

Report No. 20-106

Decision Required

SHOVEL READY FLOOD PROTECTION PROJECTS

1. PURPOSE

This item requests Council approval of the 'shovel ready' flood protection projects 1.1. (excluding Kumeroa Quarry) recently confirmed by central government for funding. It also requests approval to commit the balance of the funding required for the projects to proceed.

2. **EXECUTIVE SUMMARY**

- 2.1. A part of central government's response to the economic impacts of COVID-19 has been to invest in 'shovel ready' infrastructure projects. A request for projects to fund was made in March with a 14 April deadline for submission. Horizons submitted five flood protection projects both directly to Crown Infrastructure Partners and as part of a sector package, quite literally from Kaitaia to Invercargill.
- 2.2. A high level announcement was made by Ministers Robertson and Jones on 1 July confirming funding for those projects. Various regional announcements were made throughout July with the substantive announcement on 3 August, including those relating to Horizons.
- 2.3. The Horizons projects total five in number with an estimated cost of \$35.9M. The 3 August announcement confirms central government funding at a blanket 75% level across all five projects totalling \$26.9M. They have an underlying theme of resilience particularly as it relates to climate change, and the announcements made on 3 August underline that focus.
- 2.4. The projects put forward largely reflect various initiatives that staff intended to put forward for inclusion in the updated Long Term Plan (LTP). However shovel ready funding comes with expectations around delivery timeframes that are considerably shorter than those envisaged for the LTP, creating a range of resourcing challenges.
- Fundamentally they present an opportunity for Council to continue to invest in flood 2.5. protection with central government as co-funder, substantially lessening the impact to the region's ratepayers, the first such opportunity in more than 30 years.



3. **RECOMMENDATION**

It is recommended that Council:

- a. receives the information contained in Report No. 20-106;
- b. notes the additional funding assistance provided for the Foxton Flood Mitigation project;
- endorses the high level concept as it relates to the Rangitikei River Enhancement shovel ready project and approves an additional loan against the Rangitikei Scheme of \$1.3M to meet the local share requirement;
- d. endorses the high level concept as it relates to the Lower Manawatu Flood Protection Resilience shovel ready project and approves an additional loan against the Lower Manawatu Scheme of \$3.75M to meet the local share requirement;
- e. endorses the Palmerston North Flood Protection shovel ready project and approves an additional loan of \$1.75M to meet the local share requirement;
- f. delegates authorisation to the Chief Executive to enter into funding agreements with Crown Infrastructure Partners, the Ministry of Business Innovation and Employment or whichever government department or crown entity is the vehicle for providing central government funding.

4. FINANCIAL IMPACT

- 4.1. The financial impacts with this item are the local share requirement Council needs to commit to access the funding on offer from central government, impacts that vary across the different projects.
- 4.2. For Foxton the project and funding are already committed across both Horizons and the Horowhenua District Council (HDC); no new / additional funding is required. In fact there may be scope for a reduction in current targeted rate levels, a decision best made when the detailed design work is completed in the next few months. That will also require discussion with HDC as co-funder around scope and cost-share.
- 4.3. Excluding the Kumeroa Quarry proposal (a separate item), the remaining three projects are intended to be loan funded. With the Rangitikei and Lower Manawatu projects it's proposed to spread the debt servicing cost evenly (as a percentage) across the respective rating classifications. With Palmerston North, it's intended to specifically target the Palmerston North (Palmerston North Flood Protection) rate category. Loan terms are intended to be set at 20 years.
- 4.4. All other things being equal (mindful of some of the decisions Council is yet to make as part of the LTP update process) those debt servicing costs are as follows:

Year	HRC 25% Share	Annual Debt Servicing Cost (cummulative)	Cummulative impact (% of Current	
			Rangitikei Scheme	Organisation
1	\$450k	\$30k or 0.06% on Council Rates Revenue	3.47%	0.05%
2	\$450k	\$60k or 0.13% on Council Rates Revenue	7.02%	0.09%
3	\$400k	\$88k or 0.19% on Council Rates Revenue	10.31%	0.14%

Table 1 – Rangitikei River Enhancement Financial Impacts



25 August 2020

Year	HRC 25% Share	Annual Debt Servicing Cost (cummulative)	Cummulative impact (% of Current	
			LMS - PN Rate Cat.	Organisation
1	\$585k	\$38k or 0.08% on Council Rates Revenue	0.87%	0.06%
2	\$585k	\$78k or 0.16% on Council Rates Revenue	1.75%	0.12%
3	\$580k	\$119k or 0.25% on Council Rates Revenue	2.67%	0.19%

