

## Meeting of the Environment and Integrated Catchments Committee

**Date:** Wednesday 21 September 2022  
**Time:** 9.00am  
**Venue:** Central Hawke's Bay District Council  
28/32 Ruataniwha Street  
Waipawa

### Agenda

Item	Title	Page
1.	Welcome/Karakia/Notices/Apologies	
2.	Conflict of Interest Declarations	
3.	Confirmation of Minutes of the Environment and Integrated Catchments Committee held on 6 July 2022	
4.	Follow-ups from previous Environment and Integrated Catchments Committee meetings	3
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<b>Decision Items</b>		
14.	Biosecurity Operational Plan and Annual Report – <i>Late item to follow</i>	
6.	Central Hawke's Bay Tukituki swing bridge funding options	9
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6.	Organisational Ecology by Dr Edgar Burns	15
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**HAWKE'S BAY REGIONAL COUNCIL**  
**ENVIRONMENT AND INTEGRATED CATCHMENTS COMMITTEE**

**Wednesday 21 September 2022**

**Subject: FOLLOW-UPS FROM PREVIOUS ENVIRONMENT AND INTEGRATED CATCHMENTS  
COMMITTEE MEETINGS**

**Item 4**

**Reason for Report**

1. In the attached list are items raised at previous Environment and Integrated Catchments Committee meetings that staff have followed up on. All items indicate who is responsible for follow up, and a brief status comment. Once the items have been reported to the Committee they will be removed from the list.

**Decision Making Process**

2. Staff have assessed the requirements of the Local Government Act 2002 in relation to this item and have concluded that, as this report is for information only, the decision-making provisions do not apply.

**Recommendation**

That the Environment and Integrated Catchments Committee receives and notes the *Follow-ups from previous Environment and Integrated Catchments Committee meetings*.

**Authored by:**

**Annelie Roets**  
**GOVERNANCE ADVISOR**

**Approved by:**

**Chris Dolley**  
**GROUP MANAGER ASSET MANAGEMENT**

**Iain Maxwell**  
**GROUP MANAGER INTEGRATED CATCHMENT  
MANAGEMENT**

**Attachment/s**

- 1 [!\[\]\(a16a19bbc0e991a431a3f945e52ea4ee\_img.jpg\)](#) Followups for Sept 2022 EICC mtg



## Follow-ups from Previous Environment &amp; Integrated Catchments Committee Meetings

6 July 2022

	Agenda item	Follow-up item	Responsible	Status/Comment
1	State of the Environment 3-Yearly synthesis report	It was proposed that the report be submitted to this year's Plain Language awards. Entries close on 31 July 2022.	A Madarasz-Smith	Report was submitted as proposed.
2	Reshaping of the Protection and Enhancement programme	Work on the delivery model and progress to be reported to Regional Council annually.	I Maxwell	Ongoing.
3	March/April 2022 double rain events – Flood scheme impacts, recovery and lessons learned	A comprehensive technical flood report is being prepared and expected to be presented to the 21 September EICC meeting.	C Dolley	Not on agenda – on track to be completed. Will be provided to a future EICC meeting.
4	Karamu Urban Catchment Advisor	A review of the Karamu scheme is currently underway and will be presented to a future EICC meeting	C Dolley	This is 12-18 months' work and will be picked up as an agenda item when complete.

9 March 2022

	Agenda item	Follow-up item	Responsible	Status/Comment
5	Minor items not on the Agenda	Consider a future EICC meeting in CHB, including relevant fieldtrips to the Tukipo wetland and community initiatives	I Maxwell/ C Dolley / Governance	Will be scheduled in at a later stage or in the new triennium.



**HAWKE'S BAY REGIONAL COUNCIL**  
**ENVIRONMENT AND INTEGRATED CATCHMENTS COMMITTEE**

**Wednesday 21 September 2022**

**Subject: CALL FOR MINOR ITEMS NOT ON THE AGENDA**

**Item 5**

**Reason for Report**

1. This item provides the means for committee members to raise minor matters *relating to the general business of the meeting* they wish to bring to the attention of the meeting.
2. Hawke's Bay Regional Council standing order 9.13 states:
  - 2.1. "A meeting may discuss an item that is not on the agenda only if it is a minor matter relating to the general business of the meeting and the Chairperson explains at the beginning of the public part of the meeting that the item will be discussed. However, the meeting may not make a resolution, decision, or recommendation about the item, except to refer it to a subsequent meeting for further discussion."

**Recommendations**

That the Environment and Integrated Catchments Committee accepts the following *Minor items not on the Agenda* for discussion as item 13:

Topic	Raised by

**Annelie Roets**  
**Governance Advisor**

**James Palmer**  
**Chief Executive**





**HAWKE'S BAY REGIONAL COUNCIL**  
**ENVIRONMENT AND INTEGRATED CATCHMENTS COMMITTEE**

**Wednesday 21 September 2022**

**Item 6**

**Subject: CENTRAL HAWKE'S BAY TUKITUKI SWING BRIDGE FUNDING OPTIONS**

**Reason for Report**

1. This item seeks the Committee's recommendation to the Regional Council for the funding source, dollar amount and transfer of funding from Regional Council to Central Hawke's Bay District Council (CHBDC) for the rebuild of the Tarewa Swing Bridge (Waipukurau) which was damaged beyond repair in the March 2022 flood event.

**Officers' Recommendation(s)**

2. Regional Council staff recommend that the Committee approves the funding of \$565,000 total (Source: \$23,632 from Upper Tukituki Depreciation Reserve and \$541,368 from the General Disaster Relief Reserve) and provide this as a grant to Central Hawke's Bay District Council to contribute towards the rebuild Tarewa Swing Bridge, with a legal instrument to guarantee public access across the bridge remains in perpetuity.

**Executive Summary**

3. The Regional Council owned Tarewa Swing Bridge (Waipukurau) was damaged beyond repair in the March 2022 flood event. Due to Regional Council's insurance structure, no insurance claim was able to be made, therefore funding for the construction of a replacement bridge needs to come from one of Regional Council reserves. The cost to construct a replacement the bridge has increased significantly compared to the original bridge.
4. During the early stages of developing concept designs, Central Hawke's Bay District Council (CHBDC) proposed to collaborate with Regional Council for the replacement bridge, requesting the bridge be designed and constructed with dual purpose, also being capable of supporting a wastewater pipeline, which is planned for year 8 of their 2021-2031 long term plan. For this to be a viable option for CHBDC, Hawke's Bay Regional Council would need to contribute \$565,000 (expected construction cost of a replacement bridge) as a grant. CHBDC would then lead the design and construction of the bridge and become the owner of the asset being solely responsible for ongoing maintenance, with the understanding pedestrian access of the bridge will remain in perpetuity. The total estimated construction cost of the dual-purpose bridge is \$1.1m. Additional costs for the pipework itself and other project costs equate to approximately \$500k.

**Background /Discussion**

**Original Bridge**

5. In 2014, the Rotary Rivers Pathway Trust together with Regional Council completed the construction of the two pathways along the Tukituki Awa in the vicinity of Waipukurau. These are part of the Tukituki Trails network, which is administered and maintained by the Rotary River Pathways Trust.
6. The Rotary Rivers Pathway Trust started planning process for a swing bridge to connect the two limestone paths on either side of the river. They engaged Abseil Access to design the swing bridge.
7. The Trust believed that it could raise the funds necessary to construct the bridge and at least one potential funder required the bridge to be 'owned' by a public body, with that body taking responsibility for its ongoing maintenance. The Trust approached HBRC to be the 'owner' of the

bridge and to take responsibility for the ongoing maintenance and ultimate replacement at the end of its useful life.

8. This was proposed to Council on 30 November 2016 with the following resolution
  - 8.1. *“That Council: ... 2. Agrees to be ‘owner’ of the proposed bridge, and accordingly take responsibility for its ongoing maintenance and ultimate replacement; and accordingly requesting staff to include financial provision for this into future Annual and Long Term plans’.*
9. In 2017 Regional Council, together with Rotary Rivers Pathway Trust, completed the construction of the structure called Tarewa Swing Bridge.
10. Since its construction, the bridge had become the centrepiece of the Tukituki Trails network and was well used and enjoyed by Central Hawke’s Bay public and visitors.
11. The original bridge had a book value as an insured Regional Council asset of approximately \$343,500 (June 2021: \$312,282 + 2022 CPI Civil Construction 10%). It was recorded as an asset of the Upper Tukituki Flood Control Scheme (geographically) but is managed as an Open Spaces asset.
12. The bridge and the associated Tukituki Trails network are not part of the Great Ride cycleway network in the Heretaunga Plains area.

### **March 2022 Flooding Event**

13. The bridge was damaged beyond repair in the March 2022 flooding event. Regional Council’s Works Group has since dismantled and removed the remains of the damaged bridge, to make the area safe and open to the public, albeit without the connection across the river. Materials from the bridge that were able to be salvaged were recovered by Rotary Pathways and HBRC staff.
14. The bridge was on the asset register and insured, but the overall cost of the damage from the March 2022 flood event came under the minimum excess, therefore no claim was made. This scenario requires replacement funding from reserves.

