



Meeting of the Environment and Integrated Catchments Committee

Date: Wednesday 12 May 2021
Time: 9.00am
Venue: Council Chamber
Hawke's Bay Regional Council
159 Dalton Street
NAPIER

Agenda

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1.	Welcome/Karakia/Notices/Apologies	
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14.	Urban Biodiversity Presentation by Dr Bruce Clarkson (1.30pm)	
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HAWKE'S BAY REGIONAL COUNCIL
ENVIRONMENT AND INTEGRATED CATCHMENTS COMMITTEE

Wednesday 12 May 2021

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

Reason for Report

1. On the list attached 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-up Items from Previous Meetings".

Authored by:

Leeanne Hooper
TEAM LEADER GOVERNANCE

Approved by:

Desiree Cull
STRATEGY AND GOVERNANCE
MANAGER

Attachment/s

- 1 [↓](#) Followups for May 2021

Follow-ups from Previous Environment & Integrated Catchments Committee Meetings

3 February 2021

	Agenda Item	Follow-up Item	Responsible	Status/Comment
1	Nic Caviale Presentation – Freshwater Improvement Fund Co-funding Opportunities for Community Led Projects	Seeking Council co-funding of \$1M over 5 years – staff to investigate potential options through LTP development	I Maxwell	Catchment Delivery staff are communicating with Nic and will further the discussions once the outcomes of Govt funding rounds are known.
2	Tūtira Regional Park Pine Forest Replanting Plan	Financial impacts on balance sheet to be provided with recommendation to Council to inform Council's decision	B Douglas/ C Dolley	Information (ref 1 following) was provided to 24 February Regional Council meeting where Replanting Plan decision made
3	Regional Water Security Programme – 2021 Engagement	Provide Councillors with an update on the PDU's response to the letter sent in April 2020 at Council's direction	T Skerman	Email sent to EICC members & Executive Leadership Team on 4/2/2021 – reference 2 following

4 November 2020

	Agenda Item	Follow-up Item	Responsible	Status/Comment
	Hawke's Bay Marine & Coast Group (HBMaC) and Sustainable Seas National Science Challenge Collaboration	Report to EICC meeting on the long term marine and coastal science programme to enable implementation of Ecosystem Based Management	A Madarasz-Smith /J Smith	<p>The HBRC Marine & Coast Science work, aligned with the HB Marine & Coast (HBMaC) group, has provided a framework for identifying collaborative research priorities. Organisations affiliated to HBMaC are steadily working through these priorities (as identified in the research roadmap - https://www.hbrc.govt.nz/assets/Document-Library/Reports/HBMAC-Roadmapv17digital.pdf)</p> <p>Aspects of HBRC work scheduled through to 2024, and completed highlights include:</p> <ul style="list-style-type: none"> - Multibeam Seafloor Mapping and associated ecological visualisation (theme Habitats and Ecosystems) has been completed for the Wairoa Hard, Clive Hard and Cape Kidnappers. Mahia Peninsula is currently being surveyed. - Coastal Seabird Survey (theme - Habitats and Ecosystems). - Key Ecological Areas Assessment for the HB Coastal Marine Area (theme - Habitats & Ecosystems). - Modelling multiple stressors in HB Estuaries (theme - Terrestrial & Coastal Linkages). - Modelling the effect of river inputs on coastal water quality in Hawke Bay (theme - Terrestrial & Coastal Linkages). - Developing a hydrodynamic model to enable source, transport and fate of sediments (and other contaminants) to be assessed (currently in development, theme - Terrestrial & Coastal Linkages). <p>These projects, in addition to coastal state of the environment monitoring, enable the Marine & Coast science team to advise the HBRC policy team on the current state and aspirations for the marine area of HB. Our collaboration with the Sustainable Seas National Science Challenge provides information to support the Kotahi Plan Change and assist in application of a management approach similar to Ecosystem Based Management should that be progressed.</p>

Reference 1

Based on questions at the meeting of the Environment and Integrated Catchments Committee on 3 February my understanding is that Finance are to:-

1. show the impact on the asset valuation between the full replanting option and the composite option proposes
2. show the impact on council cashflows between the two options.
3. What is Council's discount rate?

Asset Value (Council's Balance Sheet)

Following the harvest of the existing trees the remaining asset on Council's balance sheet will be the land.

Going forward, over time the asset value will increase as the trees grow so in the future (bearing in mind we have a 30 year timeframe) the value of the forestry asset on the balance sheet will be higher under the status quo than under option 2.

The difference is best represented in the comparison of net present values

Impact on Councils cashflows (and on future revenues)

To simplify the comparison we have used a discount rate of 5%

This is the minimum Council would expect based on the assumed returns from investments in the 2021-31 LTP.

We have not done any detailed analysis of the financial projections so reliance is placed on the data as presented in the report.

The trade off is the difference between a "pure commercial" approach whereby Council seeks to maximise its financial return and the proposed approach with 50% of the land allowed to revert to native species.

From a cashflow perspective the initial cash outlays, in particular over the term of the next LTP will be lower under option 2 as only 50% of the land needs to be replanted.

Further out Council will receive considerably less when the forest is harvested.

Table 3 – Comparison including sale of carbon – NPV at 5%

Option 1 (Status Quo)	Option 2 (Composite – 50% Pine & 50% native regeneration)	Trade off – potential future lost income
\$620,057	\$388,408	\$231,649

Table 4 - comparison with no carbon sale – NPV at 5%

Option 1 (Status Quo)	Option 2 (Composite – 50% Pine & 50% native regeneration)	Trade off – potential future lost income
\$620,057	\$192,100	\$427,957

Reference 2

From: Tom Skerman <Tom@hbrc.govt.nz>

Sent: Thursday, 4 February 2021 12:28 PM

Subject: EICC Follow ups - Cr Foss Request

At yesterday's EICC meeting we were asked to provide Councilors' with an update on the PDU's response to the attached letter sent in April last year at the direction of Council.

While to date we have not received a formal response to this letter, we have been successful in securing a commitment to an additional \$1.3m suspensory loan funding for Heretaunga storage investigations. This funding is now the subject of contract negotiations which we are pushing hard to conclude ahead of any changes by the new Government to PGF policy towards storage projects.

My general observations on the opportunities to change the conversation regarding above-ground storage in CHB are:

- It was always going to be very difficult to get the previous coalition Government to support any work relating to the Makaroro site and related consents.
- We have not yet seen any evidence that the new Government's position is any different, but equally we have not seen that tested.
 - We are aware that MPI appears to be actively developing policy around water storage as a key enabler of its Fit for a Better World Strategy - particularly around the transition to higher value, climate resilient food productions systems.
 - It is clear that increasing freshwater security is not only an important climate change adaptation mechanism, but has an important role to play in de-carbonising the economy – so perhaps we will see Government policy move in this direction.
- The MAR project is not a barrier to above ground storage investigations (by HBRC or any other party) – in fact above and below ground storage are complimentary.

Happy to provide further info.

Regards,

Tom Skerman



The CHB Water Security project, co-funded by PGF, seeks to investigate storage and aquifer replenishment/enhancement with a view to developing an integrated solution that supports environmental objectives, offsets current abstraction and builds the district's capacity to deal with a changing climate. Scoping activity has commenced with preliminary assessment of water storage options, to review sites previously identified and to furthermore identify smaller scale storage alternatives that were discounted for failing to meet the previous Council evaluation criteria set down in 2009. Staff are also preparing a project plan to initiate a Managed Aquifer Recharge (MAR) field pilot to test performance and capability of MAR to effectively replenish and enhance the aquifer system.

In relation to the water storage investigations, it was inevitable that at some stage during the process it would be both rational and prudent to revisit the huge volume of historical and high quality data, analysis and research completed through the Ruataniwha Scheme process in order to determine whether the information developed through that project (in the form of intellectual property and intangible assets e.g. consents) could be reviewed and re-cast to support more environmentally focussed outcomes with less priority on 'development' focussed outcomes. With the Government's stimulus policy for economic recovery in mind, the Council wishes to investigate whether this specific work stream can be brought forward, within the range of options being considered in any event.

The Council is of course aware that this request requires consultation with the PDU given the existing funding agreement explicitly directs that the CHB Water Security project "must not involve the reinstatement of any material aspect of the proposed Ruataniwha storage and reticulation project", which was sited in the upper reaches of the Makaroro river. The rationale for this prohibition of course was that government had no interest at that time in reviewing or overturning the Supreme Court's 2015 landswap decision that effectively stopped the scheme in its tracks. The government was also concerned that the scale of the then-scheme would necessitate land-use intensification that was in conflict with the new Government's freshwater quality objectives. These concerns were also set down in the PGF's water storage investment policy which rules out any support of increasing ruminant agriculture and large scale water schemes.

While this position is at present clear to the Council, as is also well known, from 2009-15 the Makaroro site was thoroughly investigated, reviewed and confirmed as the most viable option when taking into account storage volumes, geotechnical issues and dam sizes alongside the project economics. In addition, the Makaroro site offers the ability to deliver environmental benefits in augmenting low flows in the Waipawa and lower Tukituki rivers. Associated with the site is an extensive and detailed body of work that can be reviewed and re-worked to test whether elements of that project satisfy current circumstances and new or updated objectives. There is a substantial body of existing intellectual property and effort manifested in extant consents. Accordingly, it is now felt that CHB presents a prime opportunity to accelerate a water security/infrastructure project in a region prone and suffering from drought, and requiring solutions that support the transition to a lower emissions, climate smart economy, with a focus on horticulture in CHB supported by a sustainable water supply, as part of the COVID 19 response and recovery programme.

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Accordingly, we seek your agreement or feedback on commissioning a specific piece of analysis on the information developed during RWSS to scope the potential for those assets to deliver a water security solution (or solutions) that are subject to the following guiding principles or constraints:

- The first-order objectives are to deliver environmental gains to stabilise and recover the health of the waterways with co-benefits in greater water security for existing community, economic, primary production activity and potentially hydroelectric generation in keeping with government's renewable electricity generation objectives.
- The regulator and the operator must be at arms-length. HBRC's role is initially conceived as facilitator, assistant and sponsor until the project is crystallised.
- Extensive pipe networks across the plains are no longer considered, however the canal between Waipawa and Tukituki is required to ensure water is available more broadly (which in turn increases the scope for aquifer enhancement sites, if viable).
- No new water is made available to expand bovine ruminant farming (particularly dairy), noting that intensive (non-housed) dairy farming is effectively ruled out by the current nutrient policy framework under PC 6.
- Active support is given to promoting land use change to horticulture.
- No attempt will be made at the outset to pro-actively seek to revisit the Department of Conservation land swap and consequent inundation of the special conservation area.

For the Heretaunga Flow Maintenance project Staff have commissioned most aspects of the proposed scoping and evaluation process that will identify and evaluate options for progressing preferred storage sites to prefeasibility analysis. Without discounting other opportunities, it is overwhelmingly likely that the existing storage site on Te Tua Station in Maraekakaho will be a compelling candidate for prefeasibility.

The Te Tua site has existing storage and has always been proposed as an environmental scheme to offset the impacts of groundwater takes on the Ngaruroro River and surrounding lowland streams. The site has a willing landowner who has demonstrated a willingness to engage with tangata whenua and stakeholders to overcome objections and barriers and to develop a storage solution that is acceptable to the community. There is an existing water take consent currently believed to be necessary and sufficient to fill a 5m m3 storage facility, and the site is very favourably located to be able to discharge water into surrounding water bodies during low flow periods. The owner has already undertaken a significant amount of work and has a consent lodged with HBRC to proceed. This does not preclude further investigations about future storage, including a potential additional site held by the owner of Te Tua Station that could potentially be linked with the Te Tua Dam site thereby increasing the overall storage capacity.

Accordingly, we seek the PGF's agreement to accelerate the Te Tua storage site immediately, noting that the agreed process will continue and that further sites of interest may be identified for pre-feasibility towards the middle of this year. We consider the Te Tua site may be a workstream within the project on an accelerated development timeframe and could commence construction within 12 months.

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The Regional Water Assessment is currently targeted at producing an all-of-region framework for long term water use and management in the region. Council seeks the support of the PGF to redirect initial effort to a faster and possibly deeper analysis (e.g. a full natural capital assessment) within the Wairoa District's boundary. This will in turn provide tools that can support and inform the multiple projects seeking to drive land use change to highest and best use and transitions to a low emissions economy. It will also support decision making around municipal and industrial use and potentially unlock opportunities in these areas.

Finally, although no further funding applications are being submitted to either the PGF or the IIRG in relation to HBRC's Regional Water Security programme, we are conscious that the Regional Water Assessment was designed to identify regional investment priorities for water security in the context of a changing climate. We look forward to on-going engagement with the PDU's specialist water storage team and to be proactively exploring new opportunities for funding partnerships. We also welcome your input and support for the critical role you plan in this Council's aspiration to lead the region's "Climate. Smart. Recovery".

Thank you for your consideration of these requests. Please contact Tom Skerman (Group Manager Strategic Planning, Hawke's Bay Regional Council) on 021769960 or tom@hbrc.govt.nz or Amanda Langley (Director, Project Haus) on 0211955009 or amanda@projecthaus.co.nz for further information.

Yours sincerely



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HAWKE'S BAY REGIONAL COUNCIL
ENVIRONMENT AND INTEGRATED CATCHMENTS COMMITTEE

Wednesday 12 May 2021

Subject: CALL FOR MINOR ITEMS NOT ON THE AGENDA

Reason for Report

1. This item provides the means for councillors to raise minor matters 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."

Decision Making Process

3. 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 accepts the following "Minor Items Not on the Agenda" for discussion as Item 16.

Topic	Raised by

Authored by:

Leeanne Hooper
TEAM LEADER GOVERNANCE

Approved by:

Desiree Cull
STRATEGY AND GOVERNANCE MANAGER

Attachment/s

There are no attachments for this report.

HAWKE'S BAY REGIONAL COUNCIL
ENVIRONMENT AND INTEGRATED CATCHMENTS COMMITTEE

Wednesday 12 May 2021

**Subject: REVIEW AND RECOMMENDATIONS OF THE HAWKE'S BAY POSSUM
CONTROL AREA PROGRAMME**

Reason for Report

1. This item seeks the Committee's endorsement of the proposed response to key recommendations from the independent review of the Hawke's Bay Possum Control Area (PCA) programme.

Officers' Recommendation(s)

2. Council officers support the findings of the PCA review and its recommendations. Staff therefore recommend that the Committee supports option 1 as outlined in this item, and instructs staff to prepare a detailed proposal, in accordance with section 70 of the Biosecurity Act 1993, for possum management in Hawke's Bay for later consideration and potential adoption for public consultation.

Executive Summary

3. One of the key recommendations of a Section 17a efficiency and effectiveness review of council's biosecurity and biodiversity programmes undertaken in August 2020 was that a full review of the Possum Control Area (PCA) programme be undertaken. That review of the PCA programme has been completed, making the primary recommendation that:
 - 3.1. Hawke's Bay Regional Council should move to a contractor-based model for possum control.
4. The PCA Review report also made the secondary recommendation that:
 - 4.1. A funding options analysis should be undertaken to assess the beneficiaries and exacerbators of the programme to determine the most appropriate funding model. These considerations will affect how the financial impact of any new approach to possum control would be spread across the community.
5. The PCA Review report also made several other operational recommendations that are detailed further in this agenda item.
6. If council was to move to a contractor-based model for possum management across approximately 700,000 ha covering both rural and urban areas, an increase in operational budget will be required. Alongside this, the PCA programme will continue to grow as areas roll out of OSPRI vector management and enter the PCA programme.
7. Although a detailed analysis of a contractor-based model has not yet been completed, an estimated cost for landscape maintenance control from Hawke's Bay possum contractors contacted as part of the PCA review was \$7-8/ha. Please note this cost would only apply to the area controlled within the PCA area boundary in any one year. A detailed analysis to accurately assess the total cost of this programme would be completed if council instruct staff to draft a proposal.
8. If a substantive change is made to the current delivery model for possum management in Hawke's Bay, a partial plan review to amend the current Regional Pest Management Plan (RPMP) will be required. The steps to making a RPMP are clearly outlined within sections 70 to 77 of the Biosecurity Act 1993. The first step is for Council to make a proposal in accordance with section 70 of the Biosecurity Act 1993 that demonstrates how numerous provisions have been met.

9. It is recommended that council staff undertake the first step of drafting a proposal that includes a discussion of the costs and benefits of different delivery models for possum management in Hawke's Bay and the most appropriate funding model. This proposal would be brought back to the EICC for subsequent consideration and decision making as per the attached timeline.

Background /Discussion

10. Council has been managing possums through its PCA programme since 2000. It has been a flagship biosecurity programme with approximately \$17m invested directly by council over 20 years in the initial knockdown and maintenance of low possum numbers. In Hawkes Bay, vector control operations administered by OSPRI automatically transfer to the council PCA programme when OSPRI ceases vector management. This maintains the gains of the investment by the community in possum control. Historically there has been a high level of support for the PCA programme which has grown to 672,279 ha. This area comprises of 88 PCAs, covering 4,300 properties, and is currently achieving its target of <4% residual trap catch (RTC) with an average of 2.4% RTC across the entire PCA area. Possum control has also been undertaken across 23,915 ha of urban area comprising of 19 PCAs. Most properties within the urban PCAs are not bound by the rules within the RPMP due the properties being less than 4ha.
11. Although the PCA programme is meeting the RPMP objective and Councils Level of Service measure, there have been growing concerns about the effectiveness of the PCA programme from HBRC staff, contractors and the community.
12. During the Section 17A review of the Biosecurity and Biodiversity functions, which was reported to EICC on 16 September 2020, the PCA programme was highlighted as warranting an in-depth review.
13. A full review of the PCA programme has since been completed which analysed the effectiveness of the current programme and reviewed alternative delivery models.
14. The key findings of the PCA programme review were:
 - 14.1. The current landowner responsibility model is intrinsically harder to manage and monitor than having work done by contractors or council staff. This is due to council staff having to manage over 4,300 properties as opposed to a small group of contractors. A related issue is that for most landowners, possum control will be just one of the many jobs to be done on the property; even with the best of intentions, some owners will do possum control haphazardly or not at all.
 - 14.2. HBRC's ability to monitor actual possum numbers in its control areas on a regular and short term basis has diminished as the total programme area has become larger and the corresponding budgets have not been increased. The current approach, with long periods between monitoring properties, creates uncertainty and makes it more difficult to know what is happening to possum populations across the entire PCA programme area.
 - 14.3. It is impractical to monitor properties 4ha and smaller because there is not enough area on those small properties to place possum monitoring lines. This poses a risk as small properties have the capacity to harbour large possum populations.
 - 14.4. HBRC does not have a robust biodiversity monitoring programme to help assess the effect of its possum control.
15. The PCA review report makes the following primary recommendation:
 - 15.1. Council should move to a contractor-based model for possum control.
16. It also makes the following secondary recommendation:
 - 16.1. A funding options analysis should be undertaken to assess the beneficiaries and exacerbators of the programme to determine the most appropriate funding model.

These considerations will affect how the financial impact of any new approach to possum control would be spread across the community.

17. The report makes further recommendations, being if council retains the current landowner model of possum control, it should:
 - 17.1. Develop methods for efficient monitoring of small properties (less than 4 ha)
 - 17.2. Amend the monitoring rules to require no single monitoring line exceeds the 4% RTC target
 - 17.3. Remove the financial subsidies for the purchase of bait and the use of contractors
 - 17.4. Increase the PCA budget to increase engagement with landowners and
 - 17.5. Increase the monitoring budget so every property in a PCA is monitored at least every four years.
18. The final recommendations of the report apply to possum management regardless of whether council adopts a contractor-based model or retains the current approach:
 - 18.1. Bring forestry fully into the possum control programme and remove the current rating discount that forestry receives
 - 18.2. Develop and implement an appropriate stratified random possum monitoring design to determine the level of monitoring required to give sufficiently high confidence that the results for any given year accurately reflect conditions across the relevant areas
 - 18.3. Develop and implement a biodiversity monitoring programme for managed and unmanaged areas in Hawke's Bay to help the council evaluate the effectiveness of its programmes
 - 18.4. Develop operational alternatives for a future in which brodifacoum is no longer easily available as the primary possum control tool.
19. The report also notes that the landowner responsibility model could be the "right" system for Hawke's Bay despite its inefficiencies, as long as the community and the council are fully aware of the risks and trade-offs associated with it. The report concludes that an essential step would be consultation with the community, including a discussion of the costs of the PCA programme, the various benefits it provides and the different options for funding the work.

Staff Response to PCA Review

20. Staff support the findings of the PCA review and its recommendations.
21. Although the current PCA programme is meeting the RPMP objective, it has several risks which are clearly outlined in the PCA review. Staff are aware of these risks and have been working within the current framework to reduce these. This includes creating an incentive scheme, increasing and refining possum monitoring and undertaking land occupier engagement, including PCA facilitation (meeting with every land occupier individually within a PCA). All these steps add complexity and cost and may still fail to solve the issue of land occupiers not undertaking regular possum control or following best practice.
22. The following analysis has been undertaken for the two options that were presented in the PCA review alongside an additional two options. This preliminary analysis is provided to assist the Committee's decision making. A more detailed examination of potential costs and benefits would be developed as part of a Section 70 proposal.

Review of the options

23. The following sections examine four options for council to consider in response to the review.

Option one: Move to a contractor-based model (preferred option)

24. Contractors managing possums at scale (e.g. 100,000ha) has the following advantages.
 - 24.1. It is the most efficient and effective method for managing possums as all properties will receive possum control in a coordinated approach focusing on habitat (as opposed to being limited to a property boundary)
 - 24.2. It allows spatial management, targeting contiguous areas of high risk habitats, while reducing effort in low risk areas
 - 24.3. Contractors can use a suite of tools (many require a Controlled Substance Licence) and deploy them following best practice as required to meet the specific needs of the farm and its habitats
 - 24.4. Farmers do not need to worry about finding time to undertake possum control
 - 24.5. It is the simplest model for council staff to manage
 - 24.6. It is the lowest risk model for achieving the Regional Pest Management Plan objective and will have the greatest outcomes for both biodiversity and TB vector management.
25. The process of moving to a contractor-based model would incur costs:
 - 25.1. A partial plan review of the RPMP is required
 - 25.2. Consultation with land occupiers and the community will be required
 - 25.3. A funding review and potential amendment to the long-term plan may be required.

