



If calling, please ask for Democratic Services

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## Environment Committee

Thursday 18 August 2022, 9.30am

Taumata Kōrero, Council Chamber, Greater Wellington Regional Council,  
100 Cuba St, Te Aro, Wellington

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### 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

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Thursday 18 August 2022, 9.30am

Council Chamber, Greater Wellington Regional Council,  
100 Cuba St, Te Aro, Wellington

## Public Business

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| 2.  | Conflict of interest declarations   |        |      |
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| 4.  | <a href="#">Confirmation of the Public minutes of the Environment Committee meeting on 23 June 2022</a>       | 22.296 | 3    |
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| 10. | <a href="#">Crown Funded Projects update – August 2022</a>  | 22.366 | 69   |



Please note these minutes remain unconfirmed until the Environment Committee meeting on 18 August 2022.

Report 22.296

## Public minutes of the Environment Committee meeting on Thursday 23 June 2022

Taumata Kōrero – Council Chamber, Greater Wellington Regional Council  
100 Cuba Street, Te Aro, Wellington at 9.30am.

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### Members Present

Councillor Gaylor (Chair)  
Councillor Connelly (Deputy Chair)  
Councillor Blakeley  
Councillor Brash  
Councillor Hughes  
Councillor Kirk-Burnnand  
Councillor Laban (from 9.32am)  
Councillor Lamason  
Councillor Lee  
Councillor Nash  
Councillor Staples  
Councillor van Lier

Councillors Connelly and Laban participated at the meeting remotely and counted for the purpose of quorum in accordance with clause 25B of the Schedule 7 to the Local Government Act 2002.

### Karakia timatanga

The Committee Chair opened the meeting with a karakia timatanga.

### Public Business

#### 1 Apologies

Moved: Cr Staples / Cr Nash

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

The motion was **carried**.

Councillor Laban arrived at the meeting at 9.32am the conclusion of the above item.

**2 Declarations of conflicts of interest**

There were no declarations of conflicts of interest.

**3 Public participation**

There was no public participation.

**4 Confirmation of the Public minutes of the Environment Committee meeting on 12 May 2022 – Report 22.189**

Moved: Cr Blakeley / Cr Kirk-Burnnand

That the Committee confirms the Public minutes of the Environment Committee meeting on 12 May 2022 – Report 22.189

The motion was **carried**.

**5 Update on Progress of Action Items from Previous Environment Committee meetings – June 2022 – Report 22.230 [For Information]**

Al Cross, General Manager, Environment Management, spoke to the report.

**6 Environment/Catchment Update – June 2022 – report 22.22 [For Information]**

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

**7 Farming Reference Group update – Oral report**

Barbie Barton, Chair, Farming Reference Group, updated the Committee on the discussions had at the Farming Reference Group meeting held on 15 June 2022.

The Region has experienced reduced sunlight and significant rainfall. This has caused ground conditions to be very wet and tracks to be very muddy.

Labour shortages continue to impact farming. Costs are increasing due to the labour shortage, but also wider network pressures related to getting goods to their final destination. The price of fertiliser (nitrogen) has also increased, which impacts grass (feed) and food production.

The Farming Reference Group meeting was constructive, with discussions held on wetlands, as well as receiving a summary from Greater Wellington Chief Executive, Nigel Corry, and Councillors Ponter and Staples, on water conservation.

A presentation was given on native tree supply, seed collection and resourcing. The Greater Wellington team was very helpful. The Farming Reference Group was advised that

seed harvesting is not allowed at Queen Elizabeth Park or on Department of Conservation land. Ms Barton recommended that dialogue be opened particularly with harvesting from Queen Elizabeth Park.

**Noted:** The Committee requested that the presentation received on Wetlands be presented to the Committee.

**8 Submission on the National Policy Statement for Indigenous Biodiversity – Report 22.286**  
[For Information]

Ali Caddy, Manager, Biodiversity, and Jamie Steer, Senior Biodiversity Advisor, spoke to the report.

**9 Crown Funded Projects update – May 2022 – Report 22.271** [For Information]

Wayne O’Donnell, General Manager, Catchment Management, and Katrina Smith, Senior Biodiversity Advisor – Fish Passage, spoke to the report.

## **Karakia whakamutunga**

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

The public meeting closed at 11am.

Councillor P Gaylor

**Chair**

Date:

**Environment Committee**  
**18 August 2022**  
**Report 22.321**



**For Information**

## **UPDATE ON PROGRESS OF ACTION ITEMS FROM PREVIOUS ENVIRONMENT COMMITTEE MEETINGS – AUGUST 2022**

**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 Committee meetings, that require actions by officers, are listed in the table of action items from previous Committee meetings ([Attachment 1](#) - Action items from previous Environment Committee meetings – August 2022). All action items include an outline of the current status and a brief comment.

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

**Ngā āpitihanga  
Attachment**

| <b>Number</b> | <b>Title</b>  |
|---------------|---|
| 1             | Action items from previous Environment Committee meetings – August 2022 |

**Ngā kaiwaitohu  
Signatory**

|         |   |
|---------|---|
| Writers | Al Cross – Kaiwhakahaere Matua mo te Taiao/General Manager, Environment Management<br>Wayne O’Donnell – Kaiwhakahaere Matua Whaitua/General Manager, Catchment Management |
|---------|---|

| <b>He whakarāpopoto i ngā huritaonga<br/>Summary of considerations</b>  |
|---|
| <b><i>Fit with Council's roles or with Committee's terms of reference</i></b><br>The action items are of an administrative nature and support the functioning of the Committee.   |
| <b><i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i></b><br>Action items contribute to Council's or Greater Wellington's related strategies, policies and plans to the extent identified in <b>Attachment 1</b> . |
| <b><i>Internal consultation</i></b><br>There was no additional internal consultation in preparing this report and updating the action items.  |
| <b><i>Risks and impacts - legal / health and safety etc.</i></b><br>There are no known risks or impacts.  |

**Attachment 1 to Report 22.321**

**Action items from previous Environment Committee meetings**

| <b>Meeting date</b> | <b>Action</b>   | <b>Status and comment</b>   |
|---------------------|---|---|
| 31 March 2022       | <p><b>Update on the progress of action items – Report 22.86</b></p> <p><b>Noted:</b></p> <p>The Committee requested that an update on the broader engagement strategy relating to the Mangaroa wetland be provided.</p>   | <p><b>Status:</b></p> <p>Ongoing</p> <p><b>Comment:</b></p> <p>A strategy will be developed following the completion of formal court actions and will be informed by the outcome of current internal reviews.</p> <p>The General Manager, Environment Management is providing a presentation 15 September 2022 Council workshop</p>   |
| 12 May 2022         | <p><b>Public participation</b></p> <p><b>Noted:</b></p> <p>The Committee requested that officers review pig numbers on the Greater Wellington land in question, explore responding with further control measures if required, and report back the proposed course of action to the public participants and the Committee.</p> | <p><b>Status</b></p> <p>Ongoing</p> <p><b>Comment</b></p> <p>The suggested approach is for a Forest ranger to run their dogs through this area of the forest once every three months as a work exercise for the purposes of tracking any increase or seasonality in pig numbers, destroying any located on Greater Wellington land and reporting back on those numbers to Greater Wellington and associated landowners. If numbers on Greater Wellington land get high we will consider getting a contractor involved.</p> <p>We will shortly reach out to the adjoining landowners to seek permission to also access their land as part of</p> |

**Attachment 1 to Report 22.321**

**Action items from previous Environment Committee meetings**

| <b>Meeting date</b> | <b>Action</b> | <b>Status and comment</b>   |
|---------------------|---------------|---|
|                     |               | this programme which will be key to successfully reducing pig numbers in this area. |

**Environment Committee**  
**18 August 2022**  
**Report 22.23**



**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. **Certified Farm Environment Plans** - The Natural Resources Plan (NRP) now requires Certified Farm Environment Plans (CFEP) within identified Priority Catchments in the Ruamāhanga and Kāpiti Whaitua. Uncertainty around when a national framework for Certified Freshwater Farm Plans will be rolled out has driven the introduction of CFEPs to the NRP. Creating a new CFEP system is straining existing resources and there are many challenges in attempting to predict the national framework in order to avoid duplication of two similar systems.
3. **Ballance Farm Environment Awards** - The 2022 Ballance Farm Environment Awards recognised well-deserved landowners on environmental sustainability and good farming in June. Greater Wellington work was acknowledged to have positively impacted winning landowners. The Wainuioru Community River care group won the region's first catchment group award.
4. **Biosecurity** - Wet weather and COVID impacted on programme completion. In spite of this the pest plant and pest animal control for the Key Native Ecosystem programme was mostly delivered.
5. Rabbit Modified McLeans scale monitoring has been mostly completed in the region. Some rabbit night counts to assess population trends were also completed.
6. The mustelid component (4,295 ha) of the Regional Possum Predator Control programme was successfully completed. However, the possum component was only partially completed with 35,700 ha of the planned 81,200 ha being treated (44% completed), due to reduced staffing throughout the year and COVID 19 restrictions.
7. We have produced new online guidance for resource consent applicants on how best to manage the effects of development on the region's indigenous biodiversity. The guide provides clear direction for applying the effects management hierarchy, to

achieve objectives under the Resource Management Act 1991, National Policy Statement for Freshwater Management, and the NRP. In the past, the hierarchy has tended to be poorly applied, often resulting in poor outcomes for biodiversity. This guidance will support a much-needed lift to the standard of practice for applying the hierarchy, ensuring more effective management of biodiversity in the region.

8. We provided a submission on the Exposure Draft of the National Policy Statement for Indigenous Biodiversity. Our main points were that we need more resourcing and more timely guidance to implement the NPS direction, clarity on alignment with the resource management reforms, interim provisions to ensure the protection of significant natural areas, greater emphasis placed on application of the effects management hierarchy and more effective indigenous vegetation targets.
9. Updates on Flood Protection Implementation projects are provided in the Annual Flood Protection Implementation Report (Report 22.324).
10. Lake Submerged Plant Indicators (SPI)/aquatic macrophyte surveys from a range of sites in the Wairarapa and Kapiti areas that were undertaken earlier this year have just been reported back to us from NIWA. Most of these sites were previously un-surveyed with only a few previously surveyed. The results provide national context, with a mixture of interesting findings at the new sites and some sad news with some lakes in a very poor state and some continuing to decline (Lake Pounui and Lake Waitawa).
11. The Waste Water Treatment Plant's (WWTP) continue to have varied compliance across all Whaitua. This ranges from minor non-compliances to in some cases moderate or significant non-compliance. Where there is moderate or significant non-compliance, investigations are being carried out and conversations with the relevant territorial authority (TA) are ongoing.
12. **Transmission Gully** - It remains unclear what extent of works is required to complete construction of Transmission Gully (TG), and how long that is likely to take. There remain a significant number of outstanding compliance and approvals/consenting tasks on the project. Greater Wellington has recently communicated to Waka Kotahi NZ Transport Agency (Waka Kotahi) our expectations of the agency as consent holder to demonstrate greater ownership and leadership in closing out compliance and approvals requirements, and reiterated Greater Wellington's role as regulator. Greater Wellington has also confirmed changes in the way it will be engaging in Waka Kotahi project governance forums to ensure its role as regulator remains clear and unfettered.
13. The Harbours team have made submissions on the Regulatory Systems (Transport) Amendment Bill. This was in relation to makes changes to the Maritime Offences Regulations. The proposal looks to update the Maritime Offence regulations. We are generally supportive of the proposed changes. We also provided feedback on proposed update Guidelines relating to Part 90 (Pilotage and Pilot Exemptions) of the Maritime Rules. The updating of the Guidelines was support with additional suggestions and noting that the Rule it is based on is due for revision to make it more fit for purpose.
14. Beacon Hill has commenced a trial as the out of hours contact point for the Greater Wellington Radio network for out of office and out of hours staff. Staff have been trained on the system and expected responses.

