Anzac Parade Response to the resilience report

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ANZAC PARADE FLOOD RESILIENCE

This report outlines the Anzac Parade Flood Resilience Strategy and actions being done by both Horizons Regional Council and Whanganui District Council. These actions include activities already being undertaken, as well as those undertaken in response to the 2015 flooding and the Strategy. Input from communities has been valuable to achieving action on the ground. Actions have been noted where they align with the recommendations made in the Strategy. These are summarised in section 4: <u>Summary of recommendations and actions</u>.

1 Anzac Parade Flood Resilience Strategy

The Anzac Parade Flood Resilience Strategy 2022-2122 was developed with the aim of improving the wellbeing of people living along ANZAC Parade who face severe flood risk. Technical analysis, deliberation and joint problem solving let to its formation. It was determined that short-term actions (1-10 years) were those appropriate to focus on given pending Climate Adaptation legislation and national direction on matters central to flood resilience. The key actions identified were:

- 1. Identify communities, businesses, taonga and assets exposed to riverine and coastal hazards
- 2. Prioritise most at-risk communities
- Improve and maintain up-to-date flood risk modelling (riverine and coastal) in a changing climate in a manner that aligns with information systems in the region's Territorial Authorities
- 4. Strengthen flood risk and resilience governance in the face of climate change

The recommendations were:

- Horizons Regional Council (HRC) does not proceed with stopbank improvements that would materially reduce flood risk, rather attention be focused on a buy-out programme with/without community-based relocation
- 2. A co-designed medium- to long-term flood resilience strategy be prepared for Anzac Parade
- 3. Improvements to the early warning system
- 4. Improvements in the evacuation system
- 5. Improved controls on nuisance flooding
- 6. Preparation of flood proofing guidance and investigate public-private partnership options for implementing household flood proofing
- 7. Critical analysis of and practical steps to strengthen the alignment of HRC and Whanganui District Council (WDC) regulatory provisions and operational procedures and practices that have a bearing on flood risk reduction and resilience building in a changing climate
- 8. Initiation of a comparative analysis of existing legal mechanisms, governance arrangements and funding options for pre-flood and post-flood purchase of the most at-risk homes along Anzac Parade to inform the medium- to long-term strategy co-design process

2 Actions at a regional scale

Identification of the region's communities, businesses, taonga and assets exposed and vulnerable to riverine and costal hazards will be addressed iteratively at a regional scale through risk assessments and spatial planning. More local impacts (businesses, specific assets and taonga) are likely to fall to Territorial Authorities to identify. Improve and maintain up-to-date flood risk modelling (riverine and coastal) in a changing climate in a manner that aligns with information



systems in the region's Territorial Authorities. Flood modelling is to be reviewed following the release of NIWA's updated regional climate projections, expected in 2024. A spatial information strategy is proposed to ensure councils across the region have access to an adequate and consistent dataset. The Local Government Flood Resilience Co-investment Fund will enable upgrades to regional mapping to provide publicly available information on flood risk, and a regional flood vulnerability assessment.

Prioritising most at-risk communities in the region is embedded in the Horizons' Climate Action Strategy and the Climate Action Joint Committee (CAJC) Joint Action Plan. It is a question of principle rather than an exercise in ranking and list-making with no additional funding proposed.

One aspect of strengthening flood risk and resilience governance in the face of climate change recommended was to strengthen the capabilities of the CAJC to enable and deliver regional climate action. The powers of the CAJC were strengthened in early 2023. The role of the Committee will continue to evolve over the next few years, to ensure an effective response to local issues. The operation of the committee is funded by Horizons but response to specific issues will be considered on their merits.

An area of focus for both the CAJC and Horizons is to strengthen Te Tiriti o Waitangi-led regional risk and resilience governance capabilities. This includes learning from and raising awareness about the transformative potential of Te Ao Māori and mātauranga Māori in addressing natural hazard risk; including the cultural significance and legal personhood of the Whanganui awa, other rivers, the coast, and whenua. Responses anticipated are at a local scale as opposed to regional. Whilst resource and institutional constraints are aimed to be met, the shape and pace of work in this area must be tangata whenua led. Work in this area is either through existing budgets or subject to LTP funding.

Another recommendation is identifying and closing regulatory loopholes that enable new development in locations exposed to climate-compounded flood risk and extreme events. National direction creates regulatory tensions that are not always able to be overcome. Spatial planning may assist in overcoming this issue.

