



Co-Governance is the korowai of
kaitiakitanga over Te Waihora and its catchment

AGENDA|**2021**





Co-Governance is the korowai of kaitiakitanga over
Te Waihora and its catchment

THE 45th HUI OF
TE WAIHORA CO-GOVERNANCE GROUP
WILL BE HELD ON

FRIDAY 12 March 2021

COMMENCING AT 2.00 PM

VENUE

**Hao Room at Te Hāpua: Halswell Centre,
341 Halswell Road, Christchurch.**

MEMBERSHIP

Co-Chairpersons

**Te Rūnanga o Ngāi Tahu
Environment Canterbury
Selwyn District Council
Christchurch City Council
Te Papa Atawhai, Department of Conservation**

**Lisa Tumahai
Cr Jenny Hughey
Liz Brown
Cr Craig Pauling
Mayor Sam Broughton
Cr Pauline Cotter
Nicola Toki**

The hui will be open to the public.

ORDER PAPER

	Mihi Whakatau (2 pm)		page
1	Apologies	Chair	
2	Declaration of conflicts of interest <ul style="list-style-type: none"> Review and update register of interests 	<i>Chair</i>	1
3	Record from last hui (2.05 pm) 4 December 2020	<i>Chair</i>	2
4	Matters arising from minutes (2.05 pm)	<i>Chair</i>	
5	Strategic items (2.10 pm) 5.1 Revision of Co-Governance Agreement – verbal update (reference target 1.2) 5.2 Review of Co-Governance Strategy (reference target 1.1) 5.3 Te Waihora indicator framework wānanga (reference target 3.1) 5.4 Whakakōhanga Kōrero – verbal update (reference target 5.1) 5.5 Funding landscape update – <i>for information</i> (reference target 4.1) 5.6 Refreshing the website (reference targets 1.3, 1.4) 5.7 Council Long-Term Plans 2021-31 5.8 Risk register and report – <i>for information</i> (reference target 8.3) 5.9 Co-Governance Strategy Action Plan update – <i>for information</i> (reference target 1.1)	<i>JOG</i>	 5 15 29 37 40 43 48 50
6	Operational Updates (3.40 pm) 6.1 Whakaora Te Waihora (including Whakaora Te Ahuriri and Whakaora Te Waikēkēwai) (reference target 6.2)	<i>JOG</i>	51
7	Other matters	<i>Chair</i>	
8	Close of hui		

Te Waihora Co-Governance Group

Declaration of Interests Register

Keeping a Declarations of Interest Register allows Co-Governors to identify and manage a conflict of interest when it arises.

The Office of the Auditor General notes a conflict of interest can arise when: “A member’s or official’s duties or responsibilities to a public entity could be affected by some other interest or duty that the member or official may have.”¹

If a member is in any doubt as to whether or not they have a conflict of interest, then the member should seek appropriate legal guidance and/or refer to the following guidance: <https://www.oag.govt.nz/2010/lamia>

NOTE: Co-governors will be asked to advise the Committee Advisor of any relevant information for inclusion or amendment in the Register at each meeting to ensure information remains accurate and complete. The correctness of the Register will be confirmed at each meeting.

Name	Interests (at 4 December 2021)
Broughton, Mayor Sam	
Brown, Liz	Taumutu Rūnanga – registered as an interested party
Cotter, Cr Pauline	
Hughey, Cr Jenny	Co-Chair, Community Law Centres, Aotūroa Director, Good Practice Group Limited
Pauling, Cr Craig	Osborne Stream Working Party Living Water project Co-Chair of Te Ara Kākāriki
Toki, Nicola	Member of Living Water Steering Group
Tumahai, Lisa	

¹ Office of the Auditor General Good Practice Guide – Managing Conflicts of Interest: Guidance for public entities

Notes from the 44th meeting of Te Waihora Co-Governance Group hui Friday 4 December 2020 at 1.00 pm

Present:

Te Rūnanga o Ngāi Tahu	Liz Brown (Co-Chairperson)
Environment Canterbury	Cr Jenny Hughey (Co-Chairperson) Cr Craig Pauling
Christchurch City Council	Cr Pauline Cotter
Department of Conservation, Te Papa Atawhai	Nicola Toki
Selwyn District Council	Deputy Mayor Malcolm Lyall
In Attendance:	
Te Rūnanga o Ngāi Tahu	Trudy Heath (General Manager, Te Ao Turoa)
Environment Canterbury	Stefanie Rixecker (Chief Executive) Tim Davie (Director of Science) David Perenara-O'Connell (Senior Strategy Manager) Adrienne Lomax (Senior Strategy Advisor) David Murphy (Programme Implementation Manager, Whakaora Te Waihora) Annabel Butler (Programme Assistant) Miria Goodwin (Zone Facilitator Selwyn Waihora Zone) Louise McDonald (Senior Committee Advisor)
Selwyn District Council	Murray Washington (Group Manager Infrastructure)
Christchurch City Council	Diane Shelander
Selwyn Waihora Zone Committee	Cr Nicole Reid (SDC) Co-Chair Fiona Robertson

Mihi Whakatau

Co-Chair, Jenny Hughey opened the hui at 1.00 pm and welcomed everyone to the first hui open to the public.

Noting that there was not a quorum it was agreed that this hui would not be considered as a meeting under the terms of the Local Government Official Meetings Act but would go ahead as a workshop. Any decisions required will be confirmed at the next meeting.

Cr Pauling provided a karakia.

Apology

An apology was received and accepted from Mayor Broughton.

1. **Conflicts of Interest**

No conflicts of interest were declared, and members were asked to send any updates to the secretariat.

3. **Record of the meeting hui held on 11 September 2020**

Refer pages 5-9 of the agenda

The minutes from the meeting held on 11 September 2020 were noted and no corrections made.

4. **Matters arising**

Nil.

5. **Strategic Items**

5.1 **Te Waihora Co-Governance Group Agreement**

Refer pages 10- 31 of the agenda

Nicola Toki reported that the principles of the revised draft Te Waihora Co-Governance Agreement had been discussed with the Department of Conservation's head office, but not yet the most recent draft document. Due to the current legislation, the earlier draft agreement cannot be supported but the Department was keen to progress this, although it was unable to endorse it at this time.

The Joint Officials' Group were thanked for their work on the revised agreement and it was agreed to consider its endorsement at the next hui.

Murray Washington confirmed that work can continue under the current agreement.

5.2 **Funding Landscape**

Refer pages 32-36 of the agenda

Trudy Heath and Tim Davie presented this report.

There was a discussion about how to bring the programmes and projects described in the report together. It was noted that as part of its overarching vision the Co-Governance Group should acknowledge the parties, provide leadership, and bring it all together.

The future funding opportunities were reviewed, and it was agreed that accessing funding sources needs to continue including accessing funds from the Central Plains Water environmental management fund, and Jobs for Nature.

There was support for picking up the work following the Nigel Bradley report.

5.3 **Co-Governance Risk Register and Report**

Refer page 37 - 44 of the agenda

The Risk Register and Report were noted.

6. **Operational Updates**

6.1 **Whakaora Te Waihora Progress Report**

Refer pages 45-67 of the agenda

The report was tabled for information. David Murphy also reported that three talks on the Whakaora Te Ahuriri project were presented at the recent joint conference of the New Zealand Freshwater Sciences Society, the New Zealand Hydrological Society, and the Engineering New Zealand/Water NZ Rivers Group”

Next Meeting

March 2021 – venue to be confirmed.

Closing karakia

Cr Pauling gave a closing karakia, and the meeting closed at 1.58pm.

Te Waihora Co-Governance Group

Date of meeting	12 March 2021
Agenda item	5.2
Author	Tim Davie / Adrienne Lomax

Review of the Co-Governance Strategy

Te whāinga / Purpose

1. Co-Governors are asked to provide feedback on a refreshed Co-Governance Strategy and work programme for the next three years.

Ngā hononga / Value proposition

2. Effective Co-Governance is the means to achieve the vision for the restoration of the mana, mauri and ecosystem health of Te Waihora.

Ngā tūtohutanga / Recommendations

That the Te Waihora Co-Governance Group:

1. provide feedback and input on the updated vision statement, commitments and work programme
2. agree that a refreshed Strategy and work programme come to the next Co-Governance hui for adoption.

He kupu whakataki / Background

1. Following a series of workshops and meetings in 2017/18, a Co-Governance Strategy and Action Plan (attachment 1) was adopted by the Co-Governors. It reflected the wish to be more strategic and future focused, and to raise the profile of co-governance.
2. The resulting Strategy set out a vision for co-governance and a set of commitments, based on the conversations at those workshops. The Action Plan set out targets and actions for the Co-Governors and Joint Officials to achieve more effective co-governance.
3. The period of this Action Plan is 2018- 21. While the purpose and focus of the Co-Governors has remained largely the same, it is timely to review the Strategy and Action Plan and to refresh both in the first half of 2021. A summary report of what has been achieved in the first three years of the Action Plan 2018-21 will be provided by Joint Officials later in 2021.

Updating the strategy and action plan

4. As noted, the Strategy and Action Plan was adopted in June 2018. It was intended to advance the vision for the restoration of the mauri and ecosystem health of Te Waihora agreed in 2011. With the elevation of the concept of 'Te Mana o te Wai, through the Government's Essential Freshwater package and the National Policy Statement for Freshwater Management, it is proposed to add 'mana' to the vision:

The restoration of the mana, mauri and ecosystem health of Te Waihora and its catchment

5. Co-Governance is the means to achieve that vision and to build relationships, contribute to decision making and seek future investment.
6. To clarify the purpose of co-governance, it is proposed to rename the Co-Governance 'vision' as the mission statement. The vision for Te Waihora will be the guiding statement and provide a clear focal point for all those contributing to restoration across the catchment.
7. The work of the Co-Governors will be guided by their mission statement – *to be the korowai of kaitiakitanga over Te Waihora and its catchment* – with a clear focus on how effective co-governance can advance the vision for the restoration of the mana, mauri and ecosystem health of Te Waihora.

Commitments

8. The Co-Governors are asked to review the eight commitments of the Co-Governance Strategy, with a recommendation that the number is reduced to five commitments (combining 1 (largely achieved), 2 and 7, and combining 3 and 5):
 - **Set strategic direction and priorities**
for all those working to restore the mauri of Te Waihora, ki uta ki tai, and to promote integration and alignment of actions across the lake and catchment within an overarching framework for restoration and rejuvenation
 - **Provide political leadership and influence**
both locally and nationally, for the implementation of our strategic direction for Te Waihora for current and future generations
 - **Share decision making**
with Ngāi Tahu, on matters that relate to the mana and mauri of Te Waihora and the catchment, to extent that Ngāi Tahu determine is necessary
 - **Secure sustainable long-term funding and investment**
for actions on the ground
 - **Evaluate effectiveness**
of the implementation of restoration work programmes and of co-governance over time

9. It is proposed to rename the next 'Action Plan' for the 2021-24 period as the 'Co-Governance work programme' and make it clearer that the refreshed programme of activities for the Co-Governors is to progress co-governance, e.g. building relationships, exploring mechanisms to share powers, securing investment and providing guidance to staff, rather than the operational activities of restoration.

Co-Governance work programme

10. The Joint Officials have reviewed the co-governance activities and targets for the next three years. A proposed work programme, including some indicative timeframes, is included as attachment 2.

Implications, cost, and engagement

Implications

11. Depending on the projects and areas of work the Co-Governors wish to progress as part of the work programme, there may be more emphasis on partners to demonstrate their commitment to co-governance, to contribute resources, and to be willing to work collaboratively with Ngāi Tahu in the exercise of statutory functions, duties and powers.

Costs

12. There is no cost to reviewing and refreshing the Strategy and Action Plan/work programme, other than staff time and a small amount of design time to refresh the 'placemats'. This will be covered by existing Environment Canterbury budgets.
13. Future funding implications will depend on the guidance provided by Co-Governors with respect to the targets.

Engagement

14. Co-Governors and Joint officials will determine their individual Parties' requirements to engage within their own organisations.

Te mahere mahi / Next steps

15. Joint Officials will update the commitments and draft work programme to incorporate feedback from Co-Governors and the Parties.
16. A summary report on the last three years will be prepared.
17. The refreshed Strategy and work programme, and summary report, will come to the next Co-Governance hui, scheduled for June 2021, for adoption.

He āpitihanga / Attachments

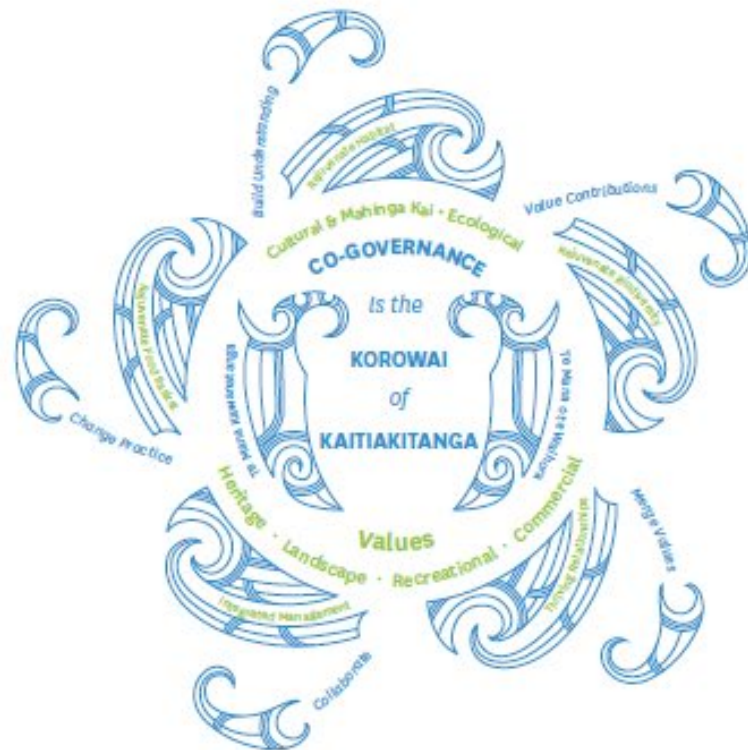
- Attachment 1: Co-Governance Strategy and Action Plan 2018-21
- Attachment 2: proposed Co-Governance mission statement, commitments and work programme 2021-24



A vision for Co-Governance

Co-Governance is the korowai of kaitiakitanga over Te Waihora and its catchment.

To be leaders providing direction for all those who have a role in, or responsibility for, restoring the mauri of Te Waihora while maintaining a prosperous land based economy and thriving communities for current and future generations.



Co-Governance Commitments

– We will:

- Commit to co-governing the lake and its catchment
- Provide political leadership and influence for the implementation of our strategic direction for the lake
- Set strategic direction and priorities for all those working to restore the mauri of Te Waihora, ki uta ki tai
- Secure sustainable long-term funding for actions on the ground
- Promote integration and alignment of actions across the lake and catchment within an overarching framework for restoration and rejuvenation
- Share decision making and responsibilities
- Provide an intergenerational focus
- Evaluate effectiveness over time

**Ko ngā hau ki ētahi wāhi
ko ngā kai kei Orariki**

*No matter from which
direction the wind blows,
food can always be procured
from Te Waihora*

Co-Governance for Te Waihora

– why does this matter to us?

Te Waihora/Lake Ellesmere is one of New Zealand's most important wetland systems and is a regional, national, and international taonga. Today, it is also one of New Zealand's most polluted lakes. It is going to take considerable time, effort and resource to restore and rejuvenate the many values of Te Waihora/Lake Ellesmere.

The lake's importance is recognised in a National Water Conservation Order which lists its outstanding features as habitat for wildlife, indigenous wetland vegetation and fish; and significance in accordance with tikanga Māori in respect of Ngāi Tahu history, mahinga kai and customary fisheries. To restore the mauri of Te Waihora/Lake Ellesmere we must work closely together as iwi, central and local government, industry and the wider community.



Action Plan 2018-2021 - How will we deliver on our commitments

1. We will commit to co-governing the lake and its catchment

Target 1.1 Adopt a Strategy for Co-Governance to set direction for the Co-Governance Parties.

Action

- Co-Governance Strategy adopted
- Three year action plan agreed
- Annual report against Action Plan
- Review of Strategy and update of Action Plan

Target 1.2 Ensure that the Co-Governance Arrangements provide a sound basis for the journey ahead.

Action

- Agreement revised and adopted
- Separate Terms of Reference and Meeting Standing Orders

Target 1.3 Increase the external profile of Co-Governance and increase transparency, including public meetings, agendas and minutes.

Action

- Arrangements in place for meetings to be public and agendas/minutes available on the tewaihora.org website
- Co-Governance arrangements and achievements profiled at public/community events

Target 1.4 Improve communication within and between Co-Governance Parties, and with stakeholders and the wider community.

Action

- Develop and adopt a Te Waihora Co-Governance Communication and Engagement Plan
- Begin implementation of Communication and Engagement Plan

Target 1.5 Provide opportunities for all Councillors/Governors of each the four Parties to learn more about Co-Governance and what it means for their organisations.

Action

- Develop and deliver targeted information packages for Councillors/Governors and staff of each of the four Parties

2. We will provide political leadership and influence for the implementation of our strategic direction for the lake

Target 2.1 Seek ways to increase efficiency and coordination of engagement requirements for key stakeholders.

Action

- Clearly articulate the roles and responsibilities (statutory and non-statutory) of all Parties and stakeholders
- Create mechanism for stakeholders to agree collective short and medium term priorities, which may be location based or activities based

Target 2.2 Build and strengthen relationships nationally and internationally

Action

- Secure a meeting with one or more Government Ministers
- Investigate options for adding Crown Governor to Te Waihora Co-Governance Group
- Seek to build and strengthen relationships with other co-governance groups in New Zealand, to share experience and knowledge of co-governance
- Look for international opportunities to increase leverage and influence, such as investigating Ramsar status for Te Waihora

3. We will set strategic direction and priorities for all those working to restore the mauri of Te Waihora, ki uta ki tai

Target 3.1 Articulate the shared long-term vision and strategic priorities for the restoration of the mauri of Te Waihora.

Action

- Review and refresh the Whakaora Te Waihora Phase Two 'Investment Approach', including the strategic priority actions (work packages)
- Seek feedback from key stakeholders
- Undertake regular reviews of strategic restoration priorities, informed by monitoring and evaluation (contributing to Target 2.1, action 2)

4. We will secure sustainable long-term funding for actions on the ground

Target 4.1 Secure sustainable long-term funding from a variety of sources: central and local government, industry, philanthropic trusts.

Action

- Proactively approach potential partners/investors and secure \$10 million by 2021
- Secure a total of \$99 million over 10 years

5. We will promote integration and alignment of actions across the lake and catchment within an overarching framework for restoration and rejuvenation

Target 5.1 Assess current lake-related restoration related activities across the catchment.

Action

- Undertake an assessment of current restoration related activities underway (Co-Governance Parties, other agencies, industry, community)
- Once strategic restoration priorities agreed (Target 3.1), map how current activities relate to/align with those strategic priorities and identify gaps
- Support key stakeholders to identify opportunities for partnership and improved alignment of actions, e.g. support groups such as Te Waihora Agencies Group
- Invite other groups working in the catchment to engage with Co-Governors each year, e.g. through a presentation to a Co-Governance meeting, or by the group hosting a visit from Co-Governors

6. We will share decision making and responsibilities

Target 6.1 Develop and agree operational process protocols.

Action

- Two protocols in place with others in development by July 2019

Target 6.2 Provide governance/oversight of the delivery of the Whakaora Te Waihora Joint Restoration Work Programme

Action

- Annual workplan agreed
- Annual workplan implemented and progress reported

7. We will provide an intergenerational focus

Target 7.1 Take a long term approach to restoring the mauri of the lake.

Action

- Identify pathway for progressing in-lake solutions

8. We will evaluate effectiveness over time

Target 8.1 Identify how the Whakaora Te Waihora Programme and each Co-Governance Party is contributing to Co-Governance commitments.

Action

- Systems in place for the Whakaora Te Waihora Programme and each Co-Governance Party to identify and report annually on their respective contributions, both to co-governance and to the restoration of the mauri of Te Waihora

Target 8.2 Identify the barriers that prevent the Whakaora Te Waihora Programme and each Co-Governance Party making progress on Co-Governance commitments

Action

- Barriers identified and reported to Co-Governance Group

Target 8.3 Benchmark progress towards achieving Co-Governance commitments.

Action

- Develop a high-level set of indicators to track progress on achieving Co-Governance commitments – performance and risks
- Annual reporting against indicators

Target 8.4 Track progress towards achieving the shared long-term vision and strategic priorities for the restoration of the mauri of Te Waihora.

Action

- Develop a high-level set of indicators to track progress on achieving shared restoration outcomes, priorities and objectives.
- Annual reporting against indicators

Whākana ki ō
manuhiri i tō kāinga
Mana is upheld through
fulfilling roles and
responsibilities

Mā te tuakana e tika ai
te teina, mā te teina e
tika ai te tuakana
Through relationships and
respect we can find the
way forward



Attachment 2: Proposed Co-Governance mission statement, commitments and work programme 2021-24

A vision for Te Waihora

To restore and rejuvenate the mana, mauri and ecosystem health of Te Waihora and its catchment.

Te Waihora Co-Governance mission statement

Co-Governance is the korowai of kaitiakitanga over Te Waihora and its catchment

To be leaders providing direction for all those who have a role in, or responsibility for, restoring the mauri of Te Waihora while maintaining a prosperous land based economy and thriving communities for current and future generations.

Co-Governance commitments

- **Set strategic direction and priorities**
for all those working to restore the mana and mauri of Te Waihora, ki uta ki tai, and to promote integration and alignment of actions across the lake and catchment within an overarching framework for restoration and rejuvenation
- **Provide political leadership and influence**
for the implementation of our strategic direction for Te Waihora for current and future generations
- **Share decision making**
with Ngāi Tahu, on matters that relate to the mana and mauri of Te Waihora and the catchment, to extent that Ngāi Tahu determine is necessary
- **Secure sustainable long-term funding and investment**
for actions on the ground
- **Evaluate effectiveness**
of the implementation of restoration work programmes and of co-governance over time

Co-Governance work programme 2021-24

Strategic direction and priorities

Including relationships/stakeholder engagement and promoting integration and alignment of actions across the lake and catchment within an overarching framework for restoration and rejuvenation.

