Pākowhai Category 2C Community Meeting

16 May 2024



Agenda

Welcome/intros Ground rules Flood modelling update Preferred solution What happens next Q&A



Welcome and introductions

Hawke's Bay Regional Council team

Hastings District Council team

Please save questions until the end



Ground rules

Phones off or on silent

Communicate clearly and with a respectful tone

Listen with an open mind

Share 'air-time' have your say, and create space for others as well

Do not interrupt other speakers

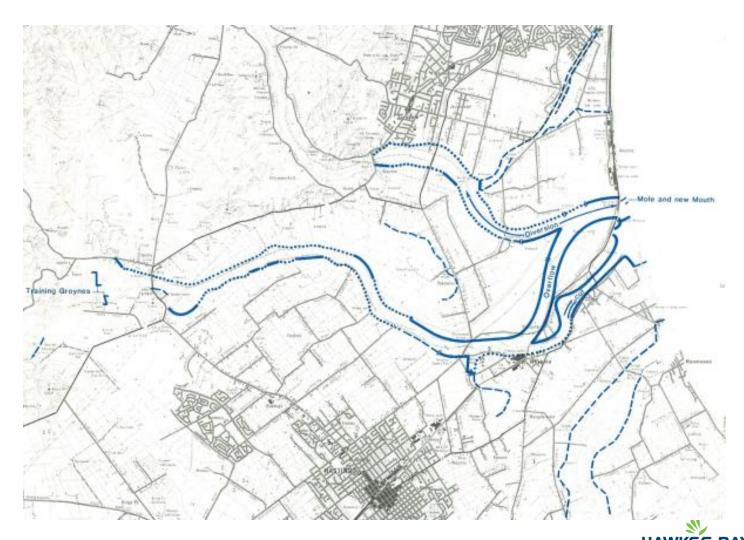
Save your questions until the speaker is finished

Keep your questions relevant to the purpose of the meeting



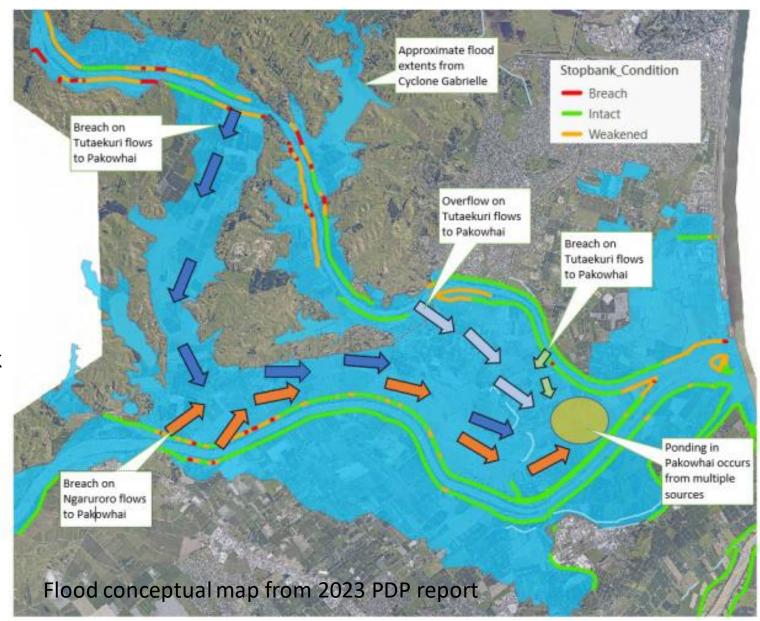
Background

- Long history of flooding in Pākowhai area during Māori and early European settlement.
- 1929 scheme included secondary banks along left bank of Tuatakuri Waimate Stream (Chesterhope to Franklin Rd).
- Old stopbanks deemed 'surplus to requirements' following stopbank upgrades in 1980s and 1990s.
- Tk-W stopbanks now largely small remnants only

