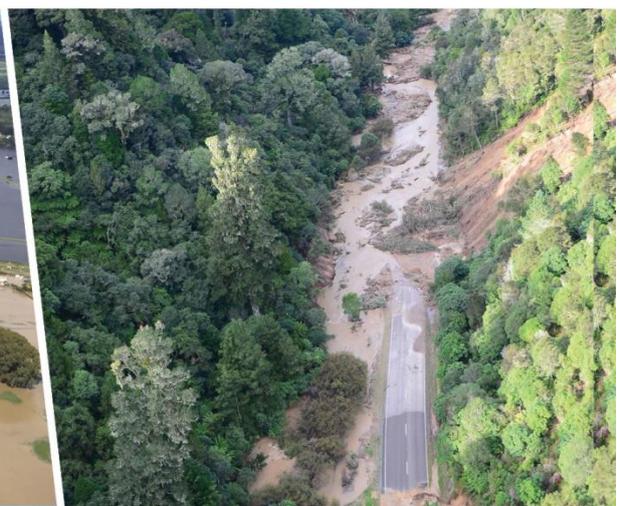


Whakatāne District Recovery Debrief

April 2017 – ex-cyclones Debbie and Cook



Reconnect – tūhononga **Restore** – whakahou **Rebuild** – waihanga **Regenerate** – whakatipu



Message from the Whakatāne District Local Recovery Manager

Numerous agencies, groups, and individuals at every level have contributed, and continue to contribute to the Whakatāne District Recovery, following the massive flood damage caused by ex-cyclone Debbie in April 2017. There remains an ongoing focus on supporting, helping to rebuild, and strengthening our community's future wellbeing. There will be a deep scar left within the whole community of Whakatāne, but the actions and responses of many who have helped the recovery process, have contributed to the community's healing more quickly, leaving each person, family and community in a more resilient position.

The shared learnings arising from this process will contribute to improved responses and recovery in future testing times.

This collective document can only be a snapshot of all the activities undertaken, but is produced to provide the local and wider NZ communities with an insight and some "tools" that may help during future disaster recovery efforts.

Acknowledgements

We acknowledge the Whakatāne District Council for its dedication to supporting its community and the Recovery Project at all levels. We would also like to thank the Ministry of Civil Defence and Emergency Management and the Bay of Plenty Emergency Management Group for ongoing support.

Numerous agencies have contributed to this document's insights, and these learnings have been balanced with the desire to provide a readily-available and encompassing resource.

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Abbreviations

BOPDHB	Bay of Plenty District Health Board
BOPEM	Bay of Plenty Emergency Management
BOPRC	Bay of Plenty Regional Council
BOPRST	Bay of Plenty Rural Support Trust
EBCoC	Eastern Bay Chamber of Commerce
EBET	Eastern Bay Energy Trust
EQC	Earthquake Commission
LHP	Liveable Homes Project
LRO	Local Recovery Office
MBIE	Ministry of Business, Innovation and Employment
MCDEM	Ministry of Civil Defence and Emergency Management
MOH	Ministry of Health
MPI	Ministry for Primary Industries
MSD	Ministry of Social Development
NASH	Ngāti Awa Support Services
NAVA	Ngāti Awa Volunteer Army
NRO	National Recovery Office
RAG	Rural Advisory Group
RAS	Residential Advisory Service
WDC	Whakatāne District Council
WHP	Welcome Home Pack

1 The Event

On 6 April 2017, the Whakatāne District experienced widespread damage to homes, property, businesses, farms, the natural environment and infrastructure as a result of the events generated by ex-Tropical Cyclone Debbie and ex-Tropical Cyclone Cook. During this event, 1,600 people were evacuated from Edgecumbe town and the surrounding area after the Rangitāiki River stopbank breached on College Road, causing extensive flooding. A number of residents in Poroporo, Rūātoki, Thornton and Tāneatua also had to leave their homes and some rural communities were isolated for more than a week.

A local state of emergency for the Whakatāne District was declared on 6 April 2017, in response to ex-Tropical Cyclone Debbie. For our district, this was a large-scale event. Some of the impacts are illustrated below.



Stop bank breaches in Edgecumbe and Poroporo caused widespread flooding causing 1,900 people to be evacuated from their homes.



1,400 hectares of farm land was under water for 10-14 days.



5,500 COWS TRUCKED OUT
4,086 cows were trucked out of the area in the first 48 hours after the breach in Edgecumbe.



River bank erosion
1 hectare of river bank erosion deposited 24,000 cubic metres of soil into the Waimana river – a volume that would fill the Aquatic Centre’s pools 43 times.



Significant roading damage isolated some rural communities for over a week.



Nearly 3,500 tonnes of sediment has been taken to landfill from EQC section clearing operations.



17 TONNES
*Over 17 tonnes of **whiteware and steel** have been recycled.*



The Ministry of Social Development provided assistance to over 3200 people.



7.0k TONNES OF WASTE
More than 7,000 tonnes of waste has been sent to landfill from clean-up in Edgecumbe, more than the volume the whole Whakatāne District would normally produce in 6 months.



1.5k+ VOLUNTEERS
Some 1,500 registered volunteers contributed more than 6,800 hours of work, over 11 days, to the NAVA clean-up effort.



50% of families were back in their homes eight months after the event (by Christmas).



\$500k was distributed to businesses (\$200k) and farmers (\$300k) through the Business Recovery Grant and the Bay of Plenty Primary Sector Recovery Grant.



15 homes were severely damaged and needed to be demolished or removed.



Over 300 homes needed repair to be habitable again.



Around 260 free building consent applications for flood repairs have been processed by Council



House insurance status varied for yellow stickered homes. 54% rebuilt through insurers, 30% cash settled, 5% were uninsured, and 11% had unknown insurance status.

2 Purpose of document

This document reviews the actions and processes taken by the Whakatāne District Recovery Team in relation to the flood and cyclone event in April 2017.

It aims to identify features that worked well and lessons for improvement. It does this in two different ways:

1. Sharing our successes and the challenges/lessons learned for each project in each recovery environment.
2. Identifying and discussing key themes across all parts of recovery.

As well as capturing our 'recovery story', a compendium of resources (toolbox) is included that can be re-used by the Council, or any other Council, in the event of a future flood or natural disaster.

This document does not cover the 'response' phase prior to transition to recovery, or the recovery roles of the Bay of Plenty Civil Defence Emergency Management Group, the Ministry of Civil Defence Emergency Management or the National Recovery Office. It focuses on the Whakatāne District Recovery Team's actions, processes and experiences during the recovery phase. It also aims to provide a balance of all the viewpoints presented through the debrief process.

3 How to use this document

This document is organised into three main parts:

PART A – DECONSTRUCTING RECOVERY ACTIVITIES. A description of each recovery activity and its successes and challenges/lesson learned forms the basis of Part A. This part aims to be practical and operationally-based. It provides a starting point and the benefit of our lessons learned for those that may also be involved in recovery activities.

PART B – AN OVERVIEW OF KEY THEMES AND INSIGHTS. Analysis of responses highlighted some key themes and insights into the recovery process. Part B explores these key themes, and provides insights that may inform planning for future recovery processes. This provides a high level, strategic discussion piece, rather than a practical guide, as in Part A.

PART C – TOOLBOX OF TEMPLATES, PROCESSES AND PROCEDURES. A collection of resources to use, adapt and improve. Part C has been compiled in response to the limited amount of information and resources available in New Zealand on the topic of recovery. The toolbox is a compilation of templates, resources, plans, processes and flow charts used across all recovery activities. The toolbox does not necessarily represent 'best practice', as many templates and processes were developed 'on the fly', but it is hoped that they will provide a starting point for others to use, adapt and improve on.

It is anticipated that by sharing our recovery story (the good, the bad and the ugly), the range of learning experiences, the pathways taken and the tools used to realise our recovery objectives, others will benefit in years to come.

4 Methodology

Debrief sessions were used to share lessons learned in a systematic way. Structured debrief sessions six months into the recovery project helped the recovery team learn from their successes, as well as identify factors they could have managed differently. Workshops were held with some key stakeholders and other external agencies provided written debrief material.

An output from this is an account of what the recovery team did to address the issue (including strengths and learnings) and also a toolbox of resources.

5 The Team

A Recovery Team was set up to support people in affected communities to recover. The formation of the team was always about creating the right environment for the recovery team to wrap-around affected communities. To do this, the Local Recovery Manager drew together a collaborative and diversely-skilled team.

The core team structure reflected the following environments and is outlined in figures 1, 2 and 3. As shown in Figure 1, the Ministry of Civil Defence and Emergency Management’s (MCDEM) four environments (social, built, natural and economic) were loosely used to structure the team. Figure 1 illustrates that ‘working in partnership with iwi’ was integrated across all four environments to reflect the importance of Iwi in our District. Figure 2 sets out the objectives and success factors for each environment and figure 3 provides the team structure at the commencement of the Recovery Office.

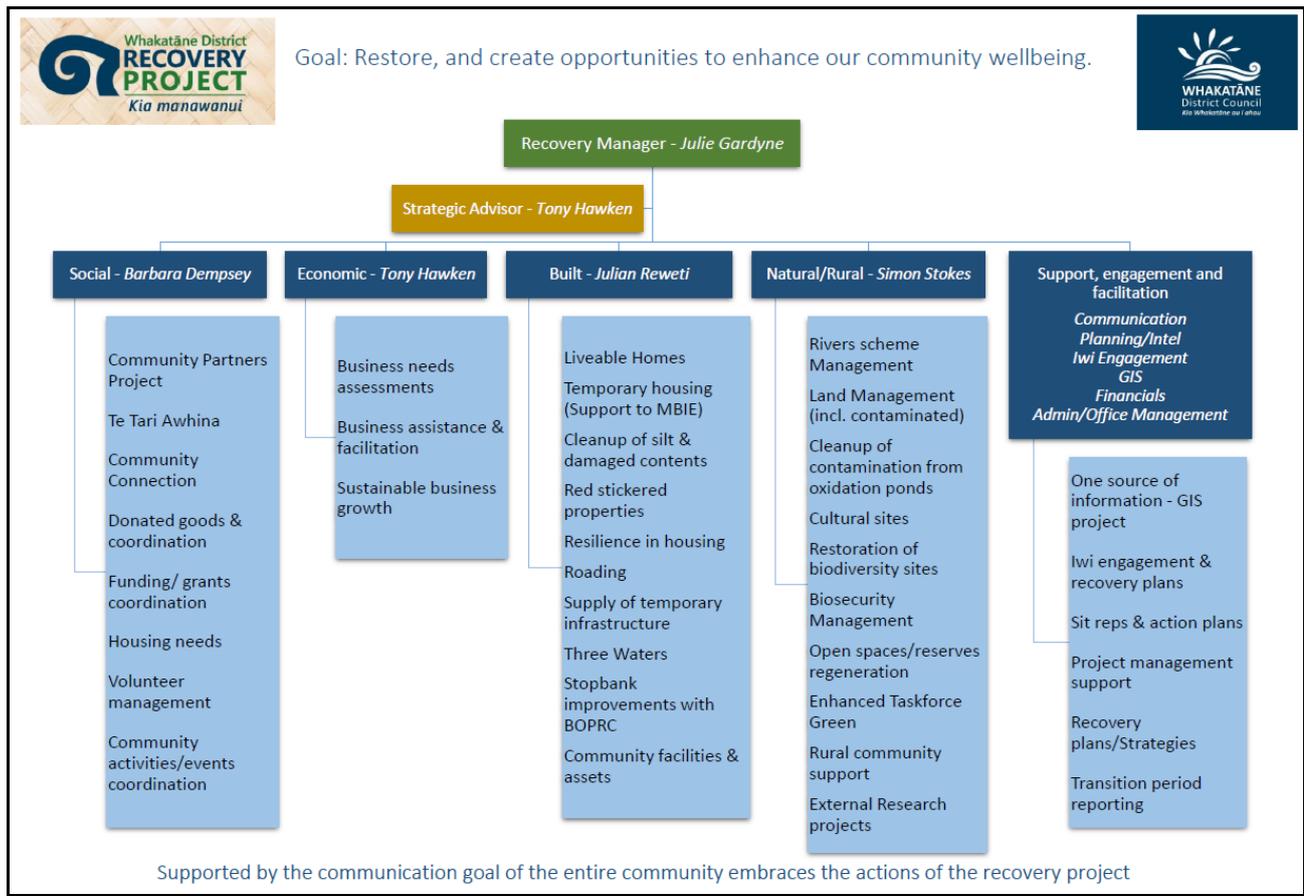
Figure 1: The recovery environments and their relationship with ‘working in partnership with iwi.’



Figure 2: Five recovery environments illustrating objectives and success factors for each.

 <p>Reconnect Tūhononga</p>	<p>RECONNECTING OUR COMMUNITY</p> <p>Communities that have been adversely affected by flooding are restored to what they were previously, and where possible, enhanced.</p> <p><i>Welfare and Wellbeing</i> Essential needs of individuals and whānau are met, and community health & wellbeing are supported.</p> <p><i>Community Home by Christmas</i> Community spirit, pride and resilience are strengthened. Families / whānau have moved back into their homes by Christmas.</p>
 <p>Restore Whakahou</p>	<p>RESTORING THE NATURAL AND RURAL ENVIRONMENT</p> <p>The natural environment is restored and enhanced, where possible, and the primary sector community returns to a new normal.</p> <p><i>Primary Sector Support</i> The primary sector is fully supported and functioning within a new normal.</p> <p><i>Environmental Effects</i> The impact of the flood and its recovery does not leave lasting negative environmental effects on our land and in our water.</p>
 <p>Rebuild Waihanga</p>	<p>REPAIRING OUR HOMES AND RESTORING OUR COMMUNITIES</p> <p>Housing, infrastructure, facilities and services are repaired.</p> <p><i>Housing</i> There is adequate housing supply and damaged homes are repaired to a liveable standard.</p> <p><i>Infrastructure</i> Infrastructure and services are restored and stop-bank repairs provide protection for the community.</p>
 <p>Regenerate Whakatipu</p>	<p>REGENERATING THE ECONOMY</p> <p>Sustainable business activity is re-established, and where possible, enhanced.</p> <p><i>Business Continuity</i> Support is targeted to help restore businesses and to provide certainty around business and employment continuity.</p>
 <p>Partnership Mahi Kotahi</p>	<p>PARTNERSHIP</p> <p>Working with Iwi to identify and prioritise opportunities that may include:</p> <ul style="list-style-type: none"> • Giving effect to Iwi values through collaborative engagement • Recognising natural, cultural and historical heritage • Enabling partnership approaches to projects that are aligned to the recovery phase and beyond.

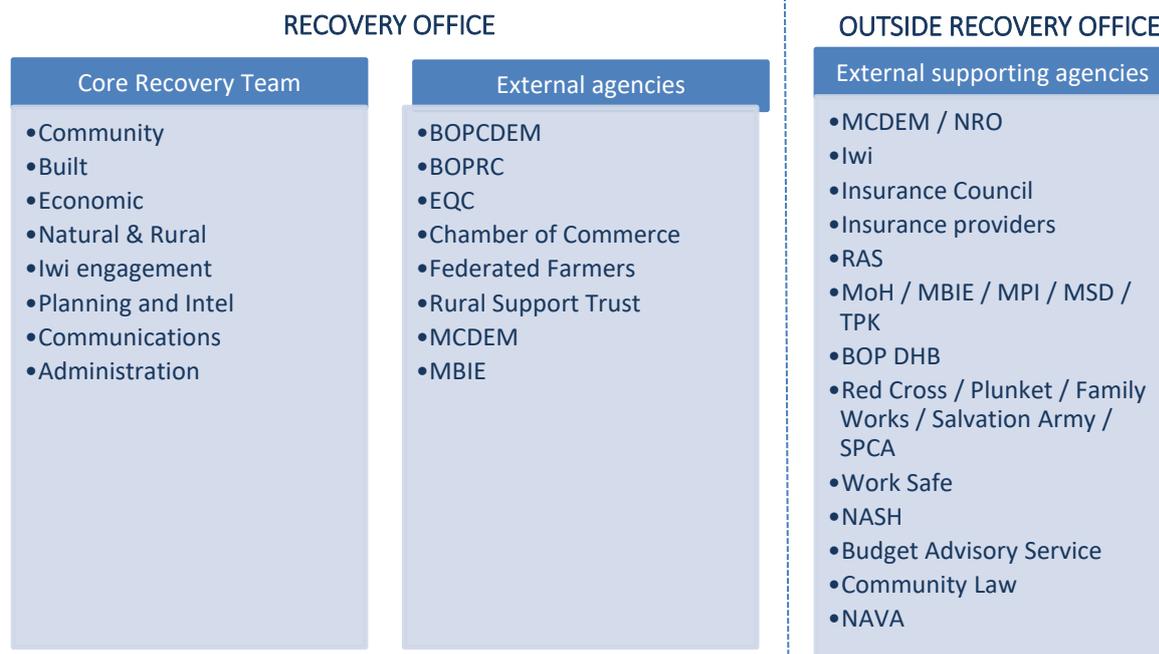
Figure 3: Recovery team structure at the time of formation of the Recovery Office



The Recovery Team was supported and guided by experts from numerous teams within Council. Without the support, specialist knowledge and skills (particularly for technical issues such as waste, infrastructure and building) provided from across the organisation, many of the recovery activities would not have progressed as quickly and effectively as they did. Appendix I attempts to illustrate how the core recovery team interacted with both the national and regional recovery groups, as well as other teams within Council (adapted from Waimakariri District Council structure diagrams).

External agencies also played a significant role in recovery. The benefits of collaboration in recovery cannot be highlighted enough in this document. As such, figure 4 provides linkages with all those external agencies and groups involved in recovery activities.

Figure 4: Linkages with other supporting agencies



6 Top Tips from the Recovery Team

Although every event and every recovery will be different, our top tips or essential factors to consider in the beginning phase of recovery; to keep momentum going beyond the first month; and key issues that arose are outlined below.

6.1 Top tips for getting started (the first month)

A list of essential factors to consider from the beginning, to get the team up and running and heading in the same direction:

1. *Understand the event* – Understand the “event” – including the scale and scope, as early as possible. Share this throughout the recovery team (internally and externally) to ensure everyone is working from the same page.
2. *Understand the community you are supporting* – questions to ask about the community include who are the key people you need support from / can support you? What do you know about the communities’ existing priorities? How does the community ‘tick’? Get a sound understanding before you consider appointing the team as this will help determine the skill set you need e.g. people who are already known by the community will have existing knowledge/relationships that can be of significant benefit.
3. *Co-locate and collaborate*– share space, resources and systems (IT systems, printers, GIS etc.) as much as possible and integrate Council and external staff as early as possible (co-everything is the best way to go!). An open door approach to external agencies works well.
4. *Go off-site* – Set up a large, offsite location for a team office and establish an inclusive/safe/shared environment. Once this is set up invite more agencies to join you. The more people working in recovery sharing the same space, the more efficient and effective recovery will be. Establishing and maintaining these relationships will be much easier and good relationships are GOLD. Also, make sure you keep links with the wider organisation so you don’t become isolated (a high risk).
5. *Retain EOC staff for transition*– Transition to recovery would be easier if key EOC staff were retained for several days, once the response had ended and the recovery took primary focus to ensure knowledge is not lost in transition.
6. *Consider local pressure* – in Edgecumbe, there was a need for recovery to have a ‘face’ in the community too (refer to Te Tari Āwhina).
7. *The ‘right’ people* – Hunt for the ‘right’ experienced people both inside Council and externally to join recovery. Ideally people already known in the affected community.
8. *Foster team spirit* – Foster a good team environment – humour/fun goes a long way when things get a bit strained.
9. *Get training for team* – Bring in other experienced recovery managers to get instant knowledge for the whole team. Get training for team for various roles, if possible.
10. *Communications* – Information flow is crucial, so again appoint the RIGHT person. You can never communicate too much.
11. *Support staff* – Appoint an administrator dedicated to answering and directing phone calls and also ‘runners’ to do ‘ground-truthing’.
12. *Be prepared* – Identify possible people in the community to be on the recovery team (BEFORE the event).
13. *Be creative to access funds* - Find and access funding quickly (locally and nationally), sometimes you may need to think outside the box.
14. *Establish contacts in key organisations* – Do this early and ensure any handovers are done properly to ensure relationships are managed.
15. *Streamline processes* – Processes such as recruitment need to be much faster than normal (you cannot wait two months to get the right person).
16. *Good intel* – Focus on data and challenge information until you know it is right. Basing decisions with incomplete or inaccurate data can sometimes backfire.
17. *Communicate internally* – Spend time communicating as a cohesive team. Daily briefings are a good idea at the beginning when everything changes fast (make them short and relevant).
18. *Health and wellbeing* – Be aware and mindful of each other’s health and wellbeing as recovery can be stressful. Look after yourselves and your teammates.
19. *Manage NRO / Group* - Understand the scope of the NRO/CDEM Group’s needs (appoint people to deal with these rather than everyone trying to address these).
20. *Listen to the little noise* - Don’t ignore the “little” noise, it can easily escalate into a large issue.
21. *Start planning* – This will help with number 1 and 2 above. It will also give everyone direction with an overall recovery objective(s) and objectives for each recovery environment.

6.2 Top tips for keeping going (beyond the first month)

Just as importantly, our top tips for a motivated, resilient and highly-functional recovery team over the long haul are outlined below:

1. *Team agility and flexibility* – Change the team to suit the workflow and skills needed, and do regular reviews to ensure you have the ‘right’ staff. This needs to be much more frequent than BAU as the environment / community needs change quickly.
2. *Health and wellbeing* – Keep check of this as over time individuals may show signs of stress.
3. *Celebrate success* – Celebrate successes and this will help to keep people motivated and focused on the objective.
4. *Embrace social media* – Monitor this regularly so you are in touch with the issues and mood of the community.
5. *Motivation* – Find ways to keep the team’s motivation and record success. We had a ‘wall of achievements’, competitions and social events.
6. *Pictures* – Use diagrams, maps, plans on a page, pictures and photos to communicate as people often do not have time to write or read long reports.
7. *Embrace new staff* – New staff are fresh and provide new ways of looking at issues. Make them feel welcome and get them up to speed fast.
8. *Keep your eye on the ball* – Stay focused and remind yourselves of the big goals i.e. don’t get bogged down in the detail. A good structured plan with clear objectives, success factors, milestones and target timeframes that is reported on weekly will help with this.
9. *Don’t underestimate the need / resource required to update progress* – Updates to Government, Council(s), agencies, key stakeholders and funders on progress are needed for continued support but can be time / resource hungry.
10. *Community leaders* – Identify and work alongside community leaders and support them to develop and deliver community led projects.
11. *Transition from Recovery to BAU can be difficult* – Transition will likely be staggered and inconsistent, which can be unsettling for both those moving out of recovery and for those still in recovery.
12. *Exercise management* – If you don’t exercise some management at the beginning you will not have the ‘mana’ to make changes / cancel services at a later date (see donated goods and volunteers).
13. *Make sure the right people are around the table* – Set up meetings with partners at all levels and ensure all those who need to be there are around the table. This will make information sharing and relationship building a lot easier to manage.