Option two: Retain current PCA programme with amendments

26. Retaining the current PCA programme with amendments would have the following advantages:
 - 26.1. Likely require a smaller increase in resources than option one
 - 26.2. Some risks highlighted in the PCA review would be mitigated, such as including forestry in the PCA programme and amending monitoring requirements.
27. Retaining the current PCA programme with amendments would still require a partial plan review of the RPMP while largely retaining the existing inefficiencies:
 - 27.1. Possum management is defined by property boundaries as opposed to being undertaken in a coordinated approach at scale using the most appropriate tools
 - 27.2. The risk of land occupiers not undertaking possum control or not following best practice remains. This will likely result in increased compliance costs
 - 27.3. The land occupier responsibility model is intrinsically harder to manage and monitor than a contractor-based model.

Option three: Retain current PCA programme with no amendments

28. Retaining the current PCA programme with no amendments would not incur the costs associated with an RPMP review or LTP amendment. However, the operational efficiency and effectiveness of the PCA programme would not be improved. Staff do not recommend this option.

Option four: Cease the PCA programme

29. Staff do not recommend terminating the possum control programme. Any short-term cost savings would be offset by the negative impacts on primary production and biodiversity.

Staff view of the options

30. Staff support the primary recommendation made in the PCA review, being moving to a contractor-based model for possum control in Hawke's Bay. In the view of staff this option

presents the lowest risk option from a possum management perspective. This model would likely result in much lower possum densities than the current model, it addresses the issue of commercial forestry being exempt from the programme, it is less complex to deliver and would have the highest primary production and biodiversity outcomes with substantially lower risk.

31. Staff estimate that at least 30% of PCA properties use contractors. Shifting to a contractor-based model would mean that these occupiers would pay for possum control through their rates, rather than directly to contractors. Occupiers who do their own control pay personal costs that would be transferred to rates. Although this would result in a more standardised distribution of costs, the financial impact on individual land occupiers can only be calculated on a case-by-case basis.
32. Staff note there are procurement risks associated with a change to large contracts. There are currently contractors in the region of varying size and any change may be disruptive to their current business model. Staff do not want to see any contractors leave the region and have a view that the proposed approach can offer a range of contract options that could potentially suit a range of contractor models. Staff would work with the contracting community to better understand their views so that they can be considered in developing long-term sustainable contracting solutions.

Implementing change

33. If a significant change is required to the current PCA programme, a Partial Plan Review to amend the Hawke's Bay Regional Pest Management Plan (under sections 70 to 77 of the Biosecurity Act) will need to be undertaken. The steps to making a RPMP are clearly outlined within sections 70 to 77 of the Biosecurity Act 1993. This includes public notification, receipt of submissions and conducting a hearing process. A final draft of the amended RPMP, along with a report outlining proposed decisions, will be tabled for council to make a final decision upon in accordance with section 75 of the Act.
34. Once a council decision has been made to adopt a change to the RPMP, public notice will be given of the decision along with making the amended RPMP and the full decision report will be available to the public. The public can then make submissions to the proposed changes and be heard. Council can then consider those submissions in then finalising any amendments to the RPMP. Submitters will be notified of the final changes and will have 15 working days to lodge an appeal with the Environment Court in accordance with section 76 of the Act, if they wish to do so.
35. The first step would be to draft the proposal, under section 70 of the Act, that would be brought back to council for consideration and if supported, to adopt for consultation. If council agree to the staff recommendation in this paper, a fixed-term project manager would be engaged to lead the partial plan review process and discussions with key stakeholders. The costs for the project manager and the plan change process will be fully funded through existing budgets through a reduction in the regional Predator Free project spend.
36. An indicative timeline has been included as an attachment to this paper (attachment one) that outlines the steps and highlights to council where the further decision making steps in this process are.

Strategic Fit

37. The PCA programme sits within the RPMP. The RPMP plays an important role in achieving both the Biodiversity and Land strategic outcomes and goals in the HBRC Strategic Plan 2020-25.
38. Pest management sits within a biosecurity framework for the Hawke's Bay region, which includes the RPMP, the Hawke's Bay Biodiversity Strategy and the HBRC Strategic Plan. Neighbouring Regional Pest Management Plans and national legislation, policy and initiatives have also influenced this Plan.

39. All programmes sitting within an RPMP are required to have clear measurable outcomes, which are specified within the monitoring section. This monitoring section is integrated into the Biosecurity Annual Operational Plan, which goes to council for approval prior to each financial year. The Operational Plan sets out the operational delivery for each programme and the monitoring and reporting requirements. Staff report to council annually (November) on the progress of the Operational Plan.
40. Failing to achieve the RPMP objective and council Level of Service Measures for the PCA programme could affect achieving the strategic outcomes and goals in the HBRC Strategic Plan 2020-25 for Biodiversity and Land.

Significance and Engagement Policy Assessment

41. The decision sought in this item is low under the criteria contained in council's adopted Significance and Engagement Policy as it is only seeking to develop a proposal with more detailed information that is to be subsequently presented to council for consideration and potential public consultation.

Considerations of Tangata Whenua

42. Staff consider Tangata Whenua will have a strong interest in this topic and will be required to be engaged once council's position is clear.
43. If council agree to the staff recommendation engagement with Tangata Whenua will occur as part of the development of the change to the RPMP and associated changes to councils LTP.

Financial and Resource Implications

44. The PCA report does not include a detailed analysis of the costs of different models of possum control. The current system includes a complicated mixture of costs, both direct and indirect. For example, landowners who do their own control have direct costs such as bait, but the cost of bait is subsidised by council. Those landowners also incur the less obvious opportunity cost associated with the time they spend filling bait stations. Landowners who engage contractors have an obvious direct cost, but their rates also include some possum control area programme costs, such as monitoring and subsidization of baits.
45. It is virtually impossible at this stage for staff to provide an accurate idea of the actual costs of landowner control of possums as the costs will vary significantly from property to property. However in an effort to provide some indication staff consider that a rough estimate of the "system-wide" dollar cost of the current PCA programme is in the \$4-\$8 per hectare range.
46. In contrast, the average, estimated cost for landscape maintenance control from Hawke's Bay possum contractors contacted as part of the PCA review was \$7-8/ha.
47. There are also "costs" that are very difficult to quantify, but important nonetheless. The current model generates risks and uncertainties that would be greatly reduced if council managed professional contractors were used. These uncertainties makes it more difficult to know if money is being well spent and desired outcomes achieved across the board.
48. The financial impact on individual land occupiers can only be calculated on a case-by-case basis. For example, forestry blocks currently pay less per hectare for the pest animal targeted rate compared to farms. Land that is used for forestry is charged 74.26 cents per hectare, compared to 204.79 cents for rural land greater than 4 ha. The financial impact of any change would obviously depend on the size of the individual property and the current investment in possum management.
49. Nevertheless, the broad financial impacts of moving the PCA programme to a contractor-based model would be analysed as part of the partial plan review process. The information would be included within the Proposal that would come back to council for consideration before being released for public consultation.

50. Following the development of the revised programme and the changes to the levels of service required for delivery is known, a change to the Revenue and Financing Policy will likely be required. The funding needs analysis will be undertaken to assess the beneficiaries and exacerbators of the revised programme to determine the most appropriate funding model in accordance with Section 101 (3) of the Local Government Act.

Consultation

51. If instructed, staff will draft a detailed proposal on suggested changes to the current PCA programme for consideration by council. If supported and adopted, a full consultative process would be undertaken as required within sections 70 to 77 of the Biosecurity Act 1993. This includes public notification, receipt of submissions and conducting a hearing process. If a substantive change to resourcing is required to the PCA programme as a result of the partial plan review process, an amendment to the long-term plan will also be required to fund it. Consultation would occur concurrently with the Annual Plan process in March 2022.

Decision Making Process

52. 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:
 - 52.1. The decision does not significantly alter the service provision or affect a strategic asset, nor is it inconsistent with an existing policy or plan.
 - 52.2. The use of the special consultative procedure is not prescribed by legislation.
 - 52.3. This decision is not significant under the criteria contained in Council's adopted Significance and Engagement Policy.
 - 52.4. The persons affected by this decision are all persons with an interest in the region's management of possums under the Hawke's Bay Regional Pest Management Plan and other policies such as the Hawke's Bay Biodiversity Strategy.
 - 52.5. Given the nature and significance of the issue, Council can exercise its discretion and make a decision without consulting directly with the community or others having an interest in the decision.

Recommendations

1. That the Environment and Integrated Catchments Committee:
 - 1.1. Receives and considers the "*Review and Recommendations of the Hawke's Bay Possum Control Area Programme*" staff report
 - 1.2. Agrees that the decisions to be made are not significant under the criteria contained in Council's adopted Significance and Engagement Policy, and that the Committee 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.
2. The Environment and Integrated Catchments committee recommends that Hawke's Bay Regional Council:
 - 2.1. Instructs staff to develop a proposal, under section 70 of the Biosecurity Act 1993, that includes an analysis of the costs, benefits and funding models for a **contractor-based model** (option 1) for possum management in Hawke's Bay for consideration and potential adoption for public consultation.

Authored by:

**Mark Mitchell
ACTING MANAGER CATCHMENT
SERVICES**

Approved by:

**Iain Maxwell
GROUP MANAGER INTEGRATED
CATCHMENT MANAGEMENT**

Attachment/s

- 1 [↓](#) Review and Recommendations of the Indicitive timeline

Review and Recommendations of the Hawke's Bay Possum Control Area Programme – indicitive timeline

PCA programme review indicative timeline														
	2021							2022						
Task	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	July
Key stakeholder engagement														
Detailed CBA Complete														
Draft proposal complete														
Legal review														
Consultation prep complete														
ECCC approval - 570, 71 & 72														
Delegate powers to BWP														
Council - ECCC recommendations														
Proposal released														
LTP consultative process														
Submissions reviewed														
Staff report produced														
Hearings & deliberations														
BWP make recommendations to ECCC														
ECCC recommendations to Council														
Publicly notify plan														
Possible Env court appeals														
Making of Plan (Council seal)														
Amended RPMP operative														

HAWKE'S BAY REGIONAL COUNCIL
ENVIRONMENT AND INTEGRATED CATCHMENTS COMMITTEE

Wednesday 12 May 2021

Subject: OSPRI UPDATE ON HAWKE'S BAY TB RESPONSE

Reason for Report

1. In 2020 council received an update from Steve Stuart the CE of OSPRI on matters related to the TB outbreak in the region. Council requested that staff provide a regular connection of council to OSPRI management to receive updates from them on matters of mutual interest and specifically on progress with the eradication programme for TB within the region.
2. A senior representative for OSPRI, will attend the meeting to discuss OSPRI activities and answer questions.
3. This paper also provides a background on Hawke's Bay Regional Council's Possum Control Area (PCA) programme, our partnership with vector control activities delivered under the National Bovine Tuberculosis Pest Management Plan and how that relates to the recent Bovine Tuberculosis outbreak in Hawke's Bay.

Executive Summary

4. OSPRI is the statutory management agency for the National Bovine Tuberculosis Pest Management Plan which aims to eradicate bovine TB from New Zealand by 2055.
5. In April 2019 a TB infected herd was detected in the Waitara Valley. Since then, a further 27 properties have been infected. There are currently 16 herds infected in Hawke's Bay with a further 11 herds under investigation and 11 herds that have gone clear.
6. The relationship with OSPRI prior to April 2019 was patchy and not effective for either party. Council has subsequently developed a strong strategic and operational relationship with OSPRI and are working well collaboratively. Staff sit on the recently established Hawke's Bay Industry TB Support Group (ICM-GM, Manager Catchment Services, primary sector leadership, local farmer leadership and OSPRI leadership), the Hawke's Bay Governance group (Senior leadership from OSPRI, B&L-NZ, Dairy NZ, Assure Quality and Deer Industry) and the Hawke's Bay TB Free committee (Cr Foley, ICM-GM and Manager Catchment Services). Staff are also working with the local OSPRI team in attending community meetings, exchanging possum control data and offering assistance with land occupier contact information. The HBRC Communications team has also assisted in getting key messages out.
7. There are significant challenges in managing the current TB outbreak in the short and medium term. Access to critical areas of land for widespread vector management has been hampered and there is significant pressure on farmers and this is impacting on relationships with OSPRI staff. HBRC staff will continue to work closely with OSPRI, and offer to support where practical, in managing the TB outbreak in Hawke's Bay.

Background

8. OSPRI is a not-for-profit limited liability company comprising a group of companies inclusive of TBfree NZ Ltd and NAIT Ltd. OSPRI is the statutory management agency for the National Bovine Tuberculosis Pest Management Plan, pursuant to the Biosecurity Act 1993 and the Biosecurity (National Bovine Tuberculosis Pest Management Plan) Order 1998. The implementation of this legislation is funded through government contributions and levies on farmers, through industry shareholders being Beef and Lamb NZ, Dairy NZ and the Deer Industry of NZ. The TB-free programme aims to eradicate bovine TB from

New Zealand animal herds by 2026, from our possum population by 2040 and from the country by 2055.

9. The Hawke's Bay Regional Council has played an active role in supporting the management of the risk of TB since 1996. In 2001 the first PCAs were formed. Since then the PCA programme has grown to cover approximately 700,000ha with over \$17m invested by Council over the past 20 years in both the initial knockdown and ongoing maintenance of possums to low densities.
10. The PCA programme was initiated to deliver multiple benefits for ratepayers, including lowering the risk of TB (but noting we are not the direct risk manager of TB), reducing the economic and amenity damage caused by possums and improving biodiversity outcomes.
11. The PCA programme is implemented through the Regional Pest Management Plan (RPMP) which is underpinned by the Biosecurity Act 1993. A key feature of the RPMP is that once a PCA is created, land users within it have an obligation, enforceable by Council compliance action, to keep possum densities at or below 4% RTC.

TB outbreak

12. In April 2019 a TB infected herd was detected in the Waitara Valley. Since then, further infected herds have been detected in Matahoura, Tutira, Waikoau, Waipataki, Patoka, Glengarry north, Tarawera and Rissington. The source of TB infection in this outbreak has been DNA strain-typed to wildlife from north of the Mohaka River.
13. There are currently sixteen herds infected in Hawke's Bay with a further eleven herds under investigation. In the wider North Island Region there are currently five infected herds, three in the Waikato, one in the Bay of Plenty and one in the Wairarapa.
14. The current dry conditions and market instability due to COVID19 has added further complexity for those farmers who have herds infected with TB with animals unable to be moved off farm and feed on farm being low. The Rural Support Trust, Beef and Lamb NZ and Dairy NZ are providing assistance where possible.
15. Although OSPRI is the management agency in charge of managing TB in NZ there has been some confusion in the community regarding each organisation's roles and responsibilities. This is possibly due to HBRC undertaking vector control (possum management) on behalf of OSPRI until September 2013, when OSPRI transitioned this role to its own vector management department.
16. Council has developed a strong strategic and operational relationship with OSPRI and are working well collaboratively. Staff sit on the recently established Hawke's Bay Industry TB Support Group (ICM-GM, Manager Catchment Services, primary sector leadership, local farmer leadership and OSPRI leadership), the Hawke's Bay Governance group (Senior leadership from OSPRI, B&L-NZ, Dairy NZ, Assure Quality and Deer Industry) and the Hawke's Bay TB Free committee (Cr Foley, ICM-GM and Manager Catchment Services). Staff are also working with the local OSPRI team in attending community meetings, exchanging possum control data and offering assistance with land occupier contact information. The HBRC Communications team has also assisted in getting key messages out.
17. The Bio Managers Special Interest Group has formally approached OSPRI to take a sector led process of re-engagement at a strategic level with OSPRI leadership. We are particularly wanting to minimise risks of future outbreaks, and to discuss how councils can better engage with OSPRI.

Next Steps

18. Staff will continue to work closely with OSPRI, and offer to support where practical, in managing the TB outbreak in Hawke's Bay.
19. The GM – ICM continues to engage with OSPRI leadership to further discussions about our collective issues and exploration of how the two organisations can work more

collaboratively in future continue. This has been positively received and we will continue to ensure engagement occurs both at a senior leadership level and operationally within each organisation.

Decision Making Process

20. 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 “*OSPRI Update on Hawke’s Bay TB Response*” report.

Authored by:

Mark Mitchell
ACTING MANAGER
CATCHMENT SERVICES

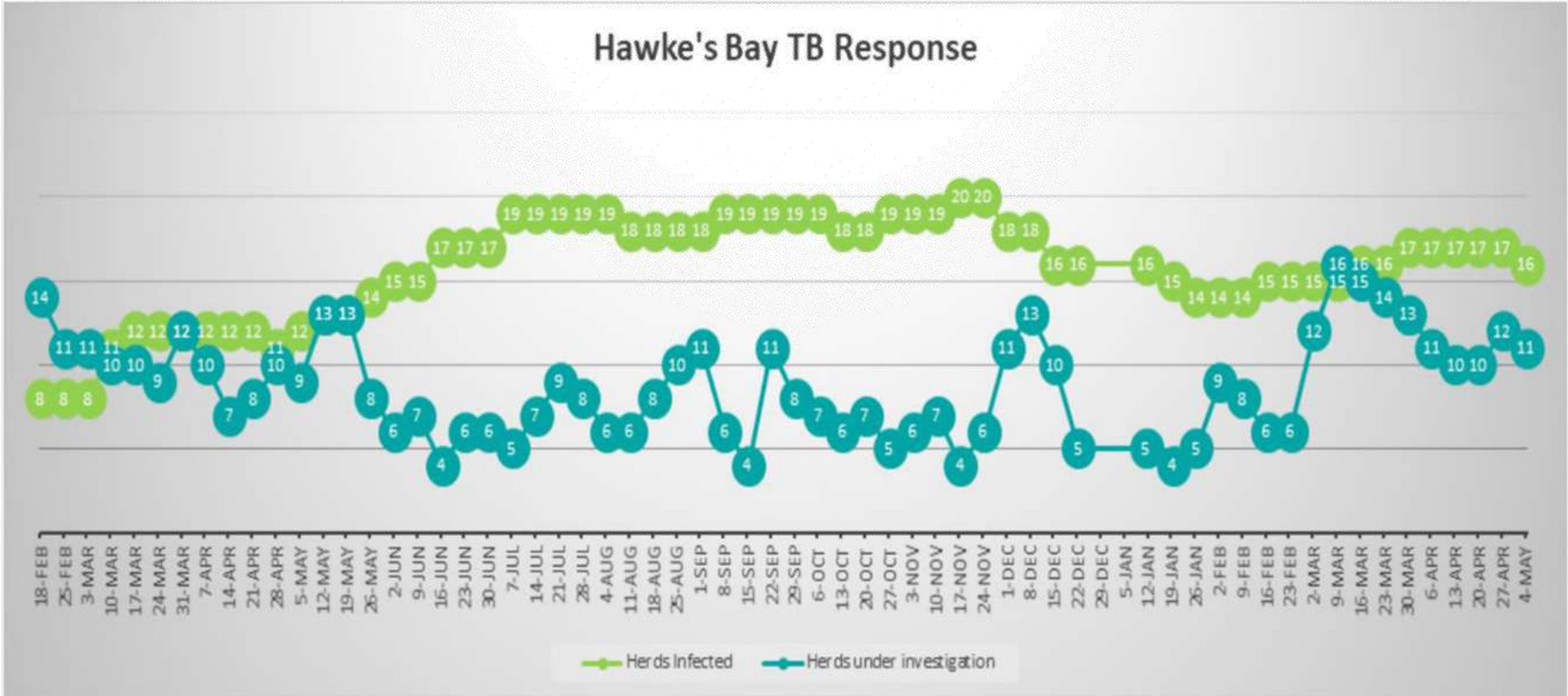
Approved by:

Iain Maxwell
GROUP MANAGER
INTEGRATED CATCHMENT MANAGEMENT

Attachment/s

- 1 [📄](#) Hawke's Bay TB Response as at 4 May 2021

Hawke's Bay TB Response as at 4 May 2021



HAWKE'S BAY REGIONAL COUNCIL
ENVIRONMENT AND INTEGRATED CATCHMENTS COMMITTEE

Wednesday 12 May 2021

Subject: PROPOSED ENVIRONMENTAL PROJECTS OVERVIEW TOOL

Reason for Report

1. This item provides an overview and demonstration of a GIS web tool that aims to provide Councillors and staff with an overview of the totality of our on-ground works for this financial year.

Background and discussion

2. To date, we have been unable to show the totality of our cross council on-ground activities spatially in a succinct manner, making it difficult for both governors and staff to get a sense of what we are doing and where.
3. This has been difficult as this data is not stored in one place, nor is it captured the same way. Therefore, this required one staff member to collate this across the organisation to ensure the data provided an accurate and consistent picture.
4. Using this data, our GIS team have developed a web tool that provides a spatial representation of our on-ground works, a snapshot of where we are working this financial year along with high level budget information.
5. Our aim was to provide a succinct high-level overview, and as our current financial budget is not broken down by location, we have presented the aggregate region wide budget for the activity. Please note that 'total budget' includes both operational expenditure and capital expenditure, and includes staff time, external expenditure and any other applicable costs related to that activity.
6. The tool is still in development, but staff are eager to get feedback on its utility.

Next Steps

7. As the tool demonstrated is still in development, staff are seeking feedback on the value of it and any improvements that can be identified so that it can continue to evolve and be adapted.

Decision Making Process

8. 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 "*Proposed Environmental Projects Overview Tool*" staff report.