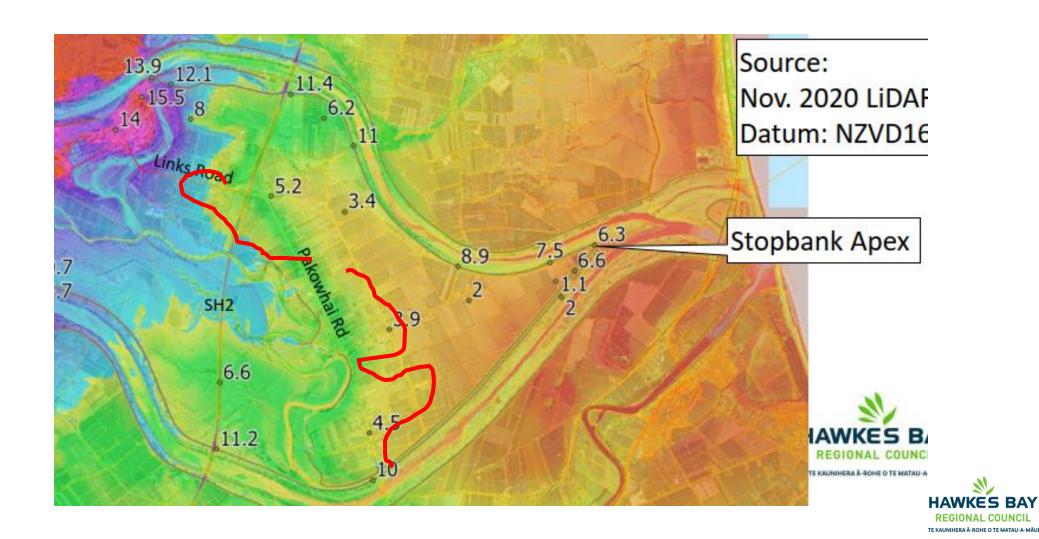


Cyclone Gabrielle

- Inflows from upstream stopbank breaches. Estimated at 800m3/s into Pakowhai.
- Ponding in Pakowhai area as lowest point to flow to. Deep flooding up to 6m.
- Breaches and overtopping from both Tk and Ng rivers.
- Water receded once breach at the confluence occurred.

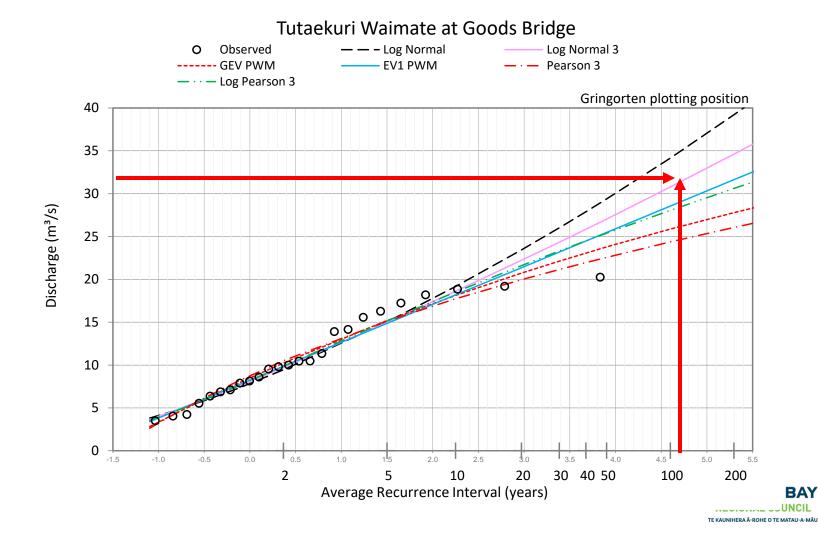


Pākowhai ground contours



Tutaekuri-Waimate flood flows

- 100 yr Internal Tutaekuri-Waimate catchment flows about 30m3/s.
- By comparison the Ngaruroro river design flood flow capacity is 4,500m3/s.
- Preference from design team and HBRC to provide additional resilience greater than just internal catchment flows.
- Mitigates overtopping risk in future events ending up in Pakowhai Cat 2.