15. Harbour's application to Maritime New Zealand for funding for our summer education work was accepted however the level was significantly less than applied for. This money comes from the Fuel Excise Duty on petrol considered to have been used in boats. The reason given was a high level of applications. We will adjust our proposed plans accordingly.
16. Greater Wellington Parks and ICT are working with Regional Trails partners and WellingtonNZ to develop better system for maintaining and updating all trail data across the region. Previously this work had been supported by Greater Wellington GIS team, however that is no longer an option given the time commitment.
17. The forestry relationship has improved in terms of getting agreement on cost sharing for certain infrastructure. Challenges remain over managing their operational practices for harvesting and defining the responsibilities of Parks in this area and how eReg supports this. Working on getting better long-term plans from forest managers (Forest 360), but this area remains a challenge when balancing recreation, access and forestry harvesting.

### ***Whaitua-specific issues***

#### *Te Whanganui-a-Tara*

18. The Predator Free Wellington team have used innovative techniques including new uses of toxins, a rat detector dog, and working with an eradication specialist, all of which resulted in great efficiencies and the certainty of only a handful of ship rats left on Miramar Peninsula (Phase 1 area). The rat detection dog is used to follow up in areas we have controlled and to detect the last rats in current operational areas. Volunteers are now installing traps into the buffer zone of the phase 2 area (Island Bay to CBD).
19. The aerial 1080 operation at Kaitoke and Hutt Water Collection Area KNE sites area was delivered in late May. Due to poor weather only 8,555 ha was completed and the remaining 2,430 ha (all in Hutt Water Collection Area) will be flown in September 2022. We retrieved a number of poisoned possum carcasses during river and beach checks following a number of flood events after the operation (carcasses are dissected to determine those that have signs of 1080 in their gut contents).
20. The South Makara aerial 1080 operation as part of the Regional Possum Predator Control programme has been postponed until autumn 2023.
21. We are maintaining surveillance for dama wallabies (exclusion animal in the Regional Pest Management Plan) at the bottom of Remutaka Hill Road. A wallaby detector dog checked historic sites as well as the supposed new site, with no further wallabies detected.
22. Pest plant work included controlling *Pinus contorta* in Pakuratahi Forest KNE site, delimiting surveys for moth plant and woolly nightshade (both eradication plants in the Regional Pest Management Plan) in Wainuiomata, and annual inspections for moth plant in Hutt Valley – with a significant new moth plant site found in Lower Hutt. We also worked with Wellington City Council (WCC) to deliver a Weedbusters Wellington Hui which was a big success with 80 participants from related industries/fields in the region.

23. The Pest Animals team have completed a major installation of auto-resetting traps into Te Kopahou Reserve (for WCC) on the South Coast.
24. After 5 years of monitoring from our harbour buoy (officially the Wellington Regional Integrated Buoy Observations (WRIBO)), the programme has met its objectives of characterising the water quality in the vicinity of the Hutt River plume and provided plenty of other insights along the way. Alongside NIWA and the Coastal SIG, we have taken the decision not to continue with this programme, as we believe any further questions we have are better answered by smaller-scale investigations.
25. The earthworks for Omaroro Reservoir project in Mt Cook are being monitored by the Environmental Regulation team. Due to the natural diversion of the Papawai Stream flows into the sediment retention pond these works were placed on hold. Consent was sought by Wellington Water Limited (WWL) and granted for the removal of accumulated sediment and to divert flows back into the main stream channel. These works have commenced. Environmental Regulation has engaged with Papawai Stream Group, who have a strong interest in the form and functioning of the Papawai Stream. Environment Regulation will continue to do so until works to the Stream, including habitat restoration, is complete. Environmental Regulation is also working with the contractor (HEB) to manage limited works throughout the winter period to minimise delays associated with this critical infrastructure for Wellington City.
26. Harbours and Environmental Regulation are working with the Wellington Jetsports Club and WCC regarding a request to hold the Jet-ski nationals off Freyberg beach at the end of February 2023. They have used this location twice before. This is a well-run event that it does not significantly impact on the main Oriental Bay beach and provides good spectator viewing. The previous two contests required a noise consent and that will be looked at for this one also (nearly all the skis in the event have 4 strokes engines so the noise is not excessive).
27. Storm damage to infrastructure at Dry Creek, Belmont Regional Park. Consenting required to address bank erosion immediately adjacent to picnic area, parking as well as to bridge foundations. Questions to answer here about maintaining the long-term resilience of the access road to the main camping area.
28. Working with East Belmont Grazing licence holder to agree new public access through lambing and calving areas. Harder conversations around farming and recreation with licence holder under the new Toitū Te Whenua. However, some good gains through this 2022 trial with new recreational loop around Kilmister block and access to top of Boulder Hill from Dry Creek. Also trialling the shortening of the season from blanket 10 weeks down to 6 weeks.

#### *Ruamāhanga*

29. Carterton District Council (CDC) have approved a Greater Wellington poplar and willow nursery development at CDC's wastewater treatment plant utilising treated effluent for irrigation purposes on 21 hectares of land adjacent to the wastewater treatment ponds. This expansion will secure future production of tree material to treat erosion prone land across the region, as low flow restrictions on water takes are expected to impact future production of the existing Akura nursery.

30. Greater Wellington continues to lead the work with the aggregates industry, principally focussing on long term solutions to address increased demand for materials (sand, gravels, rocks etc) together with the lack of supply that Wairarapa's rivers can sustainably provide. A meeting was held on 4 July 2022 with aggregate industry representatives and the Wairarapa district councils to provide an update and gather information.
31. The 19 July 2022 rainfall event has caused several erosion problems on the Waipoua and Ruamahanga Rivers. Immediate remedial works have been completed while longer term solutions are developed. Catchments are saturated and any rainfall is having more of an impact than would normally be expected.
32. Generally, the Lower Wairarapa Valley Development Scheme was less affected by the July event than the Upper Valley. Flood recovery works, following the February 2022 event, have been completed at the following sites:
  - a Manganui channel realignment, repair to overtopped bank and gravel groyne installation.
  - b Abbotts Creek channel realignment and vegetation control.
  - c Abbotts Creek gravel extraction to increase channel capacity by Longwood Road.
  - d Wairongomai gravel extraction, channel realignment, repair to overtopped stopbank and installation of rock protection.
  - e Channel alignment and erosion repair in the Turanganui.
  - f On the Ruamahanga River:
    - i Channel widening opposite Awaroa Sill.
    - ii Gravel extraction and boulder bank protection around Waihenga Bridge.
33. A successful round of scheme meetings was held during the week commencing 20 June 2022, with each of the scheme groups confirming they were satisfied the schemes had been maintained to the required standard. Separate meetings were held for the Upper and Lower Ruamahanga, Waipoua and Waingawa River Groups.
34. The resource consent to allow the continued removal of vegetation and sediment from highly modified watercourses in the Wairarapa was lodged with Environmental Regulation on 30 June 2022. This was required due a policy change in the proposed Natural Resources Plan.
35. Pest plant work undertook delimiting surveys for moth plant and woolly nightshade (eradication plants in the Regional Pest Management Plan).
36. Biosecurity set up the Lake Pounui KNE site with predator control equipment again, as well as setting up two new predator control sites set up for Flood Protection at Tauanui confluence and Barrage Gates.
37. The Wairarapa Moana Governance Group met at Papawai Marae for their quarterly meeting. The group approved key planning documents including the Ecological Restoration Plan, produced by Kāhu Environmental and the Engagement and Experience Plan produced by Henley Hutchings. Both of these reports were produced

with significant engagement and involvement with Tangata Whenua connected to the Moana.

38. The Wairarapa Moana Governance Group were also presented with a comprehensive report on the uses of glyphosate for pest control around the moana in response to concerns raised by representatives of Rāngitane o Wairarapa. A robust discussion was held, and information was shared by the Biosecurity team and by Department of Conservation (DOC). The group agreed that a more transparent approach would be adopted, and the partners would work more closely to minimise potential impacts. Greater Wellington will have a follow up meeting with Rāngitane o Wairarapa and Ngāti Kohununu ki Wairarapa to ensure all questions, concerns, and perspectives have been accurately understood.
39. Continued conversations are being held with South Wairarapa District Council (SWDC) and its consultants on the Featherston Wastewater Treatment Plant (FWWTP) consenting process. Progress continues to be slow from SWDC.

*Te Awarua-o-Porirua*

40. The Porirua Wastewater Treatment Plant resource consent hearing commenced 13 June 2022 and adjourned on 16 June 2022. The panel has issued several minutes directing further information from the applicant to in relation to operational matters and to allow time for expert conferencing. To date joint witness statements have been provided from experts on odour, dispersion modelling, ecology, and public health. Submitters have been given the opportunity to provide supplementary statements and information and will have the opportunity to comment to the independent hearing commissioners on any updated draft conditions. The hearing is still open. The Have Your Say webpage <https://haveyoursay.gw.govt.nz/poriruawwtp> is used to communicate key updates and make information available to submitters.
41. Pest Plants were not able to complete the aerial boneseed spraying at Whitireia KNE site and the work has been deferred to our next spraying season.
42. We are preparing to open applications for the 2022 Community Environment Fund in the Te Awarua o Porirua whaitua which we co-manage with Te Rūnanga o Toa Rangatira. This is a contestable fund for volunteer groups involved in environmental restoration projects. This year the fund will be open for applications in mid-August for six weeks. Successful applicants will be notified in November 2022.
43. The hearing for the publicly notified resource consent for a significant expansion of the Willowbank Quarry will commence on the 15 August 2022. A number of submissions were received including from DOC and the Judgeford Protection Society. The hearing will be held jointly with Porirua City Council (PCC) in Porirua. An independent Hearing Panel chaired by David McMahon will determine the consent.
44. Parks continue to work with Ngahere Korowai partners and Te Rūnanga o Toa Rangatira to determine how this project might be governed and operated. Clarifying how our mana whenua partner will be involved is also key to determining the funding options from Greater Wellington.

*Kāpiti Coast*

45. The resource consent to allow the continued removal of vegetation and sediment from highly modified watercourses on the Kapiti Coast was lodged with Environmental Regulation on 30 June 2022. This was required due a policy change in the proposed NRP.
46. Biosecurity, Environmental Science and consultants is working with Parks regarding Recloaking Papatūānuku and the peat wetland restoration at Queen Elizabeth Park (offering advice on control and arranging contracts with our Biosecurity Panel for Parks). Work continues on the resource consent for spraying and working with our mana whenua partners to agree a methodology. Still some challenging conversation to be had with stakeholders including NZTA on the rewetting consent over perceived impacts on SH1 and Ruamati South.
47. Challenges with plant supply from poor propagation results have led to difficult conversations and a lot of scrambling around to try and honour agreements between Parks, Friends groups and Maclean Trust for winter planting in 2022. Excellent collaboration with Parks, Pest plants and Environmental Science and Land Management to find a solution.
48. Pest plants are delimiting for moth plant and woolly nightshade (eradication plants in the Regional Pest Management Plan). Manchurian Wild Rice final draft conditions have been sent to landowner for final sign-off and the actual consent should be granted soon. The annual report for Manchurian Wild Rice control has been sent to Ministry for Primary Industries (MPI) as part of their National Interest Pest Response programme).
49. Preparation of key science information for the Whaitua Committee is on track, with a number of reports either completed or nearing completion. The process of forming the Science Advisory Group (SAG) is also underway – this group will assess different future water scenarios and the impact of those on water quality and ecosystem health. The outputs (due October) are intended as a key resource for the Committee’s decision-making.
50. An oil spill response exercise was held in June at the Kapiti Emergency Operations Centre, this was one of our smaller exercises and partially run online to due health restrictions.

