# Ohiti Community Advisory Group

December 18 2024, 5.30-8.00 pm Ōmāhu Marae

Attending: Community: Mare Kupa, Carle Kupa, Chels Kupa, Sandra Gifkins, Andrew Russell, Kylie Morrison, Tessa Robin (Chair), Craig and Jen Severly, Sandra Gifkins, Malcolm Smith. Local Heavy Transport Roaduser: Ian Emmerson. Community-Appointed Science Advisor: Kit Rutherford (online) Dave McBryde. Hawke's Bay Regional Council: Te Wairama Munro, Jessica Easton, Harry Donnelly, Nic Peet, Jaime Yule, Hinewai Ormsby, Xan Harding, Andrew Casely. Hastings District Council: Councillor Ana Apatu, Gus Charteris. Admin: Neala Rosandich, Steph Howard

Apologies: Meihana Watson (Mana whenua), Te Kaha Hawaikirangi (HBRC), Amber and Willem Kupa (community)

# Main Issues Discussed

# Flood Protection Initiatives

• Updates on 11 Regional Council flood protection projects, valued at \$245 million and mostly funded by the Crown (\$200M with council covering \$45M), highlighted the urgency to mitigate flooding risks and meet government expectations from a council perspective.

### Flood Modelling and Technical Complexities

- Two Options Presented: Evaluated flow modelling options 2C and 2E to manage flood risks effectively.
- Stopbank Impact on a 1:100 and Over Design Flood: The pros and cons of both options were discussed, highlighting their varying effectiveness and limitations under extreme flood scenarios.
- Ethical concerns about shifting risks to downstream areas, with a focus on equitable protection for Ōmāhu community.
- Challenges due to limited historical data and infrastructure vulnerabilities like bridge impacts were reviewed.
- Calls were made for adopting higher flood protection standards in light of climate change.
- Discussion on the Community-led peer review

# Insurance and Section 72 Notices:

- Concerns about insurance accessibility for flood-affected areas were raised, with calls for greater transparency from insurers.
- Discussions addressed the potential removal of Section 72 notices if mitigation measures reduced flood risks, although scepticism remained among landowners.
- The council acknowledged they cannot guarantee insurance or s72 outcomes for landowners but said that mitigation efforts should help. Landowners remained cautious, citing conflicting feedback from insurance companies.
- Addressing insurance implications for affected properties and considering Section 72 notice removals.

# 1. Welcome and Whakawhanaungatanga

- The Chair, welcomed everyone to Ruatapuwāhine and opened the hui with a karakia to ground the discussions in shared purpose and to honour the collective effort required to address the community's challenges. New attendees were warmly welcomed. Dave's expertise in flow modelling was highlighted as a valuable resource for the discussions.
- Whakawhanaungatanga: Everyone introduced themselves and disclosed their interests.

# 2. Record of Last Meeting and Terms of Reference

- Minutes from the prior meeting were and approved (Moved: Jess; Seconded: Ana).
- The Terms of Reference (ToR) were ratified to reaffirm the Group's scope and operational framework.

# **Action Points**

- HBRC to input admin (food, venue etc) costs to ToR so they can be finalised.
- Minutes and documents from the last meeting will be made sent by email as well as available on a shared folder

# 3. Project Timeline

- HBRC gave an overview of the Crown funding agreement, noting that the \$200 million allocated for flood mitigation is contingent on timely progress. Of 11 regional projects, six were highlighted: Ōhiti, Pōrangahau, Waiohiki, Pakowhai, Whirinaki and Wairoa.
- The Council confirmed that dates previously presented to the community such as March 31 2024 were not in fact hard deadlines and but said what while there is no near term deadline, prolonged delays risk the withdrawal of Crown funding.
- Members of the community expressed frustration was expressed over the length of time it took the council to start meaningful conversation with the community and that any delays rest with council rather than community actions.
- Several people said how important it is for there to be clear, consistent communication with affected property owners to reduce uncertainty.
- It was generally agreed that the goal is to ensure the best solution for the community as soon as possible, and/but this can only be achieved through doing the due diligence properly.

# 4. Flow modelling and costs of different options (see presentation slides accompanying)

Modelling of two flood protection schemes was presented by Tonkin and Taylor. This was a high level summary as the detailed assessment and reporting is underway but not yet completed.