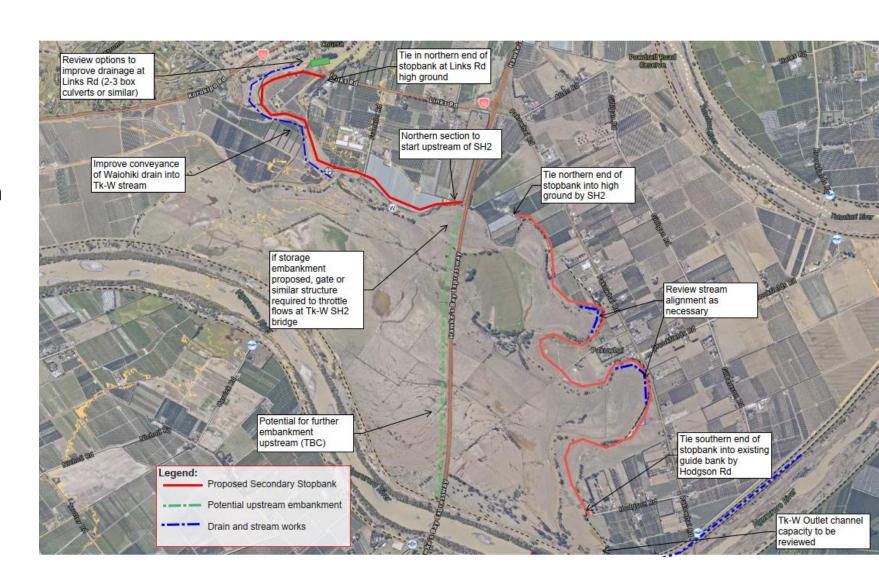
Hydrology- Cyclone Gabrielle review - NIWA

River	Pre Cyclone Peak Flow (m3/s)	Post Cyclone Peak Flow (m3/s)
Tutaekuri 1% AEP	2300	2900
Tutaekuri 0.2% AEP	3560	5200
Tutaekuri Gabriel	4800+ (One in 980 year ARI)	4800+ (One in 400 year ARI)
Ngaruroro 1% AEP	3550	3930
Ngaruroro 0.2% AEP	5000	6000
Ngaruroro Gabriel	5400 – 6000 (One in 710 year ARI)	5400 – 6000 (one in 400 year ARI)

