



HOROWHENUA LAKE DOMAIN BOARD

NOTICE OF MEETING

A meeting of the Horowhenua Lake Domain Board will be held in the
Horowhenua District Council Chambers
126-148 Oxford Street, Levin
on Monday, 7 May 2018, commencing at 10.00 am

AGENDA

Public Forum

1. **Welcome and Karakia**
2. **Apologies**
3. **Confirmation of Minutes** – 12 February 2018
4. **Matters Arising**
5. **Chairperson's Report**
6. **Monitoring Report** (copy attached)
7. **Approvals Granted and/or Requested**

Devbhoomi Association of New Zealand (DANZ) – permission to celebrate a cultural festival – Festival of Colours (Holi) - 4 March 2018

Geese Cull – Authority to Carry and Discharge Fire Arms at the Horowhenua Lake Domain and use of motorised boat- 7 April 2018 (this cull did not proceed due to health & safety concerns raised)

Pest Fish Monitoring – use of motorised boat as part of resource consent conditions for the construction and operation of the fish pass on the Lake Horowhenua outlet and also to cover some of the milestones within Te Mana O Te Wai projects – change of dates from three nights during April to May – dates to be confirmed.

8. Finance

Mr Paulin will give a finance update.

9. General

(a) Pest Management – Hazard Management/Health & Safety Plan
Copy **attached** for the Board's consideration and endorsement.

(b) HDC LTP Submission
The Chair spoke to the Domain Board's submission to the HDC Long Term Plan on Wednesday 2 May 2018. A copy of the Board's submission is **attached**.

- (c) Application for Enforcement Order – Queen Street Drain)
 Application for Injunction – Board Ramp) copies **attached**

10. **Next Meeting:** 6 August 2018

*Note: Public Forum
 Five (5) minutes allocated to each speaker*

HOROWHENUA LAKE DOMAIN BOARD - MONITORING REPORT
following the 12 February 2018 meeting

Item	Item Description	Meeting Date	Resolution/Action	Responsible person	Status	Comment
35	Resignation of Board Member and Appointment of a Replacement	5 November 2015 1 February 2016 2 May 2016 1 August 2016 13 February 2017 15 May 2017 2 October 2017 12 February 2018		Chair	On-going	This has been an on-going issue since 2015 and much discussed. The Board Chair will report on a meeting with the Minister of Conservation, Eugenie Sage, on 1 May 2018 in the Chairperson's Report.
42.	Lake Trust Update	2 May 2016	Update from the Lake Trust to be regular Agenda item		On-going	
44.	Taueki Proceedings	1 August 2016 13 February 2017 15 May 2017 2 October 2017	Judgment of Judge Moss in relation to the Taueki Trespass proceedings appeal	Chair		The High Court had remitted the trespass action back to the District Court. That judgment also appealed. District Court date awaited. Heard in the District Court 18/19 January 2018. Judge's decision reserved
47.	Draft Pest Management Plan	1 August 2016 2 October 2017 12 February 2018				\$5,000 received from DOC towards a Pest Management Plan. A geese cull was to be undertaken in early April but was cancelled due to health and safety issues. A Hazard Management/Health

Item	Item Description	Meeting Date	Resolution/Action	Responsible person	Status	Comment
			<p><i>THAT the Horowhenua Lake Domain Board approves the outline plan for the Geese and Chicken/Rooster cull at Muaūpoko Park</i></p> <p><i>AND</i></p> <p><i>THAT the Horowhenua Lake Domain Board considers the development of a Reserve Management Plan in satisfaction of 41(1) of the Reserves Act with a view to establishing an overall strategic direction for the Reserve</i></p> <p><i>AND FURTHER</i></p> <p><i>THAT the Horowhenua Lake Domain Board identifies a budget for the ongoing management of Canada Geese."</i></p>			<p>& Safety Plan will be brought to the May 2018 Board meeting.</p> <p>The Board is seeking funding for a Reserve Management Plan through the HDC LTP process.</p>

MUAŪPOKO PARK
BRANTA AND ANSER
GEESE CONTROL

DRAFT

1.0. EXECUTIVE SUMMARY

The Lake Domain Board as administrator of Muaūpoko Park has requested officers to develop a programme to control population levels of Geese of the Genus *Branta* and *Anser*.

2.0. BACKGROUND

2.1. DESCRIPTION/LOCATION

Lake Domain/Muaūpoko Park is situated at the end of Queen Street West. The Domain constitutes a small proportion of the surrounding lands and is administered by the Lake Domain Board which has the power and authority to administer the Reserves Act 1977 at the location.

The site has a number of buildings; open spaces; plantings; and park furniture (benches, bins etc) on site. It also has a public toilet and two play areas. The site is well-used by members of the public.

Fig 1: Lake Domain/Muaūpoko Park



2.2. TITLE

The land parcel that makes up Lake Domain/Muaūpoko Park is Section 37, SD Waiopēhu. The certificate of title is WN E4 603 and ownership of the site is registered as Lake Domain Board/DOC.

Whilst the Lake Domain/Muaūpoko Park is primarily constituted of this title, public access is maintained to the shore of the lake through Section 18 of the Reserves and Other Lands Disposal Act 1956.

3.0. LEGISLATION RELEVANT TO LAKE HOROWHENUA

3.1. Reserves and Other Lands Disposal Act 1956

3.1.1. Background

Section 18 sub-section 4 of the Reserves and Other Lands Disposal Act 1956, in relation to the Lake Domain/Muaūpoko Park, states.

Notwithstanding the declaration of any land as being in Maori ownership under this section, there is hereby reserved to the public at all times and from time to time the free right of access over and the use and enjoyment of the land

Sub-section 5 further states.

Notwithstanding anything to the contrary in any Act or rule of law, the surface waters of the lake together with the land firstly and fourthly described in subsection (13), are hereby declared to be a public domain subject to the provisions of Part 3 of the Reserves and Domains Act 195.

- provided that such declaration shall not affect the Maori title to the bed of the lake or the land fourthly described in subsection (13):
- provided further that the Maori owners shall at all times and from time to time have the free and unrestricted use of the lake and the land fourthly described in subsection (13) and of their fishing rights over the lake and the Hokio Stream, but so as not to interfere with the reasonable rights of the public, as may be determined by the Domain Board constituted under this section, to use as a public domain the lake and the said land fourthly described.

Sub-section 7 & 8 of the Act states.

Subject to the provisions of this section, the Minister of Conservation shall appoint in accordance with the Reserves and Domains Act 1953 a Domain Board to control the said domain.

Notwithstanding anything to the contrary in the Reserves and Domains Act 1953, the Board shall consist of—

- 4 persons appointed by the Minister on the recommendation of the Muaūpoko Maori Tribe:
- 1 person appointed by the Minister on the recommendation of the Horowhenua County Council:
- 2 persons appointed by the Minister on the recommendation of the Levin Borough Council:

- the Director-General of Conservation, ex-officio, who shall be Chairman.

3.1.2. Summary

The Lake Domain Board is the constituted administrator of Muaūpoko Park and as a result is responsible for the overall management and overview of the domain, and any work undertaken within its confines.