 Table 2 – Palmerston North Flood Protection Financial Impacts

Year	HRC 25% Share	Annual Debt Servicing Cost (cummulative)	Cummulative impact (% of Current	
			LMS	Organisation
1	\$1.25M	\$82k or 0.17% on Council Rates Revenue	1.85%	0.13%
2	\$1.25M	\$166k or 0.35% on Council Rates Revenue	3.75%	0.26%
3	\$1.25M	\$254k or 0.54% on Council Rates Revenue	5.73%	0.40%

Table 3 – Lower Manawatu Flood Protection Resilience Financial Impacts

- 4.5. As noted previously one related LTP discussion are the revenue impacts associated with changing the land use of the leased land corridor that runs adjacent to much of the lower reach of the Rangitikei River, a matter not covered in this item.
- 4.6. If Council approves these projects and Horizons contribution to be funded from external LGFA loans, the impact on rates for Year 1 of the 2021-2031 Long Term Plan would be an average increase of approximately 0.31%. Noting that previous Council decisions to commit to the Jobs for Nature projects an average rates increase in Year 1 of the 2021-2031 LTP of 0.88%, this would take the total committed average rates increase to approximately 1.19%.

5. CLIMATE CHANGE IMPACTS

- 5.1. Part of the case for investment both within the Horizons region and nationally is the opportunity to make flood protection schemes more resilient in the face of climate change, a very real threat to levels of service. There are a range of different threads to that across the Horizons projects:
 - the effect that rising sea levels will have on the river management activity and the provision of flood protection and land drainage along the lower reaches of both the Manawatu and Rangitikei Rivers;
 - the change in flood frequency with changing rainfall patterns;
 - the higher suspended sediment loads associated with changes in flood frequency and the likely acceleration in loss of flood protection standards sediment accumulation rates increase along the lower reaches of the Rangitikei, Oroua and Manawatu Rivers.

6. COMMUNITY ENGAGEMENT

- 6.1. Circumstance relating to the shovel ready process clearly constrained community engagement the relatively short notice period and lodgement required during lockdown. That's somewhat compounded by the early August announcement and the urgency to commit to funding agreements, out of step with the consultative process associated with the update of Council's LTP.
- 6.2. Nonetheless the projects do align with the intent / focus with the current LTP / 30 Year Infrastructure Strategy. Arguably they also fit with the expectations the community has for how Horizons should be managing such infrastructure.
- 6.3. Some community engagement has occurred; an overview of the relevant applications was provided to the recent Rangitikei and Lower Manawatu Scheme meetings. Foxton has

25 August 2020

been the subject of considerable community engagement through previous LTP and Annual Plan processes with a newsletter update about (at time of writing) to be sent to ratepayers.

7. SIGNIFICANT BUSINESS RISK IMPACT

- 7.1. Not surprisingly given the emphasis on resilience, these projects have an appreciably positive impact on business risk. They are in the main focussed on existing schemes with known (albeit at the high end of the operating range for Palmerston North) limitations and fit within the wider focus set by the current 30 year Infrastructure Strategy.
- 7.2. By way of example, the preliminary breach scenario work undertaken for the Mangaone Stream in the vicinity of Tremaine Avenue (presented to the June Catchment Operations Committee meeting) illustrates the consequences of failure, with a high level damage estimate (based on the cost per property from the 2017 Edgecumbe failure) in the range of \$50M to \$100M.

8. BACKGROUND

- 8.1. On 25 March the Chair of Crown Infrastructure Partners Mark Binns wrote to all infrastructure owners advising of central government's intention to fund 'shovel ready' projects as part of the economic stimulus with the COVID-19 pandemic and associated national lockdown. In addition to the shovel ready requirement the request also emphasised job creation, the need to demonstrate regional / national benefit and size, noting a threshold of \$10M for consideration and setting a deadline for applications of 14 April.
- 8.2. Nationally River Managers have been actively engaged for some time with central government around funding of flood protection activities, a conversation that stepped up a gear early this calendar year. Although the total value of shovel ready infrastructure projects submitted exceeds the amount central government budgeted for by some margin, the strength and currency of the discussion suggested applications with a flood protection focus might be viewed in a favourable light.
- 8.3. Horizons applications followed two paths five individual applications submitted directly and bundled into a sector-wide application. Like many others River Managers staff have been closely following the progress of the applications; feedback had been positive and that sentiment was confirmed with the announcements by Ministers Robertson and Jones on 1 July. The individual applications submitted by Horizons and others were effectively deleted; the confirmation made by those ministers relates to the sector-wide application.
- 8.4. Confirmation of the Horizons component of that application was made on 3 August. The projects included have a total estimated cost of \$35.9M and were made on the somewhat optimistic basis of 100% funding from central government. The funding for each region falls into one of two categories Horizons sits in the higher rate category of 75% equating to a total grant of \$26.9M.

