

If calling, please ask for Democratic Services

Hutt Valley Flood Management Subcommittee

Tuesday 3 August 2021, 4.30pm

Council Chamber, Upper Hutt City Council, 838-842 Fergusson Drive, Upper Hutt

Members

Greater Wellington Regional Council

Cr Lamason (Chair)

Cr van Lier (Deputy Chair)

Cr Connelly

Cr Lee

Hutt City Council

Deputy Mayor Lewis

Cr Edwards

Upper Hutt City Council

Mayor Guppy

Cr Wheeler

Hutt Valley Flood Management Subcommittee

Tuesday 3 August 2021, 4.30pm

Council Chamber, Upper Hutt City Council, 838-842 Fergusson Drive, Upper Hutt

Public Business

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Please note these minutes remain unconfirmed until the Hutt Valley Flood Management Subcommittee meeting on 3 August 2021.

Report 21.293

Public minutes of the Hutt Valley Flood Management Subcommittee meeting on Tuesday 22 June 2021

Council Chamber, Hutt City Council
30 Laings Road, Lower Hutt, at 4.35pm.

Members Present

Greater Wellington Regional Council

Councillor Lamason (Chair)
Councillor van Lier (Deputy Chair)
Councillor Connelly
Councillor Lee

Hutt City Council

Deputy Mayor Lewis

Upper Hutt City Council

Mayor Guppy
Councillor Wheeler

Public Business

1 Apologies

Moved: Cr van Lier / Deputy Mayor Lewis

That the Subcommittee accepts the apology for absence from Councillor Edwards.

The motion was **carried**.

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 Hutt Valley Flood Management Subcommittee meeting on 30 March 2021 - Report 21.139

Moved: Cr Wheeler / Mayor Guppy

That the Subcommittee confirms the Public minutes of the Hutt Valley Flood Management Subcommittee meeting on 30 March 2021 – Report 21.139.

The motion was **carried**.

5 Update on progress of action items from previous Hutt Valley Flood Management Subcommittee meetings – June 2021– Report 21.281 [For Information]

6 RiverLink Project Update 2021 – Report 21.247 [For Information]

Tracy Berghan, Owner Integration Lead RiverLink; Tom Biggin, RiverLink Lead at Hutt City Council, Martin White, former Project Director, and David Allen, RiverLink Legal Counsel, Buddle Findlay, spoke to the report.

7 Hydraulic modelling in the Hutt Catchments update – Report 21.236 [For Information]

Andy Brown, Team Leader, Investigations, Strategy and Planning; Francie Morrow, Project Manager, Floodplain Management Plans; and Susan Borrer, Engineer, Modelling, spoke to the report. A presentation was tabled.

8 Hutt Valley Flood Management Projects Report – June 2021 – Report 21.241 [For Information]

Sharyn Westlake, Team Leader, Floodplain Management Plan Implementation, spoke to the report.

The public meeting closed at 5.30pm

Councillor P Lamason

Chair

Date:

For Decision

ASSET MANAGEMENT REPORT FOR TE AWA KAIRANGI/HUTT, WAINUIOMATA AND WAIWHETU FLOODPLAINS 2020/21

Te take mō te pūrongo

Purpose

1. To advise the Hutt Valley Flood Management Subcommittee (the Subcommittee) 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

Recommendation

2. That the Subcommittee **recommends** to the Environment Committee that it is satisfied that flood protection and erosion control infrastructure assets have been satisfactorily assessed and that identified issues are being addressed through maintenance and improvement work programmes.

Te tāhū kōrero

Background

3. The Flood Protection department (the Department) is responsible for flood protection and erosion control infrastructure assets, and land and property located on 15 river schemes across the Wellington Region. These assets have a total combined value of \$428 million¹ and provide flood and erosion protection to the communities, businesses and infrastructure located on these floodplains.
4. 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.
5. The Environment Committee has overall responsibility to monitor the maintenance and improvement of these assets on behalf of Council. The Environment Committee relies on feedback from the various subcommittees, scheme advisory committees and friends' groups to confirm infrastructure assets are being satisfactorily maintained to the agreed service level.

¹ As at 30 June 2020

Te tātaritanga Analysis

Highlights and future challenges

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

Asset condition and maintenance

9. 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.
10. Monitoring asset condition enables us to predict and plan maintenance, forecast renewal requirements and develop effective, proactive work programmes. This is essential to managing flood risk because it influences the likelihood of asset failure, and, therefore, the performance of the assets to ensure they achieve required service levels.
11. Infrastructure assets on Te Awa Kairangi/Hutt River, the Wainuiomata River, and Waiwhetu Stream are being well maintained with 94 percent of assets rated in Very Good (1) to Moderate (3) condition. This has remained consistent over the last three years as shown in **Table 1** below. A detailed summary of asset condition is included in **Attachment 1** – Detailed breakdown of condition by asset type.

Year	2021		2020		2019	
Asset Condition Rating Scores	Ratio	Count	Ratio	Count	Ratio	Count
1 - V. Good	94%	516	92%	487	93%	469
2 - Good		841		1016		1214
3 - Moderate		375		405		254
4 - Poor	6%	76	8%	130	7%	121

Year	2021		2020		2019	
5 - V. Poor		26		44		32
Totals	100%	1834	100%	2082	100%	2090

Table 1: Summary of asset condition

12. Tree removal from stopbanks has been a priority for the Operations team and this will continue. Another focus has been on repairing rocklines along the length of Te Awa Kairangi / Hutt River; these have been 'topped up' with rock. This is necessary as scouring at the base of the rockline causes the lining to slump and for holes to form. The addition of rock ensures that the integrity of the rockline is maintained.

Asset performance, criticality, and risk

13. The Department uses a comprehensive risk-based framework developed at a national level to produce a risk profile for each river.
14. 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. The consequence of failure relates to risk posed to both the community and environment from failure of a design flood event. Once a probability and a consequence score have been determined for each reach, a risk level is assigned at this level from 'Very Low' to 'Very High'.
15. 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 this confidence.
16. 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 individual assets can.
17. The risk profile produced for each river identifies critical assets systems or reaches, and critical assets within those systems are defined as those which have a high consequence of failure.
18. Generally, most of the infrastructure assets on the Te Awa Kairangi / Hutt River, the Wainuiomata River, and Waiwhetu Stream are assessed as 'Very Low' to 'Medium' risk and this continues the trend from the previous years.
19. There are, however, a small number of sections of Te Awa Kairangi/Hutt River and Wainuiomata River 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** - Te Awa Kairangi / Hutt River and Wainuiomata River risk assessment maps 2021 identifies these areas.

Management response

20. All 'High' or 'Very High' risks shown in **Attachment 2** are known to officers and have been identified for treatment either through an existing Floodplain Management Plan (FMP), a technical investigation or operational work programme. Existing and proposed FMP improvements works have been budgeted and prioritised. These risk areas are discussed below, moving from downstream to upstream of Te Awakairangi / Hutt River and the Wainuiomata River.
21. 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.
22. 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.
23. 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.
24. Along Harcourt Werry and Taita Drives, and River Road there are sections of berm that are actively eroding or edge protection assets that are in poor condition putting these sections at either 'High' or 'Very High' risk. As the consequence of a stopbank failure is high or very high in these sections, the risk reflects this. These sections will be remedied through the climate resilience programme due for completion by June 2022.
25. The River Road stopbank above Moonshine Bridge has a capacity issue and average intrinsic strength; it is predicted to overtop in the 2,800 cumec event and is shown as 'Very High' risk. Technical investigations into the capacity and strength of this section of stopbank are programmed for completion during the 2021/22 financial year. The HRFMP signals that the existing stopbank upstream of the Moonshine Bridge will be raised and strengthened but are not currently budgeted; this will be reviewed following the technical investigations.
26. Sections of the urban reach adjacent to the Wainuiomata River are 'High' risk and are either predicted to over top in the 1 percent Annual Exceedance Probability (AEP) or have edge protection assets that are in poor condition. Technical investigations into the capacity, are programmed for the 2021/22 financial year and improvements to the edge protection assets incorporated into operational work programmes.

Ngā hua ahumoni

Financial implications

27. The proposed decision has no financial implications.

Te huritao ki te huringa o te āhuarangi

Consideration of climate change

28. 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.
29. 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.
30. Following the Ministry for the Environment guidance recently, the Department's current climate change policy is being updated, and this will be incorporated into future technical investigations and asset design.

Ngā tikanga whakatau

Decision-making process

31. 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

32. 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

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

Ngā āpitihanga

Attachments

Number	Title
1	Detailed summary of asset condition
2	Te Awa Kairangi / Hutt River and Wainuiomata River risk assessment maps 2021

Ngā kaiwaitohu
Signatories

Writer	Lucy Ashford – Project Engineer, Operations Planning Jacky Cox – Section Leader, Operations Planning
Approvers	Colin Munn – Team Leader, Operations Planning and Delivery Graeme Campbell – Manager, Flood Protection Wayne O’Donnell – Group Manager, Catchment Management

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

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

The Subcommittee provides oversight of the development, implementation, and review of the Floodplain Management Plan for the Te Awa Kairangi / Hutt River floodplain; the infrastructure assets that form the flood protection and erosion control scheme are a critical element of this.

Implications for Māori

There are no known implications for Māori.

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

The confirmation from the Subcommittee that the infrastructure assets in the Te Awa Kairangi/Hutt River, the Wainuiomata River, and Waiwhetu Stream have been satisfactorily maintained fulfils one of the Department's non-financial performance measures in the Long Term Plan. This report and confirmed minutes are supplied as evidence to Audit NZ that the Department has achieved this.

Risks and impacts: legal / health and safety etc.