3.2. RESERVES ACT

3.2.1. Background

Section 41(1) of the Reserves Act states.

The administering body shall, within 5 years after the date of its appointment or within 5 years after the commencement of this Act, whichever is the later, prepare and submit to the Minister for his or her approval a management plan for the reserve under its control, management, or administration.

It is unclear whether the Lake Domain Board as administrator has produced a Reserve Management Plan for Muaūpoko Park. If a Reserve Management Plan has not yet been prepared for the site it is suggested this work is completed urgently as it will assist in the management, maintenance, and ongoing development of the site.

The Reserves Act under Section 50(1) allows for the administrators of the Reserve to

authorise any person to take and kill any specified kind of fauna that may be found therein, and may for that purpose, notwithstanding anything to the contrary in this Act, authorise the use of firearms, traps, nets, or other like objects within the reserve.

Such authorisation under 50(2) to be in writing, and under 50(3)

Subsections (1) and (2) shall apply only where the taking and killing of fauna would not be in contravention of Part 5B of the Conservation Act 1987, or of the Wildlife Act 1953, or of any regulations or Proclamation or notification under those Acts

It is an offence under Section 94 of the Act to take or kill any fauna without express written permission from the Board to do so. Consequently, any cull will require to be authorised by the Lake Domain Board Chair. The permission granted for the 2016 cull is attached as Appendix 1.

3.2.2. Summary

The Lake Domain Board is the formal administering body for the Domain under the terms of the Reserves Act and as such is responsible for the production of a Reserve Management Plan in line with the legislation.

The Lake Domain Board will need to issue the relevant permissions under the Act to undertake the proposed cull, and any further culls.

3.3. WILDLIFE ACT

3.3.1. Background

Part 1 Section 3 of the Act provides for the protection of wildlife

Subject to the provisions of this Act, all wildlife is hereby declared to be subject to this Act and (except in the case of wildlife for the time being specified in Schedule 1, Schedule 2, Schedule 3, Schedule 4, or Schedule 5) to be absolutely protected throughout New Zealand and New Zealand fisheries waters.

Schedule 1 of the Wildlife Act 1953 identifies New Zealand Game birds in seven categories those being Black Swan; Chukar; Duck; Partridge; Pheasant; Pukeko; and Quail.

In respect to the Lake Domain game birds present are Black Swan and Duck. Duck species present include Mallard and Paradise Shell Duck. Section 19.1 of the Wildlife Act requires that:

every person who hunts or kills game of any species during an open season in any area, unless that person is the holder of a licence under this Act to hunt or kill game of that species available in that area during that season, commits an offence against this Act and is liable on conviction to the penalty set out in section 67E(3).

Up until 31 May 2011 Canada Geese were classified as Game Birds. However, in June 2011 the Canada goose was moved from schedule 1 of the Wildlife Act 1953 to schedule 5. This means this species is no longer recognised as a game bird and can be culled at any time of year. Horizons Regional Council does not classify Canada Geese as a pest and as a consequence management of the population largely resides with the landowner.

The New Zealand stock is mainly the *Branta canadensis maxima* species. While largely herbivorous, eating a wide range of grasses and grains, the Canada goose also consumes small fish and insects. The geese feed from bottom sediments and also directly on aquatic plants. However, probably the greater issue at the Lake Domain is defecation from large numbers which has two effects those being (a) spoiling of general grass areas for recreation and leisure, and (b) their droppings introduce bacteria and nutrients into the lake.

The *Anser* genus of geese also known as Pilgrim Geese are also present at the Lake Domain and are included on schedule 5 of the Wildlife Act 1953.

3.3.2. Summary

There are a number of waterfowl at the lake a number of which are game birds according to the Act.

Current direction from the Lake Domain Board arising from its meeting of 02/10/2017 is to undertake a cull of geese of the genus *Branta* and *Anser*, neither of these species is classified as a Game Bird.

3.4. H&S AT WORK ACT

3.4.1. Background

The H&S at Work Act 2015 replaced the H&S in Employment Act. A significant change under the new legislation is that Persons Conducting Business or Undertakings (PCBU's) cannot contract out their responsibilities (Part 1, Sub-part 4, Section 28(a)). Neither can they transfer their duties to a third party (Part 2, Sub-part 1, Section 31).

It is considered for the purpose of any works on Muaūpoko Park that the Lake Domain Board is a PCBU under the terms of the Act. As such it has a primary duty of care under Part 2, Sub-part 2, Section 36 of the Act to:

- ensure, so far as is reasonably practicable, the health and safety of:
 - workers who work for the PCBU, while the workers are at work in the business or undertaking; and
 - workers whose activities in carrying out work are influenced or directed by the PCBU, while the workers are carrying out the work.
- ensure, so far as is reasonably practicable, that the health and safety of other persons is not put at risk from work carried out as part of the conduct of the business or undertaking.

And in exercising its primary duty of care officers of the PCBU must exercise due diligence (Part 2, Sub-part 3, Section 44) in ensuring:

- They acquire, and keep up to date, knowledge of work health and safety matters;
- gain an understanding of the nature of the operations of the business or undertaking of the PCBU and generally of the hazards and risks associated with those operations;
- ensure that the PCBU has available for use, and uses, appropriate resources and processes to eliminate or minimise risks to health and safety from work carried out as part of the conduct of the business or undertaking;
- ensure that the PCBU has appropriate processes for receiving and considering information regarding incidents, hazards, and risks and for responding in a timely way to that information;
- ensure that the PCBU has, and implements, processes for complying with any duty or obligation of the PCBU under this Act;
- to verify the provision and use of the resources and processes.

3.4.2. Summary

The Lake Domain Board is a PCBU under the terms of the H&S at Work Act and as such has a duty to ensure as far as is reasonably practical the health and safety of workers and others who may be working on, or visiting the site.

The Lake Domain Board has a duty to ensure it exercises due diligence in terms of the proposed cull at Muaupoko Park. To meet this duty, officers of the Board will need to familiarise themselves, and sign off any plan for a geese cull. An outline plan is attached as Appendix 2 with a detailed operational plan including maps attached as Appendix 8.

3.5. LAKE DOMAIN BYLAWS

3.5.1. Background

The Horowhenua Lake Domain Board undertook a review of the Bylaw pertaining to the Muaupoko Park Reserve (Horowhenua Lake Domain) in 2015. This involved public consultation, with 10 submissions received. The Board subsequently, at a meeting held on 3 August 2015, resolved:

THAT the Horowhenua Lake Domain Board confirms the Horowhenua Lake Domain Bylaw 2015, as amended, for submission to the Minister of Conservation for Horowhenua Lake Domain Bylaw, as amended, for submission to the Minister of Conservation for approval."

It is understood the bylaw was signed by the Minister of Conservation and Lake Domain Board in November 2015.

The Bylaw states.

No firearm is to be brought into the Reserve area unless under special permit of the Board for which prior written approval has been granted" (Bylaw 9). However, provision is made for culling. "As a means of controlling birdlife within the reserve the Board may authorise controlled culling to be carried out from time to time to reduce the number of domestic species currently present in the Reserve" (Bylaw 17.3).

In addition Bylaw 17.2 precludes the shooting of birds without the express written permission of the Board.