Dependent somewhat on future legislation is critically assessing the most effective and equitable ways to institutionalise cost-sharing of interventions to manage extreme flood risk across the region. Horizons is reviewing the rationale, coverage and funding of flood control and drainage schemes, to ensure alignment with broader environmental and community outcomes. An Integrated Catchment Management project is proposed to combine the River Management and Flood Protection activities as part of the LTP.

Engagement in strategic discussions with key Government role-players and bodies like LGNZ about regional lessons learned on institutionalising flood resilience is another recommendation. This includes addressing open questions in drafting Climate Adaptation legislation through the RMA law reform process. Horizons staff actively engage with peers in other regions and central government to learn from experience elsewhere and understand the national context. This occurs as part of usual business, including through relationships with LGNZ groups such as Te Uru Kahika. The extent to which TA staff do so varies, due to capacity constraints.

Other recommendations are awaiting direction through the Climate Adaptation Bill which is yet to be tabled.

3 Strategic actions for Anzac Parade

In the context of Anzac Parade, some recommendations also require direction through the Climate Adaptation Bill. Whanganui District Council and Horizons Regional Council have collaborated on many of the following actions.



Separately, the recommendation that Horizons does not proceed with stopbank improvements that would materially reduce flood risk (e.g., 1:100 or 1:200 year protection), but focus attention on ways to enable a buy-out programme with/without community-based relocation is acknowledged.

Another recommendation was for improvements to the early warning system to enable easy access for diverse residents, including different age, ethnic, linguistic, etc. as well as groups with variable internet and telephonic access in urban, town and rural settings. Corroboration of the accuracy and timeliness of warnings given different storm trajectories and weather conditions; and exploration of innovative ways to keep residents up to date given the high turnover of people along Anzac Parade was also recommended. Whanganui has one of the country's best early warning systems in place. Network upgrades were completed following the 2015 floods, along with implementation of the National Emergency Management Agency's (NEMA) geofence alert system. An upgrade to IVR is in progress. Anticipated hazard and river height, among other factors, informs a decision point for each warning level. The decision sits with the local controller. The aim is for early warning and wide safety margins. Horizons Regional Council is also investigating a flood siren for the area. This work occurred through existing budgets, primarily that of the Horizons Emergency Management Team. The Local Government Flood Resilience Co-investment Fund will enable upgrades to Horizons' flood forecasting system to improve predictions of river flows and inform flood event management.

Improvements to the evacuation system, distilling and applying lessons learned from recent evacuation orders and processes along Anzac Parade and the wider region. Dependent on time availability, "prepare to" alerts precede "evacuate now/by" alerts through media, social media and radio, as well as via vehicle mounted voice alert siren systems. Door knocking also takes place where possible to provide occupants of what to do and where to go. Road blocks and cordons are also used when necessary. Individual training sessions occur at least annually. Evacuation is a Whanganui District Council responsibility so Horizons does not fund this.

In November of 2023, the Manawatū-Whanganui Civil Defence Emergency Management Group undertook community engagement to raise further awareness with residents about early warning systems and Whanganui District Council's evacuation procedures.

Improved controls on nuisance flooding, including ongoing work on the Matarawa Stream diversion and maintenance practices; and infrastructure upgrade programme. An egress gate has been installed on the stopbanks of Kōwhai Park to help increase flood resilience in the area. The gate will allow floodwaters to return to the main stem of the awa quicker, rather than remaining ponded within Kōwhai Park and the Anzac Parade area. Advice is provided on flood proofing homes and raising things in garages and sheds using pallets. No further upgrade work for the Matarawa Stream are proposed in the draft infrastructure strategy as part of the LTP.

Preparation of flood proofing guidance and the investigation of public-private partnership options for implementing household flood proofing is a TA function as the building control authority. No funding is currently proposed by Horizons Regional Council.

The critical analysis of and practical steps to strengthen the alignment of Horizons Regional Council and Whanganui District Council regulatory provisions and operational procedures and practices that have a bearing on flood risk reduction and resilience building in a changing climate is another action. E.g., District Plan rules to build flood resilience along Anzac Parade; policy and plan provisions that need to be reconsidered in the light of potential future managed retreat/relocation of at-risk communities. The most obvious opportunity for this to be done comprehensively will be as a response to the RM-replacement legislation and the Climate Adaptation Bill which is yet to be tabled. Given the uncertainty in this space through a new government, this will be revisited once there is more clarity in the space.