6.3 Keeping on top of the issues

Circumventing issues before they become significant problems will make all recovery offices run more smoothly. It is therefore important to try and be ‘proactive’, rather than ‘reactive’, around potential issues. Although the next recovery journey is likely to be different, we would have loved to have had a ‘heads-up’ about likely issues – so here are the major ones encountered by us.

- Health and Safety and the need to develop processes and procedures early on in recovery. We suggest that consideration, early on, be given to whether there is a need for a dedicated health and safety person on the recovery team. In addition, we would also recommend that a public health expert, such as a Medical Officer of Health, initially work within the Recovery Office, supported by Public Health Officers.
- Identifying and managing stress within the Recovery Team by getting training early, so all involved know what to look out for (e.g. psycho-social training for key staff).
- Unclear roles and responsibilities between Local Recovery Office, Group Recovery Office, Regional Emergency Management Advisors, National Recovery Office and Ministry of Civil Defence and Emergency Management.

- Unclear roles and responsibilities between the Local Recovery Office and government agencies, such as MPI, MoH and BOPDHB, MBIE.
- Lack of information, or misinformation, makes it very difficult to make well-informed decisions, particularly when recovery is moving at a fast pace. Not all external groups are willing to share information, or in some instances, cannot share information due to Privacy Act requirements and at times, unintentionally shared misinformation can have a significant negative impact. Try to 'ground-truth' information as much as possible.
- Volunteers require appropriate management so they can more-effectively help with recovery efforts. The double-edged sword for such willing assistance was that the logistics to support volunteers, plus major health and safety and public safety issues, required substantial resource to try and ensure safety for a large group of mostly unskilled labour.

PART A

Deconstructing recovery activities





PART A – DECONSTRUCTING RECOVERY ACTIVITIES

Part A is a description of each recovery activity and its successes and challenges and/or lessons learned.

This part has been written predominantly for those working (or about to start working) in recovery. It aims to provide a practical starting point and the benefit of the lessons we learned along the way. It does not necessarily describe ‘best practice’, but does provide a description on how we went about projects. It is hoped that others will add to this body of knowledge to enable the continual improvement of recovery processes and actions.

1 Recovery management

A Recovery Team was set up to assist and guide affected communities through the recovery process. The appointed Whakatāne District Recovery Manager drew together a collaborative and diversely-skilled team for this task. Below is a list of successes and challenges covering a number of recovery management issues, from office set up to Iwi engagement.

Our successes	
Setting up the Recovery Office	An open door / collaborative approach with multiple agencies sharing the same space. External agencies in the Recovery Office included: <ul style="list-style-type: none"> • Bay of Plenty Regional Council • EQC team • Rural Support Trust • Federated Farmers • Te Rūnanga o Ngāti Awa partnership contact • Ministry of Business, Innovation and Employment (temporary accommodation) • Chamber of Commerce • CDEM Group Manager and REMA.
	This proved to be very effective. Communication lines were efficient and information was shared as much as possible, resulting in a highly-informed team and better decision-making.
	The Recovery Team was well connected to the communities impacted, giving them the ability to easily connect with community leaders and affected residents through established relationships. Some members in the Recovery Team were also affected residents. Involvement in the recovery office provided the opportunity to provide positive community leadership and helped with their personal recovery journey.
	Being located in a separate, off-site office provided the ability for the team to focus solely on recovery tasks (i.e. away from business as usual). It also fostered positive team spirit and a high level of commitment to recovery efforts. There was also a local recovery presence at TTA. Conversely, this had a negative impact on the wider organisation as the remaining Council staff had to cover BAU.
	Visits from other Recovery Managers from around New Zealand were extremely helpful. Visits provided a good “sense check” and reassurance that the Recovery Team was on the right track. The sharing of information was also invaluable.
	A high level of trust and support was received from elected members. Councillors recognised the difficulty in maintaining “normal” reporting channels and elected members appreciated the special “elected member newsletters” that aimed to inform them on recovery progress and key news.
Relationships with MCDEM / NRO and CDEM Group	MCDEM and NRO staff were very supportive , willing to help and visited the recovery office on many occasions. The National Recovery Manager made a significant difference in engaging with central government agencies and had an excellent relationship with the Minister for Recovery. The MCDEM/NRO team were very conscious of the different skills they brought to Recovery. Strategic advice, including examples of recovery in other parts of New Zealand, was very useful.

Iwi engagement	The disaster affected most iwi to varying degrees. Existing relationships between Recovery Office staff and Iwi significantly assisted engagement.
	There was a high level of support from Iwi for recovery work, including opportunities for partnership on some projects.
	Existing forums also supported recovery work communications and engagement, such as the Rangitāiki River Forum and Whakatāne District Iwi Chairs Forum.
Central Government	Generally, central Government’s response to funding was immediate and flexible, with a willingness to partner with Council(s) and the community to get things done. The level of interest from Government was high and it was useful to have a specific Recovery Minister who was also the local MP, with knowledge of the impacted areas.
	Flexibility from EQC was very much appreciated in terms of the ‘whole of Edgecumbe township’ clean-up, even though the decision was based on the inflated number of 100 uninsured homes. The presence of EQC in the Recovery Office also enabled improved communication and decision-making.
	The willingness of government agencies to partner and work collaboratively to support impacted families was a significant success.
Our challenges and lessons learned	
Setting up the Recovery Office	The recovery template suggests a working group for each area – built, social, natural, economic etc. The Recovery Team used a project-based approach (e.g. waste, Liveable Homes Project etc.), rather than a working group approach. This created some overlap for some organisations and, at times, ad-hoc involvement of some organisations.
	Whakatāne District includes seven Iwi. There is limited information at the national level on recovery that includes Iwi in a meaningful way. The Recovery Team made a decision at the outset to ‘weave’ Iwi engagement throughout each environment, rather than Iwi engagement being a project in itself. In addition, the Recovery working group template didn’t work well in the community with various Iwi.
	Adequately resourcing the team was an issue for the Recovery Team from day one. It is suggested that a transition period (overlap) with EOC resource and recovery resource, for several days after the emergency declaration is lifted, would provide additional resource and an improved transfer of information.
	Another resourcing issue experienced was that temporary, seconded staff members from partner organisations were over-subscribed in the first few months of recovery. Significant time delay implications were experienced in finding and training new staff. In hindsight, emphasis should have been placed on hiring fixed-term staff from the beginning, for the duration of recovery.
	Another resource issue included the need for the building assessment project manager and health and safety expertise to be located in the recovery team for the initial set up of recovery. Work Safe representation was also needed early on in recovery (they were introduced late in the recovery process).
	Overall, the local Recovery Team had limited previous recovery experience. A recovery training programme that covered general recovery information, different roles in recovery, managing team wellbeing and psycho-social training would have been a useful initiative at the outset.
	Impacts on the rural environment were substantial. From a Recovery Team perspective, the rural environment was more difficult to manage, with numerous overlaps and gaps. A working structure was developed by MPI by the end of the third week of response and this structure carried through to recovery. It generally worked well, with regular meetings between MPI and the Rural Recovery Team. Although this preparedness was valuable and there was a Natural/Rural Environment Lead who acted as a conduit between the Recovery Team and the rural environment, this aspect of recovery may have benefited from better integration. MPI consider that a separate rural environment may have been more supportive of rural communities and the primary sector.
	Keeping the wider Council organisation informed about the recovery activity is very important, particularly support services, for example, customer services.
	Formalise structure to involve insurance companies early on if possible. Information from insurance companies is invaluable to monitor progress of building repairs and formalise information flows. Establishing relationships and obtaining formal regular reporting and/or meetings would be very useful.
Te Tari Āwhina, the community hub could have been better-resourced initially. The hub evolved	

	<p>overtime, but on reflection, having a dedicated hub manager would have been useful from the beginning.</p> <p>Branding of the Recovery Office was distinct from Whakatāne District Council. This was beneficial for the Recovery Office as community perceptions were generally positive about recovery activities. Ramifications were that public perception of Whakatāne District Council in relation to recovery activities were negative, as Council was perceived as having little involvement in the recovery effort. The reality was that the majority of the Recovery Team were Council staff. In hindsight, the Recovery Office, at the very least, should have also carried the Council logo.</p>
MCDEM / NRO and CDEM Group	<p>There was a high level of overlap, resulting in inefficiencies and a lack of clarity, in reporting by the Recovery Team to the different national and regional groups. The relationship, roles, responsibilities and reporting lines remain unclear between MCDEM, NRO, REMA, CDEM Group.</p>
	<p>Clarification is needed in relation to the extension of recovery powers in the new legislation. The Recovery Team sought legal opinion that differed from national advice, as the intention is not clear.</p>
Iwi engagement	<p>The traditional recovery structure / MCDEM templates and guidance do not clearly define the role of Iwi in the recovery process. In communities with significant Māori populations, this is a gap that needs further consideration.</p>
	<p>At times, iwi engagement needs to occur through multiple means (for example, co-governance, Rūnanga and hapū). This is resource-intensive, but should have been part of the Recovery Team role. Weekly meetings were held with most affected Iwi, but not all. The feedback loop was also not closed very well. Iwi engagement was seen as a gap. It is important that all recovery staff be able to engage with Iwi and not just one person as an Iwi Engagement Advisor.</p>
	<p>Significant opportunities were not taken up, particularly in relation to information sharing and partnering on projects. One area that would have been beneficial is using Iwi communication channels. For example, social media of Rūnanga and also Rūnanga holding hui to explain what support is available for people. It may have also created a more comfortable environment if Iwi could have sought assistance in a marae setting, rather than a Council setting.</p>
	<p>Māori landowners who were not primary producers were excluded from support and funding avenues i.e. MPI fund. This represents a significant gap for Māori landowners who are not connected to rural networks, such as Federated Farmers and Rural Support Trust, because the land is not in economic use.</p>
	<p>Iwi representation was missing from the MPI Economic Impact Assessment. This also represents a lost opportunity where there is a significant area of Māori-owned land.</p>
	<p>Another assumption raised was around iwi representation. The assumption was made by DHB that TPK represented impacted Māori communities; however, some Māori communities reported that TPK did not represent their community and in order for decisions to be made, they needed to be at the table themselves. Further thought is needed by all agencies to clarify who can represent different communities, particularly Māori communities.</p>
	<p>Some aspects of central Government funding were extremely challenging for the Recovery Team, such as BOPDHB funding for navigators. Clarity, at a national level, is needed about the role of health in psycho-social recovery. Lobbying for funds for the Navigator Service was time-consuming and unnecessarily difficult.</p>
Central government and funding	<p>Clarity is needed around the GST component of funds that are offered. It is suggested that a fact sheet covering this aspect should accompany fund offers.</p>
	<p>MBIE business grant was only aimed at those directly impacted by the flood, with funds being distributed to 14 of the 27 businesses directly impacted. Many businesses were, however, indirectly impacted (41 businesses) by road closures and/or loss of customers, but did not meet the MBIE grant criteria. Loss of population in evacuated communities is also not an insurable loss for businesses and therefore those indirectly impacted fell into a funding 'gap'.</p>
	<p>The MBIE grant is subject to an independent evaluation process to determine its effectiveness. This will investigate the appropriateness of the funds criteria, the benefits the funding has had on those that received funds, as well as the 'reach' of the funds.</p> <p>In addition, it would be useful to document the business recovery work from Canterbury as a model for supporting businesses, to fill a perceived information gap.</p>

	<p>The level of reporting to central Government was understandably high. However, this was challenging to meet when there are so many other demands on time in the Recovery Office. It is suggested that at least one full FTE position be established to prepare and respond to update inquiries from multiple agencies.</p>
	<p>A lack of funding to support recovery processes in MCDEM funding criteria. This is an ongoing cost to Council and to the ratepayer.</p>
<p>Finances</p>	<p>The finance area needed more resource and support. A suggestion is to have financial systems and processes developed as early as possible. Sorting finances months after a Recovery Team has started work is challenging and not advised. Note and recognise that Government and external agencies providing funding have reporting and approval requirements that need to be administered and that those requirements have time implications.</p>
	<p>Understand Council’s insurance policies before commencing the recovery process. For example, does it allow the backfill of BAU staff? This lack of understanding resulted in substantial pressure on the rest of the organisation to keep BAU moving as well as pressure for the Recovery Team to continue without additional staff, recognising that costs cannot be recouped from MCDEM funding.</p>

Regular meeting groups were also established for different groups at various levels under the recovery environments. Some of the key meeting groups included:

- Leaders Meeting
- Partners Meeting
- Psychosocial Meeting
- Rural Advisory Group.

For a list of key roles and organisations involved in each group, refer to Toolbox Part C.

2 Recovery planning and reporting

Recovery planning is difficult to find time for in the midst of day-to-day issues that need immediate action. It is, however, vital for ensuring everyone is working towards a set of shared goals and objectives.

The Whakatāne Recovery Team’s goals and objectives were set in the recovery planning document (*Whakatāne District Recovery Project’s Recovery Action Programme*) reasonably early-on in the recovery process (within 3 months). This was done with the idea that the Recovery Action Programme would remain a living document that provided a starting point for determining a clear direction and pathway for rebuilding communities in a future-focused way. The Recovery Action Programme was adapted over the recovery process, in response to the changing needs of the community¹.

Rather than a high level strategic document, actions in the Recovery Action Programme were geared towards meeting the immediate and intermediate needs of affected communities, such as clean-up, repairing homes, temporary housing and psycho-social support. An early realisation that impacted communities were not ready to look forward resulted in the deferral of the development of a community vision/plan for Edgumbe. It was considered that a vision/planning exercise should be developed in a way

¹ Recovery should always be strongly aligned to the needs of the community, which change and develop over time. To do this effectively, it is important to both understand and monitor the needs of the community through the use of key indicators and measures.

that is community-led and community-delivered, with the idea that, in time, this would supersede the Recovery Action Programme.

The primary goal for the recovery programme was to “restore and create opportunities to enhance our community wellbeing”. The recovery framework established five interrelated environments of Community, Natural/Rural, Built, Economic and Partnership. The five environments are outlined in the table below, along with associated objectives (the desired future state), outcome statements (what success will look like) and success factors (how we will know if we are achieving the objective). More information is available in the Recovery Action Programme. Refer to www.Whakatāne.govt.nz/recovery-project for more detail, including milestones and target timeframes for each environment.

 <p>Reconnect <i>Tūhononga</i></p>	<p><i>RECONNECTING OUR COMMUNITY</i></p> <p>Communities that have been adversely affected by flooding are restored to what they were previously, and where possible, enhanced.</p> <table border="0"> <tr> <td style="vertical-align: top;">Welfare and Wellbeing</td> <td style="vertical-align: top;">Essential needs of individuals and whānau are met, and community health & wellbeing are supported.</td> </tr> <tr> <td style="vertical-align: top;">Community Home by Christmas</td> <td style="vertical-align: top;">Community spirit, pride and resilience are strengthened. Families / whānau have moved back into their homes by Christmas.</td> </tr> </table>	Welfare and Wellbeing	Essential needs of individuals and whānau are met, and community health & wellbeing are supported.	Community Home by Christmas	Community spirit, pride and resilience are strengthened. Families / whānau have moved back into their homes by Christmas.
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Community Home by Christmas	Community spirit, pride and resilience are strengthened. Families / whānau have moved back into their homes by Christmas.				
 <p>Restore <i>Whakahou</i></p>	<p><i>RESTORING THE NATURAL AND RURAL ENVIRONMENT</i></p> <p>The natural environment is restored and enhanced, where possible, and the primary sector community returns to a new normal.</p> <table border="0"> <tr> <td style="vertical-align: top;">Primary Sector Support</td> <td style="vertical-align: top;">The primary sector is fully supported and functioning within a new normal.</td> </tr> <tr> <td style="vertical-align: top;">Environmental Effects</td> <td style="vertical-align: top;">The impact of the flood and its recovery does not leave lasting negative environmental effects on our land and in our water.</td> </tr> </table>	Primary Sector Support	The primary sector is fully supported and functioning within a new normal.	Environmental Effects	The impact of the flood and its recovery does not leave lasting negative environmental effects on our land and in our water.
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 <p>Rebuild <i>Waihanga</i></p>	<p><i>REPAIRING OUR HOMES AND RESTORING OUR COMMUNITIES</i></p> <p>Housing, infrastructure, facilities and services are repaired.</p> <table border="0"> <tr> <td style="vertical-align: top;">Housing</td> <td style="vertical-align: top;">There is adequate housing supply and damaged homes are repaired to a liveable standard.</td> </tr> <tr> <td style="vertical-align: top;">Infrastructure</td> <td style="vertical-align: top;">Infrastructure and services are restored and stop-bank repairs provide protection for the community.</td> </tr> </table>	Housing	There is adequate housing supply and damaged homes are repaired to a liveable standard.	Infrastructure	Infrastructure and services are restored and stop-bank repairs provide protection for the community.
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 <p>Regenerate <i>Whakatipu</i></p>	<p><i>REGENERATING THE ECONOMY</i></p> <p>Sustainable business activity is re-established, and where possible, enhanced.</p> <table border="0"> <tr> <td style="vertical-align: top;">Business Continuity</td> <td style="vertical-align: top;">Support is targeted to help restore businesses and to provide certainty around business and employment continuity.</td> </tr> </table>	Business Continuity	Support is targeted to help restore businesses and to provide certainty around business and employment continuity.		
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 <p>Partnership Mahi Kotahi</p>	<p>PARTNERSHIP</p> <p>Working with Iwi to identify and prioritise opportunities that may include:</p> <ul style="list-style-type: none"> • Giving effect to Iwi values through collaborative engagement • Recognising natural, cultural and historical heritage • Enabling partnership approaches to projects that are aligned to the recovery phase and beyond.
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Recovery planning and reporting successes and challenges / lessons learnt are outlined in the following tables.

Our successes	<p>Development of the planning framework was tailored to recovery actions and the work programme, rather than being a high-level strategic document. It was useful to have these discussions and subsequent documentation of objectives and milestones reasonably early on in the recovery process, to ensure the recovery team and other agencies were working towards the same goals.</p> <p>Linkages between the planning framework and the situation reports were developed. Benefits included reduced workloads for reporting to central government. It was useful to have a planning framework that allowed for this (e.g. milestones and target timeframes).</p> <p>The deferral of the development of a community vision/plan for Edgecumbe, to allow the community to be ready and empowered to develop and implement its own community plan.</p>
Challenges / lessons learnt	<p>Central government did apply pressure to develop a recovery planning document as soon as possible for reporting purposes. Although the planning activity was invaluable to guide recovery actions, and MCDEM staff were very supportive and helpful in terms of recovery planning, it was a challenge early on to have enough information to make assumptions about timeframes for recovery e.g. 90% home by Christmas.</p> <p>The natural environment work programme included a substantial section on the rural or primary producer sector. Although this formed an important part of the plan, engagement raised issues with some of the wording in the Recovery Plan and different timeframes made it more difficult to align planning documents across agencies</p> <p>Planning before full consideration of the scope of the issue, and/or for political reasons is challenging. For example, one of the Recovery Team’s significant milestones was that 90% of displaced residents (yellow stickered homes) would be back in their homes by Christmas. Full consideration had not been given to the impact of the winter weather on the drying and repair process, availability of tradespeople, the number of homeowners and the time needed for some to work through the cash settlement process and the proportion of those that would take the opportunity to re-evaluate life plans (renovate, move towns etc.).</p> <p>Recovery planning followed the CDEM guidance and adopted the four environments, with a fifth theme of Partnership woven through each. Although this made for easier management and documentation initially, it unnaturally segregated some of the activities, specifically those relating to wellbeing. Improved alignment of all wellbeing outreach activities across impacted families, homeowners, businesses and farmers would have been beneficial in ensuring all needing support are captured, including business wellbeing, which was a gap in the recovery process.</p>

2.1 Recovery GIS

During the response phase, data was managed in ArcGIS Online and this was a critical tool for sharing and communicating data. During recovery, managing data in the cloud did not satisfy recovery needs. The immediate challenge to providing GIS support for the recovery team was to determine the long-term needs of the team and to design a solution that would best fit those needs. Interviews were conducted and the feedback helped to guide the substance and functionality of the system.

Integration with council’s corporate systems was integral and managing the recovery GIS within our existing enterprise architecture was a lot simpler. A dedicated Emergency database was created and a viewer built for the recovery team with ongoing support. For more information refer to the Recovery GIS Project Charter in Part C (Toolbox).

GIS success and challenges / lessons learnt are outlined in the following table.

Our successes	Set up a web viewer for recovery staff in a short space of time. This enabled the delivery of an accessible, accurate and responsive GIS system to the Recovery Team.
	Built and managed datasets across the spectrum of recovery activities.
	Provided the recovery team with high quality maps, analysis and support to enable better decision making.
	Developed an application for the welfare team which enabled capture and management of community support.
Challenges / lessons learnt	Over the initial month, the volume of work was overwhelming and it was a considerable challenge to manage the requests coming in.
	The recovery environment was very dynamic and multi-faceted - it was a challenge to anticipate future workload .
	Data matching and validation required time and resource. Data was gathered from various sources during both the response and recovery and was of varying degrees of accuracy and detail.

3 Reconnecting Our Community

As with any disaster, we need as much help as we can get to repair the physical damage caused, but also the emotional and social impacts. With this in mind, recovery activities in this environment aimed to create opportunities to reconnect and strengthen our communities to help restore community resilience.

Five key community projects developed to ensure recovery needs were being met included:

- Establishment of Navigators to provide wrap-around services for those who needed help to access available services;
- Provision of Te Tari Āwhina Community Hub and other centres;
- Coordination of events to provide some respite for the community from recovery activities;
- Facilitation of a community plan that was community-led, community-driven and community-delivered;
- Access to insurance advice through the Residential Advisory Service.

