

If calling, please ask for Democratic Services

Environment Committee

Thursday 16 September 2021, 9.30am

Remotely, via Microsoft Teams

Members

Cr Gaylor (Chair)

Cr Connelly (Deputy Chair)

Cr Blakeley

Cr Brash

Cr Hughes

Cr Kirk-Burnnand

Cr Laban

Cr Lamason

Cr Lee

Cr Nash

Cr Ponter

Cr Staples

Cr van Lier

Barbie Barton

Recommendations in reports are not to be construed as Council policy until adopted by Council

Environment Committee

Thursday 16 September 2021, 9.30am

Remotely, via Microsoft Teams

Public Business

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6.	Environment/Catchment update	21.412	11
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Please note these minutes remain unconfirmed until the Environment Committee meeting on 16 September 2021.

Report 21.371

Public minutes of the Environment Committee meeting on Thursday 12 August 2021

Taumata Kōrero – Council Chamber, Greater Wellington Regional Council
100 Cuba Street, Te Aro, Wellington at 9.31am.

Members Present

Councillor Gaylor (Chair)
Councillor Connelly (Deputy Chair)
Councillor Blakeley
Councillor Brash
Councillor Kirk-Burnnand (until 12.32pm)
Councillor Lamason
Councillor Lee
Councillor Nash (until 12.06pm)
Councillor Ponter (until 12.19pm)
Councillor Staples
Councillor van Lier (via Microsoft Teams)
Barbie Barton

Members participating remotely at this meeting via Microsoft Teams counted for the purpose of quorum, in accordance with clause 25B of Schedule 7 to the Local Government Act 2002.

Karakia timatanga

The Committee Chair invited Councillor Connelly to open the meeting with a karakia timatanga.

Public Business

1 Apologies

Moved: Cr Staples / Cr Lamason

That the Committee accepts the apology for absence from Councillor Hughes and Councillor Laban.

The motion was **carried**.

2 Declarations of conflicts of interest

There were no declarations of conflicts of interest.

3 Public participation

Max Lutz and Brett Nicholson, Friends of the Ōtaki River, updated the Committee on community activities on the Ōtaki River.

Jamie Falloon, Federated Farmers Wairarapa, spoke on historical wetlands in the Wairarapa.

Bob Anker, Mangaroa Peatland Focus Group, spoke on ownership and property rights.

A group of residents from Mangaroa spoke to the Committee.

David and Melissa Crooks, spoke on the rural/urban disconnect.

Stacy Jack-Kino, spoke via Microsoft Teams, on the quality of life within the environment.

Shar McDonald spoke on health and safety of children in the environment.

Hamish McDonald spoke on securing land rights and occupancy.

Fiona Simpson spoke on lifestyle standards.

Kerry Ryan spoke on the impacts on community wellbeing.

John Hill spoke on sustainable regenerative farming.

Lynne Hill spoke on concerns and issues raised by the community.

Carol Dormer spoke on concerns within the community.

Richard Dormer spoke on rights to use private land.

The Committee Chair thanked the Mangaroa residents for sharing their experiences with the Committee and noted that officers will engage with residents on their concerns.

4 Confirmation of the Public minutes of the Environment Committee meeting on 17 June 2021 – Report 21.277

Moved: Cr Nash / Cr Blakeley

That the Committee confirms the Public minutes of the Environment Committee meeting on 17 June 2021 – Report 21.277.

The motion was **carried**.

5 Update on progress of action items from previous Environment Committee meetings – Report 21.295 [For Information]

Wayne O'Donnell, General Manager, Catchment Management, Al Cross, General Manager, Environment Management, spoke to the report.

The Committee Chair advised, in accordance with Standing Order 3.5.6, that there will be an update on the Farming Reference Group, which was not on the agenda.

6 Farming Reference Group update – Oral report

Barbie Barton provided an update on the Farming Reference Group (the Group). Ms Barton advised the Committee that the Group held a workshop, and focused on pest management.

Ms Barton advised that the Group discussed the funding of pest management, with a focus on what changes should be made to the Revenue and Financing Policy in 2022.

The Group also discussed the changes in hunting behaviours and the impact this is having on the control of ungulates, particularly deer and pig. The Group observed that the changing practice of hunting is to hunt for only the amount of meat needed, rather than recreation. The impact is that fewer numbers of these animals are being killed. As these animals fall under the Wild Control Act, management of them rests with the Minister of Conservation.

The meeting adjourned at 10.49am and resumed 11.07am.

7 Plan Changes 2022 Scopes and Forward Work Programme – Report 21.340

Al Cross, General Manager, Environment Management, introduced the report. Miranda Cross, Team Leader, Policy Development; Irene Clark, Principal Advisor; Alastair Smaill, Programme Lead – Urban Water; Rachel Pawson, Senior Policy Advisor; Fleur Matthews, Team Leader, Policy Implementation; and Pam Guest, Senior Policy Advisor, spoke to the report and tabled a presentation and handout.

During the officer introduction on the report, the following procedural motion was moved:

Moved: Cr Lamason / Cr Staples

That the meeting move directly to the next business, superseding the item under discussion.

The motion was **carried**.

The Committee Chair accorded priority to agenda item 11 – *Wainuiomata Mainland Island Sanctuary update* in accordance with Standing Order 3.5.2.

8 Wainuiomata Mainland Island Sanctuary Update – Oral Report

Councillor Nash updated the Committee on the progress of the Wainuiomata Mainland Island Sanctuary (the Sanctuary).

The feasibility study for the Sanctuary is progressing and engagement is commencing with mana whenua on next steps. Discussions are continuing with the Crown around funding, and it is planned that the Minister for Conservation will be invited to attend a site visit. A more detailed report will be provided to the Committee at its next meeting on 16 September 2021.

9 Plan Changes 2022 Scopes and Forward Work Programme – Report 21.340
[Consideration continued]

Moved: Cr Blakeley / Cr Brash

That the Committee:

- 1 Agrees to the initial scope of each workstream proposed in Regional Policy Statement Change 1 and Natural Resources Plan Changes 1 to 3, as set out in Attachment 1.
- 2 Requests officers to report to each meeting of the Environment Committee through to August 2022 on the proposed plan changes.
- 3 Agrees to establish the 2022 plan changes working group to work with officers in review of plan change research and approach prior to Committee meetings and in between Committee meetings.
- 4 Agrees that the 2022 Plan Changes Working Group comprises of Councillors Gaylor, Connelly, Brash, Lee and Staples.

The motion was **carried**.

The Chair accorded priority to agenda item 8 – *Transmission Gully Work Programme* - in accordance with Standing Order 3.5.2.

10 Transmission Gully Work Programme – Report 21.360 [For Information]

Richard Percy, Project Leader, Statutory Projects, and Shaun Andrewartha, Manager, Environmental Regulation, spoke to the report.

Noted: The Committee requested that the Transmission Gully work programme be added to Greater Wellington’s risk register.

Noted: The Committee requested that officers provide a further update on the Transmission Gully Work Programme at the next Committee meeting on 16 September 2021.

Councillor Nash left the meeting at 12.06pm and did not return.

Councillor Ponter left the meeting at 12.19pm and did not return.

11 Flood Risk Management Programme – Report 21.345 [For Information]

Andy Brown, Team Leader, Investment, Strategy and Planning and Louise Algeo, Team Leader, Hydrology, spoke to the report and tabled a presentation.

Councillor Kirk-Burnnand left the meeting at 12.32pm and did not return.

12 Crown Funded Projects and Programmes Update – August 2021 – Oral Report [For information]

Wayne O’Donnell, General Manager Catchment Management, tabled a presentation and updated the Committee on the projects and programmes funded by the Crown.

13 Whaitua Process Update – Oral Report

Tim Sharp, Programme Manager, Whaitua, updated the Committee on the progress of the Whaitua process. Mr Sharp noted that the Whaitua Implementation Plan and supporting documents are on track and will be presented to Council at its meeting on 23 September 2021.

Karakia whakamutunga

The Committee Chair invited Councillor Connelly to close the meeting with a karakia whakamutunga.

The meeting closed at 12.58pm.

Councillor P Gaylor

Chair

Date:

For Information

UPDATE ON PROGRESS OF ACTION ITEMS FROM PREVIOUS ENVIRONMENT COMMITTEE MEETINGS – SEPTEMBER 2021

Te take mō te pūrongo

Purpose

1. To update the Environment Committee (the Committee) on the progress of action items arising from previous Committee meetings.

Te horopaki

Context

2. Items raised at the Committee's previous meetings, which require action by officers, are listed in **Attachment 1** – Action items from previous Environment Committee meetings. For all action items, the current status and a brief comment is provided on progress to date.

Ngā hua ahumoni

Financial implications

3. There are no financial implications from this report, but there may be implications arising from the actions listed.

Ngā tūāoma e whai ake nei

Next steps

4. All completed items will be removed from the action items table for the next report. Items not completed will continue to be progressed. Any new items will be added, following this Committee meeting, and circulated to the relevant business group/s for action.

Ngā āpitihanga

Attachment

Number	Title
1	Action items from previous Environment Committee meetings – September 2021

Ngā kaiwaitohu
Signatories

Writer	Al Cross – Kaiwhakahaere Matua mo te Taiao/General Manager, Environment Management Wayne O’Donnell – Kaiwhakahaere Matua Whaitua/General Manager, Catchment Management
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**He whakarāpopoto i ngā huritaonga
Summary of considerations**

Fit with Council's roles or with Committee's terms of reference

The action items are of an administrative nature and support the functioning of the Committee.

Implications for Māori

Known implications for Māori are identified to the extent advised in Attachment 1.

Contribution to Annual Plan / Long Term Plan / Other key strategies and policies

Action items contribute to Council's or Greater Wellington's related strategies, policies and plans to the extent identified in Attachment 1.

Internal consultation

There was no additional internal consultation in preparing this report and updating the action items.

Risks and impacts - legal / health and safety etc.

There are no known risks or impacts.

For information

ENVIRONMENT/CATCHMENT UPDATE

Te take mō te pūrongo

Purpose

1. To inform the Environment Committee (the Committee) of Greater Wellington Regional Council (Greater Wellington) activities relating to the Committee's areas of responsibilities.

Te horopaki

Context

Regional issues

2. Our summer boating safety programme has started. This runs till the end of April and has been allocated \$50,000 from Maritime NZ for this. Community Engagement has developed a new strategy to capture attention and tie together our safety messaging. This work includes education about the changes in the Navigation Safety bylaws.
3. We have received notification from the Ministry for the Environment (MfE) that our fish passage project has progressed to Stage 2 of the Freshwater Improvement Fund application process. Some specifics about the project still need to be negotiated. After agreement is reached we will be required to submit our proposed work programme and our annual plan for year 1 for MfE approval. The intention of the project is to improve fish passage in the Wellington Region working in collaboration with mana whenua, other external agencies and the community.
4. An additional 95,000 hectares of digital soil mapping has been completed and is now available online to the community through the S-Map online portal hosted by Manaaki Whanua. This includes completion of digital soil map coverage for productive land areas in the Te Whanganui-a-Tara and Kāpiti whaitua as well as northern areas of the Ruāmahanga. The long term goal is complete coverage of the region to help inform policy development and whaitua implementation.
5. Staff working to respond to wetland aspects of the Essential Freshwater policy changes are looking to finalise some initial wetlands information/communications for landowners. This is primarily to address and clarify misinformation that came to light at the most recent Committee meeting. This interim information will be high level and intended to lead into more detailed factsheets and further landowner engagement, which will be rolled out once changes to the wetlands regulations are finalised by central government.

6. Wetlands also continue to feature prominently in the Consenting, Compliance Monitoring and Enforcement space. Environmental Regulation staff are involved in a number of investigations, prosecutions and other regulatory actions relating to wetlands across the Region. Greater Wellington is leading the way in testing specific aspects of the regulations and legislation in court. There is also demand for advice on the provisions of the Proposed Natural Resources Plan (pNRP) and the National Environment Standard (NES) Freshwater and the consenting requirements and we are continuing to link in with territorial authorities (TA) on ensuring they liaise with us when dealing with issues that may impact wetlands (e.g. subdivision consenting).
7. Environment Court Hearings for the pNRP appeals are currently scheduled for November and December. Rebuttal evidence is due to be filed with the Court on Friday 16 September 2021 following on-going conferencing of planning experts.
8. The Government is consulting on a number of freshwater implementation regulations. We are preparing Council submissions in response, with input from the Farming Reference Group. The upcoming deadlines are:
 - a Freshwater farm plan regulations: 26 September 2021
 - b Changes to the low slope map for stock exclusion regulations: 26 September 2021
 - c Changes to intensive winter grazing regulations: 7 October 2021
 - d Changes to the wetlands regulations: 27 October 2021
9. A Council workshop on 2 September 2021 provided feedback on the freshwater farm plan regulations and low slope map for stock exclusion regulations. We will seek feedback on intensive winter grazing and wetlands regulations at the Council workshop on 5 October 2021.
10. The Environment Select Committee is continuing to hear submitters on the Natural and Built Environment Bill exposure draft. Greater Wellington's submission was heard on 27 August 2021. The Committee is due to report back to Parliament by 22 October 2021.
11. A number of Wastewater Treatment Plants (WWTP) across the Region are non-complying with their resource consents. These range in terms of minor, moderate or significant non-compliance and we are working closely with the relevant TAs to rectify this. Enforcement action has commenced at sites of significant non-compliance, and in various forms depending on the situation and severity of potential impacts.
12. Greater Wellington officers are working through a number of consenting and compliance tasks linked to Transmission Gully road opening, including retrospective consenting and approvals. We are trying to get a clear understanding from the Project parties of the approvals programme leading up to road opening and to the completion of construction. Onsite compliance monitoring continues and a number of incidents are under investigation.
13. Land Management winter planting programmes including hill country erosion treatment and riparian enhancement, are expected to be completed by late September 2021 across the Region despite COVID-19 alert level delays. Additional contractors have been engaged to accelerate the remaining planting work in the short time remaining before dry weather.

Whaitua-specific issues

Te Whanganui-a-Tara

14. The aerial 1080 operation to control possums in the Akatarawa Forest was undertaken on 2 July. This control of possums and other mammals will help to protect the ecological integrity of the forest, including the ancient rata forest. There have been two flood events since the operation so our emergency response procedures were activated. This included erecting signage and checking the Hutt River, Eastbourne and Petone beaches for possum carcasses to minimise risk for dogs. There have been no reported instances of dogs eating poisoned carcasses. There has now been enough rain in the catchment so 1080 baits on the ground are no longer toxic. However, we will continue to monitor the situation until possum carcasses have decayed and no longer pose any risk to dogs.
15. We have received the final draft of the Wellington Harbour channel risk assessment; it will be shared with users and reported back to the Finance, Risk and Assurance Committee as well as options for wider presentation to Councillors.
16. Meetings in October and November 2021 are being planned for the Plan Change Working Group of the Environment Committee; we hope to have these scheduled in a few weeks with a focus on Plan Change 1 (National Objectives Framework) and Regional Policy Statement (RPS) Change 1 (Visions and Te Mana o te Wai); this also covers Ruamāhanga and Te Awarua-o-Porirua Whaitua.
17. Whaitua Te Whanganui-a-Tara Implementation Programme (WIP) and Te Mahere Wai (companion document from mana whenua) are to be presented to Council on 23 September 2021.
18. A letter from the Committee Chair and Deputy Chair, the two letters from the Whaitua Te Whanganui-a-Tara Committee to residents, and an email from Councillor Connelly was sent to Robert Anker (on behalf of the Mangaroa residents), in response to the residents' input at the Environment Committee meeting on 12 August 2021.
19. Wellington City Council intends to release a draft District Plan in October 2021 (ahead of formal notification of a proposed District Plan), which will implement the changes agreed through the Wellington City Spatial Plan in June 2021.
20. Hutt City Council is continuing with reviewing its District Plan and intends to release a draft District Plan in early 2022, prior to formal notification of a proposed District Plan later in 2022.
21. Upper Hutt City Council (UHCC) is continuing with a rolling review of its District Plan. Proposed Plan Change 49 (Open Spaces) is currently being consulted on, with submissions closing on 17 September. We are preparing an officer submission as the scope of the Plan Change is fairly narrow. UHCC is also consulting on draft provisions for its rural and residential chapters. We are preparing high-level officer comments on these provisions, and will make a formal submission once this Plan Change is notified.
22. Urgent flood protection work is continuing on three sites on the Hutt River to secure the bank edge ahead of implementing the permanent works as part of the Government funded Climate Resilience works programme. Despite the flood damage and the latest lockdown we are on programme to complete these works by mid-June 2022. The

planting programme is also continuing as quickly as possible to try and get this work completed before the ground conditions change.

23. Several parts of Greater Wellington are involved in work related to both the single user and multi user ferry terminals, this covers environmental and consenting aspect and also navigation safety considerations.
24. Commissioners have approved the application by NCI Packaging (NZ) Limited for Discharge Permit to discharge contaminants into air, for a duration of 20 years and subject to the conditions. The conditions have an adaptive management approach whereby a biofilter will be reviewed to determine its effectiveness at mitigating odour discharged from the plant site. Expansion of the biofilter and/or raising stack heights are additional mitigation requirements if monitoring indicates that further odour control is required.
25. Wellington Water Ltd are preparing draft stormwater strategies for the Stage 2 consent process. These strategies will have a consistent approach across all the catchments (being Wellington City, Porirua and Hutt Valley).

Ruamāhanga

26. Predator control in Pukaha buffer and Wairarapan Key Native Ecosystems has taken longer to initiate than planned, due to tendering processes, but is now ready to start. We are starting to receive notification of magpie attacks on the public, as well as rook sightings. Completion of rook control before chicks disperse from nests is an upcoming focus. We have had a lot of enquiries about possums, and the dedicated pest control rates. We are intending to workshop this matter with Councillors in October.
27. Wairarapa Moana Wetlands Project operational planning – we are nearing the end of a procurement process and very soon will be engaging consultants to work through a collaborative operational planning process. This will involve working across the partnership, with experts and the local community to prioritise ecological restoration and visitor experience spending across the project area.
28. Flood Protection work on both the Climate resilience project and River Rd and the JFN planting projects are continuing. We are on track to plant 12,000 natives at the Barrage Gates site over the next two weeks.
29. A workshop of the Upper Ruamāhanga Advisory committee is programmed for 13 September 2021. The key focus of the workshop is to discuss the ‘room for the river’ concepts and how any intervention work will be managed in this new approach. A number of floods over the winter have caused some erosion in the river buffers and landowners are keen to understand how the new approach works in these situations.
30. For the progress on the Plan Change Working Group of the Environment Committee refer to paragraph 16 above.
31. Land Management presented advice to South Wairarapa District Council Assets and Services Committee around earthflow erosion management that has caused closure to Hinakura Road east of Martinborough.
32. For progress on whitua implementation refer to the report Whitua Implementation Update (Report 21.409) which is also being presented at this meeting.

33. A response to Jamie Falloon's questions raised during public participation at the previous Environment Committee meeting has been sent.
34. None of the Wairarapa TAs have consent lodged yet for Stage 1 stormwater consenting which need to be submitted before the end of the year (pNRP cut-off date). We have been meeting with them and have now received a draft for our experts to review from Masterton District Council.
35. Given the lack of gravel available from our rivers, we are seeing a number of resource consent applications coming in around land based quarries. The issues we can consider are quite narrow, however they are causing some angst with local residents as they have concerns around noise and traffic movements (District Council issues). The problem that is arising is that the Wairarapa Combined District Plan (and the TAs interpretation of this document) results in the TAs not requiring a resource consent for quarrying. Therefore the local residents see the Greater Wellington process as the only avenue where they can have their say and this creates a huge amount of work and coordinated communication to diffuse the situation and get a clear and concise Greater Wellington message out. We are working with the TAs on some joint communications and we are also working towards having something on our webpage for easy access.
36. The Wairarapa Water Resilience Strategy was accepted by the three Wairarapa TAs, and approved by Council mid-2021. The implementation stage has now commenced and will be workshopped with the Wairarapa Committee in late September 2021.

Te Awarua-o-Porirua

37. Regular predator control work in selected KNE sites continues as scheduled, with some delays due to COVID-19.
38. Wellington Water Ltd are preparing draft stormwater strategies for the Stage 2 consent process. These strategies will have a consistent approach across all the catchments (being Wellington City, Porirua and Hutt Valley).
39. For the progress on the Plan Change Working Group of the Environment Committee refer to paragraph 16 above.
40. Hearings on Porirua City Council's Proposed District Plan are beginning in late September. There are eight topic-based Hearing Streams established, which will run sequentially out to June 2022. Greater Wellington will likely be presenting at most if not all Hearing Streams. Hearing Stream 1 will cover over-arching matters, plan-wide structural issues and definitions.
41. Whaitua implementation – this is subject of another report to this meeting – Whaitua implementation Report 21.409.

Kāpiti Coast

42. Numerous rabbit enquiries and pre-planting protection works are being actioned. There will be a lot of night shooting this year, again, for which we are getting more resources from Kāpiti Coast District Council (KCDC). New multi-species predator control work has started at two sites, one in Maungakotukutuku Dam site for KCDC, and the other a private forest up Otaki Gorge Road.

43. Biosecurity are working with Ministry for Primary Industries (MPI) and the Department of Conservation (DOC) to manage Sea Spurge on the Kāpiti coast. We have started door to door surveying of Raumati for woolly nightshade, moth plant and blue passionflower. A boneseed survey along the Peka Peka coast is complete, with boneseed removed on inspection. Some work is deferred until we are at a COVID-19 Alert Level 2 allowing staff to go from house to house.
44. Whaitua planning is underway and we are working towards identifying research and information gaps and needs. We will be involving a number of internal departments as well as external partners in this process, including mana whenua and KCDC.
45. In the coming months we will be ground-truthing our aerial wetland mapping in Kāpiti. This will help validate this innovative approach, identify areas where the predictive approach works well and where it doesn't, and inform use of this tool at a national level.
46. KCDC has established a Steering Group including mana whenua and Greater Wellington officers to developing a stormwater management strategy to support an application for its second-generation global stormwater discharge permit. This will update the existing stormwater management strategy to account for climate change and growth projections. A draft stormwater management strategy is to be completed by May 2022.
47. River Management activities are continuing with work focused on completing as much as possible of the planting programme before the season ends.
48. The Friends of the Otaki Walkover, programmed for 22 September 2021, has been cancelled. No alternative date has been set yet. A smaller walkover with key officers and the Friends executive will be held shortly and a new date discussed.