9. DISCUSSION

- 9.1. Choosing what projects to submit for funding was based on a range of factors, first and foremost being what projects could be construed as shovel ready. One project discounted from inclusion at an early stage was the Reid Line Floodway upgrade predominantly property purchase with several years of property purchase remaining and therefore light on jobs and not spade ready even with an optimistic interpretation.
- 9.2. The large floodgate structures that sit within the Lower Manawatu Scheme were also considered for inclusion future renewal and replacement costs currently not funded through depreciation and accordingly likely to need to be funded by future additional

25 August 2020

borrowing. Again even a very charitable interpretation of shovel ready wouldn't allow inclusion of this as a project.

9.3. Consideration was also given to the inclusion of other (in addition to the lower River training structures that already have \$7.5M of Provincial Growth Fund money confirmed) Whanganui projects, particularly flood protection for Putiki. The resource commitment to Whanganui through the river training structures is already considerable and that combined with the nature of the other projects (e.g. retreat strategy for Anzac Parade) and their current conceptual developmental stage ruled out any being included.

10. FOXTON FLOOD MITIGATION

- 10.1. Flood protection for Foxton was an obvious choice for inclusion based on the nature of the project and is arguably the most shovel ready of the five. Funding for the project has been tight, particularly with the altered mitigation approach and particularly for HDC with the larger share and a rapidly growing district.
- 10.2. The joint Council workshop in February provided an overview of the revised mitigation strategy (an upgrade of Kings Canal and the diversion of flood water into the Whirokino area instead of a Cook Street pipeline) and the likely (but at that stage not yet quantified) additional cost. Central government funding not only addresses that likely funding deficit but also provides an ability to broaden project outcomes. The application outlines it as a three year project with a total budget of \$6M.

11. PALMERSTON NORTH FLOOD PROTECTION

- 11.1. The scope for the Palmerston North project runs out of the Tonkin and Taylor work presented to the September 2019 Catchment Operations Committee meeting. It encompasses further investigation to develop more detail sub-surface soil profiles for the stopbank network that protects the city and assessing in more detail the adequacy of the cut-off drains for the Fitzroy Bend section of stopbank. It also includes other elements such as a full CCTV survey of all pipeline penetrations of the City's stopbank network.
- 11.2. However the majority of the estimated \$7M cost relates to specific identified issues with the Mangaone Stream; issues that had been previously identified (vulnerabilities downstream of the Tremaine Avenue Bridge) and issues identified with the 2019 work (e.g. a section of stopbank at the end of Belvedere Crescent that has a retaining wall cut into it, the integrity of the section of stream bank retaining wall in behind Bisley Street).
- 11.3. The biggest single project proposed involves the rebuild of the stopbank upstream of Pioneer Highway that adjoins the Palmerston North City Council Kakatangiata Plan Change area bordered by No. 1 Line, Longburn Rongotea Road and Pioneer Highway. The current stopbank has known issues that while fitting with current operating context have impeded previous plan change processes in the area; the stopbank would not be fit for purpose with a fully-developed residential area in behind. Clearly there is also scope to consider stopbank alignments that differ from the current one, providing scope for riparian planting, something not previously possible in order to retain flood carrying capacity.

12. RANGITIKEI RIVER ENHANCEMENT

12.1. The Rangitikei River enhancement project is borne out of work staff have been undertaking around a more sustainable management approach for the scheme (the subject of a workshop with Council back in January) focussed on the reach downstream of the Bulls Bridge. The application emphasises, amongst other things, the sense in investing in making the scheme less prone to flood damage in the future (and accordingly reducing the size of future flood damage claims to central government).

- 12.2. Accordingly the work encompassed within the project includes removing some of the colonising introduced plant species and opening up the river 'fairway', along with new protection and native plantings set further back from the river. It also looks to address a significant weakness with the current scheme the open corridor of leased pastoral farmland alongside the Parewanui stopbank. The river came close to carving a new path several kilometres long against the stopbank in 2018 it's planned to progressively vegetate this area to prevent this from happening.
- 12.3. The vision also includes improving access along the lower reach of the river a shared path along the north side of the river from Bulls to the sea. Most of the land is Horizons owned making (subject to alignment confirmation with community input) it effectively shovel ready.
- 12.4. The application outlines a delivery timeframe of 12 months reality is that managing the Rangitikei is an open-ended challenge for Horizons with no time limit; the intent is at an early stage to discuss with MBIE staff what timeframe is palatable to central government, endeavouring (worst case) to accelerate what we can to leverage as much of the funding as possible.

