Proposed Regional Policy Statement Variation 2 (Natural Hazards)

Work Stream A: Risk Threshold Engagement

Project Team:
Lucy Brake (iScribe Ltd) – Project Team Leader and Report co-ordinator/writer
Dr Margaret Kilvington (Independent Social Research, Evaluation & Facilitation) - Process design, Analysis framework and Results analysis
Kerry Gosling (BOPRC) – Process design, Session facilitator, Results analysis

Prepared for:
Bay of Plenty Regional Council
PO Box 364
Whakatane 3158

April 2014

Executive summary

Between February and early April 2014, the Bay of Plenty Regional Council (BOPRC) sought to engage with the community on its proposed variation to the Proposed Bay of Plenty Regional Policy Statement (PRPS), known as the PRPS Variation 2 (Natural Hazards) project.

This report summarises the consideration of different engagement options, the chosen option for community engagement activities and the feedback received. It is a summary of:

- the BOPRC's community engagement objectives for the PRPS Variation 2 (Natural Hazards) project,

- the community engagement activities and the way in which these were promoted and managed, and

- themes that emerged from the community feedback.

The setting of levels of risk and the thresholds between them, informed by a process of community engagement, is the purpose of the Risk Threshold Engagement work stream. The engagement of the community in setting these levels is an important part of the policy development. The aims of the community engagement programme were to gain peoples' input into what level of risk they want their community to be safeguarded from and to ensure the community has an input into identifying the measures of whether a risk of a natural hazard is acceptable, tolerable or intolerable.

The overall format for each session was in three parts: Introduction; Council responsibilities and roles; and Risk Tolerability Matrix. Through this process the community engagement was focused on the setting of risk thresholds. Specific meanings were provided for a number of terms, including Acceptable ("This is part of life and I can put up with that"), Tolerable ("My family could recover in time if we had to") and Intolerable ("This risk is too great, it just can't be justified").

Based on the best practice principles and the results and feedback gained from this engagement it is believed that the final process is robust and meaningful. Overall the attendance was adequate to run good and lively meetings. The attendance demographics demonstrate that the process and advertisement of the community engagement ensured a wide range of participation. The overall opinion is that the results provide a good steer on how a community regards the risk of natural hazard events.

The matrix responses, when compared with responses to the questions posed, indicate people are less tolerant of risk (even as the chance of this decreases) when they are including consideration of the consequences and potential impact of the event. They are more optimistic about risk when they are considering how rules and restrictions might impact on them.
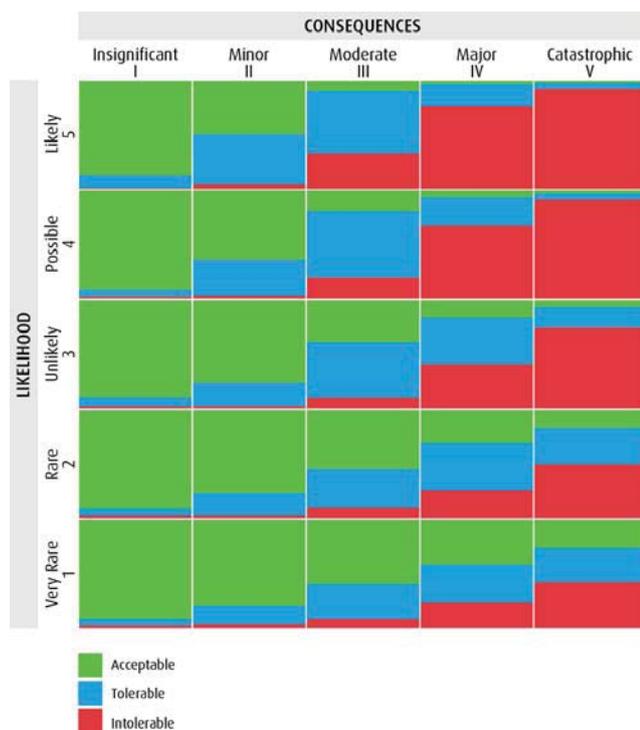
Overall risk tolerability matrix results (refer Part 5: Results) for more details.