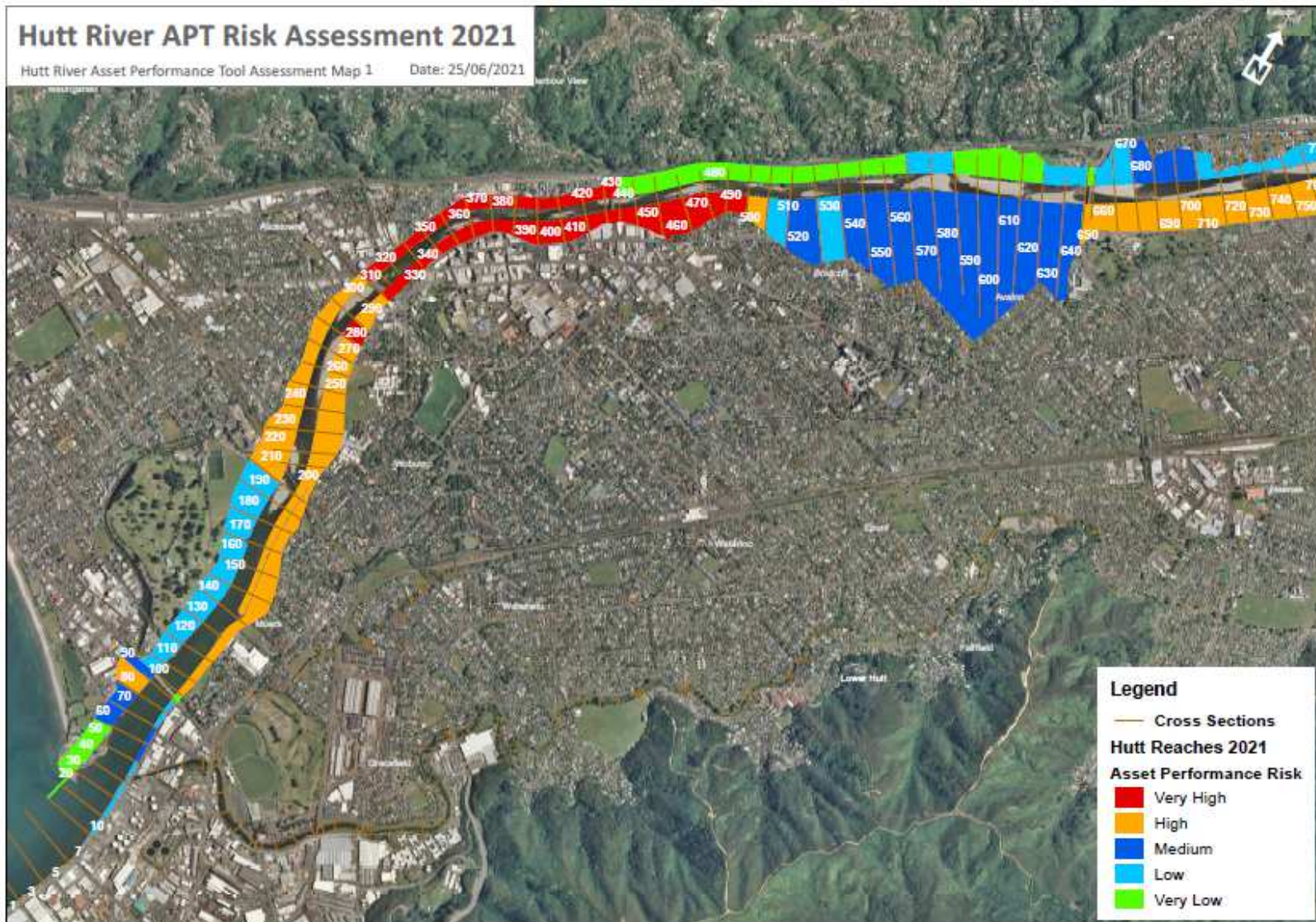
The reports note that there are a small number of sections of Te Awa Kairangi / Hutt River and Wainuiomata River that pose either a 'Very High' or 'High' risk to the communities and businesses on the River's floodplain but that the infrastructure assets providing protection are in very good to moderate condition. These areas are also identified in for either a technical investigation or in an operational or improvement programme.

Attachment 1 – Detailed breakdown of condition by asset type

2021 Asset Type Condition Rating Table

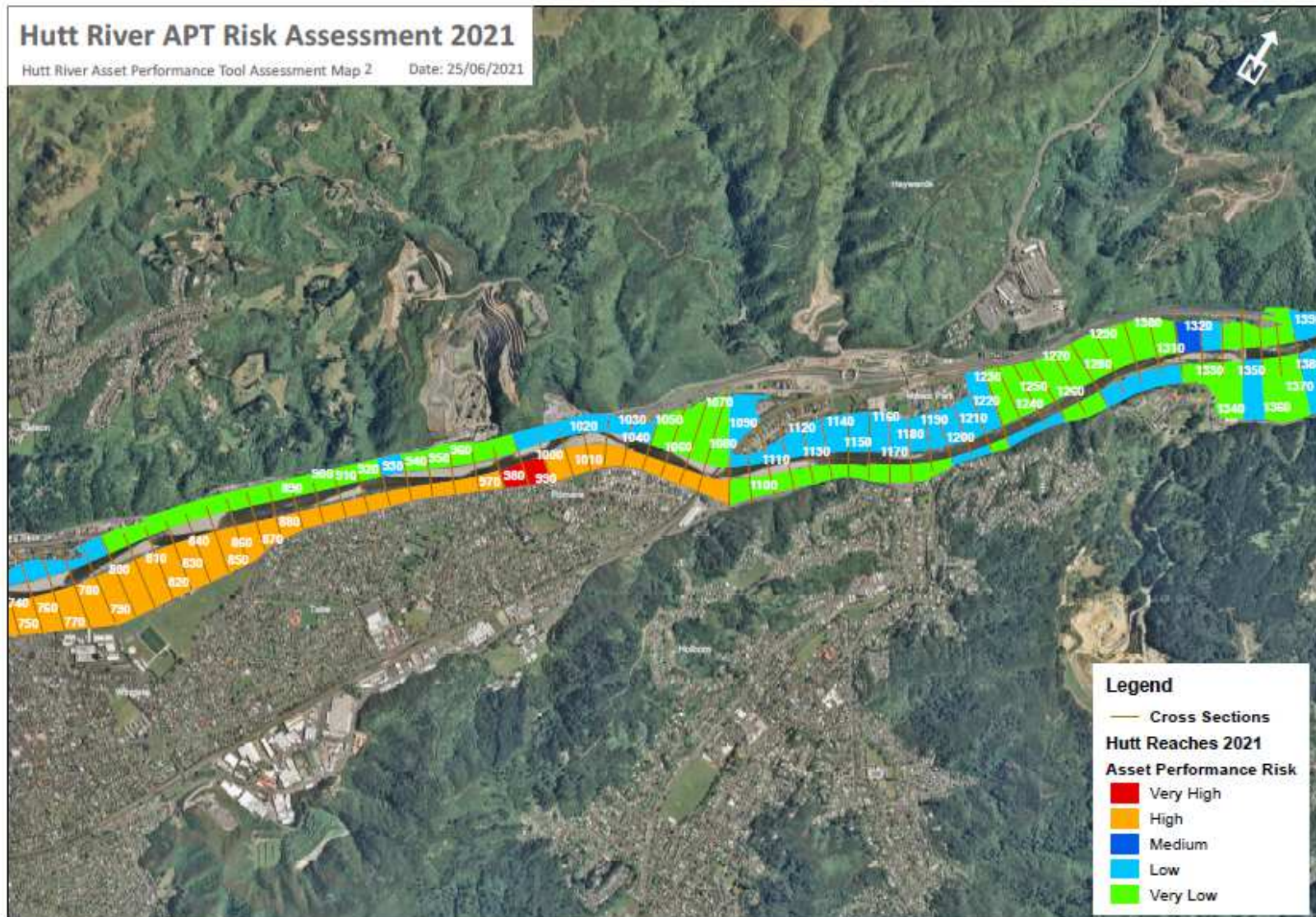
Asset Type	1 - Very Good	2 - Good	3 - Moderate	4 - Poor	5 - Very Poor	Total
BLOCKLINE	7	1	1			9
BRIDGE		1				1
BUILDING		1				1
CHANNEL	132	214	68			414
CULVERT		7	3			10
DEBRIS ARRESTOR	2	2	2		1	7
DEBRIS FENCE		7	35	5	1	48
DEMOLITION LINE		2	9			11
DRAIN	31	36	7			74
FENCE		2				2
FENCE RAIL IRON NET				1		1
FLOODGATE	10	12				22
FLOODWALL	23	4				27
GATE	9	44	2			55
GROYNE	6	43	25		3	77
HEADWALL		4	1	1		6
NATIVE PLANTING	1	31	40	2		74
RETAINING WALL		3	1			4
RIPRAP	2	52	8	3	2	67
ROCK MATTRESS	1	1				2
SEAT	1	9	1	1		12
SIGN	5	2	2	1		10
STOPBANK	130	68	57	1		256
TRACK	134	181	23			338
TRAINING BANK	4	7		1		12
WILLOW	17	104	90	60	19	290
WINGWALL	1	3				4
Total	516	841	375	76	26	1834

Attachment 2 – Te Awa Kairangi / Hutt River and Wainuiomata River risk assessment maps 2021