13. LOWER MANAWATU FLOOD PROTECTION

- 13.1. This application, like the Palmerston North project, links to some of the challenges facing the Lower Manawatu Scheme that have previously been highlighted to Council. Those are the limitations with the Rural Upgrade Project only raising / rebuilding those parts of the stopbank network that were not to height (best estimate of the 100 year Return Period flood height) with no consideration given to embankment integrity.
- 13.2. Other challenges include climate change effects, loss of flood carrying capacity due to sediment accumulating on river berms and the limited consideration given to the schemes' environmental impacts.
- 13.3. Developing a stopbank rebuild programme is the simple component of this project; the application highlighted a significant operating risk easily made shovel ready. Thinking as it relates to both making the scheme more resilient to sedimentation and providing improved environmental outcomes is more complex but the three year programme enables a sequencing where in the latter stages sedimentation and biodiversity outcomes can have a proportionately greater focus.

14. COMMENT

- 14.1. As noted earlier, discussions with central government around funding have been more active over the last 12 to 18 months. Clearly those discussions didn't anticipate the opportunities that a pandemic might present although the problem is a good one to have the earlier discussions anticipated a gradual turning on of the funding 'tap'. The larger and better resourced Councils (arguably those least in need of central government funding) are better placed to 'drink from the fire hose' that is shovel ready funding.
- 14.2. As noted previously by the Chief Executive many parts of the organisation are relatively lean resource wise and River Management is one; sector benchmarking in 2017 (albeit based on a relatively crude measure of operating budget relative to asset value) highlighted that; there is no capacity within the group to deliver these projects with the current level of resourcing.
- 14.3. Compounding matters, some elements of the 'Jobs for Nature' project also impact on River Management; possible requirements on schemes to fund some fish passage projects and the staff input relating to construction. Similarly resourcing and funding relating to the Arawhata project also has impacts for the Group; development as it relates to the sedimentation and biodiversity elements of the Lower Manawatu Project has slowed as more resources are diverted into the Arawhata project.



- 14.4. River Management is an area that requires technical skills and expertise complemented by accumulated knowledge and experience; in particular areas the consequences of not getting it 'right' are very considerable, as demonstrated with Edgecumbe. Although planning is well underway it will take some time to build the additional capacity required to deliver these projects.
- 14.5. There is a considerable challenge for Council around meeting the expectations central government has around progress but working to an achievable timeframe a real risk that some of the funding will be lost due to delays. Adding to those challenges, the amount of funding, timeframes and sector capacity suggest that 'poaching' of staff is inevitable.

15. CONSULTATION

15.1. There is no broad consultation plan at this time – this will evolve as the projects develop. Consultation in the short term will concentrate on the Rangitikei project with briefings for lwi and Rangitikei District Council.

16. TIMELINE / NEXT STEPS

- 16.1. As noted previously the nature of the projects and the requirements attached to them have required some work elements to advance ahead of Council approval. This mainly relates to Foxton a committed project where work continued over lockdown and is now well advanced. Some core elements of the plan are intended to be quickly advanced to construction to meet central government expectations. That will progress in parallel with the completion of the detailed design, with a fully costed project brought back to Committee / Council for confirmation.
- 16.2. With the Rangitikei project a landscape architect has been engaged to better articulate the vision for the project, again something that will be brought back to Committee / Council for consideration. Similarly for the Lower Manawatu project the thinking around the parts of the network that require strengthening will be brought back to Committee / Council for consideration, as will the sedimentation and biodiversity initiatives as they are developed.
- 16.3. The one not seen as requiring further decisions by Council is Palmerston North Flood Protection – that's intended to be advanced as quickly as resourcing allows, following the outline and prioritisation set by the 2019 Tonkin and Taylor report. Clearly elements such as property purchase will require specific Council approval.

17. SIGNIFICANCE

- 17.1. Clearly the projects proposed are of a size and scale that is significant for Horizons. However the actual resource requirement for Horizons is a small fraction of the total budget and not significant in regard to total number of FTE staff employed by Horizons. Horizons 25% share over the expected three year delivery timeframe is around \$3M per year, generally consistent with capex spend in the River Management area over a number of years (dating back to the 2004 floods). As noted previously the projects are also consistent with the current LTP and 30 year Infrastructure Strategy.
- 17.2. Accordingly the staff view is that this is not a significant decision according to the Council's Policy on Significance and Engagement.

Adrian Smith CHIEF FINANCIAL OFFICER Ramon Strong GROUP MANAGER RIVER MANAGEMENT

ANNEXES

There are no attachments for this report.