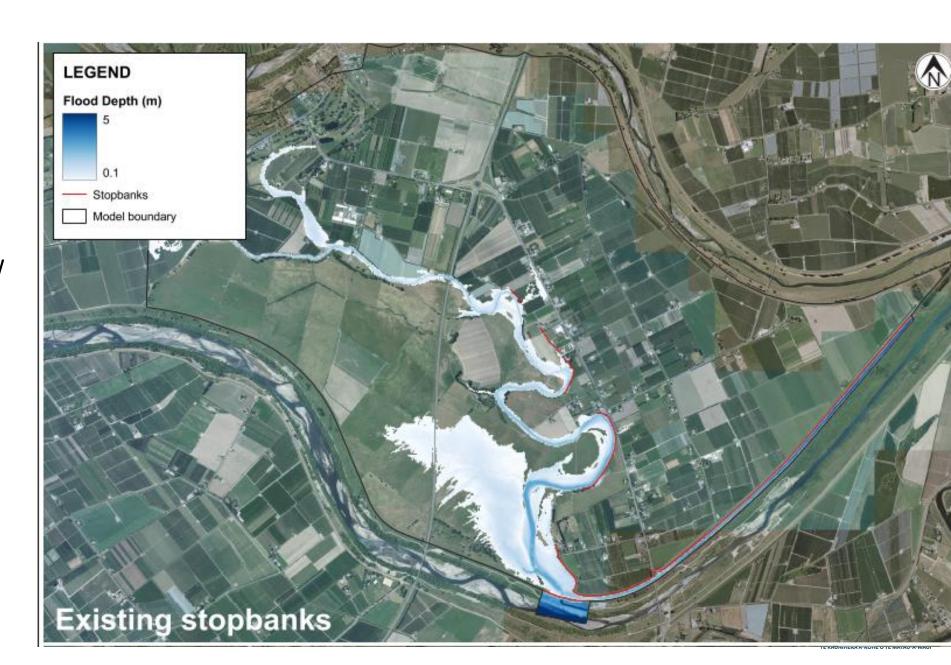


Short listed option

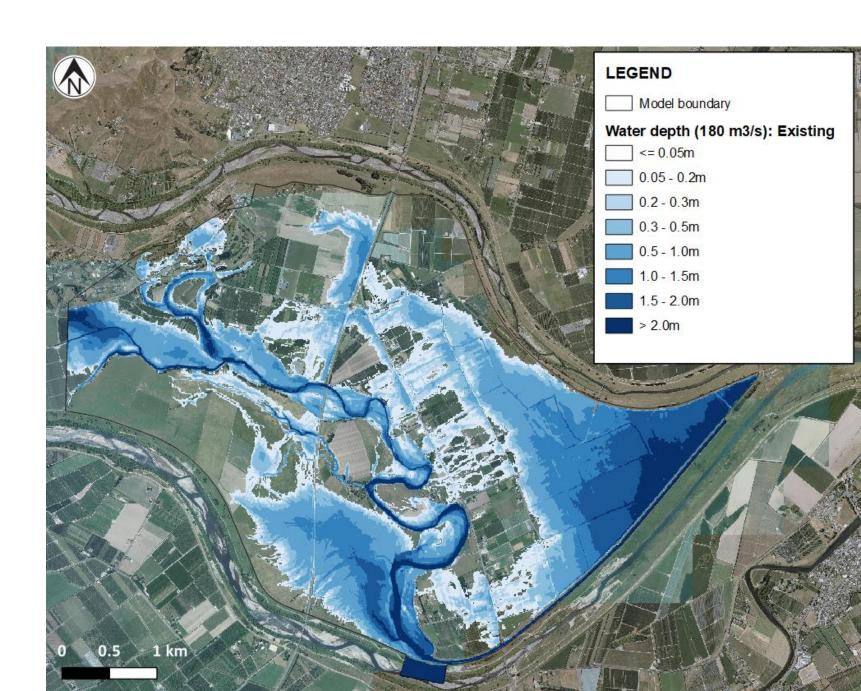
- Reinstate stopbanks along Tk-W
- Section from SH2 to Links Rd
- Section from SH2 to Hodgson Rd
- Old stopbanks to be removed and reinstated.
- Improve drainage function where necessary (i.e. Waiohiki drain).



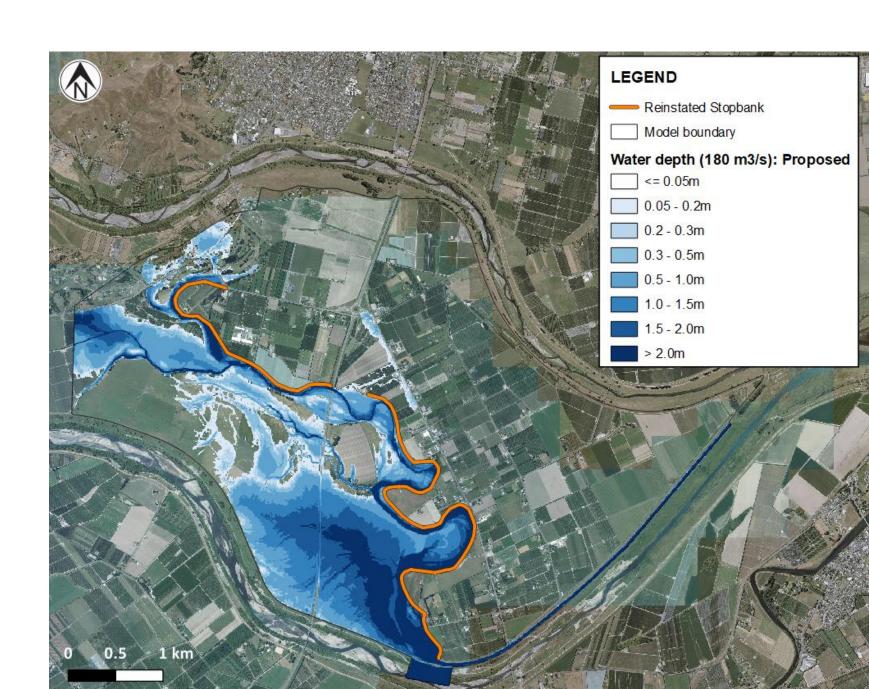
Modelled 100 yr flows- Tk-W catchment (assumes Ng in flood)



