

AGENDA

Orari-Temuka-Opihi-Pareora Water Zone Committee Meeting Monday, 6 May 2024

Date Monday, 6 May 2024

Time 1pm

Location Council Chamber, Council Building, King George
Place, Timaru

File Reference 1668413

Orari-Temuka-Opihi-Pareora Water Zone Committee

Notice is hereby given that a meeting of the Orari-Temuka-Opihi-Pareora Water Zone Committee will be held in the Council Chamber, Council Building, King George Place, Timaru, on Monday 6 May 2024, at 1pm.

Orari-Temuka-Opihi-Pareora Water Zone Committee Members

Suzanne Eddington, John Henry, Glen Smith (Chairperson), Bailey Lissington, Chris Konings (Deputy Chairperson), Clr Michelle Pye, Deon Swiggs, Phillipa Guerin, Sharyn Cain and Rynee de Garnham

Quorum – no less than 5 members

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- 1 Opening Karakia**
- 2 Apologies**
- 3 Public Forum**
- 4 Identification of Items of Urgent Business**
- 5 Identification of Matters of a Minor Nature**
- 6 Declaration of Conflicts of Interest**
- 7 Chairperson's Report**

8 Confirmation of Minutes

8.1 Minutes of the Orari-Temuka-Opihi-Pareora Water Zone Committee Meeting held on 11 March 2024

Author: Rachel Scarlett, Governance Advisor

Recommendation

That the Minutes of the Orari-Temuka-Opihi-Pareora Water Zone Committee Meeting held on 11 March 2024 be confirmed as a true and correct record of that meeting and that the Chairperson's electronic signature be attached.

Attachments

- 1. Minutes of the Orari-Temuka-Opihi-Pareora Water Zone Committee Meeting held on 11 March 2024**

MINUTES

Orari-Temuka-Opihi-Pareora Water Zone Committee Meeting Monday, 11 March 2024

**Minutes of Timaru District Council
Orari-Temuka-Opihi-Pareora Water Zone Committee Meeting
Held in the Council Chamber, Council Building, King George Place, Timaru
on Monday, 11 March 2024 at 1.03pm**

Present: Suzanne Eddington, Glen Smith (Chairperson), Chris Konings (Deputy Chairperson), Cllr Michelle Pye, Deon Swiggs, Sharyn Cain

In Attendance: Mayor Nigel Bowen, Dave Moore (Zone Facilitator, Environment Canterbury), Rachel Scarlett (Governance Advisor, Timaru District Council)

1 Opening Karakia

Dave Moore conducted the opening Karakia.

2 Apologies

2.1 Apologies Received

Resolution 2024/1

Moved: Sharyn Cain

Seconded: Suzanne Eddington

That the apology of Phillipa Guerin, Rynee de Garnham, John Henry and Bailey Lissington be received and accepted.

Carried

3 Public Forum

There were no public forum items.

4 Identification of Items of Urgent Business

No items of urgent business were received.

5 Identification of Matters of a Minor Nature

No matters of a minor nature were raised.

6 Declaration of Conflicts of Interest

No conflicts of interest were declared.

7 Chairperson's Report

No Chairpersons report was presented.

8 Confirmation of Minutes

8.1 Minutes of the Orari-Temuka-Opihi-Pareora Water Zone Committee Meeting held on 6 November 2023

Resolution 2024/2

Moved: Glen Smith

Seconded: Chris Konings

That the Minutes of the Orari-Temuka-Opihi-Pareora Water Zone Committee Meeting held on 6 November 2023 be confirmed as a true and correct record of that meeting and that the Chairperson's electronic signature be attached.

Carried

9 Reports

9.1 Zone Committee Action Plan funding requests

To update the Committee on the status of the Action Plan budget and to present new funding requests for the Zone Committee to consider for recommendation.

The presenters for item 9.3 Te Kete Tipuranga o Huirapa Funding Request were not present for this meeting. This report is left to lie on the table.

Recommendation

That the OTOP Water Zone Committee receive the status report and new funding applications and consider whether to recommend the applications for funding.

9.2 Barkers Creek Action Plan Funding Request

Danette McKeown spoke to the committee to present Barkers Creek Catchment Group's funding application.

Discussion included, Barkers Creeks distinctive hydrology and topography, with farms sloping into the Creek, thus contaminating the water from livestock run off.

Danette McKeown spoke to the Committee about introducing four separate species of dung beetle, dung beetle benefits to soil health. A baseline of information collected from the Creek and how future data collection of the dung beetles will be monitored through the beetles DNA captured in the water.

Discussion also included, Independent research being conducted and accepted through government agencies, with no evidence of negative impact to the environment, farmers feedback from the Barker Creek area and future livestock drench resistance.

Resolution 2024/3

Moved: Chris Konings

Seconded: Sharyn Cain

1. That the OTOP Water Zone Committee receives the presentation and funding request, and
2. Recommends this funding application from Barkers Creek Catchment Group.

Carried

9.3 Te Kete Tipuranga o Huirapa Funding Request

Felicity McMillan and Matthew Rudd from Te Kete Tipuranga o Huirapa were not in attendance to speak to the Committee.

Discussion between the Committee members included the request for \$12,000 of funding, long term maintenance of the project, and an option for the request to sit at the table until the next financial year.

The Committee agreed to lay the request on the table until a representative of Te Kete Tipuranga o Huirapa is present

Resolution 2024/4

Moved: Clr Michelle Pye

Seconded: Sharyn Cain

1. That the OTOP Water Zone Committee receives the presentation and funding request, and
2. considers this funding application in the May 2024 meeting, from Te Kete Tipuranga o Huirapa Ltd.

Carried

9.4 Committee Update

The Committee members spoke to the report to update the Committee on actions from the previous meeting, relevant information and upcoming engagement opportunities.

Zone Committee Updates Review – Process has been initiated and ECAN is leading the review. There will be an inclusion of a workshop on 8 April 2024 with the Orari-Temuka-Opihi-Pareora Water Committee and discussions may include their objectives with leadership in the group and engagement with the community, new water plans and biodiversity.

Discussion included, upper Rangitata not being included in a committee, and growth in local public transport investments.

Long Term Plan Update – Deon Swiggs (ECAN) spoke to the committee regarding biodiversity funding and grants increasing rate pressures. Increase in stock bank and river resilience investments. Opportunity to increase a flat free instead of an annual charge. The committee also discussed the funding cut for wallaby control and its adverse effects.

Resolution 2024/5

Moved: Chris Konings

Seconded: Clr Deon Swiggs

That the OTOP Zone Committee receives this report and provides feedback.

Carried

10 Consideration of Urgent Business Items

No items of urgent business were received

11 Consideration of Minor Nature Matters

No matters of a minor nature were raised.

12 Closure Karakia

Dave Moore conducted the closing Karakia.

The Meeting closed at 2.19pm

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Glen Smith
Chairperson

9 Reports

9.1 Zone Committee Action Plan Budget – applications for funding

Author: Dave Moore, Zone Facilitator

Authoriser:

Recommendation

That the OTOB Water Zone Committee:

1. **Receives** the three applications from Richard Lacombe, Te Kete Tipuranga o Huirapa Ltd (Arowhenua Native Nursery), and Burkes Pass Heritage Trust.
2. For each project, confirms whether it:
 - a. **Supports** the project being recommended for funding using the OTOB Zone Committee Action Plan Budget for FY2023/24, or
 - b. **Does not support** the project being recommended for funding using the OTOB Zone Committee Action Plan Budget for FY2023/24, or
 - c. **Requests further information** on the project before making a decision.

Purpose of Report

- 1 For the Zone Committee to consider three applications received for funding using their Zone Committee Action Plan Budget for FY2023/24

Applications

2 Applications have been received from:

- Richard Lacombe – refer **attachment 1**
- Te Kete Tipuranga o Huirapa (Arowhenua Native Nursery & Restoration) - refer **attachment 4**
- Burkes Pass Heritage Trust. Refer **attachment 5**

Summaries prepared by the Facilitator for the three projects are provided:

Application 1: Pig Hunting Creek Lagoon Restoration – Remediation strategy funding request	
Applicant	Richard Lacombe
Funds requested	\$15,000
Project summary	<p>Develop a strategy to shift the management of Pig Hunting Creek lagoon from stock grazing to management focused on achieving ecological outcomes consistent with its prior state and species composition.</p> <p>Improving the ecological functioning of Pig Hunting Creek will contribute to restoring mahinga kai regionally. A properly functioning wetland is a filter which protects the coastal waters from pollutants. The adjacent</p>

	Tuhawaiki mataitai is an area where shellfish are gathered, improvement to the coastal wetlands will support the health of the mataitai.
Action alignment	<p>Plan</p> <ul style="list-style-type: none"> • Assist with the protection, enhancement and restoration of mahinga kai and tuhituhi o neherā sites. • Focus on tuhituhi o neherā sites and mahinga kai and how best to manage these. • Zone Implementation Programme 2.2.1 Protect and enhance coastal lagoons. Assist local groups to enhance and improve lagoon habitat. • Zone Implementation Programme Addendum 4.5.X Projects that contribute to the protection and enhancement of the following areas are prioritised for funding and resources in the zone, including funding allocated under the Immediate Steps Programme: <ul style="list-style-type: none"> a. coastal margins and lagoons to support indigenous biodiversity and over time provide a biodiversity corridor; c. protection and enhancement of braided river habitat (the Opihi lagoon is a part of the braided Opihi River); d. opportunities to protect high value species, sites or habitats in the zone. <p>It is recognised that the lagoon is an old Waitaha occupation site and valued by mana whenua. The coastal areas of South Canterbury were part of an important network of mahinga kai sites. A guiding strategy for restoration will ensure that restoration supports mana whenua values.</p>
How funding will be used	<p>Will cover the cost contracting an ecologist to develop a strategy to shift the management of Pig Hunting Creek lagoon from stock grazing to management focused on achieving ecological outcomes consistent with its prior state and species composition.</p> <p>Improving the ecological functioning of Pig Hunting Creek will contribute to restoring mahinga kai regionally. A properly functioning wetland is a filter which protects the coastal waters from pollutants. The adjacent Tuhawaiki mataitai is an area where shellfish are gathered, improvement to the coastal wetlands will support the health of the mataitai.</p>
In-kind contributions and project partners	<p>Land owner:</p> <ul style="list-style-type: none"> • Releasing land from productive use. • Removal of 1.7 ha of fencing (wire and fence posts). • Post strategy commitment to undertake restoration work in line with the strategy. • Strategy oversight and liaison with agencies.

Community engagement	<ul style="list-style-type: none"> • ECan (engaged with for advice and funding) • TDC (engaged with advice and may seek SNA funding to undertake earthworks) • Normanby Lagoon Project (in formation, attended first meeting and hosted visit)
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Application 2: Opihi Lagoon Plant Maintenance	
Applicant	Te Kete Tipuranga o Huirapa Ltd (Arowhenua Native Nursery)
Funds requested	\$12,000
Project summary	<p>Te Kete Tipuranga o Huirapa Ltd request funding of \$12,000 for two rounds of plant maintenance in the dryland area of Opihi Lagoon. This will allow for good plant growth and suppress woody weeds which will otherwise dominate the plantings. The funding request is for work to commence from 1 July 2024.</p> <p>Funding sought will cement the gains made over the last four years and ensure that the cultural and ecological significance of the lagoon is protected.</p> <p>Note: This report was tabled at the 11 March 2024 Zone Committee meeting where it was left on the table for reconsideration at this 6 may meeting.</p>
Action Plan alignment	<ul style="list-style-type: none"> • Assist with the protection, enhancement and restoration of mahinga Indigenous biodiversity • Zone Implementation Programme 2.2.1 Protect and enhance coastal lagoons. Assist local groups to enhance and improve lagoon habitat. • Zone Implementation Programme Addendum 4.5.X Projects that contribute to the protection and enhancement of the following areas are prioritised for funding and resources in the zone, including funding allocated under the Immediate Steps Programme: <ul style="list-style-type: none"> a. coastal margins and lagoons to support indigenous biodiversity and over time provide a biodiversity corridor: c. protection and enhancement of braided river habitat (the Opihi lagoon is a part of the braided Opihi River); d. opportunities to protect high value species, sites or habitats in the zone.

How funding will be used	This funding will be spent on two rounds of plant maintenance. Each round will take four days to work through. The cost for this is \$1,500 per day including all the necessary herbicides and equipment.
In-kind contribution and project partners	Predator trapping is currently being undertaken by the Tipuranga o Huirapa Ltd trapping team on a 30day cycle.
Community engagement	This is a publicly accessible site and the enhancement for recreational and education purposes where they do not conflict with the goals of the project is a possibility in the future. Protection and restoration of this site has been driven by Arowhenua Rūnaka.