What	Why	When
Develop and share the 10/20/50-year vision for the restoration of the mauri of Te Waihora and the catchment, including investigating the establishment of a Te Waihora wetland park	To provide a roadmap for all those working on the ground To ensure potential investors can clearly see how individual projects and work programmes are contributing to the vision	First draft by July 2021
Facilitate regular Whakakōhanga Kōrero hui	To provide a forum for information sharing and encouraging co-operation between members, and an opportunity for sharing the strategic direction and priorities of the Co-Governors with the key stakeholders, encouraging alignment between organisations and activities	Ongoing – quarterly

Political leadership and influence

For the implementation of our strategic direction for the lake for current and future generations, and ensuring alignment with the vision and advocating for shared decision-making.

What	Why	When
Initiate discussions between statutory agencies and Ngāi Tahu on shared decision-making mechanisms	To fulfil the commitments of the Co-Governance Agreement to provide for an enduring relationship between Ngāi Tahu and the other Parties that includes shared exercise of functions, duties and powers insofar as is possible under the relevant statutes that bind each of the Parties, and to the extent Ngāi Tahu wish to be involved To ensure that, regardless of who is empowered to make a decision, the community see aligned decision-making in the best interest of the lake	Ongoing
Deliver regular updates to each of the Parties	To ensure improved understanding of what co-governance means for them in practice, across their organisation	At least annually
Report back to Co-Governors on activities from each organisation that contribute to achieving the vision	To ensure visibility and transparency and improve understanding of what co-governance means in practice (and an opportunity for Parties to learn from each other about how to put co-governance into practice)	Standing item for co-governance hui

Supporting Co-Governance

Ensuring the governance obligations are fully met with respect to on-the-ground projects, and that the machinery of co-governance functions efficiently.

What	Why	When
Provide appropriate resourcing and staff expertise	To support the Co-Governors to meet their commitments	ongoing
Provide secretariat support for the Joint Officials Group and Co-Governors	To ensure hui are managed efficiently, and that all the agreed requirements for public visibility and regular reporting are met	Ongoing
Provide communications support, including media liaison and website management	To provide planning, processes and protocols to ensure clear communications, and increased visibility of co-governance and the progress being made	Ongoing
Provide oversight of Co-Governance-led projects	To ensure requirements of good governance are met and that project implementation is on track, for: <ul style="list-style-type: none"> Whakaora Te Waihora Greenpark Sands working group Other projects 	Ongoing
Establish mechanisms for shared decision making	To work with those who are delivering statutory functions to investigate and implement practical, workable options for shared decision making	Ongoing

Funding and investment

Securing funding and investment from multiple sources, to support the implementation of the strategic direction.

What	Why	When
Develop a funding strategy/approach	Significant funding is required to make a real difference. Securing this level of funding is an important piece of work and needs clear direction and resourcing.	Dec 2021
Contract a fundraiser	Specific skills are required to take advantage of short-term funding opportunities	July 2021

Evaluating effectiveness

Regular reporting on progress to Co-Governors and the wider community (and investors).

What	Why	When
Report back to Co-Governors and the community on agreed indicators	To track progress toward restoration of the mana, mauri and ecosystem health of Te Waihora and the catchment and ensure visibility and transparency – for Co-Governors, the community and investors	Annually
Maintain indicator framework to track progress on achieving shared restoration outcomes and vision	To articulate why particular activities are important, and to allow the framework to evolve and ensure it is truly representative of shared values	Ongoing
Report on Co-Governance work programme implementation	To track progress towards achieving the Co-Governance commitments – is Co-Governance making a difference and helping progress achievement of shared restoration outcomes?	Standing item for co-governance hui

Te Waihora Co-Governance Group

Date of meeting	12 March 2021
Agenda item	5.3
Author	Tim Davie / Adrienne Lomax

Te Waihora indicator framework wānanga

Te whāinga / Purpose

1. To provide a summary to the Co-Governors of the indicator framework wānanga held on 4 December 2020 and seek feedback.

Ngā hononga / Value proposition

2. Further development of the indicator framework, and initiation of new large-scale inspirational projects, will provide an opportunity to track and accelerate progress on the restoration of the mana, mauri and ecosystem health of Te Waihora and the catchment, raise the profile of the Co-Governors, and demonstrate strategic leadership.

Ngā tūtohutanga / Recommendations

That the Te Waihora Co-Governance Group:

1. note the attached summary of the wānanga and provide feedback

He kupu whakataki / Background

3. The Te Waihora indicator framework has been developed over the last year or so by partner organisation staff with assistance from subject matter experts. It is intended as a way to measure progress of the restoration of the mana, mauri and ecosystem health of Te Waihora and the catchment, to provide information about what is working and what isn't working, and to guide prioritisation and decision making. It will also provide a means to engage with the wider community and potential funders.
4. The draft indicator framework was endorsed by the Co-Governors in March 2020, and Co-Governors asked that a wānanga be held to further discuss the framework and identify future pathways.

Indicator Framework wānanga

5. The wānanga was held on 4 December 2020 with the Co-Governors, Joint Officials and other staff, plus one of the co-chairs and another member (SDC Councillor) of the

Selwyn-Waihora Zone Committee. It was facilitated by the Selwyn-Waihora Zone Committee facilitator. There were two parts to the wānanga.

Vision statements

6. Participants were asked to articulate, for each of 20 indicators, 10- and 20-year vision statements that are meaningful and aspirational for individuals and communities connected with Te Waihora. Creativity was encouraged to inspire the development of new projects and enterprises over the coming years.
7. Attachment 1 is a summary of the vision statement comments for the twenty indicators. The majority of the content was captured at the wānanga; some additional notes from earlier discussions have been added.

Anchor projects

8. Anchor projects are envisaged as large-scale umbrella projects or work programmes that encompass multiple aligned projects and will make a major contribution to achieving the 10, 20, and 50-year vision.
9. They are intended as the practical link between the current actions/projects and the vision from Co-Governors; they are inspirational and also tangible and a way to coalesce the current actions and galvanise future actions around similar themes.
10. Much of the discussion in the second part of the wānanga centred on the establishment of a 'wetland park', which could encompass other projects/work programmes, and the development of a visitor/education facility or series of facilities around Te Waihora. Attachment 2 sets out four possible groupings that could become anchor projects.

Feedback sought

11. Co-Governors are invited to reflect on the content captured in the summaries in attachment 1 and 2 and consider if this accurately represents the kōrero on the day.
12. Suggestions for amendments or additional content for the 10- and 20-year vision statements can be provided to Joint Officials. As these tables are further populated, it will provide the basis for the development of a roadmap for the restoration of the mana, mauri and ecosystem health of Te Waihora and the catchment.
13. Feedback is also sought on the potential anchor projects. Are these the large-scale opportunities Co-Governors wish to prioritise and pursue? Are there any additional suggestions?

Implications, cost, and engagement

14. Joint Officials will continue to work on the indicator framework and a roadmap for restoration. Additional Ngāi Tahu expertise will be sought to assist with confirming indicators and developing measure and targets.

15. With respect to progressing anchor projects, beyond initial scoping, undertaking new initiatives, or significantly upscaling existing projects, will require resourcing. This may have implications that would need to be discussed by each of the Parties once more details are available.

Te mahere mahi / Next steps

16. The Joint Officials will:

- continue to develop the indicator framework, including measures and targets, and consider the most appropriate format for reporting back to Co-Governors
- continue to revise and update the vision statements to incorporate feedback from Co-Governors
- refine the anchor project concepts through a co-design process. Feedback will continue to be sought from Co-Governors and feasibility tested with the individual organisations.

He āpitihanga / Attachments

- Attachment 1 - indicator framework
- Attachment 2 – potential anchor projects

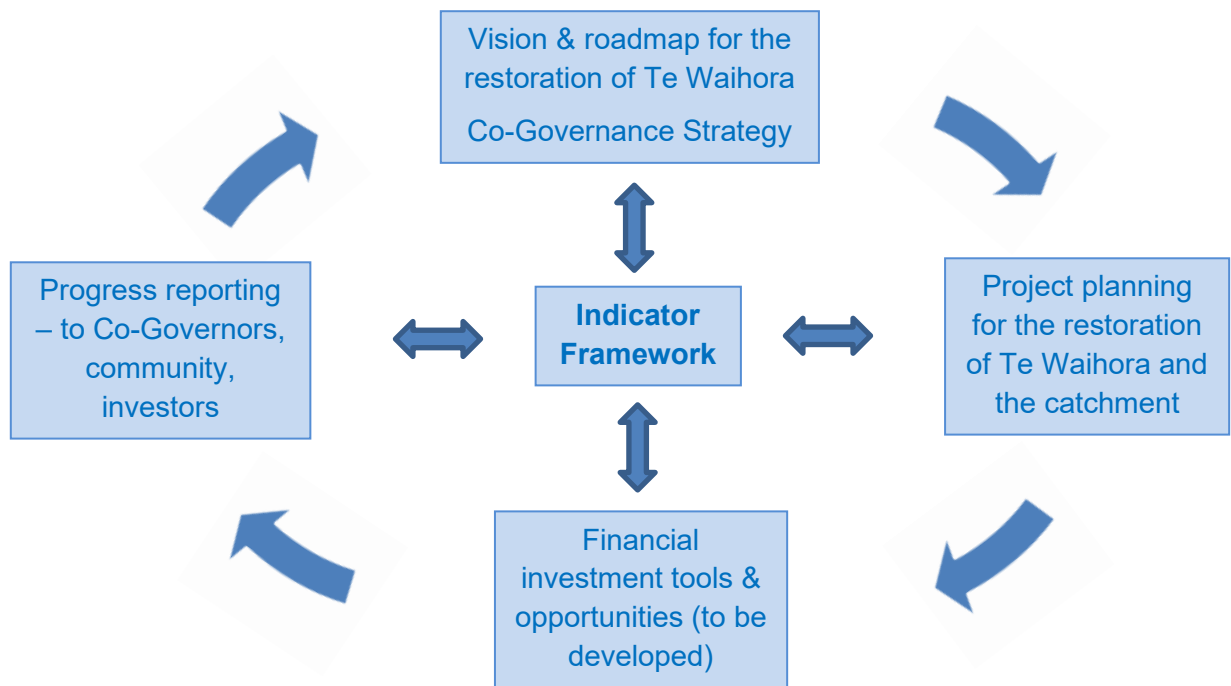
Additional information

Peer reviewed by	David Perenara-O'Connell, Miria Goodwin, Erana Riddell
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Attachment 1 – indicator framework

The Te Waihora indicator framework has been developed over the last year or so by partner organisation staff with assistance from subject matter experts. It is proposed as a way to measure progress of the restoration of the mana, mauri and ecosystem health of Te Waihora and the catchment, so we know what is working and what isn't working. It is also a means to engage with the wider community and funders.

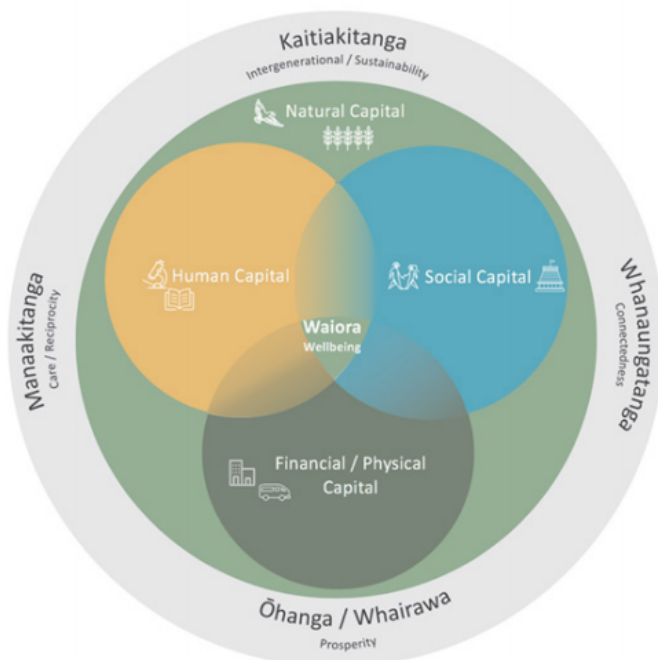
With the framework in place and being used to guide prioritisation of projects, it is hoped that potential investors will have increased confidence in Co-Governance and the clear mechanism to demonstrate progress for social, cultural and economic outcomes alongside ecosystem health reporting. Measuring and reporting progress across a wide range of indicators will increase accountability and transparency about how and why decisions are made, and what is or isn't being achieved, and will build trust.



The values and knowledge systems of Ngāi Tahu, as kaitiaki, are the primary driver in identifying indicators, alongside western values and science. The set of twenty indicators is also intended to capture the uniqueness of Te Waihora and the local values and economy and not simply be a generic set of measures which could be applied to any water body.

The draft framework was developed to align with the Government's Living Standards Framework and to incorporate reference to the United Nation's Sustainable Development Goals.

In the framework, the indicators of a healthy lake and ecosystem are the most important indicators. It is assumed that a healthy lake will underpin healthy communities, healthy people, and a healthy economy; therefore, all the other indicators are reliant in some way on one or more of the Natural Capital indicators that relate to a healthy lake and ecosystem.



Waiora speaks to a broad conception of human wellbeing, grounded in water (wai) as the source of all life.

The foundations for wellbeing come through **kaitiakitanga** (stewardship of all our resources), **manaakitanga** (care for others), **ōhanga** (prosperity) and **whanaungatanga** (the connections between us).

These foundations support the development of the four capital stocks: **financial and physical capital**; **human capital**; **social capital**; and **natural capital**. Wellbeing depends on the sustainable growth and distribution of these four capitals, which together represent the comprehensive wealth of New Zealand.

One way to visualise this relationship is the diagram above, taken from [A Māori perspective on the Living Standards Framework, He Ara Waiora / A Pathway Towards Wellbeing](#), NZ Treasury, September 2018.


The diagram was developed in response to tax policy design. The restoration of Te Waihora is very different, however, the way wellbeing and the capitals are represented may resonate, with human wellbeing being grounded in water as the source of all life.

Measures and targets will be developed for each of the indicators, with targets and timeframes informed by the vision articulated by the Co-Governors.

Developing a 10-, and 20- year vision



The indicator framework presented to the Co-Governors included a long-term vision – described as two-generation, or 50 years – for each of the four capitals. The wānanga held on 4 December 2020 asked participants to think about their aspirations and expectations for what might be achieved in 10 years and in 20 years for each of the twenty indicators.

The tables below – one of each of the four capitals – capture the main points from the discussion at the wānanga. Some additional notes from earlier discussions (in italics), are also included.



	Relevant Sustainable Development Goals 6. Clean water and sanitation 14. Life below water 13. Climate action 15. Life on land
The mauri and ecosystem health of Te Waihora is restored 50-Year Vision (acknowledging that Te Waihora cannot be returned to the pre-human settlement condition) Abundant and diverse birdlife, surrounded by native vegetation including kahikatea forests, wetlands with sedges and harakeke, expanses of purple native musk (<i>Mimulus repens</i>) and glasswort (<i>Sarcocornia quinqueflora</i>), and large areas of pingao on seaward areas of Kaitorete. The tributaries flowing into the lake will bring clean water to the lake and significant areas of lake bed around the lake margins will be protected by well-established macrophytes within the lake and will have clear water for most of the time, with a gravel lake bed visible. There will be abundant fish populations, with diadromous species able to access the sea at appropriate times to maintain healthy populations. The vast open expanses of Te Waihora, with the backdrop of Te Pātaka o Rākaihautū (Banks Peninsula) will retain a natural appearance, mostly uninterrupted by visible human activity.	

Indicators	10-Year Vision	20-Year Vision
1. Water quality <i>Why: Water quality in the lake supports functional food web which sustains communities, individuals and economies. Water clarity matters to people.</i>	<i>Healthy populations of aquatic plants and animals, and an improved understanding of what makes up a healthy food web in the lake.</i> At key sites around the lake, for most of the time, it will be safe for swimming, boating and all forms of recreation. A small number of bays will have been identified as priority areas and projects will be underway to improve water clarity at those sites Opening to the sea is able to be achieved when needed. Lake weed is the curse of the fishers.	<i>Thriving populations of aquatic plants and animals that support quality food harvests.</i> Priority bays, such as the Ararira, will have water clarity for most of the time.
2. Stream health – tributaries (water quality & quantity) <i>Why: Tributary quality and quantity affect in lake water quality and quantity; tributaries provide tuna habitat and opportunities for mahinga kai and recreation.</i>	We will understand the state of the tributaries and what interventions are needed to stop the decline and turn it around. Progress will have been made in some catchments, including the Waikēkēwai. There will be regular reports available detailing the water quality and quantity and ecosystem health and trends of the tributaries. Children can find cockabully in all the creeks. Everyone has rain tanks for secondary uses (eg flushing toilets).	<i>Recreational suitability is restored at all traditional sites, eg it's safe to swim at Coes Ford throughout summer.</i> Key interventions to improve stream health will be underway. Mahinga kai will be abundant and high quality. Children can catch freshwater crayfish in all creeks. Dogs can play safely in rivers.
3. Lake margin vegetation health <i>Why: Appropriate vegetation on lake margins provides key habitats, especially for birds, helps to reduce erosion (and therefore sediment deposition), and helps to manage public/vehicle access.</i>	Weeds will have been removed from lake margin land. Vehicle impacts are managed.	Indigenous vegetation is enhanced around the lake and we can see natural regeneration processes at work.
4. Wetland cover and quality – catchment wide <i>Why: Wetlands in the catchment can trap and remove contaminants and provide habitat.</i>	Embankment Road wetland, Tārekautuku/Yarrs Lagoon and Osbornes Drain wetlands will all be well on the way to becoming fully functioning wetlands ¹ . Further potential wetland sites will have been identified in each main sub-catchment.	Additional fully functioning wetlands established.
5. Waipuna health <i>Why: Waipuna support tributary water quality.</i>	All significant waipuna south of SH1 fenced and the importance of these sites recognised and respected.	Water quality (nitrogen) of waipuna feeding lowland streams is improving.
6. Wildlife (birds) health <i>Why: Wildlife (birds) are acknowledged as an outstanding feature of the lake (WCO) and the lake is of international significance for species diversity and abundance, relevant for mahinga kai and recreation.</i>	<i>Diversity and abundance of bird species remains high.</i> Significant habitat enhancement projects underway around the lake margin. Predator control in place for all recognised bird habitats.	<i>Diversity and abundance of bird species remains high.</i> Enhanced habitat well established. Lake margin is 100% predator free.
7. Fisheries health <i>Why: Healthy fisheries are part of the food web of the lake and vital for mahinga kai, recreation and economic opportunities associated with the lake.</i>	Threatened species have been saved from extinction (longfin tuna, mudfish). There is a network of key restoration sites secured, and others identified.	Threatened species (as at 2020) numbers increasing. There is a network of key sites established and protected in the upper, mid and lower reaches of all main tributaries.
8. Landform and landscape <i>Why: The integrity of landforms and landscapes, and their historic significance, is of great importance to the communities around the lake.</i> <i>(This indicator is about the physical state of the land, the social capital indicator 5 is about people's relationship with the landforms.)</i>	Corridors of indigenous vegetation are being established, along with a series of larger legacy restoration sites, beginning to link existing pockets of indigenous vegetation throughout the catchment.	<i>Channelised waterways being returned to natural forms.</i> Key restoration sites and existing areas of indigenous vegetation are connected, around the lake margin and throughout the catchment.



¹The Department of Conservation describes a wetland in the following way: Wetlands act like the kidneys of the earth, cleaning the water that flows into them. They trap sediment and soils, filter out nutrients and remove contaminants; can reduce flooding and protect coastal land from storm surge; are important for maintaining water tables; they also return nitrogen to the atmosphere.
<https://www.doc.govt.nz/nature/habitats/wetlands/>

 Social Capital 	Relevant Sustainable Development Goals 16. Peace, justice and strong institutions 17. Partnerships for the goals
Thriving communities: current and future generations are provided for 50-Year Vision (acknowledging that Te Waihora cannot be returned to the pre-human settlement condition) Communities, organisations and partnerships with an interest in Te Waihora will work to support the restoration of the mauri of the lake and will acknowledge and respect the customary responsibilities of Ngāi Tahu. Communities will be able to access Te Waihora for mahinga kai and for active and passive recreation for generations to come. The natural resources of Te Waihora, and the history of settlement woven through the landscape, will be protected alongside the restoration of native habitat wherever possible.	