Contents

Part 1: Project history

This report is pertaining to the community engagement component of a variation to the Proposed Bay of Plenty Regional Policy Statement (PRPS) to insert replacement natural hazards provisions. The community, by way of a community engagement process, is providing input to the setting of levels of risk and the thresholds between them that will feed into this variation.

On 9 October 2013 the Regional Council decided to initiate a variation to the PRPS to insert replacement natural hazards provisions. The Resource Management Act 1991 requires the Regional Council to have a regional policy statement and to regularly renew it. A second generation PRPS had been notified, submissions received and heard, and appeals lodged with the Environment Court against the Council's decisions on submissions. Most appeals have been resolved. Resolution of all the appeals on the natural hazards provisions of the PRPS had been the objective of a working party established under the auspices of the Environment Court. This process ended without the appeals being resolved. The Environment Court has agreed to adjourn consideration or hearing of the natural hazards appeals for up to one year from 31 October 2013 to allow for a variation to be prepared. The Court requested progress reports be provided in February and May 2014 and for BOPRC to be able to advise in August 2014 that the variation has been notified or of the date on which it is to be notified.

The purpose of the PRPS Variation 2 Natural Hazards project is to prepare a variation up to the stage of notification. The variation is to propose natural hazards provisions to replace those in the Council's decisions version of the PRPS. The project comprises concurrent policy and technical work, associated guidance and the Resource Management Act 1991 Section 32 report of the evaluation of the policy proposals, and is made up of five work steams as follows:

A   Risk Threshold Engagement

B   Consistent Risk Assessment

C   Policy Framework Development

D   Implementation Guidance

E   Process Compliance.

1.1 Key project objective

The key objective of the project is a generally agreed variation policy framework that guides those preparing regional, city and district plans and considering resource consent applications to manage land use and associated activities according to the level of natural hazard risk they are subject to, ready to be notified for submission before September 2014.

Part 2: Purpose of community engagement

The setting of levels of risk and the thresholds between them, informed by a process of community engagement, is the purpose of the Risk Threshold Engagement work stream. The engagement of the community in setting these levels is an important part of the policy development.

2.1   Community engagement aim

The aims of the community engagement programme were to:

- gain peoples' input into what level of risk they want their community to be safeguarded from,

- identify key themes in regards to the community's perception of risk and risk tolerance,

- ensure the community has an input into identifying the measures of whether a risk of a natural hazard is acceptable, tolerable or intolerable, and

- advise the community of the process for the variation, and ultimately the district and city council planning processes that will take place following, and where they will be provided with opportunities for input.

2.2   Purpose of the report

The report has been prepared to:

- feed the results and feedback into the other work streams, help shape the project and inform the BOPRC decision-makers who will decide the risk threshold levels,

- assist with developing the PRPS Variation 2, associated guidance and a section 32 report of the evaluation of the policy proposals, and

- provide stakeholders and the community with information on how the feedback and results have been interpreted and will be used to inform decision-making.

Part 3: Methodology

3.1   Best practice principles of engagement

The International Association for Public Participation (IAP2) is the preeminent international organisation advancing the practice of public participation. They state that 'Public participation' means to involve those who are affected by a decision in the decision-making process. It promotes sustainable decisions by providing participants with the information they need to be involved in a meaningful way, and it communicates to participants how their input affects the decision.[1]

In addition, there are a number of principles of best practice[2] identified on the RMA Quality Planning website[3]. These principles have been developed as part of a Guidance Note on consultation and helped to inform the development of the methodology for this particular engagement project, and ultimately have led to the chosen process for community engagement on what is a highly complex topic. The relevant principles include:

- Tailoring the consultation process to available resources and political expectations (time, expertise and budgets).

- Involving people who are committed, who are effective at listening and communicating.

- Proactively thinking about any potential cross-over with any consultation occurring around the same time - including under other legislation – and integrating other consultation where appropriate.

- Identifying and understanding your audience.

- Identifying and planning for consultation with tangata whenua, including an understanding of any additional or specific requirements under Treaty of Waitangi settlements.