Authored by:

Thomas Petrie
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SENIOR ADVISOR INTEGRATED
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Approved by:

Chris Dolley
GROUP MANAGER ASSET
MANAGEMENT

Iain Maxwell
GROUP MANAGER INTEGRATED
CATCHMENT MANAGEMENT

Attachment/s There are no attachments for this report.

HAWKE'S BAY REGIONAL COUNCIL
ENVIRONMENT AND INTEGRATED CATCHMENTS COMMITTEE

Wednesday 12 May 2021

Subject: EROSION CONTROL SCHEME – UPDATE ON SYSTEMS AND FORECASTS

Reason for Report

1. This item provides an update on the Erosion Control Scheme (ECS) Programme – and the systems improvements implemented and in progress to ensure more accurate financial tracking and financial forecasting of the delivery of the ECS.
2. To highlight changes to the ECS grant rate and ECS project caps.
3. To update council on the 2020-21 work programme and proposed programme for 2021-22.

Executive Summary

4. The Catchment Delivery team are currently undertaking a review and re-development of the systems and processes used for the delivery of the Erosion Control Scheme (ECS).
5. A key focus is to improve the ability to maintain accurate budgets and financially forecast proposed ECS works and improve the ability to report on what we achieve.
6. The aim is for Catchment Advisors to deliver their work with a simple, clear and concise system that enables them to be confident and consistent in the delivery of their work and spend as much time as possible on the land supporting landowners.

Background

7. In December last year at a council workshop, issues were reported regarding the overshoot of ECS budget due to additional works commitments on farms through Jobs for Nature funding opportunities. At this point in time the ECS budget tracking system was unable to provide accurate financial forecasting to maintain our ability allocate funding within budget.
8. Approval was sought at the 3 February 2021 EICC to bring forward ECS borrowing to cover increased project spend, and council agree to fund this.

Discussion

9. The ECS Programme utilises Microsoft Dynamics CRM data management system. This system has presented difficulties being an 'out of the box' solution with insufficient time and resources invested in the implementation stage to tailor the system to meet the ECS needs. Catchment Delivery staff and the Information & Communication Technology (ICT) Business Systems Manager have undertaken a requirements analysis to identify the changes required to make the system work for the delivery of the ECS Programme.
10. When the CRM system was implemented, the scheme was designed to operate using rolling/flexible 12-month project contracts. The system providers were confident that the CRM system would be able to extrapolate financial information to report by financial year. However, in practice, the CRM system as currently configured, is unable to deliver a reliable forecasted committed financial value for the projects, by financial year.
11. Actions are in place to address this:
 - 11.1. A service agreement has been established with the system provider. We are currently working through a costing analysis to urgently confirm and then implement agreed changes

- 11.2. Based on costs associated to any system changes quoted by the provider, a decision on continuing its use or quickly moving to an alternative solution will need to be made
 - 11.3. Staff have begun reviewing other council's grant systems so that if the current system change costs to get it operating satisfactorily are deemed to be excessive then we potentially have the option of adopting and modifying an existing system at less cost
 - 11.4. Staff are also investigating spatially enabled data systems that would allow better integration between our GIS system and our financial reporting system. This would help with reporting to council as well as 'dashboard' monitoring by managers
 - 11.5. Staff will look to investigate every opportunity to implement a system that can service multiple teams within HBRC that deliver similar work
 - 11.6. All contracts now follow set financial year periods (previously contracts could be drawn up for any twelve-month period.) This will enable more accurate extraction of data by financial year out of the CRM system
 - 11.7. There will be a short period where existing contracts which straddle two financial years (2020-21 and 2021-22) are still in progress. To allow for accurate reporting, the ICM Management Accountant has developed a manual Excel ECS Financial Tracker which will provide the ability to track and forecast the ECS budget in the interim, until the system and process changes have been fully implemented.
12. A review of the GIS mapping system used by Catchment Advisors to map proposed and planned works is also currently being undertaken.
 - 12.1. A review group made up of Catchment Advisors and GIS staff are working to improve the way spatial information is captured. These improvements will allow HBRC to more accurately report on work supporting landowners to protect soils and improve water quality on their land. These improvements will better align with regional and national reporting requirements
 - 12.2. Proposed changes will improve our process to secure funding reimbursements through the MPI Hill Country Erosion Fund which is currently very difficult.
13. To ensure as many landowners as possible with areas of high risk of erosion can access support through the ECS Programme, the following changes are being introduced from 1 July 2021:
 - 13.1. Reduction of the HBRC ECS grant rate from 75% to 50%
 - 13.2. Project funding caps set with a maximum project cost per property (in any given financial year) of \$100,000 (i.e.: HBRC ECS contribution a maximum of \$50,000)
 - 13.3. Implementation of a prioritisation process with timing of funding approvals to coincide with the Long-Term Plan approval process
 - 13.4. Landowners have been surveyed on the proposed change of the grant rate from 75% to 50% and the majority of landowners are understanding of the change, and we do not consider this change will materially reduce uptake of the scheme
 - 13.5. Due to the large number of proposed projects available in the 2021-22 financial year, the change to a 50% grant rate will mean the ECS budget will fund more projects without a major increase to staff workloads
 - 13.6. The initial grant rate of 75% was implemented to promote swift uptake of the ECS however, now that demand is exceeding budget there is an opportunity to reduce the grant rate to an appropriate level. This fits with the original intent and thinking for the programme and the current ECS policy allows for this change
 - 13.7. The 2021 value of projects already committed at a 75% grant rate is \$457,692. These are projects where the existing grant rate was agreed prior to the change being communicated and the 75% grant rate will be applied

- 13.8. For the 2021-22 financial year a prioritisation process has been implemented to coincide with the Long-Term Plan approval process. This will allow staff to screen and fund the projects with the greatest return on investment and impact on reducing erosion
- 13.9. Priority will be given to pole planting, assisted reversion and shovel ready projects, as these projects are eligible for HCEF or MfE reimbursement
- 13.10. Projects that can be delayed will be prioritised for a second funding round for the second half of the financial year, for after the Long-Term Plan budgets are adopted and the total budget available is confirmed
- 13.11. Committed and forecast project costs as shown in Table 1 below are 'planned project costs' and are subject to change as works are completed and 'actual costs' are known. Any change to type of work undertaken, or the amount of work undertaken must have a variation from the plan approved prior to work starting.

Table 1: ECS Committed and Forecast Budget Spend

	2020	2021
Committed	\$4,309,799	\$1,250,749
Prior year project carryover (spent)	\$316,722	
Pipeline (proposed projects)		\$2,225,434
Grand Total	\$4,626,522	\$3,476,183
Funds available for ECS grants	\$4,719,701	
LTP draft budget for ECS grants		\$3,050,000
	\$4,719,701	\$3,050,000
Amount available for allocation to projects 2021-22		\$1,799,251
Deficit (to be managed via re-prioritisation to future financial years)		-\$426,183

Conclusion

14. A Financial Tracker has been created as an interim solution to maintain oversight of the ECS financial situation.
15. A reduction in the ECS grant rate and project cap will be introduced from 1 July 2021 to align with increased demand for ECS support. This was anticipated and fits with the current ECS policy.
16. Project commitments in 2020 and project commitments and forecasted projects for 2021 are being managed so that expenditure will be within approved budgets. Other than those projects where there is a commitment at the existing grant rate, all 2021 projects will take account of the grant rate reduction and project cap limit.
17. Proposed projects that do not get approval for the 2021 financial year and remain priority works, will if continuing, get moved into the following financial year.
18. Catchment Delivery staff have identified the systems changes that are required to improve the delivery of the ECS Programme and are working alongside ICT and GIS staff to implement these in priority order as budget allows.
19. The proposed system changes are going to take time and further work to implement.

Next Steps

20. As the above changes require a policy update, an ECS Policy change process is underway to incorporate these changes, along with associated supporting documentation.

ECS Key Metric Update

21. Additional area of highly erodible land planted in trees (current LOS target 2000ha):
- 21.1. 2018-19: 94 ha
 - 21.2. 2019-20: 667 ha
 - 21.3. 2020-21: 1,102 ha to date.
22. Additional kilometres of riparian margin protected annually (both sides of a waterway – current LOS target 100km):
- 22.1. 2018-19: 8 km
 - 22.2. 2019-20: 27 km
 - 22.3. 2020-21: 40 km to date.

Decision Making Process

23. 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 “*Erosion Control Scheme – Update on Systems and Forecasts*” staff report.

Authored by:

Dean Evans
MANAGER CATCHMENTS DELIVERY

Billie Herries
CATCHMENT MANAGEMENT LEAD –
FRESHWATER IMPROVEMENT
PROGRAMMES

Bronda Smith
CHIEF FINANCIAL OFFICER

Andrew Siddles
CHIEF INFORMATION OFFICER

Approved by:

Iain Maxwell
GROUP MANAGER INTEGRATED
CATCHMENT MANAGEMENT

Attachment/s

There are no attachments for this report.

HAWKE'S BAY REGIONAL COUNCIL
ENVIRONMENT AND INTEGRATED CATCHMENTS COMMITTEE

Wednesday 12 May 2021

Subject: NAPIER OPEN WATERWAYS WATER QUALITY

Reason for Report

1. The purpose of this paper is to summarise to the Environment and Integrated Catchment Committee the purpose of, and results to date of the Napier Urban Waterway Investigation project.
2. Staff from Napier City Council (NCC) will provide a presentation of the results to date of the operational monitoring program of the Napier urban waterways.

Executive Summary

3. NCC and Hawke's Bay Regional Council (HBRC) are working together to gather an extensive collection of operational data reflecting the current state of the Napier urban waterways. This includes pumped and gravity waterways discharging into Te Whanganui-a-Orotū (Ahuriri Estuary).
4. This first stage of the program is approximately 1 year into a 3-year program. This approach is novel, in that asset ownership has been put aside and NCC and HBRC working together to develop solutions which will then be the responsibility of the appropriate council to implement.
5. The initial monitoring results indicate that there is substantial work to be carried out to improve water quality within the Napier urban waterway network.
6. Commencing in the first Quarter of the 2021-22 financial year an expert consultant will be engaged to review the state of the waterway information and recommend an optimal pathway to deliver a step change in the network water quality.
7. In a parallel workstream it is intended to document the cultural significance of the Napier urban waterway network with an intention that these elements will contribute to and guide the investment roadmap.
8. The recommended pathway will be implemented through incorporation into subsequent budgeting process such as an LTP or amendment updating the existing expenditure profile.

Strategic Fit

9. This work is core to the management of the HBRC Napier/Meeanee Drainage Scheme. This drainage scheme forms part of the greater Heretaunga Plains Flood Control Scheme.
10. This work is aligned with the initiatives under consideration of the Long Term Plan 2021-2031 including:
 - 10.1. Additional engineering resources to undertake scheme plans with the Napier/Meeanee catchment being in the top 3 priorities for review. Scheme plans will assess:
 - 10.1.1. Impact of climate change
 - 10.1.2. Current level of service performance
 - 10.1.3. Investment to meet growth
 - 10.1.4. Investment to meet (and exceed) regulatory requirements
 - 10.1.5. Produce a capital, operations and maintenance improvement plan and integration into the appropriate LTP.

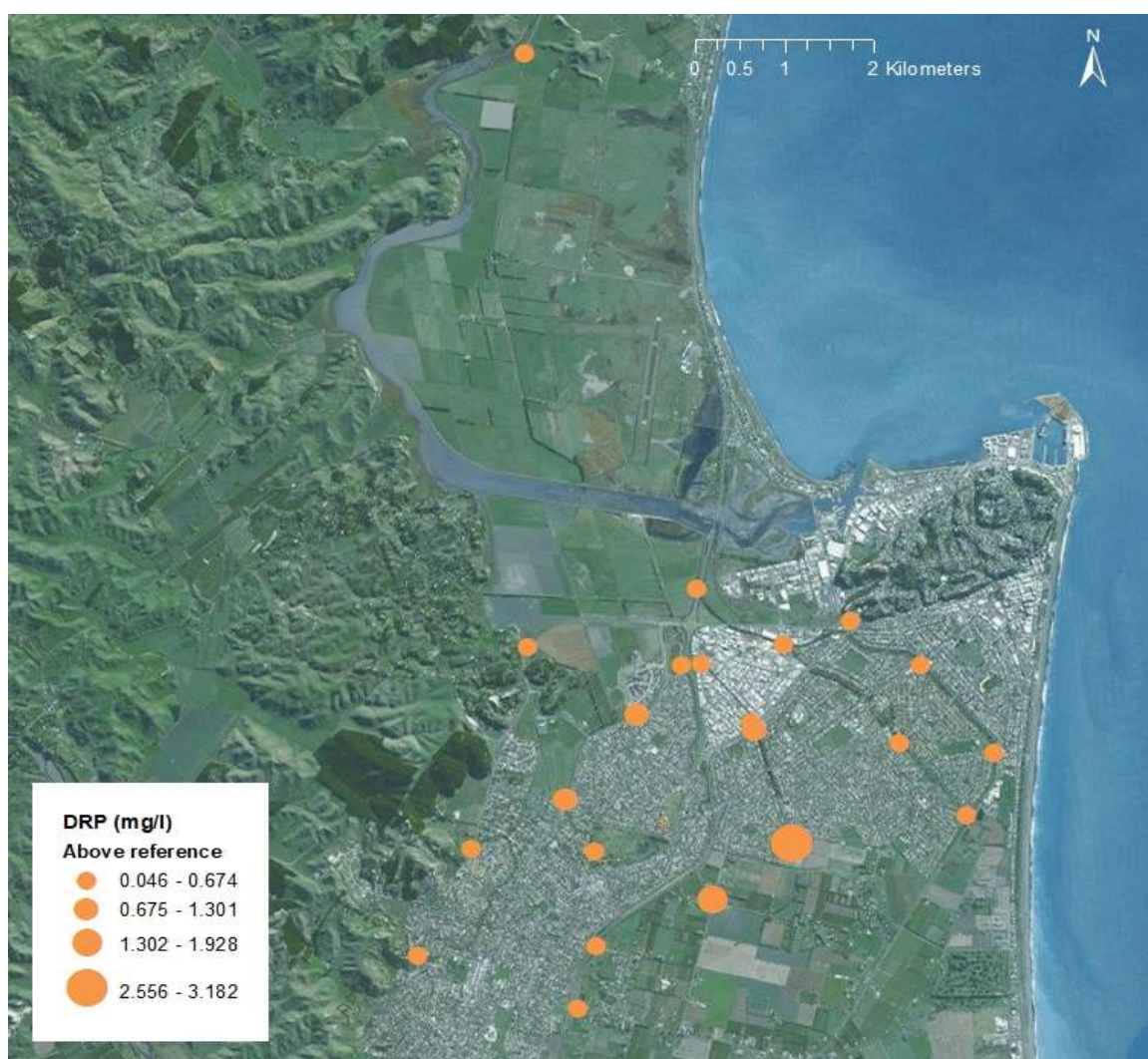
- 10.2. Additional resource to manage the increasing number and complexity of consents required to operate our services.
- 10.3. Investment in software for modelling schemes and flood forecasting.
- 10.4. Additional funding for essential scheme upgrades and freshwater reform requirements such as fish passage.
- 10.5. Additional resources such as the Ahuriri urban catchment coordinator (working title) who will work with the community to improve water quality outcomes within the catchment.

Background

- 11. In 2018 Ahuriri Estuary and Coastal Edge Masterplan undertaken by Napier City Council identified the requirement for funding to a series of projects dedicated to prevention of further degradation of Te Whanganui-a-Orotū. Under Project 1, which suggests the development of a wetland fringing the estuary for treatment of urban waterways, an initial waterway study was identified as a foundation piece of work.
- 12. This waterway study allocated \$100,000 per annum for three consecutive years of detailed operational sampling to investigate the quality of the Napier's urban waterways exceeding the monitoring requirements from stormwater resource consents.
- 13. This study is required prior to implementing treatment wetlands, as neither HBRC nor NCC held enough data to justify an end of line treatment wetland would be the best option for effective urban waterway treatment.
- 14. Due to the nature of the project and the shared jurisdiction of many of the major waterways in Napier (e.g. Old Tūtaekurī Riverbed (Georges Drive), County, Plantation, Pūrimu and Taipo Stream), HBRC proposed to match the funding, bringing the joint project to \$200,000 per annum for three years.
- 15. Attachment 1 shows the HBRC assets of the waterway infrastructure.
- 16. The joint approach is novel in that the stages 1 and 2 are proceeding on the basis of a common waterway network without reference to ownership. Once solutions have been identified and prioritised across the network each individual council will be responsible for the delivery, operation and maintenance.
- 17. The overall goal of the joint project is to develop a comprehensive capital improvement program and operational improvements to deliver a step change in water quality of Napier's urban waterways.
- 18. Stage 1 is to build a foundational understanding of the current state of the major waterways discharging to Te Whanganui-a-Orotū (Ahuriri Estuary), built by regular data collection over multiple weather types, seasons, and over a number of years.
- 19. Stage 2 is to undertake a detailed study of the water quality data set and recommend a comprehensive program to address:
 - 19.1. Any illegal or unconsented discharges
 - 19.2. Treat pollution effectively at the source and for the specific type of pollution
 - 19.3. Determine key design parameters and relative priority of a polishing wetland(s) at key discharge locations.
- 20. Stage 3 is to introduce the recommended pathways into the appropriate capital and O&M budget for each Council.
- 21. Stage 1, the project is purely data collection. The first year of the waterway project involved prescheduled monthly water samples across 25+ carefully selected sites in the city to capture waterway quality in different land use zones, being rural, residential, commercial, and industrial. Now into the early stages of the second year, water quality monitoring has been reduced to 20 sites every 6 weeks. Sediment sampling is

undertaken once per annum, and ecological assessment twice per annum. Visual observations are undertaken on a weekly roster.

22. Stage 2, will be commenced early in the 202-/22 FY and take at least 12 months to complete through contracting specialist consultants to analyse the initial water quality information and assess a wide range of behavioural, operational and capital options aligned with current and emerging technology, with dealing with both point source and diffuse sources of pollution.
23. Stage 3 will be to update both the NCC and HBRC capital and maintenance budgets with the recommended pathway and ensure that there is funding available for the implementation of the recommended pathway. This will likely need Council approval through an annual plan or subsequent LTP process. Once an agreed pathway is funded, execution can commence.
24. Data is collated through Napier City Council, though presentation of the data is in an interactive ArcGIS format. An example of this format is as follows, representing 10 months of surface water quality data on Dissolved Reactive Phosphorus (DRP):



Issues

25. Issues identified from the monitoring to date include:
 - 25.1. Universally excessive phosphorus concentrations in water (up to 400x the guideline value for species protection)
 - 25.2. Ammonia concentrations in water
 - 25.3. Nitrate in water

- 25.4. Instances of very high Chlorophyll a in water
- 25.5. Water flow
- 25.6. Channelisation and lack of riparian margins
- 25.7. Water clarity
- 25.8. Faecal coliform concentrations and a lack of pattern to these concentrations
- 25.9. Pest plants – both around the waterways and in the water (e.g. Lagarosiphon)
- 25.10. Zinc (in sediment)
- 25.11. One or two instances of excessive mercury in sediment; and
- 25.12. Highly invasive tubeworm increasing in size in the County waterway by Prebensen Drive.

Significance and Engagement

- 26. Not only will this project inform both NCC and HBRC of the long-term trends and behaviour of the urban waterways feeding to Te Whanganui-a-Orotū (Ahuriri Estuary), but this knowledge will stem other action such as:
 - 26.1. Place greater importance on, and encourage the improvement of the waterway ecosystems themselves rather than just their discharge into Ahuriri Estuary
 - 26.2. Investigation of appropriate in-situ solutions of water quality improvement devices and identify any pilot programs that may be required
 - 26.3. Informed rehabilitation approaches for key areas of concern (such as County Waterway at Harold Holt Rd)
 - 26.4. Pinpointing pollution hotspots, where management and enforcement action can be prioritised
 - 26.5. Investigation of the cultural significance of all waterways
 - 26.6. Investigation of appropriate streambank sections to plant in native riparian species
 - 26.7. Public communication of the true state of the waterways and of action planned to rehabilitate these waterways.

Implications

Financial

- 27. This project largely follows those urban waterways which are conditionally authorised to discharge stormwater and drainage water into Te Whanganui-a-Orotū (Ahuriri Estuary), beside State Highway 2, via the Westshore Tidal Gates. The associated resource consent is jointly held by NCC and HBRC and therefore both Council's hold responsibility for its level of compliance against those conditions. This project is over-and-above current compliance criteria required by this consent.
- 28. Financially, any non-compliance with the resource consent could result in enforcement action being taken by HBRC's regulatory wing, resulting in potential fines or prosecution of up to \$600,000 per event.
- 29. This project is funded by the current LTP funding of both NCC and HBRC for stages 1-3.

Social and Policy

- 30. This project and its findings are the vital first step in the sustainable improvement of the socially and ecologically important, yet delicate Te Whanganui-a-Orotū (Ahuriri Estuary).
- 31. This project aligns with the motives of, and pre-empts the implementation of the regional TANK Plan Change in attempting to gain a sound awareness of the behaviour of Napier's waterways in order to make informed and targeted surface water improvements.

32. This project also prepares both NCC and HBRC for new conditions in the new jointly held Westshore Tidal Gates consent.

Risk

33. Continued degradation of Te Whanganui-a-Orotū (Ahuriri Estuary) could result in the system reaching an ecological point of no return. With the majority of the discharges into Te Whanganui-a-Orotū (Ahuriri Estuary) within the urban waterway network, there is an urgent need to implement waterway treatment. It is imperative that the waterways are properly understood prior to, and in order to avoid the unnecessary risk of implementing a treatment option which may not be appropriate or an efficient use of funds.
34. The associated risk of implementing an inappropriate (type, position or methodology) surface water treatment option prior to understanding the nature of the feeding urban waterways is daunting.