Indicators	10-Year Vision	20-Year Vision
1. Co-Governance <i>Why: The statutory and non-statutory responsibilities held by the Parties contribute to every aspect of ecosystem health and how that intersects with communities, individuals and the economy. They have the ability to influence priorities and direct resourcing</i>	<i>All the key parties remain engaged in co-governance, with strong and respectful relationships.</i> <i>Adequate resourcing has been secured.</i> <i>Planning rules/permits for the lake and lake margin allow for different activities to co-exist and vehicle access to sensitive areas is well managed.</i> Rangatiratanga is driving new ways of working for all of the parties. There is no commercial longfin tuna take from Te Waihora.	We have transitioned to unity governance, treaty-based Rangatiratanga and civics education mainstreamed in schools Bilingual resources are in use for all interactions with the lake.
2. Mahinga kai success for customary use <i>Why: The ability to participate in customary activities and maintain traditions strengthens communities</i>	<i>Participation in mahinga kai activities has increased from 2020 levels and traditions are being passed on to younger generations.</i> Waiata are being sung in schools about the kai from Te Waihora (pātiki, tuna, īnaka) being abundant	īnaka are thriving. It is safe to eat fish, swan eggs, watercress and other kai from in and around Te Waihora Harakeke industry is thriving, with the constructed wetlands as the source
3. Recreation/public access <i>Why: Communities/agencies can ensure that people have the ability to connect with nature, which is known to contribute to physical and mental wellbeing.</i>	<i>Access is improved (quality and number of access points), including new cycleways to link Rail Trail and key lake margin access points.</i> Information and interpretation is provided, with bilingual storyboards around the lake and an education hub established. The residents are connected with the lake and respect the values – there are no hoons at Greenpark Sands. The lake is in people’s conversation It is a bird watching paradise and an international attraction. Wind-powered boating is the preferred means of getting about the lake.	Waiata groups are common in the community, singing about the abundant and healthy natural resources of Te Waihora as they are now, not what used to be. Picnicking by the lake is a regular weekend activity. Silent electric boating is common, with water skiing, jet skis etc.
4. Active protection of the environment <i>Why: Much more will be achieved with the buy-in and active participation of those with land stewardship roles</i>	<i>It is the norm for all landowners to have established and be maintaining restoration projects on their land, including wetland and riparian restoration – these projects add value to their land.</i> <i>Farm practices mean that nutrient and sediment discharges are significantly reduced from 2020 levels.</i> <i>All lake margin land has been retired and is being managed for biodiversity and cultural values.</i>	Wetland (outstanding/restored) around the whole lake. Farming with integrity is the norm – there is no leaching of nutrients to water. No septic tanks in use.
5. Integrity of landforms and landscapes <i>Why: To recognise and provide for examples of Ngāi Tahu cultural landscapes of particular importance in the catchment, and acknowledge that the landform is distinctive and rare internationally.</i>	<i>Te Reo place names are recognised and used alongside English names.</i> The community appreciates the wetland ecosystems (no hoons with vehicles at the lake margin) Recreation with respect and knowledge – recognising values. Adaptation to wetter lake margins (as a result of climate change) has been initiated and is managed and supported.	<i>Te Reo place names are recognised and used as first choice.</i> Visitors see pristine self-sustaining, wetland habitat all around the lake.
6. Protection of historic sites and resources <i>Why: Both the historic Māori occupation around the lake and the later Ngāi Tahu and European settlement are important parts of Canterbury’s heritage and valued by lake communities</i>	<i>Important sites, including wāhi tapu and wāhi taonga are identified.</i> The marae is a centre of education and interaction with lake.	<i>Ngāi Tahu are confident that wāhi tapu and wāhi taonga are protected.</i> Te reo Māori is thriving and there is no racism.

 Human Capital 	Relevant Sustainable Development Goals 3. Good health & wellbeing 4. Quality Education
A healthy Te Waihora supports healthy people 50-Year Vision (acknowledging that Te Waihora cannot be returned to the pre-human settlement condition) Individuals will have knowledge of and be able to participate in activities as the generations before them have done, including accessing mahinga kai, recreational fishing and game bird hunting, birdwatching and water sports, and simply enjoying the wide open expanses of Te Waihora. People to be employed by new or existing businesses as a result of the healthy lake. There will be more opportunities for people, including international visitors, to visit and connect with Te Waihora.	

Indicators	10-Year Vision	20-Year Vision
1. Traditional food gathering practices sustained <i>Why: The ability to participate in customary activities, maintain traditions and learn skills will increase a sense of identity and belonging and enable future generations to continue to traditional practices</i>	<i>Regular participation in mahinga kai activities has increased from 2020 levels and people feel more connected to their traditional practices.</i> Ecotourism includes a business catching pātiki (flounder) and serving it up with kumara chips. Cultural tourism business established.	High-end restaurant serving food produced in and around Te Waihora. High-end cultural tourism.
2. Provides for wellbeing/recreation/tourism/education <i>Why: Connection with nature is known to contribute to physical and mental wellbeing of individuals.</i>	New cycleways to link Rail Trail and key lake margin access points. Te Waihora education hub and visitor centre established. Businesses offering waka and biking tours, night sky tours, birdwatching tours, raranga (weaving), opportunities learn about rongoā (traditional Māori medicine).	<i>Te Waihora education hub and visitor centre thriving and expanded to include additional locations around the lake.</i> International research centre established. ‘Te Waihora classic’ established, an annual triathlon: swimming, waka ama, cycling. Te Waihora is the place of choice for outdoor activities. It is a destination for international tourists.
3. Employment opportunities linked to natural resources <i>Why: Employment opportunities and choices for people will contribute to their health and wellbeing.</i>	Visitor and education centre established. Sustainable commercial fishing is thriving. Multiple successful ecotourism enterprises. People are employed as guides, interpreters, bird watching guides, planting riparian margins, fencing.	Floating classroom available for visiting schools. Ecovillage outdoor education centre (self-sustaining) established. Mōkihi (raft made from raupō and harakeke) making and tours. Phosphorus extracted as a profitable business.

 Financial / Physical Capital 	Relevant Sustainable Development Goals 7. Affordable and clean energy 8. Decent work and economic growth 9. Industry, innovation & infrastructure 12. Responsible consumption & production
A prosperous land and water-based economy is maintained 50-Year Vision (acknowledging that Te Waihora cannot be returned to the pre-human settlement condition) Individuals will have knowledge of and be able to participate in activities as the generations before them have done, including accessing mahinga kai, recreational fishing and game bird hunting, birdwatching and water sports, and simply enjoying the wide open expanses of Te Waihora. People to be employed by new or existing businesses as a result of the healthy lake. There will be more opportunities for people, including international visitors, to visit and connect with Te Waihora. Existing land use, including farming, will continue to transition to and embed sustainable practices, which enhance the environment whilst retaining economic viability. Commercial fishing and customary fishing will continue within a sustainable management framework. New business opportunities as a result of innovation and healthy natural ecosystems will be available, including different forms of food production plus opportunities and infrastructure to cater for increased visitors to the area.	

Indicators	10-Year Vision	20-Year Vision
1. Existing land use continues to be profitable (with nutrient/sediment losses managed and reduced to acceptable levels) <i>Why: Existing land use which adapts to meet higher environmental standards to protect the water quality of the lake will contribute to maintaining the economic prosperity of the catchment (along with uptake of new opportunities).</i>	<i>Farming practices have adapted to new standards requiring reduced emissions and discharges, and where standards are not able to be met, new land uses are investigated/trialled.</i> Te Waihora catchment farmers are recognised for their innovative practices.	<i>Produce from the Te Waihora catchment is attracting a premium because of where it comes from.</i>
2. Opportunities to investigate and implement new sustainable/regenerative enterprises <i>Why: Creation of new business opportunities which are complementary to supporting the mauri of the lake and environs will contribute to maintaining the economic prosperity of the catchment and supporting local communities.</i>	Nutrients are extracted from lake water by pumping through farm-based filters with tanks of algae. Renewable energy from a tidal action turbine. Sustainable land use with alternative crop trials successfully underway – green protein, blue-green carbon, growing mahinga kai, mānuka (honey), rongoā species.	Wetlands as filters are paid for by upstream farmers (blue carbon market). Thriving renewable energy businesses. Sustainable land use with alternative crops established – green protein, blue-green carbon, growing mahinga kai, mānuka (honey), rongoā species.
3. Tourism infrastructure/facilities <i>Why: Provision of tourism infrastructure and facilities will support and reflect demand. Great provision will be linked to the quality of the environment and experience for visitors.</i>	Dedicated, focused and high-quality access and interpretation areas. Selwyn Coastal Pathway established. Lakeshore established park with retired land, recreation access, mahinga kia access.	Completed Selwyn Coastal Pathway. Thriving lakeshore park. Huts (Greenpark, Lower Selwyn) have been removed.

Attachment 2 – potential anchor projects



Committed to the restoration of the mana, mauri and ecosystem health of Te Waihora and the catchment

The following pages set out four potential anchor projects:

1. Te Waihora Wetland Park/Mahinga Kai Park
2. Taonga species of Te Waihora
3. Riparian restoration of Te Waihora tributaries
4. Te Waihora visitor and education centre

The wetland park is covered first with a little more detail, as more time was spent discussing that topic. However, the order is not intended to be significant.

Each project includes a 'Contributions to indicators' table. The indicators that are likely to be progressed are shown in bold, with a darker background colour. The tables will continue to be refined and feedback is very welcome.

1. Te Waihora Wetland Park/Mahinga Kai Park

What

- The creation of a legally designated area around Te Waihora – a regional park – with its own set of legal and planning provisions, integrating current and future management. May include covenanting provisions (DOC?). Including public, private and Māori land interests.
- An instantly recognisable 'brand' – which could also be used to market activities and produce from the area.
- Providing opportunities to foster and promote a range of new initiatives and visionary projects (aquaculture, raupō production, farm exemplar and education and tourism centre, phosphorus extraction and reuse, nutrient/interception wetland construction).
- Providing the basis for seeking international recognition of the values, eg Ramsar designation.
- Encompassing multiple other projects/programmes, eg taonga species, riparian restoration

Where

- A contiguous ribbon around the lake plus major tributaries (CLVMA?), governed by lake level and natural contours – a strip of varying width.

When

- Start now, with an analysis of requirements of establishing the park and current land ownership/use.

Why

- To reconnect people with the lake and the cultural narrative, to protect what we treasure, and its uniqueness and to foster employment opportunities.

Who

- Co-Governors provide leadership.
- Staff of co-governance parties work on this and Te Mana o te Wai.
- Involve staff from other agencies/groups through Whakakōhanga Kōrero.

How

- Prepare a business case, with an analysis of requirements of establishing the park and current land ownership/use.
- Investigate governance structure options.
- Make funding applications to get underway.
- Facilitate land purchase/retirement around lake margin.
- Use 'nodes' as a key tool for delivering, possibly sponsored by specific groups such as the Zone Committee, Lions etc.
- Use opportunities for linking strong storytelling and operations/Whakakōhanga Kōrero.

Contributions to indicators (this project would contribute to all 20 indicators)

Natural Capital Indicators	Social Indicators	Human Capital Indicators
Water quality	Co-Governance	Traditional food gathering practices sustained
Stream health – tributaries (water quality & quantity)	Mahinga kai success for customary use	Provides for wellbeing/recreation/tourism/education
Lake margin vegetation health	Recreation/public access	Employment opportunities linked to natural resources
Wetland cover and quality – catchment wide	Active protection of the environment	
Waipuna health	Integrity of landforms and landscapes	Financial/Physical Capital Indicators
Wildlife (birds) health	Protection of historic sites and resources	Existing land use continues to be profitable (with nutrient/sediment losses managed and reduced to acceptable levels)
Fisheries health		Opportunities to investigate and implement new sustainable/regenerative enterprises
Landform and landscape		Tourism infrastructure/facilities



Images from **Recreation Demand Study: Te Waihora/Lake Ellesmere**, A report prepared for the Department of Conservation—Te Papa Atawhai, S. Espiner et al., March 2017

2. Taonga species of Te Waihora

What

- A set of linked taonga species protection and enhancement projects and programmes – encompassing edible and endemic species, both plants and animals.

Where

- Individual taonga species projects linked to different locations, eg bittern projects for Harts Creek and Ararira wetland, mudfish habitat in upper catchment, predator control on Kaitorete to protect nesting birds.



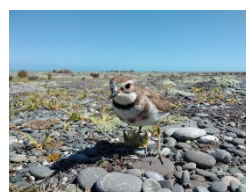
When

- Start now, linking existing work programmes/projects, and identifying gaps.



Why

- It is the statutory role of DOC and councils and kaitiaki responsibility of Ngāi Tahu.
- To contribute to mahinga kai success and maintenance of customary practices.
- Healthy populations of taonga species will contribute to status of Te Waihora, increasing likelihood of international recognition and making it a more attractive destination for visitors and educators.



Who

- DOC could lead, and other co-gov parties contribute.
- Through Whakakōhanga Kōrero, seek support and involvement for other agencies, community and educational groups.

How

- Identify all projects and work programmes already underway.
- Analyse gaps and opportunities.
- Seek resourcing/funding to continue successful work programmes and initiate programmes where gaps exist.

Contributions to indicators (this project would contribute to at least 14 indicators)

Natural Capital Indicators	Social Indicators	Human Capital Indicators
Water quality	Co-Governance	Traditional food gathering practices sustained
Stream health – tributaries (water quality & quantity)	Mahinga kai success for customary use	Provides for wellbeing/recreation/tourism/education
Lake margin vegetation health	Recreation/public access	Employment opportunities linked to natural resources
Wetland cover and quality – catchment wide	Active protection of the environment	
Waipuna health	Integrity of landforms and landscapes	Financial/Physical Capital Indicators
Wildlife (birds) health	Protection of historic sites and resources	Existing land use continues to be profitable (with nutrient/sediment losses managed and reduced to acceptable levels)
Fisheries health		Opportunities to investigate and implement new sustainable/regenerative enterprises
Landform and landscape		Tourism infrastructure/facilities

3. Riparian restoration of Te Waihora tributaries

What

- Riparian restoration of the banks of waterways flowing into Te Waihora.
- Establishment of corridors, linking larger legacy restoration and indigenous vegetation sites.
- Reintroduction of indigenous plant species.
- Create riffles and recreate more natural water courses to enhance habitats for stream life.



Where

- On the key tributaries, in particular the lower reaches, on both public and private land.

When

- Already underway, eg Whakaora Te Waikēkēwai, Living Water.

Why

- Has the potential to improve habitats and water quality by intercepting sediment/nutrient inflows and creating shading of the waterways, which reduces weed growth.
- Clean water and diverse native riparian habitats can contribute to people's general enjoyment and appreciation of an area where they live, work or play.

Who

- All co-governance parties
- Other agencies and groups
- Landholders
- A lead agency is required to bring all the information together.

How

- Undertake a stocktake of past and present initiatives.
- Identify and promote opportunities for support available to landholders.
- Collate information and publicise, to encourage participation and enable sharing of best practice expertise.

Contributions to indicators (this project would contribute to at least 14 indicators)

Natural Capital Indicators	Social Indicators	Human Capital Indicators
Water quality	Co-Governance	Traditional food gathering practices sustained
Stream health – tributaries (water quality & quantity)	Mahinga kai success for customary use	Provides for wellbeing/recreation/tourism/education
Lake margin vegetation health	Recreation/public access	Employment opportunities linked to natural resources
Wetland cover and quality – catchment wide	Active protection of the environment	Financial/Physical Capital Indicators
Waipuna health	Integrity of landforms and landscapes	Existing land use continues to be profitable (with nutrient/sediment losses managed and reduced to acceptable levels)
Wildlife (birds) health	Protection of historic sites and resources	Opportunities to investigate and implement new sustainable/regenerative enterprises
Fisheries health		Tourism infrastructure/facilities
Landform and landscape		

4. Te Waihora visitor and education centre

What

- An innovative, interactive, visitor and educational facility (or multiple facilities) on the shores of Te Waihora.
- Leverages off multiple other projects/programmes, eg taonga species, riparian restoration

Where

- Consider connected multiple locations, eg Ararira/Yarrs Flat (central point of the lake), Kaituna, Kaitorete, Timbervard Point, Waikirikiri, Taumutu.

When

- Tbc

Why

- To reconnect people with the lake and the cultural narrative.
- To encourage greater connection/interaction between rangatahi and the lake.
- To foster employment opportunities.

Who

- Co-Governors lead?
- Partner with others, including Lincoln and Canterbury Universities, Education Outdoors NZ.

How

- Establish partnerships with key organisations.
- Seek funding.

Contributions to indicators (this project would contribute to at least 9 indicators)

Natural Capital Indicators	Social Indicators	Human Capital Indicators
Water quality	Co-Governance	Traditional food gathering practices sustained
Stream health – tributaries (water quality & quantity)	Mahinga kai success for customary use	Provides for wellbeing/recreation/tourism/education
Lake margin vegetation health	Recreation/public access	Employment opportunities linked to natural resources
Wetland cover and quality – catchment wide	Active protection of the environment	
Waipuna health	Integrity of landforms and landscapes	Financial/Physical Capital Indicators
Wildlife (birds) health	Protection of historic sites and resources	Existing land use continues to be profitable (with nutrient/sediment losses managed and reduced to acceptable levels)
Fisheries health		Opportunities to investigate and implement new sustainable/regenerative enterprises
Landform and landscape		Tourism infrastructure/facilities



Te Waihora Indicator Framework

Natural Capital Indicators	Social Indicators	Human Capital Indicators
<p>9. Water quality</p> <p><i>Why:</i> Water quality supports functional food web which sustains communities, individuals and economies. Water clarity matters to people</p>	<p>7. Co-Governance</p> <p><i>Why:</i> The statutory and non-statutory responsibilities held by the Parties contribute to every aspect of ecosystem health and how that intersects with communities, individuals and the economy. They have the ability to influence priorities and direct resourcing</p>	<p>4. Traditional food gathering practices sustained</p> <p><i>Why:</i> The ability to participate in customary activities, maintain traditions and learn skills will increase a sense of identity and belonging and enable future generations to continue to traditional practices</p>
<p>10. Stream health – tributaries (water quality & quantity)</p> <p><i>Why:</i> Tributary quality and quantity affect in lake water quality and quantity; tributaries provide tuna habitat and opportunities for mahinga kai and recreation</p>	<p>8. Mahinga kai success for customary use</p> <p><i>Why:</i> The ability to participate in customary activities and maintain traditions strengthens communities</p>	<p>5. Provides for wellbeing/recreation/tourism/education</p> <p><i>Why:</i> Connection with nature is known to contribute to physical and mental wellbeing of individuals</p>
<p>11. Lake margin vegetation health</p> <p><i>Why:</i> Appropriate vegetation on lake margins provides key habitats, especially for birds, helps to reduce erosion (and therefore sediment deposition), and helps to manage public/vehicle access</p>	<p>9. Recreation/public access</p> <p><i>Why:</i> Communities/agencies can ensure that people have the ability to connect with nature, which is known to contribute to physical and mental wellbeing</p>	<p>6. Employment opportunities linked to natural resources</p> <p><i>Why:</i> Employment opportunities and choices for people will contribute to their health and wellbeing</p>
<p>12. Wetland cover and quality – catchment wide</p> <p><i>Why:</i> Wetlands in the catchment can trap and remove contaminants and provide habitat</p>	<p>10. Active protection of the environment</p> <p><i>Why:</i> Much more will be achieved with the buy-in and active participation of those with land stewardship roles</p>	
<p>13. Waipuna health</p> <p><i>Why:</i> Waipuna support tributary water quality</p>	<p>11. Integrity of landforms and landscapes</p> <p><i>Why:</i> To recognise and provide for examples of Ngāi Tahu cultural landscapes of particular importance in the catchment, and acknowledge that the landform is distinctive and rare internationally</p>	<p>1. Existing land use continues to be profitable (with nutrient/sediment losses managed and reduced to acceptable levels)</p> <p><i>Why:</i> Existing land use which adapts to meet higher environmental standards to protect the water quality of the lake will contribute to maintaining the economic prosperity of the catchment (along with uptake of new opportunities)</p>
<p>14. Wildlife (birds) health</p> <p><i>Why:</i> Wildlife (birds) are acknowledged as an outstanding feature of the lake (WCO) and the lake is of international significance for species diversity and abundance, relevant for mahinga kai and recreation</p>	<p>12. Protection of historic sites and resources</p> <p><i>Why:</i> Both the historic Māori occupation around the lake and the later Ngāi Tahu and European settlement are important parts of Canterbury's heritage and valued by lake communities</p>	<p>2. Opportunities to investigate and implement new sustainable/regenerative enterprises</p> <p><i>Why:</i> Creation of new business opportunities which are complementary to supporting the mauri of the lake and environs will contribute to maintaining the economic prosperity of the catchment and supporting local communities</p>
<p>13. Fisheries health</p> <p><i>Why:</i> Healthy fisheries are part of the food web of the lake and vital for mahinga kai, recreation and economic opportunities associated with the lake.</p>		<p>3. Tourism infrastructure/facilities</p> <p><i>Why:</i> Provision of tourism infrastructure and facilities will support and reflect demand. Great provision will be linked to the quality of the environment and experience for visitors</p>
<p>14. Landform and landscape</p> <p><i>Why:</i> The integrity of landforms and landscapes, and their historic significance, is of great importance to the communities around the lake</p>		

Te Waihora Co-Governance Group

Date of meeting	12 March 2021
Agenda item	5.5
Author	Joint Officials Group

Funding landscape updates

Te whāinga / Purpose

1. To provide Co-Governors with a high-level overview of the current funding landscape with respect to the larger -scale projects contributing to the restoration of the mana, mauri and ecosystem health of Te Waihora and the catchment.

Ngā hononga / Value proposition

2. Securing sustainable long-term funding and investment for actions on the ground is a key commitment for Co-Governors, and an understanding of the current funding landscape provides valuable context and may highlight opportunities.

Ngā tūtohutanga / Recommendations

That the Te Waihora Co-Governance Group:

1. Note the information provided.

He kupu whakataki / Background

3. A paper summarising the funding landscape, i.e. the projects currently funded, the applications in progress, and potential future opportunities, was presented to Co-Governors at the 4 December 2020 hui, providing the basis for discussion.

Funding landscape update

4. Joint Officials have provided an update on the information provided in December (attachment 1). It is proposed that a simple update be provided at each Co-Governance hui on larger-scale projects:
 - current Whakaora Te Waihora projects (i.e. governed by the Co-Governance Group)
 - current relevant projects/work programmes involving Co-Governance Parties
 - funding applications proposed or in progress.

5. Major projects are those that:
 - are located in the Te Waihora Catchment
 - are timebound, i.e. have a start date and a planned finish date
 - have significant investment (e.g. considerable staff time and/or >\$100,000 over the life of the project).
6. In addition to major projects, all Parties undertake ongoing work that is relevant to the restoration of Te Waihora, including monitoring programmes, management of the drainage schemes and lake opening to the sea, supporting the Selwyn Waihora Zone Committee, and supporting community action with funding (e.g. Environment Canterbury's Canterbury Biodiversity and Immediate Steps funding, Selwyn District Council's Significant Natural Environment Fund, various Department of Conservation contestable funds).
7. It may be possible to extend the scope of an update in future to include major projects being undertaken by groups other than the Co-Governance Parties.

Funding opportunities

8. There are a range of opportunities available for further funding. Attachment 1 includes a section on applications in progress led by Co-Governance Parties.
9. At the 4 December 2020 hui, Co-Governors asked Joint Officials to investigate the possibility of funding a position for someone to identify opportunities and projects for further funding. A verbal update will be provided at the 12 March 2021 hui.

