable company established to help deliver the Government's ambitious goal of eradicating possums, stoats and rats from New Zealand by 2050.

PF2050 is currently funding 17 large, landscape-scale projects that are expected to achieve eradication of one or more pest species in various parts of the country, and is now supporting us to see if it is possible to establish an 18th project, in the Marlborough Sounds.

When

The feasibility study will run from January to July 2023.

How will the consultation work?

The Trust will consult Crown agencies and iwi and undertake liaison with all landowners with holdings of 5ha or greater in the two study areas. The purpose is to gauge the level of support for pest eradication in the two areas.

The Trust will only proceed to the next stage if there are sufficient landowners in support of eradicating one or more of these key predators - possums, rats and/or stoats.

At this stage, there is no funded project and there is no commitment to agree to predator control. This is an investigation only. However, if we can demonstrate full community support for one or other of the sites, the Trust will seek out the substantial funding required to make this project a reality.

For more information

For more information, please contact Sally Thomas at sally@soundsrestoration.org.nz or at 022 375 0334.

www.soundsrestoration.org.nz www.pf2050.co.nz

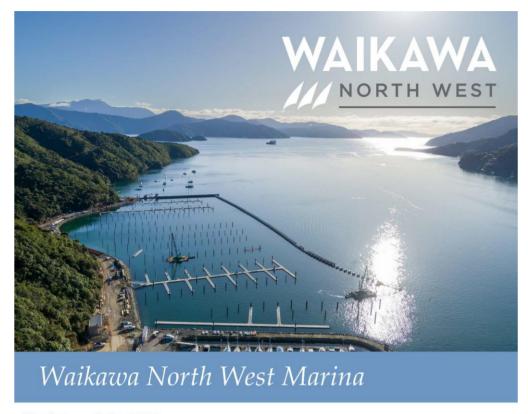
Appendix B – London Quay Project Update

Sketch Plan For Discussion





Appendix C – Waikawa North West Marina Progress Plan Update



Update - July 2023

Reclamation: Asphalt and line marking has been completed, and has enabled the road to be opened to 18W. (the second to last jetty)

Breakwater: The balustrade works have continued with offsite fabrication in Picton with a local contractor, and these will furnish the public walkway to the end of the breakwater.

Buildings: The final amenities block is nearing completion of construction and fit-out.

Northern end of Marina: The final amenities block, public access to the water, the breakwater walkway, and Te Ātiawa cultural recognition points will be completed over the coming months. A community celebration is planned for Friday 22nd September. More details soon.

Our marinas team are in the process of allocating berths on the final three jetties, and there has been good uptake from our waiting list.

There are still some berths available, particularly for 14m and multi-hull (Catamaran) vessels.

Call - 03 5203312 - or email service@msmarinas.co.nz for more details.

Appendix D - iReX Update

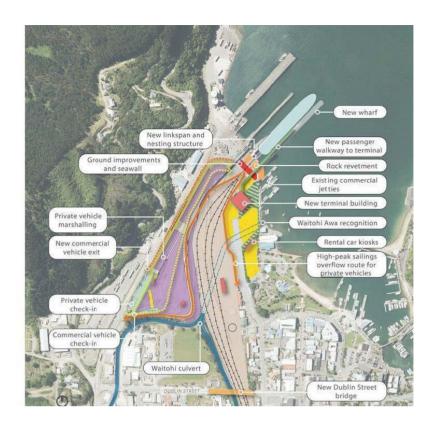


New Ferries - Arrive in 2025 and 2026



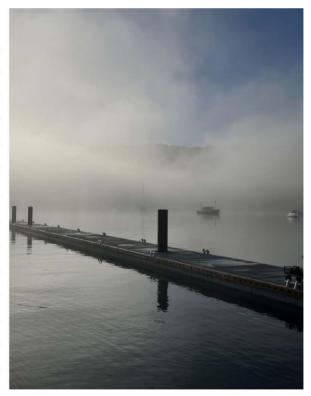
Development

- Wharf replaces existing #1 wharf
- Linkspan rail and road
- Passenger gangway and walkway
- Sea walls
- Terminal building
- · New ferry terminal jetties
- · Car park and landscaping
- Marshalling yard reconfigured rail and road
- Waitohi culvert upgrade
- Dublin Street over-bridge