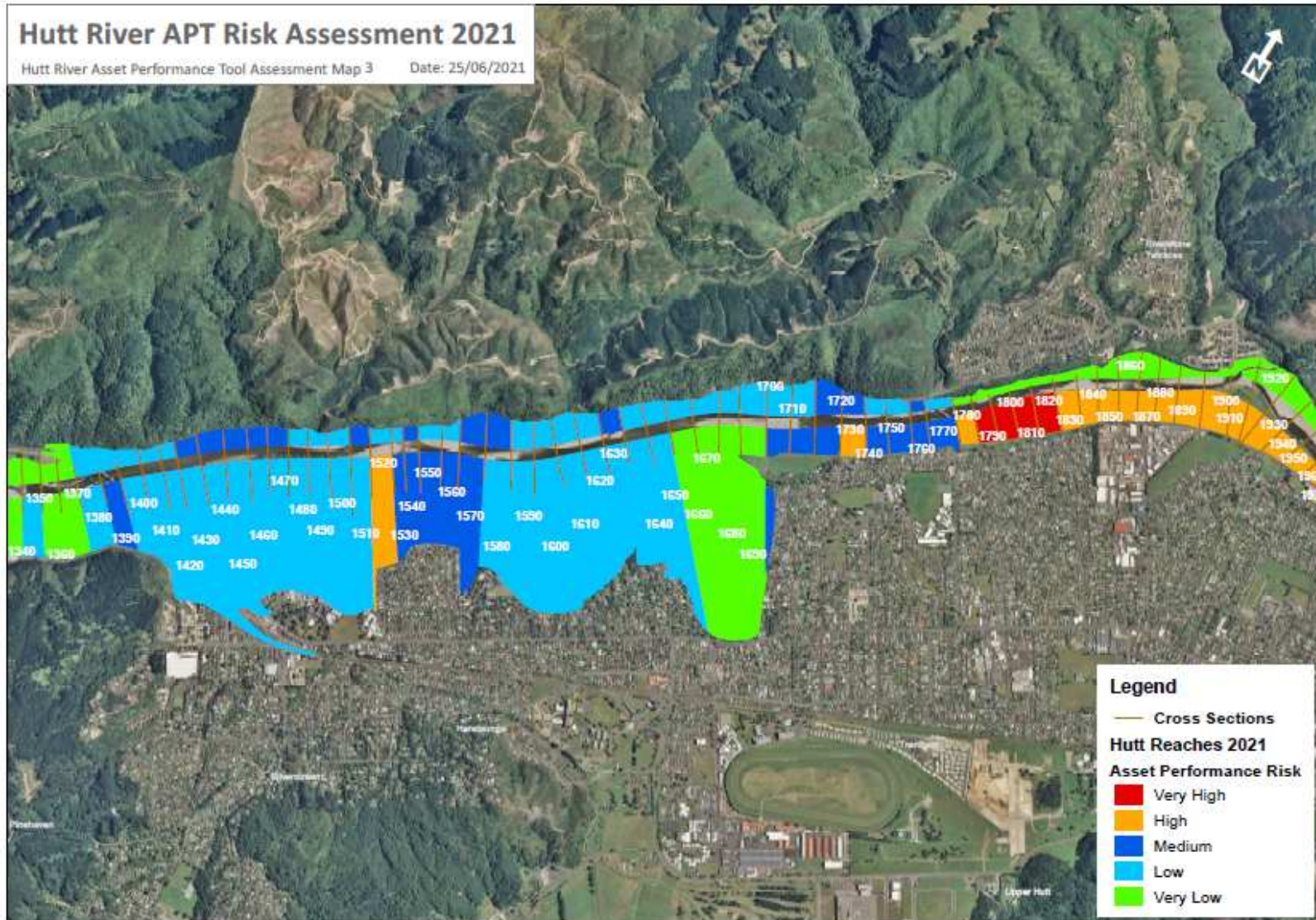
Hutt River APT Risk Assessment 2021

Hutt River Asset Performance Tool Assessment Map 2 Date: 25/06/2021



Hutt River APT Risk Assessment 2021

Hutt River Asset Performance Tool Assessment Map 3 Date: 25/06/2021



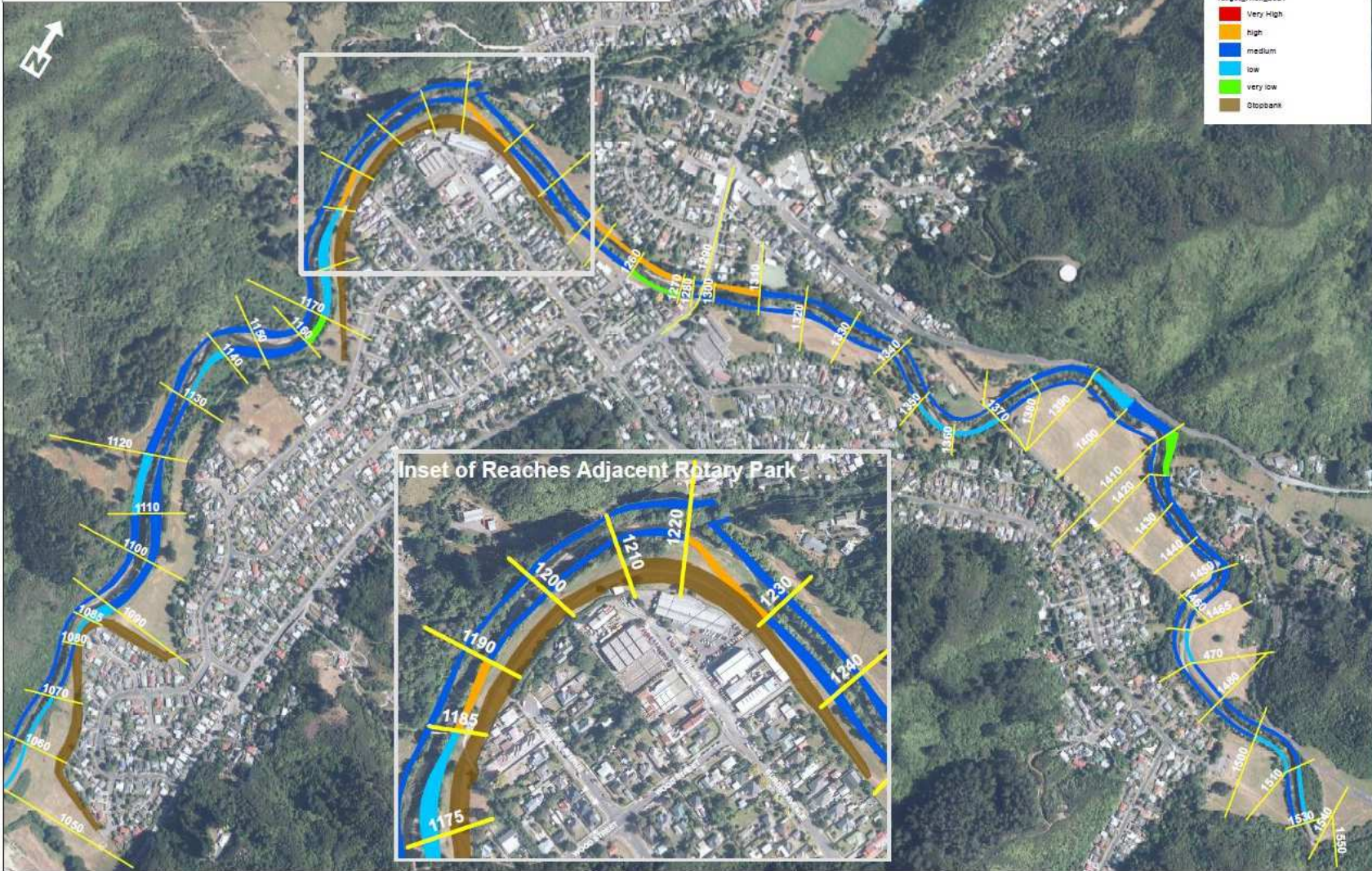
Wainuiomata River APT Risk Assessment 2021

Asset Performance Tool Assessment

Date: 7/07/2021

Legend

- Cross Sections
- Wainuiomata Reaches 2021**
- Target_Risk_2021
 - Very High
 - High
 - medium
 - low
 - very low
 - Otopobank



For Information

HUTT VALLEY FLOOD MANAGEMENT PROJECTS REPORT – AUGUST 2021

Te take mō te pūrongo

Purpose

1. To update the Hutt Valley Flood Management Subcommittee (the Subcommittee) on progress made in implementing general Hutt Valley Flood Management (HVFM) projects, and on other relevant matters.

Te horopaki

Context

2. Greater Wellington Regional Council (Greater Wellington) has an ongoing programme of projects within the catchments of Te Awa Kairangi/Hutt River and the Wainuiomata River. The projects are included in, or guided by the floodplain management plans and river management schemes for the rivers and streams within these catchments.

Te tātaritanga

Analysis

Te Awa Kairangi/Hutt River

3. Projects being completed within the managed extent of Te Awa Kairangi/Hutt River are outlined in the Te Awa Kairangi/Hutt River Floodplain Management Plan, and Te Awa Kairangi/Hutt River Environmental Strategy. Currently, the focus area for project delivery is RiverLink, the length of river between Kennedy Good Bridge and Ewen Bridge near to Hutt City Central Business District. The projects in this section have been combined into the RiverLink project. Other smaller scale projects are occurring in other parts of the river.
4. RiverLink is a multi-partner project to improve flood protection, regenerate Hutt City and improve transport choice. It is the major focus for implementation of the Hutt River Floodplain Management Plan. The project is forecast to complete implementation in 2028. Detail about the project is contained in separate RiverLink Project Director's reports.
5. Government funding has been secured for flood protection projects through the Government's stimulus package focusing on climate resilience and infrastructure development to help rebuild the economy following COVID-19 alert levels lockdown periods. Greater Wellington's programme comprises two projects located in the Te Awa Kairangi /Hutt River and the Ruamahanga River. Within the two projects, there are

seventeen separate locations of works. The works comprise of flood and erosion protection in Te Awa Kairangi/Hutt River and Landfill erosion protection in the Ruamahanga River.

Belmont Wetland

6. The infill planting and maintenance took place in May 2021 with 350 plants being planted and mulch spread around the area.
7. Finalisation of the environmental monitoring plan and gravel removal from the forebay are still required. This work has been delayed due to resourcing issues.

Flood Hazard Modelling

8. Greater Wellington is updating the flood hazard model for the Te Awa Kairangi/Hutt River. This is being carried out in line with Greater Wellington's flood hazard modelling standard process and also to meet Hutt City and Upper Hutt City's District Plan timeframes.

Gravel Analysis

9. Greater Wellington has completed the five yearly gravel analysis for the Te Awa Kairangi/Hutt River. This has been finalised and is with Flood Protection Operations to plan extraction activities.

Climate Resilience Projects

10. Project-specific tasks which are underway are as follows:
 - a *Pomare Bridge Stopbank Works* – Construction has been delayed, however the KiwiRail access permit has now been approved and construction is set to commence late July 2021.
 - b *Stokes Valley* – Comments from stakeholders (Department of Conservation (Doc) and Fish & Game) on the draft Site Specific Environmental Management Plan (SSEMP) have been received and incorporated into the plan. The document is now under internal review by Environmental Regulation.
 - c *15/16 Current Programme Sites* – Contracts for lead consultants have been signed and design work is progressing.
 - d *6/16 Current Programme Sites* - Detailed designs are complete.
11. The draft communications plan has been completed, reviewed, and is awaiting final approval.
12. The budget has been increased by \$3 million to a total of \$20 million due to an increase in the scope of works.
13. Contracts have been submitted to Greater Wellington's mana whenua partners for negotiation: Port Nicholson Block Settlement Trust, Te Rūnanga o Toa Rangatira Inc., Rangitāne ō Wairarapa Inc., and Ngati Kahungunu ki Wairarapa Charitable Trust. Both Rangitāne and Kahungunu have signed cultural liaison contracts, elevating them to co-design partners.