Implications, cost, and engagement

Implications

10. Regular updates will ensure that all Parties have an opportunity to present information on their individual contributions, as well as those of Whakaora Te Waihora, and that each Party receives the same information.
11. As the information is presented in a public forum, Joint Officials will ensure that no confidential or commercially sensitive information is included.

Costs

12. There are no costs to providing the update, other than staff time to provide and collate information.

Engagement

13. The updates are likely to be of interest to the participants in Whakakōhanga Kōrero and others working in the catchment.

Te mahere mahi / Next steps

14. Updates will be provided at each Te Waihora Co-Governance Group hui.

He āpitihanga / Attachments

- Funding landscape update

Funding landscape update

Projects

Table 1: major projects already underway and led by Whakaora Te Waihora (WTW), under the governance of the Te Waihora Co-Governance Group

Project	Date	Who	Funding	Description
Whakaora Te Ahuriri constructed wetland	Commenced 2019, completion in early 2021	WTW	\$1.28 million from the Ministry for the Environment's Freshwater Improvement Fund (FIF), with \$1.45 Million from ECan and \$15k from NIWA.	To create a constructed wetland at Ahuriri Lagoon to improve water quality, biodiversity and mahinga kai values.
Whakaora Te Waikēkēwai	Commencing 2021	Te Taumutu and WTW	\$2.16 million from the Ministry for the Environment (FIF). Total project costs will be \$4.16 million, with the remainder coming from ECan, Te Taumutu Rūnanga and private landholders	To restore Waikēkēwai Stream. Building on existing smaller scale WTW project.

Table 2: major projects already underway and led by, or funded by, one or more of the Co-Governance parties, and which contribute to achieving the vision for Te Waihora and the catchment.

What	Date	Who	Funding	Update
One Billion Trees	2017-2020	DOC	\$1 million for site preparation, plants, guards, planting and plant maintenance	Planting 100,000 trees on public conservation land around the lake margin (Yarrs, Williams and Lakeside Reserves)

Weed strikeforce	From 2017	Delivered by DOC, funded by ECan	\$150k per annum	Weed and willow control around the edges of Te Waihora, including grey willow, yellow flag iris, reed canary grass, blackberry, elderberry, gorse and other exotic weeds.
<u>Living Water – Ararira catchment</u>	2013-2023	DOC and Fonterra, with support from SDC	Approx \$300k per annum for 10 years	Living Water's key focus is transforming the drain and water network into a healthy freshwater ecosystem in this productive agricultural landscape.
Capital Programme to reduce sediment and contaminant loads into Huritini Halswell River	Circa 2010 to 2029	CCC	\$810,000 for Quaifes-Cox Stormwater Facility for FY20-21 \$721,000 for Owaka Corridor - Wilmers Basin for FY20-21	Total project cost for Quaifes-Cox Stormwater facility \$10.4 million Total cost for Owaka Corridor – Wilmers Basin \$3.9 million
Halswell catchment flood modelling	2020-2021	CCC	\$27,000 for FY 20-21	Updates existing model, to meet requirement of Comprehensive Stormwater Network Discharge Consent; total cost to date \$236,000
Huritini Halswell Stormwater Management Plan	2019-2021	CCC	\$250,000 estimated cost	Preparing a new plan to comply with requirements of Comprehensive Stormwater Network Discharge Consent; will replace existing SMP. Aiming for December 2021 for completion
Huritini/Halswell weed barrier	Commencing 2021	ECan	\$1 million 64% government's COVID-19 Response and Recovery Fund, 36% funded by Environment Canterbury (through a combination of contributions from partners, operational funding, and rates).	Weed barrier replacement in the lower reaches of the Huritini/Halswell River

Kahuria Te Waihora	2020-2024	DOC	\$2.6 million over 4 years from the government's Jobs for Nature programme.	Employing up to 31 people over a four-year period planting an additional 250,000 native, eco sourced plants on public conservation lands around Te Waihora. Reducing future weed burdens, restoring habitat and providing ecosystem services
Te Makura: Nursery employment initiative	Commencing 2020 for 18 months	Te Taumutu Rūnanga and DOC	\$710k over 18 months from Jobs for Nature, DOC. Funding secured by Te Taumutu Rūnanga.	Based at the DOC Motukarara Nursery to teach and empower unemployed rūnanga members in the broad range of nursery skills
Swimmable Selwyn @ Coes Ford		ECan-led, with SDC and industry support	Significant staff time and resources (detailed costs not available)	On-farm fencing, riparian planting, and sediment traps, with ongoing water quality monitoring.

Applications in progress or planned

Table 3: applications in progress or planned, where one or more of the Co-Governance Parties is directly involved.

Project	Date	Who	Fund	Description
Tārerekautuku/Yarrrs Lagoon	Submitted 10 February 2021	SDC	Application for \$796,980 from the Freshwater Improvement Fund (MfE)	Funding requested for weed and willow control, wetland and riparian planting, waterway rebattering, pest control and sediment traps (some of these costs are covered by co-funding).
Tārerekautuku/Yarrrs Lagoon	Submitted 19 February 2021	SDC	Application for \$920,348 from the Kaimahi for Nature Fund (DOC)	As above <i>Note: two concurrent applications for the same project due to timing of funding rounds. If successful with one, the other application would be withdrawn.</i>

Other projects

In addition to the large projects noted above, each of the Co-Governance Parties is also involved in delivering or facilitating numerous smaller scale projects and ongoing work programmes, including extensive monitoring programmes, that contribute to the restoration of the mana, mauri and ecosystem health of Te Waihora.

Table 4: annual contestable funds for restoration in the Te Waihora catchment

Project	Date	Who	Funding	Description
Community biodiversity funding (Canterbury Biodiversity funding and Immediate Steps funding)	Annual	ECan	\$100k+ each year from ECan for the Te Waihora catchment, plus similar level of contribution from landowners and other parties	Biodiversity and water quality initiatives. Selwyn Waihora Zone Committee recommends allocation of the Immediate Steps Fund.
Selwyn Natural Environment Fund	Annual	SDC	\$73k each year from SDC, plus similar level of contribution from landowners and other parties	To assist landowners with voluntary work that benefits the natural environment and to support the continued identification and protection of on-farm biodiversity.

Kids Discovery Plantout

Contributing to restoration in the catchment is the **Kids Discovery Plantout**, a collaboration between Te Ara Kākāriki and Enviroschools delivered to schools in the Selwyn District. Students have the opportunity to learn about native biodiversity through taking on a role of *tiaki tamariki*, caring for their special biodiversity restoration site and together contributing to restoring native ecosystems across the Canterbury Plains. The programme receives funding from Whakaora Te Waihora and Selwyn District Council, and is supported by the Department of Conservation and Te Taumutu Rūnanga.

Pest control – Kaitōrete

Pest Free Banks Peninsula is a partnership of 14 groups, including all of the Te Waihora Co-Governance Parties, that are signatories to a memorandum of understanding to remove pests from Banks Peninsula. The area includes Kaitōrete. In August 2020 Pest Free Banks Peninsula received \$5.11m to be spent over five years on [large-scale pest control](#) to be over about 28,500 hectares, expanding work under way in the Wildside Project in the southeast of the peninsula, and the internationally significant spit and dune systems of Kaitōrete, the long finger of land extending south-west from Banks Peninsula for 25 kilometres and separating the shallow waters of Te Waihora from the Pacific Ocean.

Te Waihora Co-Governance Group

Date	12 March 2021
Agenda item	5.6
Paper author	Angus McLeod / Diane Shelander

Refreshing the Website

Te whāinga / Purpose

1. To update the Te Waihora Co-Governance Group on progress towards a website refresh and to seek direction on next steps.

Ngā hononga / Value proposition

2. Raising awareness of Co-Governance and the positive outcomes being achieved, and sharing the story of Te Waihora, will help us reach new audiences, including central government and new investors. A new website is a key element of the communications and engagement plan for Co-Governance, and will provide a platform to boost public engagement.

Ngā tūtohutanga / Recommendations

That Co-Governors:

1. confirm that a new website is a priority deliverable for Co-Governance
2. provide an indication of preferred option for delivery, either:
 - Option 1 (design and development outsourced and fully funded by the partners), or
 - Option 2 (design, development and content editing provided by Environment Canterbury staff, with a funding contribution from the partners).

He kupu whakataki / Background

3. The current Co-Governance website (www.tewaihora.org) has been running for several years. Due to its age, it suffers from operational and maintenance constraints and is difficult for users to navigate. Despite this, it is well used and has a dedicated following. The most popular page is “Current Projects”, particularly Whakaora Te Ahuriri. However, there is considerable scope for increasing the usage.

4. In mid-2020, the Joint Officials Group considered a proposal and business case on the future of the website. A development project team was formed to scope a new website using www.healthyharbour.org.nz as a possible exemplar. This website cost approximately \$50,000 to deliver. Joint Officials indicated that budget of this magnitude was unavailable from the partners at that time.
5. Due to COVID-19, there was an underspend of the Ministry for the Environment (MfE) funding for the Whakaora Te Ahuriri wetland construction project for 2019/20. The Joint Officials agreed that the redevelopment of the website would provide significant benefit to the project and the MfE was approached with a request to use some of the underspend on this work. This request was declined.

Discussion

6. The current website has reached the end of its useful life. The way we are able to present current information, such as video footage, is limited. Dynamic, modern digital presence is a baseline foundation to build audience, profile and engagement. Social media platforms can be used to boost traffic once we have an improved website with better functionality.
7. A new website has potential to increase awareness of and engagement with Te Waihora values, building towards a “one-stop-shop” for all things related to Te Waihora, profiling the role of Co-Governance and telling restoration stories more effectively. This in turn will help inform key decision-makers including potential funders.
8. With Co-Governors developing 10- and 20- year vision statements and identifying large-scale anchor projects, a new website will be a key platform for raising awareness and improving communications and engagement at local, regional and national levels.
9. An enhanced website would also provide an opportunity to build links with other stakeholders, for example the participants of Whakakōhanga Kōrero, and to provide a portal for relevant information and a way to showcase restoration activities across the catchment.
10. There are two options presented for delivering a new website (advantages and disadvantages of each in brackets):
 - Option1: design and development outsourced and fully funded by the partners, with direction / support and content editing from Environment Canterbury staff (more timely delivery likely, higher up-front cost)
 - Option 2: design, development and content editing provided by Environment Canterbury staff, with a funding contribution from the partners (delivery subject to other demands on staff time, lower up-front cost).

Implications

11. There are different budgetary and timing implications for each option:

- outsourced and fully funded – a contribution of \$10,000 - \$15,000 per partner (to be confirmed when scoping is completed), Environment Canterbury staff provide development, hosting and maintenance support, communications group members provide content and advice. Under this option, depending on final project scope, development may proceed in a timely way (possible delivery July - September 2021).
- delivered by Environment Canterbury staff, with funding contribution from other partners – a contribution of \$2000 - \$5000 per partner would be allocated to design, imagery etc. Environment Canterbury staff would develop the website, with communications group advisors providing content and advice. Under this option, depending on project scope, development timing is subject to other demands (possible delivery October - December 2021).

Te mahere mahi / Next steps

12. Once the preferred option is selected and financial contributions are indicated, a full scoping, budget and design brief will be developed by the project team, including timing of delivery.

He āpitihanga / Attachments

- n/a

Additional information

File reference	[SharePoint link for this paper]
Peer reviewed by	David Murphy, Adrienne Lomax, Ann Gillies (ECan), Robin Raymond (SDC) – project team members; also shared with James Harding (TRoNT), James Richardson (CCC), Stephen Hill (SDC), Michael Hayward (DOC) – communications group members

Te Waihora Co-Governance Group

Date of meeting	12 March 2021
Agenda item	5.7
Author	Tim Davie, Murray Washington, Diane Shelandier

Draft Long-Term Plans 2021-31 – Environment Canterbury, Selwyn District Council, Christchurch City Council

Te whāinga / Purpose

1. To provide an overview of the draft Long-Term Plans (LTP) for Environment Canterbury, Selwyn District Council and Christchurch City Council, noting some key aspects relevant to Te Waihora and the catchment.

Ngā hononga / Value proposition

2. The LTP, effectively a council's business plan, covers a ten-year period and is reviewed every three years. The LTPs provide an opportunity to have input into the priorities and budgets across all areas of council activity, including those council functions, powers and duties covered by the Co-Governance Agreement.

Ngā tūtohutanga / Recommendations

That the Te Waihora Co-Governance Group:

1. Note the information provided on the draft LTPs.

He kupu whakataki / Background

3. A Long-Term Plan forms a key part of a council's commitment to the community. It details for a ten-year period the outcomes the Council aims to deliver, the activities it intends to undertake, and what that will cost. All councils have one as they are required by the Local Government Act 2002.
4. LTPs are updated every three years to reflect changes in councils' priorities due to external factors such as central government policy, changes in community expectations or organisational requirements. In the years between LTPs, activity is reviewed through the Annual Plan process.
5. The draft LTPs are developed by councillors and staff over many months, and are informed by extensive engagement with Ngāi Tahu, central government agencies and other key stakeholders, including the Co-Governance Parties.

Community consultation

6. Each council will undertake formal consultation, with a consultation document summarising what is proposed in the LTP, and setting out key consultation points and the council's preferred option. There is supplementary information, which provides more details and includes a number of policies that will guide how the council works.
7. Following the consultation period when submitters are invited to provide feedback, hearings will be held to allow submitters to come and speak to their submission. Councils will deliberate and make adjustments based on community feedback. The LTP must be adopted by 30 June 2021.

Consultation dates:

- Environment Canterbury: 8 March – 11 April 2021
 - Selwyn District Council: 29 March – 30 April 2021 (tbc)
 - Christchurch City Council: 12 March – 18 April 2021
8. Details of the submission process and how to submit are available on the websites of each council.

Relevance to Te Waihora

9. Each council has a range of statutory obligations and discretionary activities that it undertakes in the Te Waihora catchment. These will be funded through the LTP.
10. Some relevant areas of work and proposals include:

Environment Canterbury

- commitment to working in partnership with Ngāi Tahu, including having Tumu Taiao providing advice to Council in the interests of mana whenua
- funding support for the delivery of Whakaora Te Waihora and Whakaora Te Waikēkēwai, contributing to funding required to match central government funding
- replacement of the Huritini/Halswell River weed barrier, contributing 36% funding to complement 64% central government funding
- working on implementation of the government's Essential Freshwater package, including Te Mana o te Wai
- additional funding for youth engagement and providing support for community groups in the catchment, including the establishment of a new (region-wide) contestable fund.

Selwyn District Council

- funding allocated to the restoration and enhancement of Tārerekautuku/Yarrrs Lagoon, a 77ha wetland in the Ararira/LII catchment near Lincoln that has

significant cultural and ecological value, and is an integral part of the Te Waihora coastal lagoon ecosystem

- funding provision for Significant Natural Area (riparian) management and protection efforts and increasing Selwyn Natural Environment Fund, which supports planting projects on private land
- a number of walkway creation and waterway remediation projects in the Ararira/LII and Huritini/Halswell River catchment
- support for the delivery of the Whakaora Te Waikēkēwai project.

Christchurch City Council

- several capital projects under the Flood Protection & Control Works and the Stormwater Drainage activities for the Huritini/Halswell River catchment, including Sutherlands Road waterway enhancement project, the extension of the Quaifes Murphys detention basin and Sutherlands Road Culverts project
- Modelling of the Huritini/Halswell River as part of the Land Drainage Recovery Programme.

Te mahere mahi / Next steps

11. Each council will undertake consultation and adopt their Long-Term Plan by 30 June 2021.

Te Waihora Co-Governance Group

Date of meeting	12 March 2021
Agenda item	5.8
Author	Joint Officials Group

Co-Governance Risk Register and Report

Te whāinga / Purpose

1. To present the Co-Governance risk register and risk report for the period to early March 2021

Ngā hononga / Value proposition

2. Risk management will provide support to decision making and increase the likelihood of achieving objectives.

Ngā tūtohutanga / Recommendations

That the Te Waihora Co-Governance Group:

1. receive the attached strategic risk register (attachment 1) and risk report (attachments 2)

Co-Governance Risk register

3. The risk register (attachment 1) identifies current risks under the headings of the eight commitments. Some risks may apply to more than one commitment but only appear once in the register.
4. The Joint Officials Group (JOG) review the status of each risk before each Co-Governance meeting and report on any elevated risks or changes in risk status.
5. Updates to the risk register include:
 - adding the word 'perception' to risk 2.1, to read: *Perception of lack of progress* (in relation to progress on implementation of the strategic direction for the lake), and changing the status to high to acknowledge some confusion in the community about what is being achieved by the multiple initiatives in the catchment
 - changing the status of risk 4.6 (*In relation to assessing applications for funding (COVID response), MfE's perception of Te Waihora values*) from high to low to acknowledge recent funding allocations.

Co-Governance Risk reports

6. A high-level risk report (attachment 2) is based on the current risk register. JOG have assessed what is relevant to report to Co-Governors based on the risk appetite agreed by the Co-Governors (October 2018).
7. Whakaora Te Waihora operational risk is reported in more detail separately see agenda item 6.1)

Attachments

- Attachment 1 Te Waihora Co-Governance Risk Register
- Attachment 2 Te Waihora Strategic Risk Report

Attachment 1: Te Waihora Co-Governance Risk Register – March 2021

JOG reviews and updates the risk register before every Co-Governance meeting and prepares a report to provide an overview of top-rated risks and any changes, identifying the issues and opportunities that JOG agree should be highlighted. New risks can be identified, assessed and added to the register at any time. Risks will be assessed against the following categories: Co-Governance Relationships; Relationships (internal); Relationships (external); Reputational Risk; Statutory Obligations; Financial; Operational; and Health and Safety (see Risk Appetite table).

Risk Rating

LOW
MEDIUM
HIGH

Trend

Elevated
Reduced
Steady




Ref	Specific Risk	May 2020 Rating	Sept 2020 Rating	Nov 2020 Rating	March 2021 Rating	Trend	Commentary Mitigations/proposed mitigation	Previous Mitigation Comment	Owner(s) of mitigation
1. Commit to co-governing the lake and its catchment									
1.1	Relationship issues challenge long term viability of Co-Governance Arrangements					Steady	The SDC Council meeting in July 2020 Councillors approved in principle the signing of the revised Agreement, affirming their commitment to Co-Governance.	Clarification provided by JOG officials to Selwyn District Council in August after some Councillors expressed concerns about the Agreement. Further information will be provided to SDC as required.	Co-Governors / JOG
1.2	Impacts of COVID-19 pandemic					Steady	Uncertainty remains while the pandemic continues globally. Funding pressures on the Parties have been exacerbated, however, government stimulus packages present increased opportunities.	While the commitment to co-governance remains high the requirement to work under the restrictions of the national Pandemic Alert Level System is likely to disrupt the machinery of co-governance, as other activities will be higher priority for staff and there will be limited opportunities to engage with other organisations.	Co-Governors / JOG
2. Provide political leadership and influence for the implementation of our strategic direction for the lake									
2.1	Perception of lack of progress					Steady	Increase efforts to raise community awareness of work underway and role of Co-Governors. This will include establishment of Whakakōhanga Kōrero (stakeholder forum), and investigation of website improvements.	Manage expectations with good comms, regular reporting; further work needed to raise visibility of Co-Governance Group	Co-Governors / JOG
2.2	Enhancing relationship with the Selwyn Waihora Zone Committee					Steady	Selwyn Waihora Zone Committee Co-Chair, plus the SDC representative, attended the 4 December 2020 hui and participated in the hui that followed it.	Updates provided to Zone Committee after the December 2019 meeting. Zone Committees meetings suspended during lockdown.	Co-Governors / JOG
3. Set strategic direction and priorities for all those working to restore the mauri of Te Waihora, ki uta ki tai									
3.1	Lack of alignment of the objectives/priorities of the Parties					Steady but review overdue	Agreed to new forum (Whakakōhanga Kōrero) – first hui delayed due to COVID set for 5 March 2021	There may be impacts of COVID-19 on the priorities of the Parties and other stakeholders	Co-Governors / JOG
4. Secure sustainable long-term funding for actions on the ground									
4.1	Lack of progress in securing future funding					Steady	Investigations into contracting expertise to assist with navigating the funding opportunities available.	Bradly report provided a focus for discussion regarding opportunities for seeking investment.	Ngāi Tahu / JOG

































Ref	Specific Risk	May 2020 Rating	Sept 2020 Rating	Nov 2020 Rating	March 2021 Rating	Trend	Commentary Mitigations/proposed mitigation	Previous Mitigation Comment	Owner(s) of mitigation
								Wānanga to be arranged for early 2021 to discuss funding	
4.2	Lack of capacity/capability to undertake and manage a large scale fundraising programme					Steady	Investigations into contracting expertise to assist with navigating the funding opportunities available.	Work on the efficiency review has been delayed. However, a final report and recommendations is will be provided to Chief Executives early in 2021. JOG will consider the recommendations.	Co-Governors / JOG
4.3	Poor execution of projects undermines ability to raise further funds					Steady	Good project management processes in place and followed		JOG
4.4	Current funding secure and stable					Steady	For the 2020/21 financial year, the budget for the WTW programme is \$1,156,140. \$413,520 of the budget is for the Whakaora Te Ahuriri project where, as the project is now in its maintenance and monitoring phase, the main costs in 2020/2021 are for the maintenance of terrestrial plants, the Mātauranga Māori monitoring programme, and the applied research methodology to monitor water quality.	For the 2019/2020 financial year, the budget for the WTW programme is \$1,923,631. The breakdown of this budget is: \$565,091.50 is the Freshwater Improvement Fund contribution for the Whakaora Te Ahuriri project in 2019/2020; \$5,000 is the confirmed NIWA contribution for the Whakaora Te Ahuriri project in 2019/2020; and, the remaining \$1,353,540 is the Environment Canterbury contribution (including \$623,186.50 specifically for the Whakaora Te Ahuriri project).	JOG
4.5	Impact of economic recession as a result of COVID-19 on availability of funding sources					Steady	A number of opportunities have arisen from the Government's response to COVID-19, for partners and for others working in the Te Waihora catchment.	Some sources of funding may be less available, however, there could also be new opportunities with potential for investment in green infrastructure projects. May be useful to try and identify opportunities that would create local employment, in addition to having environmental benefits	
4.6	In relation to assessing applications for funding (COVID response), MfE's perception of Te Waihora values					New	Work now commencing on scaled up project on restoration of the Waikēkēwai, following a successful FIF application to MfE	All Parties to continue to engage with MfE and other agencies and to take opportunities to promote the values of Te Waihora	
5. Promote integration and alignment of actions across the lake and catchment within an overarching framework for restoration and rejuvenation									
5.1	Lack of alignment of relevant operational activities of the Parties					Steady	Work on hold on operational protocols. Operational relationships/cooperation unchanged There may be impacts of COVID-19 on partners and stakeholders that could affect alignment		JOG
6. Share decision making and responsibilities									
6.1	Financial management					Steady	Appropriate financial protocols in place for the entity managing projects;		Co-Governors / JOG





































Ref	Specific Risk	May 2020 Rating	Sept 2020 Rating	Nov 2020 Rating	March 2021 Rating	Trend	Commentary Mitigations/proposed mitigation	Previous Mitigation Comment	Owner(s) of mitigation
							following protocols / reporting for external funding; use of agreed procurement processes		
6.3	Health and Safety of staff working on Co-Governance work programmes					Steady	Whakaora Te Waihora H&S Policy in place. Whakaora Te Waihora Risk Register in place, which contains mitigating actions and assurances for H&S risks		Co-Governors / JOG
7. Provide an intergenerational focus									
7.1	Short term planning focus of local and central government institutions, i.e. no longer than 10 years					Steady	Recognise statutory requirements but encourage a longer view where possible, e.g. 30 year infrastructure strategies, taking a longer term view than for other strategies		Co-Governors / JOG
7.2	Loss of intergenerational focus due to lack of progress on in/near lake solutions and/or catchment interventions risks not seeing expected improvements in 20-30 years' time					Steady	In/near lake solutions discussions being progressed. A report outlining the viability of bed sediment and phosphorus recovery and reuse from Te Waihora has been received.	Ensure this work has high priority; progress continues to be reported against clear milestones	Co-Governors / JOG
8. Evaluate effectiveness over time									
8.1	Inadequate mechanisms/frameworks to measure and report progress					Steady	Wānanga with a focus on indicators was held 4 December	High level set of indicators being developed to track progress; regular reporting	JOG
8.2	Data not available (or shared)					Steady	Monitoring strategy to identify gaps/overlaps; work on developing data sharing agreements/protocols		JOG

5.2 Attachment 2: Te Waihora Strategic Risk Report – March 2021

This report summarises progress made to March 2021 and highlights the current assessed level of risk faced in achieving commitments. Narrative is provided to describe events, changes, trends or other factors where explanation or further attention is required.