*Wairarapa Coast and Eastern Hills*

51. A successful round of scheme meetings was held for the Eastern Rivers groups during the week commencing 20 June 2022, with the scheme members confirming that they were satisfied the scheme had been maintained to the required standard.
52. Plantings at Riversdale, Homewood, Mataikona and Whangaimoana Key Native Ecosystem sites were completed. Partially completed marram control at Mataikona.
53. Regional Possum Predator Control programme: A few possum control projects (Bideford Pines, Tinui North, Tinui Valley West and Castlepoint) have been moved to the 2022/23 programme.

**Ngā Take e hāngai ana te iwi Māori**  
**Implications for Māori**

- 54. 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.
- 55. Implementation with mana whenua partners is guided by Te Whāriki – the new Māori Outcomes Framework as part of the 2021-2031 Long Term Plan.

**Ngā kaiwaitohu**  
**Signatories**

|           |   |
|-----------|---|
| Approvers | Al Cross – Kaiwhakahaere Matua mo te Taiao   General Manager, Environment Management<br><br>Wayne O’Donnell – Kaiwhakahaere Matua Whaitua   General Manager, Catchment Management |
|-----------|---|

| <b>He whakarāpopoto i ngā huritaonga<br/>Summary of considerations</b>  |
|---|
| <b><i>Fit with Council's roles or with Committee's terms of reference</i></b><br>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. |
| <b><i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i></b><br>Development and implementation of related work programmes falls under the core activities of the 2021-2031 Long Term Plan.  |
| <b><i>Internal consultation</i></b><br>Internal consultation was limited to officers of Greater Wellington's Catchment Management and Environment Management Groups.  |
| <b><i>Risks and impacts - legal / health and safety etc.</i></b><br>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.  |

**Environment Committee**  
**18 August 2022**  
**Report 22.233**



**For Decision**

## **ANNUAL ASSET MANAGEMENT CONDITION REPORT**

### **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 Wairarapa River scheme advisory committee meetings held between 21 June 2022 and 23 June 2022, 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. The Hutt Valley Flood Management Subcommittee (HVFMS) met on 9 August 2022 to consider the Asset Management Report for Te Awa Kairangi/Hutt, Wainuiomata and Waiwhetu Floodplains 2021/22 (Report 22.235). The HVFMS recommends to the Committee that it is satisfied that flood protection and erosion control infrastructure assets for these floodplains have been satisfactorily assessed and that identified issues are being addressed through maintenance and improvement work programmes.
3. The Friends of the Waikanae River meeting will be held on 7 September 2022, officers will report to the Friends on asset condition and performance and note that identified issues will be addressed through work programmes.
4. The Friends of the Ōtaki River meeting is due to be held on 26 October 2022, officers will report to the Friends on asset condition and performance and note that identified issues will be addressed through work programmes.
5. The Wairarapa River scheme advisory committees met between 21 June 2022 and 23 June 2022. The advisory committees were satisfied that the flood protection and

erosion control infrastructure assets for the Wairarapa catchments had been satisfactorily assessed and that identified issues are being addressed through work programmes.

6. The Waiohine Action Group (WAG) annual walkover has taken place. Officers commented on asset condition and performance and noted that identified issues will be addressed through the coming years work programmes at that walkover.

## **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 million<sup>1</sup> 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 advisory 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 Operations & Maintenance (O&M) is undertaken has changed significantly and while levels of service have been maintained, increased resources going to be required in future years to ensure we can maintain service levels and continue to undertake O&M activities.
11. COVID-19, the raft of central and local government reforms coupled with increasing compliance costs (Health, Safety and Wellbeing (HSW) and environmental), increasing expectations on how we should work to improve environmental outcomes, partnering with mana whenua and the increasing community desire for consultation and engagement to achieve broader social objectives are all increasing the resources required, and necessitating our people resource to have a broader skill set. Climate change is also requiring more complex planning, and more frequent extreme weather events are resulting in more reactive maintenance.

<sup>1</sup> As at 30 June 2020

12. Specifically, COVID-19 continues to present both significant challenges and opportunities. Issues around contractor resource, and material supply, will continue to test us in the delivery of our work programmes.
13. Looking to the future, two key work streams are also in progress that will advance our river management practices and Asset Management maturity. The Department was recently granted two new river management resource consents for Te Awakairangi/Hutt River and Wainuiomata River; 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.
14. The announcement of the new dam safety regulations in May 2022 has confirmed the importance of our dam safety system improvement program alongside our business-as-usual dam maintenance and monitoring. The Department is progressing through our improvement work program which is addressing the outcomes of the Comprehensive Dam safety review, which was completed in 2021. The first key step is to undertake a Failure Modes and Effects Analysis Workshop planned for August 2022. This will indicate where we could build resilience in our dam safety system and inform our forward work program and prioritisation.

**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 88 percent of assets rated in Very Good to Moderate condition. This is a slight decrease from 2021 (Table 1). 12 percent of assets are rated in Poor or Very Poor condition, which is a slight increase from 2021. A detailed summary of asset condition by asset type is included in [Attachment 1](#) – breakdown of condition by asset type.

| Year                          | 2022  |       | 2021  |       | 2020  |       |
|-------------------------------|-------|-------|-------|-------|-------|-------|
| Asset Condition Rating Scores | Count | Ratio | Count | Count | Ratio | Count |
| 1 - V. Good                   | 88%   | 538   | 91%   | 622   | 88%   | 593   |
| 2 - Good                      |       | 2883  |       | 3230  |       | 3126  |
| 3 - Moderate                  |       | 1665  |       | 1653  |       | 1909  |
| 4 - Poor                      | 12%   | 647   | 9%    | 452   | 12%   | 675   |

| Year          | 2022        |             | 2021        |             | 2020        |             |
|---------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 5 - V. Poor   |             | 55          |             | 60          |             | 108         |
| <b>Totals</b> | <b>100%</b> | <b>5789</b> | <b>100%</b> | <b>6017</b> | <b>100%</b> | <b>6411</b> |

Table 1: Summary of asset condition

18. While the number of Very Poor assets has marginally decreased in 2022, the number of Poor assets has increased. This can largely be attributed to high flow events in the previous 12 months, as well as general wear of assets over time. This is being addressed through our annual operations work program though adequate resourcing to ensure service levels are maintained is a concern.
19. As part of the annual maintenance works the team has completed the willow and native planting programs as well as the floodgate/structures maintenance program. This is necessary to maintain the level of service of the flood protection system.
20. 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.
21. Additional work was carried out by the team assisting with the Riverlink prototype Belmont willow edge protection works. This will test a softer vegetative edge approach to edge protection, looking to widen our flood protection toolkit for better environmental outcomes.
22. 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 \$10.2 million; this figure increases to \$17.6 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***

23. The Department uses a comprehensive risk-based framework developed at a national level to produce a risk profile for each river.
24. 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’.

25. 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.
26. 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.
27. 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.
28. Generally, most 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.
29. 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 2** – breakdown of 'High' and 'Very High' risk areas, treatment, and timeframes, identifies these.

***Management response***

30. All 'High' or 'Very High' risks captured in Attachment 2 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.
31. 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 'High' risk. As the consequence of a stopbank failure is high in these sections, the risk reflects this. These sections will be either remedied through the climate resilience programme due for completion by August 2022 or through the O&M work programme by March 2023.
- 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 have been completed and recommendations were presented to the HVFMS on the 9 of August 2022 (Report 22.337 Moonshine Stopbank Capacity Assessment). The Hutt River Floodplain Management Plan signals that the existing stopbank upstream of the Moonshine Bridge will be raised and strengthened but the works are beyond the current LTP; 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 2022/23 financial year and improvements to the edge protection assets incorporated into operational work programmes.
- g On the Ōtaki River there is a small section of stopbank downstream of the bridges that is overtopped in the 20% AEP and is 'High' risk. This stopbanks is proposed to be upgraded as part of the implementation of the Otaki FMP and the risk will be addressed at that time.
- h For the Waikanae River, compared to 2021, the number of 'High' risk segments has reduced from twelve to four. This can largely be attributed to improvements in the condition of the Jim Cooke Park (JCP) stopbank. In Pukekawa Park, a poor condition floodgate results in this section being 'High' risk; maintenance will be targeted this financial year to lift condition. Investigations into the floodwall at Otaihanga will progress this year. The wall is predicted to overtop in less than the design event (the 1% AEP) and is rated as '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 stopbanks 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. Implementation of the Waiohine River Plan will address those on the Waiohine River.

## **Ngā hua ahumoni**

### **Financial implications**

32. The proposed decision has no financial implications.
33. The Wellington Region has a collective expenditure of approximately \$8.8 million on routine maintenance and operations of the existing assets.

## **Ngā Take e hāngai ana te iwi Māori**

### **Implications for Māori**

34. The Department is continuing to explore opportunities for Māori through the consenting space as well as through the Riverlink and Climate Resilience projects.
35. Recently granted river management consents for Te Awa Kairangi/Hutt River and the Wainuiomata River represent a step change in how Greater Wellington will undertake river management activities in the future. These consents enable co-design and development of key plans and strategies that set the parameters by which river management activities are undertaken in these rivers.
36. Ngāti Toa Rangitira and Taranaki Whānui ki Te Upoko o Te Ika are members of the RiverLink Board.
37. Cultural liaison or co-design contracts have been signed by Te Rūnanga o Toa Rangitira Inc., Rangitāne ō Wairarapa Inc., Ngati Kahungunu ki Wairarapa Charitable Trust and Port Nicholson Block Settlement Trust for enhanced involvement and collaboration on programme work for the Climate Resilience Projects.

## **Te huritao ki te huringa o te āhuarangi**

### **Consideration of climate change**

38. 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.
39. 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. 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.
40. The greenhouse gas (GHG) emissions from rock supply for maintenance varies 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.
41. Our maintenance will also use heavy machinery to carry out the work proposed in these projects. The emissions from these have not been estimated. However, in the 2018-

2019 year, use of heavy machinery mainly for flood protection works at Greater Wellington represented 2% of the total organisational carbon footprint (835 tCO2e).

42. Quarry selection is the single largest determinant of emissions. While it seemed possible that quarry operations could be improved and cartage distances reduced to help lower emissions, there are few options to obtain rock of the required quality.