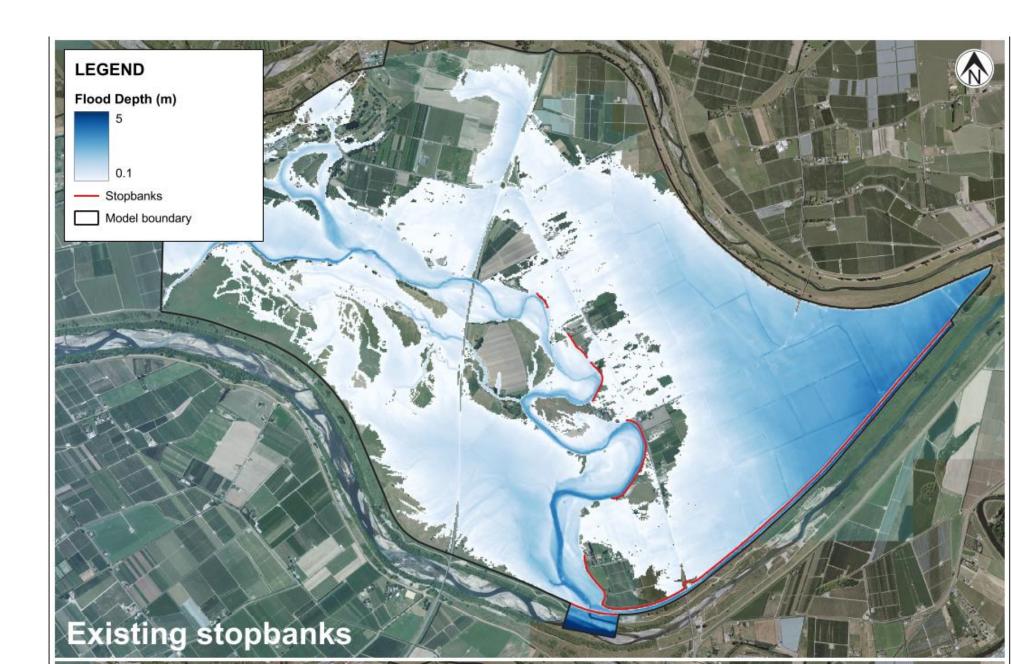
Proposed design case (180m3/s), allows for 100 yr catchment flows plus 150m3/s extra inflow.