KEY			SCOPE OF THIS REPORT
			This regular summary report sits over a risk register cascading from the measures and targets under the commitments. Risks are identified against commitments assessed against the strategic risk categories
Low Risk, or On Track	Medium Risk, or Attention needed	High Risk, or Off-track	

STRATEGIC COMMITMENTS	May 2020	Sept 2020	Nov 2020	Mar 2021
Commit to co-governing the lake and its catchment				
<i>While the commitment to co-governance remains high, the requirement to work under the restrictions of the national Pandemic Alert Level System may disrupt the machinery of co-governance, as other activities will be higher priority for staff and there will be limited opportunities to engage with other organisations.</i>				
Provide political leadership and influence for the implementation of our strategic direction for the lake				
<i>The is some confusion and concern in the community regarding the perception that, despite significant amounts of funding being allocated to a number of agencies, there is limited progress in achieving environmental outcomes and too much bureaucracy in delivering projects.</i>				
Set strategic direction and priorities for all those working to restore the mauri of Te Waihora, ki uta ki tai				
<i>New stakeholder forum agreed, but meeting delayed due to COVID-19.</i>				
Secure sustainable long-term funding for actions on the ground				
<i>Current year's WTW funding secure and stable. Discussions underway on opportunities for seeking future investment; resourcing is required to undertake and manage a large scale fundraising programme.</i>				
Promote integration and alignment of actions across the lake and catchment within an overarching framework for restoration and rejuvenation				
<i>Operational integration and alignment not yet formalised, with the exception of lake level management. Protocol for decision making on the opening or closing of Te Waihora/Lake Ellesmere to the sea agreed and other protocols drafted.</i>				
Share decision making and responsibilities				
<i>Being reviewed as part of restructure of the Co-Governance Agreement in 2021.</i>				
Provide an intergenerational focus				
<i>Ensure the work to progress in/near lake solutions and/or catchment interventions has high priority; progress continues to be reported against clear milestones.</i>				
Evaluate effectiveness over time				
<i>High level set of indicators developed to track progress.</i>				

STRATEGIC RISK CATEGORIES	May 2020	Sept 2020	Nov 2020	Mar 2021
Co-Governance relationship (i.e. between the 5 Parties)				
<i>Revision of the Agreement has provided an opportunity for Parties to reaffirm commitment to Co-Governance</i>				
Relationships (internal – within each organisation)				
<i>Revision of the Co-Governance Agreement has provided an opportunity to clarify the commitment to co-governance within each organisation.</i>				
Relationships (external – with key stakeholders)				
<i>Co-Governance Group hui will now be held in public, promoting visibility and transparency and helping to raise awareness of the role of the Co-Governors.</i>				
Reputational – likely to impact future fundraising				
Statutory Obligations				
Financial				
• Management of budget				
• Fundraising				
<i>Management of current restoration budget on track; discussions underway on opportunities for seeking future investment; resourcing is required to undertake and manage a large scale fundraising programme.</i>				
Operational				
Health and Safety (reported more fully by WTW)				

5.9 Co-Governance Strategy Action Plan update December 2020 – March 2021

1. We will commit to co-governing the lake and its catchment

Target 1.1 Adopt a Strategy for Co-Governance to set direction for the Co-Governance Parties.

- Achieved

Target 1.2 Ensure that the Co-Governance Arrangements provide a sound basis for the journey ahead.

- Interim revision to incorporate DOC in June 2019.
- Revision of the Co-Governance Agreement still underway.

Target 1.3 Increase the external profile of Co-Governance and increase transparency, including public meetings, agendas and minutes

- Public meetings under the provisions of LGOIMA part 7 are being held.

Target 1.4 Improve communication within and between Co-Governance Parties, and with stakeholders and the wider community.

- A number of people from the Parties were interviewed for a [feature on Te Waihora](#), published in the March-April edition of NZ Geographic magazine.
- Te Waihora and Whakaora Te Ahuriri featured in coverage of World Wetlands Day.
- A mini documentary on the Whakaora Te Ahuriri project is being planned.
- Permanent signage for the Whakaora Te Ahuriri constructed wetland is almost complete.

Target 1.5 Provide opportunities for all Councillors / Governors of each the five Parties to learn more about Co-Governance and what it means for their organisations.

- Information provided to governance groups as part of reviewing draft restructured Co-Governance Agreement.

2. We will provide political leadership and influence

Target 2.1 Seek ways to increase efficiency and coordination of engagement requirements for key parties.

- Establishment of a new stakeholder forum agreed (Whakakōhanga Kōrero). Initial contact made with potential participants, with the first hui scheduled for 5 March 2021.

Target 2.2 Build and strengthen relationships nationally and internationally

- Presentation on work in the Waikato catchment delayed – to be rescheduled in 2021.

3. We will set strategic direction and priorities

Target 3.1 Articulate the shared long-term vision and strategic priorities for the restoration of the mauri of Te Waihora.

- Wānanga in December 2020 articulated 10- and 20- year vision statements for 20 indicators to guide prioritisation.

4. We will secure sustainable long-term funding

Target 4.1 Secure sustainable long-term funding from a variety of sources: central and local government, industry, philanthropic trusts.

- Work continues on investigating options for future investment. New opportunities have arisen as a result of COVID-19
- Successful application to the September 2020 round of the Freshwater Improvement Fund (FIF), led by Taumutu Rūnanga on behalf of Co-Governors, for the restoration of Waikēkēwai Stream. The Whakaora Te Waikēkēwai project will have a total budget of \$4.16 million over five years, of which the FIF will contribute \$2.16 million. Environment Canterbury will contribute \$785k in direct funding and \$52k in in-kind support, with the remainder coming from other sources (Te Taumutu Rūnanga, and private landholder contributions).

5. We will promote integration and alignment

Target 5.1 Assess current lake-related restoration related activities across the catchment.

- The contributions of the parties and other stakeholders updated and included in the Whakaora Te Waihora Annual Work Plan for 2020/21.

6. We will share decision making and responsibilities

Target 6.1 Develop and agree operational process protocols

- Works on operational protocols on hold. Operational relationships/cooperation unchanged.
- Lake opening: the lake was last mechanically opened 16 July 2020 and closed naturally on 11 August 2020. The wind-affected average level as at 8am on Monday 1 March was 0.76m.
- Since August, the lake level has been below the threshold at which opening can occur.

Target 6.2 Provide governance/oversight of the delivery of the Whakaora Te Waihora Joint Restoration Work Programme.

- Annual Work Plan prepared, and regular reporting provided.

7. We will provide an intergenerational focus

Target 7.1 Take a long-term approach to restoring the mauri of the lake.

- A report outlining the viability of bed sediment and phosphorus recovery and reuse from Te Waihora was commissioned. JOG will consider next steps.

8. We will evaluate effectiveness over time

Target 8.1 Identify how the Whakaora Te Waihora Programme and each Co-Governance Party is contributing to Co-Governance commitments.

- Work underway to develop an annual reporting format.

Target 8.2 Identify the barriers that prevent the Whakaora Te Waihora Programme and each Co-Governance Party making progress on Co-Governance commitments.

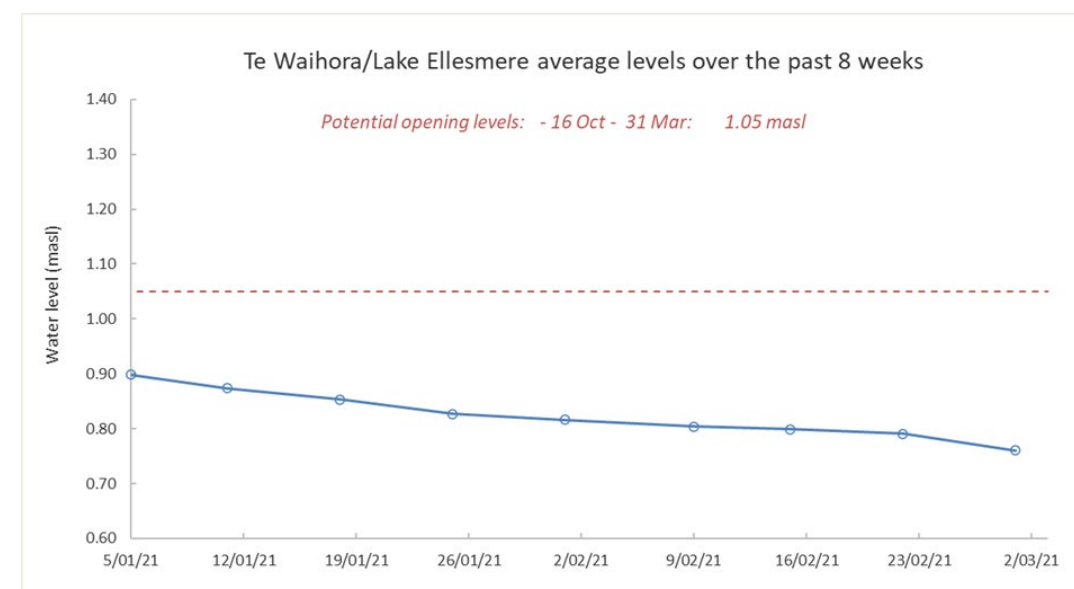
- Risk Register updated; Risk Report to be tabled 12 March 2021.

Target 8.3 Benchmark progress towards achieving Co-Governance commitments.

- To be incorporated into tracking progress – see target 8.4.

Target 8.4 Track progress towards achieving shared long-term vision and strategic priorities for the restoration of the mauri of Te Waihora.

- Draft indicator framework to facilitate regular reporting to Co-Governors and the wider community across a range of wellbeings endorsed by Co-Governors on 6 March 2020.



Te Waihora Co-Governance Group

Date of meeting	12 March 2021
Agenda item	6.1
Author	David Murphy, Annabel Butler and Kelly Garvie

Whakaora Te Waihora Progress Report

Te whāinga / Purpose

- To inform Co-Governors about the progress on:
 - the implementation of the Whakaora Te Waihora Health & Safety Management System and the Whakaora Te Waihora Risk Register
 - the implementation of the Whakaora Te Waihora programme and, in particular, the Whakaora Te Ahuriri project.

Ngā hononga / Value proposition

- Achieving the Whakaora Te Waihora vision of *“To restore and rejuvenate the mauri and ecosystem health of Te Waihora and its catchment”* requires the maintenance of the programme. The success of the programme is also a reflection of the partnership between the member organisations of the Te Waihora Co-Governance Group and will influence the likelihood of future funding for the restoration of Te Waihora/Lake Ellesmere.

Ngā tūtohutanga / Recommendations

That the Te Waihora Co-Governance Group:

- notes** the Health & Safety update, the Risk Register update, and progress on the Whakaora Te Waihora programme and the Whakaora Te Ahuriri project.
- approves** the addition of the new risk of ‘Potentially toxic blue-green algae’ to the Whakaora Te Waihora Risk Register.

Health and Safety Update for Whakaora Te Waihora

- There have been no new incidents or near misses since the last briefing to Co-Governors on 4 December 2020.
- A new risk will be added (pending Te Waihora Co-Governance Group approval) to the programme’s Risk Register. Canterbury District Health Board’s Community and Public Health unit has been advised by Environment Canterbury that the dominant species of

blue-green algae (planktonic cyanobacteria) found in Te Waihora/Lake Ellesmere is potentially toxic. The addition of this risk to the Risk Register will be focused on the Health and Safety risk to programme operations. This risk is shown in red text in the Whakaora Te Waihora Risk Register (Attachment 1).

Whakaora Te Waihora Risk Register

5. There are currently 20 risks in the Whakaora Te Waihora Risk Register, of which the current risk ratings are: two High risks, eight Moderate risks, and 10 Low risk (Attachment 2). Priorities for risk management for the Whakaora Te Waihora programme are:
 - implement mitigating actions for the two High risks (COVID-19, and resourcing insufficient to meet the targets of Phase Two of the programme)
 - maintain current mitigating actions for the eight Health & Safety risks with a Moderate risk rating (where the risk rating cannot be lowered further because of the potentially fatal consequences and/or the unreliability of some controls).
6. There is one risk pending Te Waihora Co-Governance Group approval to be added to the Whakaora Te Waihora Risk Register (Attachment 1).

Whakaora Te Waihora/Whakaora Te Ahuriri progress report

7. The delivery of all the projects in the Whakaora Te Waihora Annual Work Plan and Budget 2020/2021 are on track (Figure 2, page 1, Attachment 3), and spend was within a 4.8% variance of the budget (Figure 1, page 1, Attachment 3).
8. Key achievements on projects since the last briefing to Co-Governors on 4 December 2020 were:
 - For the Whakaora Te Ahuriri project,
 - Engineering and earthworks:

In the later months of 2020 it was noted that water-weed was choking Murray's Drain – i.e. the old course of the Huritini/Halswell River, which is the channel that brings water into the main body of the wetland – and limiting the flow of water through the constructed wetland. In January 2021 this water-weed was cleared (Figures 7 and 8, Attachment 3), increasing the flow of water through the wetland.
 - Planting:

Terrestrial plants were maintained to schedule.
 - Communications:

At the joint conference of the NZ Freshwater Sciences Society, NZ Hydrological Society, and the NZ Rivers Group, in Invercargill on 1-4 December, Environment Canterbury staff and consultants delivered three presentations on the project's management ("The Whakaora Te Ahuriri

constructed wetland: an example of collaboration and consensus”), engineering (“Constructed wetlands at a landscape scale: experience from Te Ahuriri”), and mātauranga Māori (“Whakamataara Ahuriri – the journey towards reinstating and restoring a once thriving cultural ecosystem and habitat”), which were all well received.

- For the Weed Strikeforce (delivered by the Department of Conservation):
 - In December 2020, willow control continued for management blocks 14 and 15 (on the north-eastern lakeshore), and a comprehensive round of phalaris control was completed (Figure 3, Attachment 3).
 - In January 2021, follow-up willow control was undertaken at Yarr’s Flat, L2, and at the Boggy Creek Wildlife Management Reserve (Figure 4, Attachment 3); an annual visit to Price’s Valley was conducted for purple loosestrife control, and outside of the Weed Strike Force the team continued plant maintenance for the One Billion Tree planting sites.
 - For the Whakaora Te Waikēkēwai project:
 - The project team (with staff from Te Taumutu Rūnanga, Environment Canterbury, Selwyn District Council, and the Department of Conservation) worked with staff at the Ministry for the Environment/MfE to draft the project’s five-year work programme and annual plan for year 1. MfE staff will visit Taumutu on 10 February 2021 and meet the project team to visit sites and hold a wānanga on the work programme. Once revised, the work programme will be submitted to the Joint Officials Group/JOG for approval before being finalised, and then the Deed of Funding can be signed.
9. A robust programme management platform continues to be maintained, which manages the programme’s relationships, specific projects, finances, Health & Safety, risks, administration, procurement, contracting, and reporting.

Implications, cost, and engagement

Financial implications

10. The costs of all works are included in the approved Whakaora Te Waihora Annual Work Plan and Budget 2020/2021. The budget for the 2020/2021 year is \$1,156,140.
11. \$413,520 of the budget is for the Whakaora Te Ahuriri project where, as the project is now in its maintenance and monitoring phase, the main costs in 2020/2021 are for the maintenance of terrestrial plants, the Mātauranga Māori monitoring programme, and the applied research methodology to monitor water quality.

Communication

12. As part of Co-Governance, programme decisions and reporting has been progressed through the Joint Officials Group (Te Rūnanga o Ngāi Tahu, Environment Canterbury, Selwyn District Council, Christchurch City Council, and the Department of Conservation)

before being reported to the Te Waihora Co-Governance Group (Te Rūnanga o Ngāi Tahu, Environment Canterbury, Selwyn District Council, Christchurch City Council, and Department of Conservation). Updates are also shared with the Selwyn Waihora Zone Committee.

13. The Whakaora Te Waihora Strategic Communications Plan is being implemented with regular stories on <http://tewaihora.org/ourstories/>.

Te mahere mahi / Next steps

14. The Whakaora Te Waihora Annual Work Plan and Budget 2020/2021 will continue to be implemented and progress reports will be provided at all hui of the Te Waihora Co-Governance Group.

He āpitihanga / Attachments

- Attachment 1: Whakaora Te Waihora Risk Register, with draft additions for March 2021.
- Attachment 2: Whakaora Te Waihora risk management report for March 2021.
- Attachment 3: Whakaora Te Waihora progress report for December 2020 and January 2021.

Whakaora Te Waihora Risk Register

The management of risks for the Whakaora Te Waihora programme

The management of the Whakaora Te Waihora programme – as for any programme – encompasses governance, operational delivery (including Health & Safety, project planning, and project management), financial management, relationship management (including communications), and the risks associated with each. For Whakaora Te Waihora:

- This risk register operates under the Te Waihora Co-Governance Risk Management Policy;
- Governance risks are identified and managed through the Te Waihora Co-Governance Risk Register;
- Operational, financial, and relationship management risks are identified in this Whakaora Te Waihora Risk Register.

The risks that have been included in the Whakaora Te Waihora Risk Register are those that are specific to the management of the programme, and which have a higher probability of occurring. Risks have not been included where mitigating actions are part of 'business as usual' (such as for the operational risk of contract management, or the relationship risk of contractor relationships, where procurement and contract management processes are followed as part of 'business as usual').

To provide clarification on the terms 'Risk Rating' and 'Assurances' in the Whakaora Te Waihora Risk Register:

Risk Ratings

Risk Ratings have been determined using the following risk assessment matrix:

Likelihood	Impact				
	Insignificant	Minor	Moderate	Major	Catastrophic
Almost Certain	Moderate	High	High	Extreme	Extreme
Probable	Moderate	Moderate	High	Extreme	Extreme
Possible	Low	Moderate	Moderate	High	High
Foreseeable	Low	Low	Moderate	Moderate	High
Remote	Low	Low	Low	Moderate	Moderate

Assurances

Assurances are the evidence that controls for risks are in place. The categories of 'assurances' are:

- *Self-assessment*, which are assurance actions taken by individuals;
- *Management assessment*, which are assurance actions provided by/tools used by the programme management;
- *Governance assessment*, which are assurances provided by the levels of programme Co-Governance; and,
- *External assessment*, which are assurances provided by external reviews.

Health & Safety at Work Act 2015: s 30 Management of risks A duty imposed on a person by or under this Act requires the person: a) to **eliminate** risks to health and safety, so far as is reasonably practicable; and, b) if it is not reasonably practicable to eliminate risks to health and safety, to **minimise** those risks so far as is reasonably practicable.

Definitions

Issues	Problems that are about to occur, or are occurring
Hazards	Anything that can cause harm
Risk	The possibility that harm might occur when exposed to a hazard
Incidents	An unintended event that happened (usually involves people getting hurt)
Near misses	An incident which could have (or nearly) happened but didn't

Reporting and Investigation

Complete the Hazard/Risk form using "report an issue/hazard"
Complete the Hazard/Risk form using "report an issue/hazard"
Complete the Hazard/Risk form using "report an issue/hazard"
Complete the Incident/Accident form using "report an incident/accident"
Complete the Incident/Accident form using "report an incident/accident"

Likelihood	Descriptor	Uncertainty Yardstick
Remote	May occur only in extremely exceptional circumstances	less than 10%
Foreseeable	Could occur in extraordinary circumstances	15-20%
Possible	Might occur	25-50%
Probable	Will probably occur	55-70%
Almost Certain	Is expected to occur in almost all circumstances	More than 90%

Impact(H&S)	Descriptor (H&S)	Examples-(H&S)
Insignificant		Bump or bruise, minor scratch
Minor	First Aid Treatment	Cuts & grazes, sprains
Moderate	Medical Treatment	Cuts that require stitches, burns <9%
Major	Emergency Surgery	Large bone fracture, spinal injury, full depth burn
Catastrophic	Lifelong injuries	Death, amputation of a limb

Whakaora Te Waihora Risk Register

WTW PIL = Whakaora Te Waihora Programme Implementation Manager.