**Ngā tikanga whakatau**  
**Decision-making process**

43. 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**

44. 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**

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

**Ngā tūāoma e whai ake nei**  
**Next steps**

46. No further action from the Committee is required.

**Ngā āpitihanga**  
**Attachments**

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

**Ngā kaiwaitohu**  
**Signatories**

|           |   |
|-----------|---|
| Writer    | Lucy Ashford – Section Leader, Operations Planning  |
| Approvers | Jacky Cox – Team Leader, Operations<br>Graeme Campbell – Manager, Flood Protection<br>Wayne O'Donnell – General Manager, Catchment Management |

|  |
|--|
| <p><b>He whakarāpopoto i ngā huritaonga</b><br/> <b>Summary of considerations</b></p>  |
| <p><b><i>Fit with Council’s roles or with Committee’s terms of reference</i></b></p> <p>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.</p>   |
| <p><b><i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i></b></p> <p>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.</p> |
| <p><b><i>Internal consultation</i></b></p> <p>No internal consultation was required as the infrastructure described, the condition, risk and subsequent work programmes are all managed by the Department.</p>   |
| <p><b><i>Risks and impacts - legal / health and safety etc.</i></b></p> <p>The reports notes that there are a small sections of 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 an operational or improvement work programme.</p>           |

## Attachment 1 to Report No. 22.233

## Attachment 1 – Breakdown of condition by asset type

| Asset Type                | 1 - Very Good | 2 - Good    | 3 - Moderate | 4 - Poor   | 5 - Very Poor | Total       |
|---------------------------|---------------|-------------|--------------|------------|---------------|-------------|
| ARTWORK                   |               | 1           |              |            |               | 1           |
| BARRAGE GATE              |               | 7           |              |            |               | 7           |
| BLOCKLINE                 | 4             | 6           | 3            | 4          |               | 17          |
| BRIDGE                    | 2             | 7           |              |            |               | 9           |
| BUILDING                  | 1             | 1           | 1            |            |               | 3           |
| CHANNEL                   | 199           | 604         | 188          | 72         | 1             | 1064        |
| CULVERT                   | 1             | 67          | 53           | 2          |               | 123         |
| DEBRIS ARRESTOR           |               | 10          | 2            | 1          | 2             | 15          |
| DEBRIS FENCE              |               | 56          | 69           | 83         | 9             | 217         |
| DEMOLITION LINE           |               | 2           | 6            | 2          |               | 10          |
| DETENTION DAM             |               | 3           |              |            |               | 3           |
| DIVERSION CUT             |               | 2           |              |            |               | 2           |
| DRAIN                     | 6             | 62          | 12           | 3          |               | 83          |
| DROP STRUCTURE            |               | 2           |              |            |               | 2           |
| ELECTRICAL CONTROL SYSTEM |               | 1           |              |            |               | 1           |
| ELECTRICAL GENERATOR      |               | 1           |              |            |               | 1           |
| FENCE                     | 1             | 27          | 18           | 2          |               | 48          |
| FENCE RAIL IRON NET       |               |             | 1            | 1          |               | 2           |
| FLOODGATE                 | 10            | 71          | 35           | 6          | 3             | 125         |
| FLOODWALL                 | 10            | 32          |              | 1          |               | 43          |
| FLOODWAY SILL             |               | 3           | 7            | 2          |               | 12          |
| GATE                      | 13            | 65          | 8            |            |               | 86          |
| GROYNE                    | 11            | 476         | 283          | 69         | 9             | 848         |
| HEADWALL                  | 4             | 66          | 36           | 7          | 6             | 119         |
| MANHOLE                   | 1             | 4           |              |            |               | 5           |
| NATIVE PLANTING           | 28            | 59          | 41           |            |               | 128         |
| RETAINING WALL            | 1             | 8           | 2            | 1          |               | 12          |
| RIPRAP                    | 5             | 98          | 52           | 36         | 1             | 192         |
| ROCK MATTRESS             |               | 2           | 1            |            |               | 3           |
| SEAT                      | 2             | 21          | 9            | 1          |               | 33          |
| SIGN                      | 18            | 43          | 5            | 3          |               | 69          |
| STOPBANK                  | 103           | 340         | 284          | 151        | 8             | 886         |
| TRACK                     | 97            | 312         | 112          | 18         |               | 539         |
| TRAINING BANK             | 5             | 6           |              | 2          |               | 13          |
| WEIR                      | 1             | 12          | 3            | 3          |               | 19          |
| WILLOW                    | 12            | 400         | 434          | 177        | 16            | 1039        |
| WINGWALL                  | 4             | 6           |              |            |               | 10          |
| <b>Total</b>              | <b>539</b>    | <b>2883</b> | <b>1665</b>  | <b>647</b> | <b>55</b>     | <b>5789</b> |

**Attachment 2 to Report No. 22.233**

**Attachment 2 – Breakdown of ‘High’ and ‘Very High’ risk areas, treatment, and timeframes**

| Location  | Description   | Risk      | Treatment  | Timeframes  |
|---|---|-----------|--|---|
| Hutt River<br>Pharazyn Street                   | Stopbank will overtop from 2,800 cumec design event. Stopbank intrinsic strength is ‘average’ | Very High | RiverLink will retreat, raise and improve stopbanks.   | RiverLink is due for completion by 2027.  |
| Hutt River<br>Lower Hutt City                   | Stopbank will overtop from 2,800 cumec design event. Stopbank intrinsic strength is ‘average’ | Very High | RiverLink will retreat, raise and improve stopbanks.   | RiverLink is due for completion by 2027.  |
| Hutt River<br>River Road above Moonshine Bridge | Stopbank will overtop from 2,800 cumec design event. Stability of stopbank is ‘average’.      | Very High | Stopbank section identified for upgrade in the Hutt River Floodplain Management Plan (HRFMP) but requires additional technical investigations.<br><br>Operational work programs to prioritise maintenance. | Investigations were completed in 2021/22 (HVFMS Report 22.337 Moonshine Stopbank Capacity Assessment). Short- and medium-term recommendations will be actioned in 22/23, long term actions will be detailed for the upcoming LTP. |
| Hutt River mouth                                | No stopbank. Area is inundated in the 2,300 and 2,800 cumec design events.                    | High      | Initial investigations completed through RiverLink. Further investigations through HRFMP review.   | TBC   |
| Hutt River<br>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<br>Alicetown                         |   | High      |  |   |
| Hutt River<br>Harcourt Werry Drive              | Actively eroding bank edges and/or edge protection assets that are in poor condition.         | High      | Climate resilience and O&M programme will remediate.   | Due for completion in August 2022 and March 2023 respectively.  |
| Hutt River<br>Taita Drive                       |   | High      |  |   |
| Hutt River<br>Various sections of River Road    |   | High      |  |   |
| Hutt River<br>Totara Park                       | XS 2340-2380. Stopbank and edge protection in Poor condition.                                 | High      |  |   |
| Wainuiomata River<br>Urban reach                | Stopbank segment predicted to possibly overtop in 1% Annual Exceedance Probability            | High      | Technical investigations required.   | Technical investigations programmed for 2022/23.  |

**Attachment 2 to Report No. 22.233**

|   |  |                  |   |  |
|---|--|------------------|---|--|
| (Cross sections 1185, 1210).                            | (AEP) design event (XS 1185), and edge protection assets in poor condition (XS 1210).                  |                  | Operational work programs to prioritise maintenance.  |  |
| Ōtaki River downstream of SH1 (XS210-250)               | Stopbank at risk of failure from 5% AEP design event (1 in 20 year).                                   | High             | Included in review of Ōtaki Floodplain Management Plan project.                                       | Flood hazard modelling will be undertaken 22/23. This will be used for further options analysis. |
| Waikanae River - Pukekawa Park                          | Poor condition floodgate.  | High             | Floodgate to be inspected and if any damage is observed, remediation planned.                         | Ongoing.   |
| Waikanae River Otaihanga Domain                         | Sections of stopbank and floodwall predicted to overtop in 10% and 1% AEP design events, respectively. | High             | Technical investigations required to confirm stopbank and floodwall capacity and structural strength. | Investigations are underway and will be completed in 22/23.                                      |
| Waiohine River Fullers Bend                             | Stopbank predicted to overtop in the 1% AEP design event.  | High             | Will be addressed through the Waiohine River Plan. Implementation planning ongoing.                   | 2022/23  |
| Waiohine River downstream of Rail bridge (XS 32 and 36) | Stopbank intrinsic strength is average (XS32) and channel alignment is poor (XS36).                    | High             | Will be addressed through the Waiohine River Plan. Implementation planning ongoing.                   | 2021-2023  |
| Waipoua River - Urban Reach                             | Stopbank predicted to overtop in the 1% AEP design event.  | Very High & High | Issue being considered by Waipoua Working Group.  | 2021-2023  |
| Ruamāhanga River Rathkeale (Mt Bruce)                   | Inadequate information on stopbank design. Poor intrinsic strength.                                    | High             | This project has been identified and will be addressed in the Te Kauru FMP.                           | Ongoing  |
| Ruamāhanga River Waipoua confluence (Te Ore Ore)        | No stopbank. Area is inundated in the 1% AEP design event.   | High             | This project has been identified and will be addressed in the Te Kauru FMP.                           | Ongoing  |

**Environment Committee**  
**18 August 2022**  
**Report 22.234**



**For Information**

## **ANNUAL FLOODPLAIN MANAGEMENT IMPLEMENTATION REPORT**

### **Te take mō te pūrongo**

#### **Purpose**

1. To advise the Environment Committee (the Committee) of progress made to June 2022 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 twentieth annual report on the implementation of the Western Floodplain Management Plans and the fifteenth 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 2001.
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 originally intended.
6. Te Kāuru FMP was adopted by Council in June 2019, and the Waiohine River Plan was adopted by Council in April 2022. Implementation of these plans was dependent on the Wairarapa rates funding change through the Revenue & Financing Policy review.
7. 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 riverbank protection and upgrading stopbanks on the Ruamāhanga and Tauherenikau Rivers. In 2011, Council approved the extension of the programme of works until 2022. 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.

8. During the 2020/21 financial year Flood Protection 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 Kānoa - Regional Economic Development and Investment Unit (Kānoa) funding for resilient river communities.
9. This funding has allowed works to be 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)*

10. 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. RiverLink is reported to this Committee separately.
11. There are also sites within Te Awa Kairangi/Hutt River that have obtained government funding through Kānoa. These sites are:
  - a Site 1: Stokes Valley Erosion Repair
  - b Site 2: Pomare Bridge Stopbank Repair
  - c Sites 3a-c: River Road Erosion (3a River Road, 3b River – true right bank, 3c Bed recontouring)
  - d Site 4: Wellington Golf Club Right Bank Erosion (North)
  - e Site 5: Pomare Left Bank Erosion
  - f Site 6: Royal Wellington Golf Club Left Bank Erosion (South)
  - g Site 7: Totara Park Horse Paddock Right Bank
  - h Site 8: Manor Park Right Bank Erosion
  - i Site 9: Gemstone Drive Reach Erosion
  - j Site 10: Awakairangi Park (Right Bank)
  - k Site 11: Port Road

##### *Kānoa programme status updates:*

*Site 1: Stokes Valley Erosion Repair – in progress*

12. A new, permanent rock weir will be constructed in the stream to replace the failed structure. Fish passage will be incorporated into the design, which will include 2 fish ramps and resting pools.

*Site 2: Pomare Bridge Stopbank Repair – completed*

13. Work to repair the damaged stopbank under the rail bridge took place from September 2021 to November 2021. This work repaired flood protection infrastructure that protects public land and infrastructure from Te Awa Kairangi's flooding.

*Site 3a, 3b, 3c River Road Erosion – in progress*

14. 3a: Construction along River Road (State Highway 2), directly across the awa from the Royal Wellington Golf Club, began in June 2022. For this mahi officers are building three groynes to help protect the riverbank. Construction is expected to be complete July 2022.
15. 3b: Design work was carried out for 3 further groynes to be constructed on the true right bank. This work is outside the project scope and is deferred.
16. 3c: Post-construction bed contouring is required to align the channel in this reach

*Site 4: Wellington Golf Club Right Bank Erosion (North) – completed*

17. Across the river from River Road and adjacent to the Royal Wellington Golf Club in Upper Hutt, we built 3 groynes along the riverbank to protect against erosion. Work at this site began in May 2022 and was finished in June 2022. For an image of site works, refer to Figure One.
18. The main contractor for this project, Mills Albert, a local Kapiti-based company, won a merit award from Civil Contractors New Zealand (CCNZ) for their mahi on this project. The award was presented at the CCNZ Wellington-Wairarapa branch awards ceremony in May 2022.