14. Agreed (through seeking a legal opinion) that it is legal to positively discriminate in favour of Māori and Pasifika for (Section 73 of the Human Rights Act 1993) to meet funder sustainable procurement requirements in carrying out the projects.
15. Consultation with DoC and Fish & Game is progressing.
16. Providing bank edge protection along the bank of Te Awa Kairangi/Hutt River at the Royal Wellington Golf Club is one of the climate-resilience projects included in the programme of works to be completed by July 2022. Recent flood events in Te Awa Kairangi/Hutt River have completely eroded the river trail in this area, as shown in Figure 1, below. Drone video taken during the 2-year event (4:00pm-5:30pm NZST) is available at <https://www.youtube.com/watch?v=TI4z3ibOqX8>.



Figure 1: Erosion area adjacent to the Royal Wellington Golf Club 18/7/21 (Erosion area left of photo, view looking downriver)

17. A detour around Kiwi Street, Fergusson Drive and Barton Avenue is available (as shown in Figure 2) and we are looking at what measures we can take to reinstate access along the river trail as soon as possible.

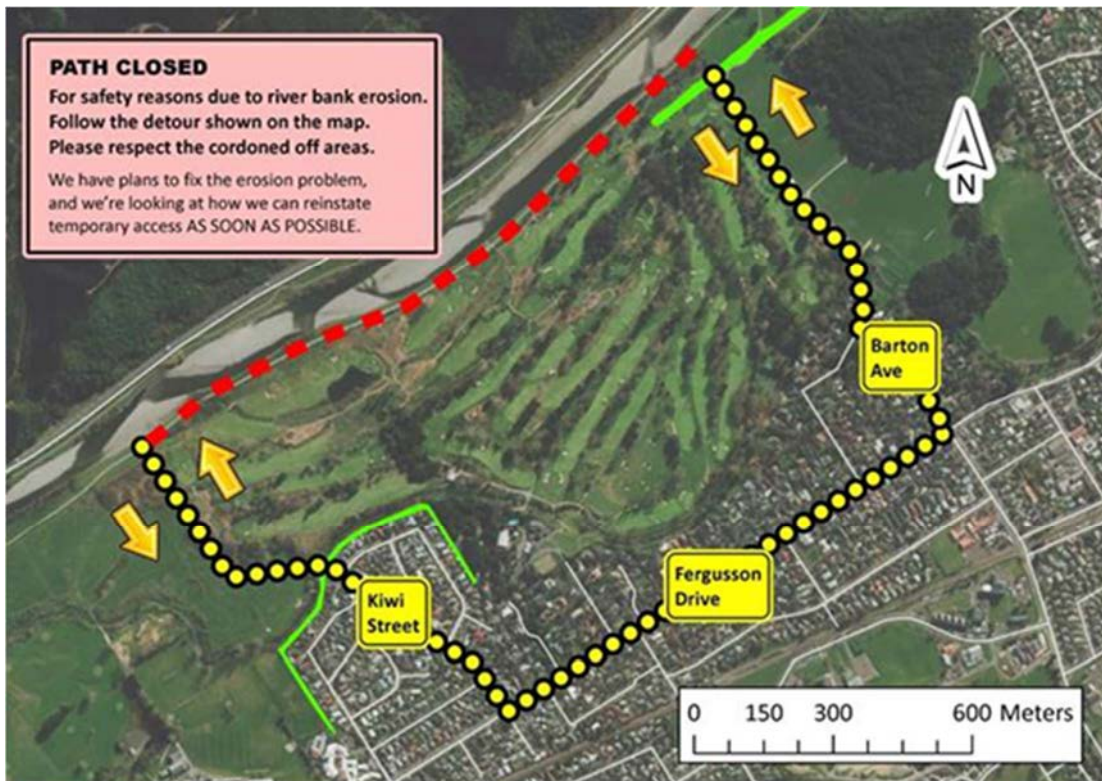


Figure 2: Detour route around the Royal Wellington Golf Club erosion site

Whaitua Te Whanganui-a-Tara Committee

18. Whaitua committees are groups of local people tasked with recommending ways to maintain and improve the quality of fresh water as required by the National Policy Statement for Freshwater Management 2020 (NPSFM). The Whaitua Te Whanganui-a-Tara Committee (the Whaitua Committee) is the third of five Whaitua Committees for the Wellington Region. It was established in December 2018 and includes mana whenua, community members and elected representatives from Upper Hutt City Council, Hutt City Council, Wellington City Council, and Greater Wellington Regional Council.
19. The Whaitua Committee is currently finalising their recommendations to give effect to Te Mana o te Wai and completing their target setting process for water quality attributes as required by the NPSFM. The Whaitua Committee has investigated the range of issues contributing to poor water quality and has identified regulatory and non-regulatory methods for making significant water quality improvements over time. The Whaitua Committee has been testing these ideas and seeking feedback from the four councils, mana whenua partners from Port Nicholson Block Trust, Te Rūnanga o Toa Rangatira Inc, and community groups. The Whaitua Implementation Programme will sit alongside a companion document called Te Mahere Wai, prepared by the iwi representatives on the Whaitua Committee. The reports are expected to be presented to the Greater Wellington Regional Council at its meeting on 19 August 2021.

Te Awa Kairangi/Hutt River Environmental Strategy

20. Projects at Pomare/Taita and Hulls Creek being delivered for Te Awa Kairangi/Hutt River Environmental Strategy have been brought into the Climate-Resilience suite of projects.

Publication of planting and revegetation guidelines for river edges

21. This is still being finalised for publication and has taken longer than expected due to final revisions of plant lists.

Te Awa Kairangi/ Hutt River Corridor Environmental and Recreational Management Plan and Operations Manual

22. The draft Environmental and Recreational Management Plan and Operations Manual sets out the framework within which all future management of the river corridor will be carried out and provides detail to guide how development and maintenance activities are to be carried out, e.g. conventions for signage, furniture types to be used, bollards etc. This document is now being finalised in draft form for consultation.

Working with partner organisations to create a walkway/cycleway trail connection through Manor Park and across the Te Awa Kairangi/Hutt River at the Silverstream Bridge

23. Hutt City Council have been managing progression of the southern section of the Manor Park walkway/cycleway, which would utilise Waka Kotahi New Zealand Transport Agency (Waka Kotahi) funding. The Greater Wellington/Hutt City Council jointly funded northern section was intended to follow, and Greater Wellington have included this in the Climate-resilience projects programme.
24. However, construction of the southern section is currently on hold due to issues with the rail crossing. Resolution of these issues is being progressed within Hutt City Council. Hutt City Council have met with senior KiwiRail management and are now awaiting the response from KiwiRail. Waka Kotahi have agreed to rebudget to 2021/2022 their funding for the southern section of the trail conditional on construction starting by 1 September and being complete by the end of December 2021.

Waiwhetū Stream

25. Greater Wellington is continuing to work with Hutt City Council to support the activities of the Friends of Waiwhetū Stream. The group recently won the Environment Award at the Hutt City Volunteer Community Awards.

Waiwhetū Floodplain Management Plan

26. Greater Wellington is currently working with Hutt City Council and Wellington Water Limited to complete the flood hazard modelling for the Waiwhetū Stream. Consultation on draft flood hazard maps is scheduled for August/September. Greater Wellington is working with Hutt City Council to align with their consultation activities.
27. Planning for the Waiwhetū Floodplain Management Plan is underway.

Operational Works (River Management Schemes)

28. Rockline and groyne repairs have been completed from Ava to Maoribank.
29. There were four block/rock groynes constructed in the Whakatiki reach of Te Awa Kairangi/Hutt River in Upper Hutt to stop further bank erosion, with willows/natives being planted along the bank edges over next few months.
30. Stopbank maintenance continues with trees and vegetation being removed from stopbanks at Shandon Golf Club, Manor Park and Totara Park areas. Various berm

repairs were completed by hydro seeding at Melling, Totara Park, Pomare and Avalon berms.

31. Maintenance work continues on floodgates and arrestors to ensure they are fully functional. This maintenance work involves replacing seals, hinge pins and painting to protect the fibreglass surfaces.
32. Fence line maintenance will be underway soon to manage the early spring growth along the length of Te Awa Kairangi/Hutt River. Community planting has been undertaken at Ava, Fraser Park and Pomare by the local schools and Hutt Valley Rotary Club. The river trail gravel surface maintenance has been carried out at Belmont, Stokes Valley to Silverstream and along the River Road section.

Regional Investigations Initiatives

Emergency Management

33. Greater Wellington continues to work with the Wellington Region Emergency Management Office to improve flood response, warning and awareness across the Region. Greater Wellington has developed new duty officer procedures and is currently progressing a programme of training, exercises, and updating catchment specific information ahead of roll out in Quarter 2 of the next financial year.
34. Flood Protection is working with Greater Wellington's ICT Services to procure and embed a flood forecasting platform which will allow Greater Wellington duty officers to more effectively use current flood forecasting models, newly developed flood forecasting models, and Wellington Water Limited's 'Nowcasting' systems to provide more effective flood forecasts and warning.
35. Flood Protection has teamed up with Greater Wellington's Environmental Science team to deliver a regional programme of improvements to the hydrometric flow gauging network. This network is critical for the provision of flood warnings and for the development of hydraulic models.

Floodplain Management Planning Guidelines Update

36. With changing attitudes and legislation around freshwater management, Flood Protection is working with other Greater Wellington departments to review and update the Floodplain Management Planning Guidelines which drive the development of our longer term strategies for managing flood and erosion risk. We have undertaken a series of workshops exploring topics such as integrated catchment management planning, iwi co-creation, adaptive management planning, and community engagement. The updated guidelines are expected by the end of 2021.

Ngā hua ahumoni

Financial implications

37. Other than the erosion sites, the above projects are within the current flood protection budgets. The erosion sites funding is through the Crown Infrastructure Partners initiative. Part funding is required from Greater Wellington, and officers are bringing forward Long Term Plan funding to enable this.