4 Summary of recommendations and actions

Strategic short-term (1-10 years) actions for the Manawatū-Whanganui region			
Recommendation	Action taken	Funding	
Identify the region's communities, businesses, taonga and assets exposed and vulnerable to riverine and coastal hazards.	This will be addressed iteratively at a regional scale through risk assessments and spatial planning. More local impacts (businesses, specific assets and taonga) are likely to fall to Territorial Authorities to identify.	The Local Government Flood Resilience Co-investment Fund will enable upgrades to regional mapping to provide publicly available information on flood risk, and a regional flood vulnerability assessment.	
Improve and maintain up-to-date flood risk modelling (riverine and coastal) in a changing climate in a manner that aligns with information systems in the region's Territorial Authorities.	Flood modelling is to be reviewed following the release of NIWA's updated regional climate projections, expected in 2024. A spatial information strategy is proposed to ensure councils across the region have access to an adequate and consistent dataset.		
Prioritise most at-risk communities in the region.	This is embedded in Horizons' Climate Action Strategy and the Climate Action Joint Committee (CAJC) Joint Action Plan. It is a question of principle rather than an exercise in ranking and list-making	N/A	
Strengthen flood risk and resilience governance in the face of climate change:			
 Strengthen capabilities of the Climate Action Joint Committee to enable and deliver regional climate action. 	The powers of the CAJC were strengthened in early 2023. The role of the Committee will continue to evolve over the next few years, to ensure an effective response to local issues.	The operation of the committee is funded by Horizons but response to specific issues will be considered on their merits.	

 Strengthen Te Tiriti o Waitangi-led regional risk and resilience governance capabilities, including learning from and raising awareness about the transformative potential of Te Ao Māori and mātauranga Māori in addressing natural hazard risk; including the cultural significance and legal personhood of the Whanganui awa, other rivers, the coast and whenua. 	An area of focus for both the CAJC and Horizons is to strengthen Te Tiriti o Waitangi-led regional risk and resilience governance capabilities. This includes learning from and raising awareness about the transformative potential of Te Ao Māori and mātauranga Māori in addressing natural hazard risk; including the cultural significance and legal personhood of the Whanganui awa, other rivers, the coast, and whenua. Responses anticipated are at a local scale as opposed to regional. Whilst resource and institutional constraints are aimed to be met, the shape and pace of work in this area must be tangata whenua led.	Work in this area is either through existing budgets or subject to LTP funding.
 Initiate strategic dialogue with key actors in insurance, banking and critical infrastructure to address open questions about flood risk reduction and resilience building in a changing climate. 	This action is awaiting direction through the Climate Adaptation Bill which is yet to be tabled.	N/A
 Clarify legal liability facing local government in a changing climate, especially with respect to past and forthcoming decisions about development in flood-prone localities. 	This action is awaiting direction through the Climate Adaptation Bill which is yet to be tabled.	N/A
 Identify and close regulatory loopholes that enable new development in locations exposed to climate-compounded flood risk and extreme events. 	National direction creates regulatory tensions that are not always able to be overcome. Spatial planning may assist in overcoming this issue.	N/A



 Critically assess the most effective and equitable ways to institutionalise cost-sharing of interventions to manage extreme flood risk across region. 	Dependent somewhat on future legislation is critically assessing the most effective and equitable ways to institutionalise cost-sharing of interventions to manage extreme flood risk across the region. Horizons is reviewing the rationale, coverage and funding of flood control and drainage schemes, to ensure alignment with broader environmental and community outcomes.	An Integrated Catchment Management project is proposed through the 2024-35 LTP to ensure River Management/Flood Protection activities are aligned to future needs.
 Engage in strategic discussions with key Government role-players and bodies like LGNZ about regional lessons learned on institutionalising flood resilience and address open questions in drafting Climate Adaptation legislation through the RMA law reform process. 	Engagement in strategic discussions with key Government role-players and bodies like LGNZ about regional lessons learned on institutionalising flood resilience is another recommendation. This includes addressing open questions in drafting Climate Adaptation legislation through the RMA law reform process. Horizons staff actively engage with peers in other regions and central government to learn from experience elsewhere and understand the national context. The extent to which TA staff do so varies, due to capacity constraints.	This occurs as part of usual business, including through relationships with LGNZ groups such as Te Uru Kahika
 Investigate options for establishing a fund for a regional buy-out programme of priority at-risk houses and communities pre-flood. 	This action is awaiting direction through the Climate Adaptation Bill which is yet to be tabled.	N/A
 Investigate options for institutionalising proactive mechanisms to buy-out priority flood damaged properties post-flood. 	This action is awaiting direction through the Climate Adaptation Bill which is yet to be tabled.	N/A