*Site 5: Pomare Left Bank Erosion – completed*

19. To help protect resident nearby, officers have built a 185-metre long rock revetment and two 38-metre-long groynes. Work at this site began in January 2022 and was finished in March 2022. For an image of site works, refer to Figure 2.

*Site 6: Royal Wellington Golf Club Left Bank Erosion (South) – completed*

20. River flooding caused by heavy rain washed out a riverside section of the Hutt River Trail in July 2021. To help protect the riverbank from future erosion, this work included building a rock revetment and rock groynes. 320 metres of riverbank was rebuilt, using around 5,500 tonnes of rock. Work at this site began in August 2021 and was finished ahead of schedule in December 2021. For an image of site works, refer to Figure 3.

*Site 7: Totara Park Horse Paddock Right Bank – in progress*

21. Across the river from River Road (State Highway 2) in Upper Hutt, officers are planning to build one groyne along the riverbank to protect against erosion. We'll also be planting willow trees to further protect against the erosion of the riverbank and planting native plants to increase biodiversity and community enjoyment. This mahi is planned for winter 2022.

22.

*Site 8: Manor Park Right Bank erosion and Site 9: Gemstone Drive reach erosion*

23. These sites were removed as the planned erosion protection works do not fit with the 'room for the river' philosophy at Site 8, and may exacerbate erosion of the left bank stopbank at Site 9.

*Site 10: Awakairangi Park (Right Bank) – in progress*

24. Officers are planning to remove obstructions that are in the river and to complete bed-recontouring work. This mahi will help protect against erosion of Awakairangi Park. This mahi is planned for winter 2022.

*Site 11: Port Road*

25. Greater Wellington and HCC have worked together towards addressing erosion concerns of businesses and property owners in the Seaview area near Port Road, Lower Hutt. In the 2018/19 year, HCC completed temporary (ten year estimated life) repair work to a section of the erosion protection south of the Waiwhetu Stream mouth. Further protection along the bank from the mouth of the Waiwhetu Stream to Estuary Bridge, which is the responsibility of Greater Wellington, was forecast to commence in 2031, however Kānoa funding has enabled advancing this mahi. The works are designed to protect against a 1% Annual Exceedance Probability (AEP) design event. Physical works are set to begin shortly, in winter 2022.
26. Sustainable procurement is being incorporated into each of the Kānoa projects, ensuring deliverables for social well-being, social procurement, environmental responsibility, community involvement, and enhancement are all met in an effective and meaningful manner. These initiatives have so far achieved the following:
- a Over 60,000 native plants are being planted through these projects, with over a quarter being procured from Rimutaka prison.
  - b The design for Poets Park's redevelopment includes 2 rongoā areas as a result of collaboration with Ngāti Toa on the park's design.
  - c The main-contractor for these projects has created a wellbeing program that is currently being rolled-out across the organisation. Four employees have been trained as wellbeing champions and are now delivering wellbeing workshops to all staff. To effectively implement this program, upper management has gone through strategy workshops, created policies and procedures, implemented an internal comms plan, and has performed a baseline engagement survey.
  - d The main contractor will also be offering prostate testing for male employees, which make up most of their workforce.
  - e Career development of workers has also been strengthened through this program. The main contractor has been able to support one young, wahine Māori worker to complete certification in business, one worker to receive their quarry manager certification, and another to gain hydro-excavation licensing.
  - f Each of the programme's four iwi partners (Ngāti Toa, Kahungunu ki Wairarapa, Taranaki Whānui, and Rangitāne) have brought their involvement to new heights through direct, paid involvement with Iwi Engagement Programme Service

contracts. They are involved in co-design of tree planting, signage, and mahi toi, amongst other works.

- g Through this programme, Greater Wellington is working with iwi partners to strengthen the relationship between iwi and Ara Poutama Aotearoa (the Department of Corrections). Iwi are leading the approach and desired end result, with Greater Wellington helping to facilitate strategy and to connect the appropriate personnel. This engagement has the potential to create meaningful ways for inmates to reconnect to their whenua, whanau, and identity overall.



Figure 1: Royal Wellington Golf Club (North) Erosion Protection - Completed Mahi



*Figure 2: Pomare/Taitā Drive Erosion Protection Mahi*



**Figure 3: Royal Wellington Golf Club (South) Erosion Protection - Completed Mahi**

*Operational matters – Te Awa Kairangi/Hutt River*

27. The Te Awa Kairangi/Hutt River annual maintenance programme was completed within the allocated scheme budgets. Work is now underway with the 2022-23 work programme. Resourcing (both internal and external) is still challenging and will require careful management to ensure that levels of service continue to be met.
28. The implementation of the new river management resource consents for Te Awa Kairangi/Hutt River and Wainuiomata River have been difficult. We have been compliant with the consent conditions though we have not been able to commit the necessary resources to make the further improvements we would have hoped.

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

29. Flood Hazard Modelling is being updated to meet Hutt City and Upper Hutt City's District Plan timeframes. These are due for completion in Q2 of the 2022/23 financial year.

*Te Awa Kairangi/Hutt River Environmental Strategy*

30. A change request for the Kānoa programme of works was submitted in May 2021 to the Climate Resilience Advisory Board, increasing the programme budget (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 Site 13: Poets Park Upgrade
  - b Site 14: Taita Park Upgrade and safety works
  - c Site 15: Manor Park Shared Pathway
  - d Site 16: Hulls Creek Bridge
  - e Site 17: Seton Nossiter culvert remediation (Porirua Stream)

31. The Kānoa programme has so far achieved the following for the above projects (also refer 13. above):

*Site 13: Poets Park Upgrade – in progress*

32. Throughout the 2.5 km stretch of Poets Park, Upper Hutt, officers have re-designed the park to increase recreational space (making it more pedestrian and cycle friendly) and to bring back biodiversity. More than 40,000 native plants will be planted. Rongoā gardens will also be planted in the park, incorporating ~2,000 medicinal plants such as harakeke, kowhai, and manuka. Mahi on-site will start August 2022 and be completed December 2022.

*Site 14: Taita Park Upgrade – in progress*

33. Throughout the 2 km stretch of Taitā Park, Lower Hutt, officers have changed the parking layout to node parking to improve traffic safety and are enhancing the recreational and environmental values of the park by making it more pedestrian and cycle friendly and to bring back biodiversity. This will create an attractive, safe community space for relaxation and recreation. More than 7,000 native plants/trees will be planted. Mahi on-site will start September 2022 and be completed by October 2022.

*Site 15: Manor Park Shared Pathway – in progress*

34. Work to build a walking and cycling path through Manor Park's beautiful native bush is progressing well. Hutt City Council is managing this project. This work aims to encourage more people to use healthier, more environmentally friendly ways to get around – like walking and cycling – to support national emission reduction goals. Mahi on-site began in September 2021. For an image of site works, refer to Figure 4.

*Site 16: Hulls Creek Bridge – in progress*

35. A pedestrian/cyclist bridge will be constructed over Hulls Creek, as a part of the popular Hutt River Trail. A gravel path will be re-installed. Over 500 native plants will be planted and landscaping mahi completed. Mahi on-site is set to begin in August 2022 and be completed in October 2022.

*Site 17: Seton Nossiter culvert remediation (Porirua Stream) – in progress, but construction works postponed as of the date of writing this report*

36. This project includes repair of the failed culvert and fish passage installation. In June 2022, we started repairing a 196-metre-long culvert running under State Highway 1 in Johnsonville's Seton Nossiter Park. As of July 2022, the remaining mahi has been postponed to January 2023 due to seasonal water levels. For an image of site works, see Figure 5 below.

*Site 19: RiverLink rock revetment*

37. This site was initially part of the Kānoa programme, but was removed from the Climate Resilience Programme at the request of the Riverlink Project Team due to consenting concerns for the RiverLink project. As a result, this site was placed into the RiverLink Alliance project.

38. The planting and revegetation guidelines for river edges is complete and is available on-line in the Greater Wellington documents library. The document is titled “Integrating native planting and flood protection: an operational guide for Greater Wellington”.
39. In implementing the Te Awa Kairangi – Hutt River Environmental Strategy Action Plan, connection improvements along the Hutt River Trail have taken place, with a new bridge over the Whakatikei River installed and the river trail extended to Totara Park (in conjunction with UHCC).
40. The document “Future of the Te Awa Kairangi/ Hutt River Corridor Environmental and Recreational Management Plan and Operations Manual” has been completed and is available on-line in the Greater Wellington documents library. It sets out the framework within which all future recreational management of the river corridor will be carried out and provides detail to guide development and maintenance activities, e.g., conventions for signage, furniture types to be used, bollards etc.



**Figure 4: Manor Park Pedestrian and Cyclist Trail Construction - In progress Mahi**



**Figure 5: Seton Nossiter Culvert Repair - In progress Mahi**

#### ***Pinehaven Floodplain Management Plan (2016)***

41. The Pinehaven Stream Flood Management Plan (PSFMP) 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). Wellington Water Limited has been appointed by UHCC to act as the agent to complete the physical work. Funding for the PSFMP has been established through a Memorandum of Understanding with a 50/50 allocation between Greater Wellington and UHCC being confirmed. Reporting on this project is provided by Wellington Water.
42. The objective of the planned Pinehaven Stormwater Improvements project is to improve flood level protection by increasing the capacity of the watercourse to achieve a 4 percent AEP flow capacity for the upgraded sections and to provide a 1 percent AEP level of protection for habitable floor levels.
43. The project is being delivered in three distinct sections:
  - a Upgrading culverts at Sunbrae Drive and Pinehaven Road (this is an Upper Hutt City Council roading renewal project)
  - b Enabling works – includes house removal and service relocation/upgrades
  - c Stream capacity and environmental improvement works – widening the stream, planting, bank stabilisation, retaining walls and earthworks (twelve stages).
44. The culvert upgrades and enabling works are complete. Funding for the full scope of works is now estimated by Wellington Water to cost \$32 million. The budget confirmed by Greater Wellington and UHCC for this project is \$19.25 million. There have been several rounds of value engineering undertaken to prioritise which works should be carried out within the remaining budget of approximately \$5.2 million from the agreed

funding. The scope of stream capacity and environmental improvement works has been reduced from twelve stages to two stages to fit within the remaining budget. This work will be primarily construction of new rock walls, widening the stream bed and replacement of a pedestrian bridge within Willow Park.

45. There is the possibility that some additional funding may be made available by UHCC and Greater Wellington. This has not been confirmed and project planning is proceeding on the basis that the budget will not increase.
46. Progress on the key deliverables for the Pinehaven Stream Floodplain Management Plan is listed in Table 4. Figure 6 to Figure 10 show works carried out.