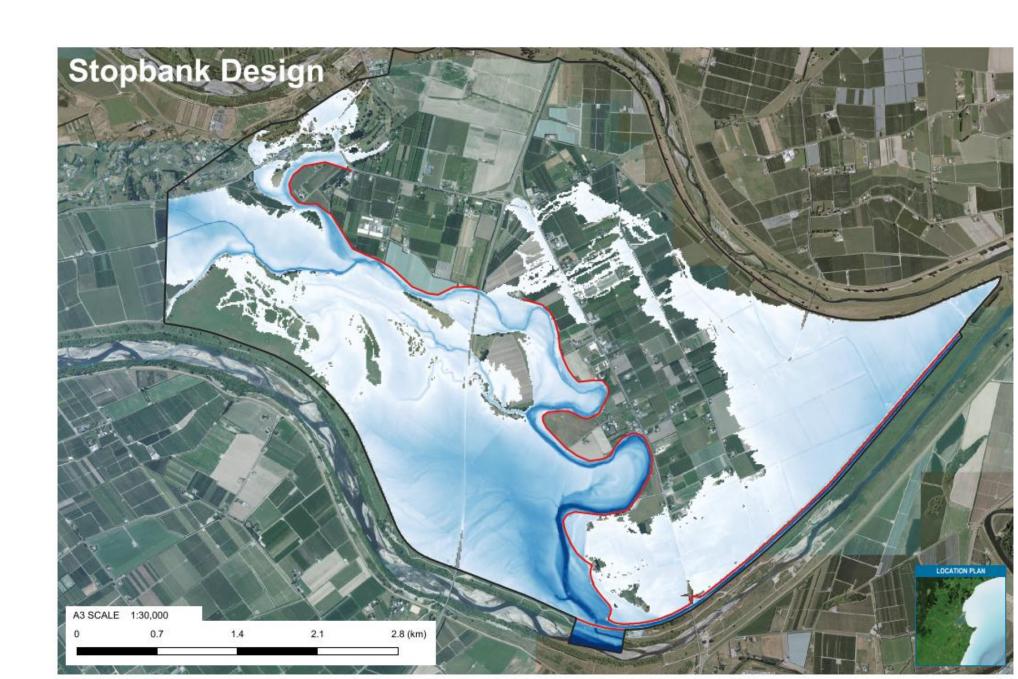
Proposed design case (180m3/s), allows for 100 yr catchment flows plus 150m3/s inflow.



Sensitivity review (250m3/s)

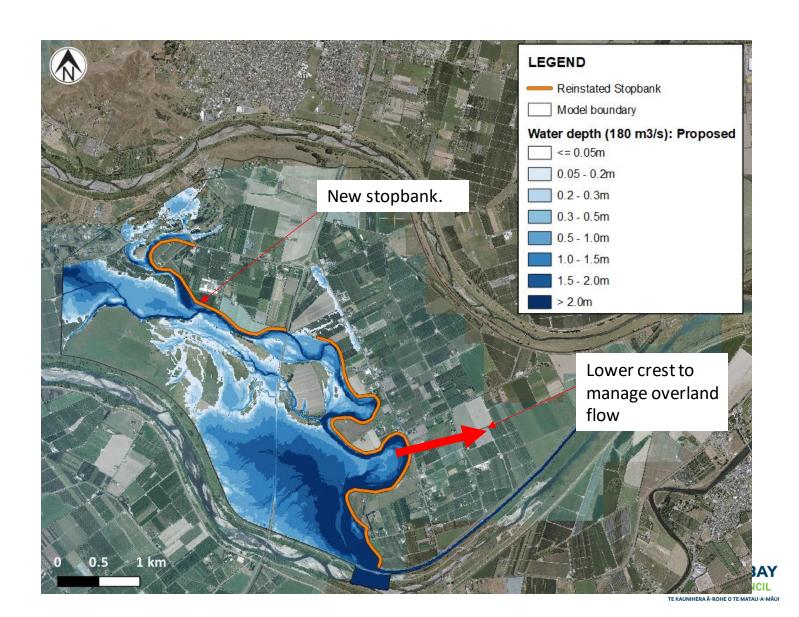


Sensitivity review (250m3/s)