Application 3: Te Kopi-O-Te Opihi (Burkes Pass) Wetland and Riparian Restoration	
Applicant	Burkes Pass Heritage Trust
Funds requested	\$10,200 to \$15,200
Project summary	<p>In August 2023 the Burkes Pass Heritage Trust presented their wetland and riparian restoration project and requested funding assistance. The Zone Committee visited the site in October which highlighted the amount of work that has been undertaken to date.</p> <p>At the 6 November 2023 meeting the Zone Committee considered the Trust's funding request (contribution to \$85,135 projected expense for 2023 financial year) and recommended \$12,340 for Supplementary planting of stage 1 & 2 and release and mulching of stage 0 & 1. They have now received this funding from Environment Canterbury.</p> <p>At the time of recommending this grant in November 2023, the Committee discussed that, they could consider further funding of this project in the future.</p> <p>The Burkes Pass Heritage trust report that progress with the project has been going well with the majority of plants thankfully surviving the dry conditions over summer. In November 2023 they had a further planting day with the Arowhenua Restoration team and another 800 plants were put in, and last month another 350 by volunteers. They have also undertaken drone photography for annual monitoring and installed a trail camera for predator information. In January a baseline eDNA sample was taken for water quality testing.</p> <p>On 28th of March they received a grant from the Community Trust of Mid and South Canterbury that enabled them last week to clear the three remaining log piles and make ready the stage 2 planting area for this year's planting. They anticipate planting stage 2 over two years and the</p>






	<p>cost for planting this year will be approximately \$10,200. This includes: grasses, flaxes, shrubs and trees with plant protectors and entirely voluntary labour.</p> <p>Adding in the cost of the Restoration team of 10 from Arowhenua for 2.5 days would be an additional \$5,000 to help our volunteers plant and place the protectors.</p> <p>The Trust are very grateful for the Zone Committee's support to date and request that the committee consider further funding for stage 2 planting.</p>
Action Plan alignment	<ul style="list-style-type: none"> To achieve a commitment to enhance Nohoanga, and to improve the health of key waterways for customary use, and enhance mahinga kai opportunities, it is important to gain insight into cultural values and areas of significance relating to mahinga kai. This can be achieved by engaging with local iwi, hapū, and other cultural practitioners to understand their knowledge and practices pertaining to mahinga kai. This understanding can inform the development of restoration and management plans that are culturally responsive and respect the values and practices of the local community. In addition to engaging with local iwi and hapū, engaging with schools and youth is important to illustrate the importance of mahinga kai and the local history. This can be achieved through educational programs and workshops that provide opportunities for students to learn about the area's history, the importance of mahinga kai to local communities, and the ecological and cultural significance of waterways and other natural resources.
How funding will be used	This funding will be used or purchasing of plants for stage 2 of the project. Stage two was cleared over the summer....
In-kind contribution and project partners	Voluntary labour for planting.
Community engagement	Various biodiversity and conservation groups from within the Te Manahuna area, also engaging with members of the Fairlie community, along with stakeholders and other interested parties. Volunteers from the Burkes Pass Heritage Trust are already engaged along with the friends of Batchelor's Bush. Envisage utilizing team members from Arowhenua Native Nursery along with team members from Te Kete Tipuranga o Huirapa restoration and trapping,

Action Plan Budget Status

Recipient	Project	Status	Amount
Orari River Protection Group	Orari River Bat population investigation Stage 1	Complete	4,850

Burkes Pass Heritage Trust	Te Kopi-O-Te Opihi (Burkes Pass) Wetland and Riparian Restoration - Supplementary planting stage 1 & 2, release and mulch stage 0 & 1	Complete	12,340
Barkers Creek Catchment Group	Dung Beetle trial	In process	20,000
Total funds committed to date			37,190
Remaining funds			37,810
New requests for funding			
Te Kete Tipuranga o Huirapa (Arowhenua Native Nursery & Restoration)	Maintenance of dry land plants at Opihi Lagoon		12,000
Richard Lacombe	Pig Hunting Creek Lagoon Restoration – Remediation strategy		15,000
Burkes Pass Heritage trust	Plants for Stage 2 restoration		\$10,200 – 15,200

Attachments

1. Funding application R Lacombe - Pig Hunting Creek [↓](#) 
2. Normanby Wetland Engineering Report 2023 - attachment to Funding application R Lacombe - Pig Hunting Creek [↓](#) 
3. Significant Natural Areas Survey 95b 95c 95d October 2015 Mike Harding Mark Davis Environmental Consultants [↓](#) 
4. Funding application - Te Kete Tipuranga o Huirapa - Opihi Lagoon [↓](#) 
5. Funding application Burkes Pass Heritage Trust May 2024 [↓](#) 

Application for funding - Zone Committee Action Plan Budget 2023/24

For Ashburton, Ōrāri Temuka Ōpihi Pareora (OTOP), Lower Waitaki, and Upper Waitaki zones

The purpose of the CWMS Action Plan Budget is:

- To allow Zone Committees to **focus on implementing their action plan and leverage other funding opportunities to achieve the CWMS priorities.**

The funding is administered, distributed, and monitored by Environment Canterbury.

Applicant details

Organisation (if applicable):	
Contact name:	Richard Matthew Lacombe
Contact email:	Richie Jacomb <richie.jacomb@gmail.com>
Contact phone number:	0273631081
Postal address:	137 Normanby Road, RD 1, Timaru.
Other address:	
Are you GST registered? (if yes, please provide number)	
NZBN (NZ Business Number, if applicable)	

About your project

The amount of information and detail we would like you to provide is in proportion to the amount of funding you are requesting. If it is smaller amount, then a simple description of your project, who's involved and what you will be doing, along with a simple budget is sufficient.

Project name:	<i>Pig Hunting Creek Lagoon Restoration</i>
CWMS zone where the activity will occur:	OTOP
Provide a brief project summary:	

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<p><i>A Strategy is required to shift the management of Pig Hunting Creek lagoon from stock grazing to management focused on achieving ecological outcomes consistent with its prior state and species composition.</i></p> <p><i>The lagoon had been fenced and drains and banks were created in the 1980s to facilitate farming but the land was never appropriate for that use. The Timaru District Council has identified that the lagoon has several Significant Natural Areas (SNAs) comprised of indigenous herbfeild and wetland vegetation. Canterbury coastal lagoons and wetlands are threatened environments and the environment type this lagoon represents is 'acutely threatened (Harding and Davis 2015). There has been widespread loss of coastal wetlands and most are still grazed to this day.</i></p> <p><i>Lagoons and estuaries are important for a variety of fish and birds which as well as living within them, use them for seasonal breeding and migration pathways. We understand the creek and lagoon are important habitat for mahinga kai but that value is degraded.</i></p> <p><i>We are returning the lagoon to an indigenous dominated state and wish to undertake works which promote that occurring. The size of area we own allows us to protect approximately 18.8 coastal lagoon. We have undertaken an engineering report for accessing drain and bank remediation with necessary hazard analysis and have removed 99% of the fences across the lagoon.</i></p> <p><i>We hope this work will encourage neighbouring properties to be inspired to undertake compatible restoration activities. The 2015 SNA report describes indigenous vegetation with significant stock trampling. The removal of stock is allowing the recruitment of native vegetation across a greater area and at higher densities, which has reduced local sediment and E.coli inputs into the coastal zone. Ongoing improvements in indigenous cover will increase the habitat value for wading birds and waterfowl and coastal migrants.</i></p> <p><i>The financial support we are seeking is an appropriate plan to reinstate the natural hydrology to the wetland as per the advice we have received.¹ A number of straight drains and bunds were put in place in the 1980s to limit surface water extent. These require removing and much of the native turf will return, outcompeting the pastoral sward. There are several locations with springs which we need to manage and to provide connection to the rest of the wetland. Understanding the vegetative associations to these ecotones ensures we are able to assist appropriately with revegetation.</i></p> <p><i>The area is regionally important and we wish to ensure that the outcomes are well considered. Hence we are wanting a strategy to guide our restoration activities and which identifies what may be required in undertaking earthworks.</i></p>
<p>Explain what the grant will be used for - what the money is mainly being spent on/what activities are involved in the project (in two sentences):</p>
<p><i>We require a well-considered strategy and design for undertaking the hydrological restoration and indigenous plantings to achieve our aim.</i></p>

¹ G&E Williams Consultants (2023) Normanby Coastal Wetland Engineering Report on an Assessment of Habitat Improvement. Otaki.

<p>Describe the outcomes or impacts of this project: <i>Outcomes or impacts are what will change or who will benefit from this work, including enduring benefits. For example, fencing off springheads will improve biodiversity and improve stream health.</i></p>
<p><i>Returning the lagoon to a natural state for the benefit of wildlife. Improvement to habitat will contribute to the wellbeing of species which rely on the coastal lagoon system. The lagoons are a network so what benefits this lagoon will support wildlife across the network in particular neighbouring lagoons such as Normanby Lagoon.</i></p> <p><i>We have attended local meetings for the restoration of that lagoon and as part of the coastal community are engaging with the Normanby community, members of which have come to see our project. Working together will help drive momentum and knowledge and encourage wider participation.</i></p> <p><i>The lagoon has identified SNAs 95b, c & d, we will work with the TIMARU DISTRICT COUNCIL to ensure that these areas are not impacted and further consider that the reinstatement of natural hydrology will aid the return of the threatened turfs identified in the areas across the wider lagoon. We have observed that this is already occurring through stock removal.</i></p>
<p>List the key outputs of the project: <i>An output describes what your group is proposing to do and is measurable. For example, install 250 m of fencing, or train 25 volunteers. Outputs are important and may be used as milestones in a funding agreement.</i></p>
<ul style="list-style-type: none"> • <i>Engage a suitable qualified ecological consultant to produce a written strategy for remediation of the bunds and drains so that work can be staged to produce restoration outcomes.</i> • <i>A good strategy will guide drain removal and earthworks which restore hydrological function.</i> • <i>Work with agencies (TIMARU DISTRICT COUNCIL and Environment Canterbury) to ensure that work aligns and is consistent with ecological objectives.</i> • <i>Continue engagement with the local community to increase the appreciation of these habitats and what is required to restore.</i>
<p>Please state how the project aligns with the relevant Zone Committee's 2021-24 Action Plan: <i>Links to Action Plans</i></p>
<ul style="list-style-type: none"> • OTOP Zone Committee Action Plan 2021-24 <p><i>All .pdfs of action plans can be found as a link at the bottom of the "What's happening in my zone" page on the Environment Canterbury website. (https://www.EnvironmentCanterbury.govt.nz/your-region/your-environment/water/whats-happening-in-my-water-zone/)</i></p>
<p><i>The OTOP ZIPA states that 'Regional councils are responsible for managing biodiversity in the coastal marine area, and in the beds of rivers, and in wetlands and hāpua. The</i></p>

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protection of biodiversity and ecosystem health is also a first order priority under the Canterbury Water Management Strategy.’ This application aligns with achieving that first order priority.

We recognise that the lagoon is an old Waitaha occupation site and valued by mana whenua. The coastal areas of South Canterbury were part of an important network of mahinga kai sites. A guiding strategy for restoration will ensure that restoration supports mana whenua values.

Improving the ecological functioning of Pig Hunting Creek will contribute to restoring mahinga kai regionally. A properly functioning wetland is a filter which protects the coastal waters from pollutants. The adjacent Tuhawaiki Mātaitai is an area where shellfish are gathered, improvement to the coastal wetlands will support the health of the Mātaitai.

Tell us what activities you’re intending to do and when you intend to have the project completed (timeline):

Contract a strategy from an expert consultant that details the following;

- *Identification of neighbouring property boundaries and agencies with adjoining land management responsibilities (e.g. LINZ hydroparcels)*
- *Detail the site remediations to the bunds and drains.*
- *Detail locations and height for potential stop bank remediation at predetermined flows between the creek and the lagoon to allow water to re-enter the lagoon.*
- *Seek guidance from mana whenua as to their values and how to maintain and advance those values.*
- *Liaise with the TIMARU DISTRICT COUNCIL ecologist to ensure that the work is of ultimate benefit to the threatened vegetation that occur within the SNAs that overlap with those features.*
- *Identify where the fill is derived from, both locally from the sides and the drains.*
- *Identify where the bunding material is spread.*
- *Identify how best to re-connect the springs to the channels.*
- *Identify if all proposed actions are permitted activities.*
- *Develop a 5-year planting strategy.*
- *Develop a monitoring strategy with Environment Canterbury.*
- *Identification and strategy for weed and pest species.*
- *Time-line for achieving aforementioned actions.*
- *Seek advice from Heritage NZ in case of finds.*
- *Identify funding and grants.*

Tell us why you think your project is feasible/realistic:

The Timaru District Council SNA reports identified that long-term sustainability of the threatened vegetation relied on stock access was better managed and hydrological processes maintained or restored. The report (Harding & Davis 2015) states “the integrity of the unnamed meandering creeks and its associated wetlands has been severely compromised by artificial drainage, stock grazing, trampling and stock waste. Smaller isolated low-lying areas have been similarly degraded by stock and drainage.

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We have removed stock and have been working towards restoring hydrological function. This application is part of that process. Over the last summer we removed 1.7 km of fence line restoring the visual characteristics of the lagoon (photo attached).

We have been in conversation with Environment Canterbury now since 2017. We obtained funding from Environment Canterbury to undertake an engineering report (Willams Consultants 2023²), which identified earthworks to rewet and wetland surface. That report found no risk to public or private assets from that work (report attached).

We are keen to proceed with the suggested alterations to reinstate the hydrology. However, we are seeking guidance from a suitably qualified ecologist to guide that work. 40 years of alteration means that native vegetation occurs in areas which require remediation with the SNA turfs straddling the bunded natural channels. Adequate guidance and consultation with agencies incorporated into a strategy will give us the direction to proceed. We have been told by Environment Canterbury and TIMARU DISTRICT COUNCIL staff that reinstating the hydrology is the best thing that can be done. A strategy document will guide us and help communicate our intentions to secure potential funding from agencies, necessary to complete the project.

The project aligns with work along the South Canterbury Coastal Interface occurring between Environment Canterbury (Zone Delivery) and the TIMARU DISTRICT COUNCIL (Biodiversity Steering Group). Our objectives are consistent with agency goals and policy. The OTOP ZIPA recognises a community outcome is to ..'Protect and enhance indigenous biodiversity Ki uta Ki Tai, particularly high naturalness areas, coastal lagoons, and wetlands and springs in the upper parts of catchments.' We are investing in that outcome.

Tell us about the project management, including leadership and financial oversight:

I the applicant will work with the consultant to produce the strategy and engage with specialists as required.