**Table 1: Pinehaven FMP key deliverables**

| <b>Item</b>   | <b>Progress</b>   | <b>Forecast</b>             |
|---|---|-----------------------------|
| Upgrading culverts                                  | Culvert upgrades at Sunbrae Drive and Pinehaven Road were installed with practical completion of the project achieved in January 2022.                    | Completed                   |
| Enabling works                                      | Enabling works were completed alongside the culvert upgrades, with practical completion of the project achieved in January 2022.                          | Completed                   |
| Stream capacity and environmental improvement works | Consent was granted for the full scope of works.<br><br>Construction on the agreed reduced scope of work is expected to take place starting January 2023. | Progressing – reduced scope |



***Figure 6: Pinehaven Culvert during construction (photo credit: UHCC)***



***Figure 7 The Pinehaven Goose and some ducks enjoying the new Redi-Rock walls downstream of Pinehaven Culvert (photo credit: GHD)***



***Figure 8 Reinstatement planting at 48 Blue Mountains Rd where a house crossing the stream was removed***



**Figure 9 Redi-Rock walls and scour protection upstream of Sunbrae Culvert (photo credit: GHD)**



**Figure 10 Placement of stream bed material within Pinehaven Culvert using conveyors (photo credit: GHD)**

### ***Ōtaki Floodplain Management Plan (1998)***

47. 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.
48. 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, design work for public access from Te Roto Road to the Winstone Ōtaki quarry lake has continued.
49. Due to landowner requirements, the public access from Te Roto Road to the Winstone Ōtaki quarry lake area is likely to be initially constructed as a cycleway/walkway/bridleway access, which is used only by Greater Wellington vehicles in the first instance.
50. The design is being developed in two stages, with the first showing only a non-vehicular track (cycling, walking and bridleway). The design is now in the preliminary design stage. The preliminary design drawings will be used to refine the cost estimate, and in turn this will be used during funding discussions with external parties.
51. Ngā Hapū o Ōtaki (NHoŌ) and Greater Wellington have jointly drafted the scope for the development of the Winstone Ōtaki quarry lake management plan. Greater Wellington and NHoŌ made a commitment to progress this project as partners. The scope currently going through the process of being signed off by both Greater Wellington and NHoŌ.
52. A detailed options shortlisting process is being undertaken for the Waitohu stream This is being delivered by the Investigations team in partnership with Ngati Kapu.

### ***Operational matters – Ōtaki River***

53. The Ōtaki River annual maintenance programme was completed within the allocated scheme budgets. Work is now underway with the 2022-23 work programme, resourcing (both internal and external) is still challenging and will require careful management to ensure that levels of service are continued to be met.
54. Work to secure a new Ōtaki River management resource consent has been paused while we resolve how to re-engage with mana whenua.

### ***Investigations, Strategy and Planning – Ōtaki River***

55. The internal review and update of the Ōtaki FMP has been completed. External engagement with NHoŌ or the Friends of the Ōtaki River have not been progressed due to COVID concerns. Review and update of the environmental strategy, flood hazard model and the Waitohu flood risk management plan has progressed ahead of finalising the FMP review.

### ***Waikanae Floodplain Management Plan (1997)***

56. 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.

57. 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.
58. During 2021/22: 1250 new natives were planted; plantings from previous years were maintained (released from weeds, mulched, rabbit control carried out, and replacement plants planted where needed). Documentation of the Jim Cooke stopbank asset management information and associated land management information has been completed.
59. The sand quarry (approximately opposite Jim Cooke Park) land purchase negotiations have continued. The erosion in this area continues to be monitored closely and further track work has been carried out following high river flows in June.

*Operational matters – Waikanae River*

60. The Waikanae River annual maintenance programme was completed within the allocated scheme budgets. Work is now underway with the 2022-23 work programme, resourcing (both internal and external) is still challenging and will require careful management to ensure that levels of service are continued to be met.
61. Work to secure a new Waikanae River management resource consent has been paused. For the Waikanae River, river management issues are complex and will take time to address. Key areas to resolve are how we re-engage with mana whenua and channel aggradation, which requires gravel extraction for flood capacity and alignment management.

*Investigations, Strategy and Planning – Waikanae River*

62. The channel capacity investigation has been completed for the Waikanae River which has indicated that the gravel build-up in the estuary area is causing minimal flood risk. However, wider issues in the catchment have been identified in the climate change scenario model runs that require further investigation.

***Te Kāuru Upper Ruamāhanga Floodplain Management Plan (2019)***

63. Te Kāuru Upper Ruamāhanga Floodplain Management Plan Implementation (Te Kāuru) was given a financial boost with the Government's COVID-19 recovery projects. Ministry for the Environment Major Rivers – Riparian Management project funding and Kānoa funding for the River Road, Masterton project are enabling implementation of two aspects of Te Kāuru. Further details of the progress of these two projects are given below.
64. The Upper Ruamāhanga River Management Advisory Committee (URRMAC) had meetings in December 2021, March and June 2022. The meetings focused on the upcoming Revenue and Financing Policy review and the proposed funding change for Te Kāuru, allowing the river more room, and updates on the progress of both Government funded projects: MfE Major Rivers and Kānoa Climate Resilience River Road, Masterton. The committee also elected a Waipoua urban member to fill the membership vacancy.
65. Implementation of Te Kāuru has not progressed past the establishment of URRMAC due to the Revenue and Financing Policy (RFP) review not being completed until year end. Work on the proposed Te Kāuru catchment targeted rate was incorporated into the RFP

review. The full process took approximately 10 months with the outcome being a successful change from the existing river scheme target rates to the Te Kāuru catchment rate. The rate was set to be initiated on 1 July 2023.

66. Governance changes, as per Te Kāuru, will be worked through during the next financial year. These changes will align the governance structure with the new rating structure.

***Waiohine River Plan (2022)***

67. The Waiohine River Plan was adopted by Council on 7 April 2022. Since the adoption of the River Plan the new rate for the proposed stopbanks at North and Kuratawhiti Streets was included in the Revenue and Financing Policy (RFP) review undertaken during the 2022/23 Annual Plan process. The new rate was successfully added to the RFP and the rate was set on 1 July 2023.

68. The new rate will now allow the implementation work to commence for the two stopbanks.

***Ministry for the Environment – Jobs for Nature funding***

69. 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.

70. 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 is 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 35 people will be employed over the five-year project period.

71. The project covers the whole of the Ruamāhanga with current sites in Masterton and by the Barrage Gates.

72. Significant progress has been made this financial year with the following being completed:

- a 38,000 plants and associated sundries were secured for Year 2. Year 3 plant order has been placed with a local Wairarapa nursery.
- b Planting activities are currently running behind schedule due to continual wet weather, which has created site access issues. However, planting will be completed before the winter planting season finishes.
- 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 Year 4. Internal cross department procurement discussions are also occurring to ensure plant supply for all GWRC planting projects.
- e Year 3 Pest plant control activities will start in the coming months.
- f The full budget for Year 2 was spent.

- g Planning with contractors for site preparation and pest plant/animal control for winter 2023 are almost complete. This year the equivalent of 6.5 people were employed full-time.



**Figure 11 South Road, Masterton (2.3ha, 10,417 plants). Drone aerial taken just after clearance and before planting activities started August 2021**



**Figure 12 Drone footage after clearance works**



**Figure 13 Photo taken October 2021**



**Figure 14 Photo taken July 2022, similar angle to photo above**

*Kānoa-funded River Road, Masterton project*

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

- a *Site 12a River Road* (5 groynes) – The design for this work has been approved. The consent was submitted in February 2022 and once approved, construction will commence. The full design for River Road encompasses the three-stage project of 12a – 5 groynes, 12b rock revetment along the River Road residential area, and 12c - a further 11 groynes. Kānoa funding contributes to the first stage, which will include the construction of 5 groynes protecting the northern edge of the Masterton District Council Landfill from erosion. The remainder of the design will be implemented as funding permits, further protecting the local environment and residents.
- b *River Road* – A co-design agreement with iwi partners has been agreed for 12b and 12c stages of this project 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.

*Consents – Upper Ruamāhanga*

74. 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. A significant resource consent was lodged several years ago to allow the continued operation and maintenance of these schemes and the application is now being updated, with the intention that it is notified by mid-2023.

*Operational matters – Upper Ruamāhanga*

75. Responding to frequent flood events has been the focus in 21/22, which have caused instability in the Upper Ruamāhanga schemes. Catchments are saturated and any rainfall is having an impact above what would be expected. Significant erosion requiring urgent remedial works have occurred on the Waipoua River. There are also ongoing erosion issues on the Ruamahanga River at Rathkeale College and the Gladstone Sports

Complex, and on the Mangaterere River adjacent to the Carterton District Council Wastewater Treatment Plant.

76. Despite this, maintenance activities have focused on the removal of vegetation from stopbanks, channel works, willow planting and layering, and mulching. In the eastern schemes, the resource challenged environment post COVID has affected the willow regrowth spraying programme.
77. Major erosion through the urban reach of the Waipoua River requires extensive work. Funding in the urban reach is split equally between Masterton District Council (MDC) and Greater Wellington and discussions with MDC on the scale and cost of repair work are underway. Some willow tree cabling work and willow layering have been undertaken to provide a temporary repair to the site until a permanent repair has been agreed. The temporary repair appears to have been successful through the last high river flow events.

### ***Investigations, Strategy and Planning – Upper Ruamāhanga***

#### *Waipoua Urban Catchment Plan*

78. Over the last quarter we have continued to progress the hydrological assessment with the community group to gain agreement on the flood hazard modelling. Some challenges with the community group remain, but we are on track to deliver updated flood hazard modelling in late 2022.

#### *Waiohine River Plan*

79. The Waiohine River Plan has been adopted by Council after a successful submissions and hearings process in late 2021. The plan is now being handed over to Implementation and Operations for delivery.

#### *Mangatāre River Plan*

80. Over the last quarter the flood hazard model has been peer reviewed and we are now testing sensitivities ahead of producing draft flood hazard maps for the District Plan. These are due to be completed before the end of 2022.

#### *Upper Ruamāhanga Rural Modelling*

81. Alongside the Waipoua modelling we have been progressing the update of the Upper Ruamāhanga Rural Modelling this is being completed by Greater Wellington's in-house modellers and will be completed by the end of 2022.

### ***Lower Wairarapa Valley Development Scheme***

#### *Consents – Lower Wairarapa Valley*

82. The Geoffrey Blundell Barrage Gates (Barrage Gates) resource consent was granted in December 2021, and an Operations and Environmental Monitoring Plan (OEMP) submitted to and certified by Environmental Regulation in April 2022. The OEMP specifically allows for the Barrage Gates to be operated for research purposes and this is critical to support the investigations required for the development of the Lower Valley Floodplain Management Plan. There are several other actions that will need to be coordinated with Mana Whenua and others to meet the consent conditions and discussions are in the initial stages.

*Operational matters – Lower Wairarapa Valley*

83. Maintenance activities have focused on the removal of vegetation from stopbanks, culvert and floodgate cleaning and maintenance, channel works, willow planting and layering, rock and boulder edge protection and maintenance of the Barrage Gates.
84. On the 13 and 14 of February 2022 downgraded cyclone Dovi made its way over the lower North Island and caused moderate flooding in the Wairarapa, with minor to moderate damage to the scheme as a result. This event was classified as a 1 in 7-year event in the Lower Wairarapa Valley and the largest since 2006.
85. Planned erosion protection work at Awaroa Sill was not completed due to insufficient rock supply. The opposite beach was lowered to increase channel capacity in this location and reduce the risk of further erosion. Rock is programmed for delivery in December 2022 and this work is now planned for completion over summer.
86. The Pukio East Stopbank realignment is in its final stage, with the main activities remaining being removal of material from the old stopbank, planting and general site tidying. The works are planned to commence this summer once the material and access have dried out sufficiently.
87. Whakawhiriwhiri Stream improvements, including the Hikunui Road Culvert upgrade, have not progressed due to ongoing land access agreement issues. The Barton property has now changed owners and an initial site meeting with the new owners has been positive, however they do have concerns about the work progressing as proposed as they do not want the water level on the lagoon on their property lowered.