- Being flexible and prepared to change the consultation approach as required, particularly as issues arise that need to be addressed more thoroughly.

- Having a strategy to manage media involvement in consultation.

In addition, the community engagement to support and feed into the PRPS Variation 2 decision-making has been based on the risk-based approach to land use planning project and toolbox developed by GNS[4] (Risk-based Toolbox). This approach promotes a robust process for public engagement and risk communication. The two-way communication effort used by the Regional Council for this project has been designed to ensure that the community and key stakeholders are informed of the process; can actively contribute to building an understanding of the hazard impacts; and are able to provide the council with constructive feedback leading to an agreement on the acceptability of the risk thresholds.

---

[1] http://www.iap2.org/.
[2] http://www.qualityplanning.org.nz/index.php/component/content/article/42-communication/118-guidance-note.
[3] The RMA Quality Planning website is a partnership between the New Zealand Planning Institute, the Resource Management Law Association, Local Government New Zealand, the New Zealand Institute of Surveyors and the Ministry for the Environment.
[4] Saunders, W.S.A.; Beban, J.G.; Kilvington, M. 2013. Risk-based approach to land use planning, *GNS Science Miscellaneous Series 67.* 97 p.

3.2   Consideration of methodology options

The basis for the community engagement process was drawn from the risk-based planning for natural hazard risk reduction which has been developed by the GNS Science.[4]

A workshop was held on 16 January 2014 to discuss the options for community input into the PRPS Variation 2. Local government participants from around the region took part including planners, communications staff, community engagement staff and technical experts from BOPRC, Tauranga City Council (TCC), Western Bay of Plenty District Council (WBOPDC) and Whakatane District Council (WDC), as well as two visitors from Auckland Council. Other territorial authorities were invited to attend, including Ōpōtiki District Council, Kawerau District Council and Rotorua District Council. This workshop was attended by Dr Wendy Saunders, leader of the GNS Risk-based Toolbox project. Dr Margaret Kilvington[5], a contributing author to that project and its report, facilitated the workshop. The minutes from that meeting are attached in Appendix A.

Key observations from this workshop were:

- Given the very short timeframe for completing the community engagement (which was advised as end of February 2014) it was initially decided that an online survey would be the most practical option - although it was noted that this was not best practice.

- There was discussion over the fact that this was only going to be high level tolerable/intolerable engagement about generic natural hazards.

- Some local authorities would have liked to have taken the communities to the next step of being inclusive of their needs on more localised hazard specific discussion but it was felt that this would be a six to 12 month process.

- A Working Group was set up to urgently process this work stream. The Working Group was set up to include community engagement and communications staff from BOPRC, TCC, WBOPDC and WDC as well as consultants.

The Working Group met weekly (first meeting was on 23 January 2014) and initially made a start on preparing the survey. This draft was jointly prepared by staff from the territorial authorities and the BOPRC.

A survey draft, covering a range of natural hazard events, was presented to the Working Group on 31 January 2014. The survey included the range of local likelihood rates and different scenarios. On review of this it was questioned whether this was the best approach and decided that more work was needed on the specific questions. At the same time a flyer was being developed about the project more generally.

---

[5] An independent social researcher, evaluator and facilitator, experienced in the area of community engagement and response to complex environmental issues.

A second draft was presented to the Working Group on 4 February 2014. Doubts were again raised about the online survey. There was concern that the concept generally was at such a high level that it required context setting, developing a common understanding of the terminology and in particular adequately conveying the concept of risk being a factor of both consequences and likelihood (a cornerstone of the risk-based approach developed by GNS). The Working Group believed that this could not be achieved with the community through an online survey. The local authority representatives, in particular, were uneasy about alarming the community without providing background on the scenarios and risks without the opportunity for the community to talk through their issues and concerns. The Working Group concluded that they were concerned about the survey questions and overall about the engagement process, and that a relook at the approach was urgently needed. At the same time it was agreed that separate sessions would be run for iwi/hapū groups. A fact sheet focused on tangata whenua was also to be drafted so that key messages were clear and available to all.