List any other groups or organisations you are partnering with on this project, such as community groups, schools etc:

Environment Canterbury (engaged with for advice and funding)

TIMARU DISTRICT COUNCIL (engaged with advice and may seek SNA funding to undertake earthworks)

Normanby Lagoon Project (in formation, attended first meeting and hosted visit)

How will you engage the community on the project:

² Ibid. 1

<i>Have begun engagement see previous. The strategy will draw on advice from both Environment Canterbury and TIMARU DISTRICT COUNCIL ecologists.</i>	
Do you know of any cultural values associated with this site?:	YES
If yes, what engagement has occurred or is planned (if any) with local Papatipu Rūnanga about this project?:	
<p><i>We have not spoken to rūnaka but are happy to. An Environment Canterbury biodiversity officer (Rose Clucas) has said she will brief the rūnaka on the project as part of a wider conversation on a Coastal Interface Project which is occurring between TIMARU DISTRICT COUNCIL and Environment Canterbury.</i></p> <p><i>The Ka Hurumanu website states that the north side of the creek had an occupation site called Wharetawhiti. Advice was sought from Amanda Symons, archaeologist with the Ngai Tahu Rock Art Trust. Burials have been found on the adjacent coast a moa hunter site is known to the south. Her advice was that the known sites would not be affected by the proposed works. However, since the occupation sites were there to utilise the resources of the lagoon, there is the potential for finds or archaeological remains. She suggested we consult with Heritage NZ, any advice from them would inform the strategy.</i></p> <p><i>We are aware Arowhenua have a nursery so we could seek from them what species they would advise.</i></p> <p><i>We referred to the coastal marine Tuhawaiki Mātaimai in a prior section.</i></p>	
Please provide an accurate location with grid reference and/or map (if relevant to your project):	
NZTM Grid Ref X (Easting): 1460227	
NZTM Grid Ref Y (Northing):507553	
Who owns the land?:	
<i>Attach evidence of permission from the landowner, or their representative (if undertaking a project on land you do not own).</i>	
Richard Matthew Jacomb (applicant)	
137 Normanby Road, RD 1, Timaru.	
Valuation number 2486017404	

Funding details

Your budget should include estimates of income and expenditure, including other funding and in-kind contributions. You should show clearly what you are planning to spend the Action Plan funds on if successful. For applications for less than \$15,000 a simple budget is

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fine. We would like more detail if your application is for a larger amount e.g. more than \$15,000 or more than \$50,000. We have a budget template in the guidance document.

<p>How much funding are you requesting?</p>	<p>15,000 – 20,000</p>
<p>If you are successful with this application, what components of your project will you spend the money on?*</p> <p><i>If you have a project budget, please attach it to your application.</i></p>	
<p>A strategy for the implementation of activities as above. We are awaiting a quote from a consultant to submit before 6th May.</p>	
<p>Have you applied to or received funding from other organisations for this project?:</p> <p><i>Previous financial year FY23 Report funded by Environment Canterbury (attached) - G&E Williams Consultants (2023) Normanby Coastal Wetland Engineering Report on an Assessment of Habitat Improvement. Otaki.</i></p> <p><i>Once we have a strategy we will apply to the TIMARU DISTRICT COUNCIL SNA fund for earthworks to fill drains (see attachments).</i></p> <p><i>We are working currently with Environment Canterbury on the removal of exotic trees from across the lagoon. (see attachments).</i></p> <p>If yes, please provide details below or note if it is included in your attached budget.</p> <p><i>The CWMS Action Plan Budget is seed funding or leverage for partnering and collaboration so it is positive if you have received or are applying for other funding.</i></p>	<p>YES</p>
<p>Is the project receiving any other monetary or “in-kind” contributions from your organisation or others e.g. manpower, use of resources, facilities and equipment?</p> <p>If yes, please provide details below:</p> <p><i>Releasing of 18.8 ha of land from productive use.</i></p> <p><i>Removal of 1.7 ha of fencing (wire and fence posts) see attachments</i></p> <p><i>Strategy oversite and liaison with agencies.</i></p> <p><i>Post strategy commitment to undertake restoration work in line with the strategy.</i></p>	<p>YES</p>

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Working with us and Environment Canterbury

<p>In the last three years have you received funding or other support from Environment Canterbury for this, or any other project?*</p> <p>If yes, what was the funding/support for, and when did you receive it?:</p> <p>Previous financial year FY23 Report funded by Environment Canterbury (attached) - G&E Williams Consultants (2023) Normanby Coastal Wetland Engineering Report on an Assessment of Habitat Improvement. Otaki.</p>	<p>YES</p>
<p>Are you intending on applying to another Environment Canterbury fund this financial year for this, or any other project?</p> <p>If yes, what fund are you applying to?</p>	<p>NO</p>
<p>But we are working with Environment Canterbury</p>	

Additional information

Do you have supporting information you would like to provide (optional)?:

Attachments

1. *Figure of property boundary across lagoon.*
2. *Photo examples of drains and trees*
3. *Map of fencing removal.*
4. *Previous financial year FY23 Report funded by Environment Canterbury (attached) - G&E Williams Consultants (2023) Normanby Coastal Wetland Engineering Report on an Assessment of Habitat Improvement. Otaki.*
5. *M Harding and M Davis (2015) Timaru District Council SNA reports for 95b c and d.*

Once completed, please send this application form to the relevant Zone Facilitator:

- **OTOP and Lower Waitaki – Dave Moore ([dave.moore@Environment Canterbury.govt.nz](mailto:dave.moore@EnvironmentCanterbury.govt.nz))**

The Zone Facilitator will keep in touch with you about timeframes, whether the Committee would like you to give them a presentation, and whether there are any questions or further information is required.

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1. Property boundary across lagoon



2. Drains and Trees

Updated 12 January 2024



Drains

Updated 12 January 2024



Drains



3. *Map of fencing removal*

Updated 12 January 2024

ENVIRONMENT CANTERBURY

NORMANBY

COASTAL WETLAND

ENGINEERING REPORT

ON

**AN ASSESSMENT OF HABITAT
IMPROVEMENT**

Report prepared by

Gary Williams

**APRIL
2023**

G & E WILLIAMS CONSULTANTS Otaki

*ENVIRONMENT CANTERBURY***NORMANBY — COASTAL WETLAND
ASSESSMENT OF HABITAT IMPROVEMENTS****1 INTRODUCTION**

The coastline south of Timaru generally has a cliff edge, with gravel beaches and with the higher land behind being slowly eroded away. For the main gravel-bed rivers there are gravel barriers at the mouth, with small estuarine areas. Where smaller rivers and streams exit to the coast, coastal wetlands or lagoons have formed.

There are a number of these coastal wetlands south of Timaru, with the Saltwater Creek wetland area being on the southern edge of the city. At Normanby there is an enclosed lagoon, with a restricted outlet, that is a Wildlife Reserve. Immediately south, there is a relatively large flat area at the mouth of Pig Hunting Creek, between a gravel coastal barrier and terraces of the higher land behind (see Figure 1).

The owners of this coastal wetland area have retired the area from grazing, and are interested in wetland habitat enhancement. The Biodiversity Section of Environment Canterbury (Ecan) has funded an investigation of the hydrology and hydraulics of the enclosed flat area, with an assessment of the effects of re-establishing the wetland character.

The South Island Main Trunk Line of NZ Railways follows the coastline south of Timaru, and is positioned on the crest of the gravel coastal barrier at both the Wildlife Reserve lagoon and the Pig Hunting Creek wetland flats. There is a double culvert opening for the Wildlife Reserve, but for Pig Hunting Creek there is a relatively long bridge.

The flats of the wetland area have been cut off from the Pig Hunting Creek channel itself by an earth stopbank, constructed some time in the 1970s.

This report summaries an assessment of the hydraulics of the enclosed coastal wetland, and the potential effect of wetland enhancement, with specific consideration of the Railway assets and the stopbank. The assessment is based on site inspections undertaken on 22nd and 23rd of February, of the Wildlife Reserve and Saltwater Creek wetland areas, as well as the Pig Hunting Creek coastal wetland, and discussions with the landowners and Ecan Biodiversity staff.

The catchment of the creeks was obtained from topographical maps, while aerial imagery from the 1930s was used to study historical changes. Early survey maps were also obtained, including the legal survey of the property.

2 BACKGROUND

The Pig Hunting Creek (Creek) rises on Mount Horrible, and flows across the basaltic sheet landscape of South Canterbury, in the Timaru District, with a

relatively narrow catchment. The Wildlife Reserve (Reserve) has a much smaller, long and narrow catchment within the basaltic landscape (see Figure 2). The wetland flats have a very small tributary creek inflow, through culverts under Normanby Road, with very restricted inlet conditions.

The Creek is cut off from the sea, at the Railway Bridge, by the coastal barrier, with only seepage outflows during normal low flow times. The Creek can back up as far as the S H Bridge before flowing over the gravel bar at the Railway Bridge. During larger flood events the Creek channel and its associated wetland flats become a pond, with floodwater outflows only partly lowering the coastal barrier at the bridge. This is shown in Figure 3 for the April 2017 flood event.

An early settlement map of the 19th century shows the site before the railway line was constructed, but it gives only a general outline of the creek with an estuarine embayment behind the coastal barrier (see Figure 5).

The stopbank on the property was probably constructed as an isolated work by the South Canterbury Catchment Board, with some central government subsidy. These works are no longer Council assets, and the stopbank would be a private asset of the landowner.

The legal (cadastral) boundary lines show the edges of the creek as wavy lines, indicating a natural feature boundary. The legal boundary then moves as the natural feature (waterway, lake or coast) moves. However, in this case there are legal roads, of the Normanby subdivision, around the property. These roads extend along the side of the Creek for the length of the property, and hence cut off the property from the Creek, in terms of legal frontage. The Creek boundaries and the roadways are shown on the base survey for the property, of Figure 6.

It should be noted that existing boundary fences are not always on the legal line. The position of these fences on the northern side are also shown on Figure 6.

Inflows to the wetland area come from the small tributary that flows directly into the wetland, through the very restrictive channel at Normanby Road, and through a small culvert to the Creek at the downstream end of the wetland, which has no flapgate to prevent back flows. The stopbank can, though, be overtopped in flood events, filling up the area of the wetland defined by the surrounding terraces.

The wetland is a relatively large area of flat coastal land for the size of the Creek, with the terrace faces further landward than along the coast, and a substantial gravel barrier cutting off the flats from the sea. The lack of a flowing outlet to the sea of the Creek, and the very small connecting culvert under the stopbank, means that water ponds on the flats for long periods of time. The depth and time span of this ponding depends on the pattern of flood events and seasonal variations in rainfall and runoff.

Overflows from the sea occur during storm surges, and storm debris was present on the crest of the barrier and on the boundary fence with the Railway at the time of the site visit, with the fence being damaged by these overflows.

The Railway is clearly at risk from coastal erosion and storm waves washing up to the railway line and the bridge or culvert openings. There is rock protection work along much of the Railway in front of the subject wetland and the Wildlife Reserve to the north. Damage has occurred to these rock protection works as well as to the Creek bridge and the twin corrugated metal culverts of the Reserve outlet.

Tsunamis occur from earthquakes along the tectonic plate boundary in Chile, and cross the Pacific Ocean to the east coast of New Zealand. There are periods of more intense tectonic activity, and the nature of the coastal wetland would be substantially altered by the sea intrusions of a period of tsunami activity.

The wetland would, then, through natural processes, change its character, with shifts in salinity and in the durations of ponding, of fresh or salt water.

At present, there are some infrequent overflows of sea water into the wetland, but surface and ponded water would mostly be fresh. The low level of the flats compared to sea levels, and the likely high connectivity through the beach gravels, does mean that the groundwater under the surface would be saline. The lower levels in the channels within the wetland may also be saline. A contour plot from aerial Lidar surveying (of 2010) is shown on Figure 7.

3 ASSESSMENT

3.1 HISTORICAL CHANGES

The earliest available aerial photograph of 1938 shows natural channels through the site flats, with the area essential one paddock, with fences around the outside of the property (Figure 8). There is a relatively wide strip of vegetation between the Railway line and the gravel beach of the coast, with bridges at both the Creek and Reserve outlets.

The 1956 aerial imagery (Figure 9) indicates some non-grazing use of the flats, but the area is otherwise very similar to the earlier aerial. The 1967 imagery (Figure 10) shows little change.

The 1977 imagery (Figure 11) shows the stopbank alongside the Creek channel, with a loop at the lower end, with a piped outlet from the natural channel of the flats. The reason for the stopbank being constructed is not known, whether it was to reduce flooding of the flats, or to maintain flood flows directly to the Railway bridge. As noted above, the stopbank does not prevent the ponding of water on the flats, which can be for extended periods of time.

In the 1980s drainage works were undertaken, as straight drains across the flats (see Figure 12). Again, the purpose of these drains is not clear, as the area is very flat, and there is virtually no fall along the drains. Groundwater levels are also very close to the ground surface.

The 1999 imagery (Figure 13) shows little change in the flats and the drains and waterways. The Railway crossing at the Reserve outlet is now, though, a twin corrugated metal culvert, replacing the previous short bridge. In this imagery, water levels in the wetland and Creek, and in the Reserve, are at a low level.

In the 2009 Google Earth (GE) imagery (Figure 14) water levels are at a high level, and close to overflowing at the Railway Bridge. The main channel along the lower area of the wetland has been altered, in what appears to be a channel deepening with low bunds being formed along both banks.

The latest GE imagery of 2020 (Figure 15) shows low water levels in the Creek and wetland, while there is a large area of ponded water in the Reserve. The reason for this difference is not known. Maybe the outlet of the Reserve down to the twin culverts has become more restrictive. It is a small vegetated channel at present.

3.2 WETLAND ENHANCEMENTS

The wetland has a very flat surface, at a low level relative to sea tidal levels, and is well-defined by terraces on the landward side, a stopbank along the Creek and the gravel barrier along the seaward side. Flow within the wetland would be of low velocities with circulating currents, and the small size of the piped outlet to the Creek means that dewatering times would be very long once the area filled up.

There is a significant freshwater pond below the terraces at the western edge, between the stopbank and the terraces, which would be feed by spring flows out of the terraced landscape. Otherwise, there is no real land variation, except at the upper end where there is a transition of the small tributary creek within a valley in the terraces after it crosses Normanby Road. Here a small detention dam has been constructed across the waterway, but it is now redundant due to the washing out of the bund and erosion around the outlet structure.

Given the level of the wetland, and that it ponds to substantial depths over the whole area, and for long periods, there would be no advantage in excavating ponds on the flats in a cut to fill operation. This is a way of increasing margins in wetlands, and hence increasing site diversity. In this case, there is an existing pond at the terrace margin, and there is the potential for ponds along this terrace edge. There is an existing well at the northern end, and this is a possible location for another freshwater pond that is feed from springs out of the terraced landscape, as shown on Figure 4.