Decision Making Process

38. 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

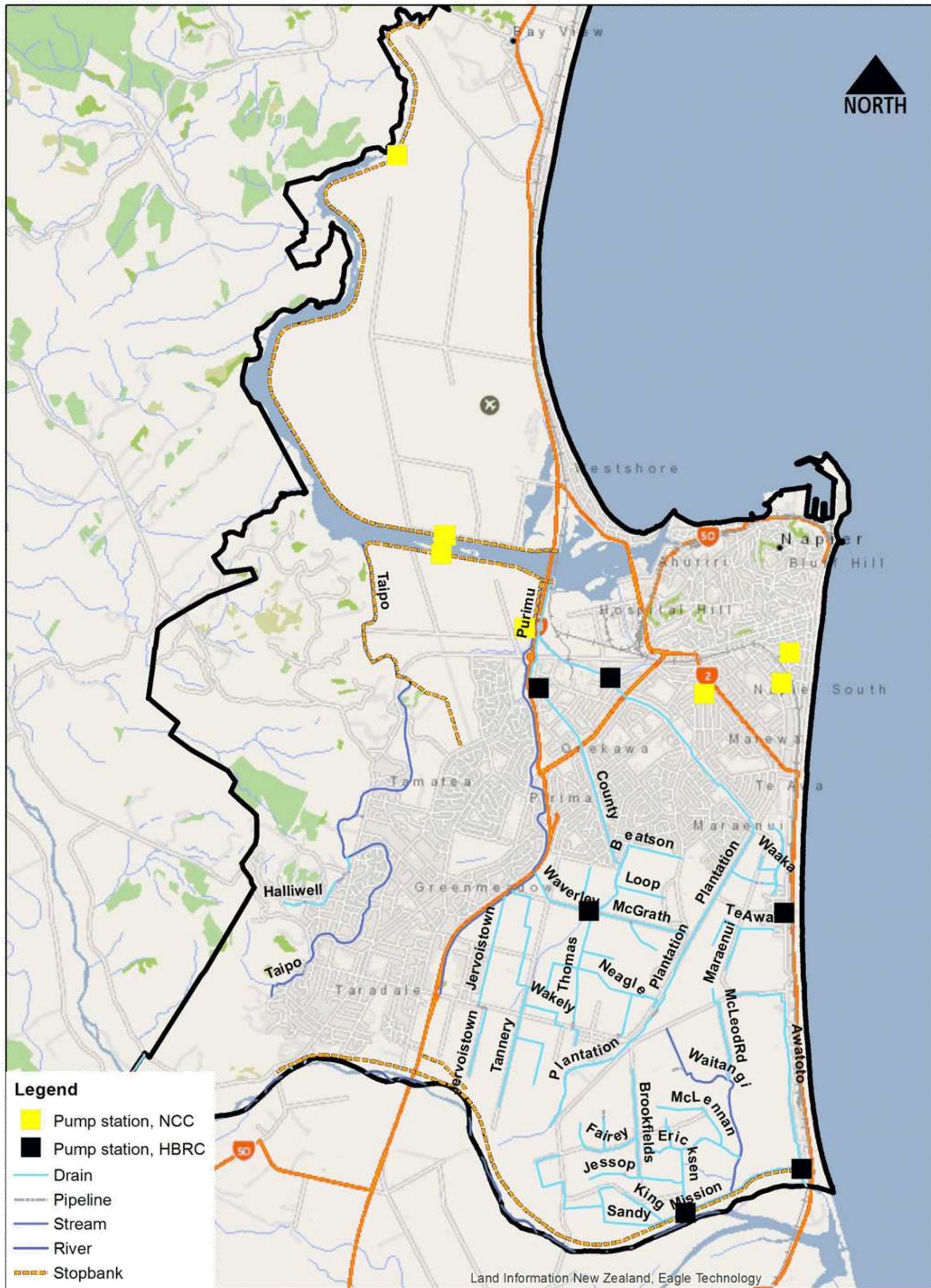
That the Environment and Integrated Catchments Committee receives and notes the “*Napier Open Waterways Water Quality*” staff report and presentation.

Authored & Approved by:

Chris Dolley
GROUP MANAGER ASSET MANAGEMENT

Attachments

- 1 [↓](#) Map showing HBRC Napier urban waterway assets
- 2 [↓](#) Napier City Council presentation - Urban Waterway Quality Investigations



HBRC Owned Assets

Napier City Urban Waterway Quality Investigations

*Presentation to Hawkes Bay Regional Council – Environment &
Integrated Catchment Committee*

- 12 May 2021



Ahuriri Estuary & Coastal Edge Masterplan (AECCEM)

Vision & Principles



Masterplan Vision

A thriving, healthy and resilient Ahuriri estuary and coastal edge.



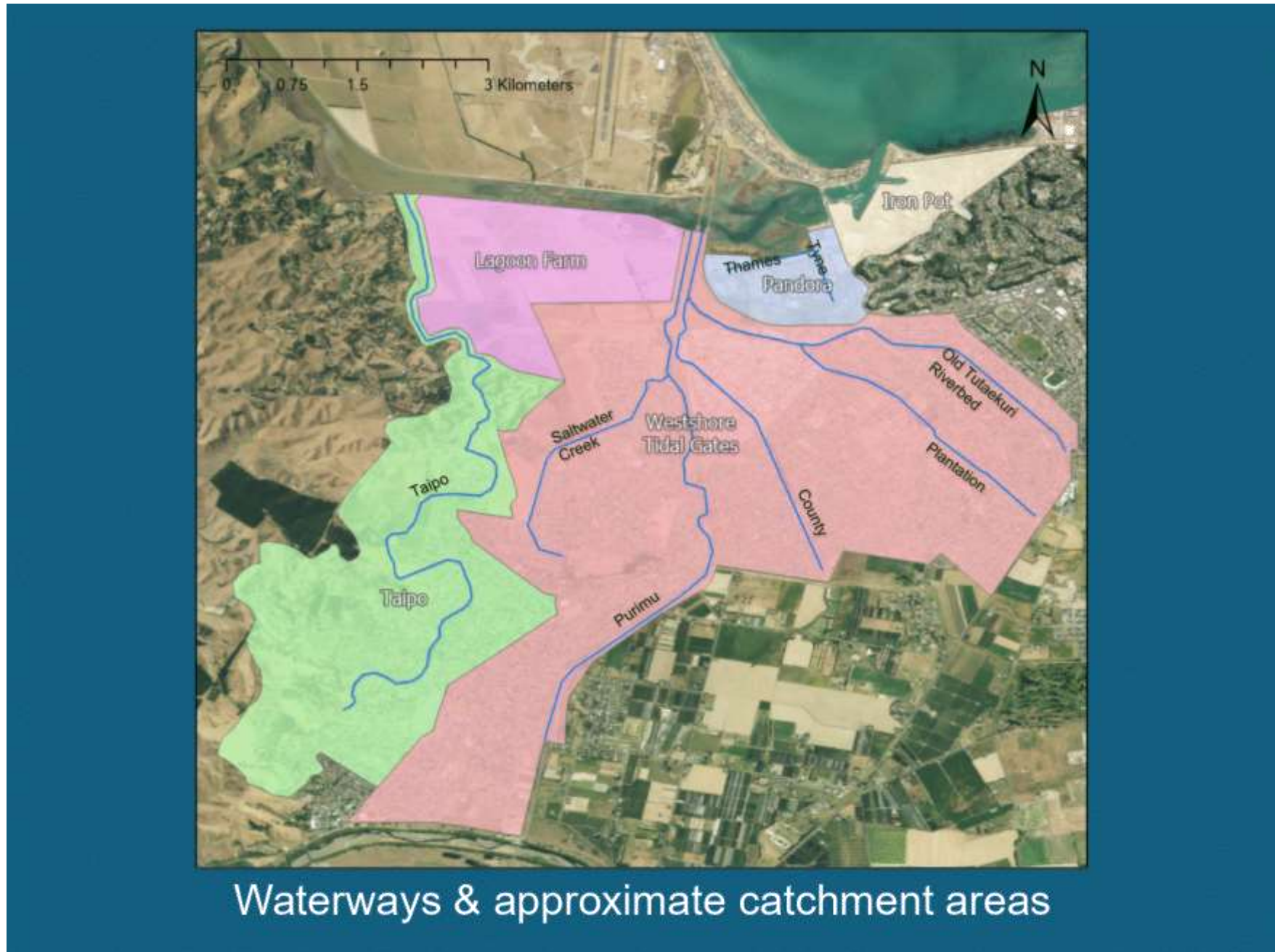
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Te Kaunihera o Ahuriri

Ahuriri Masterplan Stormwater Study

“A comprehensive stormwater study will be carried out in advance of any further exploration or implementation of other stormwater-related projects in order to determine feasibility and consider options for better managing stormwater in the City.”

- Estimated timeframe 2019-2022
- Joint funding (HBRC & NCC); \$600k





Issues and aims

- **Issue:** neither council had consistent data nor dry weather monitoring regime for Napier waterway network
- ...therefore this project to be undertaken prior to investigating feasibility of surface water treatment.

Two aims:

1. Better understanding of urban waterway behaviour;
2. Use collected data to inform ecological enhancement options.



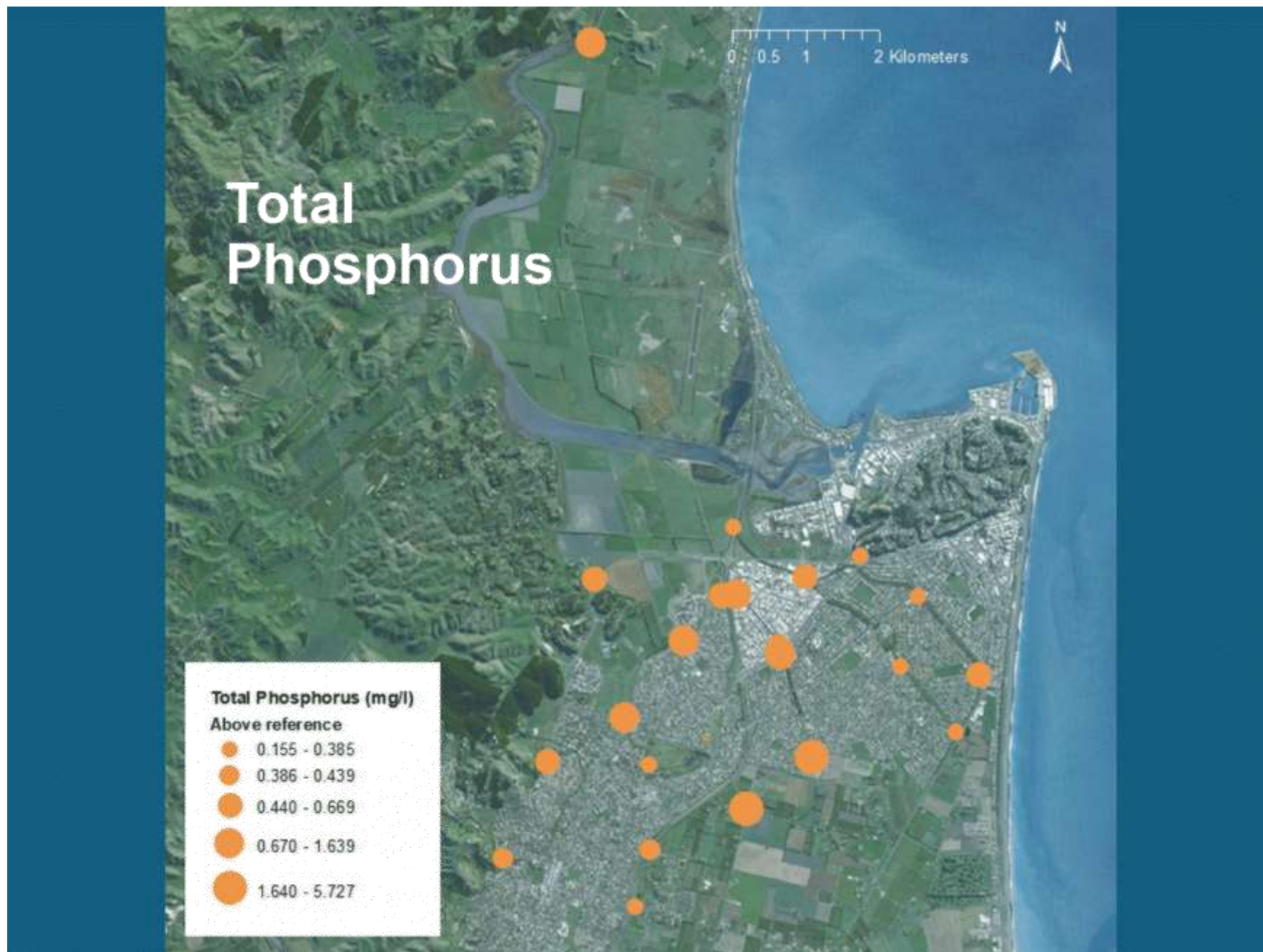
Methodologies

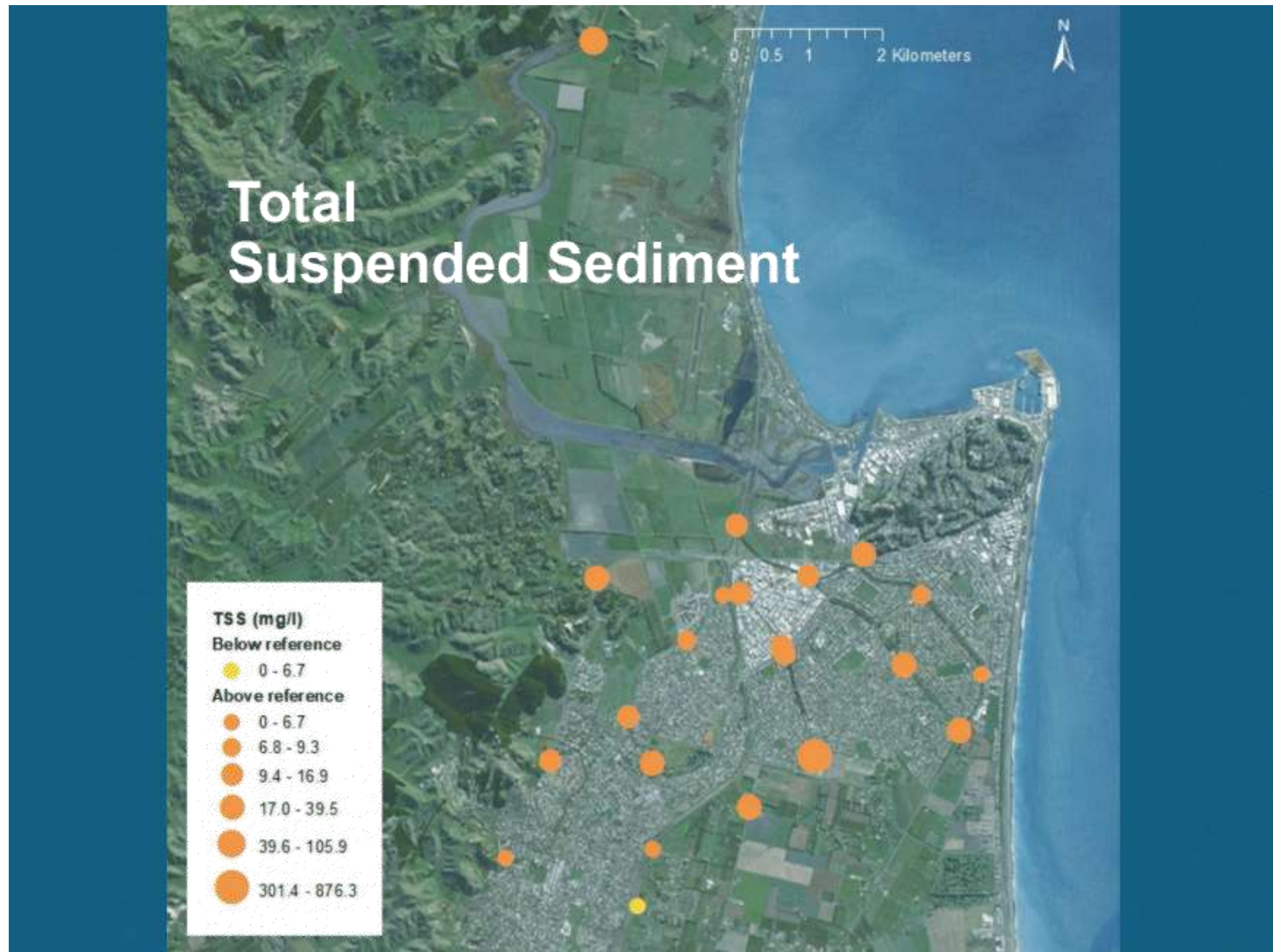
- Year One: 21 sites monitored every month.
- Year Two: 20 sites monitored every 6 weeks, with increased event sampling efforts.
- Year Three:

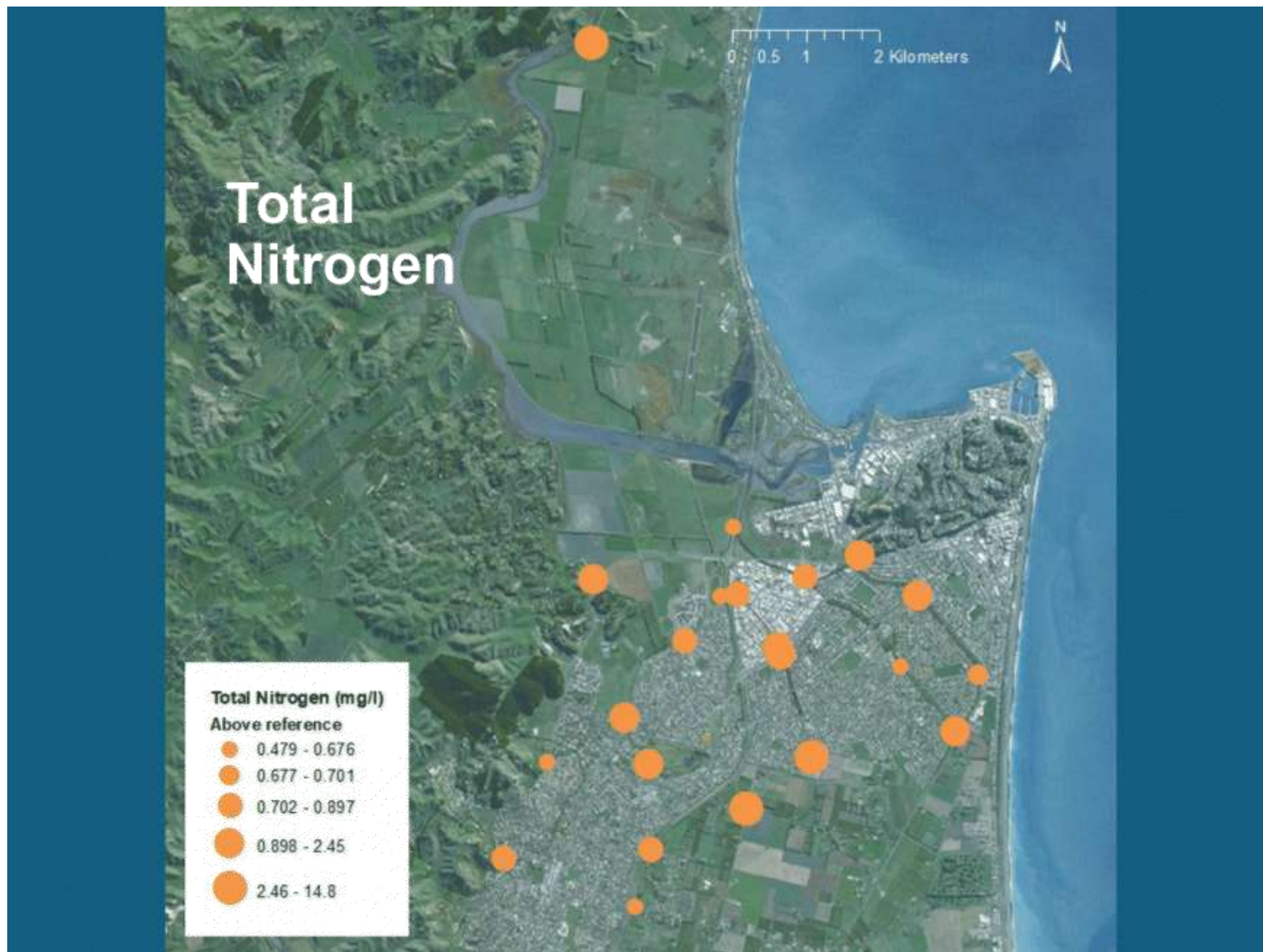
Identified key concerns

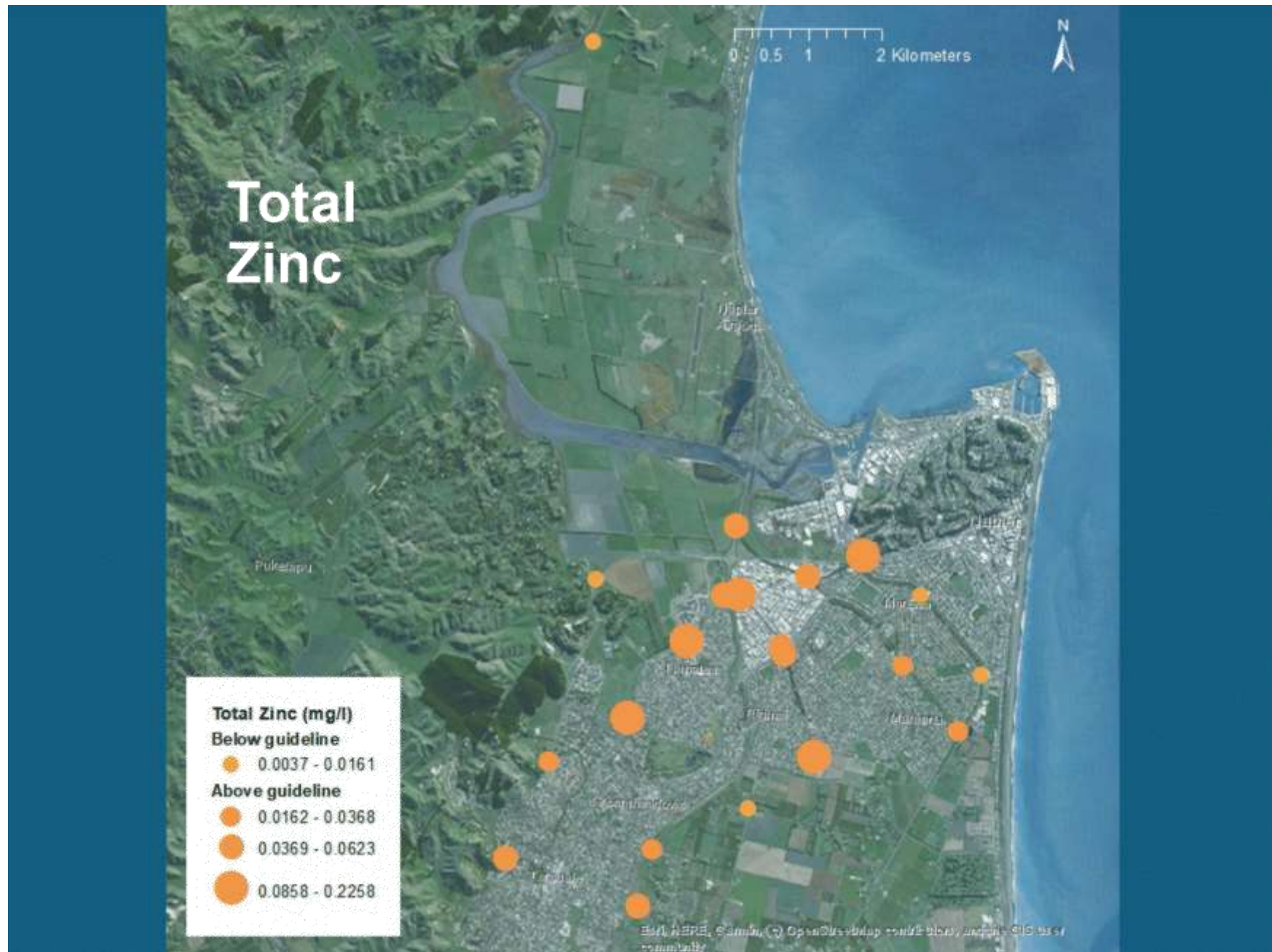
1. Phosphorus (up to 500x GV)
2. Suspended sediment
3. Ammonia & nitrate
4. Zinc
5. Channelisation
6. Clarity
7. Faecal coliforms
8. Pest plants
9. Rubbish
10. Invasive tubeworm - County