# **OPTION 2C (HBRC's preferred option)**

- Provides flood protection for all 2C properties
- Upstream impacts considered manageable, though community pushback indicated dissatisfaction among affected landowners.

# Design Components:

• Construction of stopbanks encircling the 2C property owners to redirect floodwaters.

- Raising Taihape Road to act as both a transportation route and additional flood barrier.
- Addressing flows from multiple sources, including the Ngaruroro River and smaller catchments.

### Community Impacts:

• Flooding within the 2C properties significantly reduced under this model.

• However, areas upstream experienced increased water levels.

# Hydraulic Analysis:

• Demonstrated minor velocity increases on berms near bridges but within acceptable thresholds for structural safety.

# OPTION 2E (proposed by the community)

• Adjusts the stopbank alignment westward, providing a wider pathway for Ohiwia floodwaters.

### Key Benefits:

- Reduced upstream flooding impacts by minimising water retention in critical areas.
- Addressed specific concerns about prolonged inundation and increased depths for adjacent landowners.

### Drawbacks:

• Higher cost, due to necessary acquisition of four properties, including one with residential houses, raising logistical and

# Upstream and Downstream Dynamics

- Detailed flood mapping and velocity assessments provided insights into flow patterns:
  - Option 2C created localised upstream water level increases, particularly in agricultural areas.
  - Option 2E's wider flow path alleviated some of these impacts but reduced the effectiveness of flood protection within the primary community area.

# Cyclone Gabrielle Scenario:

• Post-Cyclone Gabrielle modelling indicated the scheme could prevent catastrophic flooding but not eliminate all risks during extreme events.

financial challenges. Estimated cost of acquisition under the Public Works Act of \$3.5M

- Comparison with Option 2C:
- While Option 2E showed lower upstream impacts, it resulted in slightly less flood protection within the 2C property owners during a Cyclone Gabrielle event.

- Both models indicated overtopping of stop banks under conditions mimicking Cyclone Gabrielle's magnitude, highlighting the need for additional measures in extreme events.
- Flood modelling provided crucial insights into likely depths and velocities, emphasising the differences in protection levels and infrastructure resilience between the two options

### Technical Advice and Expert Commentary

- Historical gaps in catchment data necessitated conservative assumptions for flow modelling, particularly for smaller and less studied catchments.
- The transition to new modelling software was driven by the need for improved accuracy, particularly in bridge simulations.

### Lake Rūnanga and Overflow Channels

- A members of the community raised the potential of channelling flood flows through Lake Rūnanga, addressing choke points and improving the spillway at Lake Rūnanga as potential complementary measures.
- Experts cautioned that these interventions could require significant funding and engineering effort, potentially delaying broader flood mitigation timelines.

### Community Impacts and Prioritisation:

- Community members expressed the need for assurance that flood mitigation efforts do not exacerbate risks for downstream areas, like the Ōmāhu community.
- Concerns about properties already facing difficulties with insurance, even with flood protection options like Option 2C, were prominent.

### Future Resilience:

• Suggestions for adaptive measures, like widening flood channels or adjusting spillways, were brought up but acknowledged as outside the immediate scope and funding availability of the project.

# Discussion of Options 2C and 2E:

• While Option 2E was noted to reduce upstream flooding impacts compared to Option 2C, the additional costs and property impacts of Option 2E were debated.

• Preparation of the flow modelling and the summary was appreciated but the relative cost-benefits and tradeoffs of the two options could only be properly considered when the full reports are available and peer review is undertaken (discussion to follow)

# **Action Points**

- Tonkin and Taylor to confirm when the slides can be circulated to the group and community
- HBRC to follow up with the detailed flow modelling report in the New Year (timing TBC)

# **5. Peer Review and Technical Concerns**

#### Peer Review Needs

- Peer review of the flow modelling is critical to ensure the community can have confidence in whatever flood protection scheme is ultimately chosen
- People in the community want to ensure that peer review is independent and that their questions are adequately addressed.
- It was noted that there were different understandings about what HBRC had previously committed to support in terms of a community-led peer review and that an option was to have the community specify the questions it expects to see addressed in the council-commissioned peer review.