Bylaw 23.3 states

No motorised craft shall be permitted on the Lake Waters unless authorised by the Board. Except for rescue purposes no consent shall be given by the Board in respect of a boat driven by a motor engine which the Board determines can reasonably described as a speed boat unless the Board has first obtained on each occasion the prior written approval of the Horowhenua Lake Trustee

3.5.2. Current Position

It was confirmed at the Lake Domain Board meeting of 2 October 2017 that the Board was in favour of a Geese cull at the Lake Domain.

3.5.3. Summary

The Bylaw allows for a managed cull on the Lake Domain if permitted by the Lake Domain Board. The Lake Domain Board would therefore need to grant permission for any proposed cull. It is anticipated permission will be given by the Lake Domain Board Meeting to undertake a geese cull.

There are a number of written permissions required from the Board before a cull can be enacted.

3.6. CONCLUSION

There is a significant amount of legislation/regulation that appertains to management of waterfowl in the Muaūpoko Park. This primarily relates to the Reserves Act and the Lake Domain Bylaws arising therefrom.

The Lake Domain Board is the constituted administrator of Muaūpoko Park and as a result is responsible for the overall management and overview of the Domain, and any work undertaken within its confines. This would extend to having oversight of, and providing the necessary documentation to facilitate a cull of geese in line with 50(1) & (2) of the Reserves Act, and the Lake Domain Bylaw.

The Lake Domain Board is a PCBU under the terms of the H&S at Work Act and as such has a duty to ensure as far as is reasonably practical the health and safety of workers and others who may be working on, or visiting the site. The H&S at Work Act requires officers of a PCBU to exercise due diligence in terms of the proposed cull at Muaupoko Park. To meet this duty, officers of the Board will need to sign off any cull plan. An outline plan is attached as Appendix 2 with a detailed operational plan including maps attached as Appendix 8.

Current direction from the Lake Domain Board arising from its meeting of 02/10/2017 is to undertake a cull of *Branta* and *Anser* Geese and arrange for the complete eradication of chickens/roosters. Neither of these species is classified as a Game Bird. Canada Geese were moved from Schedule 1 (Game Bird) of the Wildlife Act in 2011 and moved to Schedule 5. This essentially means as with chickens/roosters they can be culled at any time of the year.

In addition to *Branta* and *Anser* Geese there are a range of Game Birds at Muaupoko Park. The Lake Domain Board does not wish to undertake management of the existing populations at this juncture.

4.0. CURRENT POSITION

4.1. Geese Control Methods

4.1.1. General

Whilst water fowl are some of the reasons people visit the lake it has been identified that geese can, and are being injurious to the amenity value of the site and are similarly causing a degree of environmental degradation in the area. There is as a result the need to control the population.

Current research suggests that small scale hunts with bags in single digits, and pot-shots using high powered rifles, as has been the historic control method (until 2016), together with scaring through the use of firearms have no discernible impact on large populations. In addition such approaches can create wary, more-difficult populations, and undermine coordinated hunting attempts. Therefore, these approaches are generally discouraged (Waikato Regional Council).

4.1.2. Control Methods

Preferred population control methods are –

- a) Environmental Modifications - Environmental modification with fencing, rocky shorelines hindering access, and long grass or shrubby vegetation make the environment unwelcome for the Canada goose. These methods cause the geese to seek less disturbed locations elsewhere. Scaring devices such as LPG cannons, water sprinklers etc work only for a short time. The birds can become habituated.
- b) Egg Manipulation - Crushing eggs is not recommended and will cause the geese to find a more secure or isolated location to re-lay, which may be harder to find. Oiling, pricking or addling (shaking) leaves infertile eggs that the geese will attempt to incubate unsuccessfully. The average nest contains five eggs. To impact the population, over half of the eggs laid each year will need to be interfered with, on an ongoing basis. The population may not decrease right away, but natural mortality will reduce it over time. This technique is often employed to supplement other control techniques. However nesting sites have not been reported at the Lake Domain so it is unlikely this particular method will have any relevance in relation to the Domain.

- c) **Moult Culls** - Usually in January or February, the Canada goose loses its primary and secondary wing feathers and become flightless for up to three weeks. During this time they congregate on safe water bodies as a resting place. Culling involves herding them off the water along hessian or shade cloth fencing, and funnelling them into pens to be humanely euthanised. However as with egg manipulation above it is not immediately apparent that the Lake Domain is a moulting site. Consequently it is likely this approach will have limited impact on the established population.
- d) **Co-ordinated Hunting** - Disciplined, coordinated hunting will reduce geese populations. Coordinated landscape hunting involves the use of shotguns in hides or reclining blinds at feed sites. Good reconnaissance is needed to identify and target all feed sites. The hides or blinds should be set up downwind of the feed site. Decoys can also be used. Depending on Canada goose numbers, two to five hunters are normally needed at each feed site, and remain there all day. Best results are obtained by the use of experienced hunters that return annually.

4.1.3. Summary

In respect of the control mechanisms identified above (b) & (c) are unlikely to have a significant effect as there is no evidence to suggest that Muaūpoko Park is either a nesting or moulting site. Such interventions would require a prolonged effort in establishing the location of the nesting and moulting sites with a view to introducing an annual programme to control populations

The Lake Domain Board is the formal administering body for the Domain under the terms of the Reserves Act and as such is responsible for the production of a Reserve Management Plan in line with the legislation. As such the lake Domain Board can have an influence in terms of (a) & (d). Development of a Reserve Management Plan (RMP) for Muaūpoko Park could provide a management framework for the purpose of developing a sustained environmental modification programme, and put in place a 'trigger' population whereby when the specified population is exceeded permissions are provided, and a cull undertaken.

In absence of an RMP the only effective control method is an ad-hoc but co-ordinated cull. Such a cull was undertaken in March 2016 which led to the cull of 140 white geese and 232 Canada geese (from Himatangi to Lindau Lakes Paraparaumu). Insofar as the Domain goes the cull involved the use of shotguns and .22 silenced rifles. It also utilised a 12' wooden dingy with an 18hp outboard motor for which permission was granted under bylaw 23.3.

The Domain was closed on 5-6 March between 6.45-9.00 am. The closure was notified in the local paper.

In addition to the shooters in the Domain, 35-40 experienced and licensed shooters with goose shooting experience were domiciled on surrounding private land from Himatangi to the Lindau Lakes. The shooters occupied layout blinds with decoy spreads to entice the geese to land. The permission for a boat was required so that geese that took off from the Domain were scared onto the surrounding private land and culled by the hunters stationed there.

According to the technical commentary a co-ordinated approach such as is outlined above achieves the best results insofar as Canada geese go. It is anticipated that a similar approach but localised to the Domain and surrounding land would yield the best results in the short term. An outline plan is provided as Appendix 2.

5.0. ITEMS FOR FURTHER CONSIDERATION

An Outline Plan for the cull is attached as Appendix 2

A Risk Register has been developed in relation to the proposed cull, Appendix 4 followed by a Risk Management Assessment, Appendix 7.

An Operational Plan, Appendix 8 has been attached, this takes into consideration recommended actions from the Risk Management Assessment.