***Wairarapa Aggregate Demand***

88. Greater Wellington continues to lead the work with the aggregates industry, principally focussing on long term solutions to address increased demand for materials (sand, gravels, rocks etc) together with the lack of supply that Wairarapa's rivers can sustainably provide. A meeting was held on 4 July with industry and the Wairarapa district councils to provide an update and gather information.
89. In parallel, given the relationship between many quarrying operations and neighbours, we've also been researching potential zoning and consenting issues as adopted by other councils around the country, including liaising with the team that's reviewing the Wairarapa Combined District Plan.
90. Contact is also being made with GNS's geologists regarding the nature and location of alluvial and 'blue rock' resources in the Wairarapa. Depending on existing information sources, we may pursue a high-level resource inventory i.e., desk top study – this depends on costs and the nature of the investigations that would need to be undertaken.
91. A study of this sort would be consistent with Method 52 in the Regional Policy Statement which states:

*“Identify the region’s significant mineral resources. This is to be implemented by Wellington Regional Council and city and district councils, with GWRC being the lead authority.”*

92. Our discussions with GNS will likely determine the approach to follow from this point as understanding what's potentially available and where, are key for the next steps.

### ***Regional Initiatives***

#### *Flood Monitoring Network Improvements Programme*

93. 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.
94. 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.
95. The first sites have been progressed and now scoping is progressing for year 2.

#### *Flood Hazard Planning Guidance Document*

96. Flood Protection has released the draft planning guidance document to the Territorial Local Authorities and is continuing to support the review of intensification plans. We are seeking to take a collaborative risk-based approach to reduce the risk of inappropriate development occurring in flood prone areas.

#### *Climate Change*

97. Flood Protection has been running regional workshops with planners and engineers across the region to try to gain a common approach to climate change allowances in all forms of flood modelling. In May we hosted a regional workshop of over 40 specialists to discuss this topic.

#### *Regional Flood Exposure Assessment*

98. We have been working with a consultant to deliver a regional flood exposure assessment. This assessment aims to provide a better understanding of flood exposure across the Greater Wellington Region in the present hydrological conditions and how this changes in the future due to climate change and projected growth.
99. The regional model and associated assessment has now been delivered. This will be used to support the Wellington Regional Climate Change Risk Assessment.
100. The headline findings from this study are:
- a 200,000 people living in approximately 31% of our region are at risk of flooding now.
  - b 230,000 people living in approximately 36% of our region will be at risk of flooding in 2110.

- c Further growth could increase this to 260,000 people at risk of flooding.

**Summary of progress**

*Implementation progress*

101. In the 2021-31 Long Term Plan, the resilient future community outcome for flood protection has the strategic priority of ‘communities safeguarded from major flooding’. The level of service is to ‘provide the standard of flood protection agreed with communities’, with the performance measure ‘major flood protection and control works are maintained, repaired and renewed to the key standards defined in the relevant documents’. Implementing the FMPs helps achieve this strategic priority.
102. RiverLink also has a performance measure of ‘Implement RiverLink in accordance with the approved preliminary design’, with a target for 2021/22 of ‘statutory approvals issued’.
103. 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.
104. Pinehaven Stream % complete is based on expenditure against the estimated cost for the original scope of 12 stages of work (which is \$32.2 million).
105. Wellington Water estimate that with the reduced scope of work to fit the currently available budget we will achieve 60% of the total FMP structural improvements by June 2023 based on total expenditure of \$19.25 million.

**Table 2: Implementation progress (structural measures)**

| <b>FMP or Scheme</b> | <b>Actual % Complete to June 2021</b> | <b>Actual % Complete to June 2022</b> |
|----------------------|---------------------------------------|---------------------------------------|
| Hutt                 | 41%                                   | 41%                                   |
| Pinehaven            | 38%                                   | 47%                                   |
| Waikanae             | 63%                                   | 63%                                   |
| Ōtaki                | 47%                                   | 47%                                   |
| LWVDS                | 95%                                   | 102%                                  |
| Te Kāuru FMP         | 0%                                    | 0.5%                                  |

106. Table 2 outlines the financial summary of the implementation of the FMPs.

**Table 3: Financial summary**

| River                         | Original FMP<br>Total 40 year<br>estimate<br>(\$M) -<br>Adjusted for<br>Inflation | Expenditure<br>to June<br>2022(\$M) <sup>2</sup> | Total<br>Budgeted to<br>2031 (\$M) <sup>2</sup> | Total<br>expenditure<br>forecast to<br>2031 (\$M) <sup>2</sup> |
|-------------------------------|---|--|---|--|
| Hutt                          | 133.5   | 143.1  | 249.9   | 393.0  |
| Ōtaki                         | 20.6  | 8.8  | 16.3  | 25.1   |
| Waikanae                      | 15.1  | 8.3  | 6.9   | 15.2   |
| Pinehaven                     | 6.0   | 6.6  | 5.0   | 11.6   |
| <b>Total western<br/>FMPS</b> | <b>175.2</b>  | <b>166.8</b>                                     | <b>278.1</b>                                    | <b>444.9</b>   |
| LWVDS                         | 12.3  | 8.8  | 12.8  | 21.6   |
| Waiohine                      |   | 1.1  | 2.2   | 3.3  |
| <b>Total Wairarapa</b>        | <b>12.3</b>   | <b>9.9</b>                                       | <b>15.0</b>                                     | <b>24.9</b>  |
| <b>Total</b>                  | <b>187.5</b>  | <b>176.7</b>                                     | <b>293.1</b>                                    | <b>469.8</b>   |

107. LWVDS Programme was to be closed out at the end of 22/23 financial year, however works are still to be completed on the Pukio East stopbank and Whakawhiriwhiri Stream projects.
108. Hutt 1999 (estimate \$78 million), Ōtaki 1998 (estimate \$12.07 million), Waikanae 1997 (estimate \$8.69 million) and LWVDS 2007(estimate \$8.8 million), Pinehaven 2014 (estimate \$5 million).
109. 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**

110. For this reporting period, projects are within the current flood protection budgets.
111. MfE and Kānoa 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.

### **Ngā Take e hāngai ana te iwi Māori Implications for Māori**

112. The Department is continuing to explore opportunities for Māori through the consenting space as well as through the Riverlink and Climate Resilience projects.
113. Recently granted river management consents for Te Awa Kairangi/Hutt River and the Wainuiomata River represent a step change in how Greater Wellington will undertake river management activities in the future. These consents enable co-design and

development of key plans and strategies that set the parameters by which river management activities are undertaken in these rivers.

114. Ngāti Toa Rangitira and Taranaki Whānui ki Te Upoko o Te Ika are members of the RiverLink Project Management Board.
115. Cultural liaison or co-design contracts have been signed by Te Rūnanga o Toa Rangitira Inc., Rangitāne ō Wairarapa Inc., Ngati Kahungunu ki Wairarapa Charitable Trust and Port Nicholson Block Settlement Trust for enhanced involvement and collaboration on programme work for the Climate Resilience Projects.

### **Te huritao ki te huringa o te āhuarangi Consideration of climate change**

116. 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.
117. 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.
118. 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.
119. 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 tCO<sub>2</sub>e).
120. 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 was looked into as part of procurement for projects, however scarcity of rock supply and lack of suitable material made any emissions avoidance extremely difficult.
121. Targeted planting is being carried out to mitigate CO<sub>2</sub> emissions for the Kānoa projects.
122. 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 1 metre for District Planning and 1.3 metres for infrastructure planning.

## **Ngā tūāoma e whai ake nei**

### **Next steps**

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

123. Progress RiverLink property purchases and increase efforts with remaining owners; appoint a contractor and commence construction; continue community connection and project awareness.
124. Maintain planting and monitoring of Belmont wetland.
125. Gauging and monitoring improvements
126. Complete Kānoa-funded work on Hutt River erosion sites and environmental projects.

#### ***Pinehaven Floodplain Management Plan (2016)***

127. Progress the stream capacity and environmental improvement works (stages 9 and 10).

#### ***Ōtaki Floodplain Management Plan (1998)***

128. 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 Ōtaki FMP and Environmental strategy review will continue; and we will continue to work with Iwi on the Winstone Ōtaki quarry lake management plan. With the possible exception of an additional toilet (that the Friends of the Ōtaki River are promoting), no new significant items are identified to start.
129. The design of the Te Roto Link (public vehicle and shared path assess from Te Roto Road to Greater Wellington owned land around the Winstone Ōtaki 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.
130. Chrystals 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.
131. Work to progress the new Ōtaki River management resource consent will continue.

#### ***Waikanae Floodplain Management Plan (1997)***

132. 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.
133. Work to progress the new Waikanae River management resource consent will continue.

#### ***Te Kāuru Floodplain Management Plan (2019)***

134. As a result of the rate change success, we will be able to begin the implementation of Te Kāuru.
135. The governance change outlined in Te Kāuru will be undertaken during this financial year. It replaces the existing River Scheme committees with River Management Groups

that enable not only riverside landowner membership but also rate payers within the Te Kāuru catchment.

136. The River Road, Masterton project funded by Kānoa Climate Resilience will continue with construction of Stage One being completed by December 2022. Stages Two and Three will be undertaken through the implementation of Te Kāuru. Co-design with Kahungunu ki Wairarapa and Rangitane O Wairarapa for Stage Two is beginning, with a hope to have a finalised design by December 2022.
137. Another area of work that will be undertaken is the development of the full Implementation Management Plan. This work will also be undertaken with URRMAC.
138. Continue to develop the concept of ‘allowing the river more room’ within the bounds of the new design lines 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.
139. The MfE Jobs for Nature project will continue to identify land for planting, plants, contractors for clearing, planting and maintaining the sites.

#### ***Waiohine River Plan (2022)***

140. Work on the two stopbanks proposed within the River Plan will commence when resources allow. At this stage we are unable to advise if this work will occur this financial year.

#### **Ngā āpitihanga Attachments**

| <b>Number</b> | <b>Title</b>  |
|---------------|---|
| 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             | Te Kāuru Floodplain Management Plan summary progress table                        |
| 6             | Floodplain Management Planning Implementation 2021/22 presentation                |

#### **Ngā kaiwaitohu Signatories**

|           |  |
|-----------|--|
| Writers   | Sharyn Westlake – Team Leader, Floodplain Management Plan Implementation<br>Jacky Cox – Team Leader, Operations Delivery and Planning<br>Andy Brown, Team Leader Investigations, Strategy and Planning |
| Approvers | Graeme Campbell – Manager, Flood Protection<br>Wayne O’Donnell – General Manager, Catchment Management   |

|   |
|---|
| <p><b>He whakarāpopoto i ngā huritaonga</b><br/> <b>Summary of considerations</b></p>   |
| <p><b><i>Fit with Council’s roles or Committee’s terms of reference</i></b></p> <p>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.</p>   |
| <p><b><i>Contribution to Annual Plan / Long term Plan / Other key strategies and policies</i></b></p> <p>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.</p> |
| <p><b><i>Internal consultation</i></b></p> <p>Specific projects consult with groups and departments across Greater Wellington where relevant to that project.</p>   |
| <p><b><i>Risks and impacts: legal / health and safety etc.</i></b></p> <p>The purpose of implementation floodplain management plans is to reduce the risk to communities and improve the region’s resilience.</p>   |

**Environment Committee**  
**18 August 2022**  
**Report 22.332**



**For Information**

## **FLY-TIPPING ON TE AWA KAIRANGI/HUTT RIVER – QUANTUM AND CAUSES**

### **Te take mō te pūrongo**

#### **Purpose**

1. To inform the Environment Committee (the Committee) of the nature and increasing issue of 'fly-tipping' waste being dumped on Te Awa Kairangi/Hutt River.