Wairarapa Coast and Eastern Hills

49. We have received many pig and deer complaints from private landowners and are trying to work with DOC and MPI to assist affected landowners as those organisations have statutory responsibility for these animals. MPI have compliance forms we can refer people to but DOC remains unresponsive to date.
50. The only site of *Polypodium vulgare* (invasive exotic fern) in this catchment has been controlled. Contractors have not yet started pest plant control work in the Key Native Ecosystems.
51. The Regional Possum Predator Control Programme (RPPCP) have started in North Wairarapa. Kopuaranga, Rangitumau, Bideford Pines, Juken Nissho Ltd, Castle Hill and Makara possum control operations are well underway for 2021/22. This is a total area of 27,000 hectares with 30 percent completed to date. In the last month we have worked around landowners lambing and COVID-19 Alert Level requirements. A number of landowners have preferred to wait until Alert Level 2 before work could commence.
52. Whaitua planning is underway and we are beginning the process of identifying information gaps and targeted investigations.

Ngā kaiwaitohu
Signatories

Approvers	Al Cross, General Manager, Environment Management Wayne O'Donnell, General Manager, Catchment Management
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**He whakarāpopoto i ngā huritaonga
Summary of considerations**

Fit with Council's roles or with Committee's terms of reference

The Environment Committee has responsibility to consider all matters across the development and implementation work programmes of Greater Wellington's Catchment Management and Environment Management Groups.

Implications for Māori

Greater Wellington, is required to manage land and water within the statutory requirements of a range of legislation, which requires giving effect to Te Mana o Te Wai, and consideration of Te Tiriti o Waitangi in the development and implementation of the Council's strategies, plans, programmes and initiatives.

Implementation with mana whenua partners is guided by Te Whāriki – the new Māori Outcomes Framework as part of the 2021-2031 Long Term Plan.

Contribution to Annual Plan / Long Term Plan / Other key strategies and policies

Development and implementation of related work programmes falls under the core activities of the 2021-2031 Long Term Plan.

Internal consultation

Internal consultation was limited to officers of Greater Wellington's Catchment Management and Environment Management Groups.

Risks and impacts - legal / health and safety etc.

This report covers the full breadth of work programmes, and equally a broad range of environmental, reputational, legal, financial, and HSW risks and implications are associated.

For Decision

WHAITUA IMPLEMENTATION UPDATE

Te take mō te pūrongo

Purpose

1. To advise the Environment Committee (the Committee) of the key findings from a review into the implementation of Whaitua Implementation Programmes (WIP), and the resulting actions being taken to improve implementation progress.

He tūtohu

Recommendations

That the Environment Committee:

- 1 **Notes** that a review has been undertaken on the business process for the implementation of WIPs.
- 2 **Notes** that the primary recommendation from the review is to articulate non-regulatory recommendations as tangible deliverables that can be commissioned through a project framework.
- 3 **Notes** that this will be the basis of better progress reporting in future.
- 4 **Notes** that a number of other improvements have been identified, including to governance and reporting.
- 5 **Requests** that officers report back to the Committee with an update on WIP implementation improvements including governance arrangements.
- 6 **Requests** officers to prepare a report for the Wairarapa Committee setting out a potential whaitua implementation governance role.
- 7 **Requests** officers to work with Porirua City Council to report back on the status of the Te Awarua-o-Porirua Harbour and Catchment Strategy and Action Plan and local governance arrangements for its implementation.

Te tāhū kōrero

Background

2. Council received the Ruamāhanga WIP in 2018 and the Te Awarua-o-Porirua WIP in 2019 (accompanied by the Ngāti Toa Rangatira Statement). The WIPs list 184 recommendations between them, although there are substantially more items to be managed in practice because some recommendations contain multiple sub-recommendations.

3. The Te Whanganui-a-Tara WIP is nearing completion and a further two WIPs are yet to commence. This will create a large programme of implementation work to be tracked and managed across five whaitua.
4. There is concern from Councillors, Whaitua Committees, and communities that progress in implementing the WIP recommendations has been inadequate. At the May 2021 Environment Committee meeting a more structured approach was sought to manage this implementation.
5. The Report to the Environment Committee meeting on 17 June 2021, Whaitua Implementation Programme Action Plan (Report 21.242), confirmed that of the 75 recommendations contained in Te Awarua-o-Porirua WIP and 109 in the Ruamāhanga WIP approximately one third in the case of Porirua and half in the case of Ruamāhanga will be achieved in part or in full by amendments to the proposed Natural Resources Plan (PNRP) scheduled for 2022 - 2024. Resourcing to support this statutory plan change process is provided for in the 2021-31 Long Term Plan (LTP) with preparatory work underway (Plan change work programme and implementing national direction (Report 21.148)).
6. The Programme Manager commenced work on 7 July 2021 and has undertaken an independent review of the existing implementation approaches. A programme management and project management best practice perspective has been used to identify areas of concern and to recommend improvements for more effective implementation of WIPs.

Te tātaritanga Analysis

7. Findings from the review are summarised under the following headings:
 - a Regulatory recommendations
 - b Non-regulatory recommendations
 - c Governance
 - d Reporting.

Regulatory recommendations

8. A key distinction in the type of work within the WIPs is regulatory versus non-regulatory recommendations. Regulatory recommendations refer to those which are to be implemented via changes to the Proposed Natural Resources Plan (PNRP).
9. Management of the regulatory recommendations is already well defined because the recommendations:
 - a have an implementation mechanism, i.e., the PNRP already exists and is the appropriate and only way to implement these recommendations
 - b have clear implementation ownership – a single team (the Environmental Policy team) are currently responsible for leading/implementing changes to the PNRP
 - c are clearly articulated within the WIPs, even to the point of providing a proposed wording for the PNRP in some cases.

10. Because of these points, the review has confirmed that regulatory changes have an effective implementation mechanism already and, consequently, changes do not need to be made to these mechanisms. These recommendations are already being progressed by the Environmental Policy team, with PNRP changes scheduled to be delivered in 2022 and 2024.

Non-regulatory recommendations

11. A key objective of the review was to identify why it has been difficult to make progress with the non-regulatory recommendations and to identify how this can be resolved.
12. The first point to note from the review is an observation that the term 'non-regulatory' does not actually describe what these recommendations *are*, it only describes what they are *not*. It effectively means 'everything else' which is extremely broad.
13. Related to this, the primary finding from the review is a need to articulate the non-regulatory recommendations as tangible deliverables, that is, to describe each recommendation as its specific products/deliverables which can then be commissioned and delivered. This is necessary due to often broad wording used to describe the non-regulatory recommendations, which tend to describe an intent or end state rather than the 'what' and 'how' the recommendation is to be achieved.
14. Without this level of clarity, even if Greater Wellington Regional Council (Greater Wellington) on its own attempts to implement a recommendation, there is a risk that mana whenua and communities consider that what is being delivered does not meet what was intended in the recommendation. Therefore, there is a need to articulate the recommendations as clearly defined deliverables and to ensure that there is also agreement externally to those deliverables.
15. During interviews for the review, Greater Wellington staff often noted that they thought some of the non-regulatory recommendations were already being implemented through their business-as-usual (BAU) work but that they could not be sure due to the wording in the recommendations. By articulating the recommendations as clearly defined deliverables it will be easier to test whether a recommendation is already in the process of being implemented or has even been completed.
16. Some recommendations have very long timeframes until their realisation, i.e. ten years or more. These need to be broken down into their interim achievable deliverables. Alternatively, they could be categorised as 'not yet in scope' if that is more appropriate. Unless steps such as these are taken, progress reporting will default to 'not implemented' even if the work is actually on track.
17. A clearly articulated deliverable is much easier to assign to a team or individual person within Greater Wellington to lead, and for them to work in partnership with others where appropriate. This will help drive delivery of the WIPs.
18. Many of the non-regulatory recommendations have identified cross-agency cooperation as being necessary to implement them. This includes cooperation between Greater Wellington, other councils, mana whenua and Wellington Water. By articulating a recommendation as tangible deliverable/s it will be easier to identify an individual lead organisation to manage the deliverable, including leading collaboration with other partners. This also has implications for governance – ensuring relevant

organisations are represented to endorse their leadership of a deliverable and subsequently providing oversight of its progress.

19. Although there is a general sense that the WIPs represent a large and ambitious programme of work, this has not been quantified. Articulating the non-regulatory recommendations as tangible deliverables will allow an estimate of the work effort (FTE) and any additional costs for each deliverable based on experience from other work. These can then be used to identify the estimated total cost of implementing each WIP.
20. There is currently no prioritisation of recommendations within WIPs. Articulating the work as tangible deliverables provides an opportunity to also assess the relative benefit of implementing different deliverables. Combined with an estimate of the cost, this will allow prioritisation of deliverables based on a high-level cost/benefit assessment. This does have significant limitations as the benefits cannot be monetised for direct comparison with costs, but it will still assist in identifying which deliverables to progress first.
21. It may also make sense to group a number of deliverables together across multiple recommendations, either for efficiencies (as they are similar or overlapping deliverables) or effectiveness (to have an impact they need to be delivered with others and/or in sequence). These groupings may justify dedicated projects to oversee them. For example, a number of recommendations involve requests to central government for regulatory changes which could be combined into a single communication.
22. A similar approach could be taken for upcoming WIPs, articulating recommendations as deliverables to be implemented, if Council wanted to provide a timely response after a new WIP is received. This will help articulate priorities at the outset.

Governance

23. Although not immediately apparent, the programme governance functions to develop a WIP through to its approval are fundamentally different to the governance functions to subsequently implement it. While the former has an emphasis on vision, the later needs to focus on compliance, i.e. to ensure that everything in the WIP is implemented at the operational delivery level.
24. Implementation governance also benefits from a more formal project management structure to support the delivery, through coordinating the delivery of work at a detailed level and providing reporting to the governance group.
25. Whaitua committees provided a local governance function to support development of the WIPs and this has worked well. It makes sense to continue to use whaitua based local governance arrangements where possible to support implementation, especially to confirm that deliverables correctly interpret the recommendations. The Ruamāhanga Committee still exists but the Te Awarua-o-Porirua Committee does not. Reconvening a full Whaitua Committee may be challenging at this point.
26. The Wairarapa Committee may be able to provide such a local governance function for the Ruamāhanga WIP. The Wairarapa Committee members are the councillor elected by the Wairarapa constituency and two other councillors from Council and the Mayors from South Wairarapa District Council, Carterton District Council and Masterton District

Council. It also includes one member each from Ngāti Kahungunu ki Wairarapa and Rangitāne ō Wairarapa.

27. A comparable whaitua based governance option for the Te Awarua-o-Porirua WIP (and Ngāti Toa Rangatira Statement) is not currently clear while the Te Awarua-o-Porirua Harbour and Catchment Strategy and Action Plan is being reviewed. Re-establishment of the Whaitua Committee could be considered (but not preferred).
28. We intend to liaise with Porirua City Council on the current review of governance of the Te Awarua-o-Porirua Harbour and Catchment Strategy and Action Plan before identifying local governance arrangements for implementation of the Te Awarua-o-Porirua WIP. Any future governance entity may be able to pick up on support for substantive implementation of the WIP.
29. A Greater Wellington internal governance group currently provides management oversight of WIPs as they are developed. This group does not encompass delivery of the WIPs, which has instead defaulted to BAU for implementation. The review identified that that a comparable Greater Wellington programme governance function is required to provide oversight of WIPs implementation once they are approved. This could be through expanding the role of the current group or through establishing a dedicated group of responsible General Managers.
30. The split of governance responsibilities between local and a Greater Wellington governance group would need to be defined in partnership with mana whenua and the local governance groups (and would likely be formalised through terms of reference documents). As a likely starting point though:
 - a local governance groups could have responsibility for endorsing descriptions of deliverables, prioritisation of deliverables and assigning leadership of work alongside mana whenua and between organisations
 - b the Greater Wellington governance group would have responsibility for programme management/project management support across the whole implementation programme, reporting (including to Council) and allocation of Greater Wellington resources between WIPs.

Reporting

31. As noted earlier, a purpose of the review was to identify improvements to reporting. There has been a general sense that that progress has been inadequate in implementing the non-regulatory recommendations in WIPs but also that, where work is underway, this is not visible enough through reporting. As also noted earlier, even amongst Greater Wellington officers there is uncertainty whether work they are undertaking in BAU is already addressing the WIP recommendations. There is even less visibility of any work that may be being led by other organisations.
32. By articulating the recommendations as tangible deliverables to be implemented, the scope of work to implement a WIP will become defined. These deliverables can then be tracked, using project management tools, to assess their individual progress. Once deliverables are specified these can have their status reported, e.g. whether assigned, currently underway, completed, etc.

33. By extension, it will be possible to report the progress of individual WIP recommendations, as once the deliverables related to a recommendation have been implemented the recommendation will be complete. By assessing the work effort and cost to implement each deliverable it will also be possible to give an estimate of the overall resource required to implement each WIP.
34. The final format of reporting can be refined over time depending on the needs of different audiences, for example local Committees and full Council.

Implementation of improvements

35. The report to the Environment Committee's meeting of 17 June 2021 (Whaitua Implementation Programme – Action Planning (Report 21.242)), confirmed the intent to develop WIP Action Plans for Te Awarua-o-Porirua and Ruamāhanga catchments as a matter of priority.
36. Work has already begun on how to operationalise the changes proposed from the review. A draft business process (**Attachment 1**) has been developed to show the main steps in managing recommendations, including categorising those already being implemented and converting the remainder into deliverables which can be commissioned. This includes showing interface points with governance groups.
37. Other tools being developed include templates which would be used to articulate deliverables including their estimate costs, benefits and prioritisation. A project schedule is being designed to record recommendations, deliverables and the connections between these. This would form the basis for tracking progress and to provide quantified reporting from.

Ngā hua ahumoni

Financial implications

38. There are no direct financial implications from this paper but implementation of WIPs requires resourcing more generally from Greater Wellington and territorial authorities. The processes outlined in this paper will help quantify FTE and cost impacts and will also ensure that these inform prioritisation and help maximise value.

Te huritao ki te huringa o te āhuarangi

Consideration of climate change

39. There are no direct climate change implications from this report but more effective implementation of WIPs may help support climate change outcomes.

Te whakatūtakitaki

Engagement

40. There has been no external engagement on this paper but the next steps include engagement with mana whenua and communities.

Ngā tūāoma e whai ake nei

Next steps

41. We will prepare a report for the Wairarapa Committee to discuss whaitua implementation and their possible role in providing a governance function for implementation of the Ruamāhanga WIP.
42. We will liaise with Porirua City Council on the review of the Te Awarua-o-Porirua Harbour and Catchment Strategy and Action Plan before identifying possible local governance arrangements for implementation of the Te Awarua-o-Porirua WIP.
43. We will discuss with mana whenua whether an additional process should be developed for identifying any recommendations they wish to lead implementation of. Alongside this we will ask their perspective of governance arrangements to ensure mana whenua aspirations for kaitiakitanga, rangatiratanga and manakiatanga in implementation of WIPs is appropriately reflected.
44. Establish a Greater Wellington internal governance group to provide management oversight of approved WIPs, either through expanding the role of the current group overseeing WIP development or through establishing a new group. The functions of this group would be influenced by the role local governance wishes to provide, i.e. avoiding duplication while ensuring effective management for implementation overall.
45. Once governance arrangements are agreed, these can be formalised through terms of reference documents.
46. Governance groups will be asked to endorse the business process and tools that would be utilised to implement the WIPs. These are likely to form part of an overall implementation programme plan to be endorsed by them.
47. The programme plan would also include a date by which the implementation programme should be formally reviewed, with a view to transitioning its remaining work to BAU once Fit for the Future has delivered Greater Wellington a whaitua based delivery structure for its work. This may also coincide with any moves to a more whaitua based Greater Wellington governance structure.
48. As further WIPs are approved their Whaitua Committees will be engaged with to discuss implementation arrangements for their WIPs.

**Ngā āpitihanga
Attachment**

Number	Title
1	Business process diagram

**Ngā kaiwaitohu
Signatories**

Writer	Gareth Edwards - Programme Manager, Whaitua Implementation
Approvers	Matt Hickman – Manager, Environmental Policy Al Cross – General Manager, Environment Management Monica Fraser – Te Pou Whakarae Wayne O'Donnell – General Manager, Catchment Management

**He whakarāpopoto i ngā huritaonga
Summary of considerations**

Fit with Council's roles or with Committee's terms of reference

The Environment Committee has responsibility to consider changes in the legislative frameworks and the implications these changes have on Council's environmental strategies, policies, plans, programmes and initiatives.

Implications for Māori

Greater Wellington, through the NPS-FM, is required to manage freshwater in a way that gives effect to Te Mana o Te Wai. The information provided in this report reflects and supports mana whenua interests through WIP recommendations.

Contribution to Annual Plan / Long Term Plan / Other key strategies and policies

Implementation of the National Policy Statement for Freshwater Management, PNRP and the Whaitua Committee Programme are core environmental resource management activities of the 2021-2031 Long Term Plan.

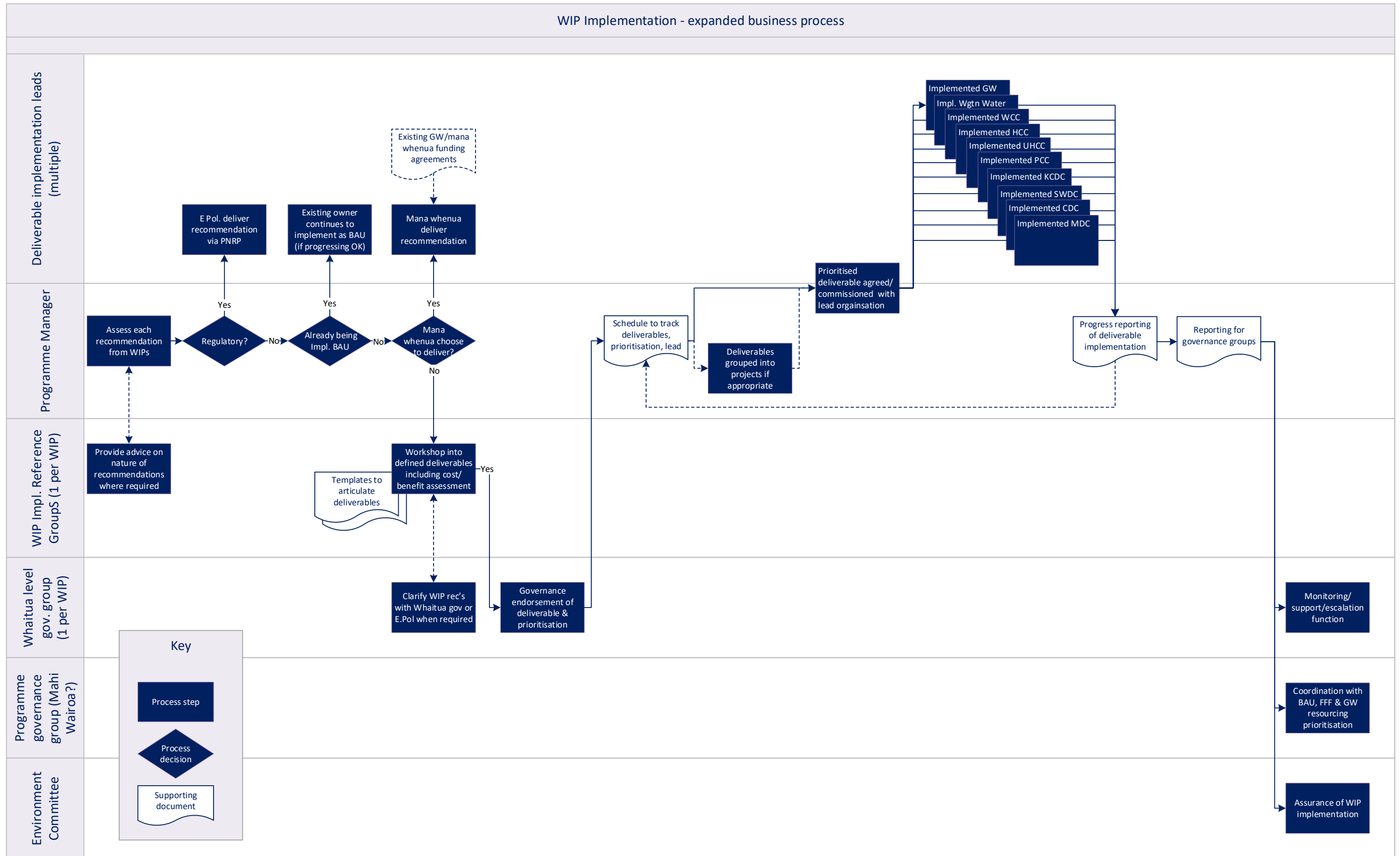
Internal consultation

Internal consultation was limited to the approvers of this report and their respective teams.

Risks and impacts - legal / health and safety etc.

There is reputational and legal risk for Council associated with the timing and phasing of implementation of WIPs and Ngāti Toa Statement recommendations.

WIP Implementation - expanded business process



For Decision

REGIONAL FLOOD PROTECTION ASSET MANAGEMENT REPORT 2020/21

Te take mō te pūrongo

Purpose

1. To advise the Environment Committee (the Committee) of progress made with the Flood Protection Department's asset management system, and the overall performance and physical condition of flood protection and erosion control infrastructure assets.

He tūtohu

Recommendations

That the Committee

- 1 **Notes** that at the 3 August 2021 Hutt Valley Flood Management Subcommittee and the Wairarapa River scheme committee meetings held between 25 May 2021 and 13 August 2021, that the committees were satisfied that flood protection and erosion control infrastructure assets for these catchments have been satisfactorily assessed and that identified issues are being addressed through work programmes.
- 2 **Agrees** that the flood protection and erosion control infrastructure assets on the 15 schemes across the Wellington Region have been satisfactorily assessed and that identified issues are being addressed through work programmes.

Considerations by Committee

2. At its meeting on 3 August 2021 the Hutt Valley Flood Management Subcommittee (HVFMS) reviewed the flood protection and erosion control infrastructure assets for the catchments in the Hutt Valley. The HVFMS resolved to recommend to the Committee that the assets have been satisfactorily assessed and that identified issues are being addressed through work programmes but requested that officers prepare a response plan for the two sections of stopbank at Taita and Moonshine identified in the report as "Very High risk".
3. The Friends of the Waikanae River meeting was held on 4 August 2021, and were satisfied that the flood protection and erosion control infrastructure for that catchment has been satisfactorily assessed. The Friends were also satisfied that identified issues are being addressed through work programmes.
4. The Friends of the Ōtaki River meeting is due to be held in October, officers will report to the Friends asset condition and performance and note that identified issues will be addressed through work programmes.

5. The Wairarapa River scheme committees met between 25 May 2021 and 13 August 2021, and were satisfied that the flood protection and erosion control infrastructure assets for the Wairarapa catchments have been satisfactorily assessed. The Wairarapa River scheme committees were also satisfied that identified issues are being addressed through work programmes.
6. The Waiohine Action Group (WAG) have been sent the scheme report for the 2020/21 financial year for consideration. Officers have commented on asset condition and performance and noted that identified issues will be addressed through work programmes.