Key projects are described below, along with successes and challenges for each topic.

3.1 Navigator Service

A team of Navigators was set up² to work with vulnerable, flood-impacted individuals and families. The main objective of the Navigator Service was to help access appropriate support and assistance. Navigators therefore identified and communicated with relevant agencies to ensure wrap-around services were delivered across sectors to their clients. Agencies approached by Navigators included, but were not limited to; BOPDHB, Toi Te Ora Public Health Service, General Practitioners, RAS, Police, Council, MSD, MBIE, MPI and a number of non-government organisations and community groups, such as the Salvation Army. Through the Navigators’ well-established networks, family, financial, housing and emotional well-being support was provided.

Navigators made contact with over 300 families. Contact was made with those impacted families through:

- Identification in the response phase and early recovery;
- Referrals from the Liveable Homes Project, Ministry of Business Innovation and Employment, Work and Income New Zealand, Te Tohu o te Ora o Ngāti Awa Support Services (NASH), Social Workers In Schools, and Ngāti Awa Volunteer Army;
- Informal referrals by neighbours and whanau;
- Identification of those who had cash-settled and/or needed insurance support.

Key issues related to health and wellbeing, accommodation, financial assistance and insurance.

Our successes	Advocating for families with community services both Government and non-Government, with positive outcomes (MBIE Housing, WINZ entitlements, Health & Wellbeing).
	Identifying that there were many insurance issues that had arisen and subsequently implementing a service to support homeowners through the engagement of RAS (specialised) services early-on in the recovery process.

² Learnings, processes and templates were shared by the Rural Support Trust with the Recovery Team during the development stage.

	Raising the community profile of the Navigator Service through networking with EBOP community services and building on existing networks and relationships for both referral of clients and access to services.
	Providing a flexible and adaptive service based on the issues that have arisen at different times.
	Setting up a survey/database to capture information and background of affected resident's situations when out in the field.
	Obtaining funding from multiple agencies to make this initiative work. However, securing funding for such an essential project should have not been so difficult.
	Navigators were mostly based at Te Tari Āwhina in Edgecumbe. This was invaluable, as it meant impacted residents were able to come and talk with navigators. Having Te Tari Āwhina, as a community hub for people to come and talk to navigators in a familiar environment was valuable. Navigators also regularly visited other communities and rural properties.
Our challenges & lessons learnt	The most significant lesson learned is that the Navigator Service would have been beneficial if it had been initiated earlier , at the very beginning of the recovery process.
	Successful contact with residents/owners was challenging , with many families displaced. This required perseverance as well as many discreet conversations with neighbours and trusted community services.
	This service was developed 'on the fly' or 'flying a plane while building it' to quote the Recovery Manager. This meant that systems, processes and procedures were developed as the service developed and evolved, which has been challenging. An opportunity to develop these procedures and processes as part of event preparedness would be advantageous. For example, a resource sheet of the wrap-around services and contacts for each available service.
	Navigators continuously worked on improving and modifying information captured through the client survey to ensure that it was 'fit for purpose'. This reflected the changing nature of community needs and also the evolving nature of the navigator service.
	General Practitioners being unaware of the process to prioritise flood-affected residents for mental health services.
	The Navigator Service was implemented with limited resource and it would have been beneficial to have a dedicated resource to take inbound calls from the community, schedule appointments with navigators and make phone calls to the community to see who might need assistance. Additional resource to meet monthly reporting requirements to funders would also have been useful.

3.2 Psychosocial support

Our successes	Navigators with high level skills and experience in this area and training for staff/volunteers (although this could have been done earlier).
	Partnership with local agencies (e.g. NASH) so people were already familiar with services. Having iwi-based services reflected our community, but there is a need to ensure other agencies were equally involved.
	Understanding of the impact of school holiday programmes, community events etc. on psychosocial recovery.
	The use of a single facilitator for red stickered homes .
	Use of existing community networks to support each other , for example, support group set up by Plunket for mothers affected by the flooding.
	Proactively supporting people, for example, the development of resources to support the community "Where to go for help" wallet cards, "Common Reactions to Disasters," "Helping Children" and "Helping Adolescents" pamphlets.
	Linking/working through schools for youth support – MoE agreed to extra SWSS (Social Worker in Schools) and DHB funded additional NASH and Community Health Counsellors for schools, early on in Edgecumbe.
Our challenges &	Gaps in service provision – lower level of presence in rural schools for children Accommodating pets (a key part of a family).

lessons learnt	<p>Earlier training for volunteers.</p> <p>Health focus on those with psychosocial issues - we wanted to support as many people as possible to not require formal psychosocial help.</p> <p>Supporting staff involved in recovery efforts – focus on community, but also need to support staff and contractors involved.</p>
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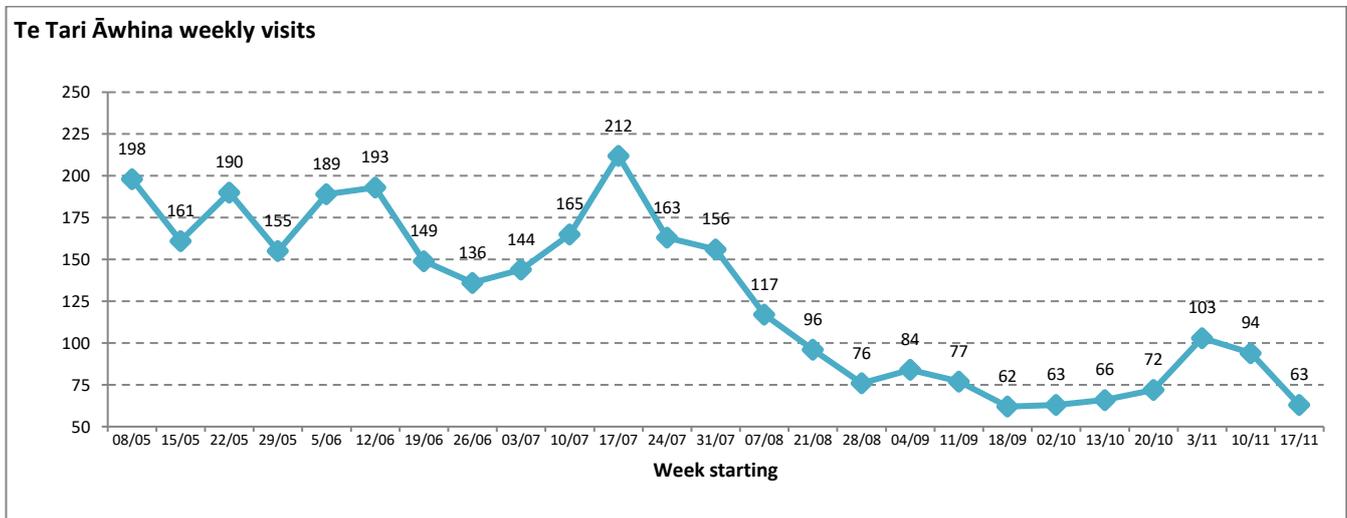
3.3 Te Tari Āwhina Community Hub

Te Tari Āwhina Community Hub was established at the Edgecumbe Library to provide a shared community and agency hub. Te Tari Āwhina was set up as a place for the community to meet and connect, to read books, use computers, have coffee and chat. Recovery information was also available at Murupara, Kawerau and Whakatāne libraries. The recovery office was in Whakatāne. We decided not to operate directly out of Edgecumbe, primarily because many services were not operative, plus there was a whole-of-District recovery requirement.

The role of Te Tari Āwhina was to:

- Ensure co-ordinated care in an ongoing way, by co-location of wellness providers
- Offer a single point of access for assistance for all recovery needs (building, wellness, insurance)
- Offer a range of wellness programmes
- Provide desk space for support agencies (hot-desks).

This service was well-received and utilised by impacted families, catering for between 136 and 212 visits a week in the first four months, and then reducing to between 62 and 117 visits per week in the following four months.



As time passed, Te Tari Āwhina morphed to provide a point of contact for the Liveable Homes Project, Navigators and the Residential Advisory Service. It became the ‘face’ of recovery and was therefore used to distribute welcome home packs and children’s Christmas presents, as well as advice and support in Edgecumbe. It was very useful to have a place (building) within the most-affected town to provide services to meet different needs, as these changed over time. Recognising this was a whole-District event, information hubs were also set up in Whakatāne and Kawerau.

Our successes	Te Tari Āwhina quickly became accepted as the ‘hub’ of recovery information services and support . Te Tari Āwhina adapted through the various phases of recovery - as a combined delivery point for forward-facing partner agencies (MSD, Te Tohu o te Ora o Ngāti Awa Support Services (NASH), Ngāti Awa Volunteer Army), to the base for the Liveable Homes Project and finally, as a contact point for Recovery Navigators and a distribution centre for Welcome Home Packs. ‘TTA’ was the ‘public face’ of Recovery in Edgecumbe, allowing the Recovery Office, operating in another location (and then from WDC) to work unencumbered by ‘walk-in’ enquiries.
	Te Tari Āwhina was an effective location for community focus meetings, and times when Recovery needed to engage with smaller groups.
	Positioning of the three-room portacabin from DHB to support the Community Hub, which was very useful for meetings and as a private space for people requiring support from agencies.
Our challenges & lessons learnt	There was a degree of agitation from library volunteers , who felt they had lost their premises. More communication may have helped, but there has also been a potential for the library to increase its profile and grow its membership.

3.4 Community Plan

When families started to move back home, the Recovery Team took the opportunity to get the community together to plan for the future. A community plan workshop was held and facilitated by Peter Kenyon, from Bank of I.D.E.A.S, on 2 September 2017 as the first stage of developing a community plan for the town. These workshops had a great turn-out with over 90 ideas generated. Community planning also signals the hand-over to the community and to other agencies to continue the recovery process as part of ‘business as usual’.

Peter Kenyon is an internationally renowned community development expert and has worked with over 1,600 communities in more than 55 countries. He is known for inspiring fresh and creative ways to stimulate community and economic renewal and is an advocate of developing communities from the inside out; and of community members investing themselves, their ideas, assets and resources in the process.

The second stage of this project involved the establishment of an Oversight Committee for the implementation of the community plan. To assist with coordinating groups, projects and activities, as well as seeking funding for some of the community projects, a Community Plan Coordinator was appointed. This role was pivotal in implementing the ideas generated in the community workshop. The draft community plan is now available on the recovery website (<https://www.Whakatāne.govt.nz/recovery-project>).

Our successes	Bringing the community together to focus on the future of the most flood-affected community of Edgecumbe. The workshop was well-attended and well-received by the community. This marked the beginning of refocusing the community on future planning for recovery. Many ideas from the community were generated, empowering community-led projects, supported by Council.
	Having a skilled and independent facilitator (Peter Kenyon) to initiate the Community Planning workshops was crucial to the success of this project. Although organised through the Recovery Team, this prompted a community-led project from the inception.
	Running separate workshops and planning sessions with business, Kaumātua, red stickered property owners and the community as a whole, allowed a ‘safe’ environment for everyone to contribute.
Our challenges / lessons learnt	Formalising the oversight committee made up of community members delayed the implementation of the Community Plan . Organising an oversight committee prior to community workshops, in readiness for the workshop outcomes, may have avoided this delay.

3.5 Events

Creating opportunities to rebuild and strengthen our communities to help restore community resilience was an important recovery activity. The Recovery Team worked on many community projects across the District, including the coordination of events to provide impacted residents an opportunity to reconnect with their community and strengthen emotional and social wellbeing.

A community events and activities programme was established to enliven flood-impacted communities, enhance community connections and build community resilience. This included:

- A community recovery expo (with all recovery activities supported)
- A school holiday programme that provided fun activities for children, and assistance to parents who may have exhausted leave allocations to clean-up after the flood
- DIY workshops for fence building, concreting, gardening and home maintenance, and a big plant day (with free plants donated by local businesses)
- Welcome home packs (WHP) – useful everyday products for the home (cleaners, brooms, etc.)
- Secret Santa, a project to help flood-impacted families at Christmas. The aim was to ease a little of the financial burden by coordinating and distributing donated Christmas presents to children of flood impacted families
- Establishment of a Kaumātua group for advice and support

People were dispersed and living in different locations, so in some ways, the community did not exist as it previously had. Community events were used as a mechanism to keep people connected, encouraging thinking and working as a community.

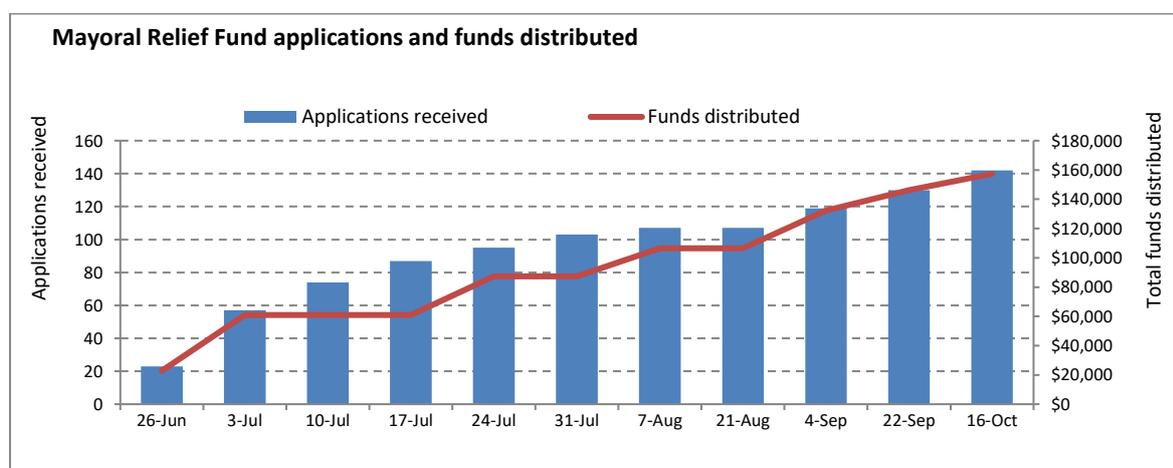
Our successes	Flexibility on what type of community events to run and the timing of events has been crucial, as it was important to have local knowledge and input to make sure community needs were met.
	Holding events that bring community together and that cater for different groups of people (including different age groups) has been a key factor and a great outcome for helping the community move forward, support each other and have an opportunity to share.
	Working together with other local groups and organisations to deliver events has also been important, as it provides support and also a way for future events to become more sustainable community events.
	Introducing a variety of activities , including specialised classes/programmes, which focus on teaching techniques to help people cope with stress and general wellbeing.
	Providing affordable full-time childcare to flood-affected families during the school holidays , by supporting families that may need extra help due to costs, lack of childcare, transport issues or coping with the stress of the flood/rebuilds.
	Partnering with Te Rūnanga o Ngāti Awa community coordinator to support flood-affected residents by providing opportunities to learn new, practical skills and bring community together. For example, sustainable garden, fencing, concreting and home maintenance workshops.
	Supporting many residents who lost their gardens in the flood to re-establish their gardens again by providing free plants, with the support of local gardeners, groups and organisations donating plants and other gardening goods.
Our challenges / lessons learnt	The impact of many residents not being back in their homes affected attendance numbers at some events/classes.
	Keeping in mind the impacts on the wider community (including rural) and working with key stakeholders in those communities to establish events and community activities, may have provided opportunities to extend some of the activities and events to more isolated communities .

3.6 Mayoral Relief Fund

A Mayoral Relief Fund was set up to assist Whakatāne District residents as they recover from the April flooding and storm events. Priority was given to applications using the following criteria:

- Provision of essentials for daily life, transport needs and household contents;
- Rebuild/recovery costs of damaged buildings;
- Essential items not covered by insurance or other funds.

An Advisory Board was established to assess applications and provide recommendations to the Trustees to confirm approval and distribution of the funds on a fair and equitable basis. Total funds distributed from the Mayoral Relief fund amounted to nearly \$160,000, with 142 approved applications.



3.7 Lottery Rangitaiki River Stopbank Breach Recovery Fund

The Department of Internal Affairs supported the Lottery Rangitaiki Stopbank Breach Recovery Fund to be established 8 May 2017 as a special fund to provide immediate assistance to Edgecumbe and the surrounding communities affected by the Rangitaiki River stopbank breach.

A sub-committee of the Lottery Bay of Plenty/Gisborne Community Committee allocated \$1 Million to not-for-profit organisations providing services to people in Edgecumbe and the surrounding communities to improve the physical, emotional and social wellbeing of people living in the affected area. The funding round remained open until the total funds were allocated resulting in 43 approved applications.

A range of funding was distributed including \$150,000 for Whakatāne District Council towards the Navigator roles to support and help flood affected individuals and families/whanau within the Edgecumbe community. Other grants included \$3,005 towards collaborative information packs for distribution from the NZ Council of Victim Support Groups Incorporated; \$69,413 for Edgecumbe Development and Improvement Team (EDIT) to Support a Community Mural Project that include youth attending workshops and working alongside artists, which aligns with the Community plan as an outcome.

The Department also worked with the Edgecumbe community, recovery groups, local forums and Council to support organisations to continue operating and meet the new needs of the local community. Internal Affairs Advisors were involved in brokering relationships with other government agencies and philanthropic organisations, provision of advice on available support and funding, and making connections with other organisations to meet the needs of local community groups who provided services to the Edgecumbe community.

The fund has now been fully expended and the Department continues to work with the Edgecumbe community to support their aspirations and initiatives.

More details regarding the grants are available on www.communitymatters.govt.nz

3.8 Insurance support through the Residential Advisory Service (RAS)

Community Law Canterbury (or the Residential Advisory Service) supported the local Community Law service to provide advice to impacted residents with issues relating to their insurance claims. RAS provided leadership in this arena, using the expertise it gained in dealing with similar matters following the Christchurch and North Canterbury earthquakes. Lawyers held clinics a few days a month (from October – ongoing in March 2018) in Edgecumbe and were available for Skype meetings as necessary, with ongoing support provided on demand. This service was very well-received by impacted families and was booked up well in advance of all RAS visits to Edgecumbe.

Our successes	RAS service was advertised well and Navigators were very proactive in referring people who needed advice and support in this area.
	Initiating this service early on , before any breakdown in relationships with insurance companies occurred.
	RAS provided an excellent service (they are the national experts in this field). At times, their advice and honesty reset people’s expectations.
	Funding secured from MBIE to deliver this service.
	Expertise brought in at the right time . At the start, people are happy to work with insurance companies and have an expectation that ‘all will be ok’, and for the most part, it is. In instances where agreements cannot be reached between insurers and the insured, frustration starts to develop and it is at this point that expertise in this area is needed.
Challenges / lessons learnt	We had local Community Law assist people from the establishment of TTA, but in hindsight, people probably were not ready to discuss insurance matters at this stage, and as such, there was limited interaction. Businesses were not sure if RAS was applicable to them.
	There will always be issues that arise from a financial arrangement such as insurance - sometimes client expectations are not realistic, especially with the new, fixed amount insurance for property. People do not always understand their policy or what they are covered for. Sometimes, insurance companies are also unreasonable.

3.9 Other community-based projects to consider

Two other community-based projects that require consideration are volunteers and donated goods. Both of these areas provide a valuable resource and demonstrate a sense of community support, but also are areas that can be problematic if not well-managed in the first instance.

3.9.1 Volunteers

Volunteers are a significant and valuable resource. In this instance, they formed a vital resource for the clean-up of Edgecumbe and the later restoration of properties and public areas. The number of volunteers demonstrated the willingness of the community and the wider New Zealand public to give support. The type of volunteer activities changed over time, from high-use during response and early recovery to low and sporadic use for community assistance in the later months of recovery (e.g. assisting homeowners with land and garden repairs).

Volunteers do however, require appropriate management, so that they can more effectively help with recovery efforts. The double-edged sword for such willing assistance was that the logistics of support and the major health and safety and public safety issues meant that substantial resource was required to ensure safety for a large group of mostly unskilled labourers. Spontaneous volunteer groups added another level of complexity – identifying and ensuring the health and safety needs of these groups were met was no easy task.

In essence, the early challenge during response and recovery was maintaining safe operations with volunteers working in a hazardous environment. Recovery and contractors initially grappled with many of the unique hazards they were facing in the impacted environment. In addition, they also had to consider a large population of voluntary support entering this environment. As some hazards became apparent and procedures subsequently changed, some ‘no-go’ activities for volunteers were put in place.

NAVA (Ngāti Awa Volunteer Army) was established as part of the response phase. NAVA was initially a partnership between WDC, BOPRC and Ngāti Awa to meet the immediate requirements for the response clean-up. Significant numbers of volunteers signed up to the NAVA initiative to help with the clean-up. People related this group to the Christchurch “Student Army”, as an approach to provide rapid help.

Other community volunteer groups from both within and outside of the District also provided support to recovery activities. An example is the Liveable Homes project, which was set up based on significant assistance from volunteers, and provided excellent project outcomes. Another example is the SPCA volunteers and pet foster carers who played an important long term role in caring for displaced pets.

3.9.2 Donated Goods

During the response phase, Civil Defence always seeks money rather than donated goods. External groups were therefore relied on to organise the distribution of donations, which turn-up whether wanted or not. Four groups set up centres in community halls in Te Teko, two in Edgecumbe (temporarily) and Whakatāne. Pou Whakaaro also established a depot focusing on furniture donations, which continues to operate.