### **Te horopaki**

#### **Context**

2. Te Awa Kairangi/Hutt River runs through New Zealand's most densely populated urban floodplain and attracts 1.5 million recreational users a year.
3. Fly-tipping is historically on-going along the driveable margins, but the problem is escalating with commercial dumping now also becoming common place. In more recent times there have also been numerous incidents of hazardous asbestos dumping which has required specialist removal.
4. The dangerous anti-social vehicle activity has also increased considerably, due in part to the proximity of the urban population and the ease of access for fly-tipping.
5. The issue of fly-tipping is highly significant for the region highlighting some obvious socio-environmental issues of financial hardship and disconnect from the natural environment.

### **Te tātaritanga**

#### **Analysis**

6. The River Ranger completes daily runs along and around Te Awa Kairangi/Hutt River collecting and disposing of all waste found including planning, logistics and inter-agency work (Hutt City and Upper Hutt City Councils, and the Police).
7. Over the last 12 months the River Ranger has disposed of tyres, cars, building materials, glass, plastic foam, household rubbish and general rubbish such as broken microwaves, stereos, toilets, garden furniture along with a variety of other commercial and domestic waste items. [Attachment 1](#) to this report shows several comprehensive photos of what can be disposed of on any given week.
8. The River Ranger is made aware of fly-tipping incidents approximately three to four times per week with an average of two to three hours a day spent on patrolling, collecting, logistics and disposing of rubbish in as safe a manner as possible.

9. This work is part of business-as-usual routine but not separated out as a specific cost but would equate to 1 FTE working day per week.

### **Ngā hua ahumoni Financial implications**

10. A recent official information request (LGOIMA request 2022-063) received from a Stuff reporter has again highlighted the issue of the costs involved in the disposal of waste which does not take into consideration the multiple staff hours, machinery/plant (trucks and tractors), etc.
11. From July 2021 to July 2022 the cost of disposal at the Silverstream landfill tip fees (Flood Protection department) was \$113,826. The cost for the Waste Management bin at the Mabey Road Depot for the year was \$3,541.08; this is the receptacle for much of the waste we find and consolidate.

### **Ngā Take e hāngai ana te iwi Māori Implications for Māori**

12. Negative impact for mana whenua Māori to protect and enhance our natural assets as well as adverse effects on cultural health, wellbeing and aspirations for iwi.
13. Struggling to meet our obligations to mana whenua under the Resource Management Act 1991 and to Māori under the Local Government Act 2002 and other legislation.

### **Ngā tūāoma e whai ake nei Next steps and actions proposed**

14. Trying to reduce fly tipping will always be an ongoing issue with a need to be adaptive to the problem and trying a range of different approaches. Below are several additional steps we propose to take to reduce the scale of the problem.
15. Officers will:
  - a Work with Territorial Authorities (TA) across the region, who use different approaches to this issue, and with Environmental Regulation about how we could use our own existing powers more effectively. There may be a need for the Committee to consider an increase in the use of our statutory powers in our compliance functions for enforcement. For example, whether dumping of rubbish is considered polluting and the ability to use those powers or whether alternative definitions and powers are required.
  - b Prepare and distribute further messaging through our existing channels to ensure the profile of the issue is maintained.
  - c Consider links into the pollution hotline to enable the public to report dumping and then link back to using ours or the TAs statutory powers to follow up with the offenders.
  - d Install fixed surveillance cameras at known hotspots in the region. The use of trail cameras in emerging problem areas.

- e Follow up with education in and around the local area as well as putting a spotlight on this issue through public messaging and awareness through the media which may help deter some offenders. This education could be through events, visits to local community groups and schools.
  - f Restore berm areas to a native ecological corridor encouraging harmonious recreation enjoyment through good housekeeping.
  - g Seek restorative justice with known offenders. This is an informal and mediated session to help give us a voice and help the offender understand the consequences of their actions. Sometimes the offenders will agree to do something that will help to put the matter right.
16. Prioritisation, and implementation, of these methods is dependant on available resources and follow through with them along with appropriate funding being met. Many of the current options absorb considerable officer time and hence the decision to simply remove the offending material is often taken in the first instance.

**Ngā āpitihanga  
Attachment**

| Number | Title                               |
|--------|-------------------------------------|
| 1      | Attachment 1: Photos of fly tipping |

**Ngā kaiwaitohu  
Signatories**

|           |   |
|-----------|---|
| Writers   | Joby Mills – Operations & Planning, Hutt River Ranger, Flood Protection<br>Jeff Evans – Section Leader Operations Delivery, Flood Protection                      |
| Approvers | Jacky Cox – Team Leader Operations Planning and Delivery<br>Graeme Campbell – Manager Flood Protection<br>Wayne O’Donnell – General Manager, Catchment Management |

| <b>He whakarāpopoto i ngā huritaonga<br/>Summary of considerations</b>   |
|--|
| <p><b><i>Fit with Council's roles or with Committee's terms of reference</i></b></p> <p>The context of this report aligns with the Environment Committee's purpose to oversee the development of:</p> <ul style="list-style-type: none"><li>- Environmental strategies, policies, plans, programmes, and initiatives to address environmental issues in the region.</li><li>- Regulatory systems, processes, and tools to meet Council's related legislative responsibilities.</li></ul> |
| <p><b><i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i></b></p> <p>Removal of waste material, and other initiatives, are funded through existing operational maintenance budgets.</p>  |
| <p><b><i>Internal consultation</i></b></p> <p>There was no internal consultation in preparing this report.</p>   |
| <p><b><i>Risks and impacts - legal / health and safety etc.</i></b></p> <p>The removal of waste material from the river environments of the region provides a positive environmental benefit and reduce the risk of harm to river users.</p>   |

# Hutt River Trail

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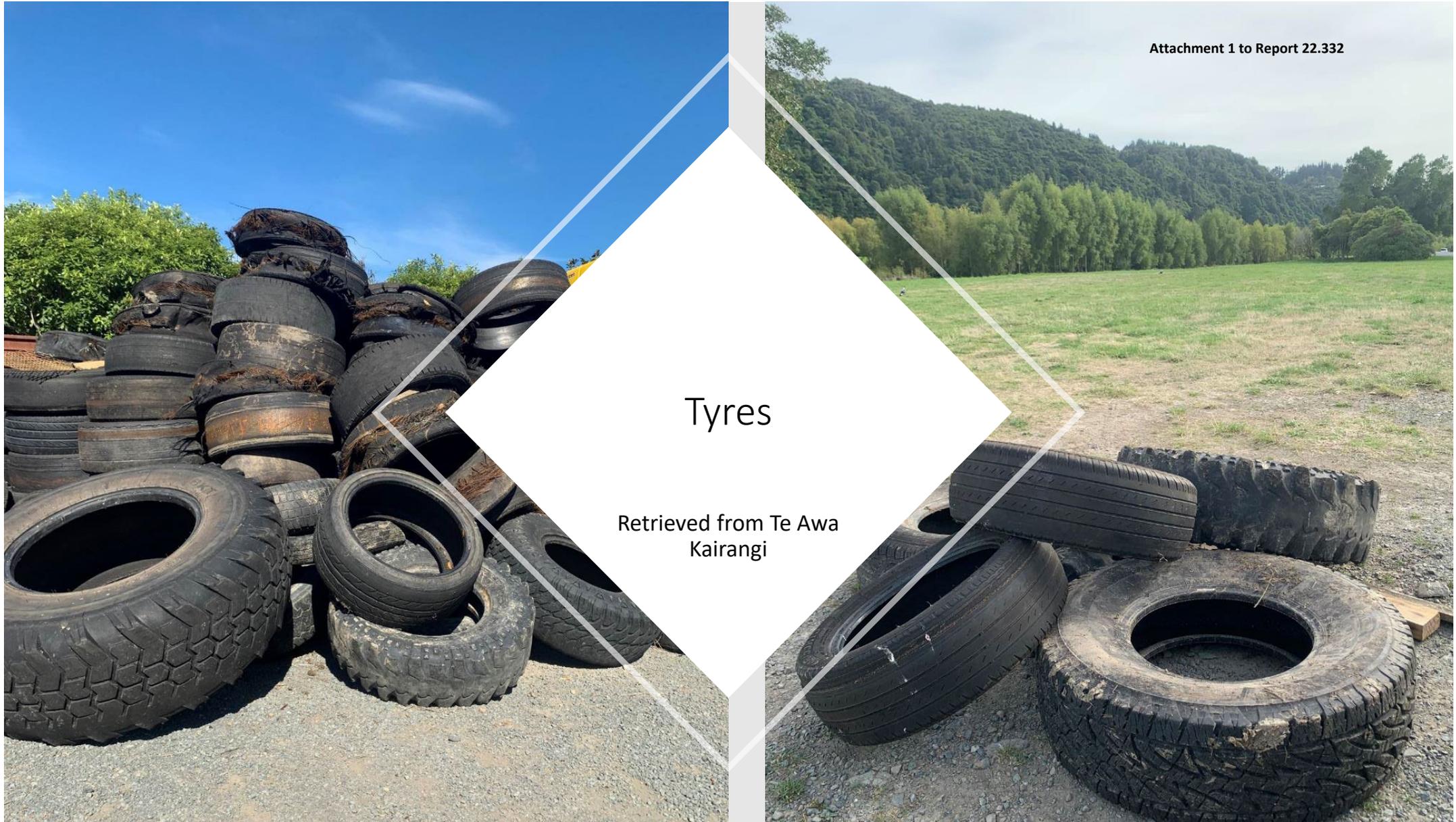
# Hulls Creek Silverstream

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Taita berms





# Broken Concrete Dumped

Taita





Environment Committee  
18 August 2022  
Report 22.366



For Information

## CROWN FUNDED PROJECTS UPDATE – AUGUST 2022

### Te take mō te pūrongo

#### Purpose

1. To update the Environment Committee (the Committee) on the Crown funded projects and programmes.

### 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 projects and programmes – progress update presentation August 2022.

### 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 18 August 2022.

### Ngā āpitihanga

#### Attachment

| Number | Title  |
|--------|--|
| 1      | Crown funded projects and programmes – progress update August 2022 |

### Ngā kaiwaitohu

#### Signatory

|        |  |
|--------|--|
| Writer | Wayne O'Donnell – General Manager Catchment Management |
|--------|--|

| <b>He whakarāpopoto i ngā huritaonga<br/>Summary of considerations</b>  |
|---|
| <p><b><i>Fit with Council's roles or with Committee's terms of reference</i></b></p> <p>It is appropriate for the Committee to be informed of the progress of the Crown funded COVID-19 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.</p> |
| <p><b><i>Contribution to Annual Plan / Long Term Plan / Other key strategies and policies</i></b></p> <p>The update contributes to the delivery of the Wairarapa Moana Wetlands Project, Ruamāhanga River flood protection strategies, Predator Free Wellington, and 1 Billion Trees Partnership Project.</p>   |
| <p><b><i>Internal consultation</i></b></p> <p>All Crown Funded projects are reported to the Greater Wellington Crown Funded Project Board, comprising representatives from Catchment, Environment and Corporate Services.</p>   |
| <p><b><i>Risks and impacts - legal / health and safety etc.</i></b></p> <p>There are no known risks or impacts.</p>   |