Te tāhū kōrero

Background

7. The Flood Protection department (the Department) is responsible for flood protection and erosion control infrastructure assets, and land and property located on 15 river schemes across the Wellington Region. These assets have a total combined value of \$428 million¹ and provide flood and erosion protection to the communities, businesses and infrastructure located on these floodplains.
8. The Department has a comprehensive asset management system, which demonstrates that the service levels of our infrastructure assets are being maintained in an efficient and cost-effective manner, will perform as designed and, where required, are being improved.
9. The Committee oversees the implementation and review of regional resilience priorities. The performance and condition of the infrastructure assets that form the 15 flood protection and erosion control schemes of the Region form a critical element of this. The Committee also relies on feedback from the HVFMS, Wairarapa River scheme committees, WAG, and Kāpiti Rivers' friends groups to assess this.

Te tātaritanga

Analysis

Highlights and future challenges

10. The context and overall environment in which flood and erosion protection is undertaken is changing – COVID-19, changing legislation, increasing expectations on how we should work, and the raft of central and local government reforms are all requiring changes to how we approach flood risk management.
11. Specifically, COVID-19 has and still is presenting both significant challenges and opportunities. Issues around resourcing, material supply, and the recent Lockdown will continue to test us in the delivery of our work programmes. This has been further compounded with the climate resilience programme and specialist input into RiverLink.
12. Looking to the future, two key work streams are also in progress that will advance our Asset Management maturity. The Department was recently granted two new river management resource consents for Te Awakairangi/Hutt River and Wainuiomata River;

¹ As at 30 June 2020

these new resource consents represent a step change in how Greater Wellington Regional Council (Greater Wellington) will undertake river management activities in the future. This coupled with Ngātahi (Greater Wellington’s new asset management system) provide both the driver and tool to enable this business step change.

13. In terms of business as usual activities, the five yearly Comprehensive Dam Safety Reviews (CDSRs) for Stebbings and Seton Nossiter Dams have been completed, which are critical features of the Porirua Stream scheme. New dam regulations will be introduced in early 2022 and there are considerable challenges to meet these regulations in terms of timeframes and resourcing. The CDSRs provide the focus needed and the Department is dedicated to ensuring appropriate dam safety systems are in place.
14. For both Stebbings and Seton Nossiter Dams the CDSRs highlight a need for extensive further work to ensure we meet the new regulations and have accurately defined any risks associated with dam operations. A work program is being developed that will outline further investigations and work required as well as continuing our existing operational maintenance. The work program will include the development of a dam safety system to ensure the dams are operated safely and responsibly.

Asset condition and maintenance

15. Asset condition is a measure of the physical state of the asset and is assessed visually on an annual basis. Asset condition does not identify the criticality of the asset or whether the asset meets the required service level.
16. Monitoring asset condition enables us to predict and plan maintenance, forecast renewal requirements and develop effective, proactive operational work programmes. This is essential to managing flood risk, because condition influences the likelihood of asset failure and therefore the asset performance to achieve the required service level.
17. Infrastructure assets across the region are being well maintained with 91 percent of assets rated in Very Good (1) to Moderate (3) condition. This is an increase from 2020 as shown in Table 1 below. A detailed summary of asset condition by asset type is included in **Attachment 1** – breakdown of condition by asset type.

Year	2021		2020		2019	
Asset Condition Rating Scores	Ratio	Count	Ratio	Count	Ratio	Count
1 - V. Good	91%	622	88%	593	92%	575
2 - Good		3230		3126		3860
3 - Moderate		1653		1909		1316
4 - Poor	9%	452	12%	675	8%	449
5 - V. Poor		60		108		60
Totals	100%	6017	100%	6411	100%	6260

Table 1: Summary of asset condition

18. A variety of assets feature in the 4 and 5 condition rating categories as shown in Attachment 1, including substantial asset types such as willows, stopbanks and floodgates.
19. Tree removal from stopbanks has been a priority for the Operations team and this will continue. A comprehensive maintenance programme is currently being developed for outlet structures, including floodgates, as well as a long term rejuvenation strategy for willows. This will ensure that maintenance is targeted and condition is gradually lifted across these asset types as these initiatives take effect.
20. Greater Wellington also contributes to reserves on an annual basis to repair damage to infrastructure assets following a flood event. In the Wairarapa this is contributed to by the respective river scheme and scheme reserves can be drawn upon to repair damage from floods in the five to 25 year return period range. The Greater Wellington Flood Contingency Reserve and the Greater Wellington Major Flood Investment are available for events greater than a 25 year return period. Currently river scheme reserves are \$9.6 million; this figure increases to \$16.8 million once the Greater Wellington Flood Contingency Reserve and the Greater Wellington Major Flood Investment are considered. The total flood reserves put Greater Wellington in a good position to fund repairs to infrastructure assets following a flood.

Asset performance, criticality and risk

21. The Department uses a comprehensive risk based framework developed at a national level to produce a risk profile for each river.
22. The framework assesses both the probability and consequence of failure of a group of assets within a discrete section of the river. Assessing the probability of failure includes analysing the structural strength of stopbanks (intrinsic strength), the capacity of the channel to attenuate flood flows, and the physical condition of infrastructure assets based on the technical information available. The consequence of failure relates to risk posed to both the community and environment from failure at a design flood event. Once a probability and a consequence score have been determined for each discrete section of the river, risk is assigned at this level from 'Very Low' to 'Very High'; the framework is shown schematically in **Attachment 2** – schematic of asset risk.
23. Application of the framework also highlights where the confidence in the underlying technical information is low and informs the Department's investigative work programme to gather new or additional information to improve confidence.
24. Assets do not work in isolation, they typically belong to a system of assets, which itself is a collection of assets that interact or are interconnected. Flood protection and erosion control schemes are no different. A system of assets can be distinguished as being critical in the same way as individual assets can.
25. The risk profile produced for each river identifies critical assets systems or river sections, and critical assets within those systems or sections are defined as those which have a high consequence of failure.
26. Generally, the majority of the infrastructure assets on the river schemes across the Greater Wellington region are assessed as 'Very Low' to 'Medium' risk and this continues the trend from the previous years.

27. There are, however, a small number of sections of schemes across the region that have been assessed as 'High' or 'Very High' risk. This risk can be attributed to one or more of the following failure modes: intrinsic strength, capacity, condition, or consequence. **Attachment 3** – breakdown of 'High' and 'Very High' risk areas, treatment and timeframes, identifies these.

Management response

28. All 'High' or 'Very High' risks captured in Attachment 3 are known to officers and have been identified for treatment either through an existing or proposed Floodplain Management Plan (FMP), a technical investigation or operational work programme. Existing and proposed FMP improvements works have been budgeted and prioritised. For those FMPs under development, while a budget and timing for an improvement work has been signalled in the Long Term Plan, and Infrastructure Strategy, the exact nature of the improvement may still be under discussion with the relevant community.
29. Treatment of 'High' and 'Very High' risks are described in paragraphs as follows:
- a At the Te Awa Kairangi/Hutt River Mouth downstream of the Estuary Bridge capacity is an issue; the area is inundated in the 2,800 cumec design event and is shown as 'High' risk. There are no stopbanks in this reach and no new stopbanks are currently signalled in the Hutt River Floodplain Management Plan (HRFMP). Initial investigations have been completed through the RiverLink project and these will be progressed further when the HRFMP is reviewed.
 - b Sections of Te Awa Kairangi/Hutt River from Moera to Strand Park, and adjacent to Alicetown are 'High' risk. This is an inherent risk as the consequence of any stopbank failure is high.
 - c The Pharazyn Street and Lower Hutt city stopbanks have capacity issues and average intrinsic strength; they are predicted to overtop in the 2,800 cumec design event and are shown as 'Very High' risk. As both the probability and consequence of failure are very high the risk rating reflects this. RiverLink will retreat, raise, and improve the stopbanks and enhance channel capacity through this section of the Te Awa Kairangi / Hutt River.
 - d Along Harcourt Werry and Taita Drives, and River Road there are sections of berm that are actively eroding or edge protection assets that are in poor condition putting these sections at either 'High' or 'Very High' risk. As the consequence of a stopbank failure is high or very high in these sections, the risk reflects this. These sections will be remedied through the climate resilience programme due for completion by June 2022.
 - e The River Road stopbank above Moonshine Bridge has a capacity issue and average intrinsic strength; it is predicted to overtop in the 2,800 cumec event and is shown as 'Very High' risk. Technical investigations into the capacity and strength of this section of stopbank are programmed for completion during the 2021/22 financial year. The HRFMP signals that the existing stopbank upstream of the Moonshine Bridge will be raised and strengthened but are not currently budgeted; this will be reviewed following the technical investigations.

- f Sections of stopbank in the urban reach adjacent to the Wainuiomata River are ‘High’ risk and are either predicted to over top in the 1% Annual Exceedance Probability (AEP) or have edge protection assets that are in poor condition. Technical investigations into the capacity, are programmed for the 2021/22 financial year and improvements to the edge protection assets incorporated into operational work programmes.
- g For the Rivers on the Kāpiti coast, the Ōtaki River has reduced channel capacity in the vicinity of the bridges resulting in a ‘High’ risk section. Channel capacity will be restored once Peka Peka to Ōtaki is complete and the causeway that is facilitating bridge construction is removed. There is also a small section of stopbank downstream of the bridges that is overtopped in the 20% AEP and is ‘High’ risk; this stopbank is being included in the review of the Ōtaki River Floodplain Management Plan.
- h For the Waikanae River, river management issues are complex. A key area is channel aggradation, which requires resource consent for wet gravel extraction but results in a river section at Jim Cooke Park being ‘High’ risk. Edge protection assets at Greenaway Road are in poor condition and put this section at ‘High’ risk; maintenance will be targeted this financial year to lift their condition. Investigations into the low floodwall and stopbank at Otaihanga will progress this year, which is predicted to overtop in the 1% AEP and is ‘High’ risk.
- i In the Wairarapa, there are five ‘High Risk’ sections; one on the Waipoua River, two on the Waiohine River, and two on the Ruamāhanga River in the Mount Bruce and Te Ore Ore sections. All feature stopbanks that have poor intrinsic strength and capacity issues and are predicted to overtop in the 1% AEP. The stopbank through urban Masterton on the Waipoua River relies on direction from the Waipoua Working Group (WWG). Implementation of the Te Kāuru Floodplain Management Plan will remedy the stopbank defects on both the Ruamāhanga River and the Waipoua River; the latter can only proceed once agreement has been reached with the WWG. Acceptance and implementation of the Waiohine River Plan will address those on the Waiohine River.

Ngā hua ahumoni

Financial implications

- 30. The proposed decision has no financial implications.

Te huritao ki te huringa o te āhuarangi

Consideration of climate change

- 31. The matters requiring decision in this report have been considered by officers in accordance with the process set out in the Greater Wellington Climate Change Consideration Guide.
- 32. The assets discussed in this report were developed over an extensive period of time, during which climate change projections (e.g. rainfall intensity, sea level rise etc.) have evolved with the scientific community’s understanding of how climate change will affect the Wellington Region. Climate change projections were incorporated into the

modelling that underpins relevant management plans and asset designs at the time they were developed.

33. Following the Ministry for the Environment guidance recently, the Department's current climate change policy is being updated, and this will be incorporated into future technical investigations and asset design.

Ngā tikanga whakatau Decision-making process

34. The matters requiring decision in this report have been considered by officers against the requirements of Part 6 of the Local Government Act 2002.

Te hiranga Significance

35. Officers considered the significance (as defined by Part 6 of the Local Government Act 2002) of this matter, taking into account Council's *Significance and Engagement Policy* and Greater Wellington's *Decision-making Guidelines*. Officers recommend that this matter is of low significance due to the administrative nature of the decision.

Te whakatūtakitaki Engagement

36. Due to the low significance of this matter, no engagement was considered necessary.

Ngā tūāoma e whai ake nei Next steps

37. No further action from the Committee is required.

Ngā āpitihanga Attachments

Number	Title
1	Breakdown of condition by asset type
2	Schematic of asset risk
3	Breakdown of 'High' and 'Very High' risk areas, treatment and timeframes

Ngā kaiwaitohu Signatories

Writer	Jacky Cox – Section Leader, Operations Planning Lucy Ashford – Project Engineer, Operations Planning
Approvers	Graeme Campbell – Manager, Flood Protection Wayne O'Donnell – General Manager, Catchment Management

**He whakarāpopoto i ngā huritaonga
Summary of considerations**

Fit with Council's roles or with Committee's terms of reference

The Committee provides oversight of the development, implementation and review of regional resilience plans and activities related to river control and flood protection. The performance and condition of the infrastructure assets that form the 15 flood protection and erosion control scheme of the Region form a critical element of this.

Implications for Māori

There are no known implications for Māori.

Contribution to Annual Plan / Long Term Plan / Other key strategies and policies

Confirmation from the Committee that the infrastructure assets across the 15 flood protection and erosion controls scheme in the Wellington Region have been satisfactorily maintained fulfils one of the Department's non-financial performance measures in the Long Term Plan. This report, and confirmed minutes, is supplied as evidence to Audit NZ that the Department has achieved this.

Internal consultation

No internal consultation was required as the infrastructure described, the condition, risk and subsequent work programmes are all managed by the Department.

Risks and impacts - legal / health and safety etc.

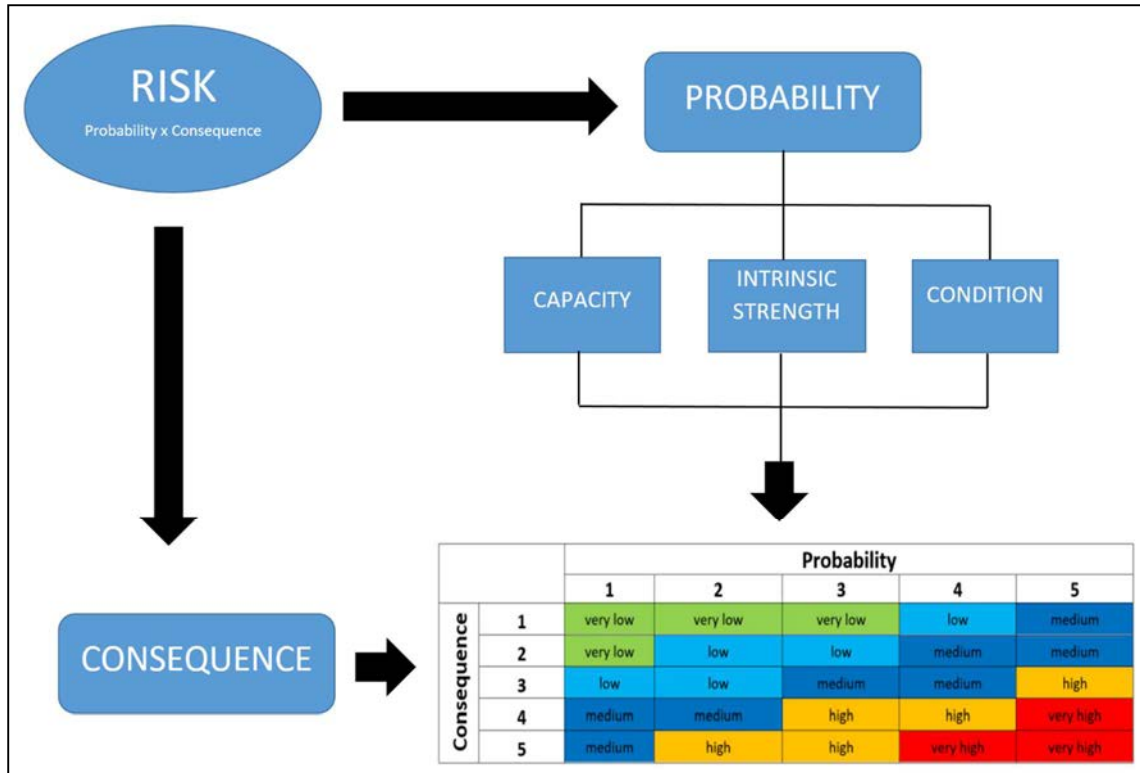
The reports notes that there are a small sections of various Rivers across the Region that pose a 'Very High' or 'High' risk to the communities and businesses on those River's floodplain but that the majority of infrastructure assets providing protection are in very good to moderate condition. These areas are also identified in either a technical investigation or in an operational or improvement work programme.

Detailed Breakdown of Condition by Asset Type.

2021 Asset Type Condition Rating Table

Asset Type	1 - Very Good	2 - Good	3 - Moderate	4 - Poor	5 - Very Poor	Total
BARRAGE GATE		7				7
BLOCKLINE	7	3	3	1		14
BRIDGE	1	8				9
BUILDING	1	2				3
CHANNEL	132	681	197	49	1	1060
CULVERT	1	69	54	6		130
DEBRIS ARRESTOR	2	10	3		1	16
DEBRIS FENCE		78	99	50	4	231
DEMOLITION LINE		2	13			15
DETENTION DAM		2	1			3
DIVERSION CUT		2				2
DRAIN	31	41	12	1		85
DROP STRUCTURE	1		1			2
FENCE	2	35	13	1	3	54
FENCE RAIL IRON NET		1		1		2
FLOODGATE	10	75	45	7	2	139
FLOODWALL	23	20				43
FLOODWAY SILL		12	1			13
GATE	19	56	3	1		79
GROYNE	6	762	233	50	13	1064
HEADWALL		78	29	8	1	116
NATIVE PLANTING	11	68	47	4		130
RETAINING WALL		8	1	1		10
RIPRAP	4	116	55	10	4	189
ROCK MATTRESS	1	3				4
SEAT	1	20	8	2	1	32
SIGN	29	26	4	2	1	62
STOPBANK	151	223	373	139	3	889
TRACK	162	296	78	1		537
TRAINING BANK	4	8		1		13
WEIR		4	10	2	1	17
WILLOW	20	509	370	113	25	1037
WINGWALL	3	5		2		10
Total	622	3230	1653	452	60	6017

Schematic showing how asset risk is determined



Detailed breakdown of High and Very High Risk Areas, Treatment and Timeframes.

Location	Description	Risk	Treatment	Timeframes
Hutt River Pharazyn Street	Stopbank will overtop from 2,800 cumec event. Stopbank intrinsic strength is 'average'	Very High	RiverLink will retreat, raise and improve stopbanks.	RiverLink is due for completion by 2027.
Hutt River Lower Hutt City	Stopbank will overtop from 2,800 cumec event. Stopbank intrinsic strength is 'average'	Very High	RiverLink will retreat, raise and improve stopbanks.	RiverLink is due for completion by 2027.
Hutt River River Road above Moonshine Bridge	Stopbank will overtop from 2,800 cumec event. Stability of stopbank is average.	Very High	Stopbank section identified in Hutt River Floodplain Management Plan (HRFMP) but requires additional technical investigations. Operational work programs to prioritise maintenance.	Additional investigations programmed for 2021/22. These will inform HRFMP improvement programme.
Hutt River mouth	No stopbank. Area is inundated in the 2,800cumec design event	High	Initial investigations completed through RiverLink. Further investigations through HRFMP review.	TBC
Hutt River Strand Park to Moera	Inherent risk as the consequence of any stopbank failure is high.	High	Operational work programs to prioritise maintenance.	Ongoing
Hutt River Alicetown		High		
Hutt River Harcourt Werry and Taita Drives	Inherent risk as the consequence of any stopbank failure is high.	High	Climate resilience programme will remediate.	June 2022
Hutt River Various sections of River Road	Actively eroding bank edges and/or edge protection assets that are in poor condition.	High		
Wainuiomata River Urban reach	Sections of stopbank predicted to overtop in 1% Annual Exceedance Probability (AEP) or have edge protection assets that are in poor condition.	High	Technical investigations required. Operational work programs to prioritise maintenance.	Technical investigations programmed for 2021/22.

Location	Description	Risk	Treatment	Timeframes
Ōtaki River Chrystalls	Channel capacity reduced due to gravel build up.	High	Capacity will be restored following completion of Peka Peka to Ōtaki project.	June 2022
Ōtaki River downstream of SH1	Stopbank at risk of failure from 20 year flood event.	High	Included in review of Ōtaki Floodplain Management Plan project.	June 2022
Waikanae River Jim Cooke Park	Gravel build reduce reduces channel capacity.	High	Regular monitoring of the riverbed. Resource consent applied for to remove gravel build up.	Continue monitoring and progress resource consent application.
Waikanae River Greenaway Rd	River assets to be improved.	High	Operational work programs to prioritise maintenance.	Ongoing.
Waikanae River Otaihanga Domain	Sections of stopbank and floodwall predicted to overtop in 1% AEP.	High	Technical investigations required to confirm stopbank and floodwall capacity and structural strength.	Programmed for 2021/22
Waiohine River Fullers Bend	Stopbank predicted to overtop in 1% AEP.	High	Technical investigation to take place	2021-2023
Waiohine River Rail bridge	Stopbank surface and intrinsic strength is average.	High	Technical investigation to take place	2021-2023
Waipoua River Urban section	Stopbank predicted to overtop in 1% AEP.	High	Issue being considered by Waipoua Working Group.	2021-2023
Ruamāhanga River Rathkeale (Mt Bruce)	Inadequate information on stopbank design. Poor intrinsic strength	High	Further technical investigations to take place. This project has been identified in the Te Kauru FMP.	2021-2023
Ruamāhanga River Waipoua confluence (Te Ore Ore)	Overtops in 1% AEP.	High	Further technical investigations to take place. This project has been identified in the Te Kauru FMP.	2021-2023

For Information

FLOODPLAIN MANAGEMENT PLANNING IMPLEMENTATION ANNUAL REPORT

Te take mō te pūrongo

Purpose

1. To advise the Environment Committee (the Committee) of progress made to June 2021 in implementing the Hutt, Ōtaki, Waikanae, Pinehaven and Te Kāuru Upper Ruamāhanga Floodplain Management Plans (FMP) and the Lower Wairarapa Valley Development Scheme (LWVDS).