### Hydrodynamic Modelling Concerns:

- Community Science Advisor and other experts suggested that 2D models generally perform well but may miss critical nuances, particularly in areas with rapid flow changes, constrictions, and complex hydraulic interactions such as bridges.
- Flagged the need for further evaluation of the bridge's pressure and erosion resistance during significant flood events.
- Highlighted potential gaps in 2D modelling, specifically under complex flow scenarios, where momentum conservation and directional shifts are critical.

- Suggestions were made to incorporate three-dimensional (3D) modelling for higher precision in evaluating bridge stability and flood dynamics during extreme events.
- Tonkin and Taylor's view was that 3D modelling was not necessary and that the modelling platform used here is used across the region.

#### **Action Points**

 Community science advisors and Regional Council will meet to negotiate how best to go about a peer review that addresses the community's questions and meets the council's needs for consenting of the flood protection measure eventually chosen.

# 6. The Bridge

### **General Comments:**

- Flood Risk Mitigation: Members of the community flagged protection of the bridge as a priority in any flood protection measure and called for peer-review and potential exploration of additional options to enhance the bridge's resilience.
- Insurance Implications: The bridge's impact on reducing flood risks and subsequent insurance coverage was emphasised, with the need to communicate realistic outcomes to the community.
- **Maintenance and Upgrades**: Suggestions were made to include regular maintenance and upgrades, such as removing sediment and reinforcing weak points, to ensure long-term functionality.

### Bridge and Infrastructure Resilience

- Discussions included detailed assessments of Taihape Road Bridge's performance during floods:
  - Observations from Cyclone Gabrielle confirmed the bridge's structural integrity, with minimal scouring or damage despite prolonged inundation.

- Simulations showed velocities around the bridge remained below critical thresholds that would necessitate hard engineering interventions.
- Sediment deposition at the bridge was noted as an ongoing challenge, particularly during the receding phase of flood events.
- Proposed measures such as rock armouring and sediment removal to enhance resilience and minimise risks during future flood events.
- Velocities near the bridge under both models remained below thresholds requiring hard engineering interventions, though localised increases were noted.

### Structural Integrity

- HDC confirmed Post-Cyclone Gabrielle assessments the bridge performed well under significant inundation. The community would like to see the review reports.
- Engineering inspections indicated no major structural damage, though sediment deposits posed a concern for future events.

### Bridge Role and Community Impact

- The bridge is a critical infrastructure for over 800+ households and is as the sole access route to town.
- Concerns were raised about its ability to withstand prolonged flood events and sediment-related blockages.

# Further Modelling

- 3D modelling was suggested as a tool to assess the structural response of the bridge to dynamic flow pressures during extreme events.
- Tonkin and Taylor viewed 3D modelling as unnecessary due to the low velocities observed and the robustness of the modelling platform they are using.

# **Action Points and Recommendations**

- HDC to investigate 3D modelling to address specific community concerns and bridge-focused risks.
- HDC to make structural integrity assessment of the bridge available to the Group.

# 7. Insurance and s72 Matters

### Members of the community raised the following concerns:

**Difficulty Obtaining Insurance**: Some members expressed frustration over the difficulty of obtaining insurance even with flood mitigation measures in place. Insurance companies often rely on pre-existing data, and decisions are sometimes made without considering updated or mitigated flood risks. Property owners expressed doubts and anxiety as to whether flood mitigation would actually restore insurance coverage for the long term and pointed to their experience of systemic biases in insurers' treatment of high-risk areas.

**Premium Costs**: High premiums for insurance coverage in flood-prone areas were a recurring concern. While some insurers have committed to offering coverage, the costs are often prohibitively high until mitigation works are completed.

**Uncertainty about coverage:** Some property owners said they are being told that they only have certainty of insurance for 1 year. There was discussion about the difference between the experience of most homeowners, who have a reasonable expectation that annual insurance renewal will be renewed and the experience of Ohiti landowners who are not being given that assurance.

**Owners of properties with Section 72 notices**: Properties with Section 72 notices are particularly challenging to insure due to high-risk classifications. This issue creates significant barriers for affected homeowners, including the inability to refinance or maintain mortgages without adequate insurance. They also reported that the s72 notice deters insurers, even with proactive risk mitigation efforts.