In early February it was agreed to contract a consultant to oversee the project and an extension to the timeframe was also given to deliver the report and community feedback by the 24 April 2014. Lucy Brake was appointed as lead consultant.

3.2.1 Chosen method

At the Working Group meeting on the 12 February 2014 a decision was made, in consultation with Margaret Kilvington, to run workshops or focus groups as opposed to producing an online survey. In recognition of the specific social research parameters of "focus groups" it was decided to call them "community sessions" which would allow more flexibility on how to best engage with Bay of Plenty communities on risk thresholds within the confines of time, resourcing and budget.

The session format was decided upon and developed using best practice techniques and tools from both IAP2 and TOP[6] (Technology of Participation) methodology. Consideration was given to the following aims:

- for sessions to be decision-oriented but values based,

- to both involve (to work directly with community to understand and consider their opinions and concerns) and collaborate (work together in developing a preferred model),

- to share information,

- to collect and compile input on a complex and emotive topic, and

- to reach a range of community members across the region.

Core to this was to explain to the community why the information was required and how it would be utilised and incorporated into the decision-making process. It was also important to ensure that members of the community were able to have their concerns heard and that a local expert was available to respond to them. (Civil Defence and/or local territorial authority staff were present at each session).

---

[6] http://www.icab.be/top/top_1.html.

The Regional Council's Community Engagement and Māori Policy teams, along with supporting consultants, would facilitate community sessions and hui to gain knowledgeable input into the setting of risk thresholds. Through these sessions a deliberative conversation could be held, in response to individual groups prior knowledge and experience of natural hazard risk ensuring that all participants had the understanding to make a considered response to questions that were pre-prepared for each session. In following this process participants would be making considered judgements as opposed to giving semi-informed opinions.

3.2.2 Promotion Plan

Regional Council's Strategic Communications Team prepared a targeted media and advertising programme to support the community engagement and to raise awareness of the sessions. The objective of the Promotion Plan was to attract as many attendees as possible to a series of community consultation sessions using free and/or low cost media. The full Promotion Plan is attached in Appendix B.

The following key messages were identified by the Strategic Communications Team as underlying the Promotion Plan:

- We can't stop natural disasters from happening but we can make decisions that will minimise damage to lives and livelihoods if disaster strikes.

- Regional Council is currently reviewing the Natural Hazards Policy of the Bay of Plenty Regional Policy Statement. This policy guides district and city plan rules that influence where people live and work, and how they develop land and infrastructure.

- Feedback from the community will help ensure the policy appropriately balances individual and collective responsibilities and risks.

- Everyone is invited to attend one of five 'Living with risk' community sessions being held across the region the week of 10 March.

- For details and to register interest phone 0800 884 880 or email: livingwithrisk@boprc.govt.nz or visit www.boprc.govt.nz/livingwithrisk.

Promotional activities included the following:

- Development of a project-specific web page, referenced in all promotional material.

- Distribution of locally tailored variations of two media releases to print, radio and TV and an email database of over 600 people. These were picked up by most local papers.

- Promotion through territorial authorities' own communication channels, including own databases (such as Community Boards).

- Expert interview on TV Rotorua City News programme.

- Quarter page display ads in five local papers covering the region.

- Radio advertising involving 403 'airings' on five radio stations across the region.

- Promotional email sent, with subsequent wider forwarding, through Regional and District Council, Civil Defence, Neighbourhood Watch groups, SmartGrowth stakeholder groups, Rotorua Youth Enviro Forum, Early Childhood Networks, Total Mobility Assessing Agencies, CCS Disability Action Network and District Health Board networks - directly reaching over 8,000 people.

- Postings on Facebook and Twitter.

- Distribution of over 1,000 flyers to local libraries, council offices and at various community events.

- Several schools placed the flyer in their school newsletter.

- Presentations were made to a number of groups including the SmartGrowth Tangata Whenua Forum, Property Developers Forum and the Strategic Partners Forum.