Risk Category	Risk	Impact	Standards	Inherent Risk Rating (before mitigation)	Mitigation	Current Risk Rating (with current mitigation)	Further controls or escalation factors	Residual Risk Rating (after further controls)	Risk Owner	Assurances	Risk Approval
HEALTH & SAFETY	<p>Potentially toxic blue-green algae</p> <p>The Community and Public Health division of Canterbury District Health Board has been advised (on 17 November 2020) that the dominant species of potentially toxic blue-green algae (planktonic cyanobacteria) found in Te Waihora/Lake Ellesmere has changed from the initial health warning issued on 24 December 2017. The type of cyanobacteria that are currently present in high concentrations are:</p> <ul style="list-style-type: none"> • Nodularia, which can appear as a thick surface scum or be suspended throughout the water. • Dolichospermum (formerly called Anabaena), which can be present as green globules floating in the water column or form surface scums or sheens. People and animals, particularly dogs, should avoid Te Waihora/Lake Ellesmere until the health warning has been lifted. Environment Canterbury monitors the lake fortnightly and the public will be advised of any changes that are of public health significance 	<p><i>On the Health & Safety of people</i></p> <p>The algal bloom can produce toxins harmful to humans and animals. Exposure may cause skin rashes, nausea, stomach cramps, tingling and numbness around the mouth and fingertips.</p>	<ul style="list-style-type: none"> • Risk-management Protocol • Public Health Warnings: https://www.cdhb.health.nz/media-release/health-warning-reminder-change-of-cyanobacteria/ • https://www.ecan.govt.nz/your-region/your-environment/water/health-warnings/lake-warnings/ <p>Follow Environment Canterbury Critical Risk rules for:</p> <ul style="list-style-type: none"> • 'Water' https://punakorero.staff-kete.health-safety/Risk%20Management/risk-water.aspx; • 'Emergency Response' https://punakorero.staff-kete.health-safety/Risk%20Management/risk-er.aspx 	Moderate	<ul style="list-style-type: none"> • Discussions held with project partners and suppliers. • Contractors are strongly advised against activities that involve immersion or prolonged skin contact with the water. the risk can be reduced by wearing waders, lab-grade or rubber gloves, and other PPE as appropriate and minimizing skin exposure in general. Avoid activities can generate droplets and aerosol that can be inhaled. • If exposed, rinse with lots of clean water and seek medical advice if symptoms such as shortness of breath, skin or eye irritations etc. occur. • https://www.ecan.govt.nz/your-region/your-environment/water/health-warnings/ 	Low	<ul style="list-style-type: none"> • Maintain mitigating actions. 	Low	WTW PIL	<ul style="list-style-type: none"> • <i>Management assessment:</i> Regular communication maintained with all staff, project partners, and suppliers/contractors to receive assurances: that no in-lake works will occur; and, workers are safe. • <i>External assessment:</i> Annual external audit to ensure there are adequate controls in place. 	Te Waihora Co-Governance Group
OPERATIONS	<p><i>On the delivery of the programme.</i></p> <p>Restrictions on access to Te Waihora/Lake Ellesmere has an impact on the delivery of macrophyte or monitoring projects.</p>	<p><i>On the delivery of the programme.</i></p> <p>Restrictions on access to Te Waihora/Lake Ellesmere has an impact on the delivery of macrophyte or monitoring projects.</p>	<ul style="list-style-type: none"> • NA 	Moderate	<ul style="list-style-type: none"> • Discussions held with project partners and suppliers. • Contractors are strongly advised against activities that involve immersion or prolonged skin contact with the water. the risk can be reduced by wearing waders, lab-grade or rubber gloves, and other PPE as appropriate and minimizing skin exposure in general. Avoid activities can generate droplets and aerosol that can be inhaled. • SSSP required including • https://www.ecan.govt.nz/your-region/your-environment/water/health-warnings/ 	Low	<ul style="list-style-type: none"> • Maintain mitigating actions. 	Low	WTW PIL	<ul style="list-style-type: none"> • <i>Management assessment:</i> Regular communication maintained with all staff, project partners, and suppliers/contractors to receive assurances: that no in-lake works will occur; and, workers are safe. • <i>External assessment:</i> Annual external audit to ensure there are adequate controls in place. 	Te Waihora Co-Governance Group

Whakaora Te Waihora Risk Register

Risk Category	Risk	Impact	Standards	Inherent Risk Rating (before mitigation)	Mitigation	Current Risk Rating (with current mitigation)	Further controls or escalation factors	Residual Risk Rating (after further controls)	Risk Owner	Assurances	Risk Approval
HEALTH & SAFETY	COVID-19 <i>COVID-19 is a new coronavirus that affects a person's lungs and airways. The World Health Organisation declared the 2019-20 coronavirus outbreak a pandemic on 11 March 2020. As part of their COVID-19 response, the New Zealand Government has an Alert Level System, which restricts the</i>	<i>On the Health & Safety of people. COVID-19 is spread during close contact, and by small droplets produced when people cough, sneeze or talk. While the majority of cases result in mild symptoms, some progress to viral pneumonia and multi-organ failure.</i>	<ul style="list-style-type: none"> At Alert Level 3 and 4, for Environment Canterbury staff, follow the All of Environment Canterbury Standard Operating Procedure for COVID-10 Exposure Practices. 	Extreme	<ul style="list-style-type: none"> All project works that are outside of the restrictions of the current alert level in the New Zealand Government's Alert Level System, are postponed until it is safe and within the Government's direction to proceed with those works. At Alert Levels 2, 3 and 4, for Environment Canterbury staff, the All of Environment Canterbury Standard Operating Procedure for COVID-10 Exposure Practices followed: <ul style="list-style-type: none"> For Type A Work Exposure if working alone; For Type B Work Exposure if working at known sites and/or with other ECan staff in small groups; and, For Type C Work Exposure is working at unknown sites, with ECan staff in large groups, or with other people who are not ECan staff. 	High	<ul style="list-style-type: none"> Maintain mitigating actions. 	High	WTW PIL	<ul style="list-style-type: none"> Management assessment: Regular communication maintained with all staff, project partners, and suppliers/contractors to receive assurances: that all works that are outside of the restrictions of the current alert level in the New Zealand Government's Alert Level System are on hold; and, workers are safe. External assessment: Annual external audit to ensure there are adequate controls in place. 	Te Waihora Co-Governance Group
OPERATIONS	<i>movement of people to break the chain of infection. This risk has three impacts: on the Health & Safety of people, on the delivery of the programme, and on the securing of future funds.</i> Note: This is also a risk in the Te Waihora Co-Governance Group Risk Register.	<i>On the delivery of the programme. Restrictions on the movement of people has an impact on the delivery of projects. At Alert Level 4, all people, apart from essential services and lifeline utilities, are required to stay home and self-isolate, and therefore most project works cannot progress.</i>	N/A	Extreme	<ul style="list-style-type: none"> Discussions held with project partners and suppliers. <ul style="list-style-type: none"> Where possible, current project works progressed. Projects assessed to: <ul style="list-style-type: none"> Identify and postpone works that are outside of the restrictions of the current alert level in the New Zealand Government's Alert Level System (e.g. under Alert Level 4 lockdown, this includes most work such as all fieldwork, events, face-to-face hui/meetings etc.); and, Identify and progress works that can be progressed within the restrictions of the current alert level in the New Zealand Government's Alert Level System (e.g. virtual hui/meetings, office-based work etc.) Plans developed to deliver remaining works under two scenarios: <ol style="list-style-type: none"> The work plan to progress works for if the current alert level is downgraded; and, The work plan for if the current alert level is extended. 	High	<ul style="list-style-type: none"> Maintain mitigating actions. 	High	WTW PIL	<ul style="list-style-type: none"> Management assessment: Regular communication maintained with all project partners and suppliers/contractors to receive assurances on the delivery of current project works, and the plans to deliver remaining works. Governance assessment: Updates on the delivery of current project works, and plans for the delivery of remaining works, provided to the Joint Officials Group and Te Waihora Co-Governance Group as part of regular programme reporting. 	Te Waihora Co-Governance Group
FINANCE		<i>On the securing of future funds. With the restriction of movement, most business have to temporarily close. This is creating a downturn in the economy, and therefore reduced opportunities to secure funding for future projects.</i>	N/A	Extreme	<ul style="list-style-type: none"> Identify where the New Zealand Government and others are looking to fund big projects that could be started straight away post- Alert Level 4 to get people back working, and which projects for Te Waihora fit the criteria. Implement mitigations for the risk 'Resourcing insufficient to meet the targets of Phase Two of the programme'. 	High	<ul style="list-style-type: none"> Maintain mitigating actions. Once any projects have been identified that fit the criteria for post-Alert Level 4, officials/Co-Governors engage with Government to progress an application. 	High	Joint Officials Group	<ul style="list-style-type: none"> Management assessment: Minutes of Joint Officials Group/JOG meetings where 'Future funding' is a standing item. Governance assessment: <ul style="list-style-type: none"> Investment Approach for Phase Two is in place. Group meetings where 'Future funding' is a standing item. 	Te Waihora Co-Governance Group

Whakaora Te Waihora Risk Register

Risk Category	Risk	Impact	Standards	Inherent Risk Rating (before mitigation)	Mitigation	Current Risk Rating (with current mitigation)	Further controls or escalation factors	Residual Risk Rating (after further controls)	Risk Owner	Assurances	Risk Approval
FINANCE	Resourcing insufficient to meet the targets of Phase Two of the programme Insufficient resources to implement the required projects in the Co-Governor's Investment Approach for Phase Two (2017-2027) of the Whakaora Te Waihora programme. Note: This is also a risk in the Te Waihora Co-Governance Group Risk Register.	If there are not sufficient resources to implement the required projects for Phase Two (2017-2027) of the programme, then it will not be possible to meet the 10-year targets in the Co-Governor's Investment Approach for Phase Two; and failure to reach these will impact on achieving the Co-Governance vision of restoring Te Waihora in two generations/35-40 years.	N/A	High	<ul style="list-style-type: none"> The Te Waihora Co-Governance Group have approved an Investment Strategy for Phase Two of the programme (i.e. the next 10 years of restoration activities from 2017-2027). The Joint Officials Group/JOG have developed a draft of the priority projects for the Investment Strategy. Te Rūnanga o Ngāi Tahu are funding an external consultant to analyse the cost of projects in the Investment Approach. 'Future funding' is a standing-item at the meetings of the Joint Officials Group/JOG and the Te Waihora Co-Governance Group. Funding possibilities are being explored with: <ul style="list-style-type: none"> The Nature Conservancy; and, The Government's provincial Growth Fund and One Billion Trees target. 	High	<ul style="list-style-type: none"> Maintain mitigating actions. Once the analysis of project costs has been completed, seek Co-Governance approval to: make the Investment Approach publicly available; develop a funder-engagement strategy; and, progress targeted funding applications. 	Moderate (Lowering this risk further will be dependent on the success of the further controls)	Joint Officials Group	<ul style="list-style-type: none"> Management assessment: Minutes of Joint Officials Group/JOG meetings where 'Future funding' is a standing item. Governance assessment: <ul style="list-style-type: none"> Investment Approach for Phase Two is in place. Group meetings where 'Future funding' is a standing item. 	Te Waihora Co-Governance Group
HEALTH & SAFETY	Open water The consequences of falling into Te Waihora/Lake Ellesmere, or another open water body, or other open water bodies.	If a person(s) falls into Te Waihora/Lake Ellesmere, or another open water body, then it could result in injuries or death (e.g. drowning, hypothermia etc.).	Follow Environment Canterbury Critical Risk rules for: <ul style="list-style-type: none"> 'Water' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-water.aspx; 'Water transportation – powered vessels' under 'Transportation' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-transport.aspx; and, 'Emergency Response' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-er.aspx. 	Extreme	Environment Canterbury Critical Risk rules for 'Water', 'Transportation' and 'Emergency Response' followed, including: <ul style="list-style-type: none"> Complete Site Specific Safety Plans/SSSPs, Task Analyses/TAs, and site inductions prior to commencing work; Check the weather and site conditions before undertaking any work on/in open water; Boats are checked and fit for purpose (Maritime Operator Safety System/MOSS); Boat operators have the required training/licence, experience of the boat and conditions, and are not fatigued and/or distracted; If a boat operator is fatigued then they have to comply with the Environment Canterbury Fatigue Protocol and no longer continue operating the boat until they are rested; Life-jackets must be worn at all times when on/in the water (life-jackets must be manufactured to a recognised standard, regularly checked, and correctly fitted); For external contractors, the operation of boats can only be undertaken by suitably qualified workers; with the delivery of work covered under the contractor management procedure that is in place for the WTW programme; A recovery plan must be in place for the event of a 'loss of control' that takes into consideration all the information and analysis for 'Water': <ul style="list-style-type: none"> The plan must be established prior to entering the water; All workers must have previous training in first-aid and 'recovery'; and, All staff working in or around water must regularly practice recovery skills relevant to their role; and, An Emergency Response plan must be in place, and regularly tested and reviewed. 	Moderate (Because of the potentially fatal consequences, and the unreliability of some controls, this risk cannot be lowered further)	<ul style="list-style-type: none"> Maintain mitigating actions. 	Moderate (Because of the potentially fatal consequences, and the unreliability of some controls, this risk cannot be lowered further)	WTW PIL	<ul style="list-style-type: none"> Management assessment: The following documents are completed and on file: <ul style="list-style-type: none"> WTW Contractor Acknowledgement of Health & Safety Responsibilities (completed before works commence); WTW Site Specific Safety Plans/SSSPs and Task Analyses/TAs – detailing the specific risk(s) of open water, and the controls (completed before works commence); A fully-signed copy of any contract for works, that includes the Health & Safety requirements (completed before works commence); Environment Canterbury HAS03 Contractor Site Induction Checklist; Contractor Health & Safety Monitoring Inspection. Bi-annual internal process audit to check there is adequate inductions, SSSPs, and H&S monitoring. External assessment: Annual external audit to ensure there are adequate controls in place. 	Te Waihora Co-Governance Group

Whakaora Te Waihora Risk Register

Risk Category	Risk	Impact	Standards	Inherent Risk Rating (before mitigation)	Mitigation	Current Risk Rating (with current mitigation)	Further controls or escalation factors	Residual Risk Rating (after further controls)	Risk Owner	Assurances	Risk Approval
HEALTH & SAFETY	Waterways/ drains The consequences of falling into waterways and drains.	If a person(s) falls into a waterway or drain, then it could result in injuries or death (e.g. drowning, hypothermia etc.).	Follow Environment Canterbury Critical Risk rules for: <ul style="list-style-type: none"> • 'Water' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-water.aspx; and, • 'Emergency Response' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-er.aspx. 	Extreme	Environment Canterbury Critical Risk rules for ' Water ' and ' Emergency Response ' followed, including: <ul style="list-style-type: none"> • Complete Site Specific Safety Plans/SSSPs, Task Analyses/TAs, and site inductions prior to commencing work; • Check site conditions before crossing any waterways/drains; • If crossing a waterway/drain, identify the accepted depth and speed of water for crossing on foot or in a vehicle; • Life jackets must be worn during any interaction with or work in a body of water large enough for complete immersion that is also affected by either strong current, large fetch, difficult egress, or high toxicity (life-jackets must be manufactured to a recognised standard, regularly checked, and correctly fitted); • A recovery plan must be in place for the event of a 'loss of control' that takes into consideration all the information and analysis for 'Water': <ul style="list-style-type: none"> - The plan must be established prior to entering the water; - All workers must have previous training in first-aid and 'recovery'; and, - All staff working in or around water must regularly practice recovery skills relevant to their role; and, • An Emergency Response plan must be in place, and regularly tested and reviewed. 	Moderate (Because of the potentially fatal consequences, and the unreliability of some controls, this risk cannot be lowered further)	<ul style="list-style-type: none"> • Maintain mitigating actions. 	Moderate (Because of the potentially fatal consequences, and the unreliability of some controls, this risk cannot be lowered further)	WTW PIL	<ul style="list-style-type: none"> • Management assessment: The following documents are completed and on file: <ul style="list-style-type: none"> ○ WTW Contractor Acknowledgement of Health & Safety Responsibilities (completed before works commence); ○ WTW Site Specific Safety Plans/SSSPs and Task Analyses/TAs – detailing the specific risk(s) of waterways/drains, and the controls (completed before works commence); ○ A fully-signed copy of any contract for works, that includes the Health & Safety requirements (completed before works commence); ○ Environment Canterbury HAS03 Contractor Site Induction Checklist; ○ Contractor Health & Safety Monitoring Inspection. ○ Bi-annual internal process audit to check there is adequate inductions, SSSPs, and H&S monitoring. • External assessment: Annual external audit to ensure there are adequate controls in place. 	Te Waihora Co-Governance Group
HEALTH & SAFETY	Driving motor vehicles The consequences of motor vehicle accidents.	If a person(s) has an accident when driving a motor vehicle, then it could result in injuries or death.	Follow Environment Canterbury Critical Risk rules for: <ul style="list-style-type: none"> • 'Transportation' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-transport.aspx; and, • 'Emergency Response' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-er.aspx. 	High	Environment Canterbury Critical Risk rules for ' Transportation ' and ' Emergency Response ' followed, including: <ul style="list-style-type: none"> • Vehicles are certified by a suitably qualified person/agency, inspected prior to use (to Land Transport Rule Vehicle Standards Compliance 2002), and designed and fit for both the task and terrain; • Drivers have the required training/licence, experience of the vehicle and conditions, follow the Road Code, and are not fatigued and/or distracted; • If a driver is fatigued then they have to comply with the Environment Canterbury Fatigue Protocol and no longer continue operating the vehicle until they are rested; • All workers must have previous training in first-aid and 'recovery'; and, • An Emergency Response plan must be in place, and regularly tested and reviewed. 	Moderate (Because of the potentially fatal consequences, and the unreliability of some controls, this risk cannot be lowered further)	<ul style="list-style-type: none"> • Maintain mitigating actions. • Defensive driving courses. 	Moderate (Because of the potentially fatal consequences, and the unreliability of some controls, this risk cannot be lowered further)	WTW PIL	<ul style="list-style-type: none"> • Self-assessment: It is the responsibility of the driver (staff/contractors/visitors/volunteers) to ensure that they follow the Road Code. • Management assessment: For staff of Co-Governance partners, drivers' licences are scanned and checked for new staff being inducted. • Management assessment: For staff of Co-Governance partners, vehicles are maintained as part of fleet management. • External assessment: Annual external audit to ensure there are adequate controls in place, which are being followed. 	Te Waihora Co-Governance Group
HEALTH & SAFETY	Traffic management The consequences of being hit by passing vehicles.	If a person(s) has an accident when working close to a road then it could result in injuries or death.	Follow Environment Canterbury Critical Risk rules for: <ul style="list-style-type: none"> • 'Transportation' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-transport.aspx; and, • 'Emergency Response' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-er.aspx. Follow NZ Transport Agency Code of Practice for Temporary Traffic Management (CoPTTM)-Part 8 https://www.nzta.govt.nz/resources/code-temp-traffic-management/	High	Environment Canterbury Critical Risk rules for ' Transportation ' and ' Emergency Response ' followed, including: <ul style="list-style-type: none"> • All workers must have previous training in first-aid and 'recovery'; and, • An Emergency Response plan must be in place, and regularly tested and reviewed. NZ Transport Agency Code of Practice for Temporary Traffic Management (CoPTTM)-Part 8 followed, including: A5.1.2 Statutory health and safety responsibilities – Duty of care <ul style="list-style-type: none"> • If varying normal operation conditions of the road, a Traffic Management Plan (TMP) Traffic Management Diagram (TMD) must approved by the Road Controlling Authority (RCA). 	Moderate (Because of the potentially fatal consequences, and the unreliability of some controls, this risk cannot be lowered further)	<ul style="list-style-type: none"> • Maintain mitigating actions. • Risk management courses 	Moderate (Because of the potentially fatal consequences, and the unreliability of some controls, this risk cannot be lowered further)	WTW PIL	<ul style="list-style-type: none"> • Self-assessment: It is the responsibility of the contractors/visitors/volunteers to ensure that they follow the CoPTTM. • Management assessment: The following documents are completed and on file: <ul style="list-style-type: none"> ○ WTW Contractor Acknowledgement of Health & Safety Responsibilities (completed before works commence); ○ WTW Site Specific Safety Plans/SSSPs and Task Analyses/TAs – detailing the specific risk(s) of traffic management, and the controls (completed before works commence); ○ A fully-signed copy of any contract for works, that includes the Health & Safety requirements (completed before works commence); ○ Environment Canterbury HAS03 Contractor Site Induction Checklist; ○ Contractor Health & Safety Monitoring Inspection. ○ Bi-annual internal process audit to check there is adequate inductions, SSSPs, and H&S monitoring. • External assessment: Annual external audit to ensure there are adequate controls in place, which are being followed. 	Te Waihora Co-Governance Group