Te tāhū kōrero

Background

2. This is the nineteenth (19th) annual report on the implementation of the Western Floodplain Management Plans and the fourteenth (14th) annual report on the Wairarapa capital works.
3. The Flood Protection department (the Department) implements floodplain management planning through three workstreams: Strategy, Investigations and Planning (ISP); Implementation; and Operations. Each workstream comes together to manage the Wellington Region's flood hazards by developing and reviewing floodplain management plans; implementing structural, non-structural and environmental measures to reduce the flood risk to the respective floodplains and improve the environment; and maintaining constructed works and river schemes.
4. The Te Awa Kairangi/Hutt River, Pinehaven Stream, Waikanae and Ōtaki Floodplain Management Plans (western Floodplain Management Plans) were completed in 2001, 2016, 1997 and 1998 respectively. Greater Wellington Regional Council (Greater Wellington) has adopted a 40-year time frame to fully implement the four Floodplain Management Plans (FMP). Implementation of the FMPs commenced in 2000.
5. The Porirua Scheme structural works were completed in 1996 and no further works are programmed apart from maintenance. The flood hazard maps have been reviewed and shared with Porirua City Council to ensure this information is readily available. The review found that the scheme was providing the levels of service original intended.
6. The Lower Wairarapa Valley Development Scheme (LWVDS) had a major review in 2006, which recommended a structural upgrade programme to improve the security of the flood defences in the lower Wairarapa valley. The original programme was for implementation over eight years, commencing in 2007/08. Generally the work involved strengthening river bank protections and upgrading stopbanks on the Ruamāhanga and Tauherenikau Rivers. In 2011, Council approved the extension of the programme of

works until 2021. The next review will be undertaken as part of a wider catchment plan with work completed in time to feed into a renewal of the Schemes resource consents which expire in 2027.

7. During the 2020/21 financial year Flood Protection has successfully obtained government funding for the following projects:
 - a Ministry for the Environment (MfE) – Major Rivers - Riparian Management from the ‘Jobs for Nature’ fund.
 - b Crown Infrastructure Partnership (CIP) Climate Resilience Covid-recovery funding.
8. These works are being undertaken as part of the implementation of the Hutt and Te Kauru FMP’s.

Te tātaritanga

Analysis

Floodplain Management Plan Implementation

Te Awa Kairangi/Hutt River Floodplain Management Plan (2001)

9. The current focus for project delivery is Riverlink. Riverlink is a partnership project between Greater Wellington, Hutt City Council (HCC), Waka Kotahi NZ Transport Agency (Waka Kotahi), Ngāti Toa Rangitira and Taranaki Whānui.
10. There are also ten (10) erosion sites within the Hutt River that have obtained government funding through the Regional Economic Development and Investment Unit (REDIU). These sites are:
 - a Stokes Valley Erosion Repair
 - b Pomare Bridge Stopbank Repair
 - c River Road Erosion
 - d Wellington Golf Club Right Bank Erosion
 - e Pomare Left Bank Erosion
 - f Wellington Golf Club Left Bank Erosion
 - g Totara Park Horse Paddock Right Bank
 - h Manor Park Right Bank Erosion
 - i Gemstone Drive Reach Erosion
 - j Totara Park Right Bank
11. The REDIU programme has so far achieved the following:
 - a Lead consultants procured for all 10 projects, with detailed designs complete for 6/10 sites.
 - b A main contractor has been procured for one site (construction beginning late July 2021), with progress being made in obtaining contractors for the remaining sites.
 - c A draft communications plan for the REDIU programme has been completed, now awaiting final approval for communicating with all stakeholders.

- d Sustainable procurement is being incorporated into each of the REDIU projects, ensuring deliverables for social well-being, social procurement, environmental responsibility, and community involvement & enhancement are all met in an effective and meaningful manner.

Riverlink Progress

12. Greater Wellington's involvement in RiverLink covers our strategic priority of regional resilience and implementation of the Hutt River Floodplain Management Plan and the Public Transport implications of moving the existing Melling train station and park and ride facilities. The flood protection and public transport benefits derived from the project are Greater Wellington's focus. Greater Wellington funding primarily relates to delivery of these project outcomes.
13. Greater Wellington's strategic priorities of freshwater quality and biodiversity, and Public Transport are supported by the successful completion of the RiverLink project
14. The resource consent and notice of requirement applications were lodged on 31 July 2021. Hearing dates have been booked for 24 November to 1 December 2021.
15. The consenting design, preliminary cost estimate and development of the current project partner agreement (PPA) is proposed to be extended to cover the remaining phase 1 and part of the Phase 2 procurement. A project partner memorandum of understanding (MOU) and multi-party funding agreement will be completed as more certainty about procurement develops. The MOU will define the governance and commercial principles for the main works alliance which will be led by Waka Kotahi as the principal to the delivery contract.
16. Public Works Act 1981 (PWA), 'Notices of desire' for the remaining 18 properties and tenants were sent out in June/July to commence the compulsory acquisition process, however good faith negotiations will continue alongside the PWA process. Strategies are being jointly developed with Waka Kotahi to manage tenants to ensure vacant possession for Quarter 4 of 2022 when it is anticipated the early works will commence.
17. Appointment of the Technical Advisor (TA) for RiverLink is almost complete, leveraging the knowledge and intellectual property from the existing Consultant team, for both the post lodgement evidence and hearing phase, and also the tender design, contract preparation, tender and selection/evaluation process for the main works hybrid alliance.

Operational matters – Te Awa Kairangi/Hutt River

18. The Te Awa Kairangi/Hutt River annual maintenance programme was completed within the allocated scheme budgets. The 2021-22 work programme is now underway with willow planting the current focus. (At this stage, the COVID-19 Alert Level 4 Lockdown has not severely impacted the work programme; this will be revaluated once the duration of Level 3 is known.)
19. The Department was recently granted a new river management resource consent for Te Awa Kairangi/Hutt River and Wainuiomata River; this resource consent represents a step change in how Greater Wellington will undertake river management activities in the future and a project to implement this resource consent is well underway.

Investigations, Strategy and Planning – Te Awa Kairangi/Hutt River

20. Flood Hazard Modelling is being updated to meet Hutt City and Upper Hutt City's District Plan timeframes. The modelling is progressing as planned, with the next step being community engagement around the models and what they represent.
21. Gravel Analysis for Te Awa Kairangi/Hutt River has been completed.

Te Awa Kairangi/Hutt River Environmental Strategy

22. A change request for the REDIU programme of works was submitted on May 9, 2021 to the Climate Resilience Advisory Board, increasing the programme budget by \$3 million (responsibility of Greater Wellington) and adding five projects to the programme, each project being a planned outcome of the Hutt River Environmental Strategy to enhance the river environment. These five projects are:
 - a Poets Park Upgrade
 - b Taita Park Upgrade
 - c Manor Park Shared Pathway
 - d Hulls Creek Bridge and Fish Passage
 - e Seton Nossiter culvert remediation (Porirua Stream)
23. The REDIU programme has so far achieved the following for the above projects (also refer 10. above):
 - a Manor Park project was put on hold due to access issues with KiwiRail land for the HCC component of the Manor Park trail though this has now been resolved.
 - b Contracts for the two consultants working on the four active projects have been signed, with designs progressing.
24. The planting and revegetation guidelines for river edges has been finalised and is being published on the internet.
25. The pocket edition of the Environmental Strategy document has evolved into a web document and information on the Environmental Strategy is now available on Greater Wellington's website <http://www.gw.govt.nz/HRES-action-plan/>

Pinehaven Floodplain Management Plan (2016)

26. The Pinehaven Stream FMP was completed in 2016 with a range of structural and non-structural flood risk management measures proposed. These measures will guide the long term management of the catchment. The implementation of the plan is being led by Upper Hutt City Council (UHCC). UHCC has appointed Wellington Water Limited as its agent to complete the physical work on behalf of both Councils. Funding for this FMP has been established through a Memorandum of Understanding with a 50/50 allocation between Greater Wellington and UHCC being confirmed.
27. Over the 2020/21 financial year the Pinehaven Stream FMP works completed this year are:
 - a Detailed design for Stream Improvement Works.
 - b Resource consent for culvert contract and main works granted

- c Property purchase
- d Culvert units purchased
- e Procurement for culvert construction
- f Tree clearing at culvert sites
- g Works commenced for culvert construction

Otaki Floodplain Management Plan (1998)

28. The Ōtaki FMP provides a co-ordinated plan to upgrade existing infrastructure, provides new infrastructure, and adopts a range of non-structural measures to provide improved flood risk management.
29. A review of the Ōtaki FMP is currently taking place. Once this review is complete structural (major capital) projects and their relative priorities will be refreshed. In the meantime a major structural upgrade to Chrystalls stopbank has occurred as part of and at the cost of, the Peka Peka to Otaki Expressway. This upgrade increased the design standard to allow for climate change through to 2130. Also design work for public access from Te Roto Road to the Winstone Otaki quarry lake has commenced.
30. Previously the Chrystalls stopbank protected the township from major flooding up to the current 1 in 100 year flood level, however the level of protection would have started to diminish over time due to the effects of climate change. The upgraded stopbank will continue to protect the township from a 1 in 100 year flood up to the year 2130 (based on current mid-range climate change estimates).
31. The Chrystalls stopbank upgrade is estimated to be worth \$2 million to \$3 million if Greater Wellington had implemented this project independently, however Fletcher Construction integrated the stopbank upgrade into their Design and Construct solution for Waka Kotahi's Peka Peka to Otaki Expressway. Whilst the upgrade did not come at zero cost to Greater Wellington, the upgrade was achieved with minimal external costs. This was excellent value for money for rate payers.
32. To progress landowner negotiations to secure a public access from Te Roto Road to the Winstone Otaki quarry lake area, the department has commenced the design of the link corridor with input from both the private landowner and Kāpiti Coast District Council (KCDC). Progressing the design to allow a firmer cost estimate will also enable funding discussions with Waka Kotahi, KCDC and Winstone Aggregates to be completed. This public access is needed to unlock the cultural and recreational potential of this area.
33. A new way of working has been developed with Ngā Hapū o Ōtaki (NHoO) on the Winstone Otaki quarry lake management plan. Greater Wellington and NHoO have made a commitment to progress this project as partners. Greater Wellington and NHoO are now jointly writing the project scope, and developing a proposal for the project governance within which decisions can be jointly made.
34. Further investigations are being carried out regarding flooding in the Waitohu Stream channel and Convent Road area.

Operational matters – Otaki River

35. The Ōtaki River annual maintenance programme was completed within the allocated scheme budgets. Work is now underway with the 2021-22 work programme with willow planting as the current focus. (At this stage, the COVID-19 Alert Level 4 Lockdown has not severely impacted the work programme; this will be reevaluated once the duration of Level 3 is known.)
36. Work to secure a new Ōtaki River management resource consent has slowed while we work with submitters to resolve concerns.

Investigations, Strategy and Planning – Otaki River

37. During 2020/21 key sections of the FMP review have been drafted. Delays have developed with key external stakeholders input, due to other external considerations.
38. Over the next financial year the reviewed sections will be collated into a new FMP and taken to the wider public for comment ahead of completion in the second quarter.

Waikanae Floodplain Management Plan (1997)

39. The Waikanae FMP provides a co-ordinated plan to upgrade existing historic infrastructure, provide new infrastructure, and adopt a range of other non-structural measures to provide improved flood risk management.
40. The Waikanae FMP was reviewed and updated between 2009 and 2012, and the FMP republished in 2013. It provides the basis for the current development and operational work programmes managed by the Department.
41. During 2020/21: land exchange (with KCDC) and legal easement associated with the Jim Cooke Park Stopbank upgrade was completed; 2,250 new natives were planted; the previous year's plantings were maintained (released from weeds, mulched, rabbit control carried out, and replacement plants where needed).
42. Resources to progress the sand quarry land purchase (approximately opposite Jim Cooke Park) were diverted to the RiverLink project. The erosion in this area continues to be monitored closely and track work has been carried out to enable the public to continue to enjoy access along the river. Land purchase negotiations are now continuing.

Operational matters – Waikanae River

43. The Waikanae River annual maintenance programme was completed within the allocated scheme budgets. Work is now underway with the 2021-22 work programme with willow planting the current focus. (At this stage, the COVID-19 Alert Level 4 lockdown has not severely impacted the work programme; this will be reevaluated once the duration of Level 3 is known).
44. Work to secure a new Waikanae river management resource consent has slowed while we work with submitters to resolve concerns. For the Waikanae River, river management issues are complex and will take time to address. A key area is channel aggradation, which requires gravel extraction for flood capacity and alignment management.

Investigations, Strategy and Planning – Waikanae River

45. Gravel analysis and surveying have been completed, with a review of the analysis being undertaken in the next financial year.
46. A technical investigation is underway to assess the gravel beaches in the lower reaches of the Waikanae River. This is a modelling investigation which will assess levels of service. We anticipate having the technical component developed by the end of the 2021 calendar year.

Te Kāuru Upper Ruamāhanga Floodplain Management Plan (2019)

47. Te Kāuru Upper Ruamāhanga Floodplain Management Plan Implementation (Te Kāuru) has been given a financial boost with the Government COVID-19 recovery projects. Ministry for the Environment Major Rivers – Riparian Management project funding and REDIU funding for the River Road Masterton project are enabling implementation of two aspects of Te Kāuru.
48. The Upper Ruamāhanga River Management Advisory Committee (URRMAC) had its first meeting in December 2020, a workshop in March 2021 and their second meeting on 23 June 2021. The next workshop will focus on the concept of allowing the river more room and what that means for intervention, as well as the proposed funding change to a catchment wide targeted rate.
49. Implementation of Te Kāuru has not progressed passed the establishment of URRMAC due to the Revenue and Financing Policy (RFP) not being reviewed during this Long Term Plan period. However, it is now intended that the RFP be reviewed as part of the 2022/23 Annual Plan. Work has now commenced to meet the March 2022 deadline for public consultation.

Ministry for the Environment – Jobs for Nature funding

50. Greater Wellington has two MfE-funded 'Jobs for Nature', the Biodiversity Department's Wairarapa Moana project and the Flood Protection Department's Major Rivers – Riparian Management.
51. The Major Rivers – Riparian Management application was based on Te Kāuru Upper Ruamāhanga Floodplain Management Plan, specifically planting of the buffers. The project has a value of \$5 million over a five year period, with a 50/50 (MfE/Greater Wellington) contribution split. It consists of planting 120,000 trees (both willow and native) over a total of 100 hectares, with 30 kilometres of fencing. Pest plant and pest animal control will be one of the main costs of the project to ensure sufficient plant survival rates. The project also has a target of increased employment and it is proposed that a total of 35 people will be employed over the five year project period.
52. The project covers the whole of the Ruamāhanga with current sites in Masterton and down by the Barrage Gates.
53. Significant progress has been made this financial year with the following being completed:
 - a The year 2 Work Programme and Annual Work Plan are almost agreed with MfE.

- b 36,000 plants and associated sundries (fertiliser tabs, tree protectors etc.) have been secured. Planting is almost complete at the South Road site (12,000 plants) and planting to start at the remaining two sites in the coming weeks.
- c Continuing to engage with community and iwi groups, and liaising with the various interested groups.
- d Plant supply discussions with individual nurseries have started for next planting season. Internal procurement discussions are also occurring to secure plant supply for the life of the project.
- e Clearance works and pre-planting spray has been completed at all three sites.
- f The covenant to protect the vegetation on private land and right of access for a period up to five years has been finalised and been distributed to several landowners.
- g The full budget for the year has now been spent.
- h Discussions with contractors for site preparation and pest plant/animal control are to start early in the new financial year.

Regional Economic Development and Investment Unit funded River Road Masterton project

54. Project-specific tasks which are underway are as follows:

- a *River Road* – Geotechnical and initial detailed design work is continuing. The design for River Road is a rock revetment along the River Road residential area with a series of 15 groynes. This protection then continues along the Masterton District Council Landfill. Rock supply is being progressed.
- b A lead consultant has been appointed.
- c A co-design agreement with iwi partners has been agreed to ensure work on this project is an exchange of mātauranga Māori and technical knowledge, but also a sharing of views in communication processes, as well as the development of mātauranga Māori measures that help us understand the impact on flora and fauna.
- d Communication plan is being developed for Fish and Game, Department of Conservation (DoC) and Masterton District Council (MDC).

Operational matters – Upper Ruamāhanga

55. The Upper Ruamāhanga schemes consist of the Ruamāhanga's three schemes; Mt Bruce, Te Ore Ore and Gladstone, covering the Waipoua, Waingawa, Kopuaranga, Whangaehu and Taueru Rivers. In the eastern schemes, blockage removal work was completed in Kopuaranga River, crack willow removal completed in lower Taueru River channel and the Whangaehu River had its annual spray programme of crack willow regrowth completed. Beach vegetation clearing and beach re-contouring were completed in Waingawa River and Ruamāhanga River in the Gladstone section. The Waipoua River had stopbank clearing weed control of Old Man's Beard, channel blockage removed and problem macrocarpa trees removed from cliff edges in the Paierau Road to Ruamahanga section. Asset condition ratings have been completed for all river schemes.

56. The Waiohine River has had ongoing erosion issues in the reach from the Rail Bridge to State Highway 2. Work has been completed at the South Wairarapa District Council bore field and at the end of Kuratawhiti Street. Beach re-contouring and construction of three large rock groynes has been undertaken. In preparation for willow planting in the winter, there have been a number of gravel groynes constructed to protect planting sites. Other works included weed control spraying, targeted gravel extraction at two locations and beach vegetation and flood debris clearing from top of the scheme to Kuratawhiti Street. The final rock delivery for the 2020/21 year totalling 1500 tonnes was completed in January 2021. Asset condition assessment work has also been completed.

Investigations, Strategy and Planning – Upper Ruamāhanga

Waipoua Urban Catchment Plan

57. Over the last quarter we have continued to progress the hydrological assessment with the community group to gain agreement on the hydrological component of the flood hazard modelling. This has largely been completed and we are on track to provide draft flood hazard maps in 2021.

Waiohine River Plan

58. The River Plan has been released for consultation. (Update August 2021 - Over 200 submissions have been received, which are now being reviewed and analysed by the project team. Dates for the hearings panel haven't been fixed yet due to the ongoing lockdown, but it is hoped that these will be held shortly after a return to Alert Level 1. We anticipate Council adoption of the River Plan in the 21/22 financial year.)

Mangatāre River Plan

59. Over the last quarter, the main focus has been collecting information from riverside landowners to help calibrate the hydraulic model. The hydrological model is being peer reviewed and we are working with the hydrologists and peer reviewers to address the comments made. We anticipate draft flood hazard maps will be available by the end of 2021, with some early engagement with targeted landowners to calibrate the model being carried out.
60. BEEA Consulting (Professor Bethana Jackson - Victoria University) have been appointed to develop a Land Utilisation Capability Indicator (LUCI) model for the catchment. This should assist with integrated catchment planning. LUCI is a GIS/Spatial planning tool developed by professors at Victoria University for helping make integrated decisions at a catchment scale. It allows multiple issues to be mapped spatially and variables to be altered in the room with community groups and stakeholders to identify areas where multiple benefits can be achieved such as upload planting to reduce sediment run-off and to mitigate flooding.

Upper Ruamāhanga Rural Modelling

61. Over the last quarter we have been progressing the hydrological assessment and liaising with Masterton District Council. This has largely been completed and we are on track to provide draft flood hazard maps in 2021 for inclusion into the next District Plan change.

Design Lines

62. Flood Protection has been working with specialist consultants to review and update where necessary the design channel lines for the Upper Ruamāhanga Rivers. This review was one of the outcomes to be undertaken as part of the FMP implementation. The initial draft is nearing completion ahead of wider engagement and targeted consultation with key stakeholders.

Lower Wairarapa Valley Development Scheme

Consents – Lower Wairarapa Valley

63. The Geoffrey Blundell Barrage Gates resource consent is close to being granted with a five and a half year term being sought to align with the other Lower Wairarapa Valley Development Scheme consents which expire in 2027. When the consent is granted a number of actions will need to be coordinated with Mana Whenua and others to meet the consent conditions and to align with the review of the Lower Wairarapa Valley Development Scheme.
64. The Lower Wairarapa Valley currently does not have a Floodplain Management Plan. Works are underway to scope the development of a management plan for the Lower Valley. This is likely to include an initial round of technical investigations aligned with establishing a governance framework and project team.

Operational matters – Lower Wairarapa Valley

65. We regret to advise that the Lower Ruamāhanga Valley Flood Management Advisory Committee (LRVFMAC) Chair Mr Bernie George passed away on 16 March 2021. Bernie had been a member of this committee for many years. The LRVFMAC meeting was held on the 13 August 2021. The LRVFMAC is yet to appoint a new Chair.
66. Stopbank maintenance in the Lower Wairarapa Valley Development Scheme is continuing with repairs at various stock damage site, vegetation mulching, mowing and spraying. Three large erosion sites have been repaired and strengthened with rock armouring and prepared for the future willow planting programme. Two further sites are due to start in the 2021-22 work programme.
67. The floodgate maintenance cleaning programme has been completed. Over 40 floodgate sites were cleaned of material and vegetation. To date, Lake Onoke mouth has closed fifteen times since 1 July 2020 and has required mechanical intervention on eleven occasions and self-opened four times.
68. Capital work projects include the Pukio East Stopbank Realignment and Whakawhiriwhiri Stream improvements. The Pukio East Stopbank realignment is in its final stage and excess material will begin to be removed next summer. The landowners plan to use approximately half of the material to construct a water reticulation system for their farm operation. Whakawhiriwhiri Stream improvements included the replacement of the Simmonds Culvert. The Hikunui Road Culvert upgrade has not progressed due to ongoing land access agreement issues. These outstanding works fall into year 11 of a 10 year programme of works, this has affected the percent complete in Table 1 below. The programme will cease at the end of the next financial year (21/22).

Gravel – Wairarapa Rivers

69. Gravel management from the Wairarapa Rivers has continued in accordance with the transition plan that has been developed to provide some certainty to the contractors extracting gravel from these rivers. River bed levels are degrading in the upper reaches and the availability of sufficient aggregate resources will continue to be a significant constraint on infrastructural developments in the region. Planning is underway to form a working group to help manage and develop solutions regarding the supply of aggregate for the construction industry.
70. A gravel extraction plan has been developed for the 2021/22 year which will focus on problem areas while continuing to transition to the volumes recommended in the gravel stocktake report.
71. The Wairarapa Gravel Stocktake Report has been independently peer reviewed. We are currently assessing the peer review with a view to incorporating the recommended changes into the Wairarapa Gravel Stocktake report.