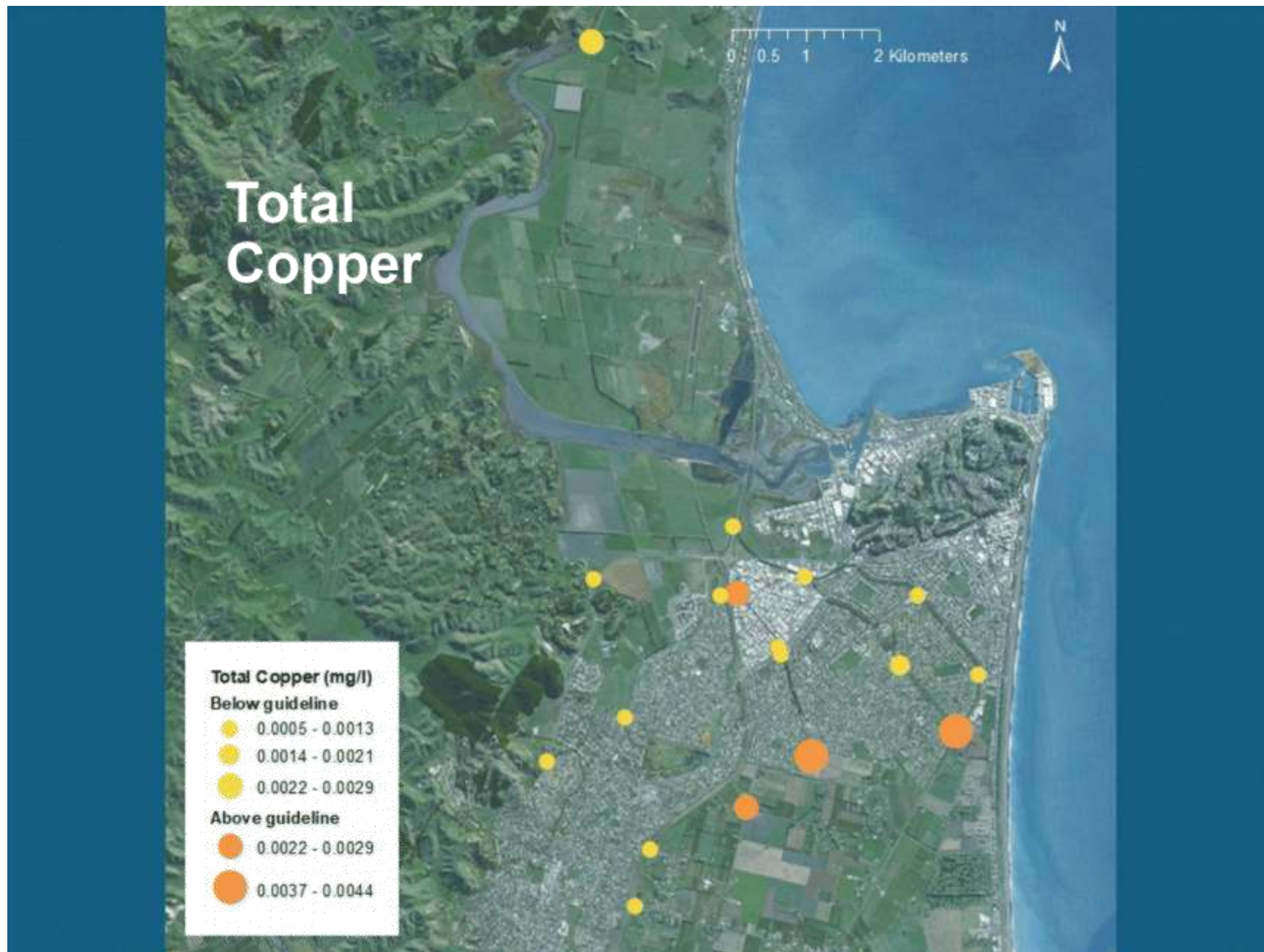












Old Tutaekuri River Bed catchment (County, Plantation, OTRB) – water

- Issues with clarity
- Rubbish
- Stagnation
- Anoxic sediment
- Faecal coliforms
- Quality **improves** downstream
- U/S Harold Holt (County) most enriched site
- Summer algae
- Saline intrusion (possibly shallow coastal groundwater)



Old Tutaekuri River Bed catchment – sediment



- All County waterway sediment sites exceed Zn guidelines.
- All sites in Plantation waterway Zn GV; Ford Rd bridge 3.5x GV.
- Plantation waterway exceeding Cd, Cu, Pb, Hg guidelines.
- OTRB lead & mercury at Kennedy Rd PS.



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Purimu catchment - water



- Purimu & Saltwater Creek
 - Ammoniacal-N, nitrate, nitrite, & phosphorus similar to OTRB
 - Zn anomaly Saltwater Creek
 - Pest weeds
 - Algal/cyanobacterial blooms
- Waverley
 - Stagnation
 - Rubbish
 - High suspended solids
 - Phosphorus ~100-fold over GV

Purimu catchment- sediment



- Purimu & Saltwater Creek
 - Zn exceeding ISGQ high across saltwater creek
 - Ranges between not exceeding & exceeding ISGQ high in Purimu
- Waverley
 - No exceedances

Taipō catchment



- Excessive Ammoniacal-N, nitrite, nitrate, phosphorus.
- High faecal coliform concentrations. (e.g. 4400 after 4.8mm rainfall).
- 3x Zn GV exceedances.
- Issues with clarity & susp. solids.

First 10 months: results by waterway

BY WATERWAY (averages)

	Total Zinc (g/m3)	Faecal Coliforms (cfu/100mL)	Total Nitrogen (g/m3)	Total Ammoniacal-N (g/m3)	Total Phosphorus (g/m3)
County	0.1327	749	7.11	0.277	2.89
OTRB	0.0220	513	0.83	0.325	0.55
Onehunga	0.0189	207	3.60	0.064	0.82
Plantation	0.0349	907	0.93	0.198	0.34
Purimu	0.0318	400	0.48	0.058	0.43
Saltwater Creek	0.0688	976	0.94	0.277	1.25
Taipo	0.0203	1289	0.78	0.178	0.51
Waverley	0.0077	508	2.46	0.176	1.94

- Red text = exceeding GV for 90% species protection
- Red fill = higher concentrations

Key learnings

- Ecological enhancement possible (upper catchment)
- Particulate metal concentrations persistent issue:
 - Industrial zones
 - Road catchments
- Road network Zn, Cu
- Zn Saltwater Creek
- Universal phosphorus excess
- N & ammonia excess



Next step

- External project review
- Technical consultant: advice for next steps
- Challenge status quo:
 1. Improvements to waterway management, District Plan Review, Stormwater Bylaw 2020, Code of Practice, TANK plan change.
 2. In-situ environmental quality improvement devices.





Questions

Photo: Old Tutaekuri Riverbed,
Athuljith Photography



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HAWKE'S BAY REGIONAL COUNCIL

ENVIRONMENT AND INTEGRATED CATCHMENTS COMMITTEE

Wednesday 12 May 2021

Subject: UPDATE ON IRG FLOOD CONTROL RESILIENCE FUNDED PROJECTS

Reason for Report

1. This report provides an update on four projects approved for funding as part of the Crown's Flood Control Resilience Funding with the Infrastructure Reference Group managed by the Provincial Development Unit.

Background

2. In Budget 2020, Cabinet agreed to provide a \$3 billion investment in infrastructure to support New Zealand's economic recovery as part of the 11 May COVID-19 Response and Recovery Fund.
3. The Government established the Infrastructure Reference Group (IRG) to identify a pipeline of shovel-ready projects to support the economy during the COVID-19 rebuild. The process was supported by Crown Infrastructure Partners.
4. In May 2020 HBRC Asset Management Group contributed to a River Managers Sector Flood Protection Shovel Ready Project Package to assist with COVID-19 Recovery.
5. On 24 June 2020, the Cabinet Economic Development Committee, agreed that the Ministry of Business Innovation and Employment (acting through the Provincial Development Unit) would be responsible for delivering projects approved by IRG Ministers where they are best placed to do so.
6. All \$299m of River Managers Sector Flood Protection Shovel Ready Projects were approved including the \$30m HBRC package consisting of four projects.
7. Council have received confirmation from IRG of funding allocation for a total amount of up to \$19.2m (plus GST, if any) which is a 64% contribution to the projects.
8. Funding agreement between HBRC and IRG was countersigned on 20 November 2020.

Discussion

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

9. The HPFCS Levels of Service project is a review of Tūtaekurī, Ngaruroro, Lower Tukituki and Clive rivers to increase flood protection across the scheme to a 1 in 500-year event. The outcome of this project will result in increased flood protection to our communities within the HPFCS.
10. This project is programmed over a three-year period and will build upon existing river modelling, condition assessment and property analysis undertaken as part of the Heretaunga Plains Flood Control Scheme level of service review.
11. HBRC co-funding of \$7.2 million is required to match IRG funds of \$12.8 million.
12. In order to facilitate the significant workload associated with HPFCS levels of service, HBRC have developed a Panel Agreement for Engineering Services. Responses were received from suppliers on 27 April in the form of an expression of interest, invitations for suppliers to submit a Request for Proposal shall be sent on 7 May 2021. This panel shall expediate the engagement of professional services resulting in procurement efficiencies throughout Council.

13. HBRC Asset Management have identified 39 sites across HPFCS (Attachments 1 and 2) which shall be subjected to a prioritisation process based on modelling outputs, freeboard levels, consequence of failure, condition assessment and investigation outputs.
14. FY 2020-21 planned investigation works are estimated at \$800,000, which includes geotechnical assessment, geophysical testing and topographical survey of the following 8 sites in order to facilitate optioneering and scope for detailed design to increase climate change resilience of HBRC assets:

Site Name and Location	River
Taradale Stopbank Strengthening (XS 17 - 22 LHS)	Tūtaekurī
Moteo Stopbank Strengthening (XS 43b - 47 RHS)	Tūtaekurī
Haumoana Stopbank Strengthening (XS 1 - 4 RHS)	Lower Tukituki
East Clive Stopbank Strengthening (XS 1 - 4 LHS)	Lower Tukituki
Ngatarawa (XS 49 - 51 RHS)	Ngaruroro
Roy's Hill (XS 41 - 44 RHS)	Ngaruroro
Haumoana Upstream of Blackbridge (XS 4 - 10 RHS)	Lower Tukituki
Farndon Road Erosion	Clive

15. Another key part of work in FY 2020-21 is developing collaborative site enhancement plans that achieve the objectives of climate resilience, biodiversity gain and community involvement by integrating actions with river bank protection works through native planting plans. Supplier diversity shall be prioritised throughout the HPFCS programme specifically for weeding, plant preparation, planting and fencing works specifically through local Māori and Pasifika owned businesses.
16. Other planning works in FY 2020-21 include site specific archaeological assessments, property management and consultation with Tāngata Whenua.
17. FY 2021-22 planned works are an estimated value of \$9.6 million. This includes allocation of individual design packages to external consultants, procured through HBRC's Panel Agreement for Engineering Services, with technical supervision from HBRC Engineering team and physical works contracts procured through local contractors. Construction windows for physical works shall be prioritised through summer, whilst planting shall be undertaken in winter.
18. FY 2022-23 planned works are an estimated value of \$9.6 million. This includes allocation of individual design packages to external consultants, procured through HBRC's Panel Agreement for Engineering Services, with technical supervision from HBRC Engineering team and physical works contracts procured through local contractors. Construction windows for physical works shall be prioritised through summer, whilst planting shall be undertaken in winter.

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

19. The Upper Tukituki (UTT) Gravel Extraction project will seek opportunities to subsidise gravel extraction 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.
20. Survey data has been used to quantify the total volume of available gravel in the UTT scheme area, this has been coupled with establishment of hydraulic grade lines for Manaonuku, Makaretu and Tukipo rivers to determine excavation depths and resultant volume of available material. It is estimated that approximately 3,100,000 m³ of gravel is available for extraction within the UTT scheme.
21. In December 2020, extraction was ceased via direction of the HBRC biosecurity team on all gravels affected by Chilean Needle Grass (CNG) which accounts for up to 1,400,000 m³ in the UTT scheme.

22. Tenders were received from two consultants in April to undertake a study on CNG, including experiments to remove CNG seeds. HBRC will negotiate the scope and costs to commence this work in May 2021.
23. A comprehensive gravel sampling and testing programme has been awarded to a local geotechnical consultant, with site works due to commence in early May at 30 predetermined areas (Attachment 3). This testing will allow areas of gravel to be classified based on their engineering material properties to further assist with suitable end use. Testing results and sampling data shall be made available to all interested parties to eliminate any competitive advantages. Exemption for removal of CNG infested material has been sought from MPI as part of these works.
24. In early 2021, HBRC Works Group formed 3 new access roads in the UTT scheme to facilitate extraction at areas which were previously difficult to access.
25. HBRC Engineering are currently undertaking a modelling assessment of the 5 rivers to prioritise key areas to undertake extraction. This may result in negotiation with class A ratepayers for establishment of additional access over private property.
26. Development of a collaborative framework agreement to propose a range of subsidised costs for transportation of gravel from the region is ongoing. To date HBRC has successfully engaged contractors throughout the local gravel extracting industry for feedback on framework structure, met with client organisations regarding significant projects and liaised with Hawke's Bay 5 Councils procurement director to align with forecasted demand of capital projects.
27. An independent economic study has been undertaken as part of the collaborative framework planning to evaluate a range of subsidy costs for gravel extraction based on cartage distance, quality of extracted material and forecasted supply/demand in the region.
28. HBRC has undertaken consultation with UTT scheme ratepayers on four occasions to seek feedback on the proposed loan funding option for gravel extraction. In October 2020 we consulted with all UTT scheme ratepayers, January 2021 grade A ratepayers, March grade A ratepayers and in April Long Term Plan (LTP) consultation with all UTT scheme ratepayers. The option to proceed with this project will be decided by Council by 1 July 2021.
29. FY 2020-21 expenditure is estimated to be \$300,000.
30. FY 2021-22 costs for gravel extraction are estimated at \$3 million, pending approval of the project following LTP consultation.
31. FY 2022-23 costs for gravel extraction are estimated at \$4.7 million.

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

32. This one-year project programme will provide engineered erosion protection works of southern approach to NZTA's SH50 bridge. The left bank of the Waipawa river immediately upstream of SH50 bridge has eroded significantly over the past five years. If left unattended, there is a risk that the southern approach will be compromised and the river may outflank the bridge.
33. HBRC Works Group have completed the installation of 75 precast concrete akmon units on the left bank of the Waipawa river.
34. Earthworks to cut and fill gravel to form the new river channel have been completed, this included excavation, carting and shaping approximately 70,000m³ of gravel.
35. Works Group are nearing completion of installation of 3,166 lineal metres of rail irons 8,100 lineal metres of wire rope to form permeable groynes on left and right banks (Attachment 4).

36. An independent ecological impact assessment was undertaken at the site which has concluded that the completed project shall result in an overall net positive effect on biodiversity, as a result of the physical works.
37. Site preparation shall be undertaken in April to commence planting of 4,700 trees in the berm area. The planting works shall be supported by Māori and Pasifika owned businesses in order to achieve key social procurement outcome metrics.
38. HBRC requested the re-allocation of \$250,000 of funding from HPFCS to ensure the works could be completed fully in accordance with the design and specifications. This request has been agreed in principle by IRG.
39. Project completion is estimated early August 2021 to a total value of \$1.25 million.

Project 4: Wairoa River, River Parade Erosion - \$1 million

40. This one-year project programme will provide steel sheet piled erosion protection works on left bank of the Wairoa river. Over the last five years the Wairoa River has gradually undermined the embankment immediately south of the Ferry Hotel. This has in turn compromised Wairoa District Council (WDC) water assets and more recently Carroll Street and River Parade.
41. Geotechnical investigations, design optioneering and preliminary design of the proposed sheet pile wall have been completed and the construction contract has been drafted.
42. Detailed design for the project is due to be undertaken in May 2021 and the physical works contractor is due to procure steel sheet piles thereafter, with expected lead time of 4 months (notwithstanding any delays as a result of COVID).
43. HBRC have liaised with Wairoa District Council to relocate a watermain as part of the enabling works, June 2021.
44. The proposed steel sheet piled wall is 73 lineal metres, braced with walers and 12 metre screw anchors which are drilled below the existing River Parade road.
45. The main contractor shall engage a local civil engineering contracting company to manage all other works out with the sheet piling. This will allow HBRC to achieve targeted social procurement outcomes.
46. Options to provide native planting upstream will be considered as part of the environmental outcomes for this project. This will be discussed as part of Tāngata Whenua engagement.

Decision Making Process

47. 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 EICC receives the *“Update on IRG Flood Control Resilience Funded Projects”* report.