Ngā kaiwaitohu
Signatories

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

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

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

The Subcommittee's specific responsibilities include "reviewing periodically the effectiveness of implementation and delivery of Floodplain Management Plans for the Te Awa Kairangi/Hutt River floodplain."

Implications for Māori

Ngāti Toa Rangitira and Taranaki Whānui ki Te Upoko o Te Ika are members of the RiverLink Project Management Board.

We are entering into a co-design relationship with Greater Wellington's mana whenua partners (Port Nicholson Block Settlement Trust, Te Rūnanga o Toa Rangitira).

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

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

Internal consultation

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

Risks and impacts: legal / health and safety etc.

This report raises no risks.

Hutt Valley Flood Management Subcommittee
3 August 2021
Report 21.315

For Information

RIVERLINK PROJECT UPDATE – AUGUST 2021

Te take mō te pūrongo

Purpose

1. To advise the Hutt Valley Flood Management Subcommittee (the Subcommittee) of the items raised in the RiverLink Project Director's Report – August 2020 (**Attachment 1**).

Te tāhū kōreroi

Background

2. RiverLink is a partnership project between Greater Wellington Regional Council (Greater Wellington), Hutt City Council (HCC), Waka Kotahi NZ Transport Agency (Waka Kotahi), Ngāti Toa Rangitira and Taranaki Whānui.
3. Greater Wellington's interest in RiverLink relates to Greater Wellington's strategic priority of regional resilience and implementation of the Hutt River Floodplain Management Plan. The flood protection benefits derived from the project are Greater Wellington's focus. Greater Wellington's funding primarily relates to delivery of these project outcomes.
4. Greater Wellington's strategic priorities of freshwater quality and biodiversity, and Public Transport are supported by the successful completion of the RiverLink project.
5. Hutt City Councils objectives for RiverLink are that Te Awa Kairangi between Ewen Bridge and Kennedy Good Bridge becomes the centre piece of the city by:
 - a Turning our city around to face and embrace Te Awa Kairangi;
 - b Pedestrian/cycle bridge linking new Melling station to Lower Hutt City Centre;
 - c Revitalised open space alongside the river to provide various features for rest and play; and
 - d Engaging with the private sector to redevelop key sites along the river corridor for residential and leisure use.

Te tātaritanga

Analysis

Highlighted items included in the Project Director's Report

6. The RiverLink Project Director's Report for August 2021 is included as **Attachment 1**.

RiverLink Project Update

Procurement

7. The delivery mechanism proposed is a single principal Waka Kotahi lead hybrid alliance which has been formally agreed by the three project partners. Work is currently underway with the project partners on any interfaces between physical works and apportioning funding accordingly.
8. In this delivery model Waka Kotahi will be the “principal” in the Alliance. Greater Wellington, HCC and Waka Kotahi will have a separate Memorandum of Understanding (MOU) binding the three partner agencies together but this MOU will not be directly linked to the Alliance contract. Also in this instance there is intended to be a competitive approach between a number of potential alliance partners before the actual alliance partner is confirmed. This is the hybrid element of the hybrid alliance model as opposed to the traditional alliance model.
9. The procurement process for establishing the Alliance is currently underway. Waka Kotahi are leading this process. Greater Wellington and HCC are being given opportunity to review the documents and provide input.
10. All three partners are in the process of agreeing the supporting documentation that will need to sit alongside the Alliance agreement.

Planning and consenting pathway

11. RiverLink Project Board agreed to pursue the two stage (council) consenting pathway, and lodge the application on the current programme, at its meeting on 15 July. Greater Wellington will continue to work with the HCC and Waka Kotahi to ensure the 2-stage consenting process is successful.
12. A robust consenting application has been prepared for what is a complex and integrated programme of capital works. This is on track for consent lodgement on or before 2 August 2021.
13. Mr David Allen, Buddle Findlay – (RiverLink’s Legal Counsel) has provided an outline timeframe for consenting, and the subsequent key stages of the Resource Management Act 1991 process with a view of securing the necessary approvals as soon as possible. The key dates for consenting are:
 - a Lodge the documents on or before 2 August 2021.
 - b A public hearing will be held (anticipated in mid-late November 2021) followed by a recommendation on the notices of requirement and a decision resource consents potentially before Christmas but most likely in early February 2022.
14. Key milestone dates of the overall programme (subject to amendment) are:
 - a Assessment of Environmental Effects report received - May 2021
 - b Decision on Procurement Model – May 2021
 - c The issue of Public Works Act 1981 Notices for outstanding properties will start mid-year with the issue of Section 18 notices, starting with properties in Pharazyn Street.
 - d Lodgement of Notice of Requirements/consents – August 2021

- e Decision on resource consent Dec 2021
- f Appeal period ends – May 2022

Greater Wellington

- 15. Greater Wellington's flood protection and ancillary components of RiverLink have been revised after a cost revision exercise across all aspects of the project. Costs have increased considerably for Greater Wellington components in particular demolition, services, landscaping and the contingencies around those costs. Greater Wellington remains committed to delivering its flood protection components and is looking at all options to close the current funding gap.
- 16. Greater Wellington have endorsed the Single principal Hybrid Alliance, led by Waka Kotahi.
- 17. Greater Wellington, HCC and Waka Kotahi continue to work together on the interface components of the project and responsibilities between partners as part of the Phase 2 procurement process.

Waka Kotahi

- 18. Waka Kotahi continue to lead and are progressing the procurement process with support from Great Wellington and HCC for Phase 2.
- 19. The tender evaluation for the principal's technical advisor role is in progress.

Hutt City Council

- 20. Opportunities are being explored for Housing Infrastructure Acceleration Funding to support the projected population growth enabled by RiverLink.

Programme

- 21. The indicative/high level timeline for Phase 2 (delivery) and Phase 3 (Urban Development) has been updated with some minor adjustments:

Phase 2 Delivery

- a Aug 2021 – Notice of Requirement and resource consents lodged
- b Feb 2022 – decision expected, subject to appeals
- c Jul 2022 – Preferred Alliance partner confirmed
- d Oct 2022 – enabling works –demolition/service relocations started
- e 2022 – works start on the river channel/stop banks - completion expected 2028 and, Melling transport improvements, which includes the relocation of Melling railway station.
- f 2024 – work starts on the pedestrian bridge at Melling station
- g now 2027 – Melling transport improvements completed.

Phase 3 Delivery

- a now 2027 onwards – urban development progresses.

Community Engagement

22. A letter has been sent advising affected parties, adjoining and affected landowners of the upcoming Resource Management Act 1991 process.
23. The social media campaign is continuing.
24. Travel surveys are underway with a current focus on the workers in the city.

Impacts of climate change on the RiverLink Project

25. The Greater Wellington components of the RiverLink Project are subject to Greater Wellington's initiatives designed to minimise greenhouse gas emissions and enhance sequestration capacity. We will work with our project partners to develop a joint procurement approach that supports Greater Wellington's mitigation objectives once we have entered that stage of the design process. The current basis of reference for this includes the Code of Practice for River Management (Te Awa Kairangi 2020). This guides all river management activities undertaken by Greater Wellington for the purposes of flood and erosion protection across the Wellington Region. The Greater Wellington corporate sustainability programme and Greater Wellington's procurement process will encourage suppliers and contractors to minimise emissions.
26. The design development for RiverLink acknowledges the need to adapt to a changing climate and aims to address these predicted impacts. Greater Wellington has included allowances for climate change impacts within the RiverLink Preliminary Design.
27. The RiverLink project provides flood protection upgrade to safely convey a 2,800 cumec flood past Hutt City Centre. Greater Wellington assessed this size of flood event at this location against a 2°C stabilization scenario and against the A2 emissions scenario. The 2,800 cumec event being close to the target 1-in-440 year return period event design standard in the year 2,100.

Ngā hua ahumoni

Financial implications

28. Greater Wellington has, through its Long Term Plan and annual planning processes, committed funding of \$125 million to delivery of the flood protection benefits of RiverLink. The current forecast for delivery of the flood protection benefits are currently being reviewed through the project processes. Greater Wellington is committed to funding its full share of the project. Work is currently underway to understand the implications and process for any required adjustments to the Long Term Plan.
29. These budgets do not include allowances for improvements to facilities related to public transport associated with the relocation of Melling Train Station, as Waka Kotahi are responsible for its relocation though some Greater Wellington funding may be desirable for some enhancements.

Financial implications for Hutt City Council

30. HCC recently voted in favour of increasing its 2021-2031 Long Term Plan funding for RiverLink to \$138.4 million, with a net cost of \$94.9 million after revenue from subsidies and land sales. The new funding will be accessible from 1 July 2021, with the majority of expenditure scheduled to occur over the next five years. The funding will allow HCC to deliver key RiverLink scheme components including a pedestrian cycle bridge, a riverbank park, city centre urban regeneration, intersection improvements, strategic property purchases and parking areas.

Ngā āpitihanga

Attachments

Number	Title
1	RiverLink Project Director's Report – August 2021

Ngā kaiwaitohu

Signatories

Writers	Tracy Berghan – RiverLink Lead, Greater Wellington Tom Biggin – Project Manager- RiverLink Hutt City Council
Approvers	Graeme Campbell – Manager, Flood Protection Wayne O'Donnell – General Manager, Catchment Management Group

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

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

The Subcommittee's specific responsibilities include to "review periodically the effectiveness of implementation and delivery of floodplain management plans for the Te Awa Kairangi/Hutt River floodplain", of which the RiverLink project is part of.

Implications for Māori

Ngāti Toa Rangitira and Taranaki Whānui ki Te Upoko o Te Ika are members of the RiverLink Project Management Board.

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

RiverLink contributes to the delivery of Greater Wellington's strategic priorities of Regional Resilience, Freshwater Quality and Biodiversity, and Public Transport.

Internal consultation

There was no additional internal consultation in preparing this report.

Risks and impacts: legal / health and safety etc.

The programme leading to commencement of construction is currently impacted by the:

- Complexity of integrating Waka Kotahi into the consenting work stream, including agreeing a variation to contract and signing of the deed of accession to the project partner agreement;
- Additional design work required for the Hutt City urban edge that forms the interface between Te Awa Kairangi/Hutt River and the city to enable commencement of the assessment of environmental effects work-streams.