### **Rebuild Planning**

15. A significant amount of urgency for the rebuild has been conveyed by key stakeholders to the contractors and project team (HBRC and CHBDC), speaking to the significant importance this structure has to the community.
16. Shortly after the March 2022 flood event, HBRC started discussions with Abseil Access (the original designer and builder of the bridge) to develop concept designs and indicative costing of a replacement swing bridge.
  - 16.1. Part of the design requirement was to raise the swing bridge height to above 1 in a 100-year flood event, increasing the structure’s resilience and lowering the likelihood of a new structure being damaged from future flooding events.
  - 16.2. The increased height meant the existing location was no longer suitable, due to spatial restrictions from the true left stopbank and neighbouring property boundary.
  - 16.3. The concept design location was approximately 30 metres upstream.
  - 16.4. The indicative cost provided by Abseil Access based on an approximately 89 metre bridge span (\$5,000 per metre) and a 60-metre boardwalk (\$2,000 per metre), was \$565,000.
  - 16.5. These indicative costings are for the construction only, and do not include finalised design drawings, HBRC officers time and any consent requirements (both building consent from CHBDC and resource consent from the Hawke’s Bay Regional Council).

- 16.6. Significant inflation of the cost of construction materials and increased height of the bridge are the driving forces behind the increase compared to the book value and construction cost of the original bridge.

### Central Hawke's Bay District Council Partnership Opportunity

17. In Year 8 of the CHBDC 2021 -2031 Long Term Plan, CHBDC had planned to commence building a wastewater pipeline from Waipukurau to Waipawa, which requires crossing of the Tukituki Awa.
18. During the early stages of engagement with Abseil Access, CHBDC proposed to partner with HBRC for the rebuild of the bridge to align work programmes by building a bridge capable of supporting their future wastewater asset river crossing requirement.
19. Abseil Access indicated it was possible to design the swing bridge to withstand the additional load requirements and, through CHBDC consultation with their technical advisors, they have decided it is feasible to design a bridge with sufficient resilience in terms of flooding risk.
20. The increased dual purpose design requirements will substantially increase the design and construction cost.
21. CHBDC have sought and received approval to bring funding forward in their Long Term Plan to contribute to the construction of the bridge, with the assumption HBRC provides a \$565,000 grant. This will enable the bridge to be designed and constructed to accept the planned future wastewater pipe/s.
22. Due to the increased risk and significance of the wastewater asset, CHBDC would lead the design and construction of the bridge and become the owner of the asset, being solely responsible for ongoing maintenance, with the understanding pedestrian access across the bridge will remain in perpetuity.
23. HBRC through its consenting function would need to approve the proposed engineering design from a river control/flood management perspective. HBRC support would need to be evidenced in the application for easements to Department of Conservation (DOC). These approvals would all be sought in advance of the bridge works commencing.
24. The bridge was recorded as an Upper Tukituki Scheme asset by virtue of geographic location at the time of entering the asset register as there was no Open Spaces asset class separation at that time. It has no flood control value, and the replacement funding should be sourced from general disaster reserves, given the wider community benefit of the asset.

### Funding Options and Financial Implications

Funding source	Available	Impact/comment
Upper Tukituki Scheme	Yes	There is no flood control benefit from the structure, so it is not an equitable source of replacement finance. There are scheme reserves available, but it would be a non-beneficial investment to the scheme and costs should not be limited to this scheme. Reserves for the bridge specifically are limited in scheme so the impact would be on the wider scheme with no flood control benefit.
General Disaster Relief Reserve	Yes- Review required	The insurance excess (\$M1.5) requires HBRC to cover these types of events from disaster reserves. In saying this, spending \$565k from the disaster reserve could mean the balance is below that required for any repair of flood protection assets after future flood events. Consideration in the next Long Term Plan (LTP) is how we build up the general disaster relief reserve again and what an appropriate top level for it should be.

Funding source	Available	Impact/comment
Open Spaces	No reserves but could be loan funded (repaid over 10 years)	98% funded through general rates. The wider community benefits would be better reflected in regional sourced funding as it is not a flood protection asset.
Combination Upper Tukituki Depreciation Reserve and General Disaster Relief Reserve	Yes	Suggested ratio is the depreciation value for the bridge since 2017 from the Upper Tukituki Depreciation Reserve (calculated as \$23,632) and the balance from the General Disaster Relief Reserve
Pursue External Funding avenues	TBC	There is a push to get the construction of the bridge underway as quickly as possible which limits potential for sourcing external funding from interested funders. There is no guarantee that the funders who have already provided funding to the original project will be able to or be willing to support additional funding. This option could be pursued by CHBDC.
Do not fund the rebuild	N/A	Not considered a viable alternative based on strong community interest and demonstrated commitment to the original project.

### Rebuild options

#### Option 1 – Regional Council provide \$565,000 grant (maximum) to CHBDC to build a replacement bridge

25. CHBDC would lead the construction of the dual-purpose bridge.
26. CHBDC proposed ownership structure of the dual-purpose bridge, maintenance and insurance will be a CHBDC parks activity, with an easement/access agreement back to 3 Waters.
27. HBRC would remain a key stakeholder and be consulted on the progress and decisions of the swing bridge design and construction regularly. HBRC will maintain existing regional cycleways advisory support, and co-ordination with river and cycleway scheme operational activity.
28. The understanding between HBRC and CHBDC is the public pedestrian use of the bridge remains in perpetuity, legal instruments (e.g. a memorandum of understanding) will be put in place to ensure this happens. This is also in the interest of CHBDC.
29. Collaboration on this project will strengthen HBRC's relationship with CHBDC. There has been good post-flood co-operation between the two councils on other flood damage remediation (CHBDC stopbanks and water intakes) following this.
30. The cost of all future life cycle, maintenance, and replacement activity for the dual-purpose bridge option rests with CHBDC.
31. CHBDC have had approval to bring funds forward to fund the construction of the bridge, under the assumption \$565,000 is provided by HBRC. The wastewater conveyance will not occur until Year 8 of their 2021-2031 Long Term Plan.

#### Option 2 – Regional Council to offer CHBDC the book value of \$340,000

32. CHBDC have indicated that unless the full \$565,000 is contributed by HBRC, utilising the swing bridge for the conveyance of their wastewater asset across the Tukituki is not a viable option.
33. Same conditions as points 25 to 30.

### **Option 3 – Hawke’s Bay Regional Council to retain full control of the rebuild of the bridge and discontinue collaboration with CHBDC in terms of dual purpose bridge**

- 34. A less resilient structure will be built as the only use will be for pedestrians/cyclists.
- 35. All costs for the bridge construction would sit with HBRC.
- 36. The risk of any cost escalations through unforeseen circumstances during the design and construction falls on Regional Council. The full costs of construction have risk of exceeding the \$565,000 (structure only) figure with the significant rising construction cost environment and then the full life cycle costs for the new structure.
- 37. Future maintenance costs sit with HBRC.
- 38. HBRC would retain the control on the design and construction decision making.

### **Option 4 – Hawke’s Bay Regional Council to not fund the rebuild of the bridge.**

- 39. This is the least desirable option. Not considered a viable based on strong community interest and HBRC’s demonstrated commitment to the project.

#### **Strategic Fit**

- 40. The rebuild will provide a physical and community infrastructure asset with increased resilience to what was built prior to the March 2022 flood event and return the prosperity from our natural resource base. The increased height of the bridge will lower the impacts of climate change.
- 41. The Tarewa Swing Bridge has been a HBRC asset since it was constructed in 2017. The bridge was part of the Tukituki Trails which are not part of Regional Council’s Hawke’s Bay Trails. The Tukituki Trails are administered and maintained by Rotary Rivers Pathway Trust.
- 42. The construction of a new swing bridge was not planned, therefore is not part of the long-term plan.

#### **Significance and Engagement Policy Assessment**

- 43. The decision is not significant under the criteria contained in Council’s adopted Significance and Engagement Policy.

#### **Climate Change Considerations**

- 44. The concept designs have increased the height compared to the original bridge, to be above the 1 in 100-year flood event level.
- 45. With the added risk associated with supporting the wastewater asset on the bridge, the structure strength will be significantly increased and likely the deck height further increased again.

#### **Considerations of Tāngata whenua**

- 46. HBRC engaged with Te Taiwhenua o Tamatea during the planning stages of the original swing bridge, who were supportive of the bridge and had naming rights.
- 47. Since the collaboration between HBRC and CHBDC, CHBDC have lead engagement with tāngata whenua. CHBDC have had recent discussion with Te Mana Taiao o Tamatea group who have confirmed their support of the direction to enable the future Tukituki River wastewater conveyance crossing to be via the new swing bridge structure.

#### **Decision Making Process**

- 48. Council and its committees are required to make every decision in accordance with the requirements of the Local Government Act 2002 (the Act). Staff have assessed the requirements in relation to this item and have concluded:

- 48.1. The decision does not significantly alter the service provision or affect a strategic asset, nor is it inconsistent with an existing policy or plan.
- 48.2. The use of the special consultative procedure is not prescribed by legislation.
- 48.3. The decision is not significant under the criteria contained in Council's adopted Significance and Engagement Policy.
- 48.4. The persons affected by this decision are The Upper Tukituki Scheme rate payers and general Hawke's Bay rate payers.
- 48.5. Given the nature and significance of the issue to be considered and decided, and also the persons likely to be affected by, or have an interest in the decisions made, Council can exercise its discretion and make a decision without consulting directly with the community or others having an interest in the decision.

## **Recommendations**

That Environment and Integrated Catchments Committee:

1. Receives and considers the *Central Hawke's Bay Tukituki Swing Bridge Funding Options* staff report.
2. The Environment and Integrated Catchments Committee recommends that the Hawke's Bay Regional Council:
  - 2.1. Agrees to source funding of total \$565,000 (23,632 from Upper Tukituki Depreciation Reserve and \$541,368 from the General Disaster Relief Reserve) to contribute towards the rebuild of the Tarewa Swing Bridge in Central Hawke's Bay.
  - 2.2. Grant \$565,000 to Central Hawke's Bay District Council, with the understanding the money will be going towards the construction of a replacement swing bridge, which will have pedestrian access in perpetuity.
3. Agrees that the decisions to be made are not significant under the criteria contained in Council's adopted Significance and Engagement Policy, and that Council can exercise its discretion and make decisions on this issue without conferring directly with the community or persons likely to have an interest in the decision.

