

Flood Protection Projects – Reallocation of External Funds

Meeting: Kaipara District Council
Date of meeting: 14 December 2022
Reporting officer: Anin Nama, General Manager Infrastructure Services

Purpose | Ngā whāinga

To seek approval to re-allocate budget from the Te Kopuru stopbank works to the Raupo floodgate projects, from the Ministry of Business, Innovation and Employment, Infrastructure Reference Group fund.

Executive summary | Whakarāpopototanga

In 2020, the Ministry of Business, Innovation and Employment (MBIE) approached Kaipara District Council (Council) to access projects that meet their criteria for Infrastructure Reference Group (IRG) funding. Following discussions with MBIE, a list of projects totalling \$20m meeting the IRG criteria was applied for. However, despite the request, only \$6m was provided by MBIE.

Two tranches of funding were provided by MBIE. The first was \$2.5m for floodgates at two locations (canal K & G) in the Raupo Drainage District. The second was \$3.5m for enhancement of the existing flood defence stopbanks between Dargaville and Te Kopuru.

Preliminary design of the floodgates identified a shortfall of approx. \$8m for the construction of both floodgates. Given the shortfall in funding and with MBIE's approval, the canal K floodgate which protects less land area than the canal G floodgate was removed from the scope. The project now focuses on the canal G floodgate which protects a greater highly productive fertile land area. It also protects Council's water supply assets and the State Highway 12 from Ruawai through to Dargaville. Without this gate, approximately 30km of existing stopbanks at \$1m/Km would require upgrading to protect the land area.

The existing Dargaville and Te Kopuru stopbank totals approximately 13km. The funding by MBIE was seen as a start towards increasing the height of the existing stopbanks. The works will see approximately 2km of the existing banks increased which aims to protect the community from inundation from storm surges and future river level rise. While the MBIE funding was made available, further funding will be required for works on the remaining 11km of stopbank.

Council approached MBIE to seek additional funding to meet the shortfall for the floodgates, however, the request was declined. To ensure Council utilised the funds and to ensure greater benefit is achieved to protect the land and community, reallocating some funds from the Te Kopuru stopbank project to complete the canal G floodgate works is a pragmatic solution.

Recommendation | Ngā tūtohunga

That the Kaipara District Council:

- a) Approves reallocating a sum of \$2.1m from the Te Kopuru Stopbank project to allow the completion of the canal G flood gate.
- b) Delegates to the Chief Executive authority to execute a contract variation with MBIE to reallocate budget from the Infrastructure Reference Group fund.

Context | Horopaki

This report has been prepared to seek Council's approval to reallocate funds from the Te Kopuru stopbank project to allow the completion of the canal G floodgate.

Two tranches of funding were provided by MBIE. The first was \$2.5m for floodgates at canal K & G in the Raupo Drainage District. The second was \$3.5m for enhancement of the existing flood defence stopbanks between Dargaville and Te Kopuru. A total of \$6m was provided by MBIE, whereas Council originally sought \$20m for both projects.

To date approximately, \$700k has been spent on preliminary investigations, design, resource consents, feasibility studies, archaeological assessment, ecological assessment and liaison with local iwi and property owners. Further design works continue for both projects.

The Raupo Drainage District covers an area of approximately 8,700 hectares of highly productive fertile land surrounding the small settlements of Te Kowhai, Nau Mai, Raupo and Ruawai. It is protected by a network of 70kms of stopbank, 140kms of canals and drains, 52 floodgates and one flood pump. To minimise the need for extensive stopbank upgrades from increasing tidal impacts and to prevent saltwater intrusion into these canals, the proposal is to install floodgate (refer figure 1).

The floodgate structures will protect Councils assets and the strategic State Highway 12 from rising river levels. The exclusion of salt water from these canals also allows for strategic freshwater storage within the catchment area.

Following preliminary design of the floodgates including a value engineering workshop held with interested parties at Ruawai, identified a shortfall of approx. \$8m for the construction of both floodgates. Council approached MBIE to seek additional funding to meet the shortfall for the floodgate, however, the request was declined. MBIE then requested Council provide additional funding to meet the shortfall for the floodgate structure. Council discounted this, as this would increase the rates that are received from the small rate payer base. Therefore, given the shortfall in funding, the canal K gate which protects less land area than canal G gate has been removed from scope. The project now focuses on the canal G gate which protects greater highly productive fertile land area and will also protect Councils water supply assets and the State Highway 12 from Ruawai through to Dargaville.