Date: 3 August, 2021

Report of the Project Director – RiverLink

RiverLink – Project Update Report

1. Purpose

This report builds on regular reports the sub committee has received which provides an update on the RiverLink project, it does not repeat or duplicate information previously provided.

In June, the sub committee received a report which outlined significant progress in terms of preparing the designations and consenting application pack. At the time of writing the project partners are confident that the documentation will be lodged with the regulators either on or before the date of the sub committee meeting – 3 August.

This report provides an update on the workstreams to complete the application pack, and outlines an indicative programme for the delivery of the project.

This report should be read in conjunction with other reports on the sub committee’s agenda which provide an update on specific matters as they relate to the Greater Wellington Regional Council and Hutt City Council.

COVID-19

No COVID 19 updates other than as reported at the March meeting. Business Continuity Plans remain in place.

2. Background

Throughout 2020 and this year Members have received reports which have provided a high level overview of the RiverLink project. The vision and strategic objectives have been outlined, as has the partnership approach and supporting governance structure. The partners have agreed to work collaboratively in an integrated, joined-up manner. The benefits of which were outlined in the February report, 2020. The partners work on the basis of achieving a “best for programme” outcome.

3. Programme

Since the sub committee’s last meeting, a concerted effort has been made by all partners, the project board, the consultant team and advisors to ensure that the target date for lodgement is achieved.

In particular, significant progress has been made with our **mana whenua** partners, under the guidance and direction of Kim Skelton and Jade Wikaria.

On 14 July 2021, the Mana Whenua Steering Group (MWSG) received presentations from a number of technical specialists on water quality

impacts, archaeology, heritage, landscape, visual amenity and construction stages.

The presentation was received positively and the MWSG made a number of recommendations to better represent opportunities for mana whenua in the project going forward. The Project Director provided an update on the resource consent application and outlined a range of opportunities to work together after lodgement.

Jade Wikaira and the team will continue to work with the technical specialists to ensure mana whenua contributions are made and appropriately represented.

In 2018, the two local authorities signed a project partner agreement (PPA), which allowed for Waka Kotahi to accede at such time as the funding for Melling was confirmed. This agreement set out the partnership arrangements for the delivery of a large and complex programme of works in a constrained area in and around Te Awa Kairangi and Hutt City Centre. The partnership approach outlined in the PPA set out the vision, aims and objectives, the governance arrangements, the establishment of a project office and funding to deliver the project. Underpinning the PPA was the need to work in terms of “best for project”. Waka Kotahi acceded to the PPA in 2020, when Melling was included in the NZ Up Programme and funding was made available by the Crown.

The designations and consenting application pack reflect the scale and complexity of the project. The **application pack** includes a series of plans, an Assessment of Environmental Effects (AEE) with eighteen specialists’ technical reports, an urban design and landscape framework, cultural assessment, a set of draft conditions and reports on consultation and engagement and an indicative programme of works. The documentation has been reviewed by the project partners and the projects’ legal counsel. The documents will be available on the RiverLink website, at the appropriate time.

At the RiverLink Project Board meeting on 15 July, it was agreed to pursue the **two stage (council) consenting pathway, and lodge the application pack**. David Allen, (Buddle Findlay, RiverLink’s Legal Counsel) and the lead planner from the consultant team attended the meeting and provided their professional opinion to assist the board in reaching their decision. Additional information was provided to the board in terms of the position reached with consultees, and potential submitters, etc. This decision was the culmination of a series of workshops, meetings and reports.

In terms of the timeframe going forward, it is anticipated that a hearing will be held in late November and the necessary approvals could be secured by March 2022, subject to any appeals, etc.

The lodgement of the designations and consenting application pack represents a significant milestone for the delivery of the RiverLink project.

The Project Director acknowledges and expresses his thanks to the consultant team, the project partners, the project board, the project office and supporting advisors for their assistance in reaching this milestone. He also acknowledges the support he has received from the sub committee.

4. Other matters

At the last two meetings Members have been advised of some outstanding property matters which required further work. Whilst there has been significant progress in resolving a number of these matters, there is still further work required on a few properties which are within the scope of the project. Negotiations and discussions with the relevant property owners are ongoing, details of which cannot be provided because they are commercially sensitive.

Ahead of lodging the consents and designation orders the project partners have undertaken a **cost revision exercise** to ensure that they have a sound understanding of the costs of delivering the proposal. As may be expected, costs have risen since the last cost estimate was undertaken, due mainly to the proposals being firmed up, the need for additional third party property and the global cost increases for materials and labour.

The project partners have initiated a process to address this issue and they continue to work collaboratively on elements where there are cost sharing obligations, - in the best interests of the programme. The project partners have reaffirmed their commitment, via the project board to review the scope and identify elements which are required as mitigation. Other options include the deferment of some aspects of the proposals to future years and exploring other sources of funding. The costs estimates are in the process of being peer reviewed, and a verbal update will be provided at the sub committee.

The sub committee should remain confident that proposals which will be delivered are those as per the proposals plans which have been shared with the local community.

5 Procurement

As lodgement and the completion of phase 1 is imminent, the project partners have been working in parallel on phase 2 - the delivery stage, - or procurement.

As has been reported since March the procurement workstream is being led by Waka Kotahi, and a key consideration which has been identified by the funding partners is the need to continue to work in partnership to realise the benefits of collaboration and integration.

Workshops have been held by the partners and with Members, to consider the most appropriate procurement model for RiverLink - a complex project. The individual partner organisations need to balance their own needs

(outcomes) with the “best for project” philosophy which is an overriding aim of the project partnership.

The project partners have agreed that a **hybrid alliance** is the most appropriate model and that a principal needs to be identified to interface with the alliance consortium. Working through the multi-party funding agreement the partners have agreed that Waka Kotahi will be the **principal**, with side agreements in place with the two local authorities.

The indicative/high level timeline for phases 2 and 3 (delivery):

- Early 2022 – resource consents approved.
- Mid 2022 – works start on the river channel/stop banks, completion expected 2028.
- Late 2022 – work starts on the Melling transport improvements, which includes the relocation of Melling railway station.
- 2024 – work starts on the pedestrian bridge.
- 2027 – Melling transport improvements completed.

It is important to acknowledge that with such a large and complex programme of works that there will inevitably be **disruption** in and around Te Awa Kairangi and in Hutt CBD. Roads, cycleways and pathways will be temporarily closed, traffic will be diverted and there will be noise, dust and vibration. Contractors will be required to minimise these disruptions and follow industry standards and apply best practice, and implement an engagement plan to advise and inform the community of mitigation proposals.

6. Communications and engagement

Community Engagement Plan

A Community Update (external RiverLink newsletter) has been issued summarising answers to questions received at the two open days and our online engagement (Social Pinpoint).

A local interest group speaking programme is underway – most recently we have spoken with Hutt Valley Chamber of Commerce, SeniorNet, SouthEnd Business Group and Rotary.

RiverLink Website

The new standalone website is now up and running (www.riverlink.co.nz) with new content being added as the project develops.

Facebook

Our latest social media campaign focuses on how people get around Lower Hutt and some also some nostalgia posts showing historical photos of local landmarks and people.

Video

The communications team and Isthmus held a workshop to develop a storyboard to update our video. Work is underway developing new visuals and a video.

Promotional materials

All the promotion material - posters, brochures, digital notice boards, Queensgate food mall table wraps, and screens, plus radio and print advertisements have been updated. The promotional material has been updated with a summary of what the project is and what it is aiming to achieve. The theme of this updated content is Lower Hutt- your river city. (It is not designed to gain feedback on the draft plans but to continue to raise awareness of what RiverLink aims to achieve for Lower Hutt.)

Engagement container

We have been at the container on Saturdays up until Easter. We are moving the container into Andrews Avenue for more awareness raising opportunities during June and July and this will be on weekdays during business hours.

Funding has now been confirmed at \$420M.

RiverLink website has updated with this news and our RiverLink Facebook page (shared Mayor Barry's post) [here](#) with the good news.

Media releases and coverage:

<https://www.beehive.govt.nz/release/nz-upgrade-programme-kept-track>

<https://www.scoop.co.nz/stories/PA2106/S00041/melling-re-commitment-a-relief-for-locals.htm>

<https://www.stuff.co.nz/national/politics/125346174/mill-road-project-dropped-after-cost-of-government-infrastructure-package-jumps-by-6b-in-a-year>

Media

DomPost reporter is wrote a feature article on the rivers in the region starting with Te Awa Kairangi/Hutt River

<https://www.stuff.co.nz/environment/300283917/taniwha-in-the-valley-hutt-river-is-both-threatened-and-threatening--but-is-it-just-misunderstood>

Stakeholder Engagement Reporting

A strategy has been prepared for the prioritisation of stakeholders and engagement for each of the stakeholders.

Riverside bridge landing signs

Landing signs for the two new bridges have been prepared and we are waiting for a peer review of the te reo translation as per Greater Wellington's policy.

A communications and engagement strategy for the post lodgement phase is being developed by the communications specialists from the project partners.

7. Project governance

The project partner agreement covered phase 1 – the pre design and consenting phase, and the multi-party funding agreement which forms part of the procurement strategy (phase 2) will keep the Riverlink partnership together, as the project transitions into the delivery phase.

The RiverLink project board now has a full complement, and has welcomed Ms Kim Skelton, Taranaki Whanui.

The project board have appointed an **independent strategic advisor** to challenge and assist with the project as it transitions into the delivery phase. To further strengthen the cultural and mana whenua linkages the project board has engaged the services of a **mana whenua advisor**, refer to section 3 above.

The project board has agreed to establish a **steering group**. The role of the steering group is to make technical and operational decisions on matters which do not need to be referred to the board – who have a strategic management role. The steering group has a representative from each of the funding partners and meets weekly; - it's agile and decisive and provides the ability to make decisions on technical and operational matters efficiently.

The **Chief Executive's RiverLink Relationship Management** meetings are now held monthly.

8. Conclusions

The lodgement of the designation orders and the consenting application pack for this large and complex programme of works represents a significant milestone. The consenting phase is one step on the journey of delivering the agreed programme of works and whilst it significant, the project board recognise that it is not an end in itself, and continue to work to ensure that the benefits are realised for the community as soon as is practicable.

The focus is now transitioning to the procurement/delivery phase with the partners remaining aligned and working collegiately.

Future reports will continue to keep the subcommittee informed of progress.