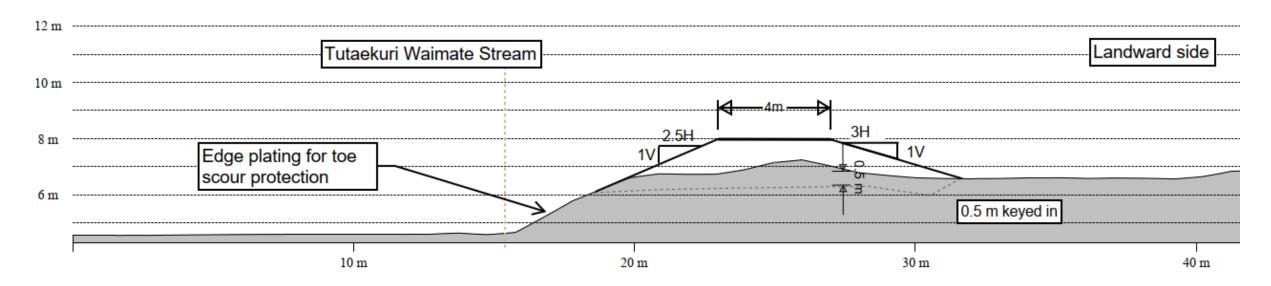
Key notes for Pākowhai

- Design limited to about 180-200m3/s.
 Beyond that starts to overflow into Hodgson Rd area.
- Additional dedicated spillway points may be required to divert flows away from Cat 2 housing.
- Stopbank may need to extend either side of SH2 to avoid small spillover in centre.



Stopbank design (example cross section)

10-15m wide and 1-2m high





Conclusions

- Pākowhai is low-lying with a history of flooding in Maori and early European times. Early scheme stopbanks have now fallen into a state of disrepair.
- Pākowhai was overwhelmed with inflows/breaches from upstream areas during Gabrielle.
- Catchment Hydrology study has indicated that the Tutaekuri-Waimate catchment flows (30m3/s) are very small compared to the main river flood flow.
- HBRC team consider that providing more resilience is prudent, given the observations from Gabrielle. However, protecting to another Gabrielle level event will be difficult to achieve.
- Secondary stopbank proposed to protect Cat 2 area and surrounding areas.
- Capacity limited to 180-200m3/s. Beyond this flow, the proposed bank will start to overtop and flows begin to pond in Cat 3 area.
- Further technical works needed to refine final alignment and design.



Next steps

- Engage with public and mana whenua.
- Refine modelling to understand potential adverse effects (i.e. look at ways to manage areas of increased flood levels).
- Commence studies (survey, ecology, geotechnical, cultural impacts).
- Review inputs from broader scheme review. Due mid-year.
- Review and refine design alignment.
- Consent and procurement.
- Construction (2025-2027-possibly two seasons)



Preferred Solution

New stopbank along true left bank of Tutaekuri-Waimate in two parts:

- Part 1 South of SH2 from Hodgson Rd to SH2 (linking into high ground)
- Part 2 North of SH2 from SH2 to Links Rd



What happens next



Next steps for category change



Timeline



Funding



Delivery plan



Pathway through categorisation

2C will move to Category 1, on confirmation that:

A sound concept that has a consenting pathway; and

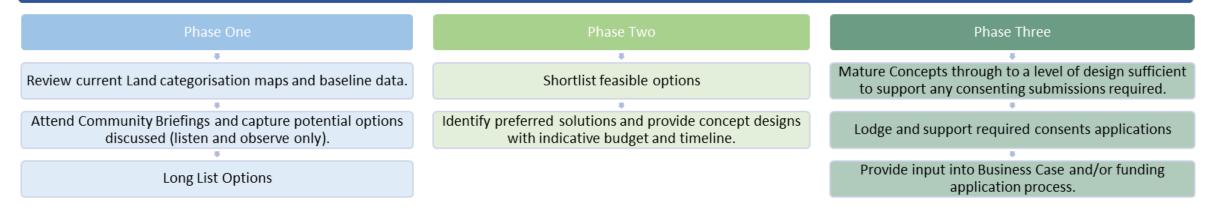
A legal interest in favour of HBRC in the relevant land;