Our successes	
Donated Goods	<p>With the early Whakatāne District Council decision in the response phase to not take donated goods (lesson learnt from previous events), members of the community stepped-up and community-led initiatives prepared themselves to receive and distribute goods. These groups generally worked well together to meet the needs of impacted families.</p> <p>Pou Whakaaro and Te Teko developed some good systems and set-up in locations that were not used by others in the community. These locations filled a huge need for people who did not have contents insurance.</p> <p>Recognition by the organisations that the needs of families and individuals would change from response, through recovery, the planning of goods collection, and distribution, and the need to respond to those changing needs.</p>
Volunteers	<p>Volunteers are a significant and valuable resource. Significant numbers of volunteers, including EDIT (Edgecumbe Development and Improvement Team) and locals stepped-up to lead and help their community. Volunteers gave a much needed sense of community caring.</p>

	<p>Ngāti Awa Volunteer Army, among other volunteer agencies, were key in the early stages of recovery for community support.</p> <p>Volunteers assisted householders with contaminated and damaged contents removal relatively quickly. Assistance for homeowners with land tidying was also received.</p>
<p>Our challenges / lessons learnt</p>	
<p>Donated Goods</p>	<p>Some donated good centres had to be closed down because they were located in halls that were required for other purposes. This upset volunteers and the services involved were also very difficult to close down.</p> <p>Donated goods volunteers who were not associated with an organisation felt impacted and marginalised (even though they were not personally-impacted by the flood event) when their role needed to change and donated goods transitioned solely to community organisations. Although DHB provided an education session for volunteers by a local psychologist, which was well received, monitoring the health and wellbeing of these volunteers was needed.</p> <p>A learning is that if these pop-up centres go on for too long, there is a negative effect on existing ‘op-shops’. In addition, we had an excess of donated goods, especially clothing, that we struggled to allocate. It is also important to note that many second-hand materials are in poor condition and need to be disposed of, adding to the cost of recovery.</p> <p>A suggestion is to take charge from the beginning, recognising that donated goods will come whether you want/need them or not, so think about establishing appropriate venues where the need is, from the beginning. Allocate a volunteer co-ordinator, set realistic timeframes/expectations of how long the service should go for, and publicise that well. It is also important to be discerning early on, about what goods will be received, including the condition of goods.</p>
<p>Volunteers</p>	<p>The volunteer arena could be described as difficult to manage. It may have been more successful if the recovery office had ‘owned’ this area of recovery more from the outset.</p> <p>Volunteers needed to be appropriately managed (help them to help us). A volunteer co-ordinator was brought in to assist with volunteer management, but this was implemented too late in the recovery process and the skills needed to navigate through the political and practical requirements were too substantial.</p> <p>Health and safety was a substantial issue and many logistical procedures and protocols were developed, such as working with faecal contaminated materials, use of PPE etc. Most health and safety processes lagged behind our needs, given the actual and almost unstoppable number of people entering the environment. Major work occurring on damaged roads added to this problem.</p> <p>Volunteer fatigue was evident in many instances. For example, volunteer families (friends and relatives) who provided homes for displaced families for long periods of time, as well as pet foster carers.</p> <p>Volunteers often did not meet the community’s needs and not all volunteers are helpful. Initially it was considered that volunteers could be used for many BAU functions or projects such as traffic control or rebuild assistance. The reality was that many needs required skilled and/or trained people, backed by full health and safety training. Many projects also required 7 days per week, consistent support (which has so far shown to be for 8 months plus).</p> <p>It is clear that not only were volunteers necessary, but that an early overall dedicated resource to manage, coordinate and monitor volunteers is essential.</p>

4 Built – Repairing our homes and restoring our communities

Key activities in the built environment are diverse, covering infrastructure, waste management, temporary services, temporary housing, agency interface, insurance interface, public health, and health and safety at all levels.

Issues addressed within this environment were also diverse and interrelated in many cases, including hazardous waste management, temporary infrastructure management and construction/cordon management, pest eradication, and forming relationships with insurance companies for the purpose of information-sharing and supporting community wellbeing initiatives.

Below are brief descriptions, at project level, of the activities that occurred, as well as a list of successes and challenges/lessons learned by the recovery team.

4.1 Public Health

Right from the outset of “Response”, and throughout the “Recovery” phase, there was a high need for public health protection advice for all persons working and living within the impacted Edgecumbe environs and rural areas. This advice centred on:

- Personal hazards associated with exposure to floodwaters, flood-affected buildings and furnishings, and pastures/fields/silt etc., and what steps to take to minimise the risk
- The impact of floodwaters on previously-identified contaminated land (i.e. potentially contaminated with timber treatment chemicals)
- Faecal contamination of silt (silt was deposited on a large scale from the river breach and became contaminated from inundated sewer systems)
- Management of HAIL sites (Hazardous activities and Industries List)
- The use of appropriate personal protective equipment
- Leptospirosis – an animal related public health issue (MPI and DHB put messaging out to the public and increased awareness with GPs. The SPCA and MPI organised free pet vaccinations and two open days to raise awareness of the risks of leptospirosis and other animal welfare recovery concerns)
- Personal hygiene measures.

Toi Te Ora Public Health (Bay of Plenty) was a key agency in providing fact sheets, procedures, and Recovery office and public advice. The direct and ongoing advice from the Medical Officer of Health was significant, in that it also set the scene for many of the recovery processes and procedures subsequently developed and adopted. It also provided credibility and authoritative advice on public health matters. In context, for the “Built Environment”, this was for issues particularly relating to public health and safety because of faecal contamination of river silt, potential chemical contamination from floodwaters, and the management of those issues in a practical way.

This advice was both practical and influential. Chemical testing results (heavy metals) for the Edgecumbe township quickly alleviated concerns, so did not subsequently feature highly in procedures. Dealing with faecal-contaminated silts and water ponding was the key issue, but with pragmatic procedures put in place, large-scale silt removal, plus the fact that the contamination was not an enduring issue, this was reasonably and sensibly dealt with. Ongoing and repetitive messaging to the public and workers was an incredibly important activity to help minimise potential health risks.

Specific issues arose with asbestos management, as many potential elements of friable and non-friable asbestos may be present in the housing stock. This is covered in the hazardous waste management section.

Further issues developed within buildings regarding “toxic mould growth”, which required specific health and safety entry protocols to be established.

Successes
<p>The availability of the Medical Officer of Health was significant in allowing early processes, messaging and procedures to be confirmed, established and disseminated quickly. This provided a high level of agility in dealing quickly with matters that arose.</p> <p>A high level of community understanding with regard to hazards and protection resulted from advice provided in many information outlets (newspaper, social media, internet, letter drops etc.).</p> <p>Wider potential health issues have not emerged.</p> <p>The development of a wide range of health and safety procedures for contractors and volunteers, based on the advice and information provided, will be of benefit to any organisation facing similar flooding issues in a built or rural environment.</p> <p>The management and disposal of silt by EQC and Recovery became a pragmatic and sensible procedure.</p>
Challenges and lessons learned
<p>There is a need for organisations to work together to provide timely and consistent messaging throughout the recovery process as issues arise.</p> <p>Toi Te Ora has updated written fact sheets relating to real flood-related issues and these should need minimal revision for any future flood event. This will enable the provision of quicker responses for public messaging and operational procedures to be implemented (https://www.ttophs.govt.nz/flooding).</p> <p>Rural communities faced many of the same public health risks, however public health information was not always readily accessible, timely or appropriate for specific communities. Thought should be given to the needs of rural and isolated communities and how to reach this audience.</p> <p>The scale and significance of the flood recovery required ongoing advice and assistance. Health concerns were diverse and daily guidance would have allowed a much faster and even more robust development of procedures. It also would have avoided the Recovery Office having to undertake actions that were unnecessary, tangential, or potentially raised unnecessary concern (e.g. faecal testing).</p> <p>It is therefore recommended that a public health expert, such as a Medical Officer of Health, initially work within the Recovery Office, supported by Public Health Officers.</p> <p>Operations developed in the built environment were highly-focused on public health protection and the resulting protocols and procedures were influential.</p> <p>The Recovery Office would have benefitted from having WDC Environmental Health Officers working within the Recovery Office in the early stages, to act as facilitators for public health alongside DHB.</p> <p>Toi Te Ora has identified the following actions for follow-up:</p> <ul style="list-style-type: none">• Extend prepared hazard information by completing website information for various hazards and have them translated into various languages.• Review public health advice on boiled water notices and general bottled water information.

- Integrate insurance advice and public health advice e.g. insurance advice is to hold items until seen, versus public health advice to dispose of items to aid drying out houses.
- Review Christchurch PHU (Public Health Unit) water boiling and solid waste media releases.

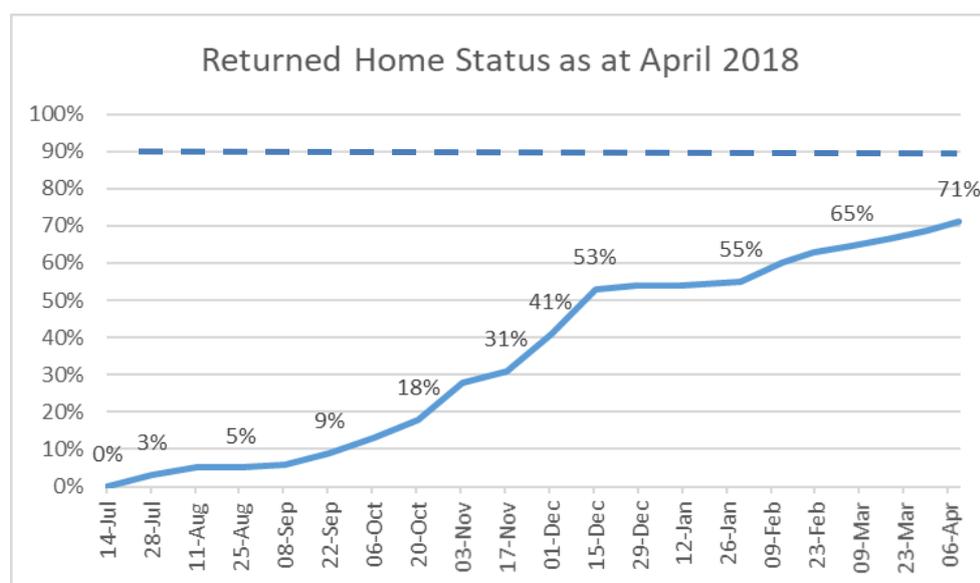
Review media release templates and have their content previously approved, in principle.

4.2 Repairing our homes

Across the district, 304 homes were assessed as moderately damaged (yellow stickered) meaning they required repair before they could be re-occupied; 15 properties suffered major structural damage (red stickered) and were not reoccupied (this particular aspect is covered in a following section). Fifty-two of the yellow stickered properties requiring repair are in Tāneatua, Rūātoki and Poroporo.

Building assessment summary	Red (severe damage)	Yellow (moderate damage)	White (light / no damage)
Edgecumbe urban	15	253	221
Plains incl. Poroporo	0	41	9
Tāneatua / Rūātoki	0	11	2

One of the early targets of the Recovery Project was that 90% of families with moderately-damaged homes would have moved back into their homes by Christmas 2017. This goal provided a key focus for agencies and highlighted the community’s desire for the earliest possible resolution. The following graph however shows the actual repair timeline.



For future similar flooding recovery events, the following outlines some of the key issues that will be faced with overall repair progress, and which need to be factored into Recovery “thinking”, particularly with regard to community and individual expectations. In some circumstances, by understanding the limitations and parameters of rebuild and repair, Recovery can more readily facilitate those elements it has control over.

Maintaining strong, positive, and supportive relationships with insurers, project managers, builders, and trades people for the duration of the event is vital to maintain positive and realistic community expectations. This is an enormous challenge when any individual negative experience (particularly when disseminated through social media) rapidly overrides other wider positive gains. It is important to monitor individual concerns, and also to see if problematic trends are emerging within the community that Recovery may have the opportunity to address.

Some of the issues that can delay repair progress are:

- Ongoing wet weather, that naturally slows the drying out of homes and the repair process;
- The practical ability of insurers to assess, negotiate, and settle with owners and then commence and rebuild 304 homes, in conjunction with a substantial number of additional repair claims across the district. Equally, insurance policies, from an owner’s perspective, can be extremely daunting;
- The limited number of tradespeople readily available for a long term rebuild;
- Owners who have cash-settled, or are in cash-settlement negotiations, that may or may not allow their homes to be repaired. Cash settlement timeframes overall have been shown to take time. The follow-on impact of this is that subsequently, each homeowner is then required to engage a builder for repairs. This is equally a time-consuming and daunting matter for most homeowners, who are not used to arranging or dealing with such a rebuild.
- Complex technical issues that cannot be resolved quickly and require specific engineering expertise. Two key issues that arose were: complex geotechnical assessments and advice with regard to land or house pile repairs; and wide-spread asbestos issues, which result from house repairs and damaged structures.

4.2.1 Understanding property ownership, insurance, and impact-scale in the built environment

One of the ongoing and largest challenges for Recovery was to

The Insurance Council of New Zealand (ICNZ) announced in December 2017, that 2017 has been the most expensive year on record for weather-related losses, with a total insured-losses value of more than \$242 million.

“These figures are a clear sign of the impact climate change is having on our country,” said ICNZ Chief Executive, Tim Grafton. “As time goes on, we expect to see more of these sorts of extreme weather events occurring.” The most expensive event of the year was the remnants of Cyclone Debbie, which struck in early April. That event resulted in 5,470 claims totalling \$91.5 million in insured losses. Flooding was also a big contributor to these figures, with insurers paying out \$94.6 million across 11,455 claims for flood events. ICNZ data shows house and contents claims made up over half of all insured losses for the year, with a total cost of \$154.2 million paid out by insurers. “This shows just how important insurance is for individuals, no matter where they live and what they own.

Extract from Insurance Council, Media Release, December 2017

understand the detail of each individual property impact, the property ownership situation (who lived at home and who rented), and who the affected peoples were. Then there was a need to understand the actual level and type of insurance cover per property, if any, and which insurer was represented in the rebuild process. From the beginning, Recovery and Insurance agencies were working to different scopes:

- Recovery focus was primarily on yellow sticker and red sticker rebuilds, as these were the homes where families were displaced until repairs were completed.
- Insurers dealt with substantively more claims than just yellow sticker properties, so had an additional and wider focus, including beyond the District.

Early in Recovery, this sharing of data was exceptionally problematic and was a major obstacle. Recovery was essentially 'blind' to the scale of damage and the rebuild progress. It was some months, following discussions at all levels, before useful data flowed at an operational level.

Although Recovery had initially requested data from insurers in a certain format, this ended up being problematic and ultimately no data was forthcoming. Simply, we had asked for data in a way and format that insurers did not normally produce, monitor, or generate. Considering that the insurance project managers were in some cases managing and monitoring claims across New Zealand, it was essential that we made it easy for those insurers to regularly transfer data, without it being a major burden. In the end, data was requested to be transferred to Recovery in a way that suited each insurer. Recommendations for working with insurers include:

- Request information/data in the insurer's desired format (make their life easy)
- Insurers were advised to strip-out the information that each insurer deemed private and sensitive to their client, and to the insurer (e.g. names and money values). By doing this, it satisfied a number of privacy and commercial concerns from insurers. The subsequent difficulty is that data came in multiple formats that required some analysis each month, so that Recovery could monitor progress against specific milestones. This analysis was however, found to be reasonable to undertake. The most important outcome was Recovery achieving a much higher level of knowledge and visibility over progress and issues.
- Ultimately, it would be beneficial if a standard was developed and agreed to for insurance information-sharing following natural hazard events. In the absence of such a protocol, our learning has been that any data shared, in any format, is better than no data.
- Recovery use of data must always be in a way that ensures that insurers maintain a high level of positive trust with Recovery.

4.2.2 Lack of early detailed knowledge

The Insurance Council advised early in the event that there was a potential that up to 50% of properties were uninsured. This drove substantial decisions for recovery, in considering the community impact. Over time, this estimate was found to be incorrect and therefore, different Recovery decisions may have been made. The recovery of insurance costs for waste management; and EQC costs for non-insured properties assistance; and the Liveable Homes strategy may have been dealt with differently, and many processes for agreements and cost recoveries more quickly-established.

What has transpired is that far more properties were found to be insured, but the number of insurance cash settled claims indicated a high level of potential under-insurance, which also has a substantial influence for repair timeframes and recovery support.

4.2.3 The benefit of information and knowing progress

Understand this information dynamic was fundamental and influential for Recovery in determining:

- The level of potential uninsured impact, which could lead to major area degradation;
- The level of underinsurance impact, which would slow rebuild progress, or limit rebuild capability. Then what collective processes could be put in place to provide advice to owners to reduce costs, minimise timeframes, and rebuild a compliant building;
- Those properties where insurer-arranged rebuilds were scheduled. This was a key to understanding timeframes and subsequent Recovery support programmes.

A large number of matters, forward-thinking, and Recovery initiatives come out of understanding and monitoring these elements.

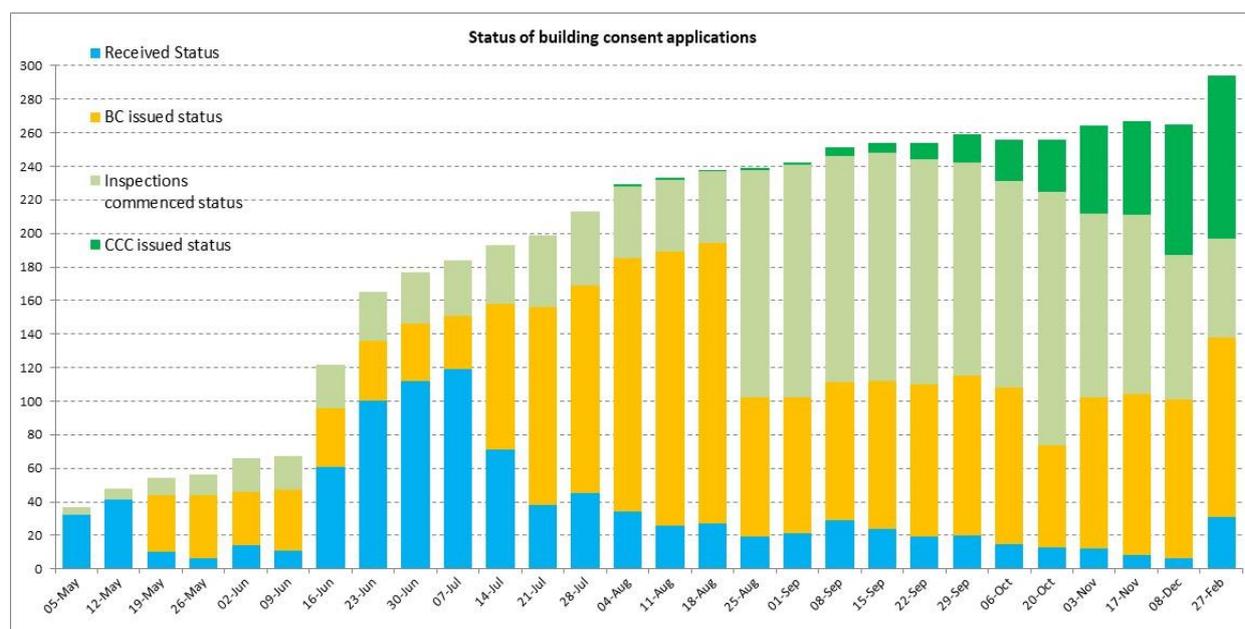
Key initiatives driven by understanding ownership and insurance:

- Collective waste management (collection and disposal) organised through Recovery and contributed to by participating insurers;
- Mass collection and disposal of contaminated silt, through EQC and recovery waste management;
- Uninsured Liveable Homes rebuild (covered in subsequent section);
- Underinsured Building repair advice support;
- Residential Advisory Service for those with insurance issues, limited understanding of their policies, or needing general insurance advice or support;
- Establishment of navigator services for individual support;
- Development of Recovery GIS layers that contained confidential welfare and individual owner and insurance details not normally held by a Local Authority;
- Establishment of free building consent process to facilitate compliant rebuilds;
- MBIE's proactive decision-making on temporary accommodation;
- Establishment of a confidential information-sharing protocol with insurers, EQC, and Recovery. In doing this, there is a fundamental need to understand the privacy issues for individuals, agencies and WDC. This protocol involves high-level relationship trust, as this information is influential in assessing progress, issues, and developing Recovery initiatives. Without this knowledge, progress would have slowed and relationships would falter, to the detriment of the community. Recovery has to carefully consider use of any information provided, so as to ensure the "Trust Relationship" is maintained.

In addition, WDC offered a free building consent process for flood-affected properties, through an established process in the Building Act, even though building consents for repairs were not a requirement. This was a key area for information provision and monitoring. Insurers in general took this up, as it gave another level of compliance surety and liability reduction. However, approx. 33% of yellow stickered properties have not taken up the free consent offer to date, which therefore required a different information-gathering strategy.

The consent process does resulting delays in information on progress, but is an excellent means of determining rebuild compliance and which residents were officially able to return home. There will potentially be some future issues where the free process for consents was not taken up by homeowners and no formal repair compliance checks were undertaken.

The following provides an indicator of progress through the consent monitoring process.



Overall, however, the picture of progress, along with the more robust and monitored consent process, highlights many areas requiring monitoring and support. The following data is at 9 April 2018:

Status	No of yellow stickered homes	%
Returned Home	220	72
Insurer scheduled rebuilds underway	30	10
Home owner active rebuild consents	21	7
Home owner processes or rebuild underway (no consent)	18	6
Minor progress, sale, or demolition	16	5
Total	305	100

Understanding this regularly updated information dynamic ensures that the actual build progress is reasonably known, which also provides a guide as to which areas may need follow up or further Recovery initiatives developed. The value of this level of detail cannot be overstated. The regular and ongoing update of information is vital to this understanding.

Our successes
Development of early protocols and a “trust relationship” with insurers was vital and tends to circumvent the need to use legislative means (which is a slow and in the circumstances, somewhat unfruitful exercise). Facilitation using the Insurance Council was essential.
Information is key and insurance updates became routine and enormously valuable after a process was established.

Most insurers undertook the optional consent process for most properties .
Our challenges and lessons learned
At the beginning of recovery, we worked on the assumption that 50% of houses were uninsured, as advised by the Insurance Council, rather than the 5% reality. This misinformation took a lot of time and resource to correct , with information sharing from some insurance agencies being very hesitant at the beginning of the recovery process, making it difficult to confirm numbers.
It would have been invaluable to have support from Community Law from Canterbury (RAS) earlier in the recovery process . The majority of insurance matters were completed without external intervention, but early advice would have helped alleviate concerns.
A national template for the sharing of insurance information would have assisted with the provision of useful and comparable information across the various insurance companies. If this is not available, then keep it simple and let the insurers give you data in their format and to the level they are comfortable with. Although there will be gaps, the knowledge and information provided will be INVALUABLE .
Regular, more informal meetings with insurers would have also been useful to build relationships and promote the sharing of information.
Early engagement about clean-up arrangements and cost recovery with insurers and EQC is essential (this is covered in the waste management section).
It took time for some builders and insurers to achieve and provide certification and then notify the energy supplier before being able to get the electricity reconnected .