## **Authored by:**

**Tim Jones**  
**PROJECT ENGINEER**

**Tintu Joseph**  
**MANAGEMENT ACCOUNTANT**

**Ken Mitchell**  
**ASSET MANAGEMENT ENGINEER**

## **Approved by:**

**Chris Dolley**  
**GROUP MANAGER ASSET MANAGEMENT**

**Chris Comber**  
**CHIEF FINANCIAL OFFICER**

## **Attachment/s**

There are no attachments for this report.

**HAWKE'S BAY REGIONAL COUNCIL**  
**ENVIRONMENT AND INTEGRATED CATCHMENTS COMMITTEE**

**Wednesday 21 September 2022**

**Subject: ORGANISATIONAL ECOLOGY BY DR EDGAR BURNS**

**Item 7**

**Reason for Report**

1. This item introduces Dr Edgar Burns' report titled *Organisational Ecology*, which uses the concept of organisational ecology to reflect on HBRC's environmental work in our region so we can increase our effectiveness in supporting improved environmental practices and climate change readiness. This is the third social science report for the Environment and Integrated Catchments Committee (EICC) in the technical paper series.

**Executive Summary**

2. Selected examples and issues of organisational ecology are discussed that can be used to enhance HBRC delivery of its regional mandate for water, soil and the growing climate pressures faced both locally and globally.
3. This report brings a social science lens to the HBRC role using the idea of organisational ecology to show the complexity and opportunities of regional council work. Among many organisational, community and sector groupings, there are competing understandings and interests. Within this ecology, only a small part of needed changes are able to be influenced by HBRC.

**Strategic Fit**

4. This work delivers against 2020-2025 Strategic Plan, namely that '*Climate change is at the heart of everything we do*'.

**Discussion**

5. The HBRC is increasingly faced with people pressures that interact with what science evidence is reporting. While climate change denialism is receding, there is little appreciation yet of the speed or severity of local consequences of climate heating on this region and its inhabitants.
6. This is presented in the main body of Dr Edgar Burns' *Organisational Ecology* report.
7. Dr Burns will present the findings of his research to Council and will be available for questions and discussion.

**Next Steps**

8. Selected next steps are proposed in the final section of Dr Burns' report (attached).

**Decision Making Process**

9. Staff have assessed the requirements of the Local Government Act 2002 in relation to this item and have concluded that, as this report is for information only, the decision-making provisions do not apply.

**Recommendation**

That the Environment and Integrated Catchments Committee receives and notes the *Organisational Ecology* report by Dr Edgar Burns.

**Authored and Approved by:**

**Iain Maxwell**

**GROUP MANAGER INTEGRATED CATCHMENT  
MANAGEMENT**

**Attachment/s**

- 1**     Dr Edgar Burns - Organisational Ecology report     Under Separate Cover



**Subject: RIPARIAN MARGIN SURVEY RESULTS FROM TUKITUKI CATCHMENT****Reason for Report**

1. This report presents the results of the riparian margin survey from the Tukituki catchment and provides an overview of the Hawke's Bay Regional Council's riparian monitoring programme.

**Executive Summary**

2. Excluding stock from regional waterways contributes towards a number of Council's goals and objectives for water quality and ecosystem health.
3. Requirements to exclude stock are already in place for certain parts of the Tukituki Catchment through PC6 (the Tukituki Plan Change), and upcoming national regulation will require stock exclusion for other parts of the region by 1 July 2025.
4. A riparian monitoring programme has been developed to investigate the extent of stock exclusion from waterways in the region. The programme involves surveying sites across Hawke's Bay to identify riparian characteristics such as fencing and vegetation. The aim of this programme is to extrapolate information from these results to gain an understanding of stock exclusion at a catchment-wide basis.
5. The Tukituki catchment was the location of the first field survey and from the results it is estimated that 43.4% of total bank length is effectively fenced, 30.9% of waterway length has both banks effectively fenced and 47.3% of bank length has stock access.
6. A planned change in methodology from field surveys to an analysis of orthophotography holds potential to increase the efficiency of the programme and provide more timely information.

**Strategic Fit**

7. **HBRC Strategic Plan 2020-25** sets a strategic goal that *'by 2025, stock is excluded from all flowing permanent and intermittent rivers/creeks, lakes and wetlands, and at least 30% are fenced and planted to filter contaminants.'*
8. The riparian monitoring project has investigated the present status of fencing and stock exclusion in the Tukituki catchment and will continue collecting fencing and stock exclusion information in other parts of Hawke's Bay.
9. **National Resource Management (Stock Exclusion) Regulations 2020** requires exclusion of stock from waterbodies and natural wetlands. As stated above, the programme estimates the present status of stock exclusion in Hawke's Bay as a baseline for ongoing monitoring.
10. The riparian monitoring programme supports the collective work by staff on stock exclusion, and can assist in identifying areas of high priority for education.

**Background**

11. Council's Land Science riparian monitoring programme was instigated in 2019 to understand the condition and management of the riparian margins across agricultural land uses and monitor their change over time in the Hawke's Bay region. The survey design is expected to enable quantification of riparian characteristics, such as fencing, vegetation, and erosion along the waterways (e.g., percentage of waterways with fencing). A similar riparian monitoring programme is undertaken by Waikato Regional Council, where this type of survey has been repeated in the region four times in the last two decades.

12. A total of 300 sites were selected across the region, which is expected to sufficiently capture regional and catchment riparian characteristics. Each riparian site is a 500-metre length of waterway. A field survey is carried out across the length of the site. The original survey methodology<sup>1</sup> proposed carrying out this survey on a rotation basis, with one catchment or catchment group surveyed during each field campaign and re-surveyed after five years.
13. The first field survey campaign in Hawke's Bay started in the Tukituki catchment in January 2019 to align with the then Tukituki Plan Change. Staff capacity shortages meant the field survey campaign in Tukituki catchment was not completed until September 2020. The catchment has 87 sites located within it, 68 of which were surveyed. The remainder were not surveyed because the landowner's permission could not be obtained.

## Discussion

14. The data collected during the field survey was analysed to estimate the extent of fencing, stock access, woody vegetation, and erosion as a proportion of bank or waterway length.
15. Using this methodology, an estimated 43.4% of total bank length is effectively fenced in the Tukituki catchment. The rest of the total bank length is either unfenced or ineffectively fenced.
16. From 31 May 2020 rules in the Tukituki Catchment came into effect requiring exclusion of all stock (excluding sheep) from waterways:
  - 16.1. on land with a slope of less than 15 degrees, and
  - 16.2. on land in priority phosphorus catchments with a slope of greater than 15 degrees unless stocking units are less than 18su/ha.
17. Strict compliance with Tukituki stock exclusion rules is difficult to ascertain using this methodology because:
  - 17.1. exclusion can be achieved using temporary fencing,
  - 17.2. accurate information on slope is currently not available (awaiting national slope maps and LiDAR data), and
  - 17.3. stocking units and stock type can be agile throughout the year.
18. Nonetheless, the programme gives important information on the types of waterways and land uses that may have higher or lower levels of effective fencing, and can facilitate conversations within these industry areas.
19. An estimated 30.9% of waterway length has both banks effectively fenced in the Tukituki catchment.
20. An estimated 47.3% of bank length in the Tukituki catchment has current stock access.
21. Only an estimated 15.6% of bank length in the Tukituki catchment is covered with woody vegetation.
22. An estimated 15.2% of bank length in the Tukituki catchment has active bank erosion.

## Next Steps

23. Since 2021, a new survey approach has been instigated to achieve better survey efficiency across the large number of monitoring sites. SKYVUW was hired to collect four-band orthophotography at the resolution of 2.5 cm for the remaining 213 sites outside the Tukituki catchment. Imagery was collected during September to December 2021, when the sun angle ensures good illumination of site areas. The imagery covers each site area but also extends wider to provide sufficient view of the surrounding environment.

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<sup>1</sup> Wu, J. (2019) Hawke's Bay riparian survey methodology for SoE monitoring. HBRC report No. 5431.

24. The imagery collected from the 213 sites can be analysed in stereo view in a GIS environment, which enables riparian characteristics to be collected effectively. The analysis workflow has been planned with assistance from the GIS team and will be initiated in November this year.
25. The new approach holds potential to shorten our current planned survey intervals (5 years) and provide more timely information.

#### **Decision Making Process**

26. Staff have assessed the requirements of the Local Government Act 2002 in relation to this item and have concluded that, as this report is for information only, the decision making provisions do not apply.

#### **Recommendation**

That the Environment and Integrated Catchments Committee receives and notes the *Riparian margin survey results from Tukituki catchment* staff report.

#### **Authored by:**

**Dr Kathleen Kozyniak**  
**TEAM LEADER MARINE AIR & LAND SCIENCE**

**Anna Madarasz-Smith**  
**MANAGER SCIENCE**

**Jamie Wu**  
**LAND SCIENTIST**

#### **Approved by:**

**Iain Maxwell**  
**GROUP MANAGER INTEGRATED CATCHMENT**  
**MANAGEMENT**

#### **Attachment/s**

There are no attachments for this report.



**Subject: FARM ENVIRONMENTAL MANAGEMENT PLAN (FEMP) UPDATE**

**Reason for Report**

1. This item updates the Committee on Farm Environmental Management Plans (FEMPs) in the Tukituki catchment. An update was last given in February 2021.