• HDC was asked to investigate whether the process for reviewing S72 notices on the Ohiti Road properties could be started based on flood protection design rather than waiting until flood protection measures were in place. This would reduce the uncertainty and the wait times for property owners.

#### Insurance Council Feedback:

- Indicated that properties with mitigated risks could regain insurability, however could not give a guarantee.
- Residents are sceptical about what Insurance Council can secure from its members citing insurers' reliance on outdated data and slow response to updated risk profiles but welcome Councils helping advocate for solutions. Community questioned the certainty of insurance companies updating their policies, given historical conservatism.

**Timing of Support**: There was disappointment regarding the timeliness of support and communication. Affected community members felt they had been advocating for solutions and meetings with limited progress, leading to personal hardships such as forced property sales due to lack of insurance.

### Transparency and Data Sharing: 2C property owners requested

- clear and evidence-based dialogue between councils and insurers
- accurate communication on flood risk reductions to rebuild trust.

### Hastings District and Regional Councils

- offered to take instances where property owners are not getting insurance to the Insurance Council, to explore potential solutions or exemptions for affected properties. Invited property owners to contact them if they are struggling to get insurance at this time.
- indicated that flood mitigation measures could potentially improve insurance access and potentially enable the removal of Section 72 notices. However, they are unable to provide the degree of certainty that property owners want because a regulatory process must be followed (for properties with s72 notices) and they cannot ultimately determined what insurance companies will do.

# **Action Points**

- Establish formal communication channel with the Insurance Council of New Zealand to address barriers and advocate for fairer policies for Section 72 properties.
- Collect data from residents on current insurance challenges to present a stronger case to insurers.
- HDC to investigate whether it could determine whether s72s could be lifted based on the stopbank design and specifications and flow modelling and report back to the group
- HBRC and HDC are considering runnning a survey of 2C property owners across the region early in the Year.
- In the meantime, Ohiti property owners are encouraged to let HBRC and HDC know if they are unable to get insurances as 2C properties at this particular time. Email: gus.charteris@hdc.govt.nz

# 8. Action Items

Action	Responsible	To be done by
1. Record of meeting to everyone by email	Admins	Friday 20 <sup>th</sup> Dec
2. Agenda for next hui	Admins	Wednesday 15 <sup>th</sup> Jan
3. Make flow modelling analysis presentation slides available	HBRC	Friday 20 <sup>th</sup> Dec
4. Send detailed flow modelling analysis to wider community	Admins	HBRC to confirm when
<ol> <li>HDC to investigate whether it could determine whether s72s could be lifted based on the stopbank design and specifications and flow modelling</li> </ol>	HDC	HDC to confirm
<ol> <li>Ohiti property owners to inform HDC if they are unable to get insurances at this time. Email: <u>gus.charteris@hdc.govt.nz</u></li> </ol>	2C property owners	ASAP
<ol> <li>Confirm peer review and how this will be done so that community's questions are addressed</li> </ol>	HBRC + Independent Science Advisor	Both to confirm
8. Mailout hard copies of flow modelling presentation and detailed analysis and record of meetings to date to 2C landowners and landowners directly affected by the proposed Stopbank	HBRC	HBRC to confirm
<ol> <li>Cost breakdown of proposed options and associated costs and costs spent on project to date</li> </ol>	HBRC	HBRC to confirm
10. Include admin costs to ToR	HBRC	By next hui

11. Community to check personal information	Community Members	When possible
12. Send out calendar invite for next hui	Admins	ASAP (completed)
13. Conduct an insurance survey to understand the current insurance landscape for properties in flood-prone areas	HBRC	HBRC to confirm
14. Explore the value of 3D modelling for critical areas, such as bridge impacts during high-flow events	HBRC + Independent Science Advisor	HBRC to confirm
15. Provide report on structural integrity of bridge	HDC	HDC to confirm

# Next Meeting

January 22 2025

Omahu Marae or by Zoom https://us02web.zoom.us/j/89577759040?pwd=bRUEAGl4HeaETZcbo8XzodXQUY1Q5U.1 Meeting ID: 895 7775 9040 Passcode: 571509