4.3 Stopbank repairs on College Road

The transition period under the Civil Defence and Emergency Management Act expired on 8 September 2017. Cordons around red stickered properties remained, using provisions in the Building Act. The Bay of Plenty Regional Council finalised negotiations to purchase properties and acquire land required for the College Road stopbank repair and road realignment in late-October. An event was held to mark this milestone and to ensure the blessing of the land in preparation for ongoing work.

Consultant engineers developed design concepts to be independently reviewed and geotechnical testing continued through November. Demolition of houses started in January 2018 and reconstruction of College Road is planned to start April and is expected to take 3-4 months, followed by work on services through to the end of May/June 2018.

4.4 Managing the 'red stickered' cordon area

For health and safety and overall public safety purposes, it was clear that access to the most-affected, red stickered area required assisted controlled access and limitation of any activities. This was required to be enacted under the CDEM Act (2002) and its transition powers, because it covered multiple land ownership

and substantive public safety issues; and it was not just buildings that were unsafe (which could have been managed under the Building Act), but the land as well. Management of the cordon allowed multiple landowners, BOPRC and insurers to resolve issues and land transfer, changing ultimate land use. The major land and building damage and issues to be managed during this process were considered beyond the capacity and capability of any individual owner, as issues were also across multiple boundaries. In addition, the safety of the public could not be successfully managed without a cordon and comprehensive processes in place. The risks in the area were also not short-term, for example, building subsidence continued as groundwater remained.

Cordon Red Zone – 6 April to 8 Sept 2017



The EOC Local Controller, and later the Recovery Manager, considered it necessary to implement the following as collective measures to meet these two objectives:

- Controlled access to the red stickered area during the CDEM Transition period;
- Security officers posted at red sticker zone (24 hour);
- WDC-assisted entry protocol and public safety briefings for all relevant staff of BOPRC, WDC, other agencies, service providers, insurers, engineers, landowners etc.;
- Development and provision of specific and multi-use health and safety protocols and factsheets;
- Implementation of vermin control (rats);
- Temporary disconnection of mainline sewers through red sticker zone;
- Lime added to large ponds to reduce odour and contamination impact;
- All services cut-off by agencies under entry protocol (gas, communication, power, meters, water, etc.);
- Full temporary fencing installed, plus warning signage.

Some additional points to consider about the red stickered area include:

- BOPRC undertook a relatively rapid red sticker property purchase process, as the temporary stopbank remained at risk.
- The BOPRC decision for land purchase essentially sped up the overall decision process and hence the timeframe where public health and safety could be reasonably managed outside of CDEM transition powers.
- Having a BOPRC representative and their Property Group negotiator/facilitator within the Recovery Office substantially aided the integrated response and management of the cordon and, more importantly, the community outcome achieved. Having an experienced single facilitator for all red stickered property owners was invaluable.
- Early removal of buildings and making land safe could not be reasonably demanded by Whakatāne District Council using LA (Local Authority) powers towards each owner, because each building required engineering assessment and land required EQC assessment (via geotechnical engineers). In some cases, the land required major repair across multiple boundaries, and many buildings were

Identified hazards from the flood

Buildings

- Damaged and unstable buildings
- 6 deemed no entry without significant protection works installed
- Black mould, spores, bacteria, airborne contaminants, dust, faecal contaminated silt
- Asbestos (friable and non-friable)
- Chemicals, solvents, liquids, fuel, rotten food and organics
- Vermin
- Unstable floors, walls, ceilings
- Unstable chimneys
- Collapsed and unstable wall claddings
- Exposed services including sewers, water, electrical, gas, communication

Land

- Faecal contaminated silt (silt caked over and the faecal contamination was persistent below the caked top layer remaining a risk to health and safety long after the event)
- Large areas of deep scour with contaminated ponds and water spanning several properties
- Exposed sewers
- Debris
- Chemicals, asbestos, ammunition, dust, fuel
- Damaged vehicles
- Exposed services (electrical, telecommunications, water)
- Damaged access to sites and buildings
- Damaged and dangerous trees
- Boundaries between some properties not discernible from debris or scouring
- Vermin (rats)
- Drainage and stormwater not operable in zone (all water treated as contaminated)

Other public access hazards

- Major area requiring high level public safety and controlled access
- Contained within significant rebuild and reconstruction zone (wider most affected yellow stickered area)
- External traffic management required and temporary road reinstatement to minimise hazard
- Primary location area that school children undertake access to school
- High potential for non-approved access and access without full public health and safety protection protocols (especially young school children)

- ultimately unrepairable;
- Individual property, public health protection, and health and safety mitigation for each owner was not considered feasible, due to cross-boundary issues. Some of the factors considered included the wider community impact, unknown insurance outcomes, EQC and engineering solutions and BOPRC stopbank and land protection outcomes;
- Additional issues relevant to the red stickered area included some non-insured properties with total loss, unknown demolition needs for each property, loss of boundaries, no ability to establish individual fences, a high level of external public connection via surrounding properties, schools and traffic, and the psychosocial impact of the damaged properties on the community;
- Owners and others requiring assisted, safe access were protected via the protocols of assisted entry. Widespread issues fell outside those which could have been reasonably expected to be known or managed by an individual landowner. Consequently, the public risk was deemed high.

Successes
<p>Initial assisted access via USAR (Urban Search and Rescue). This then transferred to highly trained personnel at a local level, providing a solid process for ensuring the safety of homeowners, engineers, insurance agents and services.</p> <p>Static security (24 hours) – This provided a good entry check and reduced the potential for non-legitimate entry.</p> <p>Fencing provided simple and effective delineation for a difficult and dangerous area to be separated from other areas.</p> <p>A number of specific hazard identification and mitigation processes were developed that could then be applied across a number of other activities.</p> <p>Vermin control (implemented early).</p> <p>Priority access provided to meet owners’ needs.</p> <p>A road rebuild helped clear the dangerous College Road access in front of the red stickered area and provided safer pedestrian and vehicle access (for schools in particular).</p> <p>The outcome and time taken for the acquisition of land by BOPRC, and the integrated approach to owners and agencies, was considered to be significantly successful.</p> <p>Having a BOPRC representative and their Property Group negotiator within the Recovery Office substantially aided the integrated response and management of the cordon and, more importantly, the community outcome achieved. The families involved had high information needs and having the benefit of a single point of contact for recovery information was invaluable.</p>
Challenges
<p>The community had a consistent, negative perception of the static security operation (necessary for hazard protection via access control within the cordon). This related to a desire to have their security needs addressed in terms of the wider policing context, to ensure properties remained safe from any criminal element. This fell outside the Recovery cordon mandate (other than ensuring strong liaison with the police) and was a continuous issue raised by the community.</p> <p>It took time for some agencies (e.g. electricity companies) to realise they were required to provide full health and safety for activities they wanted undertaken in the cordoned area (especially when activities could affect other landowner rights or activities).</p>

The cordon area became a focus for **public ‘drive-bys’**, having a substantial negative psychological effect on the community.

Lessons learned

Enclosed fencing would have been more appropriate – probably with plastic sheeting (reducing the obvious visible impact and ‘disaster tourism’).

Static Security should be uniformed differently such as “red sticker cordon personnel” rather than ISCL, which the community perceived as crime prevention security for the Edgcumbe township. Stronger messaging on this issue was needed.

There is no doubt that an **unsavoury element** undertook **harmful activities** against those who had faced such loss, which were surprising and saddening. The key crimes were property theft (looting), building materials theft, and damage to property. Some of the methods used included:

- Use of official looking clipboards and uniforms so that unauthorised property entry could be attempted
- Unauthorised entry at night
- Pretending to be a warden or person of authority, or official volunteer
- Pretending to be the homeowner.

Limiting zone access to key times. It was difficult to assist and control with such a large number of owners and agencies seeking access over many months.

4.5 Making a difference through the Liveable Homes Project (LHP)

One of the key projects in the Recovery Programme was the Liveable Homes Project (LHP). Following the floods, the LHP was set up to assist the more vulnerable members of the flood-affected community, as well as providing wider benefits to all owners of flood-damaged homes.

4.5.1 Liveable Homes (LHP) stage 1

Through the LHP, the Whakatāne District Recovery operations worked with community funders, the construction industry, volunteers and other project partners to deliver a work programme aiming to get people who do not have the means required to repair their flood-damaged properties, back into their now-compliant homes.

A key issue initially was a major concern that approximately 50% of yellow stickered dwellings did not have insurance. This drove the initial thinking around assistance for this vulnerable sector of the population. Over a few months, this concern substantially reduced and there were limited applications for assistance (17), which equates to 6% of the yellow stickered, affected homes.

This project was not just for the uninsured, it was aimed at those that needed financial assistance. The primary drivers were to get people back home; reduce costs to the government e.g. temporary accommodation; and to provide wider public benefit to the whole community by avoiding areas of the town becoming derelict.

The outcome was that this allowed a more-focused, community-funded repair programme, which made repairs achievable for these homeowners. This project was in essence a “no frills” rebuild (i.e. no decoration

or carpet unless items were donated), which generally enabled a code of compliance up to a liveable standard only. This included:

- Strip-out of water-damaged floors and walls
- Removal of river silt deposited underfloor
- Replacement of floors, part GIB above water damage, stove, wet areas, kitchen bench
- Electrical and plumbing
- Free building consent process for recovery purposes.

Funding totalling of \$1,024,000 for LHP was secured from Bay Trust, Regional Council, JN Williams Trust, Rotary, Southern Trust and the Lion Foundation.

Major retailers or benefactors also provided a proportion of the materials free, or at substantially discounted trade rates. Much of the work was arranged through retired licenced builders on a volunteer basis, using a dedicated small team of builders for construction. Where possible, homeowners provided “sweat equity” and through their families, provided voluntary labour or trades skill level help.

This project was completed within 6 months, for 17 homes. The generosity of community funders was instrumental.

4.5.2 Eastern Bay Energy Trust – Insulation – A major step towards a healthier home

Associated initiatives were implemented to ensure that there were benefits for all flood-affected families/whānau, through a \$440,000 Eastern Bay Energy Trust insulation initiative. Whilst the Liveable Homes project focused on the minimum requirements for compliance and getting people back into a compliant home, the EBET programme provided a substantial improvement to all flood-affected properties (white and yellow stickered), offering a major step towards a “Healthy Home” and ensuring that properties were ‘built back better’.

4.5.3 Liveable Homes Project and assisting the underinsured (stage 2)

With the completion of the LHP uninsured rebuilds, the Recovery Team is focusing on providing advice to those who are underinsured. Over 30% of yellow stickered homes have been cash-settled by insurers, of which many are likely to be underinsured to some extent. Some of these families may also not have the financial means to complete repairs to their homes to a liveable standard. At this stage, we do not have firm numbers of families that fall into this underinsured category but anecdotal evidence suggests that there is a definite need.

Following a similar philosophy to the LHP, and with support from community organisations, the Recovery operation offered general advice assistance to those under-insured, flood-affected residents who are unable to repair their home to a liveable and compliant standard.

Our successes
<p>The LHP project delivered to 17 in-need property owners and was completed before Christmas 2017.</p> <p>A dedicated team (including key project management volunteers known in the community) were well-focused on delivery and achieving substantial cost reduction through community connection and seeking external materials and funds.</p> <p>This project was unique and is seen as ensuring that vulnerable sectors of the community were not left struggling. Community funding was readily forthcoming at the neediest of times.</p> <p>EBET's healthier homes insulation initiative provided healthier homes for the much wider group of impacted flood victims with white and yellow stickered homes.</p>
Our challenges and learnings
<p>The community had a variety of viewpoints on the LHP. Helping those needing financial assistance/or with uninsured properties evoked some individual resentment. Nevertheless, for other property owners, who lived near such properties, there was clear support to the project, so as to ensure buildings were not left derelict (which has a major impact on adjacent property values for resale and on the general feeling of security).</p> <p>Consistent messages were vital in reinforcing that the assistance provided gave a home compliant with the building code (which we deemed "liveable"), but was much less than what an insured property would generally receive.</p> <p>If the scale of rebuild were larger, then the resourcing and management of funds, procurement, decision-making, liabilities, accounts, payments etc. would have had to substantially increase. This project initially fell outside the Council's established procurement processes and there was a strong need for agility (as one would find in the building trade).</p> <p>Decision making and subsequent liabilities would have to be substantially improved for a much larger scale project. Fortuitously the number of properties registered for liveable homes (17) allowed a much smaller, dedicated team to achieve an excellent outcome.</p> <p>The use of skilled trade build volunteers did not eventuate, as many were fully-committed to the wider rebuild. The use of non-skilled volunteers for construction rebuild was considered problematic in terms of availability, lack of skill, liability and health and safety, so was not pursued. This was a dedicated 7-day-a-week project, which fell outside of the capabilities of volunteer assistance (except for 3 dedicated, highly-skilled local project managers who committed to assisting this vulnerable sector).</p> <p>Placing LHP signage outside of those in the LHP programme signalled to the rest of the community that these property owners could not afford repairs or were uninsured. The appropriateness of this was questionable and homeowners may have felt stigmatised, adding to an already highly stressful situation.</p>

4.6 Temporary accommodation

MBIE was responsible for coordinating and endeavouring to find suitable temporary accommodation/housing for individuals and whānau with flood-damaged properties. MBIE was willing to offer diversity and investigated a range of options for temporary accommodation, such as installing portable homes at the campground, Papakainga housing and on-site portacabins. Generally, people wanted to live on-site and therefore portacabins were more favoured by the community. Decisions on options were made quickly, but availability of buildings to fill the need was difficult.

MBIE (facilitated by Council) provided portacabins on residents' properties while houses were being repaired. In addition, ten portable homes were located at the Whakatāne Holiday Park for people whose properties were not suitable portacabin installations. Papakāinga housing was also built at Kōkōhinau Marae.

With regards to portacabins, a key objective was to provide onsite facilities, subject to a number of constraints, typically around ensuring safety. Providing cabins onsite gave families a continued connection to their property, an increased sense of security, and minimised disruption to their normal routines. The major downside to this approach was that many families lived in streets where there were no other inhabitants for some time.

Availability and suitability of portacabins for families was a major issue, which was set against a backdrop of uncertain repair timeframes or cash settlements. It was clear that the demands from Christchurch and more recently Kaikoura, as well as the building industry generally, had essentially removed the immediate availability of cabin resources. This necessitated the need to procure new built portacabins (which meant substantial time delays) and an innovative development with WDC for cabins built on a Council-owned campground, for the recovery purpose.

Overall, though, the demand for cabins has been steady and became more important once insurance cover for temporary accommodation ended (typically 6 months after the event). Approximately 25 cabins are in use, with cabins becoming available for reallocation as rebuilds are completed. The rebuild timeframes mean demand is likely to remain for a further 4-6 months.

Essentially MBIE dealt with the client and WDC dealt with the physical installation of portacabins on-site. WDC recovery assisted MBIE with the onsite assessment process (and developed a number of check sheets to ensure suitability), siting portacabins onsite, and arranging services to cabins. Each site had challenges to be dealt with and considered such as: connections to services, construction site needs, possible asbestos hazards, faecal-contaminated silt hazards, unstable houses, access issues etc.

Our successes
<p>Local presence of the MBIE representative in the Recovery Office resulted in more efficient and effective decision-making and coordination across projects e.g. generally those on LHP-required temporary accommodation.</p> <p>Processes and templates developed allowed for a reasonably robust occupant selection and safe installation. These templates can be reused and developed further and make a simple, yet powerful resource.</p> <p>The use of the Liveable Homes Team to assist with the on-site locations worked reasonably well on the ground, as this team was already operating in Edgecumbe.</p>
Our challenges and lessons learned
<p>Additional steps were later added to the process that included an EQC and insurer crosscheck to see whether a portacabin could be erected on site; whether this would have hindered the rebuild substantially; confirmation that silt had been cleared; and a check to confirm whether asbestos was an issue.</p> <p>Early public information about portacabins would have helped reduce the uncertainty that prevented people coming forward at the beginning (e.g. can you take pets and how much does it cost?)</p> <p>Using a variety of cabins was problematic as it increased the difficulty for tradespeople to do electrical, sewer, and water installations. Utilising one type of portacabin would have made operations simpler. On the other hand, it was recognised early that any suitable cabin available was better than none.</p> <p>The delivery of portacabins presented early teething issues for the installation team.</p> <p>In light of the relatively low demand (compared with other events), it was considered that in many cases, property purchased for temporary use by MBIE, then resale, could have been a valid option. The advantages of this proposed option would have been more families housed in temporary accommodation, more quickly; and possibly a financial return when the asset was sold, after the housing need had diminished. Disadvantages included concerns regarding temporarily influencing the property market; substantially higher investment and risks around resale; and the desire for many to be locally-housed near or at Edgecumbe would have been unachievable.</p> <p>It was difficult to assess the demand for temporary housing. Earlier introduction of the Navigator Service may have helped understand the need.</p> <p>Allowing pets into temporary accommodation with their owners is a fundamental psychosocial matter to be catered for. Pets are family and recognising that can alleviate high levels of stress at the outset.</p> <p>Portacabins at the Whakatāne Holiday park were difficult to build in a timeframe matching the demand. Construction and weather played its part and there were practical limitations. However, the final install prior to Christmas filled a much sought-after need.</p>

4.7 Waste Management

Waste management was a key, complex and substantive matter.

It was clear immediately after the event that flood and faecal matter-contaminated house and personal contents; damaged house materials, structures and fences requiring removal; house chemicals; asbestos in a variety of forms; and numerous other waste streams were going to be a major and ongoing issue. In addition, the amount of widespread deposition of river silt was also going to be significant.

Just over 7000 tonnes of waste were taken to landfill, made up of 3452 tonnes silt and 3600 tonnes of household contents and strip-out materials. Approx. 17 tonnes of recyclable product was recovered.

This was generated by approximately 372 homes and silt on land and under houses.

Edgecumbe very quickly became an operational zone, which generated major health and safety considerations and requirements.

Waste management activities changed over time and consisted of two waves:

- The first wave was household waste that lasted for 3-4 months. This first peak in waste had declined significantly by September 2017;
- The second wave consisted of silt removed from land and under buildings. This was completed by November 2017.

4.7.1 Solid Waste

Initially, it was loosely agreed with insurers, through the Insurance Council, that large volumes of waste would be more easily coordinated and disposed of more cost-effectively and efficiently if coordinated through the WDC response, and subsequently through the WDC recovery process. For such a widespread issue, it would not have seemed sensible for major insurers, faced with such large volumes of waste, to have undertaken these functions directly (certainly bulk management was obviously cheaper and better outcome). Some insurers did arrange their own solid waste management, but they tended to have few rebuilds. This became slightly problematic, as on the ground, it was not practical to differentiate much of the waste being collected from these insured properties. It was collected regardless, but without commensurate cost recovery.

To undertake this activity required early agreement and then commissioning of EnviroNZ (a major national and experienced waste management contractor), undertaken on a rapid procurement process. Again, this relied on WDC's strong relationships with the waste management industry to allow rapid setup and development of processes.

This was definitely new territory for Recovery, and for Insurers and EnviroNZ, and consisted of:

1. Damaged household contents amassed on street berms and into collective bins;
2. Separation of metal and white ware for recycling;
3. This was followed later with house strip-out waste (gib, flooring, fixtures and fittings);
4. Asbestos from properties requiring a separate, controlled process.

4.7.2 The scale of the problem

There are not many examples within the New Zealand context where the volume and scale of waste and silt removal could have been estimated with any accuracy, nor quickly ascertained.

As the scale and volume of the problem became apparent, early project plans were discarded as impractical. The existing WDC transfer station and transport to landfill was rapidly overwhelmed as the waste generated from the event equated to six months of waste for the entire district. As a result, a change in methodology was agreed between WDC and EnviroNZ for a revised way forward.

4.7.3 Waste staging areas setup and a complete new methodology adopted

The revised way forward consisted of the following:

- Three staging areas were created, which by-passed normal waste systems (a new waste operation system was developed, independent of WDC's existing system). This involved identifying and leasing of suitable land (carpark & staging area on SH2, and a local contractor's yard). Plant machinery was also brought in (e.g. loaders, bobcats etc.), as well as local contractors and national EnviroNZ resources. A staging area in Tauranga was also created and access to an alternate landfill was arranged in Rotorua;
- A large amount of whiteware was included in waste, which required a separate contractor so recycling could occur;
- Hazardous substances and asbestos were significant issues, which had to be addressed separately. This included separate processes, handling and transport;
- Health and safety for some areas was a key focus, as many streets were fundamentally operational zones.

4.7.4 EQC and Silt Removal

Silt removal was a substantial process undertaken primarily by EQC. Large volumes of silt was deposited on land and under buildings and removal was completed by November 2017.

EQC decided early-on to take advantage of the solid waste processes established and also took advantage of a local silt transfer site that was established by Recovery, on a short-term lease basis.

Initially, local sites were considered (such as rural road reserves) as potential silt transfer sites, but the quality and consistency of silt coming off properties was low. Although silt was generally cleared as having no chemical contamination, faecal contamination had to be considered. However, this was not an enduring issue, which meant there were more options for disposal. Procedures for handling weren't complicated and were practical. These procedures were also used to inform the general population, contractors, and agencies.

Ultimately, all silt went to landfill, via a temporary local holding and transfer site.

The strength of the EQC and Recovery relationships was critical and crucial to the overall effectiveness of our response to the flooding in the recovery phase. EQC's sharing of information and data helped all parties develop and refine their recovery plans and speed up the recovery process for the Edgecumbe community.

4.7.5 Asbestos and Silt

Part way into the bulk handling process, some concerns were raised regarding possible asbestos contamination and the processes that might need to be implemented. Asbestos experts from Christchurch were brought in and it became quickly apparent that asbestos (the more concerning type – friable) was not a significant issue for bulk silt removal. A conservative approach was adopted and additional procedures were established.