**Executive Summary**

2. Farm Environmental Management Plans (FEMPs) have been mandatory in the Tukituki catchment since 31 May 2018, for all properties over 4 ha in size (with some low intensity exclusions up to 10 ha). The Regional Resource Management Plan (RRMP) required these FEMPs to be updated on a 3-yearly basis, with the first round of updates due on 31 May 2021.
3. Most FEMP reviews and resubmissions have been completed, covering 95% of eligible land in Tukituki catchment. Follow-up action continues with the remaining 42 properties.
4. The focus for the period leading to the next May 2024 resubmission is on auditing FEMPs, implementing process improvements, and planning the regional transition to Freshwater Farm Plans following clarification of those national requirements at the end of 2022.

**Strategic Fit**

5. FEMPs are strategically aligned with three out of the four top priorities in the 2020 – 2025 Strategic Plan.
  - 5.1. Firstly land, through 'climate-smart and sustainable land use', and secondly 'water quality, safety and climate-resilient security', both driving on farm change and sustainability to deliver catchment water quality targets and objectives.
  - 5.2. Thirdly, FEMPs also contribute to 'healthy, functioning and climate-resilient biodiversity.'
6. The Tukituki catchment has a 250,000 ha catchment area with 216,000 ha of this requiring a FEMP.

**Background**

7. In 2018, 796 FEMPs were completed. 710 FEMPs have been completed for the 2021 review and resubmission. With ongoing changes to property ownership, leases and property sizes, the number of FEMPs completed in each resubmission period will continue to fluctuate.
8. An additional 357 Low Intensity applications have been made since 2016. These are mainly small blocks of less than 10ha which can be exempt from FEMP requirements if they meet 'low intensity' criteria. To meet the criteria, they must have a low stocking rate of fewer than 8 stock units per hectare and not have vegetable or forage crops, or be a dairy farm.
9. There are currently 18 HBRC approved providers of FEMPs working in the Tukituki catchment, preparing FEMP updates and, if necessary, consent applications. Providers become approved by submitting three FEMPs which are checked for completeness by HBRC staff. An on-farm assessment is also included in this process by which providers demonstrate they are able to meet the required standard for a FEMP. Four new providers have been approved since the last staff notes to Council (February 2021). The interest in becoming an approved provider is growing with several enquiries received over the last few months from a range of professionals.
10. The current FEMP Project Manager started their role in May 2021 and a new Environmental Data Analyst joined in April 2022. An Audit Advisor has recently been recruited and started in

late August 2022 to further the assessment of FEMPs. The FEMP team is now at full capacity.

## **Discussion**

### **FEMPs**

11. Due to delays in receiving FEMP resubmissions because of provider capacity issues, Covid-19 delays, and the review of Overseer, the decision was made to extend the submission deadline by 12 months to 31 May 2022.
12. At the time the decision was made to extend the deadline (February 2022) around 300 FEMPs had yet to be received. Notice of the extended deadline was given to the approved providers in writing and individual letters to all landowners were sent out in February 2022. This correspondence outlined the consequences of not submitting the FEMP by the extended deadline.
13. At the time of this report being written, 711 of the 2021 FEMP submissions have been received, covering 94.73 % or 204,552 ha of eligible land in the Tukituki. For each of the remaining 42 properties needing a 2021 FEMP update, there is an existing active plan in place from 2018.
14. These 42 properties include 17 that have been referred to the Compliance section for follow up, 15 having undergone a property sale within the last 6 months and 9 are with providers awaiting their plan to be updated and submitted
15. A focus over the last year has been building the relationship between the FEMP providers and FEMP Project Manager and team.

### **Compliance actions**

16. All providers, and the vast majority of landowners, have engaged in the FEMP resubmission process. Of over 100 properties initially placed on the Compliance action list since August 2021, fewer than 20 remain. The remaining <20 properties include 7 handed over from the FEMP team after the extended deadline of 31 May 2022.
17. The Compliance team has followed up with property owners who have not engaged a FEMP provider to complete a FEMP update. Where possible, this has been through phone conversations which have been productive in engaging a FEMP Provider. Where no phone contact information is held, letters have been sent. However, posted letters have had limited effectiveness. If no response is received, some site visits have been undertaken to meet landowners and these are effective if contact can be made.
18. For the remaining properties where compliance contact has not been enough for the owner to engage a FEMP provider, further action can be taken. Enforcement action in the form of an abatement notice has been drafted and can be served for the properties where no FEMP provider has been engaged.
19. Enforcement action is used as a last resort where it has not been possible to engage the property owner in the FEMP process.

### **2024 FEMPs**

20. Planning is well underway to ensure success in the 2024 FEMP submission cycle for Tukituki.
21. The FEMP Project team is focusing on 5 key deliverable areas which are:
  - 21.1 *Auditing* (assessing FEMPs against requirements of Schedule XXII)
  - 21.2 *Providers* (increasing number of providers and improving support and training for providers)
  - 21.3 *Data Quality* (internal processes to receive, store and check data from FEMPs)
  - 21.4 *Submission Process* (how and what information is collected and how can this be done in the most efficient manner), and

- 21.5 *Communications & Engagement* (engagement and communication with providers and landowners leading up to and during 2024 cycle).
22. The FEMP team is currently engaging an external consultant to survey and interview landowners and FEMP providers to gather feedback on aspects of the 2021 resubmission process. The survey and interviews will help inform process improvements to put in place for the next (2024) FEMP resubmissions.
23. As part of planning for 2024, the aim is to give providers and landowners at least 12 months to submit the reviewed FEMPs, and therefore the project is aiming to have the submission portal open and ready for use by 1 June 2023.

### **Auditing FEMPs**

24. A FEMP Audit Advisor has been appointed. They will audit the permitted activity FEMPs, which do not require a resource consent. Property selection for auditing will ultimately be a mix of targeted risk-based audits and some random audits. Initial selection will be from properties that have identified as low intensity, and those properties at higher risk of N loss which are outside DIN (dissolved inorganic nitrogen) exceeding sub catchments.
25. All properties which have a production land use, dairy effluent, or other relevant consent, will be audited through the Compliance team.
26. These two functions will work together as a 'virtual team' to ensure consistency in the process.
27. The regulatory and non-regulatory teams across council have been working together over 2022 to develop and refine an auditing process, including on farm testing.
28. An interim approach has been adopted until the 2024 submissions. This approach will focus on providing clear feedback to farmers and providers on the quality of FEMPs before the next 2024 review and resubmission.
29. All actions highlighted through an audit will be expected to be included in the 2024 FEMP update. The exception to this is if an activity is seen to be a significant non-compliance for example if stock exclusion has not been completed.

### **Freshwater Farm Plans (FW-FPs)**

30. In July 2020 Part 9A of the Resource Management Act (RMA) was inserted to '*better control the adverse effects of farming on freshwater and freshwater ecosystems...through the use of freshwater farm plans*'. From 2025 freshwater farm plans (FW-FP) will be mandatory for horticulture properties over 5 ha and pastoral land operations over 20 ha. This is estimated to be approximately 4500 properties in Hawke's Bay.
31. Part 9A of the RMA created new roles for Regional Councils in:
  - 32.1 Appointing certifiers and auditors (according to criteria to be specified in regulation)
  - 32.2 Keeping records of certified FW-FPs and audits of FW-FPs undertaken
  - 32.3 Enforcing that a farm operator has a FW-FP
  - 32.4 Enforcing that a farm operator updates their FW-FP (when required)
  - 32.5 Enforcing observance of a FW-FP by the farm operator.
32. Various national working groups have been active over the last year and a half to test and provide feedback on the components of the national farm planning system. These have included regional sector representation from councils including HBRC. This work has traversed the structure of the national farm planning system, a proposal for a national farm data platform and planning for implementation.

33. An indication of the likely content of the regulations is due in mid-September 2022 and will then be made public for feedback and submissions. The detailed FW-FP regulations are expected to be gazetted at the end of 2022.
34. The local implementation of the national FW-FP regulations will involve a staged roll-out over time. A transition will need to be planned for Tukituki and TANK catchment areas where requirements for farm plans are already described.
35. As the detail of final regulations and national work to support the implementation becomes clear, we may need to adapt our FEMP project plan leading to 2024 to align with a planned transition to the national system.
36. Current experience with FEMPs means landowners in Tukituki will be better prepared for future farm plan requirements than those in other parts of the country.

### **Decision Making Process**

37. Staff have assessed the requirements of the Local Government Act 2002 in relation to this item and have concluded that, as this report is for information only, the decision-making provisions do not apply.

### **Recommendation**

That the Environment and Integrated Catchments Committee receives and notes the *FEMP Update* staff report.

### **Authored by:**

**Marnie Mannering**  
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**Brendan Powell**  
**MANAGER CATCHMENTS POLICY**  
**IMPLEMENTATION**

**Simon Moffitt**  
**TEAM LEADER COMPLIANCE – RURAL**

**Louise McPhail**  
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**SENIOR REGULATORY ADVISOR**

### **Approved by:**

**Katrina Brunton**  
**GROUP MANAGER POLICY & REGULATION**

**Iain Maxwell**  
**GROUP MANAGER INTEGRATED CATCHMENT**  
**MANAGEMENT**

### **Attachment/s**

There are no attachments for this report.



**Subject: ENVIRONMENTAL ENHANCEMENT PROGRAMMES**

**Reason for Report**

1. This report updates Council on the activities and achievements undertaken as part of the larger Environmental Protection and Enhancement Programme (PEP).