Regional Initiatives

Flood Monitoring Network Improvements Programme

72. The Improvements to Gauging and Monitoring budgets have been combined along with Hydrology's Capex budgets to create a five year improvement programme termed the Flood Monitoring Network Improvements Programme.
73. A business case has been developed that sets out five work streams to be delivered under this programme. These are;
 - a High flow gauging infrastructure and resilience improvements in Wellington, Hutt and Kapiti at priority sites.
 - b High flow gauging infrastructure and resilience improvements in Wairarapa at priority sites.
 - c Programme of camera installations for velocity measurement.
 - d Resourcing planning and negotiations.
 - e New site installations to improve early flood warning in key areas.
74. Planning for the first key sites is being undertaken including:
 - Waikanae at Water Treatment Plant improvements
 - Waingawa at Kaituna installation

Flood Hazard Planning Guidance Document

75. A guidance document for flood hazard planning in the Wellington Region has been produced to enable more consistent regional alignment in approaches to managing flood hazards within district council planning frameworks across the region. This is to improve the management of flooding and of the risk posed to people and communities. The document is targeted at assisting territorial authorities within the Wellington region when reviewing or changing the objectives and provisions that relate to flooding in their district plans. This will also have the advantage of simplifying the planning process for not only local councils but developers and other plan users. The document ('Flood

Hazard Planning Guidance' June 2021) is currently out with Councils for feedback before being finalised.

Summary of progress

Implementation progress

76. Table 1 shows the FMP structural measures implemented as a percentage of progress of the recommendations within the respective FMP and LWVDS. Please also refer to the attachments to this report for further detail. There is no attachment for Pinehaven as this project is being managed by Wellington Water and we have not received updated information to date.

Table 1: Implementation progress

FMP or Scheme	Actual % Complete to June 2020	Target % Complete 2020/2021	Actual % Complete to June 2021	Outcome
Hutt	33%	33%	41%	Achieved
Pinehaven	25%	66%	38%	Not achieved
Waikanae	56%	63%	63%	Achieved
Ōtaki	47%	50%	47%	Partially achieved
LWVDS	90%	99%	97%	Partially achieved
Te Kāuru FMP	0%	0%	0%	No requirement

NB: LWVDS Programme will be closed out at the end of 21/22 financial year.

77. *Table 2* outlines the financial summary of the implementation of the FMPs. Note that Te Kāuru FMP is excluded in this table as there have been no capital expenditure implementation works for this FMP.

Table 2: Financial summary

FMP or Scheme	Original FMP Total 40 year estimate (\$M) - Adjusted for Inflation ¹	Expenditure to June 2021(\$M) ²	Total Budgeted to 2028 (\$M) ²	Total expenditure forecast to 2028 (\$M) ²
Hutt	124.4	109.9	119.2	229.2
Pinehaven	5.6	4.3	6.8	11.1
Waikanae	14	8.3	8.0	16.3
Otaki	19.2	8.7	14.5	23.2
Total western FMPs	163.2	131.2	148.5	279.7
LWVDS	11.4	8.8	11.5	20.3
Waiohine		1.1	2.2	3.3
Total Wairarapa	11.4	9.9	13.6	23.6
Total	174.6	141.1	162.1	303.3

Notes:

- Hutt 1999 (estimate \$78 million), Otaki 1998 (estimate \$12.07 million), Waikanae 1997 (estimate \$8.69 million) and LWVDS 2007(estimate \$8.8 million), Pinehaven 2014 (estimate \$5 million).
- All figures have been indexed to 2020 dollar values using reserve bank CPI calculator. (Index value based on 30 June value. No inflation included for year estimate originated. General CPI values have been used.)

Ngā hua ahumoni

Financial implications

78. For this reporting period, projects are within the current flood protection budgets.
79. MfE and REDIU funded projects require part funding from Greater Wellington, and Officers have brought LTP funding forward to enable the gains for these projects to be realised.

Te huritao ki te huringa o te āhuarangi

Consideration of climate change

80. Each project within the catchment considers and responds to the predicted impacts of climate change when considering the appropriate response to the issue the project seeks to address.
81. This programme aligns with the 2015 Climate Change strategy which states we will help the region adapt to climate change. The projects increase climate change adaptation and resilience to natural disasters in the region.
82. The greenhouse gas (GHG) emissions from rock supply vary depending on the quarry source of the rock and transport to the work sites. Quarry sources for projects vary. The emissions from rock supply production and transport are not presently part of the organisation's GHG inventory.
83. Heavy machinery will also be used to carry out the work proposed in these projects. The emissions from these have not been estimated. However in the 2018-19 year use of heavy machinery mainly for flood protection works at Greater Wellington represented two percent of the total organisational carbon footprint (835 tCO₂e).
84. Quarry selection will be the single largest determinant of project emissions. While it seems likely that quarry operations could be improved to reduce emissions to some extent, the avoidance of long-distance transport of the rock is the most obvious means to minimise emissions. This will be looked into as part of procurement for projects.
85. Targeted planting will be carried out to mitigate CO₂ emissions for the REDIU projects. The location and scope of this is currently being worked through.
86. Greater Wellington currently assesses options to address flood risk based on the predicted impacts of climate change over the next 100 years. Unless specified differently for specific projects, these values are an increase in rainfall intensity of twenty percent, and a sea level rise of 0.8 metres.

Ngā tūāoma e whai ake nei

Next steps

Te Awa Kairangi/Hutt River Floodplain Management Plan (2001)

87. Prepare for RiverLink consent hearing. Progress RiverLink property purchase.
88. Community connection and project awareness for RiverLink.
89. Maintain planting and monitoring of Belmont wetland.
90. Complete Taita area safety improvements.
91. Procurement and construction of Hulls Creek Crossing and trail connection
92. Work with partner organisations to create a trail connection through Manor Park and across the Hutt River at the Silverstream Bridge.
93. Gauging and monitoring improvements
94. Progress REDIU-funded work on eight Hutt River erosion sites and the Port Road Erosion protection work.

Pinehaven Floodplain Management Plan (2016)

95. Complete culvert upgrades.
96. Work through scoping and completion of which other works can be completed within the remaining project budget.

Otaki Floodplain Management Plan (1998)

97. During the next financial year: non-structural management of the river will continue (such as vegetation control and gravel management); structural items that are in progress will continue; the Otaki FMP and Environmental strategy review will continue; and we will continue to work with Iwi on the Winstone Otaki quarry lake management plan. With the possible exception of an additional toilet (that the Friends of the Otaki River are promoting) no new significant items are identified to start.
98. The design of the Te Roto Link (public vehicle and shared path access from Te Roto Road to Greater Wellington owned land around the Winstone Otaki quarry lake) will continue. Work through funding requirements for the physical works so that we are able to accept the conditional offer of the land on which the link would be built.
99. Chrystalls stopbank upgrade will continue to address reinstatement issues, and practical completion is expected to be awarded this by year end. Boundary issues (legal, physical, and maintenance) associated with the stopbank and the new expressway corridor will continue to be worked through with Waka Kotahi.
100. Work to progress the new Otaki river management resource consent will continue.

Waikanae Floodplain Management Plan (1997)

101. During the next financial year: non-structural management of the river will continue (such as vegetation control and gravel management); minor Jim Cooke Park stopbank items will continue to be closed out; environmental enhancement planting will continue; and the negotiations associated with the sand quarry land purchase will continue. No new significant items are identified to start.

102. Work to progress the new Waikanae River management resource consent will continue.

Te Kāuru Floodplain Management Plan (2019)

103. During the next financial year there are a number of projects that we are able to get underway. The first being the proposed funding change from a landowner targeted rate to a catchment wide targeted rate. The Revenue and Financing Policy is now being reviewed as part of the next Annual Plan process.

104. The work involved in the proposed funding change will be undertaken with the URRMAC setting out the catchment boundary criteria and a benefits analysis.

105. Another area of work that will be undertaken is the development of the Implementation Management Plan. This work will also be undertaken with URRMAC.

106. Continue to develop the concept of ‘allowing the river more room’ and how that is articulated to landowners and the general public. The URRMAC will work with officers to develop this concept during this financial year.

107. The River Road, Masterton project funded by REDIU will continue with likely construction start date of January 2022.

108. The MfE Jobs for Nature project will continue to acquire land for planting, plants, contractors for clearing, planting and maintaining the sites.

Gravel – Wairarapa Rivers

109. A gravel extraction plan has been developed for the 2021-22 year which will focus on problem areas while continuing to transition down to the volumes recommended in the gravel stocktake report.

110. The Wairarapa Gravel Stocktake Report has been independently peer reviewed. We are currently arranging a workshop with the peer reviewer to understand what changes are required and are working towards developing a new gravel analysis process.

Ngā āpitihanga

Attachments

Number	Title
1	Hutt Floodplain Management Plan summary progress table
2	Waikanae Floodplain Management Plan summary progress table
3	Ōtaki Floodplain Management Plan summary progress table
4	Lower Wairarapa Valley Development Scheme development work summary progress table
5	Floodplain Management Planning Implementation 2020/21 presentation

**Ngā kaiwaitohu
Signatories**

Writers	Sharyn Westlake – Team Leader, Floodplain Management Plan Implementation
Approvers	Graeme Campbell – Manager, Flood Protection Wayne O’Donnell – General Manager, Catchment Management

**He whakarāpopoto i ngā huritaonga
Summary of considerations**

Fit with Council's roles or Committee's terms of reference

The Committee's specific responsibilities include overseeing the development and review of Council's environmental strategies, policies, plans, programmes and initiatives in the areas of river control and flood protection.

Implications for Māori

There are no known implications for Māori.

Contribution to Annual Plan / Long term Plan / Other key strategies and policies

The projects contained within this report deliver on Greater Wellington's strategic priority area of te tū pakari a te rohe/regional resilience, and support delivery of Greater Wellington's strategic priority area of te oranga o te wai māori me te rerenga rauropi/freshwater quality and biodiversity.

Internal consultation

Specific projects consult with groups and departments across Greater Wellington where relevant to that project.

Risks and impacts: legal / health and safety etc.

The purpose of implementation floodplain management plans is to reduce the risk to communities and improve the region's resilience.

Hutt Floodplain Management Plan summary progress table

Updated 15 July 2021

TOTALS IMPLEMENTATION HUTT FMP					Date AMP	COST \$M 2001 FMP	Target % at completion		Percent Complete to date	
					2000-2051	\$77.76	100.00%		41.12%	

REACH 1 : River Mouth to Estuary Bridge

WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	4.69%	STAGE	% Complete (0 = not complete, 0.5 Part complete, 1 = complete)	0.00%	HRFMP (Page #)
River Mouth Channel Works	1	6	after 2010	2032-2035	\$3.65	4.69%			0.00%	52

**REACH 2 : Estuary Bridge to Ava Rail
Bridge**

WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	17.16%	STAGE		6.71%	HRFMP (Page #)
Shandon golf course (RB) stopbank	2	2	after 2010	Ava Woolen Mills [2028-2034]	\$1.72	2.21%			0.00%	54
Light rock protection works (Estuary to Ava rail bridge)	2	2	after 2010	Ava Woolen Mills [2028-2034]	\$0.43	0.55%	Partial Work	0.5	0.28%	54
Woolen mills (Estuary to Ava LB) stopbank	2	6	after 2010	Ava Woolen Mills [2028-2034]	\$3.99	5.13%			0.00%	54
Relocation and rock lining (Estuary to Ava LB)	2	6	after 2010	Ava Woolen Mills [2028-2034]	\$2.20	2.83%			0.00%	54
Ava rail bridge investigations	2	1	2000-2002	Alicetown Strand Project [2000-2010]	\$0.23	0.30%	Complete	1	0.30%	54
Ava rail bridge waterway improvements	2	1	2003-2008	Alicetown Strand Project [2000-2010]	\$4.77	6.13%	Complete	1	6.13%	54

REACH 3 : Ava Rail Bridge to Ewen Bridge

WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	38.14%	STAGE		20.45%	HRFMP (Page #)
Strand park (Ava to Ewen RB) river realignment and land purchase	3	3	2000-2005	Alicetown Strand Project [2000-2010]	\$4.48	5.76%	Complete	1	5.76%	56
Strand park stopbank upgrade (Ava to Ewen LB)	3	1	2000-2010	Alicetown Strand Project [2000-2010]	\$2.64	3.40%	Complete	1	3.40%	56
Tama Street stopbank upgrade (Ava to Ewen RB)	3	3	2000-2010	Alicetown Strand Project [2000-2010]	\$2.48	3.19%	Complete	1	3.19%	56
Melling Bridge investigations	3	3	2001-2002	RiverLink [2015-2028]	\$0.06	0.08%	In Design		0.00%	56
Daly Street (Ewen to Melling RB) stopbank upgrade and land purchase	3	1	2008+	RiverLink [2015-2028]	\$4.61	5.93%	In Design + land	0.5	2.96%	56
Marsden Bend (RB) channel works	3	3	after 2010	RiverLink [2015-2028]	\$1.91	2.46%	In Design		0.00%	56
Pharazyn St (Ewen to Melling RB) stopbank	3	3	after 2010	RiverLink [2015-2028]	\$3.70	4.76%	In Design		0.00%	56
Riverside car park channel works (LB) and light protection works (Ewen to Melling LB)	3	1	after 2010	RiverLink [2015-2028]	\$1.78	2.29%	In Design		0.00%	56
Land for Melling Bridge Upgrade	3	14	after 2010	RiverLink [2015-2028]	\$8.00	10.29%	In Design + land	0.5	5.14%	56

Hutt Floodplain Management Plan summary progress table

REACH 4 : Melling Bridge to Kennedy Good Bridge

WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	11.75%	STAGE		9.99%	HRFMP (Page #)
Melling to Kennedy Good Bridge channel works	4	1	after 2010	RiverLink [2015-2028]	\$1.11	1.43%	In Design		0.00%	58
Melling Bridge (RB) stopbank upgrade	4	3	after 2010	RiverLink [2015-2028]	\$0.26	0.33%	In Design		0.00%	58
Boulcott Golf Course (LB) stopbank upgrade and land compensation	4	1	after 2005	Boulcott [2010-2013]	\$5.44	7.00%	Complete	1	7.00%	58
Connolly Street (LB) stopbank and land purchase	4	1	after 2010	Boulcott [2010-2013]	\$2.33	3.00%	Complete	1	3.00%	58

REACH 5 : Kennedy Good Bridge to Pomare Rail Bridge

WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	5.61%	STAGE		0.91%	HRFMP (Page #)
Kennedy Good Bridge to Pomare (LB) stopbank upgrade	5	4	after 2010	KGB Pomare [2037-2042]	\$0.86	1.11%			0.00%	60
Vegetation at Kennedy Good Bridge to Pomare rail bridge (LB/RB)	5	14	after 2010	KGB Pomare [2037-2042]	\$1.63	2.10%			0.00%	60
House Raising at Belmont to 1900	5	8	after 2010	KGB Pomare [2037-2042]	\$0.45	0.58%			0.00%	60
Rock protection at Belmont, Nash St. and Pomare Rail Bridge (LB/RB)	5	4	after 2010	KGB Pomare [2037-2042]	\$1.42	1.83%	Partial Work	0.5	0.91%	60

REACH 6 : Pomare Rail Bridge to Silverstream Bridge

WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	2.98%	STAGE		0.00%	HRFMP (Page #)
Pomare rail bridge to Silverstream Bridge channel works (LB/RB)	6	13	after 2010	Manor Park Pomare [2041-2051]	\$1.34	1.72%			0.00%	62
Manor Park stopbanks to 2300	6	13	after 2010	Manor Park Pomare [2041-2051]	\$0.98	1.26%			0.00%	62

REACH 7 : Silverstream Bridges to Moonshine Bridge

WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	5.85%	STAGE		0.60%	HRFMP (Page #)
Moonshine Bridge investigations	7	10	2001-2002	Trentham to Whakatikei [2032-2036]	\$0.06	0.08%			0.00%	64
Moonshine bridge waterway upgrade	7	10	after 2010	Trentham to Whakatikei [2032-2036]	\$3.31	4.26%			0.00%	64
Whirinaki Crescent stopbank to 2300	7	5	2004-2006	Trentham to Whakatikei [2032-2036]	\$0.47	0.60%	Complete	1	0.60%	64
Trentham to Whakatikei stopbank (part)	7	8	after 2010	Trentham to Whakatikei [2032-2036]	\$0.71	0.91%			0.00%	64

REACH 8 : Moonshine Bridge to Whakatikei River

WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	2.89%	STAGE		0.00%	HRFMP (Page #)
Trentham to Whakatikei (LB) stopbank (part)	8	8	after 2010	Trentham to Whakatikei [2032-2036]	\$2.00	2.57%			0.00%	66
Moonshine to Maoribank (LB) channel works (part)	8	10	after 2010	Trentham to Whakatikei [2032-2036]	\$0.25	0.32%			0.00%	66

REACH 9 : Whakatikei River to Norbert St. Footbridge

WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	8.31%	STAGE		0.00%	HRFMP (Page #)
Totara park stopbanks to 2300	9	10	after 2010	NOT IN AMP	\$1.42	1.83%			0.00%	68
Elbow park channel upgrade	9	10	after 2010	NOT IN AMP	\$1.41	1.81%			0.00%	68
Whakatikei to Maoribank (LB) stopbank	9	10	after 2010	NOT IN AMP	\$0.28	0.36%			0.00%	68
Moonshine to Maoribank channel works (part)	9	10	after 2010	NOT IN AMP	\$3.35	4.31%			0.00%	68

Hutt Floodplain Management Plan summary progress table

REACH 10 : Norbert St. Footbridge to Gemstone Drive

WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	2.61%	STAGE		2.45%	HRFMP (Page #)
Norbert Street footbridge to Akatarawa Channel works	10	14	2004-2005	2037-2042	\$0.34	0.44%	Complete	1	0.44%	70
Akatarawa Road (LB) floodwall at 1900	10	12	2004-2005	2037-2042	\$0.72	0.93%	Complete	1	0.93%	70
Gemstone Drive channel works to 1900	10	12	2005-2006	2037-2042	\$0.64	0.82%	Complete	1	0.82%	70
Gemstone Drive (LB) stopbank to 1900	10	12	2005-2006	2037-2042	\$0.15	0.19%	Complete	1	0.19%	70
Bridge Road House Raising to 1900	10	7	2003-2007	NOT IN AMP	\$0.18	0.23%	Partial Work	0.3	0.07%	70

Waikanae Floodplain Management Plan summary progress table

Updated 29 August 2021

STRUCTURAL IMPLEMENTATION WAIKANAЕ FMP				COST \$M FMP	Target % Complete			Percent Complete to Date
				\$3.63	100.00%			63.68%

WORK PLANNED IN FMP	REACH	PRIORITY	DATE AMP	COST \$M FMP	100.00%	STAGE	% Complete	63.68%	Waikanae FMP (Page #)
Otaihanga House Raising 1	2			\$0.40	11.03%	COMPLETE	1	11.03%	120
Otaihanga Road Raising	2		2027- 2028	\$0.14	3.86%			0.00%	120
Otaihanga House Raising 2	2			\$0.13	3.45%	COMPLETE	1	3.45%	120
Otaihanga Domain Stopbank	2			\$0.18	5.07%	COMPLETE	1	5.07%	120
Kauri Puriri Stopbank	3			\$0.89	24.66%	COMPLETE	1	24.66%	120
Greenaway Road - Lodge Relocation	2			\$0.12	3.42%	COMPLETE	1	3.42%	120
Greenaway Road - Road Raising	2			\$0.04	0.99%	COMPLETE	1	0.99%	120
Chillingworth Stopbank	2			\$0.23	6.29%	COMPLETE	1	6.29%	120
Jim Cooke Park Stopbank Upgrade	3			\$0.14	3.94%	COMPLETE	1	3.94%	119
Jim Cooke Park - Retaining Wall	3			\$0.18	4.83%	COMPLETE	1	4.83%	119
Waikanae Beach - Lengthen Fieldway Bridge	0	1	2021- 2025	\$0.43	11.83%			0.00%	121
Waikanae Beach - Golf Course Stopbank	0	2	2025- 2032	\$0.72	19.72%			0.00%	121
Jim Cooke Park - Ring Bank Lion Park	2	3	2033- 2034	\$0.03	0.91%			0.00%	121

Note - house raising was excluded from LTP measure for the Waikanae FMP structural measures implemented. House raising is not considered a structural implementation measure.