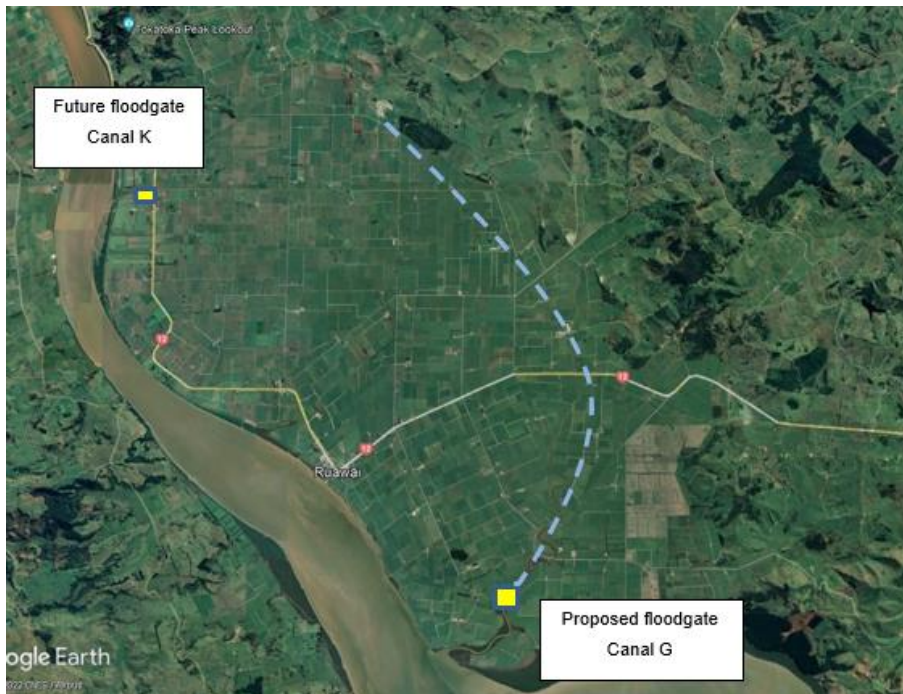


Figure 1 – Canal K & G

The existing stopbank between Dargaville and Te Kopuru protects an area of 5,460 hectares of productive fertile land surrounding the small settlements of Te Kopuru and Aratapu protected by a network of 12.7kms of stopbank, 154kms of canals and drains, 22 private and 9 district floodgates.

Around 27% of the stopbank length is 3m in height or above. The remainder varies between 2.5m and 2.75m in height. The upgrade of the existing stopbank requires compacted soil placed on the

banks to increase the high to 3.5m, the minimum height now required by Council to provide flood protection for the next 100 years.

The local communities and Iwi from the three local Marae have been involved and consulted since the inception of the project.

Discussion | Ngā kōrerorero

The Raupo drainage area represents the largest quantity of fertile land requiring protection from tidal and flood events, including a number of Councils water assets and the State Highway 12.

The land area between Dargaville and Te Kopuru is around 62% of the Raupo area being protected and is the primary transport link in this area is Pouto Road.

Options

The table below outlines two options and discusses the advantage and disadvantages for each option.

Option	Advantages	Disadvantages
<p>Option 1:</p> <p>Transfer funds from the Te Kopuru project to meet the shortfall on the Raupo project (Canal G).</p>	<ul style="list-style-type: none"> Allows Canal G floodgate structure to be completed. Minimises the need for extensive stopbank upgrades downstream of the floodgate structure. Significantly reduces the amount of infrastructure at risk from rising sea levels. Exclusion of salt water from Canal G has the potential to allow for strategic freshwater storage within the existing infrastructure. Still allows for the upgrade of some sections of the Te Kopuru stopbank. 	<ul style="list-style-type: none"> The planned Raupo Development is only partially completed (Canal G). Canal K floodgate structure unfunded at this stage. Limited length of stopbank between Te Kopuru and Dargaville will be upgraded.
<p>Option 2:</p> <p>Cancel the Raupo project and return the unspent funds to MBIE.</p>	<ul style="list-style-type: none"> No benefit 	<ul style="list-style-type: none"> Approximately 30km of existing stopbanks at \$1m/Km would require upgrading to protect the land area. The Council will need to return approximately \$700k to MBIE for the cost spent to date.

Policy and planning implications

It is unlikely that the impact of a reduced level of funding for the Te Kopuru stopbank project will materially affect the landowners and the small settlements area. It is likely in the future, that the Government may provide further funding towards climate risk mitigation works, if so, Council will continue to seek funding for the continuation of stopbank remediation.

Financial implications

There are no short-term financial implications for Council in relation to these specific projects as they are being funded by the MBIE Infrastructure Reference Group fund.

The reallocation of the budget is summarised in the table below:

Project	Current MBIE budget	Fund to be transferred	Revised MBIE budget
Raupo Floodgate Canal G	\$2.5m	+ \$2.1m	\$4.6m

Te Kopuru Stopbank	\$3.5m	- \$2.1m	\$1.4m
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The revised budget for Raupo will enable the Canal G floodgate structure to be completed for \$4.6m. The majority of the budget will be spent in FY23/24. There is a 4–5-month lead time to obtain Resource Consents from Council, the Northland Regional Council and Waikato Regional Council. The latter is the primary consent agency for dam structures in New Zealand.

The revised budget for the Te Kopuru stopbank upgrade works will enable up to 2km of stopbanks to be upgraded.

Risks and mitigations

The primary risks in respect of both flood protection projects are outlined in the following table.

Risk Item	Mitigation
Some landowners/residents may object to the disruption to their farming operations in the summer months during construction period	Discussions have commenced with the immediate landowners/residents, and they have no objections to the reduced scope of the Te Kopuru stopbank, noting that the works are part of a longer term stopbank remediation. We will continue to maintain regular communications with landowners/residents affected by the works
Council rejects transfer of funding from Te Kopuru Stopbanks project to Raupo project	Te Kopuru project can proceed as per original scope and the floodgates project would be cancelled. In this case, Council would be required to refund MBIE approx. \$700K spent on the project to date.

Impacts on Māori

At the present time, Iwi have been openly and regularly consulted during all phases of the flood protection projects. Te Uri O Hau provided formal written support for the Te Kopuru stopbank upgrade project. Similarly, a hui with marae representatives from various settlements and the Raupo Drainage Committee was held in February 2022 as part of the introductory phase of the project. This was followed by site visits and a blessing at both canal sites prior to the onsite geotechnical investigations by the consultant.

Significance and engagement | Hirahira me ngā whakapāpā

The decisions or matters of this report are considered to have a low degree of significance in accordance with Council's Significance and Engagement Policy as the funds are not rate funded. Further, discussions have taken place with immediate landowners/residents on the reduced scope with no objection. No feedback is required, and the public will be informed of Council's decision via the agenda and minutes publication of this meeting, on the website and through other channels if appropriate.

Next steps | E whaiake nei

If approved, staff will execute a variation with MBIE to reallocate the budget from their Infrastructure Reference Group fund.