**Strategic Fit**

2. The PEP contributes to three of the four focus areas of the HBRC Strategic Plan 2020-2025, being:
  - 2.1. Water quality, safety and climate-resilient security
  - 2.2. Healthy, functioning and climate-resilient biodiversity
  - 2.3. Climate-smart and sustainable land use.
3. The PEP is also closely aligned to support other internal programmes of work across Council, such as: Ecosystem Prioritisation, Erosion Control Scheme and Catchment Policy Implementation.
4. The Marine PEP project was initially developed with a slightly different focus from other enhancement and protection projects, in that it seeks to increase our understanding of the Hawke's Bay marine environment. This significantly contributes to our strategic goal of *Healthy, functioning and climate resilient biodiversity, by Growing knowledge of the coastal marine environment*.

**Background**

5. In 2017 as part of the Annual Plan development, the PEP (formerly Environmental Hot Spots) was established to accelerate on-ground action on six identified high-priority environmental 'hot spots' throughout the region – Ahuriri Estuary, Karamu River, Lake Tūtira, Lake Whakakī, Tukituki River, Lake Whatumā and our Marine environment.
6. At the 6 July EICC meeting, Council approved the request to implement a new delivery model for the PEP that will include a contestable community Environmental Enhancement Fund along with an expansion of our Targeted Catchment Work Programme.
7. As implementation of the new delivery model begins, this report was put together to update Council on the key activities and achievements delivered through the PEP since its inception.
8. The Marine PEP project has contributed to mapping areas of key subtidal habitats in Hawke's Bay to form the basis for further assessments of the biology contributing to these areas. Additionally, the Marine PEP has been able to support planting and fencing activities in the Pōrangahau Estuary to improve water quality for the only regional estuarine population of the native seagrass *Zostera muelleri*.

**Discussion**

**Protection and Enhancement Projects**

**Te Whanganui-ā-Orotu (Ahuriri Estuary)**

9. The key focus here is on improving the overall health and water quality of Ahuriri Estuary by working with landowners to reduce the high sediment and nutrient loads entering the estuary from the wider catchment, and to increase indigenous habitat.

10. Our engagement with rural landowners within the Ahuriri Estuary catchment to address these issues has been successful. The table below outlines the catchment works that have been completed through the protection and enhancement fund.

	Fencing	Native Planting	Poplar Planting
<b>Works Completed From January 2018 – Present</b>			
Waterways	11894m	21,879	
Wetlands	915m	13,216	
Retirement areas	5084m	34,815	
Estuary Protection	480m		
Slope stability (pastoral)			1890
<b>Total</b>	<b>18.4km</b>	<b>69,090</b>	<b>1190 (poles)</b>

11. An area of inland hill country across 5.9 ha has been reinstated back to a swamp forest wetland system to help improve the quality of the surface water, leaving the wetland and entering Wharerangi Stream and increasing indigenous habitat.
12. A 12.7 ha area has been retired and fenced. This area has been identified as an Ecosystem Prioritisation Site as it contains the only remnant area of indigenous forest within the Ahuriri catchment and is a highly important seed source. It is now being managed for pest plant/animal control and expanded with further native planting.
13. The largest areas of the invasive tubeworm *Ficopomatus enigmaticus* that had created bunds across the estuary restricting water flow have now been removed. These areas are now being monitored to understand the rate of recolonisation before any additional removal is undertaken.

#### Lake Whatumā

14. The Whatumā Management Group (WMG) has been appointed by the respective trusts to lead the management of Lake Whatumā and is looking to develop a long-term management plan for the lake.
15. HBRC is working with the WMG on how HBRC can assist with the development of the management plan.
16. A restoration action plan has been completed for Lake Whatumā that includes:
- 16.1. existing biodiversity values, key threats to the ecosystem
  - 16.2. visual, spatial, and written restoration objectives including the design of desired plant communities
  - 16.3. maps identifying key habitats and prioritisation of areas for management activities and development towards objectives
  - 16.4. an outline of the different methods for weed and pest animal control and associated costs, including recommended monitoring associated with management actions and planting plans for different vegetation outcomes.
17. Engagement with rural landowners within the Lake Whatumā catchment is underway with a focus on reducing sediment and nutrient loads entering the lake and increasing indigenous habitat and green corridors.
18. Partnering with landowners and Mauri Oho (Local Jobs for Nature Team) for the first season of on-ground work has recently been completed with 1ha of willows being removed and 5000 native plants being installed. Planning is now underway for native planting to be delivered in winter 2023.

19. HBRC further supported the existing volunteer pest trapping programme at Lake Whatumā by providing additional AutoTraps, DOC200 and Timms traps.

**Lake Tūtira (*Te Waiū o Tūtira, The Milk of Tūtira*), HBRC partnership with Maungaharuru-Tangitū Trust, 2018 -2022**

20. 14 Farm Environmental Management Plans (FEMP) have now been completed covering 2217ha (70%) of the Lake Tūtira catchment.
21. The table below outlines the work that has been completed through the subsidy scheme as a result of the FEMPs.

	Fencing	Native Planting	Erosion Planting
<b>Works Completed From January 2018 – To present</b>			
Waterways	5067m	27,183	
Wetlands	1270m	5278	
Retirement areas		1120	
Slope stability (pastoral)			2400
<b>Total</b>	<b>6.3km</b>	<b>33,581</b>	<b>2400</b>

22. Five sediment ponds, a rock drop structure and three fish passages have been installed on the tributaries that enter the lake.
23. The key sediment control project was completed. This involved removing the stopbank adjacent to Kahikanui Stream and installing planting benches with native vegetation. In large rain events, this allows Kahikanui Stream to reconnect to its original 10ha flood plain where sediment can drop out before water enters the lake. This also prevents the ongoing bed and bank erosion of the stream, thereby reducing a significant volume of sediment being deposited into Lake Tūtira in the future.
24. A Tūtira cultural monitoring framework was developed by Maungaharuru-Tangitū Trust with support from NIWA focusing on three cultural values of specific importance to the hapū: tuna, kākahi and swimming.
25. The Tūtira website has been revised to include a water quality dashboard that provides a source of reliable information for the community, including cyanobacteria, oxygen and lake Trophic Level Index.
26. A dynamic risk assessment is now in place that utilises the monthly cyanobacterial counts, the live data from the profiling buoy and weekly measurements of inferred algal levels. This resulted in the permanent advisory against swimming in Tūtira being lifted in February 2021.

**Whakakī Lake (*Sunshine, wetlands and bees will revitalise the taonga of Whakaki*), HBRC partnership with Whakakī Lake Trust, 2019 – 2024**

27. The Whakakī website has been revised to include a water quality dashboard and will provide a source of reliable information for the community including water level, cyanobacteria, oxygen and lake Trophic Level Index.
28. A Memorandum of Understanding was signed between the Mataroa Tamati Hook Whānau Trust and the Whakakī Lake Trust outlining how they will work together on the redevelopment of the former Whakakī School as a centre for the community. This was a significant step forward for both trusts, their beneficiaries and the Whakakī community.
29. All external and internal building renovations and new roofing installation have been completed with an opening for the community expected in the coming year.

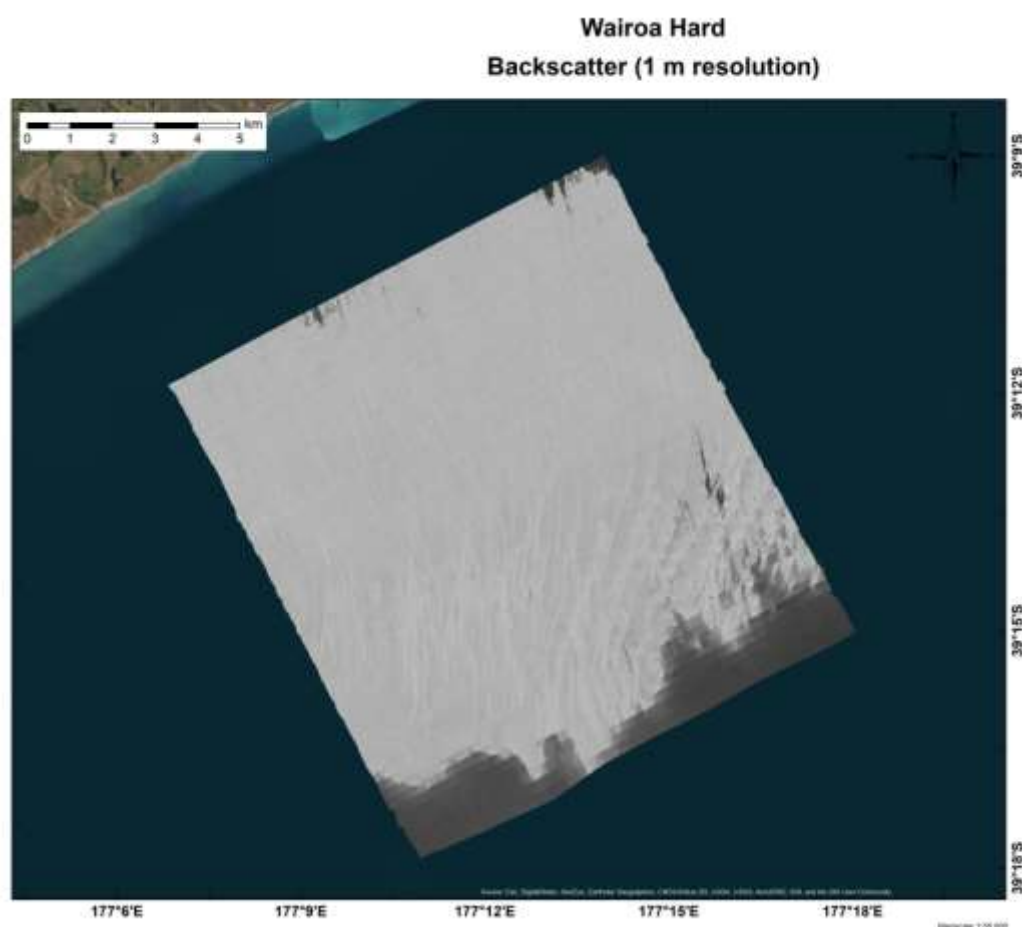
30. Following extensive community engagement full agreement was reached to build a two-stage weir in the Rahui Channel to retain water in Whakakā Lake during openings, and protect the lake from dropping too low in summer.
31. Working with the community to deliver on-ground work with multiple community planting days being held and 8000 native plants being installed around Lake Whakakā.