3.2.3 Community sessions – format

The overall format for each session was in three parts:

- Introduction
- Council responsibilities and roles
- Risk Tolerability Matrix

The aim of the first part of the session was to ensure everyone was clear about the task and to build a shared understanding of risk and natural hazard terminology including what was meant by natural hazard risk (as opposed to any other type of risk), and risk (being a combination of consequences and likelihood). Specific meanings were provided for the following terms:

- Acceptable - "This is part of life and I can put up with that".

- Tolerable - "My family could recover in time if we had to" (with the understanding that where possible action to reduce risk would be undertaken).

- Intolerable - "This risk is too great, it just can't be justified".

A PowerPoint was prepared for the sessions and is included in Appendix C.

Part of the Introduction included an outline of the focus of the session and its contribution to the PRPS variation. This incorporated a discussion around the fundamental understanding of safeguarding, risk reduction and tolerability to risk in terms of local government responsibility and action.

In Part Two of the session, participants were provided with a set of questions that prompted them to think about the role of local government in managing natural hazard risk and the different expectations that people may have about this (see Appendix D and E). This section allowed people to begin to consider what they felt Council's responsibilities should consist of in regards to natural hazard risk management. Encouraging discussion, deeper thinking and consideration of others views was also part of this section. Part Two also prepared participants for Part Three of the community sessions where they would consider the tolerability of different risk scenarios within an overall context of providing guidance on what they would expect to be safeguarded from

Part Three of the session considered different scenarios of impact from a natural hazard event, the likelihood of these happening and the acceptability or otherwise of these. Participants were provided with a Risk Tolerability Matrix to complete (see Appendix E).

The Risk Tolerability Matrix was considered to be the most efficient way of collecting people's input. It was designed using information provided in the risk-based approach to land use planning toolbox, including the Consequence Table (Figure 3.4, page 29) along with the Likelihood Scale (Figure 3.5, page 33).[7] The scenarios were expanded or developed to connect people to the process and the table. Specific consequence scenarios were outlined that the project team believed people in the Bay of Plenty community could relate to. The specific natural hazard was left unnamed so people could chose to relate it to their local community and past experiences of natural hazard events. It was important to make the Risk Tolerability Matrix personal, easily understood and relevant to Bay of Plenty communities. The matrix was refined through consultation with the Working Group and the wider Project Team, including the territorial authorities involved in the sessions and expert consultants.

The questions and the Risk Tolerability Matrix were important tools for the community session but were not designed to be used independently of the sessions. They were prompts for discussion to help participants formulate their understanding and their judgement. They were also a means by which individuals responses could be recorded and collated. Running these groups in such a way as to build capacity to undertake judgement about a complex issue is in accordance with international standards for risk-engagement.[8]

Interested people who were unable to attend the community sessions were emailed a copy of the questions used in the first part of the session and the matrix to provide them with an opportunity to still be involved in the process. These responses were taken into consideration in the analysis of the feedback from the community sessions but were reviewed separately as these respondents had not taken part in the sessions so did not receive the same background and context information.

3.2.4 Community sessions – participation

The community sessions were organised to provide opportunities for participants from urban, rural, coastal and inland communities from across the Bay of Plenty to take part. These sessions were widely advertised (see Promotion Plan Section 3.2.2). In order to manage and prepare for participation, information about the venue for each meeting was made available only to those who enquired about attending.

In addition to the general session, one Invited Parties session was held in a central location at Paengaroa. The purpose of this session was to deliberately invite stakeholders with specific knowledge and interest in decisions affecting the risks borne by communities through natural hazard management and the costs of making decisions that affected the choices for future development of the region. These stakeholders were not asked to represent views of any constituency, rather were recognised for having particular insight into the issues of various interest groups. They included those with a development interest, knowledge about how land use planning might affect vulnerable communities, experience in business recovery post natural hazard events, and experience with local government decision-making at a community level.

---

[7] Saunders, W.S.A.; Beban, J.G.; Kilvington, M. 2013. Risk-based approach to land use planning, *GNS Science Miscellaneous Series 67.* 97 p.

[8] http://www.gns.cri.nz/Home/RBP/Risk-based-planning/A-toolbox/Setting-the-Scene/Public-Engagement/Internationally-recognised-principles.