The land has been retired from grazing and the main enhancement is to re-instate the pre-existing natural waterways, and open up the wetland to the Creek. The internal fences would be taken down, then the drains that have been formed across the wetland flats would be amended as necessary to allow the shallow meandering waterways on the flats to re-establish naturally. This will involve cut and fill along the two straight drains across the flats, and some cut and fill of the bunds along the main channel where it was artificially altered. These works are indicated conceptually on Figure 4. The minimum cut and fill to re-establish the meandering pathway is indicated by the red and yellow lines. Further infilling of the drains would eliminate the artificial channels on the wetland flats, and this is indicated by the purple lines. The fill material could come from the mounds alongside the drains – from the original drain excavation – but some additional material from elsewhere is likely to be required to fully reinstate the flat land of the wetland.

To open up the main channel, a bund across the channel where the longer drain enters this channel has to be removed, as well as a section of the stopbank where it ties off against the gravel barrier. The cut material from the works along the main channel, and the arm that extends to the north-east, could be used to form some higher land beside this channel, creating some edge variation.

The end result is to return the wetland flats to the condition of the earliest aerial photography (of Figure 8).

In the valley between Normanby Road and the flats, an improved detention system could be created, incorporating the old bund but extending it to form both a deeper (channel) area and a shallow berm silt detention area. Given the restricted entry because of the road culverts, this could provide some effective detention of sediments. This may be relatively small in the bigger picture of the

wetland, but wetlands are waterway sinks that are naturally filled in by sediment supply.

The proposals, as shown on Figure 4, cover works that alter the hydraulic functioning of the wetland. There are opportunities for other enhancement measures, such as planting the terrace faces with a diversity of vegetation, and adding hardy salt spray tolerant species along the inner side of the coastal barrier.

3.3 HYDRAULIC CHANGES

The proposed measures alter the wetland hydraulics at the detail level, and would not affect the overall character or functioning of the wetland, as a flat ponding area between the coastal barrier and the terrace faces of the local landscape. The area will function as it did before the stopbank was constructed in the 1970s and the cross drains were formed.

The outflows to the sea would not change, being infrequent and during flood events, when both the Creek channel and the wetland flats are full of water. The dewatering of the flats would occur more quickly when outflows can occur, with the opening up of the stopbank. However, outflows are normally by seepage through the barrier gravels, and the seepage rates are the controlling factor of dewatering.

The Railway Bridge is, unusually, relatively long, for the flood outflows of the Creek through the gravel barrier. As can be seen from the repairs that have been carried out, some recent, the bridge is at risk from sea actions. In this case a smaller culverted opening, as for the Reserve, could be beneficial in terms of protection from wave action, as well as providing a more concentrated outflow that would be more effective in cutting through the gravel barrier.

If the Railways decide to replace the bridge, then consideration should be given to a more robust culvert type opening. This would be contrary to the norm, when the longer the opening the better it is from a waterway perspective.

3.4 EFFECTS OF PROPOSALS

There are really no off-site effects from the reversion of the area to a coastal wetland. Conversion of the area to pastoral grazing has been ineffective, with the drainage works having only local effects and not changing the water balance or groundwater levels on the flats. The stopbank has also had no real effect, in terms of ponding on the wetland flats, or in directing flood outflows through the Railway opening.

The outflows are infrequent and controlled by the gravel barrier and sea conditions, and not the bridge opening. The lower reaches of the Creek, below the State Highway Bridge, are very flat graded and hence at the low end of waterway energy, with ponding along this reach being a natural feature of the waterway. The Creek channel has not changed over the period of aerial imagery from the 1930s, with the straight diversion cut shown on the 1970s aerial, presumably undertaken along with the stopbank, having no impact on the behaviour of the Creek and its lower reach character.

There are major issues from sea hazards for the Railway line, with slow coastal erosion increasing the threat to the line along the gravel barriers that front the

wetland areas. The sea side is very high energy, while the landward side is the opposite of very low energy creeks and wetland flats.

The Railway Bridge at the Creek has had substantial recent repairs. The twin culverts of the Reserve outlet, however, require some repairs, to the bottoms of the culverts and at the entry and outlet ends. This outlet, though, is more protected by the headland and coastal cliffs immediately to the north, and has a more pronounced outlet channel through the gravel beach. All along the gravel barriers the rock protection requires maintenance. However, all this is due to the sea hazards, and not the waterways and wetlands on the landward side.

There are, thus, no significant changes in the hydrology and hydraulics of the wetland area that would affect other properties or the adjacent Railway Line, and hence no adverse effects.

6 CONCLUSIONS

The proposed wetland enhancement measures are aimed at allowing a natural reversion of the area to its pre-existing conditions, prior to its use for pastoral grazing. This requires only minor works, of adjustments to the drains and natural waterways across the flats. In addition, another freshwater pond could be constructed along the terrace margin, and a better sediment trapping facilities constructed in the valley below Normanby Road.

Further enhancement through additional vegetation cover is not included in this assessment.

The Railway Line along the coast is at risk from sea attack, with a slow erosion along the coast increasing this hazard. On the landward side, the creek and wetland areas are very low energy, with long-term ponding in both the Pig Hunting Creek channel and on the wetland flats.

The retirement from grazing of the wetland area and a reversion to a natural wetland would, thus, have no adverse effects on neighbouring properties or the Railway Line.

April 2023

G J Williams
Water & Soil Engineer

G & E Williams Consultants Ltd,
RD 3,
OTAKI. (06) 3626684

ATTACHMENT 1**FIGURES**

	Figure
LOCATION	1
CATCHMENT	2
2017 FLOOD	3
PROPOSALS	4
EARLY MAP - 19 TH CENTURY	5
SURVEY PLAN - 1910	6
WETLAND LEVELS - 2010 CONTOUR PLAN	7
1938 AERIAL	8
1956 AERIAL	9
1967 AERIAL	10
1977 AERIAL	11
1985 AERIAL	12
1999 AERIAL	13
2009 AERIAL	14
2020 AERIAL	15