Successes
<p>Significant volumes of waste were shifted quickly. This recovery activity was very responsive and effective overall.</p> <p>Contractors' skills and expertise were generally very high. Different contractors worked very well together in a collaborative team.</p> <p>Having EQC in the Recovery office sped up decision-making and allowed rapid deployment of improved procedures. We were able to clean the town <i>en masse</i> and not divide insured/non-insured properties, which could have had significant implications for the township and individuals/families.</p> <p>Worked well with WorkSafe – health and safety risks for all waste workers and volunteers.</p> <p>Cost control for bulk operations worked well. Detailed data was captured on large-scale logistics bins, volumes, trucks.</p>
Our challenges
<p>Initial response procedures and plan required change (the scale of the waste volume changed the game). Previous flood events were not applicable, as they were not on same scale, so waste volumes and waste type issues could not be estimated accurately. Underestimation of volume of hazardous waste, particularly asbestos, that needed to be addressed and managed.</p> <p>Lack of Recovery resourcing and backup was a major issue for solid waste activities. Experienced resource needs to be provided to assist this large-scale, ongoing activity, if such an event occurs again.</p> <p>Tight timeframes and unknown emerging waste volumes affected the ability to forecast volumes and costs effectively in the early stages. This meant that agreements with multiple insurance companies needed much greater formality to ensure that risks and fair cost apportionment could be undertaken.</p> <p>Many owners were also trying to dispose of a large amount of green waste as a result of section tidying. This was problematic, as there was no easy handling at the transfer station for such volume, and skip bins were generally full.</p> <p>Volunteers were eager to assist in the early stages of clean up. This did carry much higher levels of risk until procedures and messaging caught up. A number of emerging hazards became issues as work progressed, (e.g. asbestos identification and health and safety).</p> <p>Other issues emerged as home contents were being disposed of in the street, along with hazardous materials, before insurance assessors had seen the properties. This left many homeowners without documented evidence. Messaging regarding taking photos of household belongings before discarding is important.</p> <p>The wider rural area and isolated communities posed a waste coordination issue. The logistics of providing bins or drop off points and collections was difficult to manage. Disposal of waste from farms included</p>

household, milking and farm shed waste, as well as chemical disposal. Waste management needs to consider household and farm building waste in rural areas where buildings have been flooded.
Lessons learned
<p>Subject experts need to be identified early. Additional experienced waste management resources are required until recovery activities are reasonably complete.</p> <p>Expect the unexpected in this area (e.g. volume, asbestos, rats, etc.).</p> <p>An exercise to calculate the amount of waste produced per average household, to use as a guide in any future flooding events of a similar scale, would be very useful.</p>

4.7.6 Hazard Management

It was important that a reputable and knowledgeable contractor be engaged to assist quickly with the clean-up.

Additional procedures needed to be developed and implemented quickly, as many hazards arose out of the actual response and recovery operations. This was not a BAU environment where hazards would normally be easily controlled right at the collection point. This became problematic, as the community did not differentiate hazardous materials from non-hazardous. Some early thinking around this may have alleviated some operating issues, but Recovery needs to be flexible and agile to develop processes as required.

Asbestos hazards need early assessment and procedures established, as this hazard has high levels of community misunderstanding of risks. Even with contractors, the level of understanding was found to be low.

A large number of public queries regarding hazardous materials was initially very time-consuming.

4.7.7 WorkSafe

WorkSafe was invaluable in its educational and training assistance role. They were readily available to help facilitate messaging, undertake volunteer, contractor, and building project manager training sessions at Edgecumbe. These were very well-attended, showing the high need for education in this arena.

Our Successes
<p>Worked well with WorkSafe. WorkSafe briefings to contractors/workers were excellent, but Recovery needed to engage with WorkSafe earlier through response then recovery.</p> <p>Able to identify appropriate contractors and processes early-on and therefore we were able to deal with hazardous materials reasonably efficiently and effectively.</p> <p>Two main contractors had good H & S processes already in place, which were easily adapted to the recovery operations.</p>
Our challenges and lessons learned
<p>The entire town of Edgecumbe effectively became an operating environment and the level of coordination and cooperation expected under the new Health and Safety Act was difficult to achieve.</p> <p>An earlier understanding of the faecal, chemical, and asbestos issues and procedures required would have minimised subsequent changes to procedures and reduced concerns at all levels.</p> <p>Health and safety overall would have benefited from a dedicated Recovery Office resource, as these risks are significant in a semi-controlled area with high public interface.</p> <p>Hazardous Substances – the amount and volume of hazardous substances to come from people’s properties was much higher than expected. This needed to be managed appropriately.</p> <p>Waste is a highly complex and difficult operation, even under BAU conditions. It requires a number of specialists and experienced personnel in this arena to be connected and operational. It is clear that WDC had high reliance on only one internal skilled resource and that waste was a substantial activity. One option would be to bring in an additional, highly experienced resource at the management level to assist. Also, there is a need to identify subject matter experts early in the process (i.e. in planning phase <u>before</u> event).</p> <p>Management of asbestos, chemical and faecal matter. It would have been good to have educational material before the event. WorkSafe has valuable training resources that were practical and well-received. DHB has improved the onsite information available for such an event.</p>

4.7.8 Insurance companies and waste

As previously outlined, the overall waste clean-up was facilitated by collective agreement with insurers and EQC, using bulk-handling techniques via experienced waste managers with a high level of industry knowledge.

Our Successes
<p>Bulk insurers saw the advantage and quickly came on board.</p> <p>Data supplied by contractors allowed us to pass on information and deal with insurers’ details better – the data was detailed and high quality.</p> <p>Relationships with insurers developed over time and were excellent for information transfer. A high trust environment was created.</p>
Our challenges and lessons learned
<p>Not all insurers were on board, which made it difficult to differentiate waste on the ground. This became problematic for recovery, which picked up the waste but could not recover all costs. Overall though, this was not too significant. A much more solid, formalised agreement with each insurer would have lessened later cost recovery disputes.</p> <p>Identify what details are needed from insurance companies, so that they can supply Recovery with details in the same format – otherwise it is difficult to compare across insurance companies. Recovery ready to go “Insurance Agreement Templates” would have substantially improved total operations.</p> <p>Communications are important – the community understood that the skip bins were provided by WDC and then were surprised when rubbish removal costs were taken off their insurance settlements.</p>

4.8 Roothing

Storm damage caused by ex-Tropical Cyclone Debbie is estimated as \$11.2 million within the Whakatāne District and an additional \$1.4 million in Wairoa District. Many of the repairs have taken months to complete. The storm event caused lifelines to be severed, leaving a number of communities within Te Urewera and Whirinaki isolated. With no land access to Ruatāhuna for 10 days and Minginui/Te Whāiti for three days, essential emergency supplies had to be transported via helicopter to assist these communities.

Many of the roads suffering damage lie within Te Urewera and are critical to the communities, workers, a growing number of tourists and other users for residential, social, cultural, economic and environmental reasons.

A significant programme of works is planned to repair and reopen roads throughout the District. All work resulting from the numerous slips and other damage caused by the two severe weather events is planned to be completed by the end of 2018.

Storm events had a significant impact on the ability of the council and community to continue to maintain these roads at expected base levels of service. Costs also typically come at a time where social, cultural and economic recovery costs across many areas are high. Reoccurring storm damage is a long-term issue for these Special Purpose Roads (SPR’s) and is not simply a one-off problem. Maintenance costs from storm

damage average \$500,000 per annum for the SPRs in the Whakatāne District over the past 10 years. With the current 100% funding arrangements, these costs are fully met by NZTA. Under the new regime, Council will be required to carry an additional cost liability, with an additional rating burden on all district ratepayers.

In many ways, although the scale of roading repairs is substantial, the processes and procedures are well embedded into the operations and funding relationships of WDC and NZTA.

5 Natural & Rural - Restoring the natural and rural environment

Impacts on the natural and rural environment from the April weather events were significant. Approximately 1400 hectares of rural properties were impacted, including the need for re-grassing of farms (10 – 100% percent of farms for individual farmers); clean-up of properties, including assistance with clearing of trees, restoring fences and cleaning up debris; and long-term farm management and planning.

Extremely wet weather over the winter months prolonged the impacts of the April events. This resulted in surface flooding of paddocks due to already saturated soils, creating more issues for farmers.

The Rural Recovery Team's aim was to support farmers to function within a new normal. For farmers the recovery is long term, with the financial and physical impact on their farming businesses, including livestock and land lost to erosion, in some instances, being permanent.

5.1 *Supporting rural communities to recover*

5.1.1 Rural Support Trust Facilitators

The Rural Support Trust Facilitators are trained to assist rural families and individuals through hard times, including adverse events. They provide support and referral to professionals, including psychological. The Facilitators helped people navigate and access services to get the support they needed. The Trust Facilitators, as part of a nationwide Rural Support Trust network, have a solid reputation in the rural sector, with rural stakeholders, and health professionals. Although it requires reasonable investment in resources, the results show that it is effective in reducing the time communities take to recover. The Trust directly supported over 100 rural families/individuals during this event.

RST is a good example of how preparation and planning before an event can be hugely beneficial.

RST had a dedicated team of seven skilled facilitators set up prior to the event with processes and a plan in place ready to support and assist farming families

5.1.2 Bay of Plenty Primary Sector Recovery Grant

The Minister for Primary Industries provided \$300,000 to help Bay of Plenty farmers with recovery following the April flooding and storm events. This consisted of \$200,000 in the first funding round and an additional \$100,000 in the second round. Applications for the MPI second round of grants closed on 29 September and assessment of applications occurred on the 2nd October, to distribute all remaining funds.

The Whakatāne District Council partnered with MPI and administered the grant with support from a decision panel and technical advisors. The grant process was well run and received.

5.1.3 Rural events

A series of events (34 events) were delivered to connect the rural community, provide support and connect rural professionals and stakeholders. Events included:

- Rural women's networking
- Rural BBQ's, in each of the affected rural communities in the region. The BBQs included rural professionals and regional council, along with the key rural stakeholders

- An evening with Doug Avery (writer), based on being a resilient farmer (including his struggles with farming life, earthquakes, drought and depression)
- John Kirwan event-sponsored by Pioneer
- Good yarn workshops
- Bus trip for farmers to rugby in Hamilton
- Tech transfer events
- Discussion groups, including attending Kiwifruit Growers discussion group
- Attending other stakeholders', rural professionals' and council' events (community expo, Dairy NZ and Bay Vets events)
- Young farmers get-together
- Wellness presentations.

5.1.4 Rural Support Trust's rural advisory groups

The Rural Support Trust formulated a number of advisory groups. The objective of the advisory groups was to provide professional advice and services to farmers affected by flood events. These groups were setup in a number of rural communities throughout the district. Workshops were held on a range of subjects, including farm systems, animal welfare and rural insurance.

Our successes

The **physical space provided** to the Rural Support Trust and Federated Farmers in the recovery office was pivotal to ensuring efficient communication, operation and sharing of information.

BOPRC, RST and Federated Farmers **worked well together to support rural recovery**, building on already strong working relationships. Strong trust and relationships formed, which eased the flow of information and enabled more timely responses.

The **rural recovery team recognised that recovery for farming businesses needed to start immediately** after the event, and where possible between the two cyclones. Providing ongoing feed for livestock was a top priority with many farms resewing grass as soon as possible. Because of the demand for seed and contractors, significant coordination was required. This is just one example of where the Rural Team worked together with key stakeholders to coordinate recovery.

The **well-developed processes set up for facilitators** in the rural environment were adapted to establish navigator services to assist urban flood-affected individuals and families.

Having a **well-established network** across the farming community to provide grazing, stock cartage and feed at very short notice.

The **working relationship with the Navigators** ensured that lifestyle and rural residential individuals were supported, enabling their work to be dovetailed with the work of the RST Facilitators.

Events were organised within local communities, so that farmers did not have to travel far. This worked very well as it provided connection points with other farmers and support that was highly-needed.

Having a **dedicated team of facilitators** (7) already setup prior to the event, with a varied skill set and life experience, was a huge benefit to rural recovery.

A **dedicated relief worker** for 3 months to provide practical on-farm support around the district was very well received and provided some relief to those who needed it most.

The ability and **flexibility of the entire rural support team** to 'ramp-up' in response to the need.

Having the Local Recovery Manager attending **Rural Advisory Group meetings** has made for greater connection and understanding of rural needs.

Having the **National Recovery Office involved** has helped improve communication between key rural agencies and the local recovery office.

Our challenges

In the initial stages of recovery, **lifestyle block owners fell through the gaps**, due to a misunderstanding that the RST was working with primary producers only. This was picked up further on in the recovery process.

The **urgent shifting of stock was very difficult**, as cordons were restricting movement of vehicles.

For the Rural Team **recovery was region wide** (rather than District), with significant portion of the Western Bay of Plenty's coastal farmland inundated and wind damage in Ōpōtiki District.

A perception by the rural community and rural agencies that there was a **significant disconnect between financial costs of recovery and the MPI grant** given to flood-impacted individuals.

The **GP referral service did not have clear pathways** into mental health services for those who were in urgent need. In some cases, people were turned away.

The **transition to recovery placed the primary sector under the “natural and rural environment stream”** for the recovery. Recovery tried hard to work as a “whole of district” recovery unit, while utilising existing agencies such as RST and Federated Farmers. More recently, this approach has been perceived by one respondent as marginalising, making it difficult to integrate rural recovery needs into activities occurring in other workstreams (e.g. inequality in terms of participation, service design and delivery in the recovery process). On the other hand, others considered that the significant wrap-around support provided by RST to farming families and individuals in recovery was exceptionally well-planned, resourced and coordinated. It is acknowledged that all agencies have a role in supporting the rural community across all recovery environments. Recovery is a team effort and support and ownership is instrumental in building resilience. MPI's earlier involvement in Recovery may have minimised some of the issues that subsequently arose.

Going forward, it is important to enable rural communities, as well as other communities and businesses, to be **fully-included and represented in recovery** and transition decisions, conversations and activities.

Both Federated Farmers and the Rural Support Trust felt they needed **better communication channels** with key people in the wider recovery.

A **lack of clarity about what financial support was available** to impacted individuals from central Government agencies.

Use of **local service providers was not explored** and/or utilised fully.

Lessons learned

Acknowledge and support the primary sector as part of the business community, including as major local employers. Continue to build and strengthen relationships in peacetime, putting in place CDEM plans that include rural communities.

The **wider recovery effort was too focused on the farmers surrounding Edgecumbe**, at the expense of other areas such as Tāneatua, Galatea, Waimana and Rūātoki. Waimana's and Tirohanga's power outages caused significant disruption to farms, including access to stock drinking water.

In any event where primary land is impacted, resulting in loss of feed (dry matter); an accurate measure of this

and early planning, with backup plans as to what size the feed deficit is, and a plan as to how this is to be filled, is an essential starting point for all parties. Evidence from the event and recovery demonstrates that those farmers who planned early and acted on that plan are far better off, with less ongoing issues. **Encouraging resilience planning for farmers is therefore needed as a pre-event activity.**

There was **no list of key farmer contacts** for each area at the beginning of recovery. This was developed during recovery, which is crucial when roads are closed, and is something to consider prior to events.

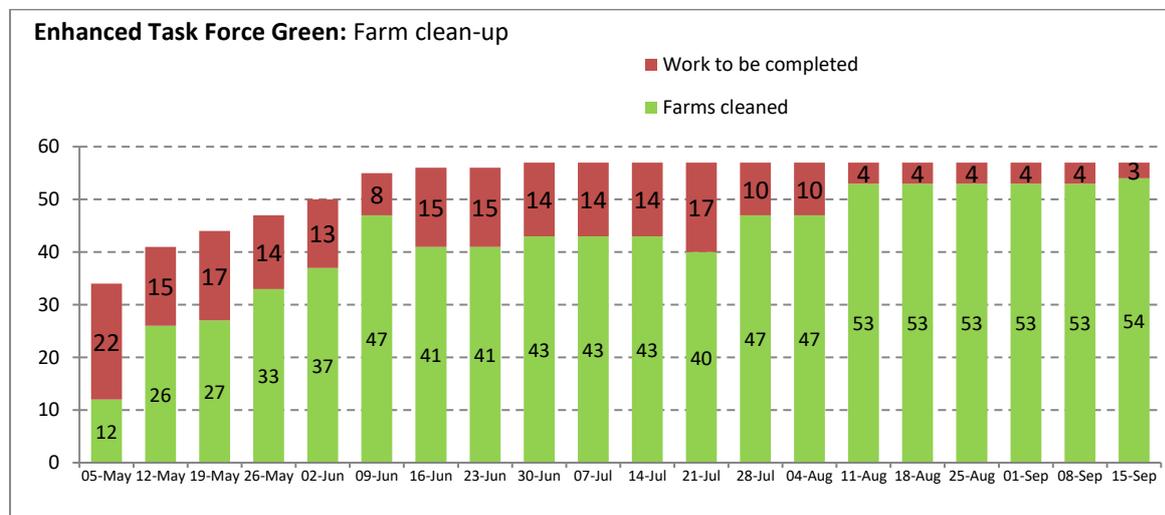
Using **social media** channels for communicating with the rural sector is invaluable. A Facebook page was developed to communicate with those networks already setup on Facebook and it provided an efficient and effective method of communication.

Psychological First Aid training prior to the event, rather than after, would have been useful for all those working in recovery.

There is a need to **clarify roles and responsibilities between MPI, Fonterra, Dairy NZ, RST and SPCA** in relation to animal welfare, to ensure better coordination for future events.

5.1.5 Enhanced Taskforce Green (ETFG)

Funding of \$500,000 was provided by the Ministry of Social Development for Task Force Green workers to clean-up rural and open spaces. This included clean-up of debris, fencing and fallen trees. A total of 54 farms were cleaned-up by Enhanced Task Force Green (refer to below graph). Works were then transferred to MSD to finalise. MSD, with support from the RST, contracted further chainsaw work which was completed by the end of March 2018.



The damage was assessed for MSD by the RST in rural areas and by WDC in more-populated areas (Edgecumbe and other communities). WDC was contracted to oversee the implementation of ETFG and a crew was employed by 14 May 2017. Three teams were deployed across the district to undertake clean-up work. Within a month of the start of the project, it was evident that the majority of the work required expert chainsaw operation to clear many of the dangerous trees; this resulted in health and safety concerns that became problematic and difficult to manage.

The contract for the ETFG crew via WDC was completed on October 17 2017 and ran for 22 weeks.

Our successes
<p>Good working relationships and processes were established quickly between agencies for the ETFG project.</p> <p>Permanent employment opportunities following ETFG work for some who were involved and were previously unemployed.</p> <p>ETFG supervisors and teams worked well and received many compliments from property owners they worked with, as well as from Council’s supervisors.</p> <p>The use of an independent auditor with experience in the forestry industry to assess the chainsaw delivery company involved in the ETFG was valuable.</p>
Our challenges
<p>Funding criteria set by MSD for the ETFG project did not cater for some of the work that was needed. This was an ongoing issue.</p> <p>A lack of readiness and capacity for all involved in ETFG that resulted in delaying the start of the project.</p> <p>Confusion and possibly a sense of unfairness as both volunteers (unpaid) and the ETFG crew (paid) were doing the same work.</p> <p>The WDC engagement process only allowing drug testing after the appointment of staff slowed down the finalisation of teams, when a quarter of the original selected participants failed the test. The availability of suitable MSD clients for the team roles tested the pool. In future, the supervisor roles should possibly be filled by experienced personnel outside of the MSD pool.</p> <p>The timing of the work in winter, though unavoidable, meant some farm properties were not dealt with as the ground was just too wet.</p> <p>The level of personnel in the RST was not adequate to allow full scoping of the work on properties. This created a situation in which ETFG teams turned up to properties and were not able to complete all tasks.</p> <p>The scheme’s focus on farming properties meant many rural properties were excluded from support.</p> <p>The placement of the ETFG project into the Places and Open Spaces group was questioned and the suggestion made that this may have been better-placed within the Recovery Group itself.</p>
Lessons learned
<p>Have the work programme fully-scoped, with enough personnel within RST to undertake the assessment of work requests. Where chainsaw work is required, engage a competent assessor to scope the work. When responding to the immediacy of a disaster these resources are likely to come from outside the affected area.</p> <p>Experience is sometimes crucial to the delivery of projects. In this case, experience and competence was needed for the removal of wind-damaged trees from properties, as well as fully experienced supervisors who may not necessarily be part of the MSD clientele.</p> <p>It would have been of benefit to mobilise ETFG earlier in recovery. It took too long to get the teams onto the farms that needed clearing.</p> <p>Where volunteers/MSD clients were working near heavy or dangerous machines or in potentially dangerous situations, health and safety needed to be managed carefully. Compliant contract providers are essential in future events for ETFG.</p> <p>There was a delay in getting ETFG on the ground due to inexperience working with the programme by all involved. Preplanning and agreement of arrangements across the Bay of Plenty would allow for quicker and therefore more affective help from ETFG.</p>

5.2 Restoring the natural environment

Our objective for this workstream was that the impact of the flood and its recovery would not leave lasting negative environmental effects on our land and in our water. Achieving that objective focused on the following activities and projects, which have mostly become BAU for BOPRC.

5.2.1 Responding to complaints

Responding to complaints within 3 working days, in relation to soil health or waste contamination issues, to enable urgent contamination issues to be addressed was actioned. Several requests were pursued, requiring the BOPRC soil scientist to visit and check. All requests were field-checked. This action started when the recovery programme began and is ongoing.

5.2.2 Archaeological sites

Ensuring appropriate kaupapa was followed for kōiwi and archaeological sites involved clear messaging being delivered to the rural community and agencies involved in any work in the field.

5.2.3 Restoring public and open spaces

To enable public enjoyment and health and safety, open space amenities, parks and reserves were repaired or checked for health and safety issues. This work was completed quickly and efficiently by WDC's Places and Open Spaces team. Only netball courts in Tāneatua were not ready for use within a month of the recovery programme getting underway, due to silt deposits. The ETFG team subsequently cleared this park.

5.2.4 Biodiversity

An assessment of the impact of the flood on biodiversity and an estimate of repair work was scoped as a project by the Department of Conservation. However, due to resources not being clearly designated to get the project underway, it has been cancelled. It remains as an aspect of recovery that should be included in the future.

5.2.5 Biosecurity

The Recovery Team managed monitoring of biosecurity issues, such as new incursions into the recovery area. This aspect of the recovery was not present in the MCDEM guidelines, but was seen as an important issue, specifically in relation to TB monitoring due to high levels of cattle movement in and out of the recovery area. Another need was the monitoring of specific pest plants, for example, alligator weed. The monitoring of alligator weed is now business as usual for BOPRC.