6.0. RECOMMENDATIONS

That the Lake Domain Board approves the Outline Plan and Operational Plan for a geese cull at Muaūpoko Park

That the Lake Domain Board considers the development of a Reserve Management Plan (if not already developed) in satisfaction of 41(1) of the Reserves Act with a view to establishing an overall strategic direction for the ongoing management of geese.

And That the Lake Domain Board identifies a budget for the ongoing management of geese.

APPENDIX 1: example letter authorising carriage of fire-arms and use of motor-boat



HOROWHENUA LAKE DOMAIN BOARD
c/- Horowhenua District Council
Private Bag 4002
Levin 5540

19 February 2016

To Whom It May Concern

Authority to Carry and Discharge Fire Arms at the Horowhenua Lake Domain for the purpose of a Geese Cull

The correspondence confirms that:

- Jim Cook
- E J Cook
- B Kirker
- S Playee
- M Sager

have authority to both carry and discharge firearms in respect of the Lake Domain Bylaw 2015 (9) and 94.2.4 (a-c) of the Reserves Act at the Horowhenua Lake Domain (Muaupoko Park); such permission to be granted between the hours of 6.45 – 9.00 am on the 5th and 6th of March 2016. The permission has been granted so that the aforementioned persons might undertake a geese cull on behalf of the administering body.

In addition this authority should be viewed as a permission to take or destroy geese of the *Branta Canadensis* species, and/or other goose species identified in Schedule 5 of the Wildlife Act 1953.

In addition, permission is granted to use a motorised craft on the lake for the purposes of animal control in respect of the above, and temporary closure of the Domain to the public for health and safety reasons during the cull.

Such permission is granted by:

Signature: 
Name: Alan McKenzie
Position: Chair, Horowhenua Lake Domain Board

APPENDIX 2: OUTLINE PLAN – GEESE CULL

Cull Plan – Canada Geese			
<i>Item.</i>	<i>Description</i>	<i>Notes</i>	<i>Timeframe</i>
	Geese Cull		
	Operational Plan, Appendix 8. to be signed off by HDC H&S Officer	As per Part 2, Sub-part 2, Section 36 and Part 2, Sub-part 3, Section 44 of the Health and Safety at Work Act.	01.05.2018
	Operational Plan, Appendix 8. to be signed off by Lake Domain Board	As per Part 2, Sub-part 2, Section 36 and Part 2, Sub-part 3, Section 44 of the Health and Safety at Work Act.	06.05.2018
	Operational Plan, Appendix 8. to be signed off by Police	Via HDC	20.05.2018
	Establish dates of cull	Dates will be confirmed	tba
	Develop management strategy for occupiers of Lake Domain and provide evidence of cooperation from occupiers as per Appendix 5.	Via Lake Domain Board Chair	30.5.2018
	Liaison meetings with private landowners, communication of cull date and plans only, no participation required.	Landowners adjacent to the park will be made aware of the operation so that considerations can be given to location of stock, pets and people during the cull.	30.05.2018
	Engage licenced firearms contractors to complete operational plan as laid out in Appendix 6.	Via HDC	tba
	Provide permission to use motorboat (Bylaw 23.3)	Lake Domain Board Chair via HDC	tba

	Seek relevant permissions from Lake Domain Board under Reserves Act (Section 50), and Lake Domain Bylaw (Bylaw 9 & 17.3).	Lake Domain Board Chair via HDC	tba
	Authority/permission to harm/remove wildlife (carcasses) under 94.1.(i) of the Reserves Act.	Lake Domain Board Chair via HDC	tba
	Develop Communications Plan as per Appendix 6.	HDC Communications Team – to be authorised by Lake Domain Board Chair	tba
	Undertake Cull	Appendix 8. Operational Plan	tbc
	Disposal of carcasses	Carcasses to be disposed of to landfill with special waste permit authorised by HDC's Solid Waste Manager	tbc

APPENDIX 3: RISK MATRIX

Likelihood	Rare - 1	Infrequent -2	Likely -3	Very Likely - 4	Certain- 5
Impact	Very Minor - 1	Minor - 2	Moderate - 3	Major - 4	Catastrophic - 5
Strategic	Small delay in delivering strategic outcome <3 months	Delay in delivering strategic outcome from agreed date for 3-6 months	Delay in delivering strategic outcome from agreed date for 6 + months	Deferral of strategic outcome to subsequent year	Failure to deliver agreed timetable on strategic outcomes for 2+ years
Financial	Very minor overspend in operational budgets 2.1-3% as a whole (where not agreed)	Minor overspend in operational budget as a whole 3.1-5% (where not agreed)	Moderate overspend in operational budgets as a whole 5.1-10% (where not agreed)	Major overspend in operational budgets as a whole in excess of 10.1-25% (where not agreed)	Large overspend in operational budgets as a whole in excess of 25% (where not agreed)
Operational	Temporary delay in completing cull	Moderate delay in completing cull	Extended delay in completing cull 6 months – 1yr	Long term delay in completing cull 1 year or more	Inability to complete cull
H&S	Inadequate plan leading to potential delays	Inadequate plan leading to minor injury	Inadequate plan leading to moderate injury	Inadequate plan leading to serious harm	Inadequate plan leading to fatality

Legal	Warning of low level breach, threat of legal action	Notice or low level legal action with low potential liabilities possibly at tribunal level	Legal action resulting in moderate level of potential liabilities, or appearance at District Court	Legal action with appearance at District Court and the risk of a significant and ongoing liability	Legal action with potential of criminal prosecution or appearance at Crown Court.
Reputational	Isolated negative view expressed via Council's normal procedures (e-mails, CRM's)	Negative local comments from groups/individuals but no long-term implications.	Negative local media coverage/ complaints leading to damaged relationships with individuals in the community.	Negative national media coverage/ complaints leading to longer-term damaged relationships with community groups.	Prolonged national media coverage/ complaints leading to longer-term damage to HDC Lake Domain Board.

APPENDIX 4: FMEA RISK REGISTER

Risk Type	Identification	Risk Evaluation				Post Mitigation Score		
		Likelihood	Impact	Total		Likelihood	Impact	Total
Strategic	No Reserve Management Plan specifying control as Policy leading to potential challenges	5	4	20	Comms plan to identify benefits of cull.	5	1	5
	Ad-hoc approach to cull leading to sub-optimal outcomes	5	4	20	Develop Reserve Management Plan to include geese /chicken control	1	1	1
Financial	Insufficient funding to facilitate geese cull	2	2	4	Initial 5k should be sufficient to facilitate cull	2	2	4
	Insufficient funding for ongoing management	5	3	15	Provide regular budget	2	1	2
Operational	No buy-in from hunting fraternity	3	5	15	Initial discussions positive	2	2	4
	No buy-in from surrounding landowners	3	5	15	Initial discussions with major land owner (West side) positive	2	2	4
	Resistance to cull from residents at Muaupoko Park	4	5	20	Lake Domain Board Chair to advise those in residence of cull and gain agreement	2	5	10
	Resistance to cull from members of the public.	4	3	12	Main Security to secure park for duration of cull	4	2	8
	Disturbance to stock	4	2	8	Nearby landowners to move stock further from Mūaupoko Park	2	2	4
	Lack of target species on day of cull	3	1	3	Pilgrim Geese present daily, variability in Canada Geese gaggles	3	1	3
	Interference from non-target species	4	2	8	Initial trials show that manipulation of mallard flock prior to cull is effective	2	2	4