For Information

HUTT AND PINEHAVEN FLOODPLAIN MANAGEMENT PLAN IMPLEMENTATION ANNUAL REPORT TO JUNE 2021

Te take mō te pūrongo

Purpose

1. To advise the Hutt Valley Flood Management Subcommittee (the Subcommittee) of progress made to June 2021 in implementing the Hutt and Pinehaven Floodplain Management Plans.

Te tāhū kōrero

Background

Western Floodplain Management Plans – implementation

2. The scoping and planning of the Hutt River and Pinehaven Stream Floodplain Management Plans were completed in 2001 and 2016 respectively. The Plans recommend both structural, non-structural and environmental measures to reduce the flood risk to the respective floodplains with improvement to the environment. Greater Wellington Regional Council (Greater Wellington) has adopted a 40-year time frame to fully implement the Flood Management Plans (FMP). Implementation of the FMPs commenced in 2000.

Te Awa Kairangi/Hutt River Flood Management Plans

3. Projects being completed within the managed extent of Te Awa Kairangi/Hutt River are outlined in the Hutt River Flood Management Plan, and Te Awa/Kairangi Hutt River Environmental Strategy.
4. An Environmental Strategy Action Plan update was completed in August 2018, superseding the 2001 version. The Action Plan component was included to more clearly prioritise environmental and community outcomes.
5. Currently, the focus area for project delivery is RiverLink, the length of river between Kennedy Good Bridge and Ewen Bridge near to the Hutt City Central Business District. Three separate but interdependent projects comprising Flood Protection, Making Places, and Melling Transport Improvements have been combined into the RiverLink Project. The RiverLink project is a collaboration between Greater Wellington, Hutt City Council (HCC) and Waka Kotahi NZ Transport Agency (Waka Kotahi).

6. The project supports the Long Term Plan (LTP) priority outcome of Regional Resilience, and also supports or has positioned itself to be able to support delivery across several of Greater Wellington’s other LTP priorities, Freshwater Quality and Biodiversity, and Public Transport.
7. The construction phase of this project is currently forecast for commencement in 2023. However, programme alignment with HCC and Waka Kotahi NZ Upgrade Programme will determine the final construction programme. Land purchase for the RiverLink project and strategic land purchase at other critical locations in the Te Awa/Kairangi Hutt River are continuing.
8. The benefits in terms of flood damages saved are estimated at 35 percent of the total benefits the Hutt River Flood Management Plan (HRFMP) will deliver. The benefits on the basis of flood damages saved will be 66 percent when the flood protection upgrade and Melling Bridge replacement components of the RiverLink project are completed.

Pinehaven Stream Flood Management Plan

9. 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 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.

Summary of progress

Implementation progress

10. Table 1 shows the FMP structural measures implemented as a percentage of progress of the recommendations within the respective FMP. The figures for the Hutt FMP are shown in more detail in the Hutt FMP Summary Progress Table in **Attachment 1**.

Table 1: Implementation progress

FMP or Scheme	Actual % Complete to June 2020	Target % Complete 2020/2021	Actual % Complete to June 2021	Outcome
Hutt	33%	33%	41%	Achieved
Pinehaven	25%	66%	38%	Not achieved

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

Table 2: Financial summary

FMP or Scheme	Original FMP Total 40 year estimate (\$M) - Adjusted for Inflation ¹	Expenditure to June 2021(\$M) ²	Total Budgeted to 2031 (\$M) ²	Total expenditure forecast to 2028 (\$M) ²
Te Awa Kairangi/Hutt	124.4	109.9	119.2	229.2
Pinehaven	5.6	4.3	6.8	11.1

Key deliverables 2020-2021

Te Awa Kairangi/Hutt River FMP

12. Table 3 outlines the progress on the key deliverables for the Hutt River FMP.

Table 3: Hutt River FMP key deliverables and other work

Item	Progress	Forecast
Strengthening our relationships with mana whenua partners through our implementation projects	RiverLink Project Management Board - Taranaki Whānui and Ngati Toa Rangitira membership. For the Hutt River Erosion Site projects within the Climate Resilience Programme, contracts have been sent to both Ngāti Toa and Taranaki Whānui for co-design partnerships. Partnership on projects is a monumental step in creating more meaningful and equal engagement with mana whenua.	Achieved In Progress
RiverLink – Consent and Initial Design Phase	Sign-off gained for Consent lodgement by 2 August 2021.	Achieved
RiverLink – Greater Wellington property acquisition programme (willing buyer/willing seller approach) for project	Greater Wellington approval to acquire three (3) additional commercial properties – No’s 4 & 5 Daly St also 69-95 High Street. 94 out of 121 properties acquired (Greater Wellington responsibility)	Achieved

¹ Hutt 1999 (estimate \$78.00M), Pinehaven 2014 (estimate \$5M).

² All figures have been indexed to 2020 dollar values using reserve bank CPI calculator (index value based on 30 June of year. No inflation included for year estimate originated. General CPI values have been used)

Item	Progress	Forecast
in alignment with property strategy	102 out of 134 properties acquired (all project partners)	
Other work		
RiverLink – River Engineering	<p>Four locations along the Hutt river margin were subjected to initial design review given the common project interest. Design optioneering at each location resulted in Greater Wellington:</p> <ul style="list-style-type: none"> • acquiring three further commercial properties on the CBD side of the river to ensure conveyance of design flood flows at the southern end of the project (just upstream of Ewan Bridge). • Realigning the design river channel closer towards the western hills 	Completed
Summer Engagement Programme 20/21	<p>The engagement programme connected RiverLink with the communities of Lower Hutt and showcased Te Awa Kairangi as a treasure at the heart of Lower Hutt. It covered everything from toxic algae to the riverbank market to transport linkages and city growth in a fun, family friendly environment. The programme was centred at the Riverbank Beach at the Riverbank Carpark.</p>	Completed
Hutt River Erosion Sites	<p>During the COVID-19 alert levels lockdown periods, work was undertaken to obtain funding from the Crown Infrastructure Partnership (CIP) for COVID-19-recovery projects.</p> <p>Greater Wellington was successful in obtaining funding from CIP for a total of \$10.752 million over two years with a 45 percent contribution expected from Greater Wellington. This funding is being used to bring forward work on</p>	In progress

Item	Progress	Forecast
	<p>10 Hutt River erosion sites, six major projects, and the Port Road Erosion protection work (described below).</p> <p>Consultants have been procured for all 10 Hutt River Erosion Protection sites, with detailed designs complete for 6/10 sites. The main contractor has been procured for one site, with construction expected to begin late July 2021.</p> <p>Sustainable procurement will be applied to each project, ensuring deliverables for social well-being, social procurement, environmental responsibility, and community involvement & enhancement are all met in an effective and meaningful manner.</p>	
Port Road Erosion Protection	<p>Greater Wellington and HCC have together worked 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 (10 year estimated life) repair work to a section of the erosion protection at this location.</p> <p>Further protection work, which is the responsibility of Greater Wellington, was forecast to commence in 2031, however, since this work is included in the CIP funded projects above, the consultant has been procured and physical works are now set to be completed by June 2022.</p>	In progress
Te Awa Kairangi – Hutt River Environmental Strategy Action Plan	Design work has commenced to address trail connection improvements at identified points along the Hutt River Trail. This includes consideration of stream crossings at Hulls Creek, Whakatikei Stream (in conjunction with UHCC), and at Manor Park.	In progress

Item	Progress	Forecast
Flood Warning Improvements	Greater Wellington continues to work with the Wellington Region Emergency Management Office to improve flood response, warning and awareness across the Region. Greater Wellington has developed new duty officer procedures and is currently progressing a programme of training, exercises, and updating catchment specific information ahead of roll out in Quarter 2 of the 21/22 financial year.	In progress
Flood Monitoring Network improvements	Flood Protection has teamed up with Greater Wellington's Environmental Science team to deliver a regional programme of improvements to the hydrometric flow gauging network. This network is critical for the provision of flood warnings and for the development of hydraulic models. This includes the key sites in the Te Awa Kairangi catchment.	In progress

Pinehaven Stream Floodplain Management Plan

13. The objective of the planned Pinehaven Stormwater Improvements project is to improve flood level protection by increasing the capacity of the watercourse and drainage to provide a one percent Annual Exceedance Probability (AEP) level of protection.
14. The project is being delivered in three distinct sections:
 - a Upgrading culverts at Sunbrae Drive and Pinehaven Road (this is a 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
15. Progress on the key deliverables for the Pinehaven Stream Floodplain Management Plan is listed in Table 4.

Table 4: Pinehaven FMP key deliverables

Item	Progress	Forecast
Stream capacity and environmental improvement works	Value Engineering is still underway, and outcomes are being assessed. Consent has been granted with works expected to begin later in 2021.	Progressing
Upgrading culverts	Culvert upgrades at Sunbrae Drive and Pinehaven Road are currently underway with expected completion in November 2021	Progressing
Enabling works	Enabling works are expected to proceed alongside the culvert upgrades later in 2021.	Progressing

Long Term Plan Priorities

16. The following are priorities for the Long Term Plan:

- Construction of the RiverLink project.
- Implement outcomes of the Hutt and Pinehaven Flood Management Plans.
- Implement outcomes of the Hutt and Pinehaven Environmental Strategies and support community groups to enhance river environments.

Specific planned work for 2021/22

17. The following table includes key work planned for 2021/22. It is not a complete listing of all work being carried out across the region, and does not include work that may be required to address storm and flood damage.

River/FMP	Details
Te Awa Kairangi/Hutt River FMP	<ul style="list-style-type: none"> • Complete RiverLink consenting design and consent preparation. • Lodge RiverLink resource consent and designation application. • Progress RiverLink property purchase and increase efforts with remaining owners • Community connection and project awareness for RiverLink • Maintain planting and monitoring of Belmont wetland. • Complete Taita area safety improvements. • Procurement and construction of Hulls Creek Crossing and trail connection

River/FMP	Details
	<ul style="list-style-type: none"> • Complete publication of planting and revegetation guidelines for river edges for Region. • Work with partner organisations to create a trail connection through Manor Park and across the Hutt River at the Silverstream Bridge. • Gauging and monitoring improvements • Progress CIP-funded work on eight Hutt River erosion sites and the Port Road Erosion protection work.
Pinehaven Stream FMP	<ul style="list-style-type: none"> • Stream capacity and environmental improvement works • Culvert upgrades
Other Related Matters	<ul style="list-style-type: none"> • Programme and project management process improvements • Integrated Catchment, Environment and Te Hunga Whiriwhiri outcomes support

Implications of climate change

18. 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.
19. 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 per cent, and a sea level rise of 0.8 metres.