5.2.6 Event analysis (erosion analysis)

Significant erosion was observed across many of rivers in the Whakatāne District as a result of the April rainfall events. A project was undertaken to quantify the extent of erosion, as well as gain a better understanding of the area of silted land, through aerial photography. Rivers included in the scope of the project were Whakatāne, Waimana, Rangitāiki, Waiohau, Whirinaki and Horomanga. This work has been very useful in helping work out the economic impact of the flood to the dairy sector, and is also being used for future planning of housing and land survey activity by the community.

5.2.7 River and stop bank repairs

BOPRC assessed all river schemes and non-scheme rivers, and some larger streams, for erosion damage and other issues/damage to infrastructure. This was completed by geotechnical and field-check analysis. This list was used to develop a cost estimate for each site and a priority rating was given. This then formed the basis for urgent work and asset management repair. The work was underway prior to the cyclone but the scale of damage and repair required post-cyclone is enormous, with a huge multi-million dollar cost.

Significant river and stopbank repairs will be ongoing for some time to come. Urgent erosion repairs include over 500 sites, which are being progressed. All current works will be completed and then a re-prioritisation of site work will occur, depending on funding and insurance. Works include:

- Lower Rangitāiki River scheme - all drainage canals are being worked on (desilting)
- Rangitāiki River at Te Teko - rock protection work
- Tauranga River - working at Rakuraku property
- Whakatāne River near Rūātoki township at the Ohutu Bridge and Valley Road - repairing erosion of river berms
- Whirinaki River - channel alignment and widening at identified sites
- Galatea on the Mangamate, Ruaperaue and Ohutu streams - desilting and realigning
- A large project of river scheme and non-scheme assessment and repair was actioned.

5.2.8 Kopuriki Road

A specific project was required for Kopuriki Road. This was due to the flood causing significant flooding issues for farmers upstream of this road, which acts as a causeway dam to the river in flood. This meant that some farms were inundated with floodwater for a much longer period and soil moisture levels were at saturation levels for many months.

Our successes
<p>What did work well and was necessary was taking the initial guidance from the MCDEM recovery structure and modifying it to suit the broader environmental focus needed. While there is little to measure the success of some of the actions – the fact that they were initiated and actioned meant people were aware of environmental issues at a broad level, with information available if necessary and people identified in the natural environment and rural workstream could help.</p> <p>This expansion of environmental issues also meant that recovery work could potentially report on more aspects of the cyclone damage and recovery. This workstream has been successful across all projects, except for biodiversity and river repair communication. It is hard to quantify the success of much of the activity, due to the nature of its delivery, but the fact that some of the environmental issues are not causing major concern is a good sign.</p> <p>Specific success points were crucial – broad-scale recovery area thinking, for example, covering TB incursions, connection of issues to Rural Support Trust and BOP Federated Farmers, funding available for activities from agencies involved, and interweaving of environmental effects into the primary sector support workstream, as discussed above.</p> <p>The work of the WDC Open Spaces team was noted as ‘brilliant’ in timing and speed to provide places for the communities affected to have a place to go for recreation.</p>
Our challenges
<p>Although valuable, the biodiversity project did not get progressed to completion, even though DOC and BOPRC supported it and started work on it.</p> <p>The scale of the river damage was astronomical and the community’s needs for repair and speed of repair couldn’t be</p>

matched by BOPRC. However, this has been poorly communicated and not explained well. Communicating using GIS and the Council website to illustrate the scale of the issues would be useful.

Not enough attention was given to the large tracts of Te Urewera and Whirinaki forests, where track damage was huge. There could have been more focus and funding support put into this work, as it had economic benefits. It did have a specific problem in that much of the work required a high level of fitness and chainsaw qualifications, which could not be matched to workforce supply (e.g. ETFG).

Obtaining information from a range of agencies involved in this workstream has at times been a challenge. The recovery programme was seen as the voicepiece/information hub to natural environment and rural activity, and so added pressure on those in recovery to obtain information, which was not being communicated through other channels (e.g. river repair progress/activity).

Lessons learned

The significant lesson was to **modify the workstream to fit the needs and requirements of the event recovery to the district and its community** (e.g. joining natural environment recovery to rural recovery). In MCDEM's guide for recovery, there is no rural component. An additional lesson would also be to bring MPI recovery people into the workstream earlier, to help with its development and delivery.

Having the right people in the right roles and places – effectively setting up the recovery team in this workstream makes a valuable difference from the get go. It is also valuable to have this workstream involved in the overall recovery programme, alongside other workstreams – so all recovery teams are aware. This allows for cross-pollinating discussions and conversations to occur, which aids overall delivery of actions.

The things that didn't go so well related to **finances and resources** (people) early in the recovery, to maintain momentum in meeting the rural community's needs. While this didn't become a major issue, it did raise itself as a problem at times. This also relates to a challenge of keeping the right people in the right roles and places for periods of time – as momentum and knowledge gets lost and connection to people in the community is reduced. There needs to be a recovery team set up and maintained for as long as possible. This then needs to be adapted successfully for other recovery phases.

The **logistics of a large catchment can be a challenge**, as it adds to the pressure on delivering support and action. This challenge can cause fatigue for team members.

Use as many avenues as possible to obtain **information**.

6 Economic – Regenerating the economy

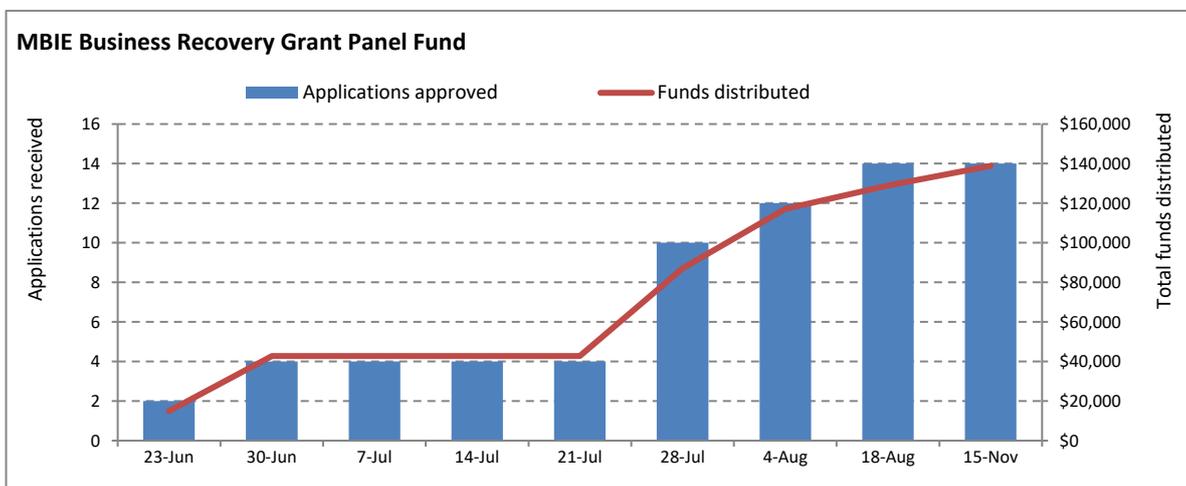
The degree and severity of the flood event has resulted in significant disruption to a total of around 70 businesses. The majority of affected businesses are small enterprises in Edgecumbe, with many struggling to remain viable during the repair phase.

To assist affected businesses, a number of projects were implemented, including support from the Chamber of Commerce, and the Ministry of Business, Innovation and Employment’s Whakatāne Business Support Grant Programme. For other sectors of the community, other funding was available, including the Ministry of Primary Industries Primary Sector Grant and the Mayoral Relief Fund.

For those businesses in Edgecumbe (majority of businesses flood affected), the lack of residents has continued to have economic impact. The severity of the effect on business is demonstrated by the significant change in spending. For the quarter ending June 2017 (April, May, June), spending in Edgecumbe was down 28.9 percent, equating to a loss of \$858,000 (Eastern Bay of Plenty Chamber of Commerce Quarterly Report provided by Marketview, 2017). For a small business community, this downturn is difficult to withstand.

6.1 MBIE’s Business Recovery Grant

A Business Recovery Grant (total available \$250,000) from MBIE was available for distribution among eligible, affected businesses (see graph below). The Whakatāne District Business Recovery Grant panel was established and accepted 17 applications. An independent review of this grant programme will occur in 2018, to evaluate the impact of this fund for flood-affected businesses; assess the process and governance of the fund; and recommend improvements for future business recovery funding programmes.



6.2 Other business initiatives

An economic action plan to assist businesses to recover was developed early in recovery. A ‘mismatch’ in understanding of roles and responsibilities resulted in many of these actions never being implemented. As discussed below, the lack of support for business was an inconsistency and gap in recovery actions.

Projects aimed at business support that came to fruition included:

- A project to launch free WiFi for Edgecumbe was implemented. WiFi was installed in the central part of Edgecumbe and further afield to extend coverage.
- A marketing and advertising package was also implemented by multiple media agencies, for an 'Edgecumbe back in business' campaign (funded by MBIE).
- A free business planning workshop was also being scoped for early-2018, to assist flood-affected businesses 'grow their business'.

Our successes

Recovery business support **involved people with mana** in the business community.

Free Wi-Fi was made available to assist the business community to recover more quickly.

A **marketing package** "Edgecumbe is back in business" was launched prior to Christmas and the reopening of Riverslea Mall, to encourage buying locally.

Funding from MBIE was made available early on to provide assurance to the impacted business community. MBIE remained responsive and engaged throughout the recovery process. An oversight and governance group was set up quickly to be able to administer this fund effectively.

Our challenges / lessons learned

Business support was a significant gap in recovery. Although there was an economic action plan, many of these activities were not implemented. In addition, business owners could access navigator support as a member of the community, but there were limited opportunities to ensure this group's needs were being met. This was inconsistent, in comparison with other affected sectors. For example, primary producers (also businesses) received wrap-around support from the Rural Support Trust, which included farming advice, support services and psychosocial support. Further thought needs to be given to how to best meet the needs of business communities in recovery, particularly when these are made up of small businesses with limited resources and limited resilience. A starting point would be preparedness in knowing the business community (e.g. creating a business directory).

The **role of the Chamber of Commerce** emerged from the MBIE funding contract. Clarification was needed on whether the Chamber's role was solely assisting businesses to access MBIE funding, or supporting businesses to recover, more generally. The Chamber's role focused on assisting businesses to access funding, leaving a significant gap in terms of more general business support.

A single person from the Chamber was the **face of business recovery**. At times, this person was under significant pressure and needed support, a break and additional resource.

Criteria for the MBIE fund were perceived to be too restrictive, as well as onerous to apply, resulting in only 14 businesses being eligible. This may have been the unintended result of MBIE transferring and applying criteria used in other recovery settings in New Zealand to Whakatāne business recovery activities, in order to make quicker decisions to support business. The affected business community in this event could be described as small, with limited resource. MBIE's business support fund is under independent review. The recommendations from this will provide insights into how to improve this fund for future use.

The task locating of **temporary accommodation for impacted businesses** was unassigned. There was an opportunity to set up a temporary business hub, e.g. at the Cosmopolitan Club in Edgecumbe, however this opportunity was missed.

Business continuity insurance was not widely held by small businesses and people did not have a strong understanding of their insurance policies. Businesses were also not able to get insurance advice from the Residential Advisory Service that was available to affected residents.

Lack of business continuity plans (e.g. no back-up files), made it difficult for businesses to get insurance claims lodged. Support and advice on business continuity planning is needed for small businesses, in preparation for such events.

7 Partnering with Iwi

A Community Communication and Partnership Plan has been developed as the fifth environment of the Recovery Project. The main outcomes are to:

- Enable partnership approaches to projects that are aligned to the recovery phase and beyond;
- Give effect to Iwi values through collaborative engagement;
- Recognise natural, cultural and historic heritage.

This Plan draws on the IAP2 spectrum with the emphasis in this community recovery being on involvement and collaboration. In recognition of the significance of the partnership with iwi authorities, specific Iwi engagement has been incorporated into the plan. Refer to www.Whakatāne.govt.nz/recovery-project for more detail, including milestones and target timeframes.

8 Communications

To facilitate and support the Recovery Project, recovery activities have been developed, with input and advice from our partners, including:

- Elected representatives, including Community Boards from the affected areas;
- Bay of Plenty Regional Council;
- Iwi representatives and organisations;
- Federated Farmers and The Rural Support Trust;
- Government Agencies, including MCDEM, EMBOP, Ministry for Primary Industries, Ministry of Social Development, The Bay of Plenty District Health Board; and
- A community group representing citizens from the wider Edgecumbe area (Community Focus Group).

A vast array of communication and engagement activities have occurred over the last eight months, including regular newsletters, social media engagement, open days, workshops and partnerships being formed. We have also aimed to acknowledge the key roles Iwi play as leaders in the Whakatāne District, through establishment and maintenance of positive working relationships that are collaborative and mutually beneficial.

For a list of communication and engagement activities refer to the Community Communication and Partnership Plan (www.Whakatāne.govt.nz/recovery-project).

PART B

An overview of key themes and insights





PART B – AN OVERVIEW OF KEY THEMES AND INSIGHTS

Analysis of debrief responses highlighted some key themes and insights into the recovery process. This part of the document explores these key themes, which both provide a high level overview of recovery, including factors that impacted recovery activities, as well as insights that can inform planning for future recovery processes.

1 Principles of community-led development and building resilience underpinned recovery activities

Communities lie at the core of recovery. A key theme was the criticality of **underpinning recovery with the principles of community-led development, and building resilience**.

- The community has been supported to determine and develop its own long-term plan for recovery and its 'new normal'. This has enabled the community to start thinking ahead about what people want to develop and redevelop in the community.
- On a practical level, community events, such as workshops on home maintenance, fencing and gardening, have helped to build sustainable local capacity and capabilities. These events, and others (like the Tough Bugga challenge, the America's Cup visit, the Bluelight Christmas in the Park, and the Rangitāiki Community Board Volunteers' Breakfast) have enabled community connections and support networks to be built or enhanced, and enabled people to engage with service providers and agencies, in relaxed and non-threatening ways. Having a community coordinator was central to these events getting impetus and support.
- Recovery activities, such as the school holiday programmes and youth-led events, will now be adopted and continued by local groups and agencies – thereby ensuring the long-term sustainability of the positive outcomes these have had for families' and children's well-being.
- The running of recovery activities and events has shown the need for flexibility and innovation, to best meet community needs with the resources to hand (e.g. when halls and other usual community meeting places were not available).

Various respondents noted that **the community-led approach needed to reflect differences within the community**; i.e. there were distinct needs of various groups within the wider district and these needs required tailored solutions. Feedback particularly concerned three groups, which are discussed below.

- Respondents noted that **businesses have specific and different needs from individuals**. Services and responses put in place to meet individuals' needs were not fit-for-purpose or targeted at businesses; examples given were the navigator service; temporary accommodation support; financial assistance (guidance and funding); needs assessments; and connections with CDEM and the Council. To address some of these, the Recovery Office developed a series of resources, including a set of templates for activities such as data collection, needs assessment and assessments of eligibility for funding. At least one respondent noted that business navigators would have been very useful to have in place, with a similar role to the navigator service delivered in the community (refer below). In addition, it was noted there was an absence of an umbrella agency that could provide guidance and advocacy for

businesses, in terms of business continuity, external funding support and insurance. Respondents were unsure if the Chamber of Commerce had this role or not.

- The second group was **rural communities within the wider district, who have both shared and unique needs and aspirations, compared to urban areas**. Complicating this situation is that the rural communities are not homogenous, but comprise primary producers (e.g. farmers and forestry blocks), lifestyle block owners, caretakers of Māori land (where the land is not used for economic gain) and households living in more remote areas (e.g. Galatea).
- The third area concerned **engagement with iwi**. Existing recovery guidance supported iwi engagement to be its own separate workstream. Structures were also not in place to expedite engagement or to share information. At times, the Council had to engage iwi through multiple means, including co-governance arrangements, rūnanga and hapū, which proved resource-intensive but necessary. It also became apparent that Māori landowners in rural areas, who were not farming the land for economic gain, were not always receiving the recovery services they needed, as they fell outside the remit of Ministry for Primary Industries (MPI) assistance, including services and support provided by the Rural Support Trust (RST) and Enhanced Taskforce Green (ETFG).

2 Critical to good outcomes was effective and timely recovery management, planning and delivery

Several sub-themes of this theme were apparent from debrief respondents, many of them inter-related. These are summarised below.

2.1 *The need for recovery preparedness and planning in advance and also during response*

Typically, this is achieved by putting in place the right capacity and capability, collaborative relationships, and leadership prior to an emergency, as well as ensuring there are frameworks and resources in place. A series of sub-themes came out of the debrief:

- **Ensure all key players in recovery are involved and engaged before and during recovery:** examples where this worked well during the recovery were groups such as the Community Partners and the Rural Advisory Group (RAG). On the other hand, the debrief identified a need for advance engagement with important partners such as iwi and hapū, as well as with regional service providers. Key partners should be involved in recovery planning and preparedness activities in future. One response to the debrief noted that insurance companies appreciated the collaborative and transparent engagement undertaken by the Recovery Office during the recovery. However, it was also noted that relationships with insurance providers could be better built in 'peacetime' to lay a foundation for good communication and mutual understanding of roles and activities in recovery. The Recovery Manager also would have liked a more formal, regular engagement with insurance companies.
- Related to the above, the debrief signalled there are huge advantages in **having established relationships and identifying key people in advance**, and that **local knowledge and experience is invaluable**. The Recovery Office staff had existing connections with key individuals, both in the community (including with iwi) and in partner agencies, which greatly helped recovery activities to progress effectively. There were also Council staff with much experience of flooding who could share their knowledge and expertise, as well as people 'on the ground' who could assist with quick estimates on damage or need. In the rural sector, known figures helped make connections between farmers and support agencies, while

established relationships between Rural Support Trusts, the Council and the Ministry of Social Development assisted in getting Enhanced Taskforce Green up and running.

- As part of recovery preparedness and planning, it is important to **identify, develop, and communicate policies, protocols and processes**, and any guidance or documentation that supports these. The recovery office staff and partner agencies discovered that various policies etc. did not already exist at the local, regional or national level, were not documented or readily accessible, or unfortunately were not referred to the right sources. As a result, they had to develop some policies, protocols and processes ‘on the fly’, or spend time and effort locating what was available. Specific examples were:
 - the requirements of the Privacy Act or agreements to share information reflecting Privacy Act requirements;
 - Health and Safety in hazard risk areas, such as where there is land damage, asbestos and contaminated silt;
 - referral processes for mental health services;
 - Mayoral Relief Fund criteria;
 - ETFG criteria; and
 - capability to track recovery information via GIS over time.

Another lesson identified was the benefit of knowing what was already in place (such as Council plans, and information gained during the response about the community) as this can be crucial in expediting recovery outcomes; this includes knowing what and where resources are available in the Council and externally.

- In terms of those resources, another sub-theme was **the need for Council to plan for the additional resources required in recovery**. Recovery planning, management and delivery goes well beyond the ‘business-as-usual’ of local authorities.

Various survey respondents noted it is difficult to manage the recovery within BAU council staff resourcing. It would have been helpful to backfill council staff seconded to the Recovery Office, potentially through bringing in fixed-term employees. Another suggestion was to retain EOC staff for several days, once the response had ended and the recovery took primary focus.

The staffing needs were often high. For example, in the first six months that the Recovery Office was running, the demand for media, reporting and public information, from both internal and external sources, required a dedicated full-time communications officer to manage, coordinate and produce processes and material (an example given in the debrief of the demands of the job included central government agencies requesting extremely quick turnaround on media releases or ministerial briefings; it was suggested that at least an additional staff member could be in place initially to be dedicated to handle such requests).

Another challenge was the availability of technical expertise in Council. For example, Council’s Health and Safety corporate team were not set up to advise on the types of health and safety challenges faced inside the cordon in Edgecumbe, where there were structurally unsound buildings and infrastructure and insanitary and contaminated waste. They were also not set up for health and safety to ‘manage’ the town as a whole or to coordinate health and safety for a substantial amount of contractors. Some other areas of the required technical expertise did not reflect a BAU council role (e.g. setting up and running Enhanced Taskforce Green).

In terms of preparedness, a need was noted for the Council to have a team training programme on recovery, including roles and responsibilities, but also how to deal with staff well-being and psychological first-aid. Similarly, a comment was made about the need for surge capacity in partner agencies with regional offices, especially where staff live outside the district.

- Central Government law does not reimburse local authorities for their staffing and Council operating costs in recovery; it was suggested that Council consider how contingency funding could instead be built into Council budgets. This aligns with another subtheme of the **need for clarity on the funding available from central Government and other avenues**. There are both existing funding arrangements (e.g. financial assistance for household goods, or Civil Defence payments for housing), as well as ‘event specific’ funding channels (such as contributions to mayoral relief funds, or Lotteries appeals). However, respondents noted the criteria for some funding sources was not always well-understood; lessons identified in this area were the thresholds for MBIE business recovery grants and funding; and MPI assistance to ‘rural communities’ is available to primary producers only.
- While the debrief has identified the value of planning and preparedness, there was also an appreciation that **in many cases what had to be put in place in real time, and ad hoc, worked well, given the circumstances**. The critical components that made this a success were said to be:
 - A common focus and desire to ‘make things work’ and achieve the best solutions for the community
 - The right mix of people and skills
 - Innovative approaches (examples include: using welcome home packs to determine who was back home; and having young people design community events that would be relevant to them and **their peers, but also build their capabilities in event management**).

2.2 *The need for awareness and clarity of roles and responsibilities*

The second key theme, interrelated with the first, was the need to know who was responsible for what. The paragraphs below summarise a series of sub-themes; again, these both pointed to gaps but also identified success stories.

- There were a few particular instances where there was a need for better understanding and clarity over the roles and responsibilities of different parties; examples given were:
 - the recovery management framework for local, regional and national level recovery, and the associated roles and responsibilities in that framework, as well as the resources available;
 - related to the above, the role and mandate of the CDEM Group;
 - at a local governance level, the role of the community board in recovery; and
 - a lack of understanding at the central government level of the relationship between Te Puni Kōkiri (TPK) and each local iwi, and who are the representatives for each iwi or hapū.
- One particular area of confusion was who had the lead role in managing the recovery with rural and remote households. There was an apparent misunderstanding of the mandate of MPI’s support for rural communities (that is only for primary producers). This played out in people incorrectly assuming that Rural Support Trust (RST) would be contacting all households, including lifestyle block owners, in rural and remote areas, and that ETFG might be available to anyone in rural areas with damage to their property. Once roles were clarified, the navigators contacted non-farming households in rural communities (working together with the RST to identify these homes).
- More generally, roles and responsibilities around rural recovery related to the need for all relevant agencies to be involved early in recovery efforts. When recovery initiatives were being established (at a fast pace), it was crucial that agencies needing a voice made sure they were present. Conversely, it would have been beneficial for the Recovery Team to ensure all key agencies were there to advocate for their communities. This generally occurred and close relationships and sound communication links were

formed, particularly with RST and Federated Farmers, and later with MPI. Only one respondent commented differently, voicing feelings of “isolation” early in the recovery process.