Authored by:

Martina Groves
MANAGER REGIONAL ASSETS

David Keracher
MANAGER REGIONAL PROJECTS

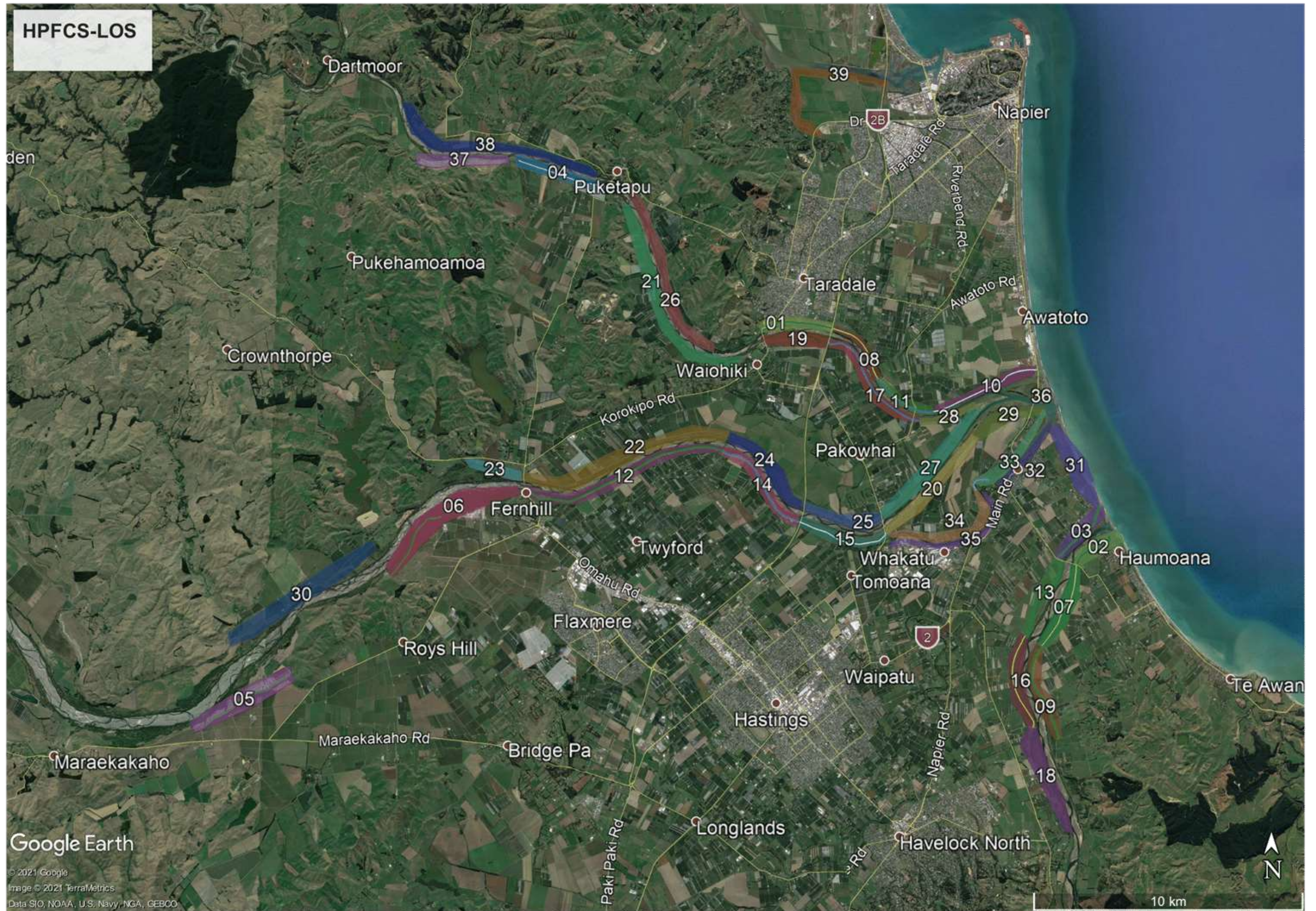
Approved by:

Chris Dolley
GROUP MANAGER ASSET MANAGEMENT

Attachment/s

- 1 [↓](#) HPFCS Site Identification
- 2 [↓](#) HPFCS Site Location Map
- 3 [↓](#) UTT Gravel Testing Areas
- 4 [↓](#) Waipawa River images

LOS - Stopbank sites selected for prioritization						
		No.	River	Bank	XS	Approx. Stopbank Length, km
		1	Tutaekuri	Left	17-22	Taradale1.97
		2	Lower Tukituki	Right	1-4	Haumoana1.28
		3	Lower Tukituki	Left	1-4	East Clive1.85
		4	Tutaekuri	Right	43b-47	Moteo2.52
		5	Ngaruroro	Right	49-51	Ngatarawa2.58
		6	Ngaruroro	Right	41-44	Roy's Hill2.14
		7	Lower Tukituki	Right	4-10	Haumoana u/s Black Bridge2.44
		8	Tutaekuri	Left	13-17	Meeanee d/s motorway1.95
		9	Lower Tukituki	Right	10-17	Tennant Road2.66
		10	Tutaekuri	Left	1-6	Brookfields lower3.11
		11	Tutaekuri	Left	6-13	Brookfields upper1.84
		12	Ngaruroro	Right	27-38	Raupare upper5.88
		13	Lower Tukituki	Left	4-10	Matahiwi, lower2.28
		14	Ngaruroro	Right	20-27	Raupare lower2.95
		15	Ngaruroro	Right	15-20	Pakowhai park2.55
		16	Lower Tukituki	Left	10-16	Matahiwi upper2.61
		17	Tutaekuri	Right	7-17	Pakowhai upper3.46
		18	Lower Tukituki	Left	16-23	River Road2.79
		19	Tutaekuri	Right Outer	17-22	Double bank1.65
		19	Tutaekuri	Right	17-22	Double bank1.51
		20	Ngaruroro	Right	7-15	Farndon3.61
		21	Tutaekuri	Right	23-41	Omaranui Road5.06
		22	Ngaruroro	Left	27-38	Chesterhope upper5.88
		23	Ngaruroro	Left	38-40	Omahu1.55
		24	Ngaruroro	Left	20-27	Chesterhope u/s motorway2.92
		25	Ngaruroro	Left	15-20	Chesterhope between bridges No. 12.18
		25	Ngaruroro	Left outer	15-18	Chesterhope between bridges No. 21.21
		26	Tutaekuri	Left	27-42	Springfield Road4.8
		27	Ngaruroro	Left	6-15	Pakowhai near TW overflow No. 13.35
		27	Ngaruroro	Left outer	6-15	Pakowha near TW overflow No. 23.87
		28	Tutaekuri	Right	3-7	Pakowhai lower1.62
		29	Ngaruroro	Right	1-7	Farndon lower2.17
		30	Ngaruroro	Left	44-49	Ohiti3.61
		31	Sea exclusion bank	Sea	ID 530-531	Sea exclusion bank3.69
		32	Clive	Right	1-8	Clive2.04
		33	Clive	Left	1-8	Farndon from Clive2.99
		34	Clive	Left	8-17 (10)	Farndon u/s bend3.93
		35	Clive	Right	8-17 (10)	Whakatu2.26
		36	Ngaruroro	Left	1	d/s SH2 at Star Compass0.33
		37	Tutaekuri	Right	47-51	Ebbetts2.5
		38	Tutaekuri	Left	43-53	Dartmoor6
		39	Main outfall channel	Right	1-7	Ahuriri2.65



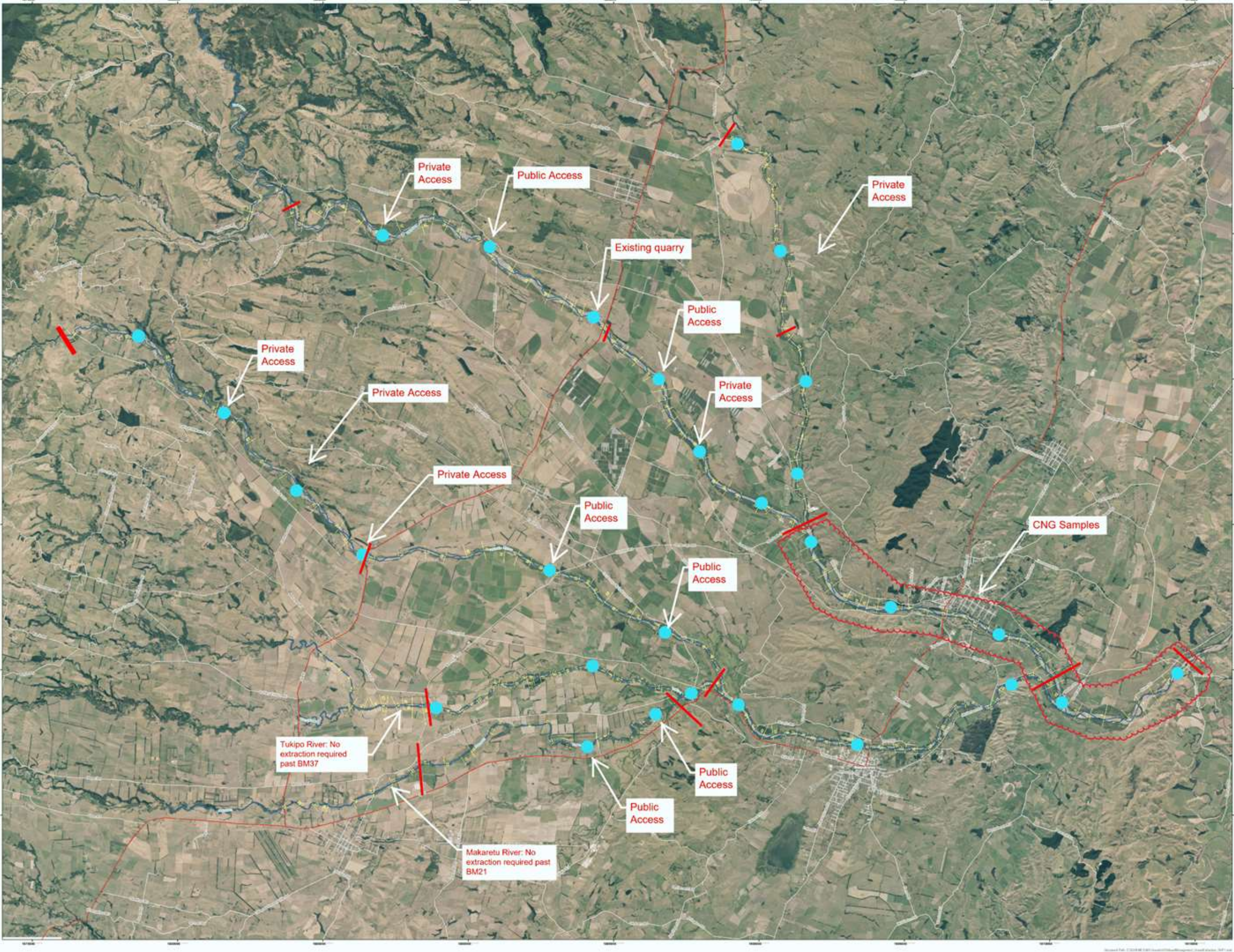




Figure 1 SH-50 Waipawa River - Left bank completion of permeable groynes, akmons and earthworks



Figure 2 SH-50 Waipawa River - Right bank permeable groynes near completion

HAWKE'S BAY REGIONAL COUNCIL
ENVIRONMENT AND INTEGRATED CATCHMENTS COMMITTEE

Wednesday 12 May 2021

Subject: WATER EFFICIENCY UPDATE

Reason for Report

1. This item provides an overview of the work programme to deliver improvements in water efficiency for Hawke's Bay. It outlines the work done to date, the drivers for this work and the proposed priorities.

Executive Summary

2. Our current state is one of major catchments being fully allocated, with likely requirements to reduce 'actual use' in the near future. In the absence of immediate solutions to increase supply (such as water storage) the only way to extract more value from a limited 'pool' of water is to minimise losses and use it more efficiently.
3. There are two main areas of focus, reducing water losses and minimising the environmental impact of water use. Water use efficiency gains can potentially impact water quantity depending on the nature of the irrigation system issues. Evidence is now emerging that indicates some changes to current irrigation scheduling practices can also reduce nutrient loss in some instances. This has potential to reduce impact on water quality.
4. In addition to staff in the compliance section who have a water use focus, there is one 0.4 FTE staff member working on water efficiency. In recent months this work has been reviewed in conversations with Environment Canterbury (ECan) and a panel of industry experts to review current programmes and consider any required changes or improvements. The main focus areas of work in the near future are:
 - 4.1. Setting standards and effective auditing processes for reviewing the irrigation component of Farm Environmental Management Plans (FEMPs)
 - 4.2. Working with industry to ensure appropriate professional standards and assurance
 - 4.3. Review and continue water efficiency campaigns
 - 4.4. Continued liaison with water user groups
 - 4.5. Explore options and capacity to work one on one to promote water use efficiency with major resource users.
 - 4.6. Provide support to efficiency aspects of the water security programme with the expectation that this will provide a reviewed focus and inform resourcing for this work in the longer term.

Background

5. Although HBRC has been working in the water efficiency space for many years, policy at a national and regional level is reinforcing the importance of this work. The relevant policies are summarised following.

National Policy Statement for Freshwater Management

6. The key driver for irrigation efficiency will now be the National Policy Statement for Freshwater Management 2020 (NPSFM). The NPSFM sets out requirements under Policy 3 and 11 (below), firstly requiring an integrated approach to managing the effects of land use and more specifically around water allocation and use.

- 6.1. Policy 3: Freshwater is managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis, including the effects on receiving environments
- 6.2. Policy 11: Freshwater is allocated and used efficiently, all existing over-allocation is phased out, and future over-allocation is avoided.

TANK Plan Change 9

- 7. The notified Draft TANK Plan Change proposes to add new rules to the Regional Resource Management Plan to manage water quality and quantity for the Tūtaekurī, Ahuriri, Ngaruroro and Karamū (TANK) catchments. The water use and allocation – efficiency rules include:
 - “46. The Council will ensure efficient management of the allocation of water available for abstraction by...”*
 - 47. When considering applications for resource consent, the Council will ensure water is allocated and used efficiently by...”*
- 8. A couple of key points in sections 46 and 47 referenced above, are:
 - a) *allocating water for irrigation on the basis of a minimum water application efficiency standard of 80% and on a reliability standard that meets demand 95% of the time*
 - b) *requiring all non-irrigation water takes (except as provided by Policy 50 for municipal and papakāinga supplies) to show how water use efficiency of at least 80% is being met and is consistent with any applicable industry good practice.*

Tukituki Plan Change 6

- 9. In 2015, Tukituki Plan Change 6 was adopted by HBRC. In the absence of water storage, the main mechanism to achieve water efficiency within this Plan is the requirement for Farm Environmental Management Plans (FEMPs).
- 10. Plan Change 6 requires irrigators to “Operate irrigation systems that are capable of applying water efficiently and management that ensures actual use of water is monitored and is efficient (including deficit irrigation and consideration of the use of precision irrigation).”

HBRC Water Use Efficiency work timeline

- 11. As the importance of this work and water security was established, the HBRC Water Initiatives Team was established in 2009. This team no longer exists so the Water Management Advisor role has shifted through the Water Information Team (data focused), Central Catchment team (field delivery focused) and now sits within the Catchments Policy Implementation team, which better aligns with the non-regulatory focus of the role. The Water Information team initiated much of the work in the following timeline.

Water User Groups

- 12. 2010 onwards – Water User groups were established or encouraged in areas with an identified need. Often plan changes and consent renewals provide the catalyst for such groups. The groups are usually self-motivated and self-organised, so progress with irrigation efficiency will only be achieved if it is considered a priority by the group. Relationships between HBRC and the user groups are critical to how effectively HBRC can assist with efficiency related work. The local Hawke’s Bay water user groups are:
 - 12.1. Twyford Irrigators Group
 - 12.2. Ngaruroro Irrigation Society
 - 12.3. Ruataniwha Water User Group
 - 12.4. Ruataniwha surface take irrigators.

13. These groups have varying links to HBRC and are at various stages of establishment, ranging between incorporated societies to informal groups.

2015 Farm Environmental Management Plans (FEMPs)

14. In 2015 the Hawke's Bay Regional Resource Management Plan, Plan Change 6 (PC6) for the Tukituki River Catchment, became operative. This requires farm properties or farming enterprises exceeding 4 hectares to prepare Farm Environmental Plans (FEMPs). These were first due for completion by 1 June 2018. The water initiatives team contributed to the preparation work for this to be included in PC6. FEMPs include a requirement to outline how irrigated water is used efficiently.

2017-19 Irrigation Check Up Programme

15. In 2017 the Irrigation Check Up (ICU) program was initiated and ran until the summer of 2018-19. This involved a basic irrigation system uniformity and application depth check, with results reported back to the irrigation consent holder. Overall, the Irrigation Check-Up programme worked with approximately 60 farmers throughout Hawke's Bay and checked many more irrigation systems, with some checked multiple times.
16. At the time of the program inception, it was anticipated that irrigation system performance checks would be a future requirement in regional plans through FEMPs or water use consents. The program was intended to create an understanding of:
 - 16.1. what an irrigation system performance check is
 - 16.2. the importance of checking irrigation systems to enable irrigators to improve system performance and
 - 16.3. prepare irrigators in a positive way for changing expectations of resource users.
17. Participants were also surveyed on their irrigation practices. This provided insight into the current state of play and provided some direction on specific areas that need to be addressed (see 'Next Steps').

2020 Irrigation Checks before and after maintenance

18. A case study was conducted with the intention of quantifying the water savings as a result of basic irrigation system maintenance. Underlying irrigation system issues affected the results but did indicate a pattern of improving uniformity with basic maintenance resulting in water savings. The results highlighted the need for further investigation to better quantify possible water savings arising from improved irrigation system maintenance.

2021 Irrigation Checks before and after maintenance (follow up)

Irrigation system maintenance and its effect on irrigation application efficiency and water use

19. A follow-up project sought to identify whether basic maintenance could achieve water savings, so that HBRC could target efficiency programmes accordingly. Two orchards were assessed using bucket tests to determine performance before and after maintenance. Some of the blocks already showed excellent performance so follow-up testing was only done on those that had room for improvement.

Results

20. This field trial showed that where there is significant poor system performance there is potential to improve water use efficiency with system maintenance. This data and results from the Irrigation Check Up program will be help to project possible water savings in Hawke's Bay. Note, this work is currently being scoped as part of Council's Regional Water Security work.
21. One block resulted in poorer performance after maintenance which highlighted the importance of follow up uniformity checks to ensure that maintenance improves

performance. This is necessary to confirm there are no further underlying system issues that require attention. This field trial supports the need for requiring irrigation system performance checks in Farm Environmental Management Plans or consents.

22. Depending on the issues within a given block some blocks showed an increase in instantaneous flow rate and others a decrease. The main area where water savings were found, was where the emitter uniformity (EU) increased significantly. That meant, to adequately water 87.5% ($\frac{7}{8}$) of the crop, the irrigation event duration decreased. In one such block where the uniformity went from 0.44EU (poor) to 0.82EU (good), although the instantaneous flow rate increased, the improved uniformity level led to a significantly quicker irrigation event. This resulted in a water saving of 46%. The other blocks tested however, showed a negligible difference in water volume used before and after maintenance.

2018-20 Media Campaigns

2019-20 'Fix leaks, it's a win-win' media comms

23. The learnings from checking many irrigation systems have helped to target communications. One area for maintaining or improving Irrigation performance is basic irrigation system maintenance such as fixing leaks. The 'Fix leaks, it's a win-win' series of advertisements using industry media channels are targeted specifically to irrigators. This season the revised approach was to put these messages out through industry channels.

2018-20 'Saving H₂O is the way to go'

24. A series of forums with high volume water users were run with attendees from various industries. It was established that water conservation is important for all water users, including domestic, and industrial. A 'Saving H₂O is the way to go' water conservation campaign was developed with domestic water users as the target audience. This included a wide-reaching print, radio and social media campaign.

2020 IrriCalc Calibration

25. In preparation for the TANK Plan Change, Aqualinc was contracted to calibrate the IrriCalc model to better calculate water needed for Hawke's Bay crops and conditions. This is intended to be one of the methods for determining water volumes for consent applications. The model is applicable throughout the Hawke's Bay region. Pending the outcome of TANK, this is intended to be part of the approach to reduce consented volumes to 'actual and reasonable' amounts.

Water Security programme

26. The Regional Water Security Programme is already well reported on to Council. The Catchment Policy Implementation are connected to this work. Involvement to date includes contributing to the Regional Water Accounts (RWA) and identifying water saving opportunities for Hawke's Bay. This will feed into the future projections for the RWA.

Discussion

Recent studies quantify potential benefits of improved practices

27. A recent study highlights that the potential exists for further efficiency gains.
28. 'Maximising the Value of Irrigation' was a 6-year MBIE funded research programme (co-funded and supported by HBRC and other partners). Field trials at case study sites indicate 5 –34% water saving. This was done by using variable rate irrigation based on spatial variability mapping. Field trials and modelling also provided evidence for reduced drainage and nutrient loss with deficit irrigation, and/or precision irrigation (on variable soils).

29. A desk top assessment of irrigation practices using the IrriCalc model by Dr John Bright at Aqualinc has indicated there are also significant potential nutrient savings by altering irrigation scheduling. The study investigated lowering the soil moisture trigger level below what is considered standard practice during spring and autumn. At the same time, refill was altered to no more than 80% of the soils full point. This was found to reduce nitrogen loss to water by 27 percent on average; ranging from 4% - 58% across the case study farms.

Review of Priorities

30. Over the last few months current priorities have been checked and reviewed with ECan staff to compare approaches as well as convening a panel of industry experts to review and ensure limited resource is focused on areas of greatest gain. Greatest opportunities identified by all were a focus on developing standards and expectations and following up with an FEMP auditing programme. All agreed the point of greatest current leverage for improving irrigation efficiency is the FEMP review and auditing process. This work will support building FEMP provider capacity in the irrigation area and clearer standard expectations and auditing requirements
31. Collaborative relationships with other councils (particularly ECan) are being developed with the anticipation of developing a cross council irrigation forum. This will aid in developing programmes, campaigns, and provide a forum for discussing and resolving issues. Recent work has involved sharing and aligning approaches to the development of audit processes and standards for irrigation components of farm plans and related needs to standardise approaches to Overseer nutrient modelling of irrigated farms.
32. Work will also continue on:
- 32.1. Review and continuation of refreshed water efficiency campaign in association with other TLAs. Media campaigns will increase awareness of saving water by domestic users. The next campaign needs to focus on the 'why' rather than the 'how'.
 - 32.2. Support and input to the Water security programme particularly in relation to efficiency.
 - 32.3. Liaison with water user groups.
 - 32.4. Direct promotion of efficiency one on one to major water resource users.

Barriers

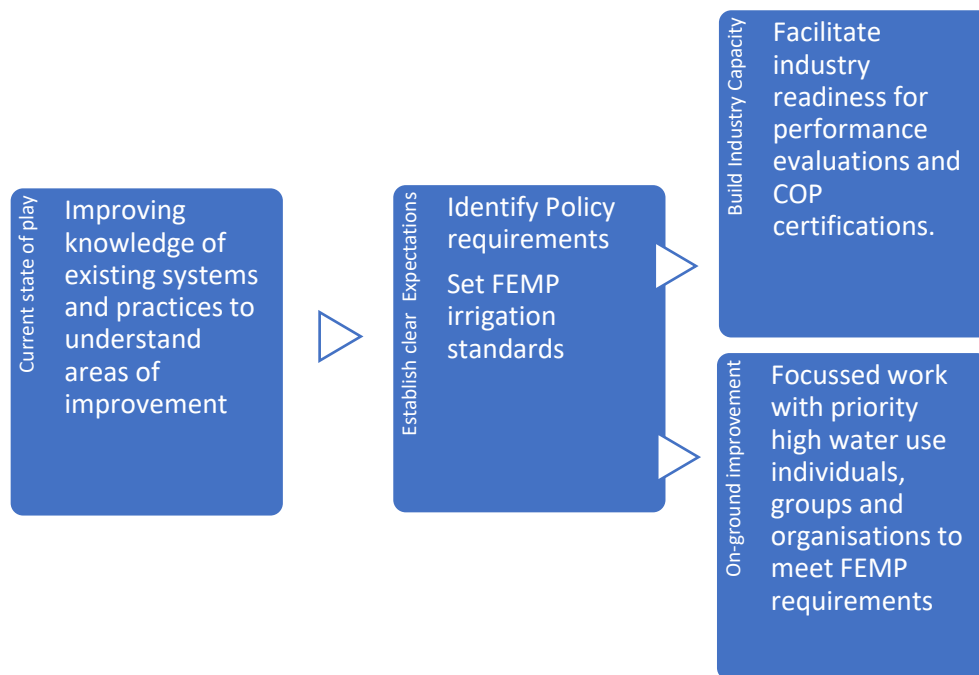
33. Currently water efficiency work beyond the regulatory functions of council is limited to permanent staff of 0.4FTE. This necessitates a facilitation role with industry and irrigators. Resourcing has reduced from the time of the Water Initiatives team which functioned from 2009 to 2016 and focused particularly on Tukituki work and establishing water user groups. It is expected that the outcomes of the broader review undertaken in the Water Security programme and developing national and regional policy (e.g. TANK) will inform longer term HBRC resource needs, direction and priorities that will be addressed in subsequent business planning processes.
34. There are strained relationships with some water users and a reduced willingness to engage with HBRC on irrigation issues beyond regulatory requirements in the Tukituki catchment. Building trust is an essential foundation for ongoing work which can take time.