	Use of Motorboat on Lake Horowhenua resulting in injury	1	5	5	Use of legally required safety equipment incl. PFDs and operator to have captains licence	1	2	2
H&S	Discharge of firearms with potential to cause serious injury/fatality	5	5	25	Exclude public use; experienced hunters; agreement with resident	5	2	10
	Inability to certify safety of carcasses post cull	5	3	15	Dispose to landfill via special permit	5	1	5
Legal	Legal action arising from injury/death	3	5	15	Effective planning and use of experienced hunters	2	5	10
	Lack of Police buy-in	3	3	9	Police liaison	2	3	6
Reputational	Possible reputational damage should public object	2	3	6	Comms Plan and 2016 history suggest generally supported	2	2	4


APPENDIX 5: RISK MANAGEMENT ASSESMENT PROCESS

Find it - List all the hazards or possible situations associated with the event activity that may expose people to injury, illness or disease. List these hazards in the 'hazards' column of the template. You can use experts or experienced people to advise you on your risk assessment.

Assess it - Rate or assess what the 'likelihood' is of people being exposed to the hazard and what the 'consequences' could be as a result of the hazard occurring. Use the Risk Ranking Matrix to do this.

Fix it - Identify what practical measures could be put in place to eliminate or reduce the likelihood of the hazard occurring. This is where changes are made to the event to reduce the risks. Then use the hierarchy of control system to minimize or eliminate the exposure to those hazards.

APPENDIX 6. RISK MANAGEMENT ASSESSMENT MATRIX

Hierarchy of Controls -	
<p>Most effective (High level)</p>  <p>Least effective (Low level)</p>	Elimination: remove the hazard completely from the workplace or activity
	Substitution: replace a hazard with a less dangerous one (e.g. a less hazardous chemical)
	Engineering control: making an event safer separate people from the hazard (e.g. safety barrier)
	Administration: putting rules, signage or training in place to make the event safer (e.g. induction, route plan, safety training)
	Personal Protective Equipment (PPE): Protective clothing and equipment (e.g. helmets, mouth guards, PFD's)

Assessed Risk Level	Description of Risk Level	Actions
<input type="checkbox"/> Low	If an incident were to occur, there would be little likelihood that an injury would result.	Undertake the activity with the existing controls in place.
<input type="checkbox"/> Medium	If an incident were to occur, there would be some chance that an injury requiring First Aid would result.	Additional controls may be needed.
<input type="checkbox"/> High	If an incident were to occur, it would be likely that an injury requiring medical treatment would result.	Controls will need to be in place before the activity is undertaken.
<input type="checkbox"/> Extreme	If an incident were to occur, it would be likely that a permanent, debilitating injury or death would result.	Consider alternatives to doing the activity. Significant control measures will need to be implemented to ensure safety.

Likelihood	Consequence				
	Insignificant – no treatment required	Minor – first aid treatment	Moderate – medical treatment or lost time	Major – serious injury requiring medical treatment of hospitalisation	Critical – fatality, permanent disability or multiple serious injury
Almost Certain - to occur	Medium	Medium	High	Extreme	Extreme
Likely – to occur	Low	Medium	High	High	Extreme
Possible – may occur	Low	Medium	High	High	High
Unlikely – not likely to occur	Low	Low	Medium	Medium	High
Rare – will occur only in exceptional circumstances	Low	Low	Low	Low	Medium

Mūaupoko Park Geese Cull

Control the Risk:

1. List the hazards/risks you have identified.
2. Rate their risk level (refer to information above to assist with this).
3. Detail the appropriate control measures you will implement to control the risk. Note: Control measures should be implemented in accordance with the preferred **hierarchy of control**.

APPENDIX 7. MŪAUPOKO RISK MANAGEMENT ASSESMENT

Please complete the following template, provide attachments as necessary to support the plan (e.g. maps, photos, plans, insurances, licenses).

Event Name: Mūaupoko Park Geese
List Names and Contact Details of Key People involved: tba
List Event Person in Charge & Contact Details: Ben Wood – Parks and Property Officer, (027) 615 2689
Location of Event: Mūaupoko Park
Date of Event: tba
Description of Event: Cull of geese at Mūaupoko Park with the use of firearms (shotguns), requested and authorized by the Lake Domain Board - administrator of the park under the Reserves Act Sec 94.2.4 (a-c). Approved by Police and HDC Health and Safety Officer. Police will be notified of the operation dates. The park will be closed to the public and they will be notified with a public notice in the week prior. The cull will be undertaken by a pest management specialist carrying the appropriate licenses, permits and authorization.

Event Date: tba		Site Supervisor/Person in Charge: Ben Wood		
Event Location: Mūaupoko Park				
Hazards	Persons Affected	Control/Actions – (Examples provided in Grey – delete and replace with your own hazards)	Risk	Person Responsible & Contact Details
Use of firearms resulting in injury and death.	Staff/Contractors/ Others	<p>Firearms to be used by licensed and qualified contractors, to be vetted and licenses cited and copied prior to the operation.</p> <p>Contractors will use 12 gauge shotguns, ammunition will be #4 shot as recommended for use with geese by industry shell manufacturers and the use of shotguns will limit the range of shot to avoid unforeseeable long range incidents.</p> <p>Using Journee's Formula for maximum ballistic range, #4 shot at full choke has a maximum range of less than 305m (1000ft). Advice from Matt Kavermann, Senior Fish & Game Officer for Wellington Fish & Game Council is that the range is less than 100m.</p> <p>Firing zone has a minimum safe distance (no obstructions/clear visibility) of 315m (1033ft), see Maps 2. & 3. Appendix 8.</p> <p>A first aid kit will be on site. In the event that anyone is injured emergency services will be notified and first aid will be applied by HDC supervisor (First Aid Trained). Contractors will secure firearms in vehicles and the operation will cease.</p>		<p>Ben Wood – 027 615 2689</p> <p>Firearms Contractor - tba</p>
Presence of members of the public within Mūaupoko Park.	Contractors/Staff/ Others	<p>Access to the park will be controlled by Main Security at the corner of Queen Street within the southernmost extent of the park as marked on Map 1. Appendix 8. Main security will sweep the park on the evening prior to move on any illegal campers and again 30 minutes prior to the posted hours for the cull to occur.</p> <p>If members of the public enter the park during the operation the cull will be called off and police will be contacted.</p> <p>When contractors arrive on site they will sweep the park for members of the public before taking any further action.</p>		<p>Ben Wood - 027 615 2689</p> <p>Main Security - tba</p>
Communication difficulties with firearms holders during	Contractors/Staff	Prior to shots being fired HDC will be communicating with Main Security via cell phone to ensure no members of the public have entered the park, at this point verbal		Ben Wood - 027 615 2689