NORMANBY COASTAL WETLAND

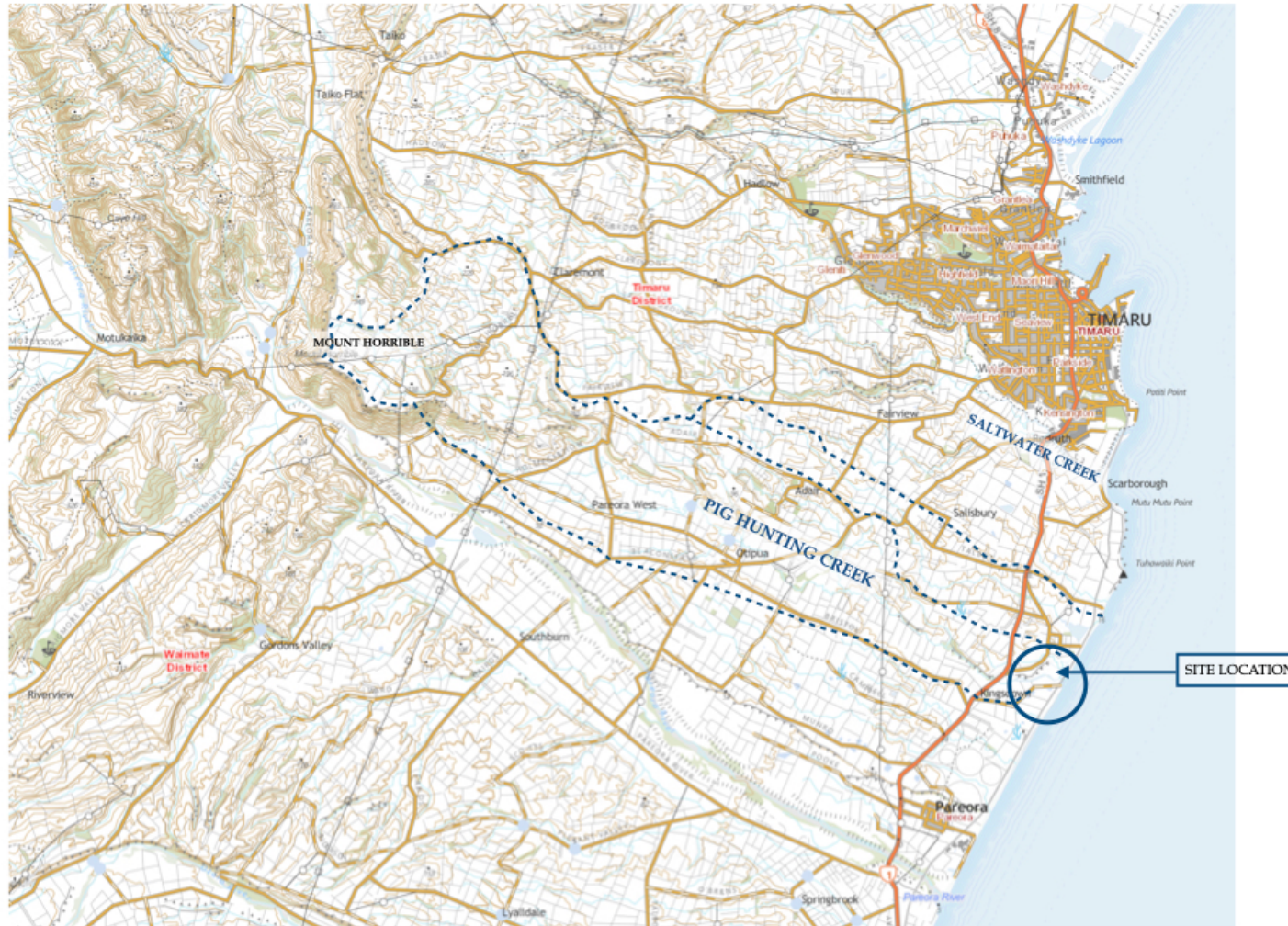
LOCATION

FIGURE 1



NORMANBY COASTAL WETLAND CATCHMENT

FIGURE 2



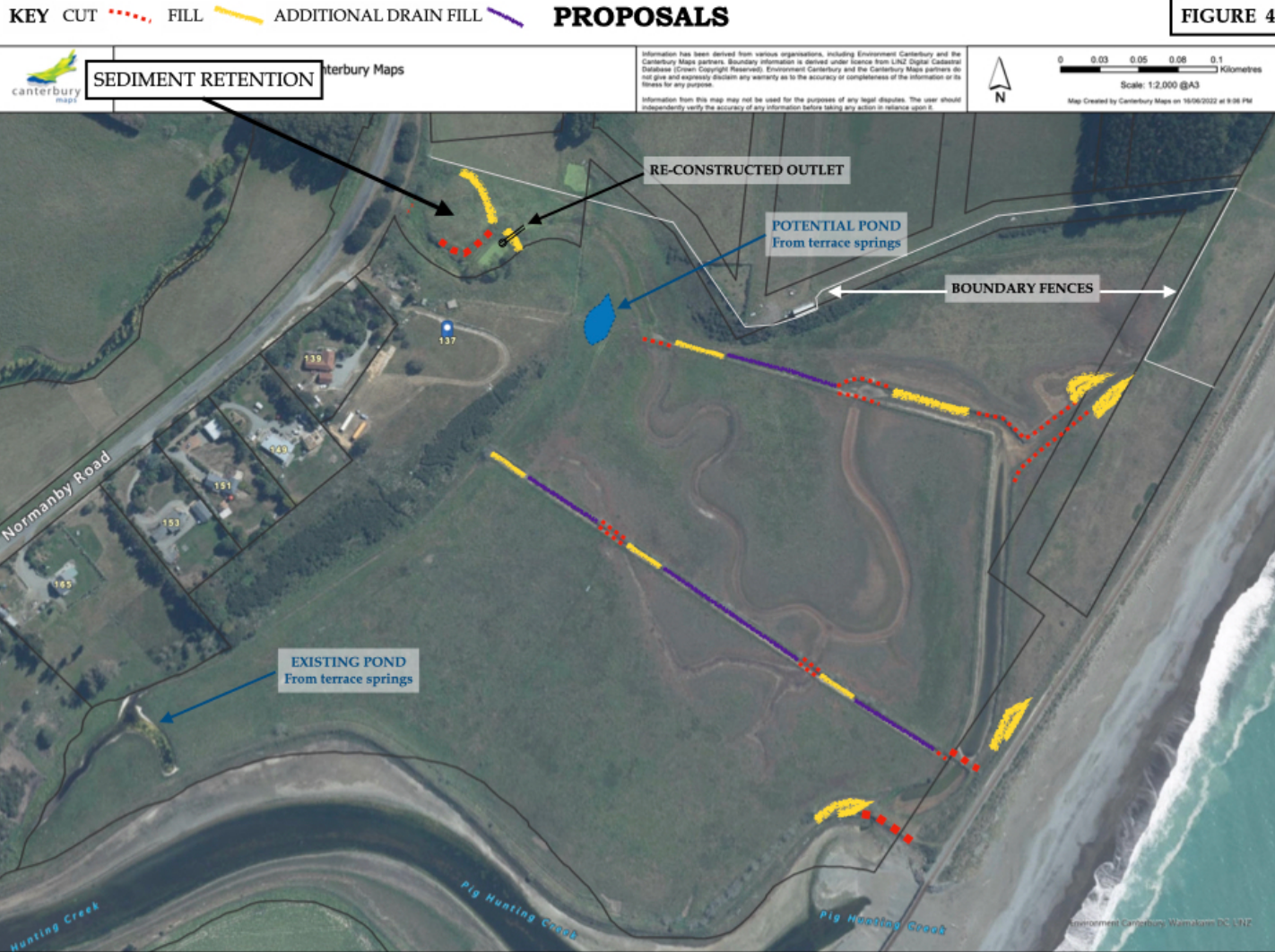
NORMANBY COASTAL WETLAND

2017 FLOOD

FIGURE 3



NORMANBY COASTAL WETLAND

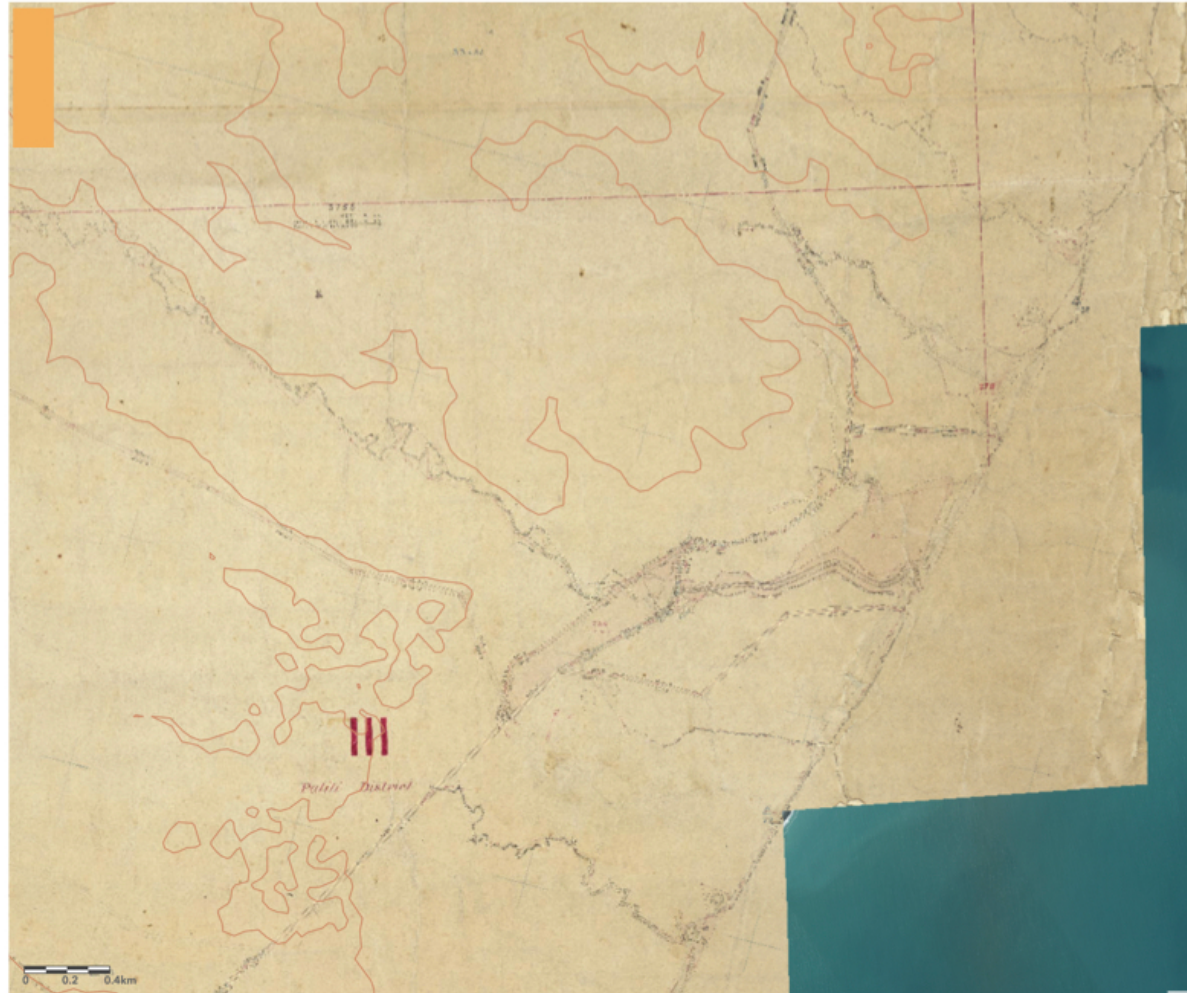


NORMANBY COASTAL WETLAND

19TH CENTURY

EARLY MAP

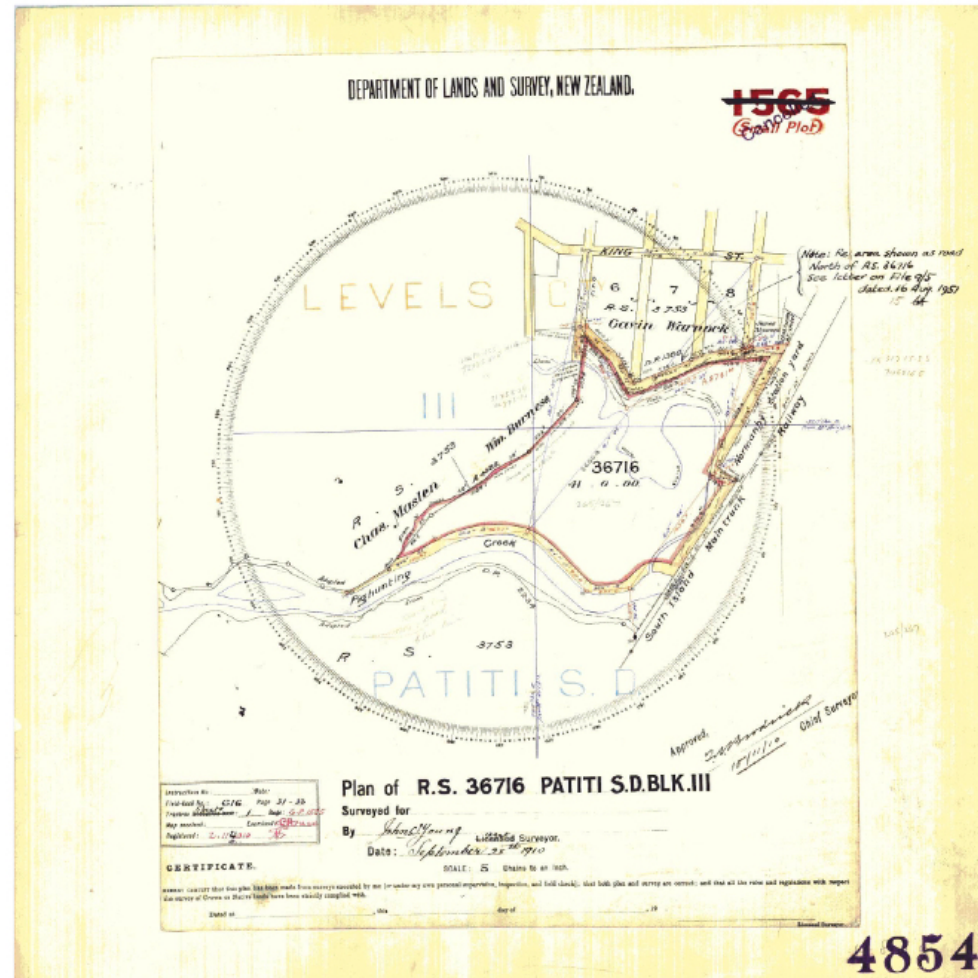
FIGURE 5



NORMANBY COASTAL WETLAND SURVEY PLAN

1910

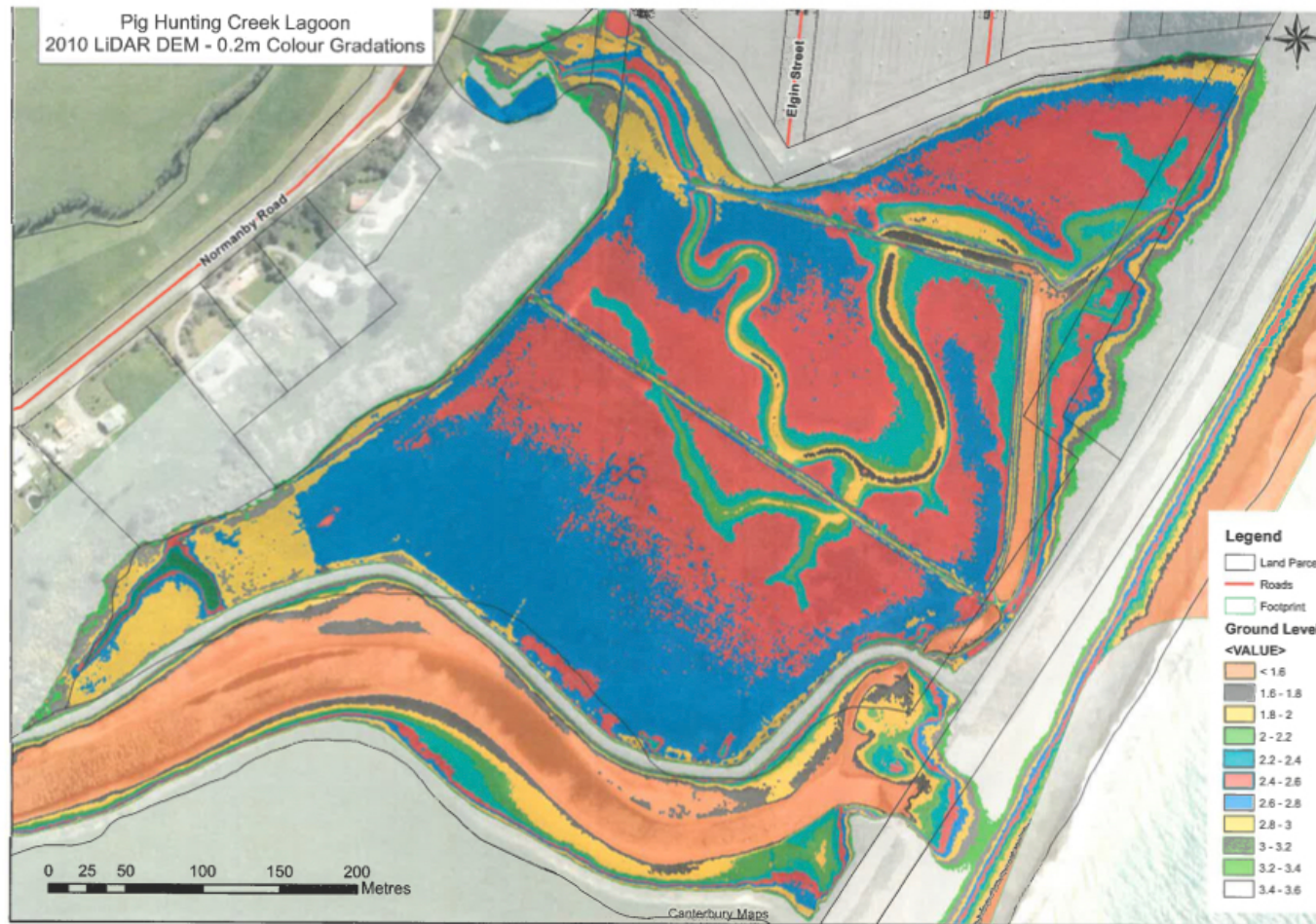
FIGURE 6



NORMANBY COASTAL WETLAND

WETLAND LEVELS

FIGURE 7



NORMANBY COASTAL WETLAND

1938 AERIAL

FIGURE 8



NORMANBY COASTAL WETLAND

1956 AERIAL

FIGURE 9



NORMANBY COASTAL WETLAND

1967 AERIAL

FIGURE 10



NORMANBY COASTAL WETLAND

1977 AERIAL

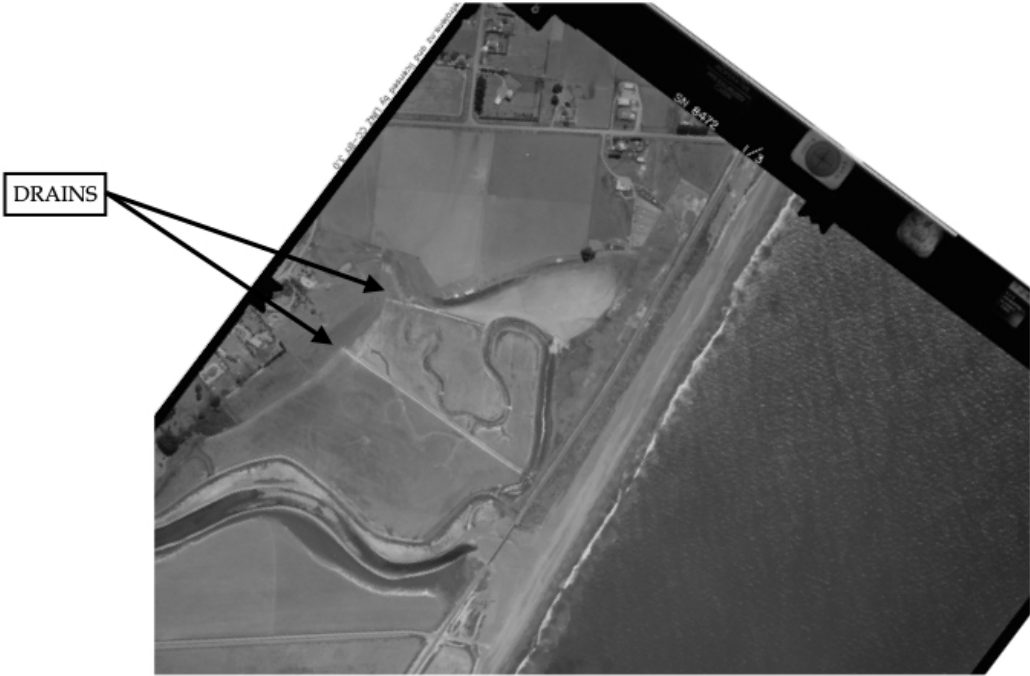
FIGURE 11



NORMANBY COASTAL WETLAND

1985 AERIAL

FIGURE 12



NORMANBY COASTAL WETLAND

1999 AERIAL

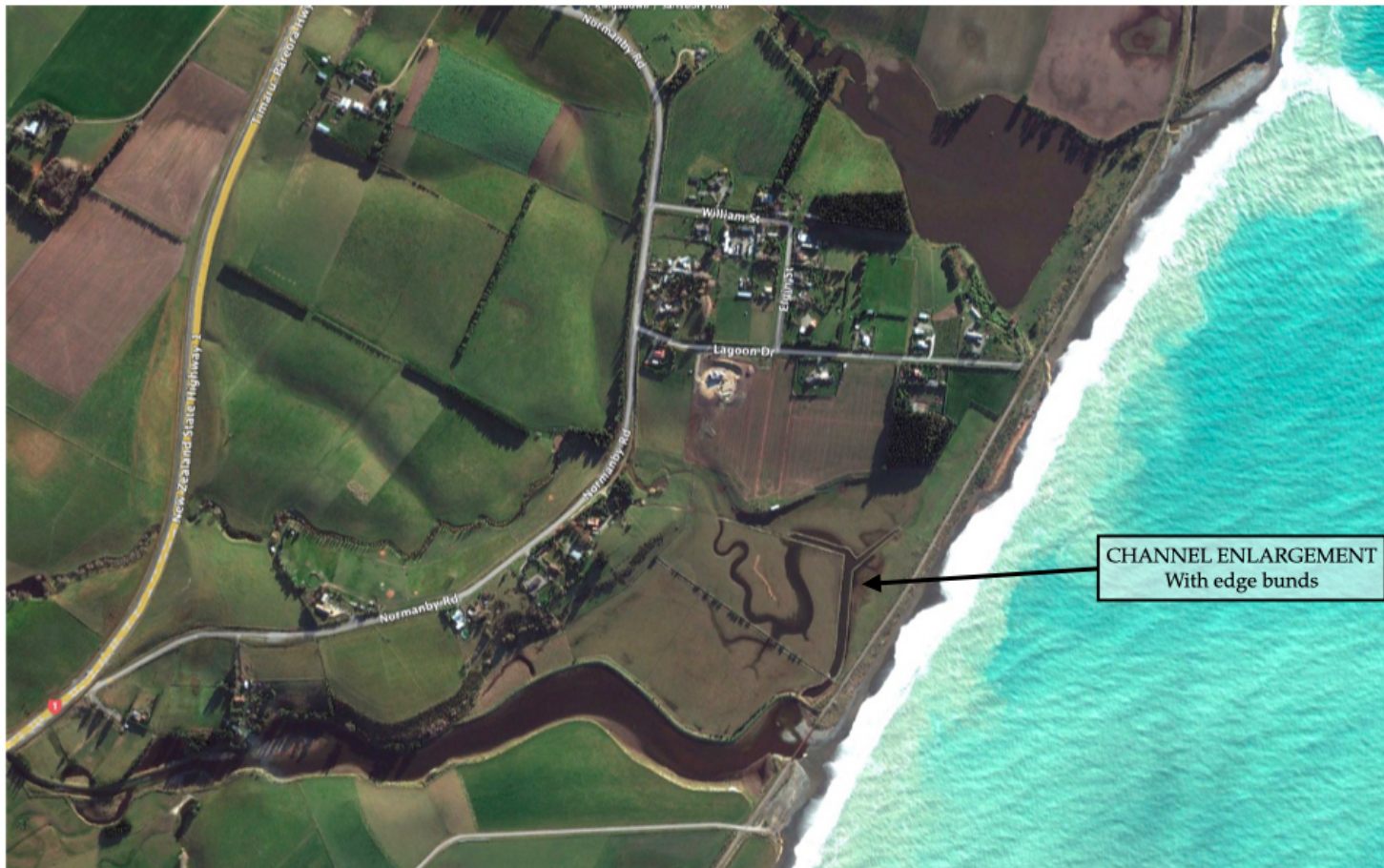
FIGURE 13



NORMANBY COASTAL WETLAND

2009 AERIAL

FIGURE 14



NORMANBY COASTAL WETLAND

2020 AERIAL

FIGURE 15



160734

*Mike Harding***ENVIRONMENTAL CONSULTANT**

PO Box 120
GERALDINE 7956
Telephone: 027-434-0184
Email: mikeharding@ihug.co.nz

23 October 2015

Joseph Gee
150 Seadown Road
Timaru 7973



Dear Joseph,

Thank you for your comments on the draft report on significant indigenous vegetation and habitat on your Normanby property.

Enclosed is the edited report. It is much the same as the draft report except for some minor editing and inclusion of an illustration of the site as mapped on Council's GIS.

These areas of indigenous vegetation and habitat are important and make a valuable contribution to ecosystem protection and fauna habitat in this part of Timaru District. Any efforts to protect and manage these areas are commendable.

Council has a Significant Natural Areas Fund which can provide assistance for the protection and management of SNAs. You may wish to consider this Fund if you plan to undertake work that helps protect these areas.

This report will now become part of the Council's records and it is expected that the SNA will eventually be listed in the District Plan during the plan review process.

Thank you for your assistance and comments. Please do not hesitate to contact me or the District Planner (03-687-7200) if you have any questions or concerns regarding this report.

Yours sincerely,

Mike Harding

cc District Planner, Timaru District Council

**TIMARU DISTRICT
SIGNIFICANT NATURAL AREAS
SURVEY**

GEE PROPERTY



Report prepared for Timaru District Council
by
Mike Harding and Mark Davis
March 2012 (edited October 2015)

TIMARU DISTRICT SIGNIFICANT NATURAL AREAS SURVEY

PROPERTY REPORT

PROPERTY DETAILS:

Owner: Joseph Gee
Valuation Reference: 24860/174.04
Address: Normanby Road, Timaru 7971.
Location:..... North of Pig Hunting Creek, South Canterbury coast.
Ecological District: Makikihi Ecological District.
TDC Land Type:..... 'Plains'
Land Environment:..... N3.1b (eastern South Island plains).

ECOLOGICAL CONTEXT:

The property covers a low-lying terrace and associated stream channels land just north of Pig Hunting Creek, on the South Canterbury coast north of Pareora. It lies in Makikihi Ecological District (McEwen, 1987) and within the N3.1b Level IV Land Environment (Leathwick *et al*, 2003). Indigenous vegetation in the N3.1b Land Environment is regarded as 'acutely threatened' (Walker *et al*, 2006).

It is likely that the original vegetation of this area was predominantly wetland vegetation adjacent to the streams, grading to coastal and/or lowland forest on higher ground. Widespread loss of indigenous vegetation in this part of Timaru District makes it difficult to determine the precise nature of the original vegetation.

The adjacent Pig Hunting Creek is an important area of open water and wetland habitat on the South Canterbury coast. It has been previously identified as a Site of Special Wildlife Interest (SSWI) and a Wetland of Ecological and Representativeness Importance (WERI). A detailed survey of indigenous fauna was not possible during this survey, though the stream and adjacent vegetation are likely to provide regionally important habitat for migratory, wading and coastal birds.

SIGNIFICANT AREAS ON THE PROPERTY:

Indigenous vegetation and habitat on the property comprises areas of sedgeland and herbfield vegetation along stream channels and adjacent to Pig Hunting Creek. This vegetation and habitat is separated by pasture with some indigenous species present.

The property was surveyed as part of the District-wide survey of Significant Natural Areas by ecologist Mark Davis during February 2012. Three areas (SNAs 95b, c and d) are regarded as Significant Natural Areas (SNAs) when assessed against the District Plan criteria.

These SNAs are illustrated on the attached aerial photograph and described in greater detail on the SNA Form in this report. Note that the boundaries of the SNAs are indicative, rather than precise. These areas meet the ecological criteria in the Timaru District Plan (criteria i-vi, pages B18-B19) and are considered to be sustainable in the long term, or sustainable with appropriate management (criterion vii, page B19). SNAs are subject to confirmation by Council after regarding the matters listed in the District Plan (pages B19-B20). It is expected that SNAs will eventually be listed in the District Plan by way of a notified plan change.

At present, consent is required from Council for clearance of areas of indigenous vegetation or habitat which meet the Interim Definitions in the District Plan. Clearance includes draining,

Timaru District Council Significant Natural Areas Report, Gee Property, October 2015.

burning, spraying with herbicides and over-planting. SNAs encompass most, but not necessarily all, areas of vegetation and habitat which meet the Interim Definitions.

To assist with the protection and management of any SNA, landowners can apply to Council for financial assistance. Any questions regarding the protection, management and use of SNAs should be directed to the District Planner.

OTHER AREAS INSPECTED ON THE PROPERTY:

Other parts of the low terrace on the property support pasture dominated by exotic grasses such as creeping bent*, crested dogstail*, sweet vernal* and salt barley grass*. Other plants among these grasses include buck's horn plantain*, white clover*, orache*, salt grass and coastal goosefoot. Herbfield communities largely occur within these paddocks, especially in central and northeast areas. These plant communities do not presently meet the significance criteria in the District Plan, though do have some ecological value and have potential for restoration.

Timaru District Council Significant Natural Areas Report, Gee Property, October 2015.



TIMARU DISTRICT SNA SURVEY

SNAs 95b, c and d

Area Name: North Pig Hunting Creek	Property: Gee	
Ecological District: Makikihi	Nearest Locality: Normanby	
95b Map Ref. (NZTM): 1460227E-5075537N	Area Size (ha): 1.35	Altitude (m): 2-3
95c Map Ref. (NZTM): 1460246E-5075335N	Area Size (ha): 0.29	Altitude (m): 2-3
95d Map Ref. (NZTM): 1459903E-5075415N	Area Size (ha): 0.28	Altitude (m): 2-3
Surveyor: Mark Davis	Survey Time: 4½ hours	Survey Date: 16-02-12

General Description:

The property lies immediately north of Pig Hunting Creek on the South Canterbury coast near Normanby. It comprises a low-lying terrace with meandering stream channels. Indigenous vegetation in the stream channels is linked to other areas of indigenous vegetation and habitat along Pig Hunting Creek by paddocks which support a mosaic of exotic pasture grasses and smaller areas of salt-tolerant native herbfield. A drainage system has reduced the extent and naturalness of low-lying areas.

Plant Communities:

Significant indigenous vegetation and habitat on the property is described below as three Significant Natural Areas (SNAs). Naturalised (exotic) species are indicated with an asterisk*.

Northern Stream Channels (SNA 95b):

This SNA comprises channels of a small unnamed creek that meanders through the property. The creek has been dammed at two points (one immediately beyond the property and one within the property) and straightened into a wide drain at its eastern end. Several other drains are connected to it, while smaller ones help drain low-lying paddocks. Herbfield is associated with the stream channel, adjacent low-lying areas and smaller low-lying areas elsewhere in the paddocks. The stream contains water for much of its length, with retoreto and duckweed on its surface.



Salt tolerant herbfield with stock trampling

Timaru District Council Significant Natural Areas Report, Gee Property, October 2015.

The herbfields are characterised by glasswort, remuremu, orache*, coastal goosefoot, salt grass, bachelor's button, *Mimulus repens*, arrow grass and less commonly *Samolus repens*, *Limosella lineata*, celery buttercup* and foxtail grass* (probably marsh foxtail*). At the time of survey much bare soil and mud was exposed among the herbfield, reflecting the effects of deer and sheep trampling but also the delay in native herb establishment following higher water levels. These herbfields often extend for about 10m beyond the stream bed before merging into grassland. Salt grass occurs among the pasture grasses, often being uncommon but occasionally in patches up to 15m across. Coastal goosefoot and orache* typically occur among the pasture grasses.

Pig Hunting Creek Margins (SNA 95c):

A small area of Pig Hunting Creek and some of its shoreline near the rail bridge are within the property. The bed was covered with water during this assessment, but during a visit in 2010 its muddy surfaces supported glasswort, *Mimulus repens*, bachelor's button, remuremu, *Samolus repens* and buck's horn plantain*. Aquatic *Ruppia megacarpa*. *Lachnagrostis littoralis* subsp. *salaria* and salt grass were present on higher margins. One plant of native spinach was observed adjacent to the railway bridge. This species is listed as 'at risk' (de Lange *et al*, 2012).

Further inland the creek margins support emerging glasswort, orache*, coastal goosefoot, bachelor's button, *Mimulus repens*, watercress* and broad dock*, which merge into creeping bent* and couch* on the stop-bank above. Native spinach is occasionally present on the upper margin.

Pig Hunting Creek Wetland (SNA 95d):

The western-most paddock contains an open water wetland among tall fescue* and creeping bent*. The wetland is broadly t-shaped with the main pond approximately 45m x 10m. The remainder of the wetland extends for about 120m as a narrow ribbon of water by a fence at the base of a scarp. The perimeter of the wetland supports a continuous but narrow zone of *Bolboschoenus caldwellii*, with less three-square and rare bachelor's button. The water is very dark and a sulphurous smell is suggestive of anaerobic conditions. Three drains are connected to the wetland and these presumably limit water levels.



*The open water wetland surrounded by *Bolboschoenus caldwellii* with some three-square*

Timaru District Council Significant Natural Areas Report, Gee Property, October 2015.

Birds/Fauna Observed:

Pied stilt, welcome swallow, banded dotterel, feral pigeon, southern black-backed gull, royal spoonbill and spur-winged plover were observed on the property during this survey. Fish are likely to be present in some waterways; possibly including threatened species such as mudfish.

Notable Flora, Fauna and Habitats:

These SNAs lie within an area where indigenous vegetation and habitat is substantially reduced, as indicated by its designation as an acutely-threatened Land Environment. Wetlands are regarded as nationally rare ecosystems. The adjacent open-water habitats of Pig Hunting Creek are listed as a Site of Special Wildlife Interest (SSWI) and a Wetland of Ecological and Representative Importance (WERI) The extent of the indigenous herbfield is notable, along with the open-water wetland and its associated sedgeland.

Notable Plant and Animal Pests:

Gorse* and broom* are common on the two main scarps within or adjacent to the property, and some elderberry* is present on the northwest scarp. Rabbit droppings were seen in several areas.

Boundaries (buffering, fencing, adjoining plant communities and habitats):

The two adjacent scarps provide some natural buffering, though they are also a potential source of woody weeds. The property is essentially perimeter fenced for the purposes of stock control. Indigenous plant communities and water bodies within the property area are not buffered from the effects of stock and farming activities.

ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

Primary Criteria	Rank	Notes
Representativeness	M	Indigenous herbfield and wetland vegetation is modified, though typical of that remaining in this part of the ecological district and moderately representative of the original vegetation.
Rarity	H	Lies in an 'acutely-threatened' land environment; wetlands are nationally rare.
Diversity and pattern	M	A moderately diverse range of vegetation, including widespread though discontinuous herbfields and an open-water wetland.
Distinctiveness/special features	M	Lies close to and is effectively part of an area of important wildlife habitat, recognised as an SSWI and WERI.
Other Criteria		
Size/shape	M/H	Relatively large areas for lowland Canterbury, though mostly narrow and poorly buffered.
Connectivity	M/H	Most wetlands are connected within the property, to the wider Pig Hunting Creek complex and are part of a chain of coastal wetlands.
Long-term Sustainability	M/H	Ecological values should persist, providing stock access is carefully managed and natural hydrological processes are maintained or restored.

H=High; M=Moderate; L=Low

Condition and Management Issues:

The condition of most of the wetlands and indigenous plant communities is generally poor except for along the lower reaches of Pig Hunting Creek. The integrity of the unnamed meandering creek and its associated wetlands has been severely compromised by artificial drainage, stock grazing, trampling and stock waste. Smaller isolated wetlands in low-lying areas have been similarly degraded by stock and drainage.

Timaru District Council Significant Natural Areas Report, Gee Property, October 2015.

It is clear that the property supported more valuable wetlands in the past, and that these have declined in extent and quality through drainage and the effects of stock. Ideally, these wetlands should be protected by excluding (or carefully managing) stock and through restoration of a natural hydrological regime. This should be done as part of a broader strategy to better protect and improve the vegetation and habitat values of the Pig Hunting Creek wetland complex. In this context the property has a pivotal role.

Final Consideration (of other matters: Section D, page B-19 of Timaru District Plan):

These areas appear too saline or wet to support permanent pasture and therefore have very limited potential for further development.

Discussion:

These areas meet the District Plan criteria for Significant Natural Areas. Though modified, they support indigenous vegetation and are relatively large. The adjacent open-water habitats of Pig Hunting Creek are listed as an SSWI and WERI. Ideally, the wetland plant communities and an adequate buffer should be securely fenced so that any grazing can be carefully managed.

References Cited

de Lange, PJ; Rolfe, JR; Champion, PD; Courtney, SP; Heenan, PB; Barkla, JW; Cameron, EK; Norton, DA; Hitchmough, RA. 2012. *Conservation status of New Zealand indigenous vascular plants, 2012*. Department of Conservation, Wellington, New Zealand. 70p.

Leathwick, J.; Wilson, G.; Rutledge, D.; Wardle, P.; Morgan, F.; Johnston, K.; McLeod, M.; Kirkpatrick, R. 2003. *Land Environments of New Zealand*. David Bateman, Auckland. 184p.

McEwen, W.M. (editor) 1987. Ecological regions and districts of New Zealand, third revised edition (Sheet 4). *New Zealand Biological Resources Centre Publication No.5*. Department of Conservation, Wellington, 1987.

Walker, S.; Price, R.; Rutledge, D.; Stephens, R.T.T.; Lee, W.G. 2006. Recent loss of indigenous cover in New Zealand. *NZ Journal of Ecology* 30: 169-177.

Scientific names of species cited by common name in this report	
<i>(Note: this is not a complete species list; it is a list only of species cited by common name in this report)</i>	
Common Name	Scientific name
(* = naturalised species)	
arrow grass	<i>Triglochin striatum</i>
bachelor's button	<i>Cotula coronopifolia</i>
broad-leaved dock*	<i>Rumex obtusifolius</i>
broom*	<i>Cytisus scoparius</i>
buck's horn plantain*	<i>Plantago coronopus</i>
coastal goosefoot	<i>Chenopodium glaucum</i> ssp. <i>ambiguum</i>
couch*	<i>Elytrigia repens</i>
creeping bent*	<i>Agrostis stolonifera</i>
crested dogtail*	<i>Cynosurus cristatus</i>
duckweed	<i>Lemna minor</i>
elderberry*	<i>Sambucus nigra</i>
glasswort	<i>Sarcocornia quinquefolia</i>
gorse*	<i>Ulex europaeus</i>
marsh foxtail*	<i>Alepecurus geniculatus</i>
native spinach	<i>Tetragonia trigyna</i>
orache*	<i>Atriplex patula</i>
remuremu	<i>Selliera radicans</i>
retoreto	<i>Azolla filiculoides</i>
salt barley grass*	<i>Critesion maritimum</i>
salt grass	<i>Puccinellia stricta</i>
sweet vernal*	<i>Anthoxanthum odoratum</i>
tall fescue*	<i>Schedonorus pboenix</i>
three-square	<i>Schoenoplectus pungens</i>
watercress*	<i>Rorippa microphylla</i>

Timaru District Council Significant Natural Areas Report, Gee Property, October 2015.

Application for funding - Zone Committee Action Plan Budget 2023/24

Applicant details

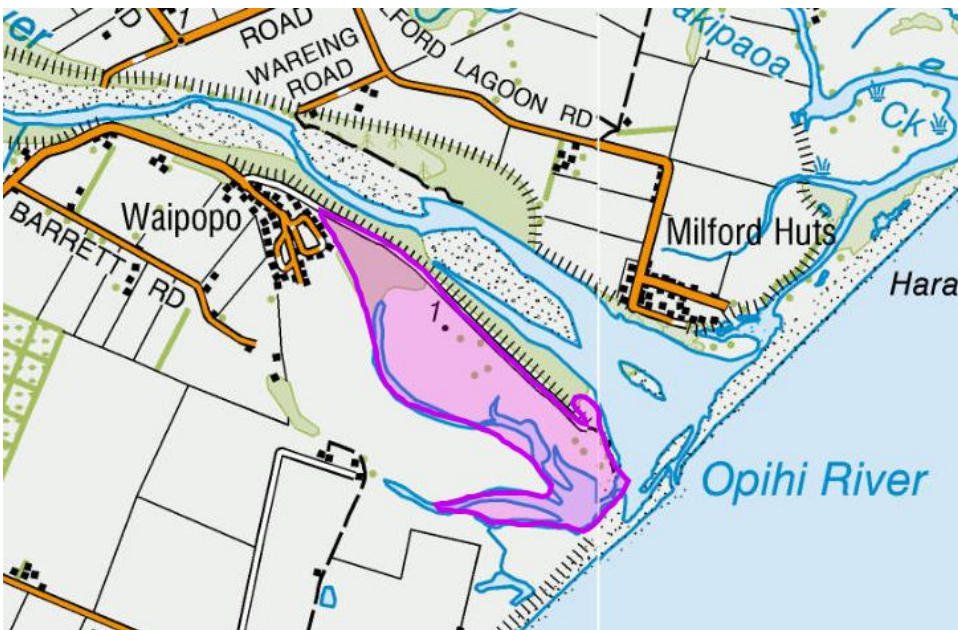
Organisation (if applicable):	Te Kete Tipuranga O Huirapa Ltd. (Arowhenua Native Nursery)
Contact name:	Felicity McMillan
Contact email:	Felicity.mcmillan@ngaithau.iwi.nz
Contact phone number:	027 320 8632

About your project

The amount of information and detail we would like you to provide is in proportion to the amount of funding you are requesting. If it is smaller amount, then a simple description of your project, who's involved and what you will be doing, along with a simple budget is sufficient.

Project name:	<i>Opihi Lagoon</i>
CWMS zone where the activity will occur:	<i>OTOP</i>
Provide a brief project summary:	
<p><i>The Opihi lagoon is a large and significant wetland located on the south side of the Opihi River mouth. It has high ecological and cultural value. The Opihi lagoon is also classified as a 'High naturalness waterbody' in section 4.5.4 of the OTOP ZIPA. The wetland has received significant investment over the last four years as its values are threatened by weed encroachment, vehicle damage and predation of birds. In this time:</i></p> <ul style="list-style-type: none"> <i>- Commissioned and received a site-specific restoration plan;</i> <i>- Over 51,000 native plants have been planted to enhance biodiversity values.</i> <i>- Vehicles have been excluded from the wetland as they were causing significant damage.</i> <i>- Access to the wetland has been improved.</i> <i>- Extensive and consistent weed control has been carried out over 9 ha to protect the ecological values of the wetland.</i> <i>- Willow trees have been removed from wetland areas.</i> <i>- Pest control is carried out in the wetland.</i> <p><i>Existing funding for this work has come to an end. Funding is sought to provide maintenance of the plantings that have been planted in the dryland areas.</i></p>	
Describe the outcomes or impacts of this project:	
<p><i>Outcomes or impacts are what will change or who will benefit from this work, including enduring benefits. For example, fencing off springheads will improve biodiversity and improve stream health.</i></p>	

<p>Funding sought will cement the gains made over the last four years and ensure that the cultural and ecological significance of the lagoon is protected.</p>
<p>List the key outputs of the project: <i>An output describes what your group is proposing to do and is measurable. For example, install 250 m of fencing, or train 25 volunteers. Outputs are important and may be used as milestones in a funding agreement.</i></p>
<p>Funding is sought for two rounds of plant maintenance in the dryland area plantings. This will allow for good plant growth and suppress woody weeds which will otherwise dominate the plantings.</p> <p>It is estimated that each round of plant maintenance will take a five person crew four days.</p>
<p>Please state how the project aligns with the relevant Zone Committee's 2021-24 Action Plan: <i>All action plans can be found as a link at the bottom of the "What's happening in my zone" page on the Environment Canterbury website. (https://www.ecan.govt.nz/your-region/your-environment/water/whats-happening-in-my-water-zone/)</i></p>
<p>This project aligns strongly with the Zone Committee's Action plan to protect and enhance:</p> <ul style="list-style-type: none"> - Mahinga kai - Indigenous biodiversity - Riparian management - Protection and enhancement of wetlands <p>It also aligns with the OTOP ZIPA recommendation 4.5.9.x</p> <p>'projects that contribute to the protection and enhancement of the following areas are prioritised for funding and resources in the zone, including funding allocated under the Immediate Steps Programme:</p> <ol style="list-style-type: none"> a. Coastal... lagoons to support indigenous biodiversity and over time provide a biodiversity corridor: c. protection and enhancement of braided river habitat (the Opihi lagoon is a part of the braided Opihi River); d. opportunities to protect high value species, sites or habitats in the zone...
<p>Tell us what activities you're intending to do and when you intend to have the project completed (timeline):</p>
<p>Funding is sought to maintain the dryland plantings at the Opihi Lagoon in the 24/25 financial year. Options are being explored to carry on with the restoration and enhancement of the site in subsequent years.</p>
<p>Tell us about the project management, including leadership and financial oversight:</p>
<p>Project management, leadership and financial oversight will be carried out by Te Kete Tipuranga O Huirapa Ltd (Arowhenua Native Nursery) who are experienced in the ecological restoration of sites like this one.</p>

List any other groups or organisations you are partnering with on this project, such as community groups, schools etc:	
Work to date on this site has been funded by Land information New Zealand and managed by the Department of Conservation. The project has also been supported by Te Kete Tipuranga O Huirapa Ltd (Arowhenua Native Nursery) and Environment Canterbury.	
How will you engage the community on the project:	
This is a publicly accessible site and the enhancement for recreational and education purposes where they do not conflict with the goals of the project is a possibility in the future.	
Do you know of any cultural values associated with this site?:	YES
If yes, what engagement has occurred or is planned (if any) with local Papatipu Rūnanga about this project?:	
Protection and restoration of this site has been driven by Arowhenua Rūnaka.	
Please provide an accurate location with grid reference and/or map (if relevant to your project):	
 <p>The map shows a pink-shaded project area situated between Waipopo and Milford Huts. Key roads include Barrett Rd, Wareing Road, and Ford Lagoon Rd. The Opihi River is visible to the east, and the area is bounded by a fence line. A pink arrow points to the project area.</p>	
Project area shown in pink.	
Who owns the land?:	

<i>Attach evidence of permission from the landowner, or their representative.</i>
The project area is unallocated Crown land. At this stage verbal agreement has been provided by Land Information New Zealand and a formal management agreement is being worked through.

Funding details

Please attach a budget to your application if one has been prepared. Your budget should include estimates of income and expenditure, including other funding and in-kind contributions. You should show clearly what you are planning to spend the Action Plan funds on if successful. We would like more detail if your application is for a larger amount

How much funding are you requesting?	\$12,000
If you are successful with this application, what components of your project will you spend the money on?*	
<i>If you have a project budget, please attach it to your application.</i>	
This funding will be spent on two rounds of plant maintenance. Each round will take four days to work through. The cost for this is \$1,500 per day including all the necessary herbicides and equipment.	
Have you applied to or received funding from other organisations for this project?:	No (for the 24/25 FY)
If yes, please provide details below or note if it is included in your attached budget.	
Is the project receiving any other monetary or “in-kind” contributions from your organisation or others e.g. manpower, use of resources, facilities and equipment?	YES
If yes, please provide details below:	
Predator trapping is currently being undertaken by our trapping team on a 30day cycle	

Working with us and Environment Canterbury

In the last three years have you received funding or other support from Environment Canterbury for this, or any other project?*	NO
If yes, what was the funding/support for, and when did you receive it?:	
No funding from Environment Canterbury has been received for this project.	

<p>Are you intending on applying to another Environment Canterbury fund this financial year for this, or any other project?</p> <p>If yes, what fund are you applying to?</p>	<p>NO</p>

Additional information

Do you have supporting information you would like to provide (optional)?:

Please attach any supporting information with your application.



Figure 1: Planting carried out. Red is 2021, green is 2022, pink is 2023 and yellow is 2024.



Figure two: Area of wetland with extensive vehicle damage with harakeke, pukio (*Carex secta*) and salt marsh ribbonwood (*Plagianthus divaricatus*) planted in June 2023.



Figure three: Penny Lane in an area that used to be a very deep hole in the track. Newly placed boulders on right. Note that the trees on the right have now been removed.

**Once completed, please send this application form to
dave.moore@ecan.govt.nz**

Application for funding - Zone Committee Action Plan Budget 2023/24

Applicant details

Organisation (if applicable):	Te Kopi-O-Te Opihi (Burkes Pass) Wetland and Riparian Restoration
Contact names:	Jane Batchelor
Contact email:	██
Contact phone numbers:	██████████

About your project

The amount of information and detail we would like you to provide is in proportion to the amount of funding you are requesting. If it is smaller amount, then a simple description of your project, who's involved and what you will be doing, along with a simple budget is sufficient.