Ōtaki Floodplain Management Plan summary progress table

UPDATED 28 August 2021

TOTALS IMPLEMENTATION OTAKI FMP					COST \$M FMP	Target % at Completion			Percent Complete to date	
					\$6.58	100.00%			46.53%	

REACH 1 : Mouth to SH1

WORK REQUIREMENT	NAME IN LTP BUDGETS	REACH	PRIORITY	DATE AMP	COST \$M 1997 FMP	48.04%	STAGE	% Complete	13.58%	Otaki FMP (Page #)
Rangiuru - Floodgates Kapiti Lane		1	IN REVIEW	IN REVIEW	\$0.12	1.82%	COMPLETE	1	1.82%	36
North bank stopbank - minor reconstruction	North Stopbank Improvements (Mouth to SH1)	1	IN REVIEW	IN REVIEW	\$0.03	0.38%			0.00%	36
North bank stopbank - deferred maintenance	North Stopbank Improvements (Mouth to SH1)	1	IN REVIEW	IN REVIEW	\$0.14	2.05%			0.00%	36
Seaward Stopbank Extension - Atkinson Ave		1	IN REVIEW	IN REVIEW	\$0.01	0.20%			0.00%	36
Rangiuru House Raising		1	IN REVIEW	IN REVIEW	\$0.65	9.82%			0.00%	36
Lethbridge House Raising		1	IN REVIEW	IN REVIEW	\$0.05	0.83%			0.00%	36
Southbank stopbank - deferred maintenance	Otaki South Stopbank Land and Otaki South Stopbank Improvements	1	IN REVIEW	IN REVIEW	\$0.60	9.17%	COMPLETE	1	9.17%	36
Mangapouri House Raising		1	IN REVIEW	IN REVIEW	\$0.32	4.87%			0.00%	36
Mangapouri Stream - Culvert and channel works		1	IN REVIEW	IN REVIEW	\$1.07	16.31%			0.00%	36
Katihiku Floodgates		1	IN REVIEW	IN REVIEW	\$0.17	2.58%	COMPLETE	1	2.58%	36

REACH 2 : Chrystalls to Gorge

WORK REQUIREMENT		REACH	PRIORITY	DATE AMP	COST \$M 1997 FMP	37.10%	STAGE		32.95%	Otaki FMP (Page #)
Chrystalls Stopbank		2	IN REVIEW	IN REVIEW	\$0.33	5.03%	COMPLETE	1	5.03%	36
Chrystalls Extended Stopbank		2	IN REVIEW	IN REVIEW	\$1.03	15.60%	COMPLETE	1	15.60%	36
Harpers Stopbank		2	IN REVIEW	IN REVIEW	\$0.27	4.15%			0.00%	36
Lower Lutz and Upper Hughes Stopbank		2	IN REVIEW	IN REVIEW	\$0.81	12.32%	COMPLETE	1	12.32%	36

REACH 3 : Waitohu Stream

WORK REQUIREMENT		REACH	PRIORITY	DATE AMP	COST \$M 1997 FMP	14.86%	STAGE	% Complete	0.00%	Otaki FMP (Page #)
South Waitohu - House Raising		3		2018- 2034	\$0.15	2.26%			0.00%	36
Old Coach Road - bridge raising and deflector stopbanks		3		2018- 2021	\$0.40	6.02%	In Design		0.00%	36
South Waitohu Stopbank - Tasman Road		3		2022- 2030	\$0.43	6.58%			0.00%	36

Ōtaki Floodplain Management Plan summary progress table

Item	Location	Work	Spent to date					Revised Schedule								2020/21	2021/22	Forecast for 6 yrs	Total for 11 years
			2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20				
	Reach 1- Tauherenikau River																0		
1		Upgrade of stopbanks	73,580	119,776													0	193,356	
2		Rock groyne(Xs 20-21RB)															0	0	
3		Boulder groyne (RC - LB)															0	0	
4		Boulder groyne (Donald - LB)															0	0	
5		Bufferzone planting				47,696											0	47,696	
6		Delta Investigation												50,000	50,000			100,000	100,000
	Reach 2- Tributary Rivers																0		
7	Turanganui	Stopbank upgrade							402,000	470,000								872,000	872,000
8	Taunui	Fencing & planting		19,325		2,554												0	21,879
9		Land/stopbank/fencing			446,266			71,500						335,000				406,500	852,766
	Reach 3 - Waiohine to Waihenga																0		
10		Planting			3,520													0	3,520
11		Fencing			1,218													0	1,218
12		Rock/boulder groyne/retards		172,617	180,827	98,600												0	452,044
13		Boulder groyne U/s Shelton							4,500									4,500	4,500
14		Boulder groyne Wildes							35,000									35,000	35,000
15		Boulder groyne Guscott																0	0
		Clumps/boulders Tuckers							60,000		30,000							90,000	90,000
16		Boulder groyne Herricks					14,827											0	14,827
17		Upgrade S/B Kershaw																0	0
		Boulder groyne Handyside																9,000	9,000
		Boulder groyne Ashton																10,500	10,500
18		Develop Tawaha Spilway																0	0
	Reach 4 - Waihenga to Tuhitarata																	0	
19	A Herrick's - LB	S/b setback 20m	25,500															0	25,500
	Tawaha Spillway Culvert	Culvert upgrade											70,000					70,000	70,000
20	X-sect 126ti 121 - RB - L B Osborne	Remove overburden																0	0
21	X-sect 120 - RB - L B Osborne	Boulder groyne																0	0
22	X-sect 122 - LB - SWDC	Boulder groyne		20,952														0	20,952
	X-sect 119/120 - RB - Alpe	Battering/Boulders							20,000		15,000							35,000	35,000
	X-sect 119 - RB - Alpe	Flood Gate							20,000									20,000	20,000
	X-sect 113/114 - RB - Alpe	W.Cabling/Boulder																50,000	50,000
23	X-sect 114 to 109 - LB - Colton	Remove overburden																0	0
24	X-sect 113 - RB - B L George	Boulder groyne																0	0
25	X-sect 111 - RB - A J Barton	S/b setback 20m or b/groyne				8,636												0	8,636
26	X-sec 108 - P Smith	Boulder groyne																0	0
27	X-sec 107 to 104 - P Smith	Remove overburden																0	0
28	X-sect 101 - LB - Tim Wall	S/b setback 20m + b/groyne	103,250	75,127		36,172												0	214,549
29	X-sect 100 - LB- Tim Wall	Boulder groyne	60,350															0	60,350
30	X-sect 96 - RB - John Bargh	Boulder groyne	65,000															11,000	76,000
31	X-sect 94 - RB - Leo Vollebregt	Boulder groyne	51,420															0	51,420
32	X-sect 92 - LB - Tim wall	Boulder groyne	83,950						10,000									10,000	93,950
33	X-sect 87- RB - Morris Edwards	Boulder groyne	81,200															0	81,200
	X-sect86- 87- RB - Wilson	Purchase property																430,000	430,000
34	X-sect 84 - RB - Owen Butcher	Rock berm (rip rap)	98,750	144,209	21,305													0	264,264
35	X-sect 80 to 81- LB - Bill Herrick	Remove overburden																0	0
36	X-sect 80 to 81- RB - Pahautea Road	Remove overburden																0	0
37	X-sect 74 to 78 - Tobin	S/b setback				481,549	909,574											0	1,391,123
38	X-sect 77 - RB - Florus Bosch	Boulder groyne	130,650															0	130,650
39	X-sect 72 to 75 - LB - Bill Herrick (Pukio)	S/b setback 20m																25,000	250,000
40	X-sect 72 to 68- LB - Bill Herrick	Remove overburden																60,000	60,000
41	X-sect 82 to 68-RB - G Vollebregt	Remove overburden																40,000	40,000
42	X-sect 66 - LB - Bill Herrick	Benching/groyne		35,854														0	35,854
43	X-sect 42 - RB - Land Corp	Boulder groyne				31,571												0	31,571
44	X-sect 36 - RB - Parkinson	Benching/groyne		36,168														0	36,168
	Scott Simmonds	Scour protection																95,000	20,000
	Ruamahanga	Boulder Protection																0	0
45	Whakawhiriwhiri Stream upgrade	Regrade, remove trees, culverts							55,000	231,000	170,000	120,525	50,000					175,000	300,000
	Reach 5 - Tuhitarata to Onoke																	0	
46	Ranking 1	Boulder rip rap	101,850	82,640	68,137	57,680	69,045	52,000	92,000	10,000	60,000							214,000	593,352

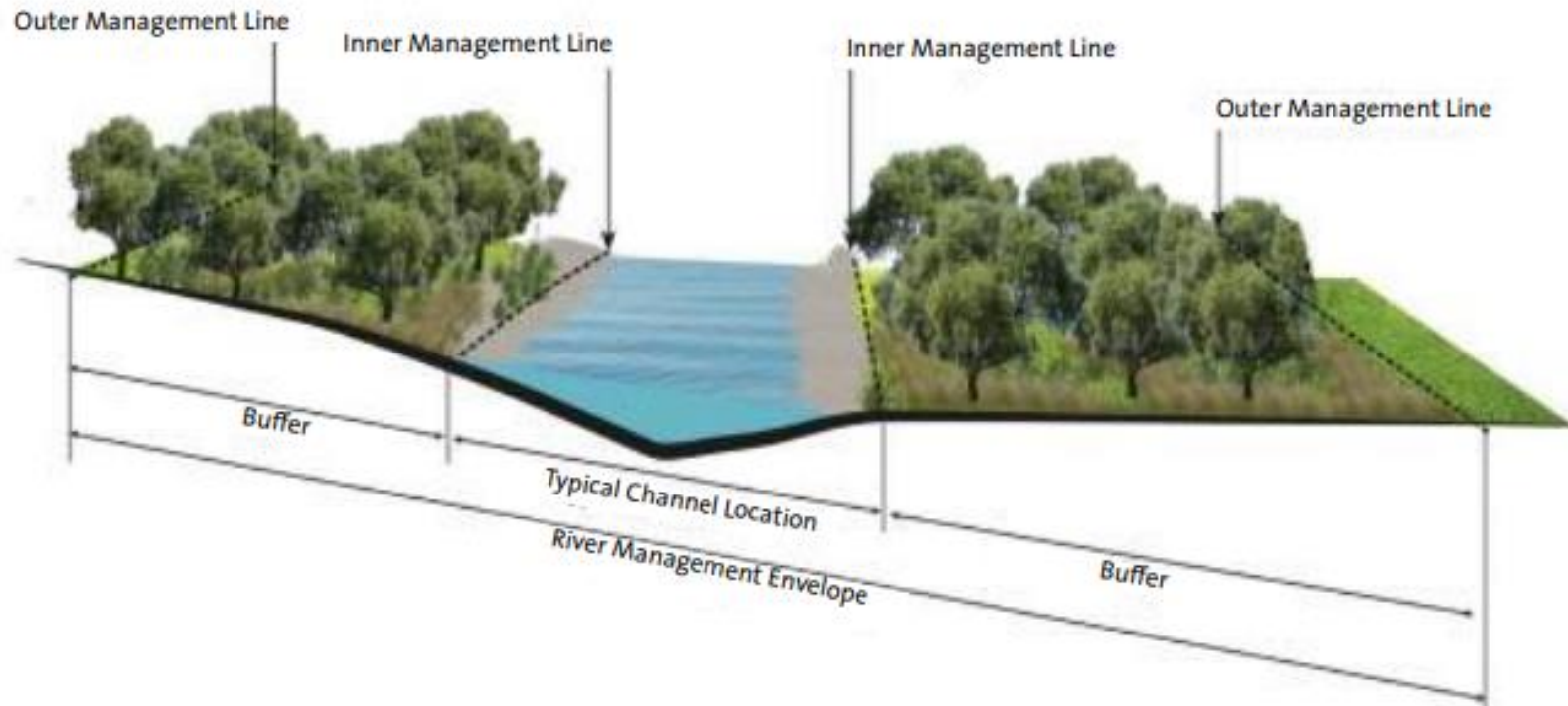
47	Ranking 3	Planting the slope		1,690	26,813	32,197	18,915	35,000	20,000	7,000		0					62,000	141,615		
48	Puals Bank	boulder rip rap					27,691	60,000									60,000	87,691		
49	Upgrade stopbanks							21,000									21,000	21,000		
	Barrage Control Upgrade									230,000							230,000	230,000		
50	Barrage downstream	Remove build up		44,270													0	44,270		
		Total cost		875,500	752,628	779,657	765,084	1,040,052	444,000	775,500	752,000	1,105,525	70,000	335,000	414,005	373,798	200,000	550,000	4,719,828	8,932,749

% Work Programme for Year	9.80%	8.43%	8.73%	8.56%	11.64%	4.97%	8.68%	8.42%	12.38%	0.78%	3.75%	4.63%	4.18%	2.24%	6.16%				1.00
Cumulatiive % for Work Programme	9.80%	18.23%	26.95%	35.52%	47.16%	52.13%	60.81%	69.23%	81.61%	82.39%	86.14%	90.78%	94.96%	97.20%	103.36%				

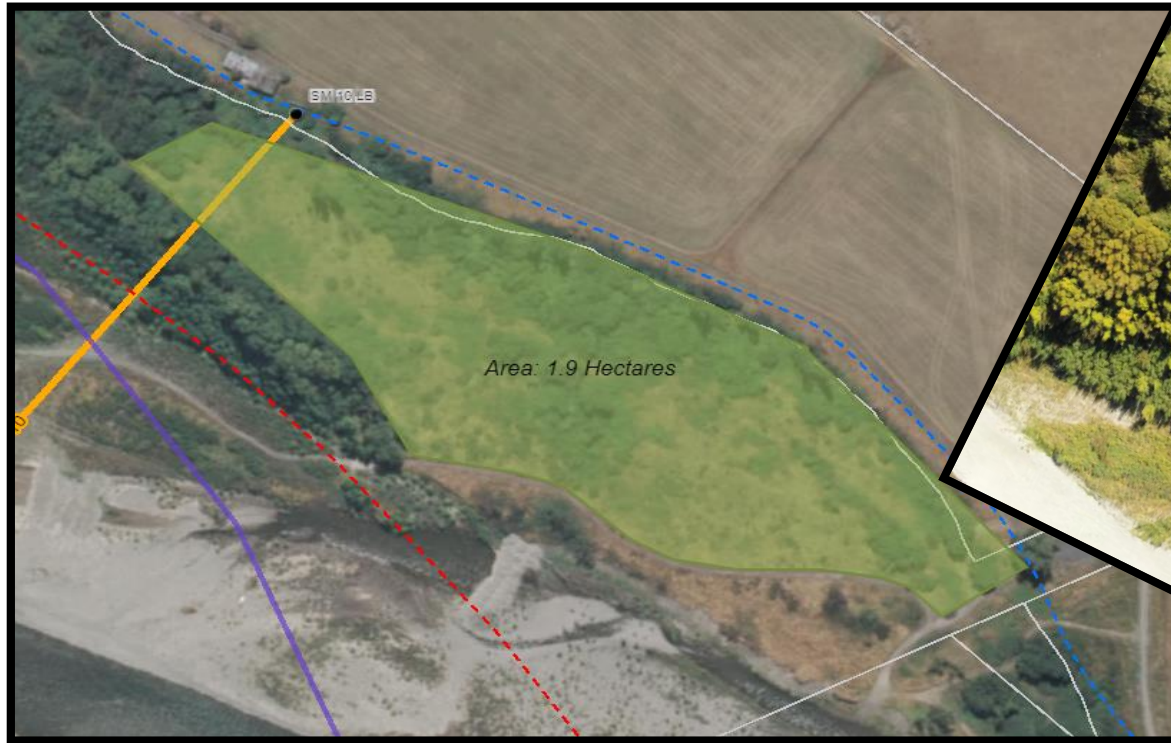
Floodplain Management Planning Implementation Annual Report 2020-21

MfE – JfN Project

- Riparian buffer planting - 'outer management line' defines the extent that may be eroded in small to moderate floods and/or will be used for riparian planting.