operation.		communication with contractors will be possible. HDC staff will use visual signalling once shots are being fired to alert contractors to immediately cease firing if circumstances require it. This will be a simple red flag system that can be deployed in front of the contractors without endangering HDC staff.		Firearms Contractor - tba
Presence of resident	Contractors/Staff/ Others	The Lake Domain Board need to communicate to any members of the public residing at Muaupoko Park that the cull is occurring, how it will be conducted and provide council with documented assurance that the resident will not be onsite during the cull, signed by resident. If the resident is present the cull will be postponed.		Lake Domain Board - tba
Aggression from members of the public	Contractors/Staff/ Others	If members of the public become aggressive towards Main Security staff the cull will be called off and police will be contacted.		Ben Wood - 027 615 2689 Main Security - tba
Disturbance to farmers stock.	Contractors/Staff/ Others	The farm directly to the east of Muaupoko contains deer, the farmer will be contacted by HDC staff directly to make them aware of the cull and advise that stock be moved as far from the park as is practicable.		Ben Wood - 027 615 2689
Non target species within firing zone.	Contractors/Staff	Initial trials show that Mallard will attempt to feed within the geese gaggle, if Mallard are present within the firing zone the cull will cease until they can be dispersed. Initial trials show that Mallard will travel across the park when they become aware of feed being dispersed, manipulation of the Mallard population prior to feeding the geese gaggle will separate them from the gaggle and away from the firing zone.		Ben Wood - 027 615 2689 Firearms Contractor - tba
Target species not within predicted zones.	Contractors	The geese will be conditioned to feeding within the zones marked on Maps 2. & 3. (Operational Plan, Appendix 8) during the early morning, initial trials show that manipulation of the geese to feed in this zone including herding them is not difficult. If the geese are not in the specified feeding zones shots will not be fired.		Ben Wood - 027 615 2689 Firearms Contractor - tba
Damage to infrastructure.	Lake Domain Board/ Horowhenua District Council	Possible damage to infrastructure would be limited to an abandoned concrete shelter at the northwest corner of the park, (see Operational Plan, Appendix 8) note that this building is not within our primary firing zone.		Ben Wood - 027 615 2689
Disposal of carcasses.	Contractors/Staff	A special waste permit will be issued by HDC to allow for the disposal of carcasses at the Hokio Beach Road landfill. While on site HDC staff will dispose of the carcasses under the direction of landfill staff. Transport of carcasses will be in a covered Recreation Service heavy truck with PTO tipper.		Ben Wood - 027 615 2689

Use of Motorboat on Lake Horowhenua.	Contractors/ Staff	A motorboat will be used to collect any carcasses from the water and to move any geese off the water towards cullers. The motorboat will be operated by a qualified captain and permits for their use will be issued by the LDB. All legally required safety equipment including PFD's will be used in accordance with Maritime Law and a second boat will be available in case of emergency.		Lake Domain Board – tba
Weather Hot /humid conditions Cold/wet/icy conditions	Contractors/Staff/ Others	Contractor to assess weather conditions on the day prior and day of the cull, if weather is likely to affect the ability for contractors to safely complete a cull then the cull will be postponed. Staff to ensure appropriate clothing for weather conditions is worn.		Ben Wood – 027 615 2689
Plan not signed off by LDB - minutes attached.	Lake Domain Board/Horowhenua District Council	If the LDB are not satisfied with the operation plan HDC will address issues raised and present updated version to the board. Cull will not occur until receiving signed off plan recorded in minutes.		Lake Domain Board – tba Ben Wood – 027 615 2689
Plan not signed off by Levin Police.	Lake Domain Board/Horowhenua District Council	If the Levin Police are not satisfied with the operation plan HDC will address issues raised and present updated version to the Police. Cull will not occur until receiving signed off plan.		Lake Domain Board – tba Ben Wood – 027 615 2689

APPENDIX 8. OPERATIONAL PLAN

1.0	BEFORE ANY FURTHER PLANNING CAN COMMENCE.	Completed Y/N
1.1	This plan gets signed off by HDC H&S Officer, LDB and the Levin Police Department before date for cull is set.	<input type="checkbox"/>
1.2	Cull date set and parties above are advised.	<input type="checkbox"/>
1.3	The Lake Domain Board process for managing resident must be in place with a signed record from the LDB acknowledging that the resident is aware of the cull date and will comply fully with all plans.	<input type="checkbox"/>
2.0.	FORTNIGHT PRIOR TO CULL	
2.1	Contractors employed to use firearms will be vetted with licenses cited and copied.	<input type="checkbox"/>
2.2	Public notice is put into local paper via HDC Communications Team and with approval of the LDB, once a week for two weeks.	<input type="checkbox"/>
2.3	Levin Police Department advised that cull is proceeding.	<input type="checkbox"/>
2.4	Everyone involved in the Operational Plan is given a copy of the Risk Management Assessment and Operational Plan to review, is made aware of their responsibilities as they relate to the plan and sign a copy of the plan to acknowledge their understanding of their role in the Operational Plan the risks associated and how they will be mitigated.	<input type="checkbox"/>
3.0	DAY PRIOR TO CULL	
3.1	5:00pm - Contractors assess weather and conditions for cull – proceed/not proceed.	<input type="checkbox"/>
3.2	Reconfirm with Police intended actions and expectations of what is to occur.	<input type="checkbox"/>
3.3	Risk Management Plan reviewed to reflect any changes to mitigation strategies and any additional requirements – proceed/not proceed.	<input type="checkbox"/>
3.4	Any significant changes as a result of the review are documented and signed off by the HDC Health and Safety Officer, Lake Domain Board and Levin Police Department. However any changes will be communicated to all parties involved with the Operational Plan and initialled.	<input type="checkbox"/>

3.5 9:00pm, Main Security monitors Mūaupoko Park for overnight campers and clears the park.