Construction in 2023

Description of Works	Start Date	Finish Date
Temporary Terminal Building Contractor: CMT Group	November 2022	Complete
Existing Terminal Building De-construction Contractor: CMT Group	August 2023	September 2023
Rail Turntable Relocation Contractor: CMT Group	August 2022	Complete
Passenger Vehicle Marshalling Yard Contractor: Simcox (Isaac Group)	November 2022	Complete
Waitohi Culvert Upgrade Stage 3 Contractor: Simcox (Isaac Group)	May 2023	July 2023
Dublin Street Services Relocation Contractor: Simcox (Isaac Group)	October 2022	Sept 2023
Auckland Street Property Works Contractor: CMT Group	June 2023	August 2023
Dublin Street Overbridge Contractor: Downer / Heb JV	September 2023	Early 2025
Commercial Jetty B Works Contractor: Bellingham Marine	March 2023	Complete
Mechanical Depot Contractor: CMT Group	July 2023	Early 2024
Main Marine Works Construction mobilisation Contractor: Downer / Heb JV	Mid-2023	
Temporary Sub Station Marlborough Lines/CMT	March 2023	July 2023





Temporary Terminal Construction - Complete



Waitohi Culvert Upgrade



Dublin Street Overbridge

From 1st of August, Dublin Street will close for approximately 20 months while enabling works are completed and the build of the Dublin Street overbridge is underway.

The overbridge will create a key connection, allowing vehicles, walkers and *cyclists to travel safely and easily between the town centre towards the port area, Queen Charlotte Drive and west side of the town.

It has been designed carefully to feature a dedicated lane for walking and

cycling, with urban design and greenery reflecting the cultural story and landscape of Waitohi Picton.

- 1 July to 30 July Dublin Street goes to one lane, with single direction traffic running from east to west between Auckland and Kent Streets. See detour map on left.
 - August for approximately 20 months Dublin Street will be closed to through traffic and pedestrians.
 - For safety reasons from 01 August Broadway will be closed to through traffic between Market and Auckland Streets.

 Transit will remain open for cyclists and pedestrians.

Waka Kotahi Update

Waka Kotahi - Roading and intersection improvements

Waka Kotahi are now completing further investigations to determine the most appropriate options for improvements and changes to intersections at Lagoon and Dublin; Kent and Wairau; and Auckland and Dublin. We

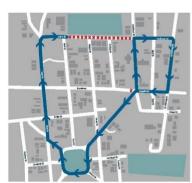
They are also looking at improvements and changes to Kent Street to assist traffic flow to and from the port area, for ferry passenger and commercial vehicles, and for port and project vehicles.

The changes and improvements will be completed before the new ferries arrive in 2025 with a focus on:

- Intersection Lagoon and Dublin
- Intersection Kent and Wairau
- · Auckland and Dublin intersection
- · Kent Street Maintenance and Upgrades

Downer Heb are planning a community BBQ ahead of the full closure, with Waka Kotahi in attendance. Details TBC.







Appendix E - Navigational Bylaw Update



Navigation Bylaw Review

Background

- The Navigation Bylaw is one of the methods used to regulate shipping and activities on the water.
- The bylaw contains rules relating to maritime and navigation safety.

Process

- Navigation bylaws are used around the Country as an effective means of addressing issues with boats and ships.
- Given that the current bylaw was completed in 2010, and the last review was conducted in 2017.
- It is time for the bylaw to be revisited.





Maritime Transport Act

 Section 33M of the Maritime Transport Act enables Regional Councils to make navigation bylaws to assist with "ensuring maritime safety in its region".



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Section 33M

- a. regulate and control the use or management of ships:
- b. regulate the placing and maintenance of moorings and maritime facilities:
- c. prevent nuisances arising from the use of ships and seaplanes:
- d. prevent nuisances arising from the actions of persons and things on or in the water.
- e. reserve the use of any waters for specified persons, ships, or seaplanes:
- f. in relation to boat races, swimming races, or similar events,
 - i. prohibit or regulate the use of ships:
 - regulate, or authorise the organisers of an event to regulate, the admission of persons to specified areas:
- g. regulate and control the use of anchorages:
- h. prescribe ship traffic separation and management schemes:
- specify requirements for the carriage and use of personal flotation devices and buoyancy aids on pleasure craft:
- require the marking and identification of personal water craft.





Changes Proposed

- Correcting information for Picton Harbour Radio.
- Incorporating water ski access lanes not currently recognised in the bylaw schedule.
- · Updating fees and charges.
- Minor editing changes for consistency and readability.



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Further work

- It is likely that during the consultation process that further issues will arise.
- Owing to the length of time since the bylaw was last looked at, it is recommended to roll over the current bylaw in its current form with the minor amendments.





Further work - Amendments

- Addressing the management of commercial shipping within the Marlborough Sounds.
- · Carriage and wearing of lifejackets.
- · Carriage of means of communications.
- · Registration of personal watercraft.
- Carriage of AIS (Automatic Identification Systems).



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