### Marine Protection and Enhancement project

32. The key focus of this programme is to gain knowledge of our subtidal marine habitats. This project has supported subtidal habitat mapping using Multibeam Echo Sounder on board the NIWA research vessel *Ikatere* to provide spatial data on the bathymetry and reflectivity (used to determine the habitat type) of these areas.

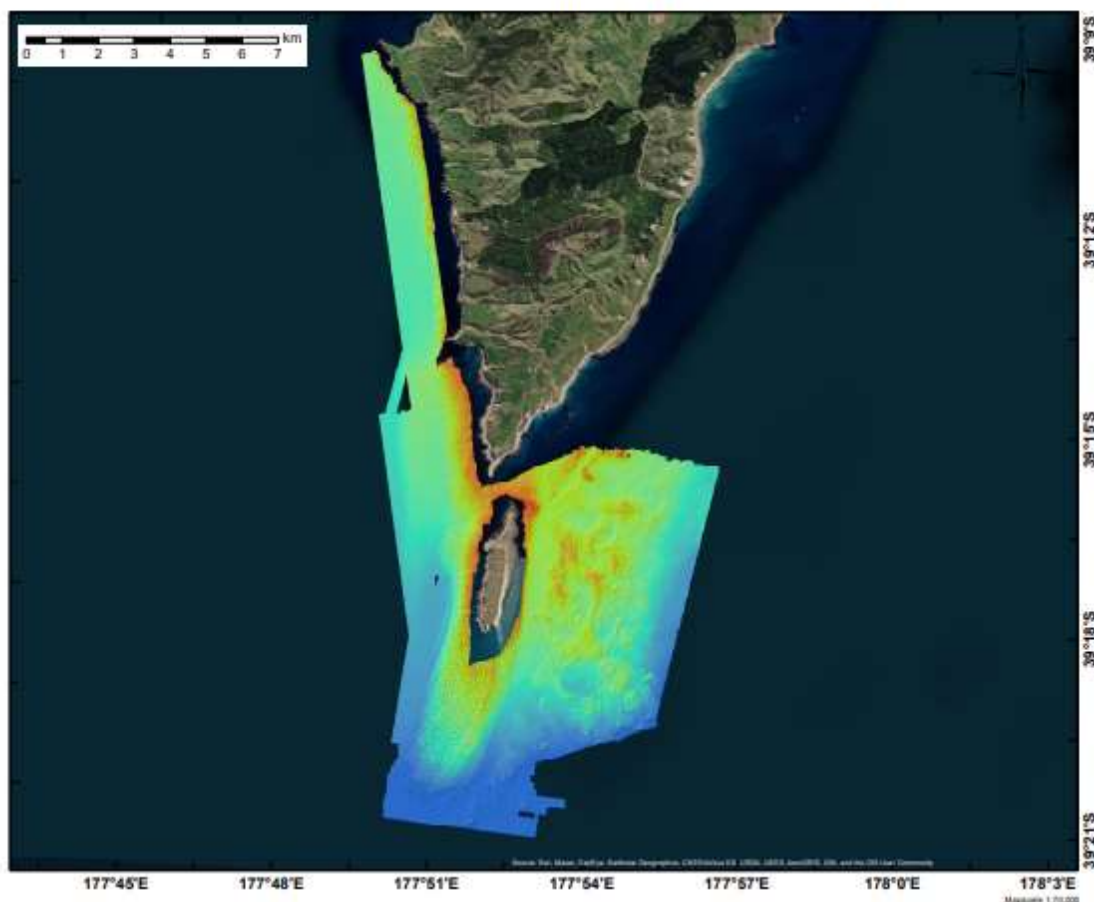
Mapping	Location	Area mapped	% of subtidal HB
2018/19	Wairoa Hard	150 km <sup>2</sup>	2.1%
2019/20	Clive Hard/Kidnappers	110 km <sup>2</sup>	1.6%
2020/21	Mahia Peninsula/Clive Hard	44 km <sup>2</sup>	0.7%
2021/22	Mahia Peninsula/Clive Hard	41 km <sup>2</sup>	0.6%
<b>Total</b>		<b>345 km<sup>2</sup></b>	<b>5%</b>

33. This data provides important insight into the habitat types in subtidal Hawke's Bay that have previously only been able to be estimated from depth and spot samples



*The Wairoa Hard showing the cobble habitat (white) and muddy habitat (dark).*

### Mahia Peninsula - Portland Island / Waikawa Bathymetry (2 m resolution)



*Bathymetry around Mahia Peninsula showing the detailed features of the seafloor.*

34. Additionally, the Marine PEP has been able to support planting and fencing activities in the Pōrangahau Estuary to improve water quality for the only regional estuarine population of the native seagrass *Zostera muelleri*.

Pōrangahau	Fencing	Native Planting
2018/19	1000m	500
2019/20	2446m	
2020/21	3800m	
<b>Total</b>	<b>7.25km</b>	<b>500</b>

#### Decision Making Process

35. Staff have assessed the requirements of the Local Government Act 2002 in relation to this item and have concluded that, as this report is for information only, the decision making provisions do not apply.

#### Recommendation

That the Environment and Integrated Catchments Committee receives and notes the *Environmental Enhancement programmes* staff report.

**Authored by:**

**Thomas Petrie  
PROGRAMME MANAGER PROTECTION &  
ENHANCEMENT PROJECTS**

**Anna Madarasz-Smith  
MANAGER SCIENCE**

**Approved by:**

**Iain Maxwell  
GROUP MANAGER INTEGRATED CATCHMENT  
MANAGEMENT**

**Attachment/s**

There are no attachments for this report.

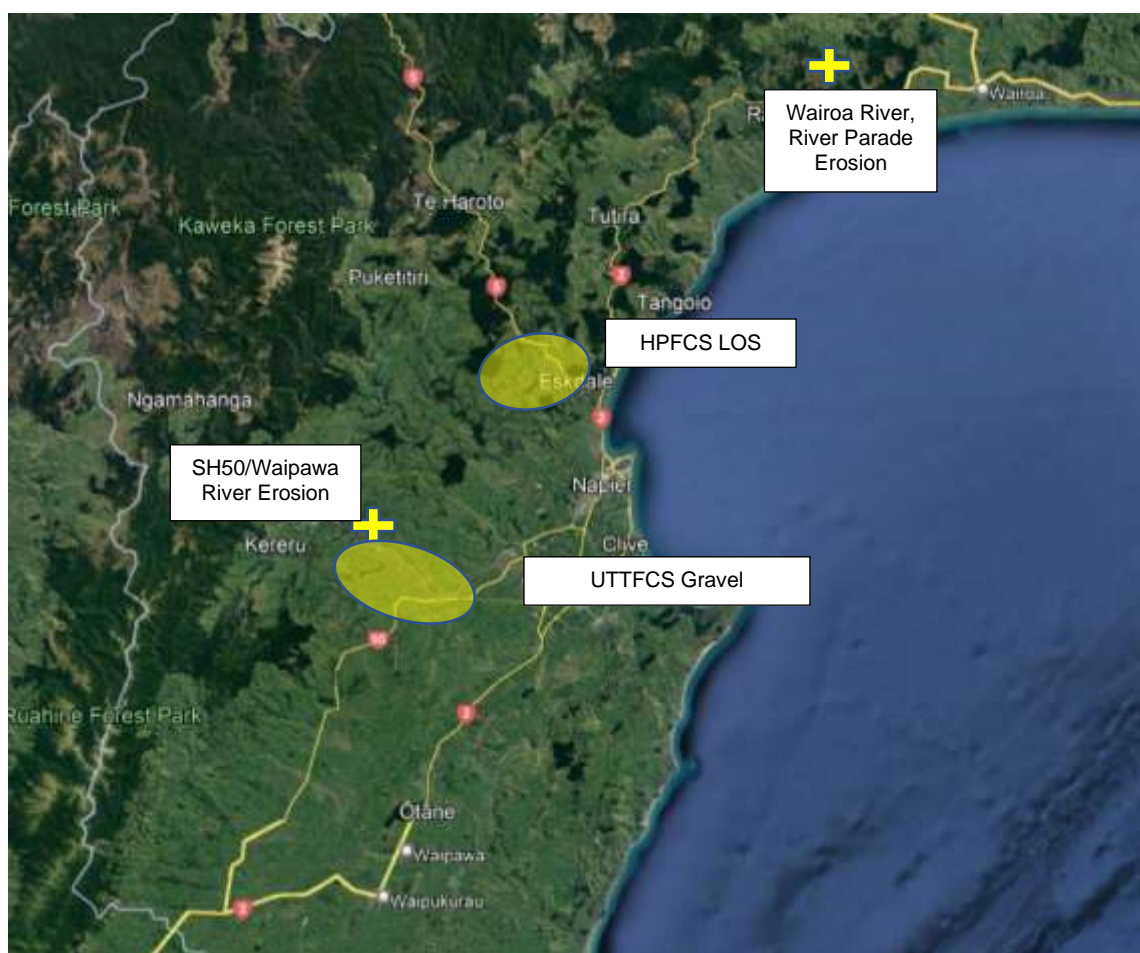
**Subject: IRG PROGRAMME DELIVERY TO DATE AND NEXT STEPS**

**Reason for Report**

1. This report provides an update on the four projects approved for funding as part of the Crown's Flood Control Resilience Funding with the Infrastructure Reference Group (IRG) managed by Kānoa – Regional Economic Development & Investment Unit, formerly known as the Provincial Development Unit.