Ngā hua ahumoni

Financial implications

20. For this reporting period, projects are within the current flood protection budgets.
21. CIP projects require part funding from Greater Wellington, LTP funding has been brought forward to accommodate this work.

Ngā āpitihanga

Attachment

Number	Title
1	Hutt Flood Management Plan Summary Progress Table

**Ngā kaiwaitohu
Signatories**

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

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

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

The Subcommittee's specific responsibilities include "reviewing periodically the effectiveness of implementation and delivery of Floodplain Management Plans for the Te Awa Kairangi/Hutt River floodplain".

Implications for Māori

Ngāti Toa Rangitira and Taranaki Whānui ki Te Upoko o Te Ika are members of the RiverLink Project Management Board.

We are entering into a co-design relationship with Greater Wellington's mana whenua partners (Port Nicholson Block Trust, Te Rūnanga o Toa Rangitira).

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

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

Internal consultation

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

Risks and impacts: legal / health and safety etc.

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

Updated 15 July 2021

TOTALS IMPLEMENTATION HUTT FMP	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	Target % at completion	STAGE	% Complete (0 = not complete, 0.5 Part complete, 1 = complete)	Percent Complete to date	HRFMP (Page #)
				2000-2051	\$77.76	100.00%			41.12%	

REACH 1 : River Mouth to Estuary Bridge

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

REACH 2 : Estuary Bridge to Ava Rail Bridge

WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	17.16%	STAGE	% Complete (0 = not complete, 0.5 Part complete, 1 = complete)	6.71%	HRFMP (Page #)
Shandon golf course (RB) stopbank	2	2	after 2010	Ava Woolen Mills [2028-2034]	\$1.72	2.21%			0.00%	54
Light rock protection works (Estuary to Ava rail bridge)	2	2	after 2010	Ava Woolen Mills [2028-2034]	\$0.43	0.55%	Partial Work	0.5	0.28%	54
Woolen mills (Estuary to Ava LB) stopbank	2	6	after 2010	Ava Woolen Mills [2028-2034]	\$3.99	5.13%			0.00%	54
Relocation and rock lining (Estuary to Ava LB)	2	6	after 2010	Ava Woolen Mills [2028-2034]	\$2.20	2.83%			0.00%	54
Ava rail bridge investigations	2	1	2000-2002	Alicetown Strand Project [2000-2010]	\$0.23	0.30%	Complete	1	0.30%	54
Ava rail bridge waterway improvements	2	1	2003-2008	Alicetown Strand Project [2000-2010]	\$4.77	6.13%	Complete	1	6.13%	54

REACH 3 : Ava Rail Bridge to Ewen Bridge

WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	38.14%	STAGE	% Complete (0 = not complete, 0.5 Part complete, 1 = complete)	20.45%	HRFMP (Page #)
Strand park (Ava to Ewen RB) river realignment and land purchase	3	3	2000-2005	Alicetown Strand Project [2000-2010]	\$4.48	5.76%	Complete	1	5.76%	56
Strand park stopbank upgrade (Ava to Ewen LB)	3	1	2000-2010	Alicetown Strand Project [2000-2010]	\$2.64	3.40%	Complete	1	3.40%	56
Tama Street stopbank upgrade (Ava to Ewen RB)	3	3	2000-2010	Alicetown Strand Project [2000-2010]	\$2.48	3.19%	Complete	1	3.19%	56
Melling Bridge investigations	3	3	2001-2002	RiverLink [2015-2028]	\$0.06	0.08%	In Design		0.00%	56
Daly Street (Ewen to Melling RB) stopbank upgrade and land purchase	3	1	2008+	RiverLink [2015-2028]	\$4.61	5.93%	In Design + land	0.5	2.96%	56
Marsden Bend (RB) channel works	3	3	after 2010	RiverLink [2015-2028]	\$1.91	2.46%	In Design		0.00%	56
Pharazyn St (Ewen to Melling RB) stopbank	3	3	after 2010	RiverLink [2015-2028]	\$3.70	4.76%	In Design		0.00%	56
Riverside car park channel works (LB) and light protection works (Ewen to Melling LB)	3	1	after 2010	RiverLink [2015-2028]	\$1.78	2.29%	In Design		0.00%	56
Land for Melling Bridge Upgrade	3	14	after 2010	RiverLink [2015-2028]	\$8.00	10.29%	In Design + land	0.5	5.14%	56

REACH 4 : Melling Bridge to Kennedy Good Bridge

WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	11.75%	STAGE	% Complete (0 = not complete, 0.5 Part complete, 1 = complete)	9.99%	HRFMP (Page #)
Melling to Kennedy Good Bridge channel works	4	1	after 2010	RiverLink [2015-2028]	\$1.11	1.43%	In Design		0.00%	58
Melling Bridge (RB) stopbank upgrade	4	3	after 2010	RiverLink [2015-2028]	\$0.26	0.33%	In Design		0.00%	58
Boulcott Golf Course (LB) stopbank upgrade and land compensation	4	1	after 2005	Boulcott [2010-2013]	\$5.44	7.00%	Complete	1	7.00%	58
Connolly Street (LB) stopbank and land purchase	4	1	after 2010	Boulcott [2010-2013]	\$2.33	3.00%	Complete	1	3.00%	58

REACH 5 : Kennedy Good Bridge to Pomare Rail Bridge

WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	5.61%	STAGE	% Complete (0 = not complete, 0.5 Part complete, 1 = complete)	0.91%	HRFMP (Page #)
Kennedy Good Bridge to Pomare (LB) stopbank upgrade	5	4	after 2010	KGB Pomare [2037-2042]	\$0.86	1.11%			0.00%	60
Vegetation at Kennedy Good Bridge to Pomare rail bridge (LB/RB)	5	14	after 2010	KGB Pomare [2037-2042]	\$1.63	2.10%			0.00%	60
House Raising at Belmont to 1900	5	8	after 2010	KGB Pomare [2037-2042]	\$0.45	0.58%			0.00%	60
Rock protection at Belmont, Nash St. and Pomare Rail Bridge (LB/RB)	5	4	after 2010	KGB Pomare [2037-2042]	\$1.42	1.83%	Partial Work	0.5	0.91%	60

REACH 6 : Pomare Rail Bridge to Silverstream Bridge

WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	2.98%	STAGE	% Complete (0 = not complete, 0.5 Part complete, 1 = complete)	0.00%	HRFMP (Page #)
Pomare rail bridge to Silverstream Bridge channel works (LB/RB)	6	13	after 2010	Manor Park Pomare [2041-2051]	\$1.34	1.72%			0.00%	62
Manor Park stopbanks to 2300	6	13	after 2010	Manor Park Pomare [2041-2051]	\$0.98	1.26%			0.00%	62

REACH 7 : Silverstream Bridges to Moonshine Bridge

WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	5.85%	STAGE	% Complete (0 = not complete, 0.5 Part complete, 1 = complete)	0.60%	HRFMP (Page #)
Moonshine Bridge investigations	7	10	2001-2002	Trentham to Whakatikei [2032-2036]	\$0.06	0.08%			0.00%	64
Moonshine bridge waterway upgrade	7	10	after 2010	Trentham to Whakatikei [2032-2036]	\$3.31	4.26%			0.00%	64
Whirinaki Crescent stopbank to 2300	7	5	2004-2006	Trentham to Whakatikei [2032-2036]	\$0.47	0.60%	Complete	1	0.60%	64
Trentham to Whakatikei stopbank (part)	7	8	after 2010	Trentham to Whakatikei [2032-2036]	\$0.71	0.91%			0.00%	64

REACH 8 : Moonshine Bridge to Whakatikei River

WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	2.89%	STAGE	% Complete (0 = not complete, 0.5 Part complete, 1 = complete)	0.00%	HRFMP (Page #)
Trentham to Whakatikei (LB) stopbank (part)	8	8	after 2010	Trentham to Whakatikei [2032-2036]	\$2.00	2.57%			0.00%	66
Moonshine to Maoribank (LB) channel works (part)	8	10	after 2010	Trentham to Whakatikei [2032-2036]	\$0.25	0.32%			0.00%	66

REACH 9 : Whakatikei River to Norbert St. Footbridge

WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	8.31%	STAGE	% Complete (0 = not complete, 0.5 Part complete, 1 = complete)	0.00%	HRFMP (Page #)
Totara park stopbanks to 2300	9	10	after 2010	NOT IN AMP	\$1.42	1.83%			0.00%	68
Elbow park channel upgrade	9	10	after 2010	NOT IN AMP	\$1.41	1.81%			0.00%	68
Whakatikei to Maoribank (LB) stopbank	9	10	after 2010	NOT IN AMP	\$0.28	0.36%			0.00%	68
Moonshine to Maoribank channel works (part)	9	10	after 2010	NOT IN AMP	\$3.35	4.31%			0.00%	68

REACH 10 : Norbert St. Footbridge to Gemstone Drive

WORK REQUIREMENT	REACH	PRIORITY	DATE 2001 FMP	DATE AMP	COST \$M 2001 FMP	2.61%	STAGE	% Complete (0 = not complete, 0.5 Part complete, 1 = complete)	2.45%	HRFMP (Page #)
Norbert Street footbridge to Akatarawa Channel works	10	14	2004-2005	2037-2042	\$0.34	0.44%	Complete	1	0.44%	70
Akatarawa Road (LB) floodwall at 1900	10	12	2004-2005	2037-2042	\$0.72	0.93%	Complete	1	0.93%	70
Gemstone Drive channel works to 1900	10	12	2005-2006	2037-2042	\$0.64	0.82%	Complete	1	0.82%	70
Gemstone Drive (LB) stopbank to 1900	10	12	2005-2006	2037-2042	\$0.15	0.19%	Complete	1	0.19%	70
Bridge Road House Raising to 1900	10	7	2003-2007	NOT IN AMP	\$0.18	0.23%	Partial Work	0.3	0.07%	70