Whakaora Te Waihora Risk Register

Risk Category	Risk	Impact	Standards	Inherent Risk Rating (before mitigation)	Mitigation	Current Risk Rating (with current mitigation)	Further controls or escalation factors	Residual Risk Rating (after further controls)	Risk Owner	Assurances	Risk Approval
HEALTH & SAFETY	Machinery – Heavy: Excavators, Bulldozers, Tractors and Other The consequences of accidents involving earth-moving machinery, such as diggers etc.	If a person(s) has an accident when using earth-moving machinery, such as diggers etc., then it could result in injuries or death.	Follow Environment Canterbury Critical Risk rules for: • 'Machinery' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-machine.aspx ; • 'Transportation' (for tractors) https://punakorero/staff-kete/health-safety/Risk%20Management/risk-transport.aspx ; and, • 'Emergency Response' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-er.aspx .	Extreme	Environment Canterbury Critical Risk rules for ' Machinery ', ' Transport ', and ' Emergency Response ' are followed, including: • All machinery will have a documented risk analysis, complete Site Specific Safety Plans/SSSPs, Task Analyses/TAs, and site inductions prior to commencing work; • Workers avoid walking in close proximity to active working farm plant (including tractors, motor vehicles); • All vehicles are certified by a suitably qualified person/agency, inspected prior to use (to Land Transport Rule Vehicle Standards Compliance 2002), and designed and fit for both the task and terrain; • Drivers have the required training/licence, experience of the vehicle and conditions, follow the Road Code, and are not fatigued and/or distracted; • If a driver is fatigued then they have to comply with the Environment Canterbury Fatigue Protocol and no longer continue operating the vehicle until they are rested. • For external contractors, the operation of earth-moving machinery – such as diggers etc. – can only be undertaken by suitably qualified workers; with the delivery of work covered under the contractor management procedure that is in place for the WTW programme; • All workers must have previous training in first-aid and 'recovery'; and, • An Emergency Response plan must be in place, and regularly tested and reviewed.	Moderate (Because of the potentially fatal consequences, and the unreliability of some controls, this risk cannot be lowered further)	• Maintain mitigating actions.	Moderate (Because of the potentially fatal consequences, and the unreliability of some controls, this risk cannot be lowered further)	WTW PIL	• Management assessment: The following documents are completed and on file: ○ WTW Contractor Acknowledgement of Health & Safety Responsibilities (completed before works commence); ○ WTW Site Specific Safety Plans/SSSPs and Task Analyses/TAs – detailing the specific risk(s) of earth-moving machinery, and the controls (completed before works commence); ○ A fully-signed copy of any contract for works, that includes the Health & Safety requirements (completed before works commence); ○ Environment Canterbury HAS03 Contractor Site Induction Checklist; ○ Contractor Health & Safety Monitoring Inspection. ○ Bi-annual internal process audit to check there is adequate inductions, SSSPs, and H&S monitoring. • External assessment: Annual external audit to ensure there are adequate controls in place.	Te Waihora Co-Governance Group
HEALTH & SAFETY	Machinery – Light (Farm plant): Chainsaws, Scrub Bars and Other The consequences of accidents involving light machinery (i.e. any machinery powered by a driven train), such as chain-saws, scrub bars and others.	If a person(s) has an accident when using light machinery (i.e. any machinery powered by a driven train), such as chain-saws, scrub bars and others, then it could result in injuries or death.	Follow Environment Canterbury Critical Risk rules for: • 'Machinery' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-machine.aspx ; and, • 'Emergency Response' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-er.aspx .	High	Environment Canterbury Critical Risk rules for ' Machinery ' and ' Emergency Response ' are followed, including: • Notifying landowners before accessing crossing farm land; • Workers avoid walking in close proximity to active working farm plant (including tractors, motor vehicles); • All machinery will have a documented risk analysis, complete Site Specific Safety Plans/SSSPs, Task Analyses/TAs, and site inductions prior to commencing work; • Only trained and competent people will have access to, and are authorised to use, the machinery. For chainsaws, only certified operators are to use chain-saws (training to NZQA units 43-6916-6917); • Machinery will be maintained, guarding of machinery will be to a specified standard (i.e. AS4024), systems will be in place to ensure that it continues to function at that standard, and machinery that is non-functioning and/or under repair or servicing will be Locked Out and Tagged Out (LOTO); • For external contractors, the operation of light machinery can only be undertaken by suitably qualified workers; with the delivery of work covered under the contractor management procedure that is in place for the WTW programme; • All workers must have previous training in first-aid and 'recovery'; and, • An Emergency Response plan must be in place, and regularly tested and reviewed.	Moderate (Because of the potentially fatal consequences, and the unreliability of some controls, this risk cannot be lowered further)	• Maintain mitigating actions.	Moderate (Because of the potentially fatal consequences, and the unreliability of some controls, this risk cannot be lowered further)	WTW PIL	• Management assessment: The following documents are completed and on file: ○ WTW Contractor Acknowledgement of Health & Safety Responsibilities (completed before works commence); ○ WTW Site Specific Safety Plans/SSSPs and Task Analyses/TAs – detailing the specific risk(s) of farm plant and machinery, and the controls (completed before works commence); ○ A fully-signed copy of any contract for works, that includes the Health & Safety requirements (completed before works commence); ○ Environment Canterbury HAS03 Contractor Site Induction Checklist; ○ Contractor Health & Safety Monitoring Inspection. ○ Bi-annual internal process audit to check there is adequate inductions, SSSPs, and H&S monitoring. • External assessment: Annual external audit to ensure there are adequate controls in place.	Te Waihora Co-Governance Group

Whakaora Te Waihora Risk Register

Risk Category	Risk	Impact	Standards	Inherent Risk Rating (before mitigation)	Mitigation	Current Risk Rating (with current mitigation)	Further controls or escalation factors	Residual Risk Rating (after further controls)	Risk Owner	Assurances	Risk Approval
HEALTH & SAFETY	Installed structures / fixtures / equipment Installed structures / fixtures / equipment may be installed by projects for different purposes (e.g. water monitoring equipment, the wave barrier for in-lake macrophytes etc.). This risk has three potential impacts: on individuals, vehicles, and the environment.	<i>On the individual.</i> If a person(s) gets entangled in the structure it could result in an injury or death (e.g. drowning, hypothermia etc.).	Follow Environment Canterbury Critical Risk rules for: • 'Water' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-water.aspx ; • 'Lone/remote work' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-lone.aspx ; and, • 'Emergency Response' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-er.aspx .	High	<ul style="list-style-type: none"> For land-based structures/fixtures/equipment, the location is noted on the individual hazard registers of Co-Governance organisations, and notified to any contractors working at site, so the hazard can be avoided. For water-based structures/fixtures/equipment, the location is noted with the harbourmaster, on the individual hazard registers of Co-Governance organisations, and notified to any contractors working at site, so the hazard can be avoided. <p>The applicable Environment Canterbury Critical Risk rules for 'Water', 'Lone/remote work', and 'Emergency Response' are followed, including:</p> <ul style="list-style-type: none"> Check site conditions and the location of any hazards beforehand; Be extra vigilant when crossing unfamiliar terrain; Carry appropriate communications devices (e.g. SPOT Personal Tracker, mobile phone, etc.); All workers have training in first-aid; and, An Emergency Response plan must be in place, and regularly tested and reviewed. 	Moderate (Because of the potentially fatal consequences, and the unreliability of some controls, this risk cannot be lowered further)	• Maintain mitigating actions.	Moderate (Because of the potentially fatal consequences, and the unreliability of some controls, this risk cannot be lowered further)	WTW PIL	<ul style="list-style-type: none"> Self-assessment: Staff/contractors/sub-contractors/visitors/volunteers responsible for their own implementation of controls. Management assessment: The following documents are completed and on file: <ul style="list-style-type: none"> WTW Contractor Acknowledgement of Health & Safety Responsibilities (completed before works commence); WTW Site Specific Safety Plans/SSSPs and Task Analyses/TAs – detailing the specific risk(s) of waterways/drains, and the controls (completed before works commence); A fully-signed copy of any contract for works, that includes the Health & Safety requirements (completed before works commence); Environment Canterbury HAS03 Contractor Site Induction Checklist; Contractor Health & Safety Monitoring Inspection. Bi-annual internal process audit to check there is adequate inductions, SSSPs, and H&S monitoring. External assessment: Annual external audit to ensure there are adequate controls in place. 	Te Waihora Co-Governance Group
		<i>On a vehicle.</i> If a land-based or water-based vehicle hits the structure/fixture/equipment it could result in injuries to the occupant, damage to the vehicle, and damage to the structure/fixture/equipment.	Follow the applicable Environment Canterbury Critical Risk rules for: • 'Water' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-water.aspx ; • 'Transportation' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-transport.aspx ; and, • 'Emergency Response' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-er.aspx .	High	<ul style="list-style-type: none"> For land-based structures/fixtures/equipment, the location is noted on the individual hazard registers of Co-Governance organisations, and notified to any contractors working at site, so the hazard can be avoided. For water-based structures/fixtures/equipment, the location is noted with the harbourmaster, on the individual hazard registers of Co-Governance organisations, and notified to any contractors working at site, so the hazard can be avoided. <p>The applicable Environment Canterbury Critical Risk rules for 'Water', 'Transportation', and 'Emergency Response' are followed, including:</p> <ul style="list-style-type: none"> Check the weather, site conditions, and the location of any hazards before undertaking any work; All workers must have previous training in first-aid and 'recovery'; and, An Emergency Response plan must be in place, and regularly tested and reviewed. 	Moderate (Because of the potentially fatal consequences, and the unreliability of some controls, this risk cannot be lowered further)	• Maintain mitigating actions.	Moderate (Because of the potentially fatal consequences, and the unreliability of some controls, this risk cannot be lowered further)	WTW PIL	<ul style="list-style-type: none"> Self-assessment: Staff/contractors/sub-contractors/visitors/volunteers responsible for their own implementation of controls. Management assessment: The following documents are completed and on file: <ul style="list-style-type: none"> WTW Contractor Acknowledgement of Health & Safety Responsibilities (completed before works commence); WTW Site Specific Safety Plans/SSSPs and Task Analyses/TAs – detailing the specific risk(s) of waterways/drains, and the controls (completed before works commence); A fully-signed copy of any contract for works, that includes the Health & Safety requirements (completed before works commence); Environment Canterbury HAS03 Contractor Site Induction Checklist; Contractor Health & Safety Monitoring Inspection. Bi-annual internal process audit to check there is adequate inductions, SSSPs, and H&S monitoring. External assessment: Annual external audit to ensure there are adequate controls in place. 	Te Waihora Co-Governance Group
ENVIRONMENT		<i>On the environment.</i> If a structure/fixture/equipment is comprised of material(s) that could pose a risk to the environment (e.g. plastic fibres entering water), which may break off / enter the environment over time or in certain conditions.	Follow the Resource Management Act 1991 rules on erecting structures within the bed of a lake or river (Section 13 of http://www.legislation.govt.nz/act/public/1991/0069/latest/DLM230265.html).	Moderate	<ul style="list-style-type: none"> For any structure/fixture/equipment: <ul style="list-style-type: none"> Assurances in place that the material, design or structure of the structure/fixture/equipment has been assessed, and it has no aspects that could pose a present or future risk to the environment; A monitoring and maintenance plan is in place; and, A recovery/removal plan is in place, if the structure/fixture/equipment needs to be removed, or any component breaks-off and needs to be recovered. 	Low	• Maintain mitigating actions.	Low	WTW PIL	<ul style="list-style-type: none"> Management assessment: For any structures/fixtures/equipment, evidence on file that: <ul style="list-style-type: none"> No aspect of the material, design or structure could pose a present or future risk to the environment; A monitoring and maintenance plan is in place; and, A recovery/removal plan is in place. 	Te Waihora Co-Governance Group

Whakaora Te Waihora Risk Register

Risk Category	Risk	Impact	Standards	Inherent Risk Rating (before mitigation)	Mitigation	Current Risk Rating (with current mitigation)	Further controls or escalation factors	Residual Risk Rating (after further controls)	Risk Owner	Assurances	Risk Approval
HEALTH & SAFETY	Environment – Terrain The consequence of falls, slips and trips, and encountering hidden objects when working with vegetation.	If when crossing difficult terrain, slippery surfaces, a person(s) has a fall, slip, or trips on the terrain or on a hidden object (such as discarded farm equipment like gates, axles, ploughs, vehicle parts) – or if when working with vegetation a person(s) accidentally encounters a hidden object (e.g. old wire) – then it could result in an injury.	Follow Environment Canterbury Critical Risk rules for: • 'Environment' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-env.aspx ; and, • 'Lone/remote work' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-lone.aspx ; and, • 'Emergency Response' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-er.aspx .	High	The applicable Environment Canterbury Critical Risk rules for 'Environment', 'Lone/remote work' and 'Emergency Response' are followed, including: • Notify landowners before accessing crossing farm land and ask if there are any hazards; • Check site conditions beforehand; • Be extra vigilant when crossing unfamiliar terrain; • Wear robust, closed-in footwear suitable for the task and terrain; • Wear the appropriate personal protective equipment/PPE (e.g. gloves and eye protection) when handling plants; • Carry appropriate communications devices (e.g. SPOT Personal Tracker, mobile phone, etc.); • All workers have training in first-aid; and, • An Emergency Response plan must be in place, and regularly tested and reviewed.	Moderate (Because of the unreliability of some controls, this risk cannot be lowered further)	• Maintain mitigating actions.	Moderate (Because of the unreliability of some controls, this risk cannot be lowered further)	WTW PIL	• <i>Self-assessment:</i> Staff/contractors/visitors/volunteers are responsible for their own implementation of controls. • <i>Management assessment:</i> For work with vegetation, the risks of hidden objects are identified in Site Specific Safety Plans/SSSPs, site inductions, and Health & Safety monitoring, where documentation is completed and on file. •	Te Waihora Co-Governance Group
HEALTH & SAFETY	Electric fishing The consequences of accidents involving electrical equipment and water. (This risk overlaps with the risk of 'waterways/drains', as this activity involves using an electric current in the water)	If a person(s) has an accident when undertaking electric fishing, then it could result in an injury or death through electrocution and/or drowning.	Follow Environment Canterbury's: • 'Standard Operating Procedure for Electric Fishing'; and, • Critical Risk rules for 'Emergency Response' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-er.aspx .	High	Environment Canterbury's 'Standard Operating Procedure for Electric Fishing' and Critical Risk rules for 'Emergency Response' are followed, including: • Users are certified in electro-fishing; • Complete Site Specific Safety Plans/SSSPs and Task Analyses/TAs prior to commencing work; • Appropriate site induction identifying any specific issues that might increase the risk of the activity (e.g. speed of water flow, submerged debris); • Appropriate personal protective equipment/PPE is worn; and, • Presence of a second person on the river-bank. • For external contractors, the use of electric fishing equipment can only be undertaken by suitably qualified workers; with the delivery of work covered under the contractor management procedure that is in place for the WTW programme; • All workers must have previous training in first-aid and 'recovery'; and, • An Emergency Response plan must be in place, and regularly tested and reviewed.	Low	• Maintain mitigating actions.	Low	WTW PIL	• <i>Management assessment:</i> The following documents are completed and on file: • WTW Contractor Acknowledgement of Health & Safety Responsibilities (completed before works commence); • WTW Site Specific Safety Plans/SSSPs and Task Analyses/TAs – detailing the specific risk(s) of electro-fishing, and the controls (completed before works commence); • A fully-signed copy of any contract for works, that includes the Health & Safety requirements (completed before works commence); • Environment Canterbury HAS03 Contractor Site Induction Checklist; • Contractor Health & Safety Monitoring Inspection. • Bi-annual internal process audit to check there is adequate inductions, SSSPs, and H&S monitoring. • <i>External assessment:</i> Annual external audit to ensure there are adequate controls in place.	Te Waihora Co-Governance Group

Whakaora Te Waihora Risk Register

Risk Category	Risk	Impact	Standards	Inherent Risk Rating (before mitigation)	Mitigation	Current Risk Rating (with current mitigation)	Further controls or escalation factors	Residual Risk Rating (after further controls)	Risk Owner	Assurances	Risk Approval
HEALTH & SAFETY	HSNO – Herbicides The consequences of accidental contact with herbicide (for workers who are applying the herbicide).	If a person(s) comes into direct contact with a herbicide without the correct personal protective equipment/ PPE, then it could result in injuries or illness.	Follow Environment Canterbury Critical Risk rules for: <ul style="list-style-type: none"> ‘HSNO (Hazardous Substances and New Organisms)’ https://punakorero/staff-kete/health-safety/Risk%20Management/risk-hsno.aspx; and, ‘Emergency Response’ https://punakorero/staff-kete/health-safety/Risk%20Management/risk-er.aspx. 	High	Environment Canterbury Critical Risk rules for ‘ HSNO (Hazardous Substances and New Organisms) ’ and ‘ Emergency Response ’ are followed, including: <ul style="list-style-type: none"> Complete Site Specific Safety Plans/SSSPs, Task Analyses/TAs, and site inductions prior to commencing work; Task Analyses/TAs need to determine who (the user), how (inhalation, ingestion and absorption) and the degree of potential exposure; Task Analyses/TAs need to also identify a response of what to do in an emergency; identify potential exposure pathways and have an emergency response plan in the event of exposure (eyewash station, shower, spill kit etc); All potentially hazardous substances must be listed on a site and in a store register; Herbicides can only be used as stipulated for their respective Safety Data Sheet/SDS; Safety Data Sheets/SDS for herbicides must be available on site, and regularly reviewed to determine the risks and controls; Herbicides must be stored securely (as per SDS) in their original containers, and Location Test Certificates (LTCs) must be obtained and maintained when required; For the handling of herbicides, <ul style="list-style-type: none"> They are to be only used by ‘Approved Handlers’ as required by the SDS / Location Test Certificate (LTC) thresholds, Users are certified and/or trained (as required) in the application of herbicides (e.g. GrowSafe training completed and GrowSafe number obtained for each user), Users follow SDS, ensure correct personal protective equipment/PPE is used, and handling guidance followed, and All personnel are trained in the correct use and maintenance of; For external contractors, the application/use of herbicides can only be undertaken by suitably qualified workers; with the delivery of work covered under the contractor management procedure that is in place for the WTW programme; All workers must have previous training in first-aid and what to do in an emergency; and, An Emergency Response plan must be in place, and regularly tested and reviewed. 	Low	<ul style="list-style-type: none"> Maintain mitigating actions. 	Low	WTW PIL	<ul style="list-style-type: none"> Management assessment: The following documents are completed and on file: <ul style="list-style-type: none"> WTW Contractor Acknowledgement of Health & Safety Responsibilities (completed before works commence); WTW Site Specific Safety Plans/SSSPs and Task Analyses/TAs – detailing the specific risk(s) of herbicides, and the controls (completed before works commence); A fully-signed copy of any contract for works, that includes the Health & Safety requirements (completed before works commence); Environment Canterbury HAS03 Contractor Site Induction Checklist; Contractor Health & Safety Monitoring Inspection. Bi-annual internal process audit to check there is adequate inductions, SSSPs, and H&S monitoring. External assessment: Annual external audit to ensure there are adequate controls in place. 	Te Waihora Co-Governance Group
HEALTH & SAFETY	Hand and power tools The consequences of accidents using hand and power tools.	If a person(s) has an accident when using hand and power tools, then it could result in an injury.	Follow Environment Canterbury Critical Risk rules for: <ul style="list-style-type: none"> ‘Machinery’ https://punakorero/staff-kete/health-safety/Risk%20Management/risk-machine.aspx; and, ‘Emergency Response’ https://punakorero/staff-kete/health-safety/Risk%20Management/risk-er.aspx. 	High	Environment Canterbury Critical Risk rules for ‘ Machinery ’ and ‘ Emergency Response ’ are followed, including: <ul style="list-style-type: none"> Complete Site Specific Safety Plans/SSSPs and Task Analyses/TAs prior to commencing work; Appropriate site induction identifying any specific issues that might compromise the safe usage of the specific tool (e.g. the presence of water); Users are certified and/or trained (as required) in the usage of the specific tool; Personal protective equipment worn as applicable to the specific tool (e.g. eye-protection, protective footwear, gloves etc.); For external contractors, the use of hand and power tools can only be undertaken by suitably qualified workers; with the delivery of work covered under the contractor management procedure that is in place for the WTW programme; All workers must have previous training in first-aid and ‘recovery’; and, An Emergency Response plan must be in place, and regularly tested and reviewed. 	Low	<ul style="list-style-type: none"> Maintain mitigating actions. 	Low	WTW PIL	<ul style="list-style-type: none"> Management assessment: The following documents are completed and on file: <ul style="list-style-type: none"> WTW Contractor Acknowledgement of Health & Safety Responsibilities (completed before works commence); WTW Site Specific Safety Plans/SSSPs and Task Analyses/TAs – detailing the specific risk(s) of hand and power tools, and the controls (completed before works commence); A fully-signed copy of any contract for works, that includes the Health & Safety requirements (completed before works commence); Environment Canterbury HAS03 Contractor Site Induction Checklist; Contractor Health & Safety Monitoring Inspection. Bi-annual internal process audit to check there is adequate inductions, SSSPs, and H&S monitoring. External assessment: Annual external audit to ensure there are adequate controls in place. 	Te Waihora Co-Governance Group

