

Report No.	21-31
Information Only - No Decision Required	

CLIMATE RESILIENCE PROJECTS UPDATE

1. PURPOSE

1.1. The purpose of this item is to update members on progress with delivering the Flood Protection Climate Resilience Projects.

2. EXECUTIVE SUMMARY

- 2.1. In April 2020 Horizons along with other regional councils and unitary authorities submitted a list of flood protection shovel ready projects for central government funding consideration. Approval in principle was announced in July, with each project confirmed by Council (including the local share contribution) in August; central government confirmation was subsequently received in September / October.
- 2.2. Although the projects represent welcome investment in flood protection by central government that investment comes with a substantial challenge the delivery timeframe. Accordingly at the November 2020 Audit, Risk and Investment Committee meeting it was agreed that staff provide regular updates on delivery of the projects.
- 2.3. At this early stage delivery is behind the programme contained in the funding agreement, noting that this picture (personal comm. with Provincial Development Unit staff) is a universal one across the sector. There are a range of reasons for that, primarily shaping the delivery team and building momentum bringing consultants on board, scoping the project elements and bringing the external resource on board needed to undertake the work. The signs are promising that spend will ramp up in the fourth quarter of the Financial Year.

3. RECOMMENDATION

That the Committee recommends that Council:

a. receives the information contained in Report No. 21-31 and Annex.

4. FINANCIAL IMPACT

4.1. This item has no direct financial impact associated with it.

5. COMMUNITY ENGAGEMENT

5.1. No consultation is considered necessary with this item.



6. SIGNIFICANT BUSINESS RISK IMPACT

- 6.1. There are two elements to this the overall risk mitigation that the projects achieve (more resilient flood protection schemes) and the specific risk related to the timeframe for completion set by central government. The former could arguably be defined as significant the consequential effects that more resilient flood defences for the Lower Manawatu and Rangitikei have on the risk to life and property.
- 6.2. The latter is not considered significant as noted previously resilience is a theme with the current Infrastructure Strategy with a related programme of work intended to be put before Council as a necessary investment (albeit at a less amount with a longer timeframe) as part of the Long-term Plan update before the shovel-ready opportunity arose. In that regard any funding from central government (\$2M to date) is money that does not have to come from ratepayers.

7. CLIMATE IMPACT STATEMENT

7.1. This item reports on progress with project delivery but as previously noted the projects themselves will improve the resilience of the Lower Manawatu Scheme, the Rangitikei Scheme and the town of Foxton to the effects of climate change (more frequent floods, sea level rise).

8. BACKGROUND

- 8.1. Early in the COVID-19 lockdown central government sought options from infrastructure owners for providing economic stimulus through infrastructure investment. River managers from around the country complied a single 'sector' application a national compendium of shovel ready flood protection projects totalling \$299.2M; in June central government approved a grant of \$211.5M. The Horizons component of that application totalled \$35.9M with a grant amount of \$26.9M.
- 8.2. The success of that application is a direct result of the efforts the sector has being making to engage with central government around co-investment in flood protection; the value-add flood protection infrastructure provides to the national economy, how vulnerable transport links and other key lifelines are without it and the instances where central government benefits but the operating costs often fall on a relatively small ratepayer base. That dialogue also emphasises the future challenges with a changing operating environment, principally the need for investment to improve resilience in the face of climate change.
- 8.3. The investment made by central government is under the banner of 'shovel ready' emphasising the urgency of the spend to achieve that economic stimulus and accordingly the projects have a nominal three year delivery timeframe. That necessitates close / particular management of issues that have the potential to extend delivery timeframes. The November 2020 meeting of the Audit, Risk and Investment Committee considered a management plan addressing that discrete set of risks.

9. **FOXTON FLOOD MITIGATION**

- 9.1. This project is separated into two parts Stage 1 addresses the capacity / integrity issues related to Kings Canal along the eastern edge of the town and Stage 2 the modifications required to convey floodwater into / through the Whirokino basin and out to the Foxton Loop. It is differs to the other three in that the benefit is in part tied to completing all of the project elements. Stage 1 provides some benefit but the full benefit is realised with Stage 2.
- 9.2. Pressures on project management resource (the prioritisation afforded to Lake Horowhenua boat ramp construction) has resulted in some delays. The lead time of some



- elements (resource consents, land purchase) adds to some of the challenges with this project, as does some vocal local opposition.
- 9.3. Design for Stage 1 is almost complete with design for Stage 2 underway. The project has an element of property purchase that does impact the overall critical path (the sequence of events that defines the completion date). Those are the footprint for the Cook Street wetland, the Duck Creek wetland and the new pump station. All three negotiations are underway although delays in receiving valuation assessments has resulted in some delays.
- 9.4. Consenting is also a critical path matter a consultant planner has been employed to assist. That includes (subject to Council approval) the use of the fast-track provisions and assuring compliance with the new National Environmental Standard.
- 9.5. A relatively simple measure that will speed up future construction work (and help the expenditure profile early in the project) is to have materials ordered and delivered in advance contractually materials supplied by the Principal (Horizons). Those materials include the large box culvert units that will replace some of the small pipe culvert crossings of Kings Canal and the sheet piling that will be incorporated into the rebuilt Kings Canal stopbank. Tender documents are being prepared for two other culvert replacements intended to be constructed this season.
- 9.6. Noting that representatives from Ngāti Raukawa and the Horowhenua District Council meet fortnightly with the delivery team to ensure a collaborative approach to project delivery.