Project name:	<i>Te Kopi-O-Te Opihi (Burkes Pass) Wetland and Riparian Restoration</i>
CWMS zone where the activity will occur:	<i>OTOP</i>
Provide a brief project summary:	
<p><i>The group comprises a partnership of the owners of Headley Greene Farm, the Burkes Pass Heritage Trust (registered charitable trust CC21800) and Arowhenua Native Nursery/ Te Kete Tipuranga o Huirapa Ltd. This is a long-term demonstration conservation project to be completed in stages to restore a segment of the upper Opihi River close to the source of the river at Burkes Pass township in conjunction with a public walking track so that the results can be seen, used for educational purposes for training volunteers, students in the Arowhenua Nursery program, local schools and property owners. The plan is to extend eco-sourced plantings 1 km along the Opihi riverbanks up to the northern boundary of Headley Greene Farm to connect the existing plantings from 35 years and continue the removal of the crack willow infestation along the Opihi River, rabbit proof fence the boundary with Aires Station and stock proofing with Headley Greene Farm.</i></p>	

This funding request is for the cost of plants and labour for stage 2. The area for stage two has recently been cleared, ready for planting.

Describe the outcomes or impacts of this project:

Outcomes or impacts are what will change or who will benefit from this work, including enduring benefits. For example, fencing off springheads will improve biodiversity and improve stream health.

- 1). To restore the natural ecosystem of the riparian zones, create habitat for birds and other native species, remedy degradation caused by stock, and increase the natural character of the area and integrate this into the pastoral farm environment.
- 2). To commence water quality testing to establish a baseline, increase knowledge of local water quality indicators and then retest on a regular basis to determine if and how restoration can improve that water quality.
- 3). To enhance public awareness of the environment of Te Kopi-o-Te Opihi, Burkes Pass and to work alongside Arowhenua to understand its history, use as a major travel route and food gathering areas on multiple similar wetland and riparian areas on farms and small holdings. This has huge potential to create green corridors for wildlife and also improve water quality in our catchment area.
- 4). To extend predator control along the river to ensure the biodiversity of wildlife is not compromised.
- 5). To create a public walking track to enable the local and wider community and visitors including children to experience local maturing native bush and listen to native birds and wildlife in their natural habitat and extend this experience along the banks of the main Opihi River.
- 6). To collaborate with different segments of the community and Arowhenua in this project with open days and working bees.
- 7). To remove weed species particularly crack willow along the river.
- 8). To create new plantings every year.
- 9). To upgrade the fences as the budget allows, for stock proofing and rabbit incursion.
- 10). To create photo survey points and also trial regular drone footage.

List the key outputs of the project:

An output describes what your group is proposing to do and is measurable. For example, install 250 m of fencing, or train 25 volunteers. Outputs are important and may be used as milestones in a funding agreement.

Project Outputs:

1. Increased community awareness and understanding of the importance of riparian zones and the benefits of native vegetation.
2. Water quality testing will be commenced.
3. A loop track extension and continuous planting of the Heritage walk is also planned to allow walkers to go through the existing bush and follow along the western bank of the Opihi. It would rejoin the existing Heritage Walk along the legal road access to the western side of the road verge.
4. Improved riparian zones in the project area will positively impact local ecosystems and biodiversity.
5. Increased collaboration between Arowhenua Native Nursery, agencies, the community, and schools in environmental conservation efforts.
6. Removal of slash from the berm of the Upper Opihi river, by shredding existing piles of downed willow.
7. Predator control will be extended from the existing trap line in Batchelor's Bush that is registered with the New Zealand Predator free website.
8. Fencing will be installed or upgraded in stages to be stock and rabbit proof along either side of the project for 2 km.

Please state how the project aligns with the relevant Zone Committee's 2021-24 Action Plan:

All action plans can be found as a link at the bottom of the "[What's happening in my zone](https://www.ecan.govt.nz/your-region/your-environment/water/whats-happening-in-my-water-zone/)" page on the Environment Canterbury website. (<https://www.ecan.govt.nz/your-region/your-environment/water/whats-happening-in-my-water-zone/>)

The proposed funding request aligns with the identified Actions in the OTOP 2021-2024 Action Plan.

To achieve a commitment to enhance Nohoanga, and to improve the health of key waterways for customary use, and enhance mahinga kai opportunities, it is important to gain insight into cultural values and areas of significance relating to mahinga kai. This can be achieved by engaging with local iwi, hapū, and other cultural practitioners to understand their knowledge and practices pertaining to mahinga kai. This understanding can inform the development of restoration and management plans that are culturally responsive and respect the values and practices of the local community.

In addition to engaging with local iwi and hapū, engaging with schools and youth is important to illustrate the importance of mahinga kai and the local history. This can be achieved through educational programs and workshops that provide opportunities for students to learn about the area's history, the importance of mahinga kai to local communities, and the ecological and cultural significance of waterways and other natural resources.

Tell us what activities you're intending to do and when you intend to have the project completed (timeline):

<p>Project Timeline:2023 - 2024</p> <p>Phase 1: Planning (completed)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Consultation with agencies and the community to identify suitable ways to process the slash on the berm of the river. <input type="checkbox"/> Develop a project plan and finalise the project budget. <input type="checkbox"/> Engage a qualified contractor to handle the slash. <input type="checkbox"/> Review the fencing requirements of the project. <p>Phase 2: Preparation (4-6 months - partially completed)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Mulch the slash - 2 slash piles in stage 1 completed, (3 more to go in stage 2), do what we can within budget. <input type="checkbox"/> Identify planting zones within the project. <input type="checkbox"/> Plan and organise planting events. <input type="checkbox"/> Deliver the proposed fencing within the budget, combined with maintenance and placement of mulch. <input type="checkbox"/> Start water quality testing. <p>Phase 3: Implementation (6 months)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Deliver the planting days, combined with maintenance and placement of mulch. <input type="checkbox"/> Deliver the proposed fencing within the budget. <input type="checkbox"/> Community outreach. <input type="checkbox"/> Establish photo points. <p>Phase 4: Monitoring and Evaluation (8 months)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Monitor the success of the project. <input type="checkbox"/> Evaluate the impact and enhancement of the riparian zone. <input type="checkbox"/> Seek community feedback, along with stakeholders and other interested parties.
<p>Tell us about the project management, including leadership and financial oversight:</p>
<p>The Burkes Pass Heritage Trust (BPHT) has a history of community involvement with heritage building restoration, community events, the development of the Heritage Walk opened in 2015 with interpretation along the way and a version for children as well. Eco-sourced native planting along the highway road reserve and walk has been progressively underway since 2004. A collaborative partnership has developed with Te Kete Tipuranga o Huirapa Ltd, (a company owned by Te Runanga o Arowhenua), which operates Arowhenua Native Nursery which will be involved in the project bringing a specialist knowledge in the conservation and restoration and project management fields. BPHT is a registered charitable trust CC21800 and finances for the project will be managed through the BPHT Opihi project bank account. The accounts are entered on the Charities Services website annually giving public accountability and oversight.</p>
<p>List any other groups or organisations you are partnering with on this project, such as community groups, schools etc:</p>
<p>We envisage utilizing team members from Arowhenua Native Nursery along with team members from Te Kete Tipuranga o Huirapa restoration and trapping, along with various biodiversity and conservation groups from within the Te Manahuna area, also engaging with members of the Fairlie community, along with stakeholders and other interested</p>

<p>parties. Volunteers from the Burkes Pass Heritage Trust are already engaged along with the friends of Batchelor's Bush.</p>	
<p>How will you engage the community on the project:</p>	
<p>In addition to the above, educational signage will be erected informing the public of the site's purpose and how they can engage with it. In addition to the educational signage and content creation, there are several ways the community can be engaged with these conservation projects. Some suggestions include:</p> <ol style="list-style-type: none"> 1. Community involvement: Encouraging community involvement in planning and implementing conservation projects can create a sense of ownership and responsibility for the project's success. This can be achieved through community consultations, workshops, and meetings. 2. Volunteer opportunities: Providing volunteer opportunities for community members to participate in this conservation project can increase engagement and provide a sense of pride and accomplishment. This can be achieved by setting up regular volunteer days or events where community members can help with planting, weeding, and other activities. 3. Social media: Leveraging social media platforms to share project updates, photos, and educational content can help to increase community awareness and engagement. This also allows community members to ask questions and share their thoughts and feedback about the project. 4. Involvement of Arowhenua Native Nursery in the project will enable the project to be promoted through the nursery's community outreach program. 5. Using the Burkes Pass Heritage Trust to promote the wider appreciation of the project through newsletters, web site and other media. 	
<p>Do you know of any cultural values associated with this site?:</p> <p>If yes, what engagement has occurred or is planned (if any) with local Papatipu Rūnanga about this project?:</p>	<p>Yes</p>

The engagement with local Papatipu Rūnanga (Māori ancestral groups) in relation to the mentioned project seems to be extensive and collaborative. Te Runanga o Arowhenua, through its subsidiary company Te Kete Tipuranga o Huirapa, is actively involved in various initiatives aimed at enhancing the Opihi River and its surroundings.

Te Kete Tipuranga o Huirapa operates the Arowhenua Native Nursery, which plays a crucial role in growing plants for the Opihi lagoon restoration project, Te ana Rock Art site, a Peka peka roosting site at Pleasant point. This involvement demonstrates a commitment to environmental stewardship and restoration efforts in the area. By growing plants specific to the Opihi River ecosystem, they are actively contributing to the preservation and improvement of the river's health.

Additionally, Te Kete Tipuranga o Huirapa's Restoration and Trapping division is likely engaged in activities related to habitat restoration and pest control, ensuring the protection and conservation of native flora and fauna along the Opihi River.

The partnership between Burkes Pass Heritage and Te Kete Tipuranga o Huirapa further strengthens the collaborative efforts in enhancing the Te Opihi awa (river). Both parties share a common vision to develop and conserve the area, recognizing the cultural significance of the headwaters as a gateway to Te Manahuna and traditional Mahinga Kai sites. This shared vision likely includes the preservation of cultural heritage, ecological restoration, and sustainable land management practices.

The concept of local Papatipu Rūnanga is essential in New Zealand's governance framework. Papatipu Rūnanga are Māori tribal councils or organizations that represent the interests and aspirations of their respective iwi (tribes) or hapū (sub-tribes). They have a unique relationship with their ancestral lands and waters, embodying traditional knowledge, cultural values, and customary practices.

Engaging with local Papatipu Rūnanga is crucial when undertaking projects that impact or involve Māori ancestral lands and waters. Such engagement ensures that the voices, perspectives, and aspirations of the indigenous communities are acknowledged and incorporated into decision-making processes. It also helps foster a collaborative and respectful approach to land and resource management, recognizing the cultural, spiritual, and environmental values held by Papatipu Rūnanga.

It is evident that Te Runanga o Arowhenua, through Te Kete Tipuranga o Huirapa, is actively involved in initiatives aligned with the values and aspirations of the Papatipu Rūnanga. This suggests an ongoing and meaningful engagement ensures the project's success while respecting the cultural significance and knowledge associated with the Te Kopi-O-Te Opihi restoration.

Please provide an accurate location with grid reference and/or map (if relevant to your project):
E1412742 N5116101
Who owns the land?: <i>Attach evidence of permission from the landowner, or their representative.</i>
The project area in the riparian zone of the Opihi River and walking track is largely unformed legal road and administered by the Mackenzie District Council who after consulting with neighbouring land owners have given permission for this project to occur. The access route through Batchelors Bush has permission from the owners of Headley Greene farm(see attached letter) who are planning an easement with Herenga O Nuku for the long term.

Funding details

Please attach a budget to your application if one has been prepared. Your budget should include estimates of income and expenditure, including other funding and in-kind contributions. You should show clearly what you are planning to spend the Action Plan funds on if successful. We would like more detail if your application is for a larger amount e.g. example? We have some example budgets for different types and sizes of projects in our resource pack. These will show you what we are expecting you to provide.

How much funding are you requesting?	\$15,200
If you are successful with this application, what components of your project will you spend the money on? <i>If you have a project budget, please attach it to your application.</i>	
Planting stage 2: <ul style="list-style-type: none"> • Purchase of plants (grasses, flaxes, shrubs and trees) and plant protectors \$10,200. • Contracting labour (Restoration team of 10 from Arowhenua for 2.5 days to help our volunteers) \$5,000 	

<p>Have you applied to or received funding from other organisations for this project?:</p> <p>If yes, please provide details below or note if it is included in your attached budget.</p>	<p>No</p>
<p>March 2024 – Grant from the Community Trust of Mid and South Canterbury grant to clear the three remaining log piles and make ready the stage 2 planting area for this year's planting.</p>	
<p>Is the project receiving any other monetary or “in-kind” contributions from your organisation or others e.g. manpower, use of resources, facilities and equipment?</p> <p>If yes, please provide details below:</p>	<p>Yes</p>
<p>Substantial in-kind voluntary labour – approximately 3,000 hours from 2020 to 2023.</p>	

Working with us and Environment Canterbury

<p>In the last three years have you received funding or other support from Environment Canterbury for this, or any other project?*</p> <p>If yes, what was the funding/support for, and when did you receive it?:</p>	<p>Yes</p>
<p>\$13,844.00; Environment Canterbury, Te Kopi-O-Te Opihi restoration; Contract number 1039. June 2022</p> <p>\$5728.60; Environment Canterbury, Te Kopi-o Te Opihi restoration; Contract number 1191-112. July 2023</p> <p>\$12,340 for Supplementary planting of stage 1 & 2 and release and mulching of stage 0 & 1. March 2024.</p>	
<p>Are you intending on applying to another Environment Canterbury fund this financial year for this, or any other project?</p> <p>If yes, what fund are you applying to?</p>	<p>NO</p>

Additional information

Do you have supporting information you would like to provide (optional)?:

Please attach any supporting information with your application.

**Once completed, please send this application form to
dave.moore@ecan.govt.nz**

10 Consideration of Urgent Business Items

11 Consideration of Minor Nature Matters

12 Closing Karakia