The table below outlines the sessions that were facilitated with numbers attending.

Type	Location	Date	Attendees
Community	Tauranga	10 March	45
	Paengaroa	11 March	11
	Rotorua	12 March	15
	Whakatāne	13 March	20
	Ōpōtiki	14 March	6
Iwi/hapū	Tauranga	10 March	13
	Rotorua	13 March	5
	Whakatāne	14 March	6
Interested parties	Paengaroa	11 March	8

Following a review of the demographics of participants at the various sessions and feedback from community members it was decided to hold three additional targeted sessions to improve the demographic and sector coverage. These are detailed in the table below:

Type	Location	Date	Attendees	Details
BOP Lifelines Group	Paengaroa	20 March	18	Included representatives from New Zealand Transport Agency, telecommunication companies, power generation and transmission companies, Port of Tauranga, local authorities, District Health Boards, oil industry.
Early Childhood Education	Pāpāmoa	3 April	14	Included Early Childhood Education and Primary teachers and parents.
Youth Jam	Rotorua	8 April	10	Year 11 - 13 Secondary school students.

The promotion and advertising of the community sessions and opportunities for people to be involved in the process is outlined below.

3.2.5 Consultation database

A consultation database was set up. All enquiries and consultation undertaken on the project were included in the database. Any personal details were only used for the purpose for which it was gathered, including making sure people were kept up-to-date of the project's progress. Relevant parts of the database will be provided to the territorial authorities when they are in the planning processes for making changes to their planning documents following the approval of the PRPS.

Part 4: Robustness of chosen process

Based on the best practice principles and the results and feedback gained from this engagement it is believed that the final process is robust and meaningful. There are a number of rigour criteria that have been built into this process as a whole that support this judgement, including:

Selection of the approach - This involved input from regional and district agencies and input from communication and community engagement expertise from different organisations.

The process of engagement - This was based on providing people with opportunity to engage with complex idea, so they could discuss and provide judgement-based response:

• People had an opportunity to get familiar with risk concepts and ideas about natural hazards, i.e. the process built capacity to consider a complex issue.

• The discussion and questions around Council responsibility grounded people in task of policy/planning and decision-making around natural hazard risk.

• Matrix scenarios enabled people to take into account not just their own risk aversion or risk-taking tendencies but to consider the implications in terms of impact.

Participation - Whilst the engagement process had a timeframe a wide range of stakeholders were canvassed from across the communities of the Bay of Plenty:

• Specific interested parties were invited to participate in focussed meeting providing good representation of key interests.

• The engagement process has specific iwi engagement platform which covers the region.

• The feedback received has been added to by people responding to the questionnaire and the scenarios who have been unable to attend the community sessions.

Collation and analysis of responses

• Feedback from the sessions was not used to provide an average response but to understand spread of views, i.e. where views were more universally held and where there was variability.

• The process of analysis recognised minority contrary views. The views that were not the majority are still recorded, considered and used to contribute to the overall risk tolerance profile.

• Cross group comparisons checked for homogeneity. Individual session responses were compared along with facilitators' notes about what had emerged in each group discussions to check for significant issues that might influence trends towards acceptable, tolerable, and intolerable. Only two groups showed more than minor shifts in risk tolerance. These were not geographic groups and were more homogenous (focussed on a shared interest) than other sessions.

It is important to note that this is part of a wider risk-based planning approach, where there are a number of other work streams helping to inform the final decision.

"*From Tauranga City Council's perspective there was very little time or resource to engage effectively with the community. Initial plans were made to conduct a short survey but it soon became obvious that this wasn't going to be sufficient. The road eventually taken was to seek feedback from representative samples of community and stakeholder groups in targeted workshops. City council staff recommended key stakeholders to be invited to these workshops and we helped promote the workshops via our own media channels. There was a good response to the Tauranga session, which broached full capacity. The resulting process was not exhaustive, but it was reasonable given the constraints, and by all indications the feedback gathered was satisfactorily representative of the wider community*", Marcel Currin, Communication Advisor, Tauranga City Council.