Strategic actions to build enduring flood resilience along Anzac Parade



Recommendation	Action taken	Funding
RECOMMEND that Horizons Regional Council does not proceed with stopbank improvements that would materially reduce flood risk (e.g., 1:100 or 1:200 year protection) but focus attention on ways to enable a buy-out programme with / without community-based relocation.	This recommendation is acknowledged.	N/A
Once Climate Adaptation legislation is promulgated, it is RECOMMENDED that a co-designed medium- (10-50y) to long-term (50-100+y) flood resilience strategy be prepared for Anzac Parade, with a focus on institutionalising a buy-out programme with / without community-based relocation.	This action is awaiting direction through the Climate Adaptation Bill which is yet to be tabled.	N/A
RECOMMEND improvements to the early warning system. To enable easy access for diverse residents, including different age, ethnic, linguistic, etc. groups with variable internet and telephonic access in urban, town and rural settings; corroborate accuracy and timeliness of warnings given different storm trajectories and weather conditions; and explore innovative ways to keep residents up to date given the high turn-over of people along Anzac Parade.	Whanganui has one of the country's best early warning systems in place. Network upgrades were completed following the 2015 floods, along with implementation of the National Emergency Management Agency's (NEMA) geofence alert system. An upgrade to Interactive Voice Response (IVR) is in progress. Anticipated hazard and river height, among other factors, informs a decision point for each warning level. The decision sits with the local controller. The aim is for early warning and wide safety margins. In November of 2023, the Manawatū- Whanganui Civil Defence Emergency Management Group undertook community engagement to raise further awareness with residents about early warning systems and	This work occurred through existing budgets, primarily that of the Horizons Emergency Management Team. The Local Government Flood Resilience Co- investment Fund will enable upgrades to Horizons' flood forecasting system to improve predictions of river flows and inform flood event management.



	Whanganui District Council's evacuation procedures.	
RECOMMEND improvements to the evacuation system. Distil and apply lessons learned from recent evacuation orders and processes along Anzac Parade and the wider region.	Dependent on time availability, "prepare to" alerts precede "evacuate now/by" alerts through media, social media and radio. Door knocking also takes place where possible to provide occupants of what to do and where to go. Road blocks and cordons are also used when necessary. Individual training sessions occur at least annually. In November of 2023, the Manawatū-Whanganui Civil Defence Emergency Management Group undertook community engagement to raise further awareness with residents about early warning systems and Whanganui District Council's evacuation procedures.	Evacuation is a WDC responsibility so Horizons does not fund this.
RECOMMEND improved controls on nuisance flooding, including ongoing work on the Matarawa Stream diversion and maintenance practices; and infrastructure upgrade programme.	Improved controls on nuisance flooding, including ongoing work on the Matarawa Stream diversion and maintenance practices; and infrastructure upgrade programme. An egress gate has been installed on the stopbanks of Kōwhai Park to help increase flood resilience in the area. The gate will allow floodwaters to return to the main stem of the awa quicker, rather than remaining ponded within Kōwhai Park and the Anzac Parade area. Advice is provided on flood proofing homes and raising things in garages and sheds using pallets.	No further upgrade work for the Matarawa Stream are proposed in the draft infrastructure strategy as part of the LTP.
RECOMMEND preparation of flood proofing guidance and investigate public-private partnership options for implementing household flood proofing.	Preparation of flood proofing guidance and the investigation of public-private partnership options for implementing household flood	No funding is currently proposed.



	proofing is a TA function as the building control authority.	
RECOMMEND critical analysis of and practical steps to strengthen the alignment of Horizons Regional Council and Whanganui District Council regulatory provisions and operational procedures and practices that have a bearing on flood risk reduction and resilience building in a changing climate. e.g., District Plan rules to build flood resilience along Anzac Parade; policy and plan provisions that need to be reconsidered in the light of potential future managed retreat / relocation of at-risk communities.	The most obvious opportunity for this to be done comprehensively will be as a response to the RM-replacement legislation. Given the uncertainty in this space through a new government, this will be revisited once there is more clarity in the space.	N/A
RECOMMEND initiation of a comparative analysis of existing legal mechanisms, governance arrangements and funding options for <i>pre-flood</i> and <i>post-flood</i> purchase of the most at-risk homes along Anzac Parade to inform the medium- to long-term strategy co-design process.	This action is awaiting direction through the Climate Adaptation Bill which is yet to be tabled.	N/A







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