- Confusion over roles and responsibilities also arose where processes and resources had to be put in place on the hoof. One significant lesson identified was the public’s perception of the staff securing the cordon around the red-stickered houses; their purpose was to grant access to homeowners, Council staff, geotechnical experts, insurance providers and other services, and to ensure restricted access for health and safety reasons. However, there was a perception by some in the community that the cordon staff were ‘security’ in the sense of having a crime prevention (i.e. policing) role. This signalled the need to ensure good public communications and clear delineation of roles.

2.3 Voluntary and spontaneous services benefited and challenged recovery management

There were ad hoc, unprompted activities and initiatives that came from within the community, with the intent to address apparent needs with local solutions. These brought both benefits and challenges.

- Organic initiatives from within the community were varied and numerous. Successful examples include ‘feet on fire’, a dance group established after the April floods; the ‘Oho Ake (Rise Up)’ concert to bring together the community; community night patrols for crime prevention purposes; organising a whānau day to bring flood-impacted families together; the transfer of the school holiday programme to Bluelight as a way of assisting those who may have used annual leave due to the floods; Pride Whakatāne’s community gift of fruit trees to affected residents; and Edgecumbe Women’s Institute fundraising benefiting the Edgecumbe Fire Brigade. Another example is community groups leading the collection and distribution of donated goods for flood impacted families.
- However, some initiatives made it challenging to ensure effective and efficient coordination and targeting of services. For example, some groups chose to operate autonomously, or provided information that conflicted with the messaging coming from the Recovery Office. This sometimes resulted in service overlap and duplication, and confusion for the public as to what to do, or where to go for help. Services were also provided that were not required, or that created later management challenges, such as the storage of a range of donated goods (which were not sought by the Recovery Office, and some of which were more of the nature of dumped than useful items).
- Various respondents noted this showed the need for a volunteer coordinator from the very beginning of the recovery, with a clear Recovery Office mandate. As one noted, volunteers are such a significant and valuable resource that there needs to be appropriate resource to manage them. On the other hand, volunteers can be a risk in the recovery context. Health and safety issues were evident, e.g. asbestos, and health and safety responsibilities for spontaneous voluntary groups were difficult to manage and sometimes unclear.
- The Recovery Office developed procedures and documents to manage volunteers and these can now be retained for future use. Another option mooted in the debrief was bringing agencies together in ‘peacetime’ to get agreement on how best to get a coordinated and managed approach. Another suggestion was that further work by MCDEM that investigates health and safety support for volunteers would be very useful.

3 The advantage of one-to-one and face-to-face contact to help resolve more complex cases - ensuring the right services get to the right person at the right time

Contacting those in need with a one to one and face-to-face service was a particular success story. The services had two components:

- **The navigator service** provided personalised assistance to help flood-affected people individually access a range of services, information and resources. The service comprised of three navigators and a team leader and was set-up in August, once funding could be secured and procedures and resources put in place. Respondents noted that ideally the service should have been resourced and set-up earlier than August, to be available from the transition from response to recovery.
- For farmers and other primary producers, the **Rural Support Teams** played a similar role to the navigators, but being already set up, were able to move into action quicker. Their key role was to make onsite visits, understand individual issues, provide some case management support and refer to other specialist support where needed. The RST organised community events to boost morale, identify community needs and engage affected rural families. Examples include 'good yarn' workshops, BBQs, rugby bus trips, Dairy NZ discussion groups, field days and ladies' morning teas. Partner agencies such as Federated Farmers and Fonterra also provided key support.
- As noted above, there was some confusion initially about the provision of one to one services in the rural areas for households that were not involved in farming, with a misunderstanding that RST's mandate extended to them. Once the navigators were set up, and their roles and responsibilities and those of the RST were delineated, the two separate services worked well together in addressing the needs of rural communities in their broader sense (i.e. not only primary producers).

There were also success stories at the organisational level, along with lessons identified for future:

- What proved to be of **significant benefit was having a separate Recovery Office**, sited away from BAU functions. This focused activity and enabled external partners, like insurance providers, to feel comfortable dealing with the council at arm's length. Some suggestions made in the debrief were that it would have been helpful to have other Council staff embedded in the Office, or to ensure strong connections back to Council teams, in areas such as accounts payable support (to record expenditure), cost recovery (for infrastructure repair and rebuild), health and safety support, and customer service support (to field calls from the public).
- Another face-to-face approach that worked well was **having various external agencies located in the Recovery Office**. Examples given were the insurance company representatives, EQC and customer service staff from the Council, as well as RST and MPI. One respondent suggested the Chamber of Commerce could also have been a useful partner to have present, to understand and also represent business needs. This was a challenge as the Chamber of Commerce representative was located in Edgecumbe with the majority of affected businesses.
- It was apparent, however, that the **Recovery Office needed to retain connections back into BAU functions** in the Council, both in terms of resourcing and drawing on expertise and experience, but also as the recovery progresses and activities are adapted or transition back into BAU council functions. It is also important that recovery planning and budgeting is not 'silo-ed' from Council's existing processes and planning.
- The Council established **Te Tari Āwhina Community Hub** at the Edgecumbe Library as a 'one stop shop' for residents from the district to get advice and support. The Ministry of Social Development, Salvation

Army, Budget Advice, Chamber of Commerce and the Liveable Homes programme all had a presence there, with the DHB siting a portacabin next to the library so its services were in close proximity.

- There was a tension between locating the Recovery Office as a whole at the event area (i.e. in Edgecumbe) and being located in Whakatāne close to working services (e.g. WiFi, water) and the Council. Having the Recovery Office in Edgecumbe would have provided 'presence' but also a dislocation from Council and access to wider staff. The Recovery Office was also not set up to be the customer interface and Te Tari Āwhina Community Hub was established for this purpose. In addition, recovery efforts were a 'whole district' recovery approach and locating the Recovery Office in Edgecumbe would have been in conflict with this overall message.
- In addition, partner agencies actively met face-to-face to discuss presenting issues and address these in a collaborative and coordinated manner. For example, the **Community Partners' meetings** initially held weekly (before moving to fortnightly) were a great opportunity for agencies to understand what other agencies were doing or could do to deliver services, but also to build a more holistic picture of the needs and issues in the community. One respondent noted that the meetings were a great example of social service organisations working together, discussing issues and brainstorming ways to improve support to the community. Another example was the weekly **Rural Advisory Group** meeting with the focus on needs and issues for primary producers.
- In general, respondents noted that bringing agencies and organisations into **community meetings** was very effective in ensuring they could both hear, and be heard by, community members. One example given was the attendance of insurance companies at community meetings, albeit later in the recovery than was found ideal.

4 Efficiencies and benefits in collectively addressing multiple needs rather than 'individuals doing it themselves'

Due to the extent and nature of the flooding and weather-related impacts, the damage to land and infrastructure extended across many properties to varying degrees. For households or building owners to deal with these impacts and hazards on an individual basis would have been very complicated, as well as costly for them. In some cases, the impacts presented serious health and safety risks, including structurally unsound buildings, damaged infrastructure (such as sewerage), and land damage, as well as secondary effects such as waste contamination and the presence of vermin (rats).

For this reason, the Council took the approach of restricting access to a demarcated area, with a 24/7 cordon and full, temporary fencing. The entire area could then be dealt with simultaneously, in terms of building and land assessments; stopping people from entering hazardous areas; addressing damaged infrastructure, and undertaking waste removal and vermin control. EQC cleaned up the silt and debris from all affected properties, both insured and uninsured.

Respondents with technical expertise noted that they were not sure how the damage and hazards could have been dealt with, if individuals had to clean-up the damage on their own properties.

Another example of a coordinated approach to resolving individual needs collectively was the Liveable Homes project. This was established to help people who did not have insurance or the means to repair their flood-damaged homes to restore them to a liveable standard. It was run by a coalition of the Whakatāne

Local Recovery Office, community funding organisations, the local construction industry, Te Rūnanga o Ngāti Awa and other project partners.

5 The need for accurate, timely and accessible data collection and management systems

A key finding from the debrief has been the importance for recovery activities to be underpinned by **accurate, timely and accessible data collection and management systems**. Some examples that illustrate this finding are summarised below.

- One apparent gap that initially complicated recovery efforts was that data collected during the response was found to be inaccurate, missing or not fit-for-purpose for recovery. This affected the initial effectiveness of one-to-one contact and service referrals, in both urban and rural locations. Some respondents considered the problems partly stemmed from poor data and inadequacies in the handover from the response.
- Initial information provided to the Recovery Office at the beginning of recovery on the proportion of uninsured flood affected properties (estimated initially at 50% instead of the more realistic 5%) had significant implications and took a long time to resolve. This resulted in projects being originally developed to an unrealistic scale, such as the Liveable Homes Project.
- Respondents also noted a lack of data on business needs, closures and commercial building damage. Meanwhile, information was lacking on insurance coverage and assessments. To resolve this, information from multiple sources was drawn into a central repository to make sense of the quantum and nature of temporary housing needs (these sources included Council ratepayer data; needs assessments from the response; and third-party accessible information).
- Once data could be obtained and consolidated, recovery activities could be tailored and targeted to need. For example, navigators had a better sense of who they should focus on for support, and the Liveable Homes project could be delivered to those who were uninsured or underinsured.
- There were successful approaches found to gathering key information – for example, online applications for mayoral relief funding provided key data on the level of need in communities. Another example is that once field-based software was made fit-for-purpose, real-time reporting could occur on building assessments, which provided invaluable information (although the rapid deployment of the software caused some teething problems - see further below).
- In a relatively quick timeframe, the Council built a GIS system that provided data and maps for the Recovery Office, managed data, and supported analysis and solution development. This system had to be built in a context of ever-changing needs and unknown requirements, inputs and outputs; and had to be able to handle a huge demand for information.

While this system was invaluable, there were some critical issues, with a lack of ‘people-based data’ (e.g. who lived where), leading to incomplete databases. Privacy legislation allegedly prevented some third parties from being able to supply information that would have enabled quicker and more targeted support. In addition, the volume and occasional inaccuracy of data from the response took time to sort through.

6 Good communications

The importance of having a **single source of information that is authoritative, trustworthy and consistent** is paramount for managing rumours and untruths in a stressed community.

The recovery has shown the **necessity for adequate communications resource**. Having a dedicated communications staff resource was vital within the Recovery Office structure. The communications role was able to provide a knowledge-base across all Recovery Environments, helping to streamline information gathering and sharing, front-foot potential issues and identify potential risks. The role could also create internal and external messaging and communications resources across all Recovery Environments.

The Recovery Office developed an initial **Communications Plan** and then implemented it. Communications were closely aligned with the development and delivery of activities and events that crossed the divide between communications and community engagement. These included: the Recovery Expo; Insurance Day; the marketing of multiple events; and the IRD Drop-In.

The **Recovery Expo**, which created a one-stop-shop for face-to-face/kanohi ki te kanohi contact between affected residents and support agencies was held approximately eight weeks into recovery, at a time when there was a growing level of anxiety, frustration and a degree of anger in the community. The Expo was extremely well-received, effective and created relationships that had ongoing benefits to recovery engagement.

Being able to draw on the graphic design resource provided by the Council Public Affairs team was a great asset, providing agility to create resources in a fast-response environment. The Recovery Office was able to maintain timely and consistent messaging: bi-weekly newsletters were distributed through print, online and social media from May – July; weekly newsletters were produced from mid-July to current; daily radio messaging initially, and twice weekly Recovery Bulletins from August.

7 Opportunities and gaps identified

Planning for natural disasters is a key aspect of recovery and building resilience. People have an innate need to try and address issues so they don't happen again, often in the immediate wake of an event. Planning for future CDEM emergencies should be supported as part of recovery. Recovery is not just about rebuilding what was there previously, but about considering how we can enhance communities where there are opportunities to do so.

The debrief was a chance to not only capture what had worked well and what had not, but also to reflect on what opportunities arose, or gaps had become apparent. Some of these have been outlined above. The following is a summary of other feedback, with a note on next steps or future work; in some cases, moves are already underway to ensure opportunities are built upon, or gaps are being addressed.

7.1 *Lack of procedures or guidance on particular roles*

Various areas were noted as having a lack of guidance and/or procedures, and the resources to support these (e.g. guidelines and technical material, process charts or forms). Some of these are summarised above in section B (i.e. cordon management, business support). Others included:

- **Donated goods:** as noted above, these were not sought, but local initiatives set up collection points. The Recovery Office then had to prepare a set of procedures and templates for managing these goods, and these will now be retained for future use. In addition, MCDEM has pointed the Recovery Office to its guidance on these areas.
- An area noted as lacking existing policies and procedures was the **Liveable Homes and winter warming/insulation programmes**. In particular, there had been a need for clear communications and guidance, including criteria for eligibility. Again, there is opportunity now to capture the procedures and materials developed for the programmes (which had positive outcomes in getting people home to clean, warm and dry homes), and retain these as resources for future use and to share with others.
- Another gap noted was the **absence of plans and procedures for setting up a navigator service**; again the Recovery Office and its partner agencies had to prepare these under urgency, with support from the National Recovery Office (MCDEM). It was noted that it would be useful to plan for a navigator service as part of preparedness planning, but also for central government to consider navigators as an essential service in recovery, with a pre-determined funding stream as well as a service delivery framework (from set-up to wind-down).
- Related to the above, a suggestion was made that it would have been useful to **put all service delivery agencies at the hub with the navigators** so that the navigators can be the listening ear on the frontline, rather than the agencies themselves. This would enable the agencies to concentrate on meeting needs.
- Those working or dealing with **Enhanced Taskforce Green (ETFG)** noted that the initiative's processes need to be reviewed to **ensure the allocation or contracting of ETFG resources was appropriate**. What had been experienced was that the specific technical nature of the windfall damage meant using untrained staff, or trainees, was not always appropriate, even if it did meet other objectives (such as building local capability and workforce). In particular, the initiative had required an experienced supervisor, as well as an experienced professional to scope the work, when in fact there had been a drive to find people within the MSD pool of candidates. Without these, the work was delayed when assessments showed the nature and extent of the work was more difficult and extensive than previously assessed (potentially as some non-eligible properties had been previously included).

7.2 *Review Mayoral Relief payments process*

A suggestion was made that the Mayoral Relief Fund process and policies needed to be reviewed. The particular points raised were the need to streamline internal Council processes and clarify the policy criteria.

7.3 *Insurance data was difficult to obtain which made assessing need, planning and targeting services very challenging*

Insurance companies were found to not have a uniform way of assessing damage or recording data. Due to commercial imperatives and alleged privacy controls, companies were disinclined, or unable to report or share information (e.g. settlements on properties).

This situation made it difficult to assess levels of need in the community, and timeframes for repair and rebuild, as well as reoccupation. The level of uninsured and under-insured properties was also difficult to ascertain.

What became clear was the need to be innovative in obtaining data from other sources instead – this included having an actual wall mounted jigsaw puzzle (where people put their puzzle piece on the wall) and welcome home packs, set up at Te Tari Āwhina, to incentivise homeowners to mark when they had returned home. The situation also signalled the need to understand the implications of the Privacy Act, with respect to the information that can and can't be shared in emergency and recovery contexts.

7.4 *Exercises to test or guide future emergency needs*

Several debrief respondents noted that it would be useful to run recovery training with pre-planning exercises.

One specific preparedness activity that was suggested was an exercise to estimate the amount of waste that might be generated in another emergency. This suggestion stemmed from the huge volume of waste that the flooding had generated, which surpassed initial estimates and required much more resource to address than was initially thought.

It was also noted that the field-based software used for recording (e.g. building assessments and damage) needed to have been tested earlier for its adequacy and appropriateness for the task.

7.5 *Data and information management needs to be pre-planned*

Related to the discussion above on preparedness, one respondent involved in managing data for the recovery noted that those managing a recovery action or providing a service will always need data to monitor progress, and to anticipate reporting needs. Their suggestion was to prepare datasets that might be useful ahead of time. They also suggested that early in the recovery, it is important to set objectives and metrics, and develop a recovery action plan.

From a financial planning perspective, it was noted that Council departments should be required to undertake formal impact assessments as part of the recovery, which would set out budgets for future work, identify options for sources of funding, and outline costs and expenditure to date. Included in this, as relevant, would be infrastructure assessments that would outline the cost to repair or restore damage, and the timeframes for this.

7.6 Adapting the approach to the four recovery environments

Various respondents noted the existing recovery management framework provided in guidance at the national level (by MCDEM) recommends taking an approach of leading, coordinating and delivering recovery within the concept of four environments (social, natural, built and economic). This approach needed to be adapted to accommodate issues that intersect these environments. To this end, the Recovery Office took a project-based approach to issues such as temporary housing needs (which intersects the social, built and economic 'environments', in terms of accommodation needs, rebuild and repair, and insurance). This approach enabled these issues to be addressed in a more holistic manner. The downside to the project-based approach, and cutting across the environments, was that some agencies had to operate outside their usual 'environment' or there was duplication across environments in terms of funding, or involvement in meetings.

A particular issue was raised for primary producers, as the rural communities and primary sector were targeted under the natural environment, when in effect their recovery needs transverse all of the recovery environments. Difficulties were experienced in integrating farmers' and their families' needs into services and initiatives for temporary housing, counselling in schools, building consents, access to primary health care, and financial assistance for businesses.

7.7 Addressing health and safety needs

As noted earlier, Council's Health and Safety corporate team were not set up to advise on the types of health and safety requirements that would be needed for a range of recovery initiatives, including managing volunteers and contractors (e.g. for the Liveable Homes project); waste management (including asbestos handling and disposal); public education on environmental health risks; and for navigators and others travelling and going out into the community. The issues were far and beyond the scope and responsibility of corporate occupational health and safety. The types of challenges that were faced included:

- Understanding the types of risks that can be created by such an event (i.e. environmental risks, asbestos). Consideration needed to be given to the Council's health and safety obligations and liabilities, and what responsibilities the Council had in terms of communicating health and safety messages to the public.
- Coordination was needed between the Council and partners. Lines of responsibility were not always clear, and agencies were sometimes working independently of each other, without formal arrangements, including who had responsibility for health and safety.
- Some staff were assigned key roles, but were not qualified or experienced to be able to advise on health and safety. The example given was volunteer co-ordination. Volunteers were dispatched to assist in initial recovery efforts without proper induction or explanation of risks and controls (e.g. in removing damaged materials from houses).
- Local Environmental Health Officers, who had knowledge of the affected communities, did not appear to be utilised sufficiently.

The debrief suggests there is a need for a better understanding in 'peacetime' of how health and safety resources will be coordinated where multiple agencies are involved. A respondent suggested the following to achieve this:

- Establish a lead monitoring health and safety facilitation role within Recovery;

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- Have templates pre-prepared i.e. volunteer induction forms;
- In a recovery, assign an appropriately-trained and experienced volunteer coordinator, who understands health and safety requirements;
- Develop a health and safety risk register in preparation for a future event;
- Understand the legal obligations and responsibilities of agencies, contractors and private landowners; and where liabilities lay, before and when undertaking activities.

8 Whakatāne District Recovery - Key Stakeholders

Key stakeholder forums	Organisations	
Leaders	WDC NRO MBIE BOPDHB EMBOP MPI Ngāi Tūhoe MCDEM	BOPRC MSD TPK DPMC Ngāti Awa NZTA Ngāti Whare
Partners	WDC BOPRC Red Cross BOPDHB MoE NZ Police Family Works NZ DIA MSD	Sport BOP MBIE TPK MSD EBOP CoC SPCA MPI RST Salvation Army
Rural Advisory	BOP Rural Support Trust BOP Federated Farmers MPI Fonterra SPCA	Ngāti Awa Dairy NZ Whakatāne District Council BOPRC
Psychosocial	BOPDHB Emerge Aotearoa Healthcare NZ MoE MSD NASH Plunket Pou Whakaaro	BOP Rural Support Trust Te Puna Ora o Mataatua Te Whare Wānanga o Awanuiarangi Tūhoe Hauora Tūwharetoa ki Kawerau Victim Support Voyagers Red Cross

Notes:

- The WDC/Whakatāne District Recovery Team represented in each forum.
- Numerous other stakeholder forums/meetings (not listed) were held such as Funders, Councils', Boards', Insurers, and community.

PART C

Recovery Toolbox of templates processes and procedures





DISCLAIMER

The following provides a number of processes, procedures, guidelines, references, forms, communication examples, and protocols used for Whakatāne District Recovery purpose by Recovery Office and various agencies. It is important to note that many of these documents were developed for use specifically to assist Whakatāne Recovery. A number of these may already be superseded or updated. The toolbox is a snapshot only and does not include all the detailed processes that other agencies used during this event. These are intended to be used for quick reference and as another tool for your recovery needs.

PART C – RECOVERY TOOLBOX OF TEMPLATES, PROCESSES AND PROCEDURES

1. Toolbox Note

A collection of resources to use, adapt and improve. Part C has been developed in response to the limited amount of documented information and resources available in New Zealand on the topic of emergency recovery. The toolbox is a compilation of templates, resources, plans, processes and flow charts used across all recovery topics. The toolbox does not necessarily represent 'best practice', as many templates and processes were developed 'on the fly', but it is hoped that they will provide a starting point for others to start from.

Refer following Toolbox Table of Contents.

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6. GIS Project Charter V1.0

Communications

7. June 2017 Infographic example
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9. Newsletters examples
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 - b. Recovery No25
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 - k. Navigator Report Feb 2018 – example
16. Psychosocial
 - a. BOPDHB Psychosocial Support Implementation Plan
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17. Volunteers
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18. Draft Community Action Plan

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21. Whakatāne District Business Recovery Grants Funding Confidentiality and Conflict Agreement
22. Whakatāne District Business Recovery Grant application process
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