10. PALMERSTON NORTH

- 10.1. A contract for the Closed Circuit Television (CCTV) inspection of all pipeline penetrations of the city's stopbanks has been award to contractor Intergroup Limited. This is a key resilience element stopbank failure is often linked to soil / structure interface (Edgecumbe). Intergroup will accurately ascertain the condition of those pipelines with any issues identified flagged to the asset owner for rectification (most are Palmerston North City Council (PNCC) assets). Clearly it's reliant to some degree on the accuracy / completeness of existing services plans and in that regard staff are also looking to conduct ground penetrating radar surveys to aid confidence that the CCTV survey will capture all pipelines present. This work should be complete this financial year.
- 10.2. Another 'early win' that the delivery team have focussed on is obtaining better information on stopbank composition and foundation integrity. The scope of that work is presently being refined with geotechnical engineers Tonkin & Taylor and will be tendered during March. Procurement associated with some of the simpler resilience project elements has just commenced.
- 10.3. Staff have also been part of PNCC discussions with those landowners within the Kākātangiata Plan Change area who border the Mangaone Stream; the Palmerston North Flood Protection Resilience Project includes rebuilding / setting back the Mangaone Stream true right (western) stopbank to make it sufficiently resilient to enable Kākātangiata to proceed. Those initial discussions have gone well.

11. LOWER MANAWATŪ SCHEME

- 11.1. Much of the focus this period has been on scoping / prioritising sub-projects (to be workshopped with Council on 24 March) in parallel with progressing some core elements. Discussions have already taken place in regard to rebuilding some sections of Tokomaru stopbank not considered to be of an acceptable standard, not captured as part of the Rural Upgrade Project (whose focus is on crest level not embankment integrity) and assessed as having relatively high failure consequences.
- 11.2. Consulting engineers E2 Environmental have been appointed and have carried out an initial assessment of the lower reach of the Moutoa floodway balancing flood protection (Moutoa floodway conveyance) and drainage (ageing infrastructural assets) considerations



with the sensitivity of the operating environment (downstream impacts on the Foxton Loop); in essence what the optimal configuration is that best satisfies those three somewhat competing requirements.

12. RANGITIKEI

- 12.1. This project is well underway and is progressing well. The purchase of the part of the true right corridor not owned by Horizons is progressing well with the valuation complete. Consultation with the existing lease holders is underway 4 of 6 are complete with varying levels of appetite to surrender their lease early.
- 12.2. Two contractors are locked in to start vegetation removal (widening the river fairway clearing colonising exotic vegetation) this month with two more in planning. We are awaiting the Short Form Agreement (SFA) from forestry consultant Ground Truth intended to assist staff with the vegetation planning, critical for winter planting to occur.
- 12.3. We are working closely with Ngāti Apa around the planting project at the confluence of the Tutaenui Stream (a separate shovel ready project that Ngāti Apa have obtained funding for) and are looking to initiate a discussion around how we might partner with iwi in a way that aligns with the social procurement requirements contained in the funding agreement with central government.

13. COMMENT

- 13.1. Staff continue to maintain a close / robust relationship with key Professional Development Unit (PDU) staff. PDU organised a national workshop on 26 February with three Horizons staff in attendance. Much of the focus of that workshop was on social procurement; staff are arranging for the provider contracted by PDU to advise Councils on social procurement (Amotai) to visit Palmerston North for an interactive session with the project delivery team. This has overlap with the Te Puwaha / Whanganui Port Revitalisation Project the funding agreement contains similar requirements.
- 13.2. Engagement / collaboration with both iwi and the relevant city / district councils, although not a major component of risk mitigation in regard to delivery timeframe, remains an integral part of successful project delivery and is at varying stages of maturity across the four projects. Horowhenua District Councillors will be briefed on the Foxton project on 24 March; Horowhenua District Council are making a financial contribution to the project in addition to Horizons and MBIE.

14. TIMELINE / NEXT STEPS

14.1. The project will continue as planned until scheduled completion in 2024.

15. SIGNIFICANCE

15.1. This is not a significant decision according to the Council's Policy on Significance and Engagement.

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ANNEXES

A Dashboard Report No 1