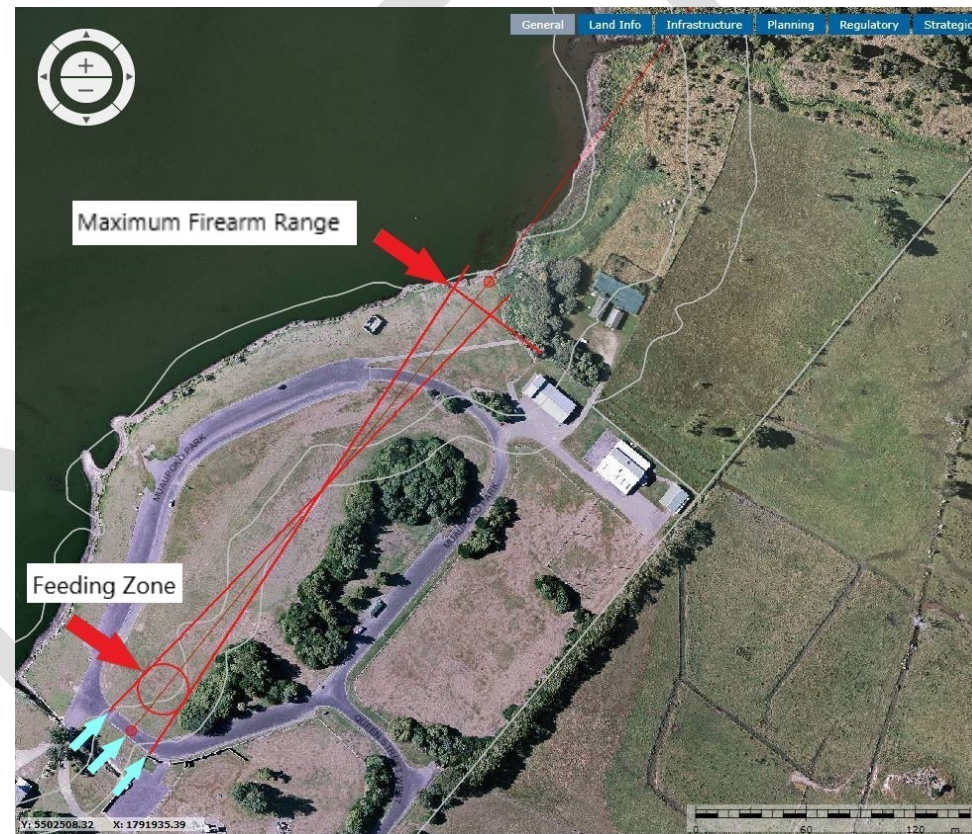
4.0 DAY OF CULL

4.1 5:30am, Main Security clear Mūaupoko Park and provide report to HDC lead supervisor on arrival at 6:00am regarding findings and confirmation that the park is clear. If public refuse to exit Police are called and the cull is put on hold until public are managed. Once park is cleared Main Security will position themselves at the corner of Queen Street on the southernmost extent of Mūaupoko Park property as indicated on attached Map 1.



Map 1. Location of Main Security during operation and designated safe for vehicles and weapons storage.

- 4.2 6:00am, Contractors and HDC staff receive Main Security report, enter the park and complete secondary survey for any members of the public.
- 4.3 6:15am, Contractors and HDC staff park in playground parking lot indicated as Safe Zone on Map 1. this is the designated area for weapons storage and first aid kit location. A brief on the operation giving considerations to assessment of geese gaggle location, mallard flock location and environmental conditions will occur. Cull continues or is postponed using either the preferred or secondary options outlined on Maps 2. and Map 3.



Map 2. Preferred option demonstrating firing positions, feeding zone, maximum weapon range and direction.



Map 3. Secondary option demonstrating firing positions, feeding zone, maximum weapon range and direction.

- 4.4.1 6:30am, HDC staff manipulate mallard flock if required and herd/feed geese into feeding zone.
- 4.4.2 Firearms operators prepare firearms for use, one HDC staff member will remain with them in visual and radio/cell phone contact with Main Security. Main Security will remain in this position until the contractors and staff are ready to leave Muaūpoko post operation.

- 4.4.3 When firearms operators are ready they will verbally signal HDC staff. When HDC staff have geese positioned they will drop feed in the feeding zone and fall back into the “safe zone”, firearms operators will move forward into the firing positions marked with light blue arrows on either Map 2. Or Map 3. with an HDC staff member positioned behind them as spotter and visual alarm operator. Firearms operators are not to move further forward than the northern road edge on the preferred option Map 2. On the secondary option Map 3. they are not to move further forward than the southern face of the old sailing club building.
- 4.4.4 When ready firearms operators may fire, if during firing the spotter becomes aware of any unsafe operation or member of public on Mūaupoko Park they will throw a weighted High Visibility flag in front of the firearms operators as a visual signal to cease fire.
- 4.4.5. Once firing has ceased firearms operators will return to the safe zone and secure their weapons including ejection of any remaining rounds. Estimate total firing time will be between 10 and 30 seconds. ☐
- 4.5.1 HDC staff will pull Recreation Services vehicle from “safe zone” and pick up carcasses. Once carcasses are onboard they will be covered with a tarpaulin for transport to the Hokio Beach Depot.
- If no injured geese have entered the water and once all geese have been collected HDC staff and contractors may leave Mūaupoko Park in vehicles. Once vehicles are clear Main Security may leave.
- If injured geese have entered the water they will be recovered by boat or by hand/gaff if close to the shore.
- Once all geese have been collected HDC staff and contractors may leave Mūaupoko Park in vehicles. Once vehicles are clear Main Security may leave. ☐
- 5.0 Prior to disposal of carcasses contractors and HDC staff involved in the Operational Plan will meet at the Levin Depot on Hokio Beach Road to debrief. Any issues or learnings raised will be noted for a formal review of the Risk Management Assessment and Operational Plan. ☐

REQUIRED APPROVALS

As representative for the Horowhenua District Council and writer of this plan I _____ have taken all practicable steps to ensure that this plan was created with the highest duty of care as it stands on this day the ____ of _____ 2018.

Signed. _____

Name. Ben Wood

Position. Horowhenua District Council – Parks and Property Officer

As representative for the Horowhenua District Council I _____ understand and approve this plan as it stands on this day the ____ of _____ 2018.

Signed. _____

Name. Arthur Nelson

Position. Horowhenua District Council – Parks and Property Manager

As representative for the Horowhenua District Council I _____ understand and approve this plan as it stands on this day the ____ of _____ 2018.

Signed. _____

Name. Jill Dallinger

Position. Horowhenua District Council – Health and Safety Officer

As representative for the Lake Domain Board I _____ understand and approve this plan as it stands on this day the ____ of _____ 2018.

Signed. _____

Name.

Position.

As representative for the Levin Police I _____ understand and approve this plan as it stands on this day the ____ of _____ 2018.

Signed. _____

Name.

Position.

Parties involved in the Operational Plan by signing this document acknowledge that they have read and understand the Risk Management Assessment, Appendix 7 and Operational Plan, Appendix 8 and their roles within said plan.

Name	Role	License # if required (copy must be attached)	Date	Signature

DRAFT

Submission to Long Term Plan
Horowhenua District Council
126 Oxford Street,
Levin

2 May 2018

Contact details

Ms Jenny Rowan

Chair of the lake Horowhenua Lake Domain Board,

PO Box 91 Paekakariki

0279662753

jenjools@xtra.co.nz

Vision

That the Mauri of Lake Horowhenua needs to be restored so that the lake can provide its traditional food source, rongoa, spiritual connections.

In addition, the Mana of Lake Horowhenua needs be handed back to Muaupoko for them to manage the Mauri, and national recreational place for all, and it is the Muaupoko who should decide the ratio between the two, and how that will be achieved.

Introduction

On behalf of the Lake Horowhenua Lake Domain Board, I have prepared this submission and thank you for this time today.

My name is Jenny Rowan and I chair the Board on behalf of the Director General of the Department of Conservation.

Our submission relates to the section of the plan called “storm water” (p12) where a reference is made “to the issue of improving the discharge quality of storm water at Lake Horowhenua and working towards discharged consent.”

The Lake Horowhenua Domain Board has responsibilities for the Domain land, buildings, and the surface waters of the lake for recreational purposes, so has an interest in what water (mostly storm water) enters the lake.

We have jurisdiction to be presenting this submission and to express our views and concerns about the lake and its ongoing wellbeing.

The timing for this discussion for the Long Term Plan could not be better, with a national political emphasis from the present government on water quality, and a more prudent use of water.