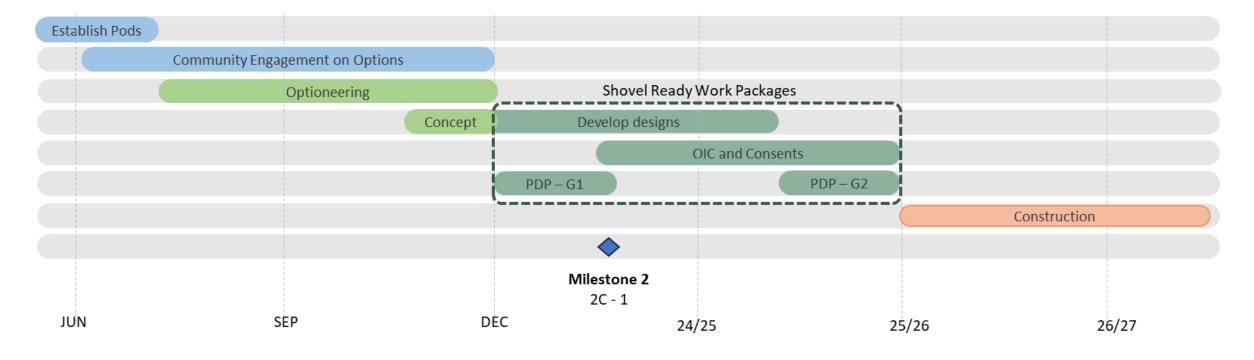
Available funding.



Pakowhai Timeline

Establish a team of engineers and consultants to review current Land categorisation Mapping and assess the options for property specific and community level flood protection initiatives with a view to develop concepts for further development and funding from the regional flood protection fund.





Crown Infrastructure Partners – Road Map

Gate one - March to June 24

- List of packages and projects
- Preliminary Design
- Detailed Project Delivery Plans
 - Cost, benefits
 - Return on investment
 - Third party requirements
 - Risk and contingency.

Gate Two – June to Sept 2025

- Developed and detailed design specifications and cost estimate.
- Check alignment with delivery plan metrics
- Resource consent application and approval
- Contractor pricing and procurement



Hastings District Council Building Consenting

Pākowhai



TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

Pathway

- Building consent guidance September to November 2023
- Hastings District Council (HDC) formed a view on building consent –
 approve in principle
- Reviewed by an independent panel: building surveyor, engineer, lawyer. Consistent with guidance
- Panel agreed in principle with HDC's decision
- HDC now in a position to approve and issue building consent.



What it means for building consenting in Pākowhai

- Set floor levels
- Issued subject to section 72 of the Building Act 2004
- Record of Title to be 'tagged' subject to inundation



Questions ...





Disaster Recovery

Te Hokinga ki te Ora i muri i te Aituā

Category 2C (Community)		
Definitions	Community level interventions are effective in managing future severe weather event risk.	
Examples	Local government repairs and enhances flood protection schemes to adequately manage the risk of future flooding events in the face of climate change effects.	
What does this mean for my claim?	No impact to claim, claim will continue to progress as normal.	
What does this mean for my ongoing insurance?	As done following the Westport and Edgecumbe events, insurers will continue to support communities whilst wide scale interventions are worked through.	
	Should these works be deferred or be shown to have not sufficiently mitigated the risks, insurers may re-evaluate ongoing cover. There could be a variety of approaches from insurers, some will continue with existing terms, some may place new risks under more scrutiny than existing customers, and others, at renewal time, may be looked at on a case-by-case basis. Depending on the level of risk, normal underwriting levers would be applied – e.g., price, excess, or exclusion of some hazards until preventative work has been completed by the relevant council(s).	

Ministry of Social Development

- If you're struggling to meet your living costs or had an unexpected bill we might be able to help you, even if you're working.
- We have different types of support and payments available depending on your situation.
- Even if you don't think you qualify, call us to talk about your situation.
- You can also visit workandincome.govt.nz and click on Check what you might get.
- Call us on 0800 559 009, 7am to 6pm Monday to Friday and 8am to 1pm, Saturday.





Help is at hand

Te Whatu Ora Health New Zealand

If you could use some extra support right now or know someone who you think is struggling, there is help available.

Talk to your GP, or find a service near you at wellbeingsupport.health.nz

Free helplines

- ✓ Chat to a trained counsellor any time—call or text 1737 for free
- ✓ The Depression Helpline call 0800 111 757 or text 4202
- ✓ Youthline call 0800 376 633 or text 234

Support for farming and rural communities

- ✓ Farmstrong, find resources at farmstrong.co.nz
- ✓ Rural Support Trust, call 0800 787 254 or visit rural-support.org.nz