Year 1 Sites - South Rd, between Waingawa river XS 9-10



Site preparation



Drone pictures of cleared site and plants onsite



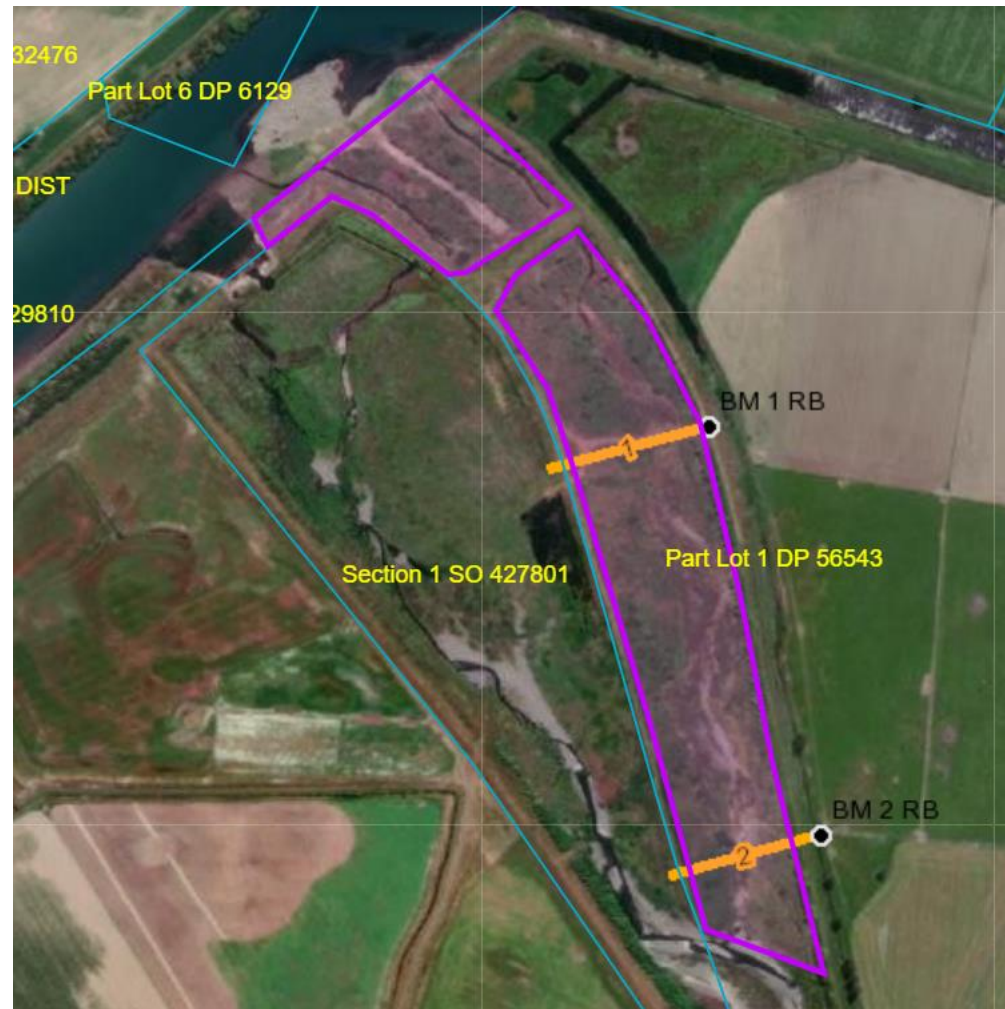
Planting and Fencing



East West Access Road, by Barrage gates, diversion cut



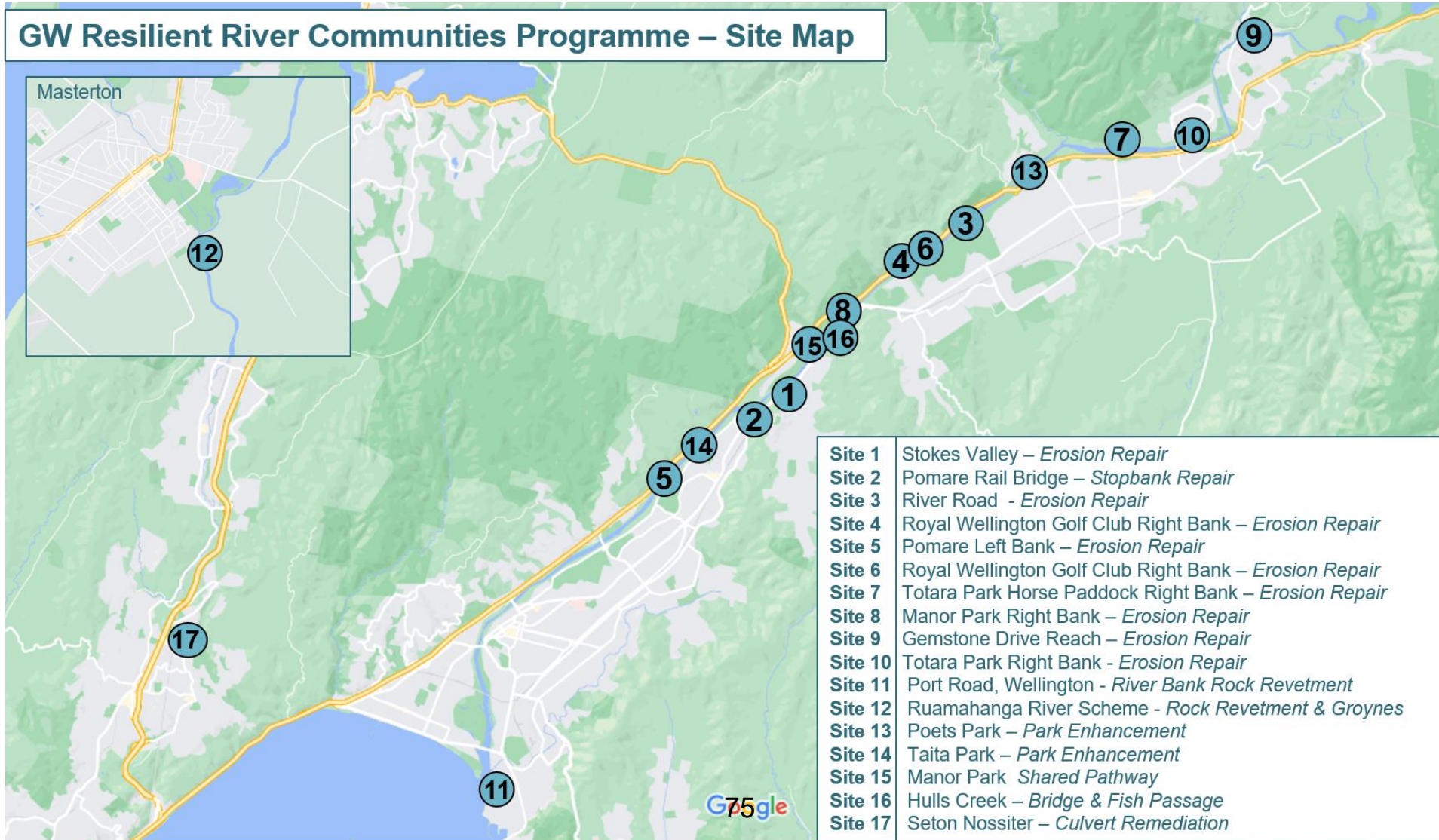
Tauanui confluence with the Ruamāhanga



Pre-lockdown planting



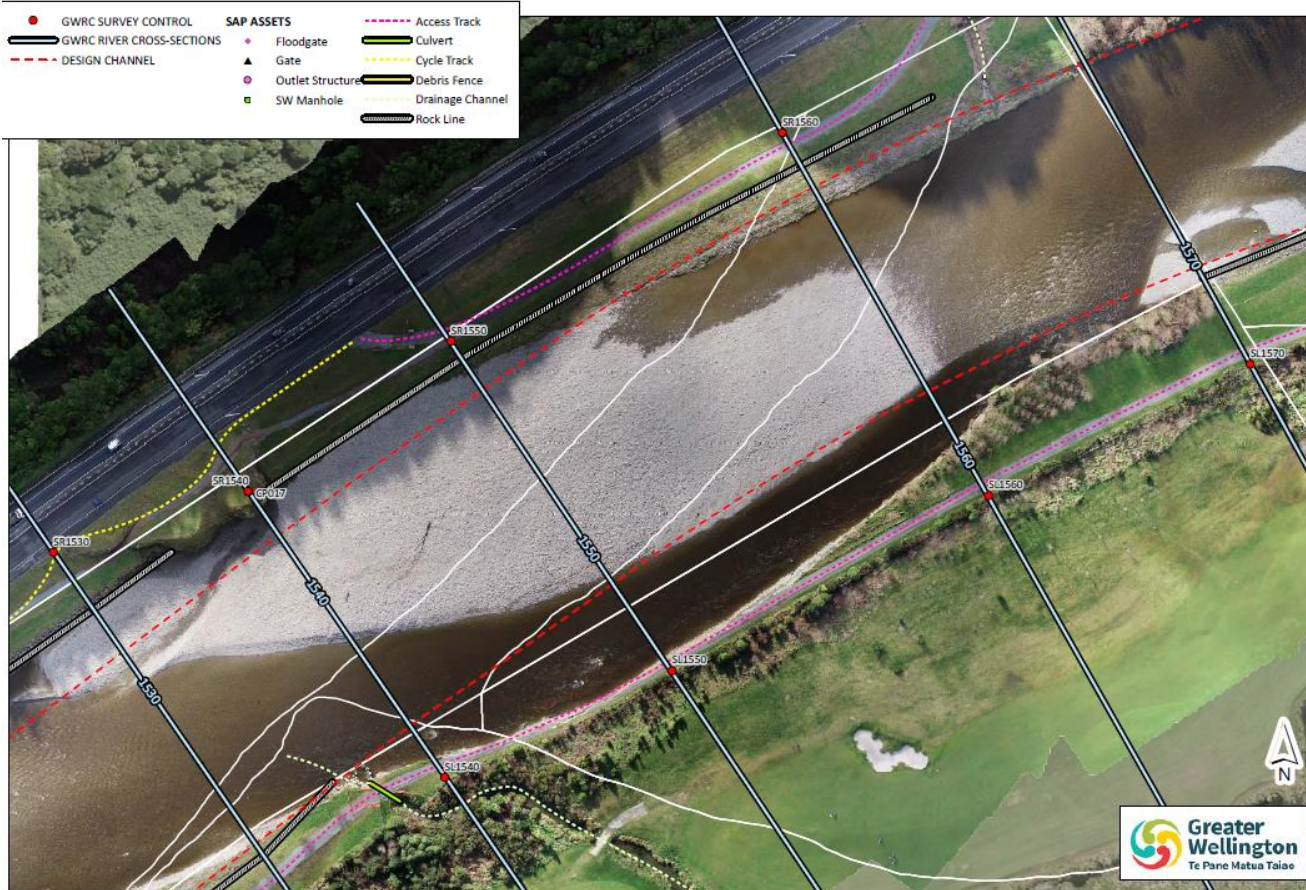
REDIU-funded projects



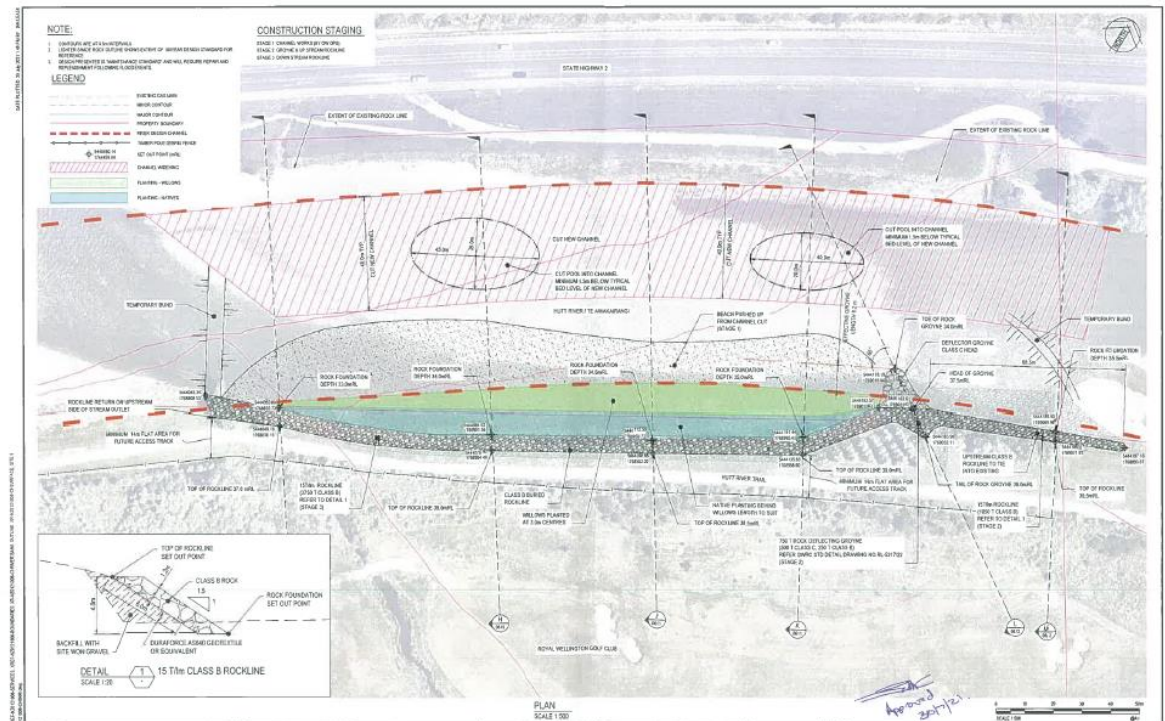
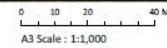
REDIU-Funded projects

	Work Site	Approximate Construction Timelines
Project 1	Stokes Valley (Erosion Repair)	TBD
	Pomare Bridge (Stopbank Repair)	<u>3 months</u> : Sept. 2021 – Nov. 2021
	River Road (Erosion Repair)	TBD
	Wellington Golf Club Right Bank (Erosion Repair)	TBD
	Pomare Left Bank (Erosion Repair)	<u>4 months</u> : August 2021 – Dec. 2021
	Wellington Golf Club Left Bank (Erosion Repair)	<u>3 months</u> : August 2021 – Nov. 2021
	Totara Park Horse Paddock Right Bank (Erosion Repair)	TBD
	Manor Park Right Bank (Erosion Repair)	TBD
	Gemstone Drive Reach (Erosion Repair)	TBD
	Totara Park Right Bank (Erosion Repair)	TBD
Project 2	Port Road Wellington (Erosion Repair)	<u>4 months</u> : Completed by June 2022
	Ruamahanga River Scheme (Erosion Repair)	<u>5 months</u> : Completed by June 2022
	Poets Park (Park Upgrade)	<u>5 months</u> : Completed by June 2022
	Taita Park (Park Upgrade)	<u>4 months</u> : March 2022 - June 2022
	Manor Park (Shared Pathway Creation)	<u>4 months</u> : Sept. 2021 – Dec. 2021
	Hulls Creek (Bridge and Fish Passage)	<u>4 months</u> : Completed by June 2022
	Seton Nossiter (Culvert Remediation)	<u>5 months</u> : Completed by June 2022

Project 1 – Royal Wellington Golf Club erosion repair



HUTT RIVER AERIAL 28 July 2021 SHEET 01 OF 02
 Following 2 yr Event 17 July 2021



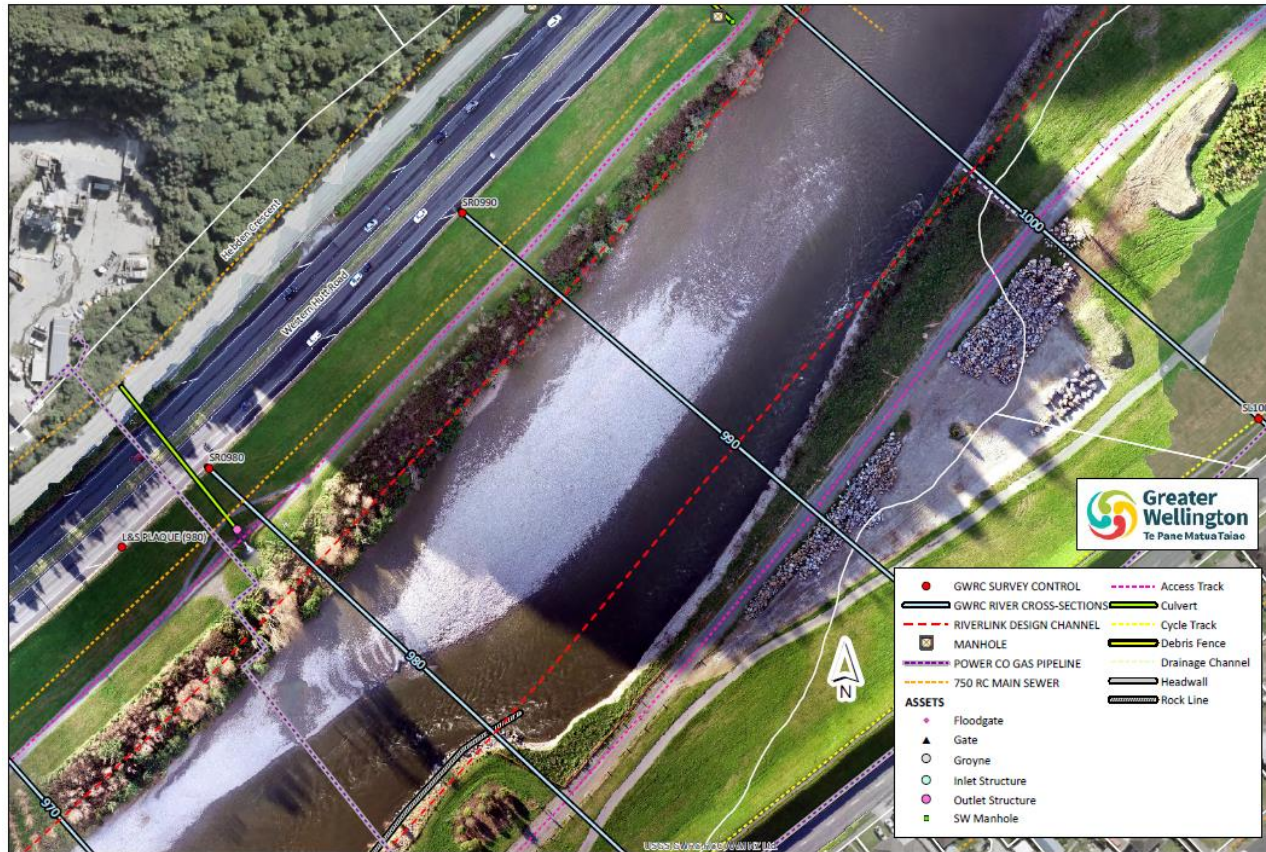
<p>REVISIONS</p> <table border="1"> <tr><th>NO.</th><th>DESCRIPTION</th><th>DATE</th></tr> <tr><td>1</td><td>ISSUED FOR PERMIT</td><td>15/07/2021</td></tr> <tr><td>2</td><td>ISSUED FOR CONSTRUCTION</td><td>15/07/2021</td></tr> <tr><td>3</td><td>ISSUED FOR CONSTRUCTION</td><td>15/07/2021</td></tr> <tr><td>4</td><td>ISSUED FOR CONSTRUCTION</td><td>15/07/2021</td></tr> <tr><td>5</td><td>ISSUED FOR CONSTRUCTION</td><td>15/07/2021</td></tr> <tr><td>6</td><td>ISSUED FOR CONSTRUCTION</td><td>15/07/2021</td></tr> <tr><td>7</td><td>ISSUED FOR CONSTRUCTION</td><td>15/07/2021</td></tr> <tr><td>8</td><td>ISSUED FOR CONSTRUCTION</td><td>15/07/2021</td></tr> <tr><td>9</td><td>ISSUED FOR CONSTRUCTION</td><td>15/07/2021</td></tr> <tr><td>10</td><td>ISSUED FOR CONSTRUCTION</td><td>15/07/2021</td></tr> </table>	NO.	DESCRIPTION	DATE	1	ISSUED FOR PERMIT	15/07/2021	2	ISSUED FOR CONSTRUCTION	15/07/2021	3	ISSUED FOR CONSTRUCTION	15/07/2021	4	ISSUED FOR CONSTRUCTION	15/07/2021	5	ISSUED FOR CONSTRUCTION	15/07/2021	6	ISSUED FOR CONSTRUCTION	15/07/2021	7	ISSUED FOR CONSTRUCTION	15/07/2021	8	ISSUED FOR CONSTRUCTION	15/07/2021	9	ISSUED FOR CONSTRUCTION	15/07/2021	10	ISSUED FOR CONSTRUCTION	15/07/2021	<p>Greater Wellington Te Pane Matua Taiao</p>	<p>Cardno</p>	<p>GREATER WELLINGTON REGIONAL COUNCIL PROFESSIONAL DEVELOPMENT UNIT HUTT RIVER EROSION PROTECTION SITE 1 - WELLINGTON GOLF CLUB (SOUTH) PLAN</p>	<p>FOR CONSTRUCTION</p> <p>DATE: 15/07/2021 SCALE: 1:500 SHEET: 01 OF 02 PROJECT: NZ0121008-CI-0600</p>
NO.	DESCRIPTION	DATE																																			
1	ISSUED FOR PERMIT	15/07/2021																																			
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Urgent works

- Royal Wellington Golf Club



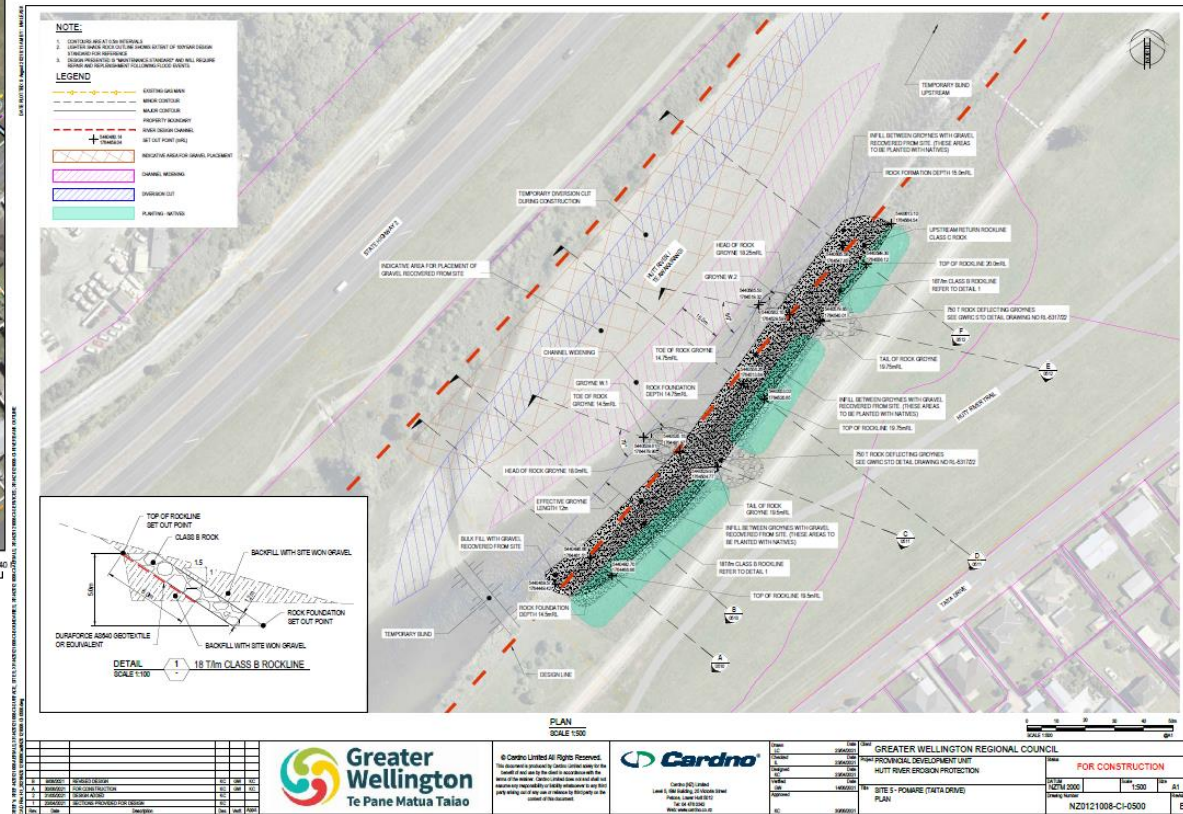
Pomare left bank – erosion repair



HUTT RIVER AERIAL 20 July 2021

AERIALS FLOWN 20 July 2021 GWRC
 Drawn : COONP, 4 July 2021
 File Ref : HUTT RVR - Pomare Erosion - 2021-07-20 (SFM)
 Plotted 8:48:04 AM, 25/08/2021

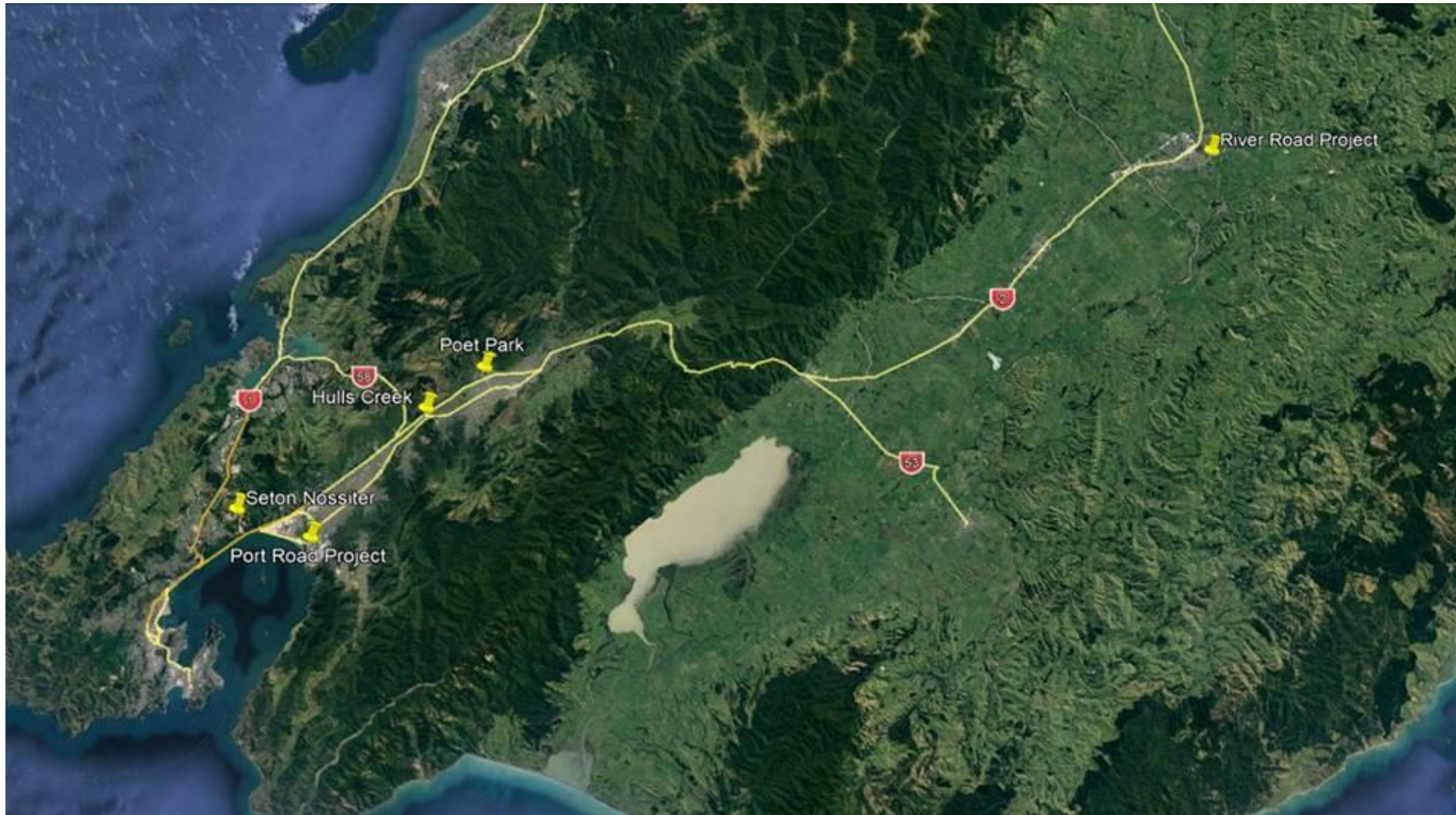
0 30 60
 A3 Scale : 1:1,000



Urgent works – Pomare left bank

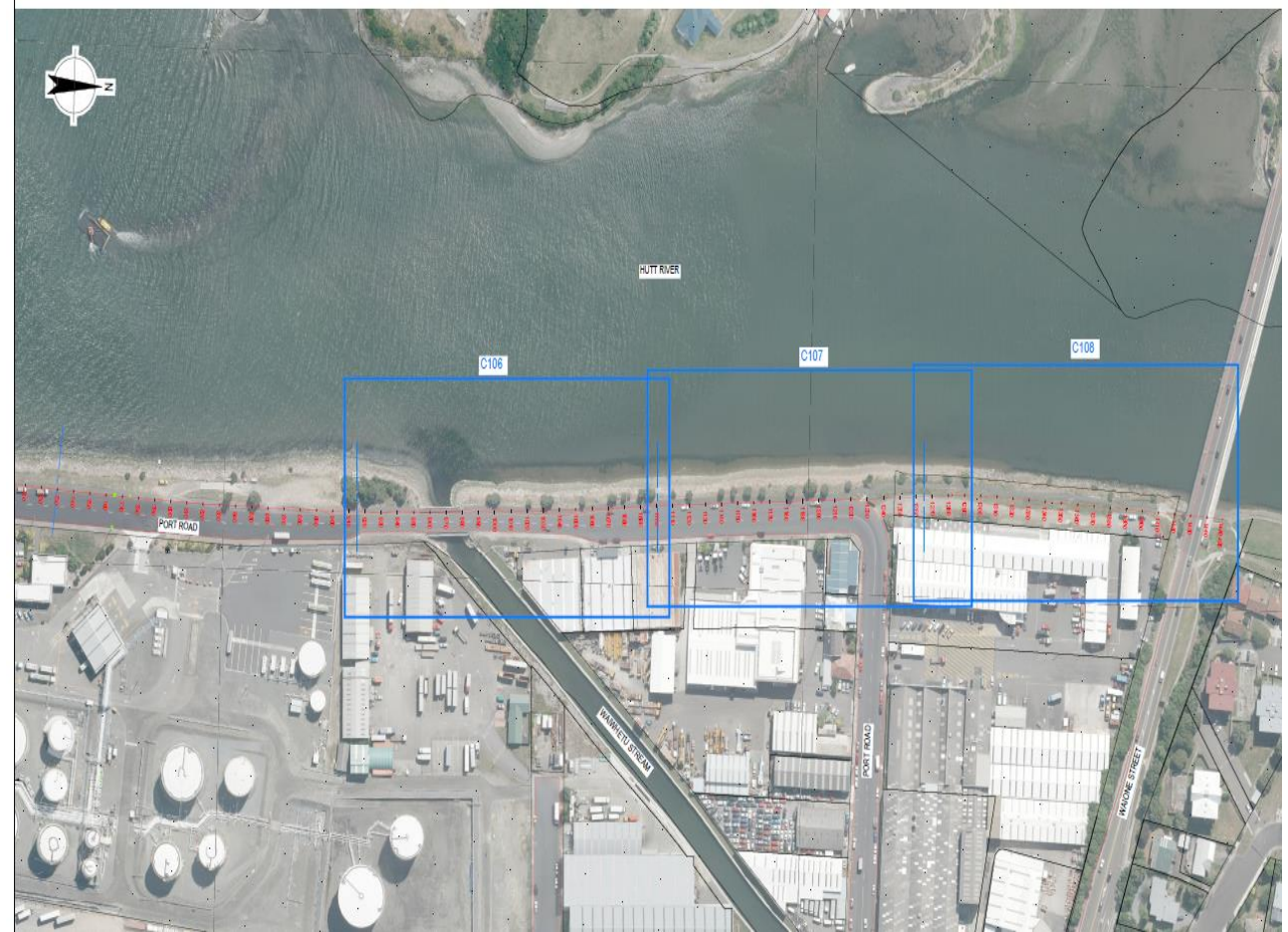
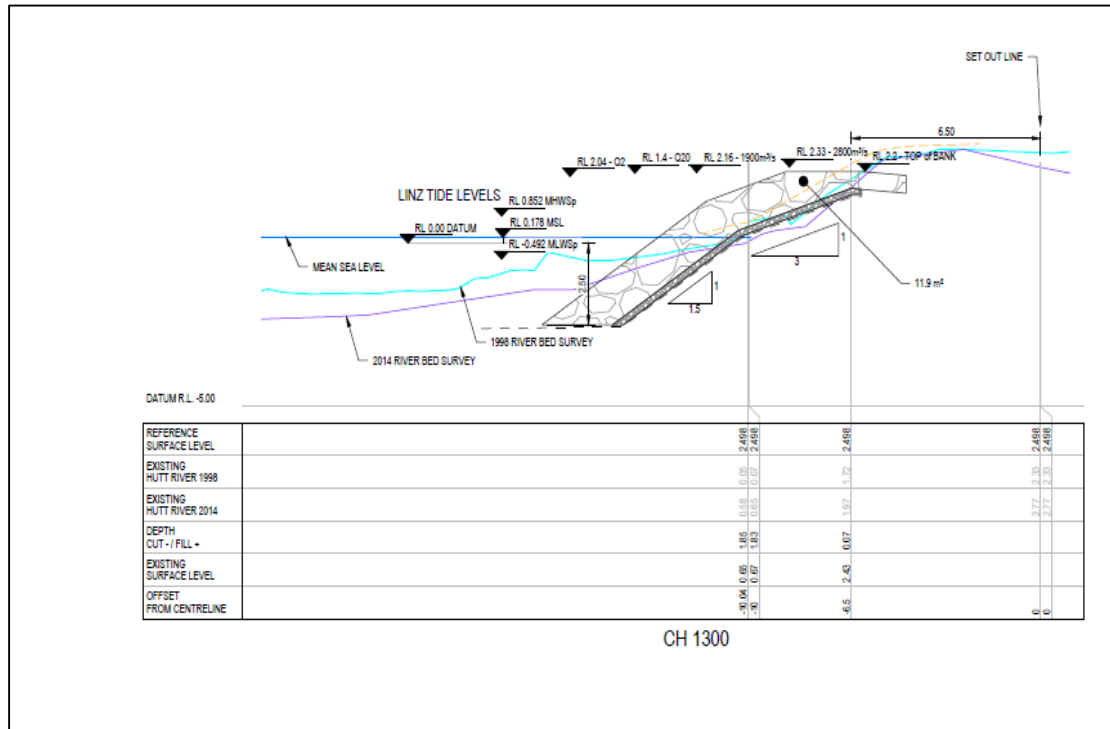