Whakaora Te Waihora Risk Register

Risk Category	Risk	Impact	Standards	Inherent Risk Rating (before mitigation)	Mitigation	Current Risk Rating (with current mitigation)	Further controls or escalation factors	Residual Risk Rating (after further controls)	Risk Owner	Assurances	Risk Approval
HEALTH & SAFETY	Drones The consequences of accidents involving drones.	If a person(s) is involved in an accident with a drone, then it could result in an injury.	Follow: <ul style="list-style-type: none"> Environment Canterbury Standard Operating Procedure for 'Drones' that is currently under development; 'Emergency Response' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-er.aspx; and, 'Obligations When Operating a Drone in New Zealand Airspace' under Civil Aviation Authority (CAA) Regulation Part 101, and 102 (if the drone weighs greater than 25kg). 	Moderate	Once completed, Environment Canterbury Standard Operating Procedure for 'Drones' is followed, as well as the Critical Risk rules for and ' Emergency Response ', including: <ul style="list-style-type: none"> Drone operators must adhere to the 'Obligations When Operating a Drone in New Zealand Airspace' under Civil Aviation Authority (CAA) Regulation Part 101; All drone activity must be registered on the Airshare website; Complete Site Specific Safety Plans/SSSPs, Task Analyses/TAs, and site inductions prior to commencing work; Drones are inspected prior to use, and designed and fit for both the task and terrain; Drone operators have the required training/licence, experience of the drone and conditions, and are not fatigued and/or distracted; - If a drone operator is fatigued then they have to comply with the Environment Canterbury Fatigue Protocol and no longer continue operating the drone until they are rested; Check weather conditions before commencing work; For external contractors, the operation of drones can only be undertaken by suitably qualified workers; with the delivery of work covered under the contractor management procedure that is in place for the WTW programme; All workers must have previous training in first-aid and 'recovery'; and, An Emergency Response plan must be in place, and regularly tested and reviewed. 	Low	<ul style="list-style-type: none"> Maintain mitigating actions. 	Low	WTW PIL	<ul style="list-style-type: none"> Management assessment: The following documents are completed and on file: <ul style="list-style-type: none"> WTW Contractor Acknowledgement of Health & Safety Responsibilities (completed before works commence); WTW Site Specific Safety Plans/SSSPs and Task Analyses/TAs – detailing the specific risk(s) of drones, and the controls (completed before works commence); A fully-signed copy of any contract for works, that includes the Health & Safety requirements (completed before works commence); Environment Canterbury HAS03 Contractor Site Induction Checklist; Contractor Health & Safety Monitoring Inspection. Bi-annual internal process audit to check there is adequate inductions, SSSPs, and H&S monitoring. External assessment: Annual external audit to ensure there are adequate controls in place. 	Te Waihora Co-Governance Group
HEALTH & SAFETY	Environment – Flora & Fauna The consequences of accidents involving flora/plants and attacks from fauna.	If a person(s) has an accident involving flora/plants (such as getting caught and torn on thorns, spikes and branches, trip hazards from tree roots, and falling branches) – or is attacked by fauna (such as bites and stings etc. from dogs, insects, stock etc.) – then it could result in an injury.	Follow Environment Canterbury Critical Risk rules for: <ul style="list-style-type: none"> 'Environment' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-env.aspx; 'Lone/remote work' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-lone.aspx; and, 'Emergency Response' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-er.aspx. 	High	The applicable Environment Canterbury Critical Risk rules for ' Environment ', ' Lone/remote work ', and ' Emergency Response ' are followed, including: <ul style="list-style-type: none"> Notify landowners before accessing/ crossing farm land, and ask if there are any fauna/animal hazards (such as stock); Be extra vigilant when crossing unfamiliar terrain; Ensure care is taken when walking in areas with lots of exposed tree roots or where vegetation obscures the surface of ground; Avoid walking under large old willow/poplar/gum trees in high winds; If stock are present, identify an alternative route. However, if an alternative route is not possible, identify an escape route prior to entering the paddock/area, ensure there is adequate supervision, and/or do not enter paddock/area if uncertain of stock behaviour; Wear appropriate personal protective equipment/PPE (e.g. gloves and eye protection) when handling plants; Carry appropriate first-aid equipment, and insect repellent; In the planning for any field-visit, identify if anyone has any allergies (e.g. an allergy to bee stings), and if so have appropriate precautions immediately available (e.g. an epipen), and an evacuation plan is in place; All workers have training in first-aid; and, An Emergency Response plan must be in place, and regularly tested and reviewed. 	Low	<ul style="list-style-type: none"> Maintain mitigating actions. 	Low	WTW PIL	<ul style="list-style-type: none"> Self-assessment: Staff/ contractors/visitors/volunteers are responsible for their own implementation of controls Management assessment: Specific fauna hazards identified in Site Specific Safety Plans/SSSPs, site inductions, and Health & Safety monitoring, where documentation is completed and on file. Management assessment: Periodic Health & Safety monitoring that includes checking the presence, and contents, of first-aid kits. 	Te Waihora Co-Governance Group
HEALTH & SAFETY	HSNO – Residual herbicide-chemicals Consequences of herbicide coming into contact with people who are visiting/ inspecting a site in the days following the application of the herbicide.	If a person(s) visiting/ inspecting a site in the days following the application of the herbicide comes into direct contact with a herbicide, then it could result in injuries or illness.	Follow Environment Canterbury Critical Risk rules for: <ul style="list-style-type: none"> 'HSNO (Hazardous Substances and New Organisms)' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-hsno.aspx; and, 'Emergency Response' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-er.aspx. 	High	The applicable Environment Canterbury Critical Risk rules for ' HSNO (Hazardous Substances and New Organisms) ' and ' Emergency Response ' are followed, including: <ul style="list-style-type: none"> Notify the landowners of a site before it is visited, and ask if there are any recent application of herbicide; Wear appropriate personal protective equipment/PPE, such as clothing that covers the whole arms and legs, and appropriate footwear; Immediately wash clothes when returning from a site-visit; All workers have training in first-aid; and, An Emergency Response plan must be in place, and regularly tested and reviewed. 	Low	<ul style="list-style-type: none"> Maintain mitigating actions. 	Low	WTW PIL	<ul style="list-style-type: none"> Self-assessment: Staff/ contractors/visitors/volunteers responsible for their own implementation of controls, wearing appropriate clothing and footwear, and immediately washing clothing on return from a site-visit. Management assessment: Site inductions for new staff with information on this risk and the controls, and induction forms filed in a timely manner. 	Te Waihora Co-Governance Group

Whakaora Te Waihora Risk Register

Risk Category	Risk	Impact	Standards	Inherent Risk Rating (before mitigation)	Mitigation	Current Risk Rating (with current mitigation)	Further controls or escalation factors	Residual Risk Rating (after further controls)	Risk Owner	Assurances	Risk Approval
HEALTH & SAFETY	Electricity – Fences Hazard from climbing over/under fences.	If a person(s) gets cut/snagged on a fence, and/or receives an electric shock from contact with a live electric fence, then it could result in an injury.	Follow Environment Canterbury Critical Risk rules for: <ul style="list-style-type: none"> • 'Environment' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-env.aspx; • 'Lone/remote work' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-lone.aspx; and, • 'Emergency Response' https://punakorero/staff-kete/health-safety/Risk%20Management/risk-er.aspx. 	Moderate	The applicable Environment Canterbury Critical Risk rules for 'Environment', 'Lone/remote work' and 'Emergency Response' are followed, including: <ul style="list-style-type: none"> • Notify the landowners of a site before it is visited, and ask if there are any electric fences and/or hazardous fences present; • Use gates/stiles where provided; • Keep clear of fences at all times; • Avoid crossing live electric fences; • All workers have training in first-aid; and, • An Emergency Response plan must be in place, and regularly tested and reviewed. 	Low	<ul style="list-style-type: none"> • Maintain mitigating actions. 	Low	WTW PIL	<ul style="list-style-type: none"> • <i>Self-assessment:</i> Staff/contractors/visitors/volunteers are responsible for their own implementation of controls. 	Te Waihora Co-Governance Group
RELATIONSHIPS	The programme is not seen as a high priority, stand-alone programme The consequence of the programme not seen as a high priority, stand-alone programme.	If the programme is not seen as a high priority, stand-alone programme (as there are many other concurrent projects within the catchment), then it could result in negative impacts on the programme's reputation and effectiveness.	N/A	Moderate	<ul style="list-style-type: none"> • For Co-Governance partners, the programme is recognised as an operational programme under the Te Waihora Co-Governance Group. • The Whakaora Te Waihora Communications Strategy, and the Whakaora Te Ahuriri Communications Action Plan, are in place. • For external stakeholders, project parameters and outcomes are communicated in the 'Programme Details' section and 'Our Stories' section of the Te Waihora website, and periodic media releases. 	Low	<ul style="list-style-type: none"> • Maintain mitigating actions. • Regularly update the Te Waihora website. 	Low	Joint Officials Group	<ul style="list-style-type: none"> • <i>Management assessment:</i> <ul style="list-style-type: none"> ◦ Monthly report (approved by the Joint Officials Group) is provided to the Te Waihora Co-Governance Group; and, • The Whakaora Te Waihora Communications Strategy, and the Whakaora Te Ahuriri Communications Action Plan, are implemented, with periodic media releases, and stories about the Whakaora Te Waihora programme on the 'Our Stories' section of the Te Waihora website and Twitter account. 	Te Waihora Co-Governance Group
RELATIONSHIPS	Lack of engagement with Rūnanga The Consequence of a lack of engagement with Rūnanga.	If there is a lack of engagement with Rūnanga, then it could result in the disruption of working relationships.	N/A	High	<ul style="list-style-type: none"> • Te Rūnanga o Ngāi Tahu facilitates engagement with Rūnanga. • For Environment Canterbury works, the Tuia programme also facilitates engagement with Rūnanga. 	Low	<ul style="list-style-type: none"> • Maintain mitigating actions. 	Low	Joint Officials Group		Te Waihora Co-Governance Group
OPERATIONS	Inadequate monitoring to gauge outcomes The consequence of inadequate resources and/or coordination of monitoring. Note: This is also a risk in the Te Waihora Co-Governance Group Risk Register.	If there are inadequate resources and/or coordination of monitoring, then it could result in inability to gauge the outcomes and so the effectiveness of the programme.	N/A	High	<ul style="list-style-type: none"> • For Environment Canterbury, <ul style="list-style-type: none"> - Resources for science monitoring are committed in Environment Canterbury's the Long Term Plan, and - A strategic approach to monitoring is in place. • For the coordination of monitoring between agencies and stakeholders, an integrated monitoring strategy is in place (delivered by the Waterways Centre, and co-funded by Te Rūnanga o Ngāi Tahu). 	Low	<ul style="list-style-type: none"> • Maintain mitigating actions. • Identify and secure resources to implement components of the integrated monitoring strategy. 	Low	Joint Officials Group	<ul style="list-style-type: none"> • <i>Management assessment:</i> Environment Canterbury has committed resources for monitoring in their Long Term Plan. • <i>Management assessment:</i> An integrated monitoring strategy is in place (delivered by the Waterways Centre for Freshwater Management, and co-funded by Te Rūnanga o Ngāi Tahu). 	Te Waihora Co-Governance Group

Whakaora Te Waihora: Risk Management Report for March 2021

The management of risks for the Whakaora Te Waihora programme

The management of the Whakaora Te Waihora programme – as for any programme – encompasses governance, operational delivery (including Health & Safety, project planning, and project management), financial management, relationship management (including communications), and the risks associated with each. For Whakaora Te Waihora:

- Governance risks are identified and managed through the Te Waihora Co-Governance Risk Register;
- Operational, Health & Safety, financial, and relationship management risks are identified in this Whakaora Te Waihora Risk Register.

The risks that have been included in the Whakaora Te Waihora Risk Register are those that are specific to the management of the programme, and which have a higher probability of occurring. Risks have not been included where mitigating actions are part of 'business as usual' (such as for the operational risk of contract management, or the relationship risk of contractor relationships, where procurement and contract management processes are followed as part of 'business as usual').

The current status of risks for the Whakaora Te Waihora programme

As of 12 March 2021, there are 20 risks in the Whakaora Te Waihora Risk Register, of which the current risk ratings are: two High risk, eight Moderate risks, and 10 Low risks. Priorities for risk management for the Whakaora Te Waihora programme are:

1. Implement mitigating actions for the two High risks (Resourcing insufficient to meet the targets of Phase Two of the programme); and,
2. Maintain current mitigating actions for the eight Health & Safety risks with a Moderate risk rating (where the risk rating cannot be lowered further because of the potentially fatal consequences and/or the unreliability of some controls).

Risk Register Summary

Current Risk Rating



Extreme



High



Moderate



Low

Risk Category	RISK	Current Risk Rating in 2020/2021		
		Oct	Nov 2020	March 2021
H&S/Operations/ Finance	COVID-19			
Finance	Resourcing insufficient to meet the targets of Phase Two of the programme			
Health & Safety	Open water			
Health & Safety	Waterways/ drains			
Health & Safety	Driving motor vehicles			
Health & Safety	Traffic management			
Health & Safety	Machinery – Heavy: Excavators, Bulldozers, Tractors and Other			
Health & Safety	Machinery – Light (Farm plant): Chainsaws, Scrub Bars and Other			
Health & Safety	Installed structures / fixtures / equipment			
Health & Safety	Environment – Terrain			
Health & Safety	Electric fishing			
Health & Safety	HSNO – Herbicides			
Health & Safety	Hand and power tools			
Health & Safety	Drones			
Health & Safety	Environment – Flora & Fauna			
Health & Safety	HSNO – Residual herbicide-chemicals			
Health & Safety	Electricity – Fences			
Relationships	The programme is not seen as a high priority, stand-alone programme			
Relationships	Lack of engagement with Rūnanga			
Operations	Inadequate monitoring to gauge outcomes			

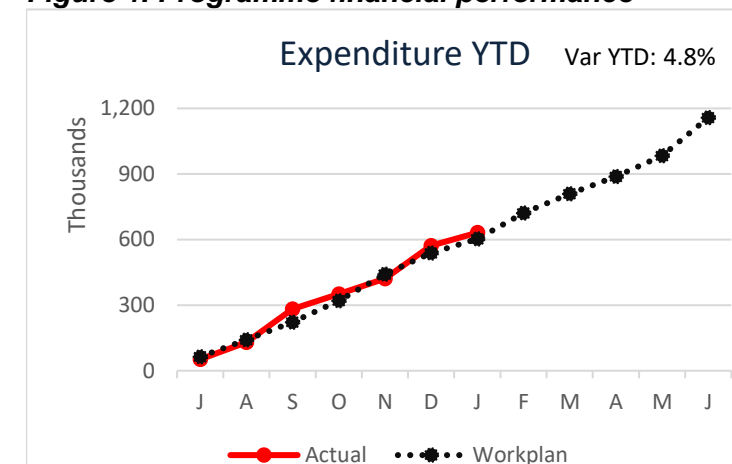
Risk # 21 awaiting Te Waihora Co-Governance Group approval to add -Potentially toxic blue-green algae (planktonic cyanobacteria)^{new}

Whakaora Te Waihora Progress Report for December 2020 and January 2021

Executive summary

- In December 2020 and January 2021, all projects for the programme were on track for implementation (Figure 2), and spend was within a 4.8% variance of the budget (Figure 1).
- Key achievements in December 2020 and January 2021 were:
 - For the Whakaora Te Waikēkēwai project, the project team worked with staff at the Ministry for the Environment/MfE to draft the project's five-year work programme and annual plan for year 1. MfE staff will visit Taumutu on 10 February 2021 and meet the project team to visit sites and hold a wānanga on the work programme. Once revised, the work programme will be submitted to the Joint Officials Group/JOG for approval before being finalised, and then the Deed of Funding can be signed.
 - For the Weed Strike Force; in December 2020, willow control continued for management blacks 14 and 15 (on the north-eastern lakeshore), and a comprehensive round of phalaris control was completed (Figure 3); in January 2021, follow-up willow control was undertaken at Yarr's Flat, L2, and at the Boggy Creek Wildlife Management Reserve (Figure 4); an annual visit to Price's Valley was conducted for purple loosestrife control, and outside of the Weed Strike Force the team continued plant maintenance for the One Billion Tree planting sites.
 - For the trial establishment of macrophyte beds, in December all of the remaining 500 vegetative propagules of *kōrepo/Ruppia megacarpa*, which had been collected from Ashworth's Pond, were planted in the tanks at the culture facility at Taumutu.

Figure 1. Programme financial performance



Risks, issues, and Health & Safety

- Risks and issues:** A new risk was approved by JOG to be added to the programme risk register. Potentially toxic blue-green algae (planktonic cyanobacteria) is found in Lake Ellesmere (Te Waihora) and is a H&S risk to programme operations. An updated Risk Register will be brought to the next hui of the Te Waihora Co-Governance Group for approval.
- Health & Safety:** There were no incidents, hazards, or near misses in December 2020 and January 2021.

Figure 2. Programme implementation performance

Colour-key to status
On track Ahead of schedule Behind schedule

Shaded cells symbolise months when work is scheduled

WORK PACKAGE	FOCUSSED PROJECTS	WORK	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	STATUS
1. Reducing the legacy Phosphorus and sediment in Te Waihora	Research options	Investigate options to reduce legacy phosphorus and sediment in Te Waihora.													On track.
2. Major water quality improvement of Te Waihora	Macrophyte establishment	Trial establishment of macrophyte beds and artificial habitat creation.													On track. Propagules of <i>kōrepo/Ruppia megacarpa</i> are growing in tanks at the culture facility at Taumutu.
	Monitoring	Monitoring programme.													On track. Monthly water monitoring activities were conducted.
3. Transforming the lake shore to wetlands	Restoration and natural regeneration of wetlands	Whakaora Te Ahuriri (the Restoration of Ahuriri): Constructing a wetland to attenuate nutrients and sediment, and improve biodiversity and mahinga kai, in Ahuriri Lagoon.													On track. See the next page for a full report.
		Maintenance of plantings at Ahuriri Lagoon.													On track. There was weed control in December 2020, extensive track maintenance, and further willow control.
	Land management	Weed Strikeforce (willow and weed control): Co-funded by Environment Canterbury's Regional Flagships, Whakaora Te Waihora, and the Department of Conservation.													On track. Ongoing willow and weed control work undertaken in December 2020 and January 2021.
4. Enhancing the riparian linkages from the catchment to the lake shore	Restoration and natural regeneration of riparian margin	Whakaora Te Waikēkēwai (the Restoration of Waikēkēwai Stream): Working to achieve the vision in 'Te Waikēkēwai Stream Restoration and Rehabilitation report' (approved by Te Taumutu Rūnanga).													On track. The project team has been working with staff of the Ministry for the Environment to draft the work programme. The resource consents for the restoration works for Papatahara (a tributary of Te Waikēkēwai/ Waikēkēwai Stream adjacent to the Ngāi Moki Marae) were issued.
	Targeted riparian margin planting	Maintenance of existing planting sites.													On track. The next round of maintenance is scheduled for autumn.
5. Te Waihora established as a centre for education and research	School and tertiary engagement projects	Kids Discovery Plant-out.													Completed.
		Management and ongoing support of the WTW programme of activities and associated relationships and accountability.													Monthly tasks completed for programme management, which managed: specific projects, finances, relationships, Health & Safety, risks, administration, procurement, contracting (there are 16 procurements in progress), and reporting.

Images



Figure 3. Locations of phalaris control (blue dots) around Te Waihora in December 2020.



Figure 4. Members of the Weed Strike Force undertaking grey willow control at Boggy Creek Wildlife Management Reserve.

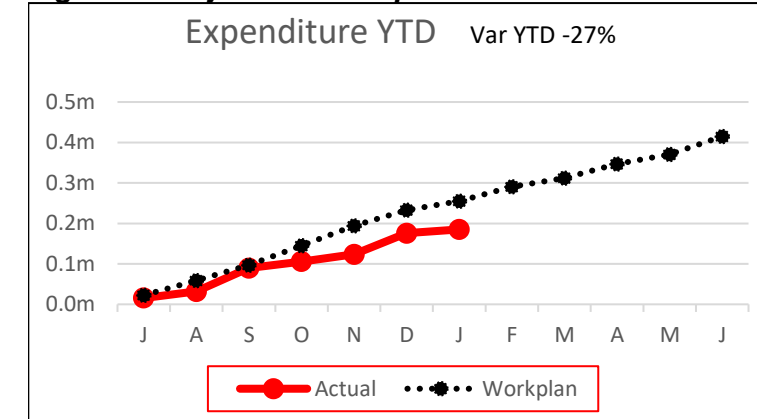
Whakaora Te Waihora Progress Report for December 2020 and January 2021

Whakaora Te Ahuriri Project

Executive summary

- In December 2020 and January 2021, all project works were on track for implementation (Figure 6), and spend was within a -27% variance of the budget (Figure 5). This large variance was due to the timing of large invoices, the rescheduling of the installation of the water quality instrumentation, and the project management costs being much less than expected.
- Key achievements in December 2020 and January 2021 were:
 - Communication:** At the joint conference of the NZ Freshwater Sciences Society, NZ Hydrological Society, and the NZ Rivers Group, in Invercargill on 1-4 December, Environment Canterbury staff and consultants delivered three presentations on the project's management ("The Whakaora Te Ahuriri constructed wetland: an example of collaboration and consensus"), engineering ("Constructed wetlands at a landscape scale: experience from Te Ahuriri"), and mātauranga Māori ("Whakamataara Ahuriri – the journey towards reinstating and restoring a once thriving cultural ecosystem and habitat"), which were all well received.
 - Engineering:** In the later months of 2020 it was noted that water-weed was choking Murray's Drain – i.e. the old course of the Huritini/Halswell River, which is the channel that brings water into the main body of the wetland – and limiting the flow of water through the constructed wetland. In January 2021 this water-weed was cleared (Figures 7 and 8), increasing the flow of water through the wetland.

Figure 5. Project financial performance



Risks, issues, and Health & Safety

- Risks and issues:** There were no new risks for the project in December 2020 and January 2021.
- Health & Safety:** There were no incidents, hazards, or near misses in December 2020 and January 2021.

Figure 6. Project implementation performance

Colour-key to status

On track Ahead of schedule Behind schedule Shaded cells symbolise months when work is scheduled

OBJECTIVE	WORK	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	STATUS
ENGINEERING & EARTHWORKS	Retain consultant to review the performance of the engineering and earthworks.													Completed.
PLANTING	Maintain the terrestrial plants.													Plants maintained to schedule.
	Monitor and maintain the aquatic plants.													On track.
MĀTAURANGA MĀORI	Retain consultant to provide advice.													On track.
	Deliver Mātauranga Māori monitoring programme.													Monitoring visit undertaken on 10 Nov.
APPLIED RESEARCH	Deploy in-field measuring equipment.													Contract being developed.
	Monthly data collection and analysis.													On track.
COMMUNICATIONS	Drone footage.													On track.
	Create permanent signage at Ahuriri site.													Text for signage in draft.
	Deliver regular information / stories to project partners.													On track.
	Media releases.													On track.
	Field-day stakeholder session.													On track.
COMMUNITY ENGAGEMENT	Meetings of the Ahuriri Lagoon Steering Group.													On track.
	Kids Discovery Plant-out.													On track.
	Project management.													On track.

Images



Figure 7. A digger clearing water-weed from Murray's Drain.



Figure 8. The open channel in Murray's Drain after the water-weed was removed.