**Background**

2. Council has received IRG funding for a total amount of up to \$19.2m (plus GST, if any) which is a 64% contribution to four projects. The four projects are listed below, and locations illustrated in diagrams 1, 2 and 3:
  - 2.1. Heretaunga Plains Flood Control Scheme Levels of Service
  - 2.2. Upper Tukituki Flood Control Scheme Gravel Extraction
  - 2.3. Upper Tukituki Flood Control Scheme SH50/Waipawa Erosion
  - 2.4. Wairoa River, River Parade Erosion.



*Diagram 1 – Location of the 4 IRG Projects*



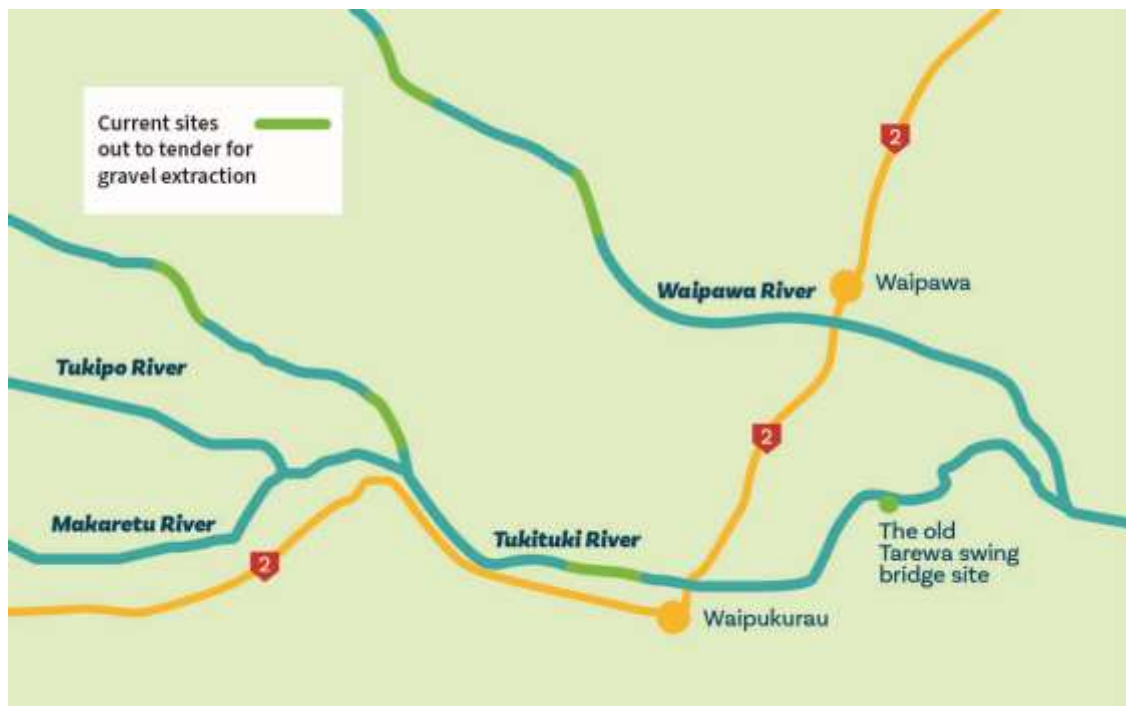


Diagram 2 – UTT Gravel Extraction -Tranche 2 Focus Areas



Diagram 3 – HPFCS 2022-2023 Stopbank Upgrades



3. Works commenced on all four projects in late November 2020.

## Discussion

### Project 1 – Heretaunga Plains Flood Control Scheme (HPFCS) Levels of Service - \$20m

4. The HPFCS Levels of Service project will review, and upgrade stopbanks across the Tūtaekurī, Ngaruroro, Lower Tukituki and Clive rivers as part of the Heretaunga Plains Flood Control Scheme level of service review, to increase flood protection across the scheme from the current 1 in 100-year flood event to a 1 in 500-year flood event.
5. HBRC are co-funding \$7.2 million to match IRG funds of \$12.8 million.
6. Physical works on the Taradale stopbank are now successfully completed, and the cycleway has been redeveloped and is now open to the public. Completion of the maintenance access track, redistribution of topsoil and hydroseeding of the berm areas are due to be completed by 20 September 2022. Work to be completed in a second tranche of work includes landscaping and planting, and the development of the Guppy Road carpark and associated landscaping.
7. Ngatarawa Native Planting – Tranche one has been completed with a total of 37,000 natives planted over 11ha. Tranche two is currently being planned for the 2023 autumn planting season. The Ngatarawa stopbank upgrade contract has been tendered with the physical works contract being awarded on 9 September. Work will commence on this site in late September/early October and will likely span a duration of 27 weeks.
8. Moteo Stopbank upgrade is nearing the completion of detailed design and draft contract documents have provided for review. The design has identified a deficit in borrow material available to complete the construction works requiring suitable fill material to be imported. This is likely to require consents from both Hawke's Bay Regional Council (HBRC) and Hastings District Council (HDC) to ensure the quality of imported material is acceptable and will not adversely impact the environment into which it is placed. Although it was originally intended to commence tendering of this project in early September, tendering has been delayed to ensure that the risk of insufficient borrow material is appropriately managed.
9. In conjunction with progressing consenting for the Moteo project, consideration will be given to a global consent approach to ensure that future projects in need of imported fill are catered for from a consenting perspective.
10. The Oamaru Stopbank design is currently being progressed to full detailed design, with the intention of tendering this project prior to Christmas for a January 2023 commencement. Construction of this stopbank is likely to be separated into two construction seasons to provide sufficient time to ensure archaeological sites and road embankments can be appropriately catered for in the design and managed during construction. Like Moteo, this project is also likely to require imported fill.
11. As a result of the issue of insufficient borrow material at several project sites – eg Moteo, Oamaru, the project team are proposing to undertake a Heretaunga Scheme wide investigation of borrow quantities in order to produce a catalogue of borrow availability to inform future upgrade works.
12. Initial investigations associated with the East Clive Stopbank have identified a number of challenges to be addressed through the planning phase for this project. These include working in closed proximity to a closed HDC landfill, construction within 100m of wetlands, work within the coastal zone and uncontrolled/contaminated fill in a section of the berm. Each of these aspects requires resource consent. Consequently, the consenting is now the primary pathway for this project and RMA planners have now been engaged to assign with this process.
13. Planning for the next tranche of stopbank upgrades (2023-2024 construction season) is underway, with the Raupare Upper, Chesterhope Upper, Brookfields Lower and Pakowhai Park having been prioritised for upgrade (see diagram 4 below).

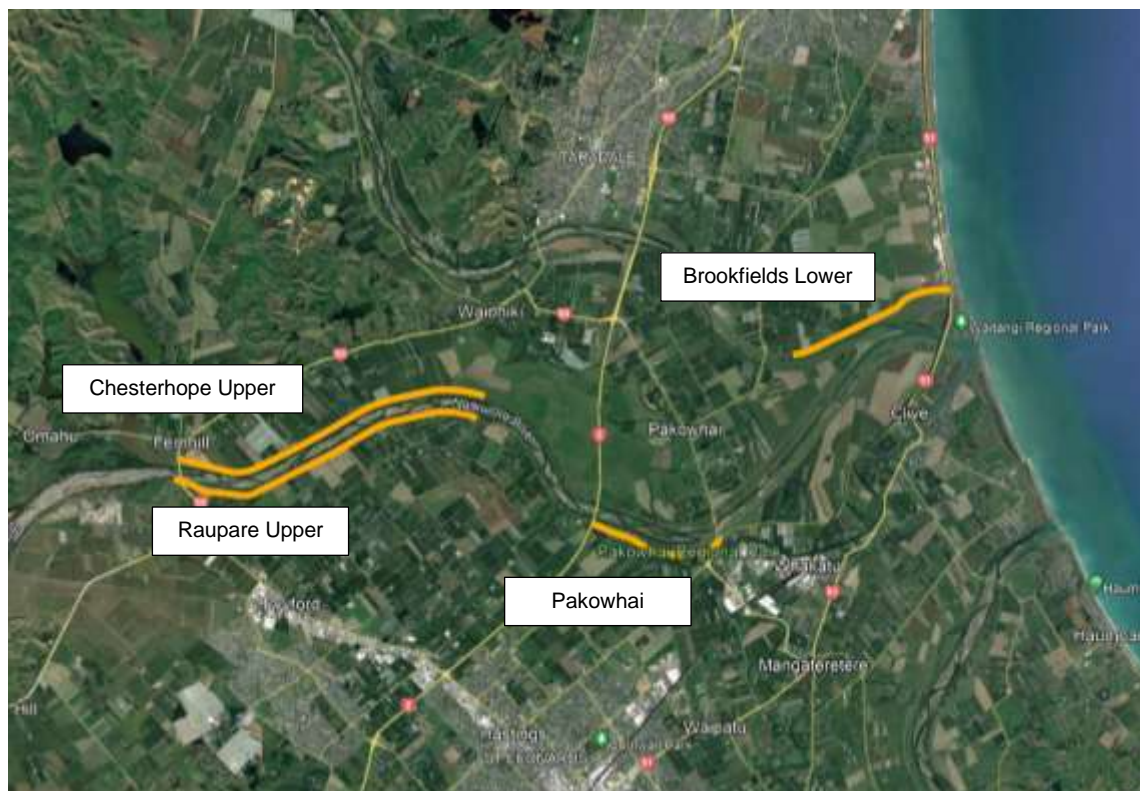


Diagram 4 – HPFCS 2023-2024 Stopbank Upgrades

14. The original programme for this work, as defined in the Long Term Plan is summarised in Table 1.

Year	IRG Contribution	HBRC Contribution	Total
20-21	\$320,000	\$180,000	\$500,000
21-22	\$6.24 mill	\$3.51 mill	\$9.75 mill
22-23	\$6.24 mill	\$3.51 mill	\$9.75 mill
<b>Total</b>	<b>\$12.8 mill</b>	<b>\$7.2 mill</b>	<b>\$20.0 mill</b>