REDIU Funded Projects – Project 2



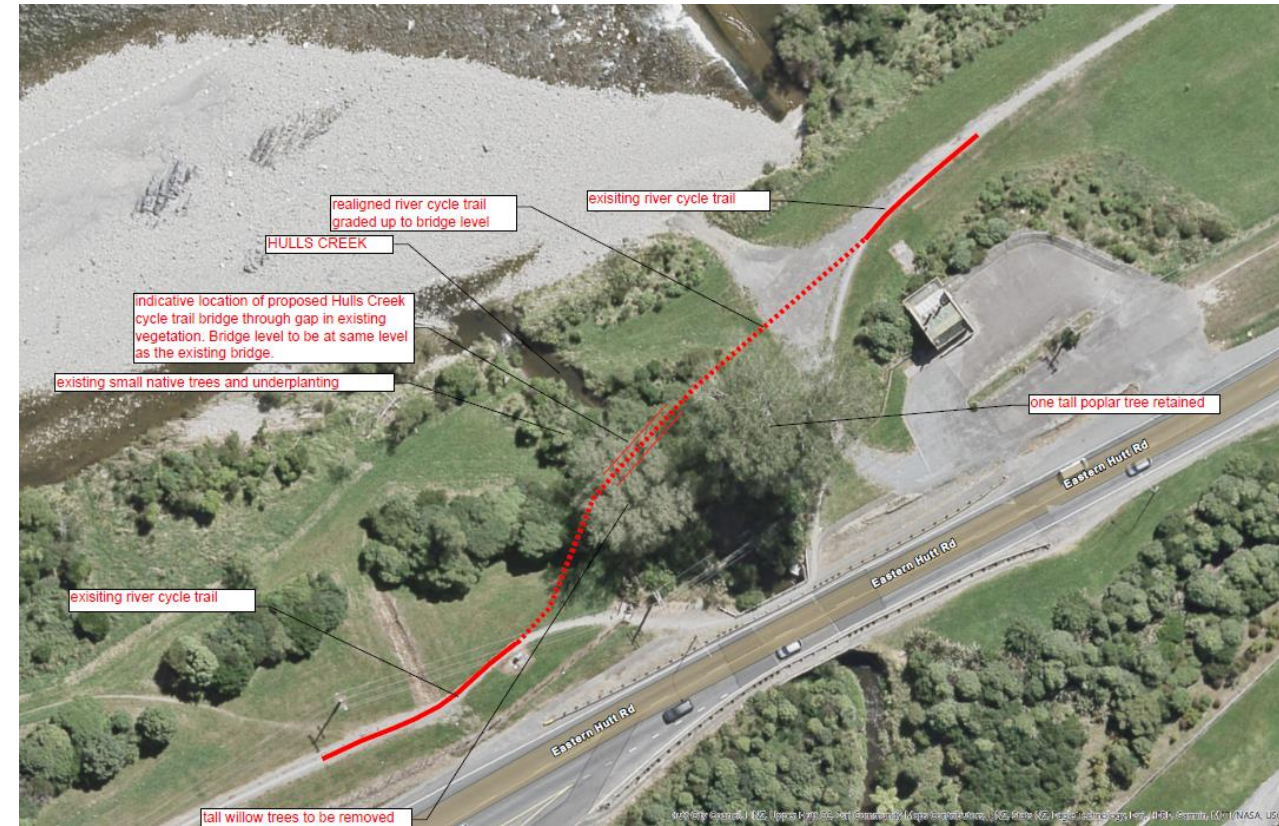
Te Awa Kairangi/Hutt River Port Road

- 430 m rock revetment
- Cost estimate: \$3 to 4 M



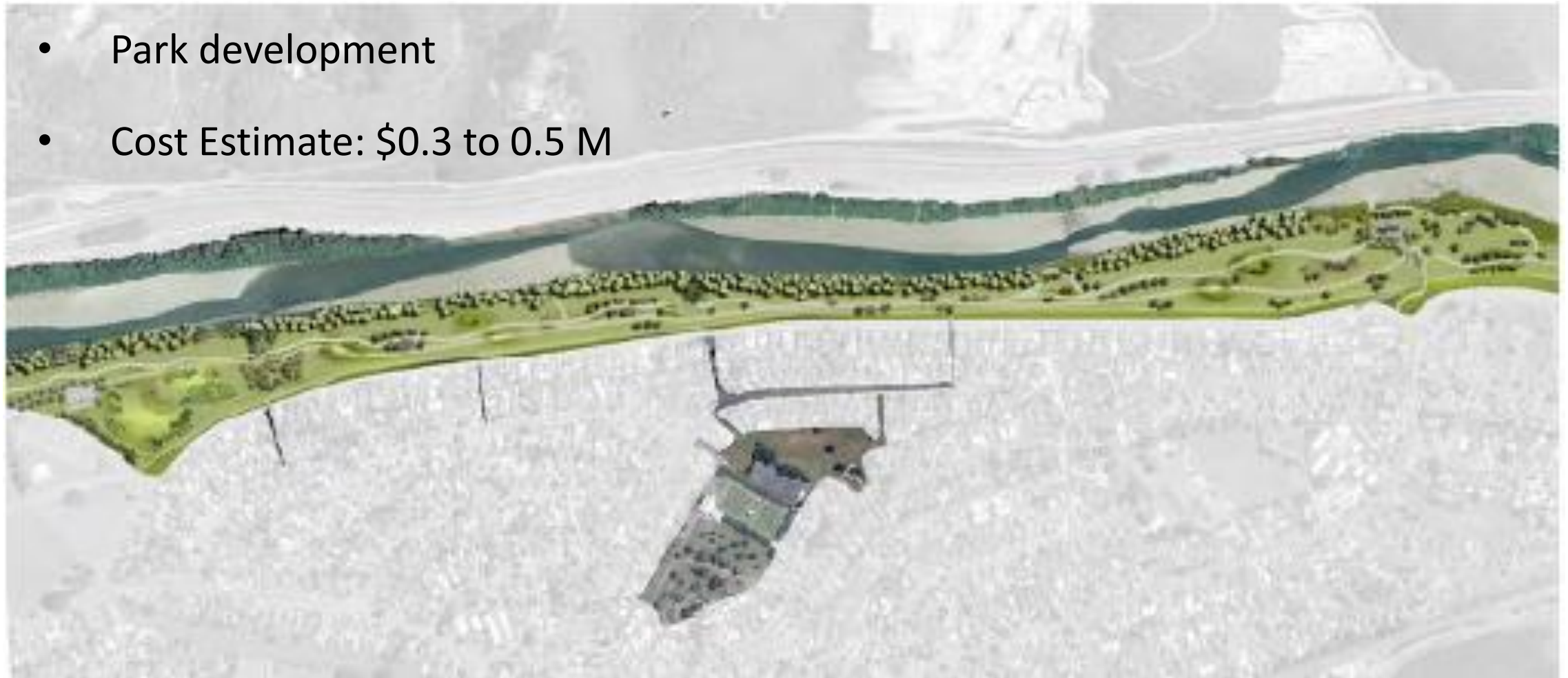
Hulls Creek Bridge

- New cycling/pedestrian bridge
- Landscape works
- Fish Passage
- Cost estimate: \$0.5M



Taita Park

- Park development
- Cost Estimate: \$0.3 to 0.5 M



Poets Park

- Park development
- Cost Estimate: \$1M



Seton Nossiter Culvert

- 110m of culvert liner affected
- Predominantly on the invert
- Cost estimate \$1-2M



Figure 3: Localised Abrasion Damage found by Damwatch (2015)



Figure 4: Localised Abrasion Damage found by Damwatch (2015)

Ruamāhunga, River Road

- 150 m long rock revetment
- 15 rock groynes (160 tonnes each, 50 m spacing)
- 500 m long bank excavation and regrading
- Cost estimate \$3-4M



Social procurement outcomes

- Park Enhancement Projects
- Wetland Restoration
- Indigenous Planting Area
- Riverside Plantings (Mixture of Indigenous & Exotic Species)
- Protection of Native Fauna
- Active Transport Bridge Project
- Multi-use Path Project
- Plant Procurement from Correctional Facilities
- Planting Days (Still in Beginning Planning Stages)
- Iwi Partnerships
- Pastoral Care (Still in Beginning Planning Stages)
- Student Involvement (Still in Beginning Planning Stages)

Preliminary plant estimates

	Site No.	5	6	7	10	13	14	15	16		
	Project	Pomare (Taita Park)	Royal Wgtn	Totara Park Horse paddock	Awakairangi Park	Poets Park CO ₂ Planting	Taita Park Landscape	Manor Park – Shared pathway	Hulls Creek	Total No.	
	Dry plant No.	750	1500	1500	500	21000	7200	1000	200	33650	
	Wet plant No.					4500				4500	
	CO ₂ plants					10000				10000	
										48150	
Botanical Name	Common Name	% Mix									
Dry sites		100%									
Aristotelia serrata	Makomako	5%	37.50	75.00	75.00	25.00	1050.00	360.00	50.00	10.00	1682.50
Coprosma propinqua	Mingimingi	8%	56.25	112.50	112.50	37.50	1575.00	540.00	75.00	15.00	2523.75
Coprosma robusta	Karamu	10%	75.00	150.00	150.00	50.00	2100.00	720.00	100.00	20.00	3365.00
Cordyline australis	Ti Kouka	5%	37.50	75.00	75.00	25.00	1050.00	360.00	50.00	10.00	1682.50
Kunzea ericoides	Kanuka	15%	112.50	225.00	225.00	75.00	3150.00	1080.00	150.00	30.00	5047.50
Leptospermum scoparium	Manuka	20%	150.00	300.00	300.00	100.00	4200.00	1440.00	200.00	40.00	6730.00
Myrsine australis	Red Matipo	5%	37.50	75.00	75.00	25.00	1050.00	360.00	50.00	10.00	1682.50
Olearia paniculata	Akiraho	8%	56.25	112.50	112.50	37.50	1575.00	540.00	75.00	15.00	2523.75
Plagianthus regius	Manatu	5%	37.50	75.00	75.00	25.00	1050.00	360.00	50.00	10.00	1682.50
Pittosporum eugenioides	Tarata	5%	37.50	75.00	75.00	25.00	1050.00	360.00	50.00	10.00	1682.50
Pseudopanax arboreus	Five Finger	5%	37.50	75.00	75.00	25.00	1050.00	360.00	50.00	10.00	1682.50
Sophora microphylla	Kowhai	5%	37.50	75.00	75.00	25.00	1050.00	360.00	50.00	10.00	1682.50
Veronica stricta	Koromiko	5%	37.50	75.00	75.00	25.00	1050.00	360.00	50.00	10.00	1682.50
			750	1500	1500	500	21000	7200	1000	200	<u>33650.00</u>
Wet sites		100%									
Austroderia fulvida	Toetoe	5%					225.00				225.00
Carex secta	Makura	10%					450.00				450.00
Carex geminata	Rautahi	20%					900.00				900.00
Cordyline australis	Ti Kouka	5%					225.00				225.00
Coprosma propinqua	Mingimingi	5%					225.00				225.00
Coprosma robusta	Karamu	20%					900.00				900.00
Phormium tenax	Harakeke	10%					450.00				450.00
Sophora microphylla	Kowhai	5%					225.00				225.00
Veronica stricta	Koromiko	20%					900.00				900.00
											<u>4500.00</u>

For Information

CROWN FUNDED COVID-19 RECOVERY PROJECTS PROGRESS UPDATE

Te take mō te pūrongo

Purpose

1. To update the Environment Committee (the Committee) on the Crown funded COVID-19 recovery projects.

Te horopaki

Context

2. The Government announced infrastructure investment funding to create jobs and progress COVID recovery. Greater Wellington Regional Council (Greater Wellington) secured funding for regional projects, as outlined in **Attachment 1** – Crown funded COVID recovery projects – progress update presentation.

Ngā tūāoma e whai ake nei

Next steps

3. The General Manager Catchment Management will speak to **Attachment 1** at the Committee's meeting on 16 September 2021.

Ngā āpitihanga

Attachment

Number	Title
1	Crown funded COVID recovery projects – progress update September 2021

Ngā kaiwaitohu

Signatory

Writer	Wayne O'Donnell – General Manager Catchment Management
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**He whakarāpopoto i ngā huritaonga
Summary of considerations**

Fit with Council's roles or with Committee's terms of reference

It is appropriate for the Committee to be informed of the progress of the Crown funded COVID recovery projects as the projects in the Wellington Region relate to Council's environmental strategies, plans, programmes and initiatives, which address environmental issues in the Region.

Implications for Māori

Implications for Māori are advised to the extent described in **Attachment 1**.

Contribution to Annual Plan / Long Term Plan / Other key strategies and policies

The update contributes to the delivery of the Wairarapa Moana Wetlands Project, Hutt River and Ruamāhanga River flood protection strategies, Predator Free Wellington, and 1 Billion Trees Partnership Project.

Internal consultation

All Crown Funded projects are reported to the Greater Wellington Crown Funded Project Board, comprising representatives from Catchment, Environment and Corporate Services.

Risks and impacts - legal / health and safety etc.

There are no known risks or impacts.

Crown Funded Covid Recovery Projects - Progress Update

The Projects:

FUND	FUNDER	PROJECT	TOTAL VALUE	GW CONTRIBUTION	JOBS CREATED
MfE	J4N	Wairarapa Moana Wetlands Project Expansion	\$5M	\$1.5	2 FTE + staff support & DOC resources
PDU	Shovel Ready	Climate Resilience Programme – Erosion Projects	\$19.6M	\$8.8M	50 FTE
PDU	Shovel Ready	Climate Resilience Programme – Major Projects			
MfE	J4N	Ruamahanga River buffer riparian planting	\$2M	\$1.3M	1 FTE
PFW	PF2050 Ltd	Predator Free Wellington	\$7M	\$250K	31 FTE Up to 15 contractors
1BT	MPI	1 Billion Trees – Hill Country Erosion	\$15M	\$7.4 (GW & landowner)	6 FTE (100% MPI funded)
1BT	MPI	1 Billion Trees Partnership Grant – Riparian/Parks/Biodiversity programme increase	\$4.5M	\$3.25M (GW & landowner)	1 FTE (100% MPI funded)

MfE – Ministry for the Environment
 J4N – Jobs for Nature
 PDU – Provincial Development Unit
 MPI – Ministry of Primary Industries



J4N Wairarapa Moana Wetland Enhancement

Feedback has been received from MfE on the Year 1 draft annual report. Clarifications and further information are required prior to its approval.

A change to the deed of funding will be undertaken following MfE approval of the Year 1 report. Changes will confirm revised budgets for years 2-5.

Evaluation of proposals for the development of Restoration, Research and Visitor Engagement Plans is complete. Contract negotiation is underway. Plans expected to be completed early 2022.

Year 2 work programme underway.

Resilient River Communities (previously Shovel Ready)

2 projects over 17 sites (work has begun on 2 sites)

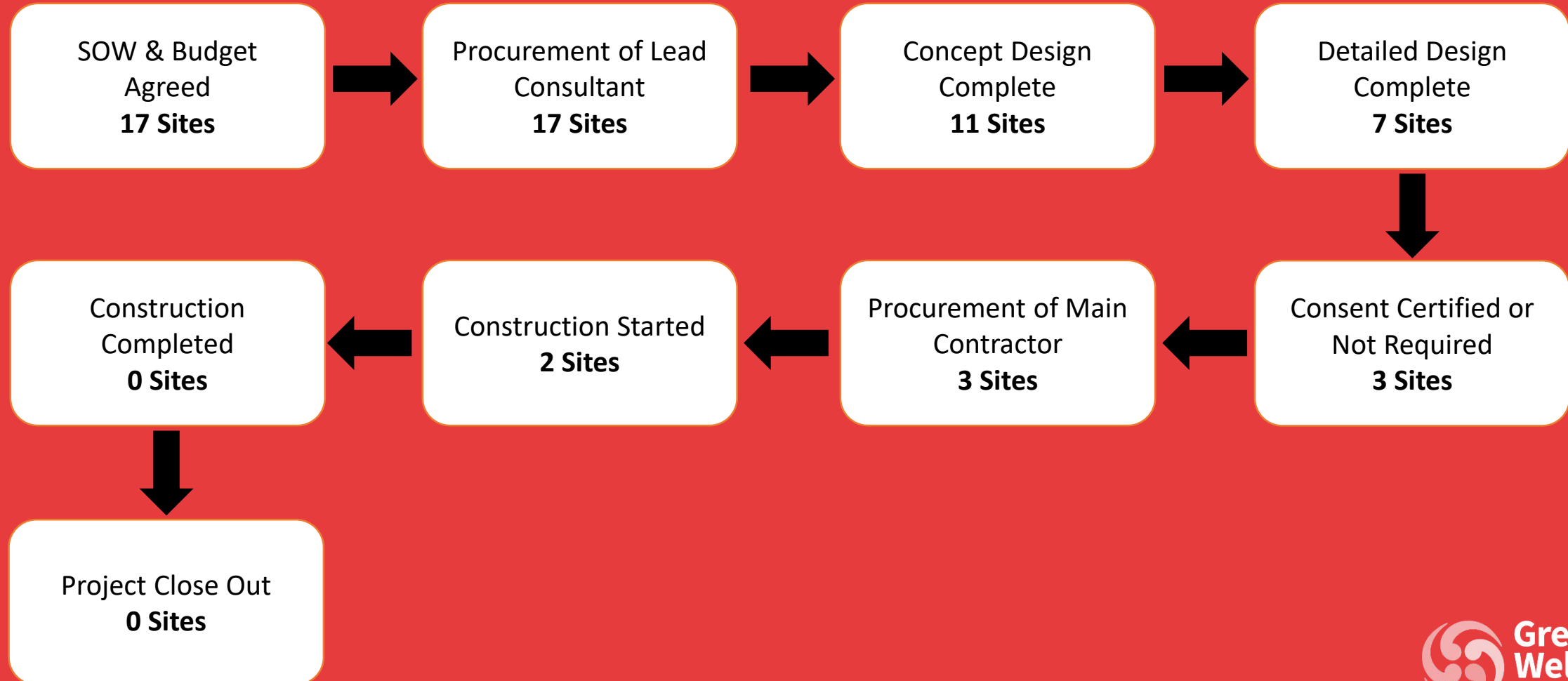
All design consultants procured, with detailed design continuing

Three co-design contracts with mana whenua signed (Rangitāne, Kahungunu, Ngāti Toa)

Sustainable procurement process:

- Supporting growth of Māori businesses
- Employment of under-represented worker demographics
- Wetland restoration project
- Professional development, life skills, & youth career training

Resilient River Communities Programme Overview – Sept. 2021



J4N Ruamahanga River Riparian Planting

One of the three sites has been planted and fenced - 2.7h. The planting at the remaining two sites was restarted at Level 3 and expected to be completed by the end of September.

Discussions are continuing with nurseries for securing plant supply for winter planting 2022.

Contractors are starting to be confirmed for spring 2021 vegetation clearance and pest plant management.

Predator Free Wellington

Rats from the majority of urban areas are now cleared. Final populations are still present in bush areas. Different methods being used to eliminate them.

Some activity continued under Covid Level 4 including areas of known activity 'hot spots', defences against reinvasion and responses to customer enquiries regarding our devices.

A move to new accommodation for the Team will soon occur. Renovations at the new accommodation have been progressing.

A new Project Lead has been appointed and other staff recruitment occurring.

New timelines and costs are being discussed with PFW Project Director in light of Covid and extra staff used on Miramar project.

Community Engagement into Phase 2 – the next part of the city have commenced

1 Billion Trees

2021 plantings are well underway, with plantings completed on Parks land, and significant progress made for Land Management and Biodiversity projects.

Planning for 2022 plantings has begun.

Iwi partnership role has made progress on a Tuhauora o Papatuanuku presentation and 1 Billion Trees Project Resource.