Next Steps

Expanded description of priority work

35. The results of recent field work provided some guidance on specific areas of improvement. Achieving widespread uptake of good management practices for irrigation will largely be delivered through well-developed Farm Environmental Management Plans, and direct work with the irrigation industry. The process from 'determining what is

required' of irrigators, to implementing these practices is described in the diagram following.



Current State of Play

36. The Irrigation Check Up Program (discussed above), revealed the current state of play, providing some specific areas to focus on to build capacity for improvement.

Industry and Catchment Scale

37. Policy development and implementation:
 - 37.1. HBRC to encourage industry professionals to become qualified to assess irrigation performance
 - 37.2. To develop an HBRC certification program for assessing irrigation performance
 - 37.3. Encourage local industry to become accredited irrigation companies
 - 37.4. Further investigate water savings potential by improving irrigation performance and practices.

Farm scale

38. Areas to focus on specifically for water users include:
 - 38.1. Robust irrigation decision making (pivot and hard hose systems)
 - 38.2. Irrigation system management
 - 38.3. Knowing irrigation application depths (all system types)
 - 38.4. Lower efficiency levels in some older irrigation systems
 - 38.5. Effect of maintenance on system performance (all system types)
 - 38.6. Encourage effective use of appropriate technology
 - 38.7. Understanding the benefits of increasing application efficiency.

Setting Expectations FEMP – Irrigation

39. FEMPs provide the greatest leverage to deliver improved water efficiency and can largely address the issues identified through the Irrigation Check Up programme. This is the

working document where irrigators can capture practical good management practices to improve environmental outcomes.’

40. HBRC is currently at the ‘setting expectations’ phase, with FEMP irrigation requirements being workshopped with industry experts. Once the draft FEMP irrigation requirements are confirmed, HBRC will move into ‘Building Industry Capacity’ to achieve on-ground improvement.

Building Industry Capacity – Hawke’s Bay resource limitations

41. Currently in Hawke’s Bay there are limited resources to assist irrigators to get the best out of their irrigation systems and minimize their environmental impacts (water and nutrient). There are several companies that provide soil moisture monitoring and irrigation scheduling advice. Our surveying shows that there is good uptake for these services, mainly within the orcharding sector.
42. There are also a number of irrigation design and service providers in the region for installation and maintenance. However, advice for irrigators on consenting requirements, environmental risk management (input needed to develop FEMP’s), and irrigation performance testing is very limited in Hawkes Bay. There are only a handful of industry professionals certified to assess irrigation system performance currently in Hawke’s Bay.
43. Alongside this, many of the local irrigation companies are not accredited in the New Zealand Piped Irrigation Systems Design Code of Practice or Design Standards (Irrigation NZ). If it is determined that these qualifications are required by industry, then HBRC has a facilitation role to ensure that industry is meeting this requirement.

On-ground improvement

44. To deliver on improving water use efficiency, Catchment Policy Implementation intend to work directly with key water users.
45. At this stage few Hawke’s Bay irrigators are seeking irrigation consultancy advice however, this is expected to change as national and local policy changes come into effect. To get the level of support needed many irrigators need tailored advice to step them through the changing expectations. It is anticipated that the private sector will deliver the technical detail for this. However, there is a role for Council to work alongside irrigation consent holders to ensure they are seeking the advice they require and implementing it and to ensure that when advice is sought there are recognised standards in place.
46. Currently HBRC has limited capacity to work with irrigators on a one-on-one basis. This program of work would prioritise those with the largest potential environmental impact (water and nutrient), to get the greatest initial gains.

General Water Saving – Wider Community Approach

47. The Water Information Team coordinated the initial water conservation campaign “Saving H₂O is the way to go”. This is due to be reassessed and confirm whether it is fit for purpose.
48. HBRC will again review this campaign working alongside the Territorial Local Authorities to take a more active role in reducing domestic, commercial and industrial water use.
 - 48.1. Potential remains for greater water use efficiency gains in Hawke’s Bay to achieve on-farm productivity gains while reducing nutrient and water losses.

Decision Making Process

49. 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 “Water Efficiency Update” staff report.

Authored by:

Monique Benson
WATER MANAGEMENT ADVISOR

Brendan Powell
MANAGER CATCHMENTS POLICY
IMPLEMENTATION

Approved by:

Iain Maxwell
GROUP MANAGER INTEGRATED
CATCHMENT MANAGEMENT

Attachment/s

There are no attachments for this report.

HAWKE'S BAY REGIONAL COUNCIL

ENVIRONMENT AND INTEGRATED CATCHMENTS COMMITTEE

Wednesday 12 May 2021

Subject: WHAKAKĪ CATCHMENT PILOT PROJECT CASE STUDIES AND FINDINGS**Reason for Report**

1. This item provides an update on the key findings of the Whakakī Catchment Pilot Project which concluded in February 2021.

Executive Summary

2. The Whakakī Catchment Pilot Project was initiated in 2017 as a collaboration between Ministry for Primary Industries (MPI), Wairoa District Council (WDC), Hawke's Bay Regional Council (HBRC) and the Whakakī Community. The initial emphasis of the project was to look at afforestation options in a highly eroding catchment with a significant culturally and ecologically iconic wetland as the ultimate destination of sediment.
3. Throughout the duration of the project, the project team has had to iterate and adapt to changes in focus, funding, and ability to work across the catchment community. A series of initiatives were undertaken through the project that provided insight into the challenges of working with communities at a local scale and processes which helped navigate that.

Strategic Fit

4. The project was initiated following on from work by Sean Weaver of EKOS who investigated options for HBRC to reduce greenhouse gas emissions while addressing the significant erosion problem in Northern Hawke's Bay hill country. Whakakī Catchment was identified as an ideal location to case study these options.
http://www.carbonpartnership.co.nz/uploads/8/2/1/0/8210062/wairoa_slm_options_paper.pdf
5. Funding was initially provided through HBREDS and MPI to support the Matariki objective to "**Work with primary producers to ensure productivity gains deliver the improved environmental performance required for freshwater reform**".
<https://www.hbrc.govt.nz/hawkes-bay/economic-development/matariki-hbreds/>
6. The project emphasis evolved into investigating options for hill country landholders to improve their environmental sustainability, while maintaining productivity and contributing to the social and cultural wellbeing of the Whakakī community.
7. Insights gained through this project reinforce the approach being taken with the Right Tree, Right Place proposal, with broadscale afforestation of *Pinus radiata* not desired by any landholders in the catchment, but most were prepared to continue with their planting programs on a more tactical basis.
8. The benefits of taking a joint collaborative approach with key stakeholders and the community provided multiple benefits, which are discussed in the presentation. HBRC is currently embarking on significant projects at a localised scale via hotspot and catchment scale interventions, and these are likely to increase in the future.

Background

9. Whakakī Lake is a culturally and ecologically significant Intermittently Closed/Open Lake (ICOL). In recent times water quality has deteriorated because of sediment and nutrients entering the lake and toxic levels of cyanobacteria have been measured both in the water and mahinga kai. The management of the lake level has been an ongoing issue for the community, with an opening in the past resulting in the lake level dropping too much over

summer killing tuna and creating algal blooms. Conversely a reluctance to open the lake late in the year has resulted in the flooding of septic systems around Iwitea and the loss of large areas of grazing land around the lake. This continues to be contentious within the community.

10. HBRC has a long history of activity in the Whakakī Catchment. MPI Hill Country Erosion Funding over 8 years enabled significant erosion control planting of hill country and fencing off riparian areas. Hotspot funding was used to fence and retire large areas around the Whakakī Lake. More than 7,000 trees have been planted both native and exotic and over 30km of streams and drains have now been fenced. Over 100 ha around Lake Whakakī has been retired and 18 ha restored.
11. The Whakakī Catchment Pilot Project was initiated in early 2017. Initially with a focus on hill country, the project was expanded to investigate options for bringing multiple strands of work together under a common community vision and aspiration via a coordinated approach. Funding for the Whakakī Freshwater Improvement Fund was approved in mid-2017. A co-design process was employed to build a better understanding of the community's aspirations and opportunities for collective projects and initiatives. Unfortunately, the Whakakī FIF project proved to be contentious within the community and to progress the Catchment Pilot Project the decision was made to refocus efforts into the upper catchment hill country landscape.
12. Commitment from the Whakakī Catchment Pilot project to fund a cultural impact assessment (CIA) in collaboration with the Whakakī FIF project enabled CIA's to be carried out by a nominated representative from both Iwitea and Whakakī Marae, which enabled a cultural audit of the project area and cultural protocols for undertaking work and the discovery of kōiwi tangata.
13. The co-design process was continued with in the upper catchment and in collaboration with landholders the decision was made to undertake farm plans throughout the catchment and later to investigate the financial implications of implementing these farm plans.
14. Farm plans were initially difficult to get wider farmer participation in. Concerns around the ultimate purpose of the plan and a lack of experience with farm plans themselves as a tool for farm management meant it took time to build support for the plans. Through a workshop and significant individual contact, ultimately 9 landholders participated, and 13 separate blocks were soil and land mapped and a detailed farm plan prepared. What proved particularly successful was having the same type of plan, done at the same time, financially supported and the ability to collectively discuss and work through those plans at a farmer workshop held 3 months after plans were completed. Significant enthusiasm by landholders was expressed for support to convert their farm plans to work plans that could be used for the Erosion Control Scheme or the 1 Billion Trees funding.
15. Three farm plans were selected by the group for a more detailed case study looking at the farm business cost of implementing farm plans, meeting new freshwater reform requirements, and offsetting the 5% Greenhouse Gas obligations in 2025. At the same time opportunities for increasing productivity were investigated. While the total cost of implementing plans differed between farms depending on size generally there was a similar impact on the annual EBIT/ha (earnings before interest and tax) at 20%. There were also significant opportunities identified for 2 of the properties for altering farm systems to increase productivity. Discussed further in the presentation.

Discussion

16. Co-design did prove to be a valuable exercise in enabling those participating to build a better understanding of each other's aspirations and values. Large amounts of information were gathered, and common themes were identified. The process of co-design did help build both trust and relationships within the community. It did highlight, however, that projects we as HBRC pre-define and regard as important do not necessarily align with what the community regards as important.

17. One of the challenges we had was in finding common ground with landholders around the purpose of farm plans. Landholders were reluctant to initially undertake farm plans and were frustrated by the use of SedNET modelled maps being used to define where areas of high erosion risk occurred. This contrasted with their own experiences where erosion was more localised and nuanced in the landscape. This led to an emphasis in the farm plans themselves to identify those areas of greatest priority and obvious need rather than areas that could potentially erode in the future. Significant uncertainty exists for the implications of ultimately Kotahi on the amount of erosion control individual landholders will need to undertake to meet limits and targets.
18. Perhaps the greatest challenge for this project was the need to be highly adaptive and flexible in approach. The project went through multiple iterations in response to different issues including funding, local politics, and changes in emphasis. The flexibility provided by funders and HBRC was critical to the success of the project. It does highlight that just because an area is ecologically significant does not necessarily mean that the community is willing to work together on it. The transactional cost of building relationships to undertake work in these areas can be large and time consuming.

Next Steps

19. Several future opportunities were identified through the project, including:
 - 19.1. The reformation of the Whakakī Catchment Group, which has widespread support within the community
 - 19.2. Extending out from the Catchment Pilot other localised farm planning processes and workshops
 - 19.3. Following up with landholders to support the implementation of their plans and access to funding.
20. Further opportunity exists for linking farm plans to broader community aspirations including the potential for local employment and building a relationship between landholders and the local nursery for the supply of trees and labour.

Decision Making Process

21. 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 “Whakakī Catchment Pilot Project Case Studies and Findings” staff report.

Authored by:

Nathan Heath
AREA MANAGER NORTHERN HAWKE'S BAY

Approved by:

Pieri Munro
TE POU WHAKARAE

Attachment/s

There are no attachments for this report.

HAWKE'S BAY REGIONAL COUNCIL
ENVIRONMENT AND INTEGRATED CATCHMENTS COMMITTEE

Wednesday 12 May 2021

Subject: AHURIRI ESTUARY STOCKTAKE

Reason for Report

1. This item reports on the progress to compile a stocktake of the work undertaken by statutory agencies across the area of Te Muriwai o Te Whanga (Te Whanga), with the intention of those agencies then being able to better align and coordinate work towards shared outcomes for the estuary.

Background and Summary

2. Te Whanga, is a significant local waterbody and resource incorporating many community values, and is a mahinga kai, having been a traditional food source for tangata whenua for centuries. The estuary is the geographical heart of Napier, with the urban and rural waterways feeding into it, and is potentially a remarkable haven for biodiversity.
3. Te Whanga serves as; recreational asset, fish nursery, wildlife sanctuary, host to significant biodiversity, and as a hunting ground for cetaceans (Orca) who visit to hunt stingrays. It is also a resting place for NZ fur seals.
4. Te Whanga is also an area with a wide range of agencies, businesses and individuals working within it towards often shared outcomes.
5. Council commissioned a local Project Manager, James Powrie to work across and interview a wide range of our partners, stakeholders, statutory agencies, business and individuals to investigate and better understand what work they are doing, why they are doing it and to then identify where opportunities might exist to better align programmes of work.
6. This review, whilst extensive in the range of people spoken to, is intended to focus only on those statutory agencies who have obligations to work within the estuary, being HBRC, Hastings District Council, Napier City Council and the Department of Conservation. Those agencies are already committed to programmes of work and the view is that those activities could return greater outcomes with better alignment and collaboration. The position taken is that our community expects that to occur and that we should be endeavouring to maximise opportunities for that to occur.
7. For the avoidance of doubt, this report is not a 'plan' for the estuary and in no way seeks to replace the expectation and obligation of Te Komiti Te Muriwai o Te Whanga in the development of the Te Muriwai o Te Whanga Plan. At the right point in time, post the Mana Ahuriri settlement legislation being promulgated, Te Komiti will begin its mahi in addressing the need for a broader plan. In the meantime, those agencies active in the area can, and should, work together in a more effective way to hasten actions to protect, enhance or restore Te Whanga.
8. James Powrie will attend the meeting and present the results of his investigation.

Discussion

9. Interviews were conducted with a range of representatives of central and local government organisations, volunteers and tangata whenua.
10. A range of projects and actions, unifying themes and perceived opportunities relating to Te Whanga, were uncovered during interviews.

11. The extent of interviews is shown in Attachment 1 of the attached report, which is a subset of a larger record of interview content, which may be made available for later use between agencies. The interview record detail also includes roles and organisations of others not yet reached, who may be interviewed later if more depth is sought.
12. Many interviewees expressed that conditions in Te Whanga are 'below the mark', as defined by personal or organisational ideals. Many also signalled that a range of improvements were in reach, given; well defined goals, aligned efforts and more direct and clear communications with residents, whose behaviour often displays a lack of knowledge or care about their own impacts on Te Whanga.
13. While interviews extended in this instance to include; Tangata whenua, and voluntary or professional groups whose actions were relevant, the next steps or actions proposed from this report relate to the four statutory agencies noted in the Ahuriri hapu deed of settlement, being HBRC, Hastings District Council, Napier City Council and the Department of Conservation.
14. The complexity of involvement in activity within Te Whanga, as seen during interviews and a series of potential areas of collaboration are shown as a matrix in Attachment 3 of the report. This also identifies the potential common ground across the range of interviewees. This may provide for future meaningful improvements to be made, subject to necessary leadership, aligned intent and resourcing.
15. Agencies individually and collectively address many components of the management system, but the condition of this waterbody, its catchment and its ability to support life, is suboptimal and for most indicators declining. That said there is much being done to address this that could be accelerated or improved through alignment and coordination.
16. Interviewees noted the potential for improved communications, coordination and collaboration between the entities, as a central recurring theme. This reinforces the need for the statutory agencies to work together better.
17. At a national level, The Parliamentary Commissioner for the Environment (PCE) report – 'Managing Our Estuaries' (August 2020), found that many of the pressures that impact on estuaries arrive via the freshwater systems that feed them and that, beyond the ocean, estuaries are a final receiving environment.
18. The PCE found that estuary management is not so much about managing the body of water itself but rather about managing the activities that affect it.
19. Communications and Biodiversity were two key themes identified by interviewees, as immediately relevant, and urgent, and were promoted as suitable rallying points, to provide focus and to establish shared and immediate action toward improvement.
20. Communications within and between stakeholding groups and agencies were seen as core to making improvements. Interviewees expressed; the need for more cohesive activity, more potential for efficiency, via sharing resources and, also; surprise at related activities which they had been unaware of.
21. If communications can be enhanced toward more coordination and collaboration in regard to Te Whanga, then more efficiency, and effectiveness are assured.
22. Biodiversity was described wholly, as suffering continued decline, or "death by a thousand cuts". Too many activities and impacts were seen as cumulative negatives within the system.
23. Alignment and coordination of actions to improve biodiversity (necessarily underpinned by a sound communications approach) will benefit the bigger picture by addressing the conditions leading to the current loss of 'the canaries in the mine'.
24. There has been significant recent uptake and support from the farmers/rural landowners in the catchment, who have actively been delivering some of the most substantial work to improve water quality and biodiversity for Te Whanga. It is worth acknowledging their

efforts particularly, as this has happened while politics has delayed or prevented other work going ahead.

Biodiversity Items of Significance

25. Te Whanga was noted as having exceptionally high values for a range of migratory and local bird species, with potential for significant gains to be made to habitat quality and quantity. It has the potential to achieve RAMSAR status.
26. It has a high value as a traditional food source and is subject to cultural health monitoring, as part of consent conditions.
27. Te Whanga is unfortunate in the location of massive historic and ongoing industrial and urban residential development, with residents who are relatively unconscious in regard to their collective impacts on the values in Te Whanga.
28. It provides a breeding ground for offshore fisheries and is also inevitably being impaired in this regard.
29. Species presence research and monitoring is being served by recent eDNA technology which allows for relatively low cost, precise monitoring of species presence.
30. Fish passage into the urban stream and drainage network has potential for significant upgrade.
31. Intertidal zone (which is extremely valuable for wading birds and aquatic life) is compromised due to historic engineering of stopbanks and may be improved by targeted reversal or reengineering over time.
32. A Regional Park offers a springboard to public engagement and understanding around their interface with Te Whanga and its biodiversity, as well as providing direct biodiversity benefit.
33. Public engagement is increasing via track networks and recreational developments and events, but also has unexplored potential to educate and engage the public with biodiversity and related challenges.
34. A number of grazing leases exist in perpetuity at the margins of Te Whanga. Some have converted to conservation leases, others may do so in time.

Communications – toward more coordination and collaboration

35. Isolated instances of inter-agency, informal and formal collaborations are evident. For instance, staff from some statutory agencies meet informally and frequently, and collaborate on specific projects, and data share constantly. There is scope to duplicate valuable aspects of this informal contact to pave the way to enhanced project activity in other areas of discipline, such as biodiversity.
36. Low impact viewing developments and electronic guiding, citizen science, events and educational opportunities are being considered. Coordinated efforts may take these concepts to fruition sooner and with more impact.
37. Signalling around the health of the estuary and impacts from community activities will benefit from agreed and aligned efforts. For instance, if people understand the sensitivity of godwit to disturbance on their recovery days, after flying from Siberia to NZ, they may be less inclined to exercise dogs off leash in the wrong places.
38. Senior level engagement is occurring with a hui of relevant leaders, and this is perhaps due for refresh, with responsibilities for successful collaboration to flow downhill from this.
39. There is an opportunity to align communications signals and campaigns between statutory agencies, so that they are consistent about the principle issues in Te Whanga. For instance, where initiatives to improve water quality are led, that they link public understanding to the health of the creatures impacted by that.

Next Steps

40. There are many high-quality activities being undertaken, and shared intentions to make improvements across agencies. There are excellent collaborative efforts being undertaken by volunteers in planting, predator control and habitat restoration, notably for bittern and whitebait.
41. Napier City Council have promoted environmental awareness actively and have assigned new focus and energy to water quality initiatives. Ensuring that all possible momentum is afforded such initiatives, depends on other agencies adding their weight where required.
42. However, a common theme, that many expressed was the need to break inertia and align statutory organisations. This obvious issue is that those agencies have the mandate, staff and resources to make the required changes to address right now.
43. Shortcomings and impacts were seen as resulting from a lack of alignment of effort and community awareness, leading to an overall lack of commitment to improvement. Some expressed that they would like to see more celebration of the many high-quality efforts of individuals, as an educational tool, and to encourage and provide a basis for the modelling and therefore success, of similar efforts.
44. As a first step in making progress on this staff will share the report and its findings with staff from other statutory agencies and will meet to discuss the report and associated detail and consider how to operationalise and/or formalise some or all of the report recommendations, focused initially on the areas of biodiversity and communication.

Decision Making Process

45. 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 “*Ahuriri Estuary Stocktake*” staff report.