Table 1: LTP Budgets for HPFCS LOS Upgrades

15. The Long Term Plan (LTP) budgets were set prior to the impact of the global Covid-19 pandemic being fully understood, particularly regarding availability of resources from contractor, consultant, and internal staffing perspectives. The original programme scheduled 3 stopbank upgrades to occur in the 2021-2022 financial year, however, due to these constraints, critical elements experienced delays, resulting in only a single stopbank progressing to construction in the 2021-2022 financial year.
16. FY 2020-2021 expenditure was \$832k.
17. FY 2021-2022 expenditure was \$3,846k.
18. With four stopbank upgrades in progress the anticipated expenditure for this work in the 2022-2023 Financial Year is \$9.33mill.

## Project 2 – Upper Tukituki Flood Control Scheme Gravel Extraction - \$8 million

19. The purpose of the Upper Tukituki (UTT) Gravel Extraction project is to seek opportunities to subsidise extraction and transportation of gravel from this scheme, with a focus on competitive tendering and supporting the local economy. Gravel extraction is required to maintain existing nameplate capacity of 1:100 level of protection within this scheme. As a consultation topic in the 2020 Long Term Plan, Council agreed to fund the HBRC co-contribution of \$2.88m from the

UTT scheme through a long-term loan allowing the project to proceed.

20. The first tranche of extraction was completed in July 2022 with two contractors extracting 101,400m<sup>3</sup>. Extraction did not reach target volumes due to high river levels limiting extraction time.
21. The second tranche of extraction involves three reaches on each of the Waipawa and Upper Tukituki Rivers with a total of 433,000m<sup>3</sup> of gravel being made available. Two of these reaches have Chilean needle grass present so Regional Projects is working closely with Biosecurity to ensure the risk associated with extraction these gravels are adequately managed.
22. Tenders for the second tranche of extraction are currently under evaluation with 11 submissions received. 5 preferred tenders have been identified. Extraction is likely to proceed in late September/early October 2022.
23. FY 2020-2021 expenditure was \$298k.
24. FY 2021-2022 expenditure was \$824k against an LTP budget of \$3m.
25. In FY 2022-2023 costs for the second tranche of gravel extraction are estimated to be \$1.8 million against an LTP budget of \$4.05m.
26. A third tranche of extraction will be investigated for the 2022-2023 extraction season if the second tranche progresses in a timely fashion and contractor performance is acceptable.

**Project 3 – Upper Tukituki Flood Control Scheme SH50/Waipawa Erosion - \$1 million**

27. This project is now completed. Photos 1 and 2 illustrate the various rope and rail and akmon/groyne site works.



*Photo 1 – Akmon and rope and rail features on the true left bank of the Waipawa River*





*Photo 2 – Rope and Rail features on the true right bank of the Waipawa River*

#### **Project 4 – Wairoa River, River Parade Erosion - \$1 million**

28. This project is substantially completed, with the fence and path the only work remaining to be completed by 30 September 2022. Photo 3 illustrates the main sheet piling works in progress.



*Photo 3 – Sheet Piling works in progress – River Parade, Wairoa River.*

#### **Social Procurement**

29. Schedule 3 of the Kanoa funding agreement details Social Procurement Outcomes (SPOs) which are to be met as part of the agreement. In order to meet our contractual obligations, HBRC is implementing the following initiatives.
- 29.1. Collaboration with Waiohiki Marae to plan public use of river works for the Tutaekuri river berm reinstatement at Taradale under the IRG upgrade work.
  - 29.2. Engagement of contractors who employ staff through Ministry of Social Development's (MSD) mana in mahi and Hastings District Council's redeployment programme
  - 29.3. Networking through MSD to identify Māori/Pasifika businesses

- 29.4. Upskilling and training contractors/consultants through a Tender Training workshop which includes 'implementation of tender' training. Three sessions have been conducted to date.
- 29.5. Partnering with Eastern Institute of Technology (EIT) – environmental science, biosecurity, film & photography. Project study opportunities, project support, work experience, planting assistance. HBRC has employed two film and two environmental science students to work and learn as part of the HBRC project team.
- 29.6. Wellbeing training for consultants and contractors working in public spaces – linking up service providers with mental health, well-being, and situational safety programme.
- 29.7. Highlighting mental health and wellbeing with our contractors in a drive to include this at toolbox talks alongside health and safety. Incremental changes to the status quo.
- 29.8. Establishing partnership agreements to dedicate project resources to upskill and train staff. This includes contractors, consultants, and client organisations whereby a continual professional development style of record keeping is maintained in a simple, manageable, cost-effective way. This has been successfully implemented in the Taradale project.

### **Decision Making Process**

- 30. Staff have assessed the requirements of the Local Government Act 2002 in relation to this item and have concluded that, as this report is for information only, the decision making provisions do not apply.

### **Recommendation**

That the Environment and Integrated Catchments Committee receives and notes the *steps* staff *IRG Programme Delivery to date and next* report.

### **Authored by:**

**Jon Kingsford**  
**PROJECT MANAGER**

### **Approved by:**

**Chris Dolley**  
**GROUP MANAGER ASSET MANAGEMENT**

### **Attachment/s**

There are no attachments for this report.



**HAWKE'S BAY REGIONAL COUNCIL**  
**ENVIRONMENT AND INTEGRATED CATCHMENTS COMMITTEE**

**Wednesday 21 September 2022**

**Item 12**

**Subject: NAPIER MEEANEE SCHEME REVIEW – PROGRESS UPDATE**

**Reason for Report**

1. This report and presentation provide an update of the status and preliminary findings of the Napier Meeanee Drainage Scheme Review.
2. Staff will provide a presentation of the work undertaken to date and preliminary findings.

**Strategic Fit**

3. During the development of the 2021-2031 Long Term Plan additional resources were made available to review all flood control and drainage schemes to understand the current level of service, any gaps to the desired level of service and impact of climate change.
4. The full programme of reviews of all schemes is to be completed within 10 years.
5. Prioritised schemes were selected on the basis that urgent review was required to support growth and/or provide a higher level of service to urban areas.
6. This work supports the Infrastructure and Services priority area and, specifically by 2030, flood risk is being managed to adapt to foreseeable climate change risks out to 2100.
7. The scheme reviews will inform the Asset Management Plan and 30 Year Infrastructure Strategy and allow for decisions to be made on the appropriate level of capital investment in subsequent LTP development.

**Background**

8. Most of the council's flood control and drainage schemes have not had a comprehensive scheme review since they were constructed.
9. For some schemes, particularly those servicing or adjacent to urban centres, developing or intensification of agricultural practices, there have been significant land use changes such as urban development and extensive use of subsurface drainage. These changes to land use have the potential to impact the level of service provided by a scheme.
10. In addition, climate change is likely to impact the level of service of many schemes as annual rainfall decreases by 5-15% by 2040 across the region, we receive more intense storms, and sea level rises up to 0.4m over the next 40 years (extreme worst-case scenario).
11. The programme of scheme reviews will review the current level of service, determine the required level of service, and identify any investment options required to meet or maintain the appropriate level of service over the 30-year life of the Infrastructure Strategy.
12. The priority schemes being reviewed, and their current status are:
  - 12.1. Heretaunga Plains Flood Control Scheme - upgrade to 1:500-year level of protection; being delivered through IRG programme
  - 12.2. Napier Meeanee Drainage Scheme - model developed and current level of service determined; option analysis commenced to meet level of service requirements
  - 12.3. Karamu catchment servicing Hastings - project being scoped and early deliverables defined with Hastings District Council staff
  - 12.4. Wairoa River- will commence when Napier-Meeanee is completed.

**Next Steps**

13. Staff will continue to develop the Napier Meeanee Drainage Scheme Review and present the final report to a future Environment and Integrated Catchments Committee (EICC) meeting.

**Decision Making Process**

14. Staff have assessed the requirements of the Local Government Act 2002 in relation to this item and have concluded that, as this report is for information only, the decision making provisions do not apply.

**Recommendation**

That the Environment and Integrated Catchments Committee receives and notes the *Napier Meeanee Scheme Review – progress update* staff report.

**Authored and Approved by:**

**Chris Dolley**  
**GROUP MANAGER ASSET MANAGEMENT**

**Attachment/s**

There are no attachments for this report.



**HAWKE'S BAY REGIONAL COUNCIL**  
**ENVIRONMENT AND INTEGRATED CATCHMENTS COMMITTEE**

**Wednesday 21 September 2022**

**Subject: DISCUSSION OF MINOR ITEMS NOT ON THE AGENDA**

**Reason for Report**

1. This document has been prepared to assist Committee Members note the *Minor items not on the agenda* to be discussed as determined earlier in agenda item 6.

Topic	Raised by