This whole submission is based on the need to clean up the water quality of Lake Horowhenua, and to ensure the storm water that is entering the lake has been treated to a standard that adds to the lake's health.

Lake Horowhenua is one of seven of the most polluted lakes in NZ with the two streams (Patiki and Arawhata) and a number of drains feeding the lake being amongst the worst polluted waterways in NZ. We need to be reassured that everything that can be done to bring this lake back to its former healthy state is being done, and that the appropriate consents are going through a proper public process and are consented inside appropriate timeframes.

This lake is on private land, and it is subject many Acts of Parliament. In respect to the Domain Board we are interested in fulfilling obligations under the Reserves Act (1977). The history is very fraught, and complicated because settlers wanted to confiscate the lake without permission of the owners. The complication came about because the Acts were actively designed to confiscate something that could not be confiscated. The grievances still remain unresolved today.

The fact of the matter is that over the half century, Lake Horowhenua has gone from a pristine food source and recreational use lake, by the local communities, to a toxic unusable lake, in fact one of the worst in New Zealand.

Instead of being an asset for Muaupoko, it has become the region's drainage asset for the catchment.

The major issue for our Board is the health of the lake, which is why the Domain Board became a signatory to the Lake Horowhenua Accord. Whilst there have been some significant steps taken with regard to activities in and around the lake, there is still a need to look at what goes into the lake, where it is coming from and what remedies are in place to ensure that polluting materials do not entering the lake.

I wish to acknowledge the work that is being done and money spent to date, by the Horizons Regional Council (HRC), the Horowhenua District Council (HDC), and the Lake Accord, but believe that much more work is needed to ensure that the identified pollution, mostly entering the lake through the storm water drain system, does not enter the lake at all.

Through the Lake Accord in particular, there has been a real effort to define and action improvements by identifying eight projects that are being managed through contractual arrangements by the Ministry for the Environment (MfE) and HRC. We understand that there has been success with some of the projects, and others are still to be activated.

There are three major MfE projects; the Freshwater Clean-up Fund, Te Mana o Te Wai, and Freshstart for Freshwater operating currently. HDC has supported all of

these projects and the various actions associated with the objectives of projects, and we see the need to strengthen this partnership further particularly around stormwater management.

So the critical “glue” in all of this is the agencies’ collective ability to continue to work together in a way that heals this lake. There does appear to be a piece-meal approach at present. For example this Board does not have a Management Plan that could and should be co-ordinated with others.

Our question is, why hasn’t there been more work done at the source of the pollution, which includes the sediment impacts?

We understand that the new MfE funded project where HDC has committed one for one dollar funded is intended these stormwater issues. It appears the major source of sediment may originate from the north-east section, where a sediment trap is proposed with this funding, however more than one is required, and are required at the boundary of the property of origin. Improved monitoring of these is required and made publically available.

The Board is also making a submission on these matters to the HRC Long Term Plan, and will take these issues up with them. We understand that monitoring is being done by HRC in the other drains including the inflow at Lindsay Rd and the Domain Drain, the Patiki Stream/Drain, the Arawhata Stream/Drain, and the Hokio Sand Rd Drain. However, the Racecourse Drain (which feeds into the Arawhata Drain) from the Levin industrial area, is not monitored at all.

A Board member has also observed that the car park at the Levin Mall floods, and this water drains away directly into the lake.

Another concern is the Levin Waste Water Treatment Plant, and the impact now after the last decade of use. Whilst this appears to have a robust system to measure groundwater contamination, we are aware that there are local community concerns about leaking leachate.

We are aware that, through a new fund new fund, both HRC and the Lake Trust will be committing about \$200K for groundwater investigations. This is to determine the level of nutrients that enter the lake the through groundwater and to investigate the geochemical conditions in which they occur.

The lake is on private land - it should not be seen in this century to be the local sewer for everyone else’s rubbish and pollutants. The responsibility surely lies with other private land owners to be managing their own properties in a way that protects the lake from their pollutants such as nitrates, heavy metals and sediment run off. We would expect the HDC to invest in educating industry and agricultural operators better on their obligations around runoff and farm management planning.

It is also surprising to the Board that there is very little comment in the Long Term Plan on the storm water issues for the wider District. Given the impact that storm water has on local infrastructure, and ultimately the lake, this needs to be addressed.

The Board also understands that everything that affects the lake also affects the Hokio stream and the community that uses that water.

Burning Plastic

Although this is not a matter the Board can directly influence, we are aware that the burning of plastic in a food producing area is being carried out.

Perhaps the Council could look to other authorities to see how they manage this totally unacceptable behaviour.

Hastings District Council, which is also a food producing area does not allow the burning of plastic of any grade in their area

Recreational Facilities

The main function of the Domain Board is to manage recreational facilities and recreational access to the Lake. While we are grateful for the support of HDC in maintaining the Domain area in its current state, we believe that the Domain is an underutilised asset for the District and town of Levin. In the last few years we have lost key recreational activities and assets (sailing, waka-ama, rowing) for Levin which we believe should be replaced.

Providing and support recreational activities which contribute to the health and well-being of the community is at the heart of the HDC activities and long term community plans. The Domain Board would like to see significant investment from the HDC to re-establish recreational facilities at the Domain. We believe that the HDC not only has an obligation under the various Acts it operates under, but also a responsibility to adhere to the vision of co-management agreed upon in various MOUs during the 1950s to develop the “gifted” Domain area. There is also an opportunity to reflect the principles of the Treaty of Waitangi to work in partnership with Muaupoko to fulfil a joint vision established over 60 years ago when the Domain Board was established.

Recommendations

The Board has considered matters relating to the storm water concerns, and we have these recommendations:

1. That all agencies concerned continue to work with private land owners, especially horticulturalists, to put sediment traps at their gate, to ensure that there is adequate protection by the use of bunds at their boundary edge, (and not on road reserve) and that their chemical use is monitored to ensure that the impact on the storm water is minimised
2. That the Council develops a plan for an alternative storm water drainage system for the urban area

3. That in any future subdivision(s) in the area affecting the drainage system to the lake, the developer be required to provide their own storm water ponds for the development
4. That adequate provisions are made and consents required to manage the increased waste from the expanding the Meat Works business – to prevent any potential contaminants reaching the lake
5. That Lake Domain Board be consulted in the issuing of consents affecting the recreational use of the lake
6. That alternative systems or tools be investigated (for example the SPARKL technology) for use in monitoring the storm water entering the lake
7. That HDC provide the Domain Board with \$10,000 to develop a Reserves Management Plan for the lake
8. That HDC continue to support a Muaupoko Waitangi Day event at Muaupoko Park at a sum of \$5000 per annum
9. That HDC invest \$500,000 into investigating and re-establishing recreation facilities at the Lake Horowhenua Domain/Muaupoko Park
10. That a finer mesh be used at the Queen Street Drain filter
11. That toilet facilities at the Domain are upgraded.

Finally, there is a view that this lake with its spring fed system could heal over time, if the pollution and sediment were removed. This would be a very low cost and effective way of letting nature do her thing. The ratepayer money then could be better spent ensuring pollution and sediment is more effectively managed in the long term.

Yours sincerely

Jenny Rowan
Chair lake Horowhenua Lake Domain Board.