Authored by:

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PROJECT MANAGER, REDAXE
FORESTRY INTELLIGENCE

Approved by:

Iain Maxwell
GROUP MANAGER INTEGRATED
CATCHMENT MANAGEMENT

Attachment/s

- [1](#) Interviewee summary
- [2](#) Regulatory and reference material
- [3](#) Responsibility, relevance and involvement matrix

Attachment 1. Interviewee summary - Ahuriri estuary stocktake			
Organisation	Role/Title	Interviewed	Principle items of responsibility relative to Ahuriri estuary and catchment.
Department of Conservation	Senior Ranger Community	Y	Stakeholders and treaty partners. Concessions, permits, licenses for grazing, restoration and recreation.
Department of Conservation	Senior Ranger Biodiversity	Y	Biodiversity Projects. Species, migratory birds, public awareness events.
Department of Conservation	Hawke's Bay Operations Manager	Y	Staff leadership, strategy, Iwi partners.
Department of Conservation	Ranger Ahuriri Field Centre	Y	Ahuriri Site Specific activities, wider weed control responsibilities and ranger duties.
Department of Conservation	Ranger Education	Y	Education and community activities.
Hastings District Council	Principal Advisor District Development	Y	Planning Activities, HPUDs Industrial Land, Change HDC - NCC boundaries to make land available?
Hastings District Council	Environmental Policy Manager	Y	Potential Allocation of HDC rural land to be zoned for Napier City Council expansion.
Hawkes Bay Regional Council	Assets Coordinator	Y	Drainage and recreational assets
Hawkes Bay Regional Council	Regional Councillor. Chair of Environment and Integrated Catchment Committee.	Y	Regional Park. HBRC and Iwi perspective on Te Whanga. Insistence on short term and massive improvements.
Hawkes Bay Regional Council	GIS Technician	Y	Geographic Information Systems
Hawkes Bay Regional Council	Open Spaces Coordinator	Y	Open spaces and biodiversity/relationships.
Hawkes Bay Regional Council	Group Manager Strategy	Y	Regional Strategy.
Hawkes Bay Regional Council	Terrestrial Ecologist	Y	Biodiversity and predator issues.
Hawkes Bay Regional Council	Te Pou Whakarae (Māori Partnerships Group Manager)	Y	Cultural oversight and relationships.
Hawkes Bay Regional Council	Group Manager Integrated Catchment Management	Y	Integrated Catchment Oversight.
Hawkes Bay Regional Council	Manager Policy and Planning	Y	Planning and documents
Hawkes Bay Regional Council	Senior Planner	Y	Planning and documents
Hawkes Bay Regional Council	Group Manager Assets	Y	Referrals to Assets and Open Spaces team members.
Hawkes Bay Regional Council	Group Manager Regulation	Y	Pictorial view of issues recommended.
Hawkes Bay Regional Council	HB Trails Coordinator	Y	Hawkes Bay Cycleway
Hawkes Bay Regional Council	Hotspot Coordinator	Y	Environmental Hotspot Projects
Hawkes Bay Regional Council	Senior Catchment Advisor	Y	Integrated Catchment Activities
Hawkes Bay Regional Council	Manager Strategy & Policy	Y	Planning, RMA.
Hawkes Bay Regional Council	Principle Scientist/Team Leader – Marine and Coast	Y	Marine and estuarine conditions monitoring.
Hawkes Bay Regional Council	Freshwater Ecologist	Y	Fishlife and habitat, whitebait, fish passage.
Napier City Council	Manager Environmental Solutions	Y	Environmental Management
Napier City Council	Report Cam Burton	Y	Environmental Management
Napier City Council	Report Cam Burton	Y	Environmental Management
Napier City Council	Director Infrastructure	Y	Infrastructure planning and projects
Napier City Council	Director City Strategy	Y	Resource consents held
Napier City Council	Manager Asset Strategy	Y	Napier Urban Waterway Quality Assessment And Improvement Project
Napier City Council	Team Leader 3 Waters	Y	Asset Management Stormwater, wastewater, drinking water.
Napier City Council	Director Infrastructure	Y	Napier Urban Waterway Quality Assessment And Improvement Project
Napier City Council	Director City Services	Y	Parks and Reserves activities
Napier City Council	Deputy Mayor Napier City	Y	Ahuriri Estuary and Coastal Edge Masterplan, City oversight, Vision.
Napier City Council	Consultant	Y	Planning.
Napier City Council	Urban Design Lead	Y	Urban design, regional park, landscape values, lagoon farm landuse strategy. Pecha kucha sessions.
Hawkes Bay Airport	Operations Manager	Y	Daily and strategic manager. Resource consent drainage/pumping, issues, projections, safety/birdstrike risk
Hawkes Bay Airport	Airport Planner	Y	Wildlife habitat adjacent, implications of enhancements.
NZ Landcare Trust	Hawke's Bay Regional Coordinator	Y	Whitebait habitat, restoration, wetland rebuilds x3 current.
Volunteer	Ex DOC wetland and species guru	Y	Bittern, wetland and local species knowledge. Training and recording of essential knowhow.
Consultant	Consultant	Y	Wetland, habitat and ecological stormwater treatment. Canada Goose cull airstrike. Bird central baselines.
Napier Port	Environmental Advisor	Y	Dredging, linked, wildlife, cultural relationships, ceaceans.
Mana Ahuriri	Chair	Y	Ahuriri Management Plan
Mana Ahuriri	GM	Y	Ahuriri Management Plan
Mana Ahuriri	Trustee	Y	Ahuriri Management Plan
Te Kaiao - Natural Resource Solutions	Founder	Y	Port Cultural committee.
Ngā Hapū o Tutaekuri	Representative	Y	Cultural monitoring in Ahuriri Estuary for Thames Tyne consent conditions. Cultural overview. Ahika - kept fires burning.
Wharerangi Marae	Representative	Y	Hapu interests.
Pan Pac Forest Products Ltd.	Environmental Manager	Y	Industrial neighbour.
Takitimu Seafoods	Consultant	Y	Fisheries and environmental stewardship.
NZ Landcare Trust	Consultant	Y	Wetlands, 3 current projects in Te Whanga.
Plant Hawkes Bay	Owner	Y	Native plant ecology. Resident business since 2005. Seed sources.
Volunteer	Ex DOC wetland and species guru	Y	Bittern wetland and local knowledge. Training and recording of essential know how.
Farmer	Farmer	Y	Restoration, relationships.

Regulatory and reference material - Ahuriri estuary stocktake			
Principle/implic organisation	Item Type	Key Documents/Plans/Strategies	Links
NCC	Consent	Effluent consents industrial	TBC
MfE - HDC/NCC/CHBDC	Draft Policy Statement	(Joint submission made) on Action for Healthy Waterways	Action for healthy waterways: A discussion document on national direction for our essential freshwater
MfE	Draft Policy Statement	Action for Healthy Waterways (joint submission)	TBC
MfE	Draft Policy Statement	Regional Response to Climate Change (discussions, ongoing)	TBC
HBRC/NCC/Te Komiti	Future Plan	Ahuriri Estuary Integrated Catchment Management Plan	TBC - Te Muriwai o Te Whanga - Joint Ahuriri Estuary Management Plan.
HBRC	Future Plan	Proposed Plan Change 9 Tūtakuri, Ahuriri, Ngaruroro and Karimū Catchments	https://www.hbrc.govt.nz/assets/Document-Library/TANIK/TANIK-Key-Reports/Proposed-TANIK-Plan-Change-9.pdf
HBRC	Future Plan	Long Term Plan 2021-31 - for consultation April 2021	TBC
Crown	Legal Document	Ahuriri Hapū and The Trustees of the Mana Ahuriri Trust and the Crown - Deed of Settlement	https://www.govt.nz/browse/history-culture-and-heritage/treaty-settlements/find-a-treaty-settlement/ahuriri-hapu/ahuriri-hapu-documents/
Crown	Legal Document	Deed of Settlement Ahuriri Hapu and Trustees of the Mana Ahuriri Trust and the Crown	Hard copy
NCC	Bylaw	Stormwater bylaw	https://www.napier.govt.nz/assets/Document-Library/Bylaws/Stormwater-Bylaw-2020.pdf
NCC	Bylaw	Trade waste bylaw	https://www.napier.govt.nz/assets/Document-Library/Bylaws/2014-trade-waste-bylaw.pdf
NCC	Bylaw	Animal Control Bylaw	https://www.napier.govt.nz/assets/Document-Library/Bylaws/2014-animal-control.pdf
NZ Legislation	Act	Resource Management Act	http://www.legislation.govt.nz/bct/public/1991/0069/latest/DLM230265.htm#srcqs
NZ Legislation	Act	Conservation Act 1987	http://www.legislation.govt.nz/bct/public/1987/0065/latest/DLM103610.html
NZ Legislation	Act	Local Government Act	http://www.legislation.govt.nz/bct/public/2002/0084/latest/versions.aspx
NCC	Map	Land Projected to be under annual flood level in 2020	TBC
MfE	National Policy Statement	National Policy Statement for Indigenous Biodiversity	https://www.mfe.govt.nz/publications/biodiversity/draft-national-policy-statement-indigenous-biodiversity
CHBDC HDC NCC HBRC	Proposed National Policy Statement	Proposed National Policy Statement for Urban Development (NPSUD) (Joint submission)	TBC
MfE/DOC	National Policy Statement	New Zealand Coastal Policy Statement 2010	https://www.doc.govt.nz/about-us/science-publications/conservation-publications/marine-and-coastal/new-zealand-coastal-policy-statement/new-zealand-coastal-policy-statement-2010/
Ministry Housing Urban Development	National Policy Statement	National Policy Statement on Urban Development	https://www.hud.govt.nz/urban-development/national-policy-statement-on-urban-development-nps-ud/
MPI - HDC/NCC/CHBDC	National Policy Statement (Per	(Joint submission made on) NPS Highly Productive Lands information paper.	https://www.mpi.govt.nz/news-and-resources/consultations/proposed-national-policy-statement-for-highly-productive-land/
NCC	Plan	Ahuriri Estuary and Coastal Edge Masterplan	https://www.napier.govt.nz/napier/projects/ahuriri-estuary-masterplan/
NCC	Plan	Water Supply Network Master Plan 2019	http://napier.infocouncil.biz/Open/2020/05/CO_20200507_AGN_489_AT_EXTRA_WEB.htm
NCC	Plan	Wastewater Master Plan	TBC
HBRC	Plan	Long Term Plan 2018-28	https://www.hbrc.govt.nz/documents-and-forms/long-term-plans/
NCC	Plan	District Plan Review	https://www.napier.govt.nz/our-council/plans-strategies-reports/napier-district-plan/district-plan-review-discussion-documents/
NCC	Plan	Ahuriri Estuary and Coastal Edge Masterplan 2018	https://www.napier.govt.nz/assets/Documents/Ahuriri-Masterplan/Ahuriri-Estuary-Masterplan-Final-10-August-2018.pdf
NCC/HDC	Plan	Coastal Hazards Strategy	https://www.hbrcost.co.nz/assets/Document-Library/Project-Documents/Cifton-to-Tangio-Coastal-Hazard-Strategy-2120-DRAFT-Aug-2016.pdf
NCC	Plan	Annual plan	https://www.napier.govt.nz/assets/Document-Library/Plans/Annual-Plans-and-Ten-Year-Plans/NCC-Annual-Plan-2019-20-Adopted-28.06.2019.pdf
NCC	Plan	Long Term Plan 2018-2028	https://www.napier.govt.nz/assets/Uploads/NCC-Long-Term-Plan-2018-2028.pdf
NCC	Plan	Park Island Masterplan 2017	https://www.napier.govt.nz/assets/Documents/District-Plan-Change-11/Park-Island-Masterplan-2017.pdf
HDC/NCC/HBRC	Plan	Heretaunga Plains Urban Development Strategy	https://www.hpuds.co.nz/assets/Document-Library/Reports/Stage-1-reports/HPUDS-Infrastructure-Review-by-MWH-Ltd.pdf
Across Agencies	Plan	Regional Biodiversity Strategy	https://www.hbrc.govt.nz/assets/Document-Library/Strategies/biodivstratNovember2015v3.pdf
Hawke's Bay Airport	Plan	HB Airport Masterplan (20 year plan)	Draft due for completion 2020.
Hawke's Bay Airport	Act	Civil Aviation Act 1990	https://www.legislation.govt.nz/act/public/1990/0098/latest/whole.html
DOC	Plan	Hawkes Bay Conservation Management Strategy 1994-2004	https://www.doc.govt.nz/about-us/our-policies-and-plans/statutory-plans/statutory-plan-publications/conservation-management-strategies/hawkes-bay/
NCC/HBRC	Project	Napier Urban Waterway Quality Assessment And Improvement Project	TBC
HBRC	Report	Regional Response to climate change - COVID recovery.	https://www.hbrc.govt.nz/home/article/928/regional-council-welcomes-192-million-climate-change-funding-7xfeatured&s=1
HBRC	Report	Ahuriri Stocktake Report	TBC - Mike Adye HBRC Report
HBRC	Report	Outstanding Water Bodies Values Report Ahuriri Estuary	https://www.hbrc.govt.nz/assets/Document-Library/Outstanding-Water-Bodies/3-Values-reports/Ahuriri-Estuary-ID30-Summary-of-Values-Aug-2020-5509.pdf
HBRC	Report	Contact Recreation and Food Gathering Review	https://www.hbrc.govt.nz/assets/Document-Library/Publications-Database/4483-EMT-13-10-Ahuriri-Estuary-CR-and-FG-Feb-2014.pdf
HBRC	Report	Hawkes Bay Biodiversity Inventory 2014	https://www.hbrc.govt.nz/assets/Document-Library/Other/Biodiversity-documents/Hawkes-Bay-Biodiversity-Inventory-August20141.pdf
HBRC	Report	Harbourmaster report 2000 NAPIER INNER HARBOUR and LOWER AHURIRI ESTUARY AREA POINT SOURCE DISCHARGES	https://www.hbrc.govt.nz/assets/Document-Library/Publications-Database/4877-Napier-Inner-Harbour-and-Lower-Ahuriri-Estuary-Area-Point-Source-Discharges-2000.pdf
NCC	Report	The strategic planning for stormwater treatment wetland on NCC held lagoon farm	TBC
HDC/NCC	Report	Sub Regional Industrial Lands Study	TBC
NZ Orca Research Trust	Report	Orca (Orinus orca) in New Zealand waters Ingrid N. Visser Ph.D. Dissertation	https://www.orcaresearch.org/wp-content/uploads/2011/08/Visser-2000-orca-NZ-PhD-Thesis.pdf
HB Airport	Report	Annual Report 2019	https://hawkesbay-airport.co.nz/assets/2019-Annual-Report-Electronic.pdf
Tony Billing	Report	Airport safety and bird control report	Hard copy
Hans Rook Joella Brown	Report	Tutakuri Ngaruroro Inanga Spawning Report (Transferable to Ahuriri habitat restoration)	Hard copy
Hans Rook	Report	Helping Bittern to help themselves	Hard copy
NCC	Report	Boffa Miskell Park Brief	TBC
NCC	Report	Taipo Restoration Study	TBC
MfE	Report	NPS-FM 2020 - big emphasis on fish passage	https://www.mfe.govt.nz/fresh-water/freshwater-acts-and-regulations/national-policy-statement-freshwater-management
HBRC	Report	Fish Passage opportunities project	TBC
PCE	Report	Managing Our Estuaries Report August 2020	https://www.pce.parliament.nz/media/197063/report-managing-our-estuaries-pdf-44mb.pdf
Landcare Research	Report	Dr Jamie Aleria report. Template for cultural monitoring	TBC
NZ Department of Justice	Report	TE WHANGANUI-A-OROTU REPORT 1995	https://forms.justice.govt.nz/search/Documents/WT/WT_DOC_68457298/Te%20Whanganui-a-Orotu%201995.pdf
NZ Coastal Restoration Trust	Report	Search of Ahuriri related references - Excellent resource	https://ref.coastalrestorationtrust.org.nz/search/?sort=title&general_search=Ahuriri
HBRC	Report	NAPIER INNER HARBOUR and LOWER AHURIRI ESTUARY AREA POINT SOURCE DISCHARGES	https://www.hbrc.govt.nz/assets/Document-Library/Publications-Database/4877-Napier-Inner-Harbour-and-Lower-Ahuriri-Estuary-Area-Point-Source-Discharges-2000.pdf
BOP District Council	Report	Protocol for Whitebait Habitat	TBC
NCC	Report	Article re blocked pipeline	https://www.stuff.co.nz/business/123067221/the-22million-ratepayer-funded-pipe-that's-been-blocked-for-five-years?fbclid=IwAR2fESyAtcx9WR9s3j/mO8j5aEOthb.bQEtQ22Ort4_9qETGktjGHD5rE

Attachment 3. Ahuriri estuary stocktake - responsibility, relevance and involvement matrix																		
Activity, project or focus area	Headlines	Responsible, relevant to, or involved agencies*																
		Hawkes Bay Regional Council	Napier City Council	Department of Conservation	Ministry for Primary Industries	Hastings District Council	Mana Ahuriri	Ngati Kahungunu	Hapu sharing Te Whanga within their rohe.	Te Komiti - future involvement	Hawkes Bay Airport	Napier Port	New Zealand Transport Agency	Voluntary individuals	Voluntary Organisations	PAMU - Landcorp	Civil Defence and Emergency Management/FENZ	
Overarching Aims	Restoring the environment, mana and mauri of Te Whangau i a Orotu. As defined in Agency Leaders' Hui.	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Estuarine/aquatic environment	Wastewater systems, design, maintenance and consenting.	*	*	*		*				*								*
Estuarine/aquatic environment	Sediment ingress from earthworks or land use.	*	*	*		*	*		*	*		*			*	*	*	*
Estuarine/aquatic environment	Stormwater systems design, maintenance and emergency response.	*	*			*			*	*		*					*	*
Estuarine/aquatic environment	Industrial/residential effluent	*	*			*		*	*		*					*	*	*
Estuarine/aquatic environment	Rural/Lifestyle Earthworks	*	*	*		*			*	*	*			*	*	*	*	
Estuarine/aquatic environment	Intertidal habitat	*		*	*		*		*	*				*	*	*	*	
Regional Park Project	Stormwater/volume management	*	*			*	*		*	*							*	*
Regional Park Project	Stormwater/wastewater treatment	*	*			*	*		*	*								
Regional Park Project	Biodiversity and habitat opportunity	*	*	*		*	*		*	*	*	*		*	*	*	*	
Regional Park Project	Recreation/community/education/structures and assets/fish passage	*	*	*		*	*		*	*		*				*		
Biodiversity - Birdlife	Bird Central - improve habitat and biodiversity, but targeted specific activities for large birds due to airport operations.	*	*	*		*	*		*	*	*	*		*	*	*	*	
Biodiversity - Aquatic	Increase intertidal habitat	*	*	*	*	*	*	*	*	*	*			*	*	*	*	
Biodiversity - Vegetation	Restore plant diversity as bird habitat and as seed source. Living legends and ecosourcing.	*	*	*		*	*		*	*	*			*	*	*	*	
Biosecurity - Terrestrial	Weeds, animal pests, predators, Canada geese	*	*	*	*	*	*		*	*	*			*	*	*	*	
Biosecurity - Marine	Fanworm, new incursions, surveillance.	*		*	*	*	*	*	*	*	*	*		*		*	*	
Fisheries - Nursery provision	Determine likely values. Act for improvements in line with wider biodiversity picture.	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	
Fisheries - Boat activity/effluent/painting	Determine stepwise gains and engage with fish fleet and processors around their environmental policy. Legacy options.	*	*	*	*		*	*	*	*		*		*	*	*	*	
Fisheries - Fish passage	Innovations, ladders, designwork, bypasses for pumpstations.	*	*	*		*	*	*	*	*	*							
Cetacean Habitat and Food Sources	Orca as ultimate totem/marker species/apex predator/relatable visitor deserving clean food and water.	*	*	*	*		*	*	*	*		*		*	*	*	*	
Cetacean welfare, traditional resource recover	Protocols to be adopted developed in HB wananga with Ngati wai TBA.	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	
Marker species and totems	Monitor gains through species counts and condition. Bittern, Godwit, NZ Falcon, Fish diversity, Bird Central Results, Orca.	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	
Water Quality Urban	Testing regimes, infrastructure, cultural health monitoring, 3 Waters review	*	*	*		*	*	*	*	*	*	*						
Water Quality Rural	Testing regimes, cultural health monitoring, catchment works, infrastructure, wetlands.	*	*	*	*	*	*	*	*	*	*							
Hydrology	Hydrological dynamics and flows links into other factors for the estuary. Salinity related to marine pest incursion effects.										*							
Recreational assets and activities	Cycleways and walking tracks, viewing platforms, facilities, signage and art installations.	*	*	*			*		*	*	*	*		*	*	*	*	
Education/events	Coordinated/connectivity building, community engagement	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*
Community engagement with Te Whanga	Lift appreciation for its gifts and potentials through sound engagement strategy and events on site.	*	*	*	*	*	*	*	*	*	*			*	*	*	*	
Communications	Synergy through shared or congruent communications strategies. Things we wouldn't do, if only we knew - public awareness of is	*	*	*	*	*	*	*	*	*	*			*	*	*	*	
Resource consent administration	Discharges, construction, soil disturbance/earthworks. Science monitoring, cultural health monitoring.	*	*			*	*	*	*	*	*	*						*
Airport Entranceway, causeway and lakes.	An archetypal collaboration between many agencies, high level satisfaction expressed by all relevant interviewees.	*	*	*			*		*	*		*		*	*	*	*	
Emergency Response	Flooding, Fire, Spills, Earthquake, Tsunami.	*	*	*		*					*	*	*					*

HAWKE'S BAY REGIONAL COUNCIL
ENVIRONMENT AND INTEGRATED CATCHMENTS COMMITTEE

Wednesday 12 May 2021

Subject: DISCUSSION OF MINOR MATTERS 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 5.

Topic	Raised by