Part 5: Results

The community sessions were assessed using feedback from the facilitators, the question response sheets (Appendix D), and the completed matrix sheets (Appendix E). Responses were tabulated as raw data then reviewed for themes and trends.

5.1   Demographics and participation

Overall the attendance was adequate to run good and lively meetings. The facilitators reported some surprise at how engaged and interested participants were despite the relatively high-level topic under consideration. The attendance demographics demonstrate that the process and advertisement of the community engagement ensured a wide range of participation. In particular:

- The total number of participants with the deliberative sessions was 171.

- Participation of general sessions favoured those in late 40s early 50s.

- Low numbers overall for those in their 20s, but this is consistent with usual participation rates for council engagement exercises.

- Māori participation in keeping with demands on iwi, and usual participation rates for council engagement exercises.

- In terms of male and female respondents the gender split is almost the same.

- The ethnicity split of respondents generally matches the regional demographic split.

- Whilst there was a lower reporting rate for people's employment status there is a good representation of different employment status that generally matches the regional split.

5.2   Part Two - The role of councils

People attending the sessions recognised that there is quite a lot of judgment involved. While a few people said a question response was "self-evident" most gave a reason for their choice or qualified it or put limits on the circumstances where their response might change. For example, a respondent to Question 1 noted "*I believe it is necessary for the council to take action to reduce consequences as it has the ability to possibly save lives and economic losses which could negatively affect it in the future*". In addition, a respondent to the same question noted "*So long as the rules are open enough that negotiation can happen should proof of mitigation or engineering can overcome the problem*".

- The tendency in responses to questions was to recognise councils have an overview role and specialist knowledge (so validates provision of information role). Things become less clear when it comes to councils' impact on matters of choice; that is where to draw the line between individual choice and collective responsibility. Rationale for councils as a vehicle for collective responsibility includes: risks to vulnerability; lack of forward thinking by individuals; and fears that individuals actions might put others at risk. Rationale for the opposite viewpoint included: inefficiencies of too much government; a sense that risk is an individual choice matter; and a fear of being too restrictive on future development.

- Overall the question responses did not give councils a strong mandate to impose "no go" zones. However, the number of "*Council should….*" statements indicates people overall recognise a role for council in managing activities that contribute to risk in response to their knowledge about natural hazards and their impacts – they are just not all consistent on how far this role should go.

- There were a number of calls for councils to undertake their role in close partnership with other local government agencies and with Māori.

- Some terminology required further explanation. Notable was the term "*safeguard*" when it refers to private property. Many people understood this to mean that councils might recompense private property owners from the public purse or carry out works to protect private assets. They were concerned that this might be expensive and unfair, burdening rate payers as a whole for private decisions. A comment that councils have a role to protect private property owners who could not afford insurance only came from the iwi/hapū session. Overall responses indicate this is a very sensitive topic.

- Another term that was questioned was "*long-term*" and most people placed this over 100 years. Participants in the iwi/hapū sessions observed that a long-term view was consistent with Māori approaches to management.

- Question 5 (see Appendix D) was regarded as the most difficult for the participants in the sessions who in their responses used words such as "*very tricky*". The responses would not give an overall steer in any direction as participants had mixed views and comments reflected that they perceived that any response to this could depend on many conditions unique to each circumstance. People saw the complexity in this question and did not indicate any preference for an overall principle that they could see would work in any situation.

Overall it is important to note that no one question or one group had 100% agreement on any question. While most questions had a strong trend in a particular direction there were always a number of contrary views. These views may not represent the majority of the population but they are nevertheless significant and can indicate the limits to the overall acceptability of a council's stance and role in natural hazard management.

The contrary views are also important indicators of sensitivity and the need for active communication around issues. This minority view tended towards a preference for personal risk responsibility and less direction from local government. However, there were also a number of comments that indicated that some people do rely heavily on councils to take on the risk-management responsibility for them. These people said that they perceive councils have expertise, and they would like them to create more certainty for them in their world. So whatever role is taken it is important that people understand the limits of this and where their own responsibility begins.

5.3 Part Three – Risk Tolerability Matrix

5.3.1 Overall matrix results
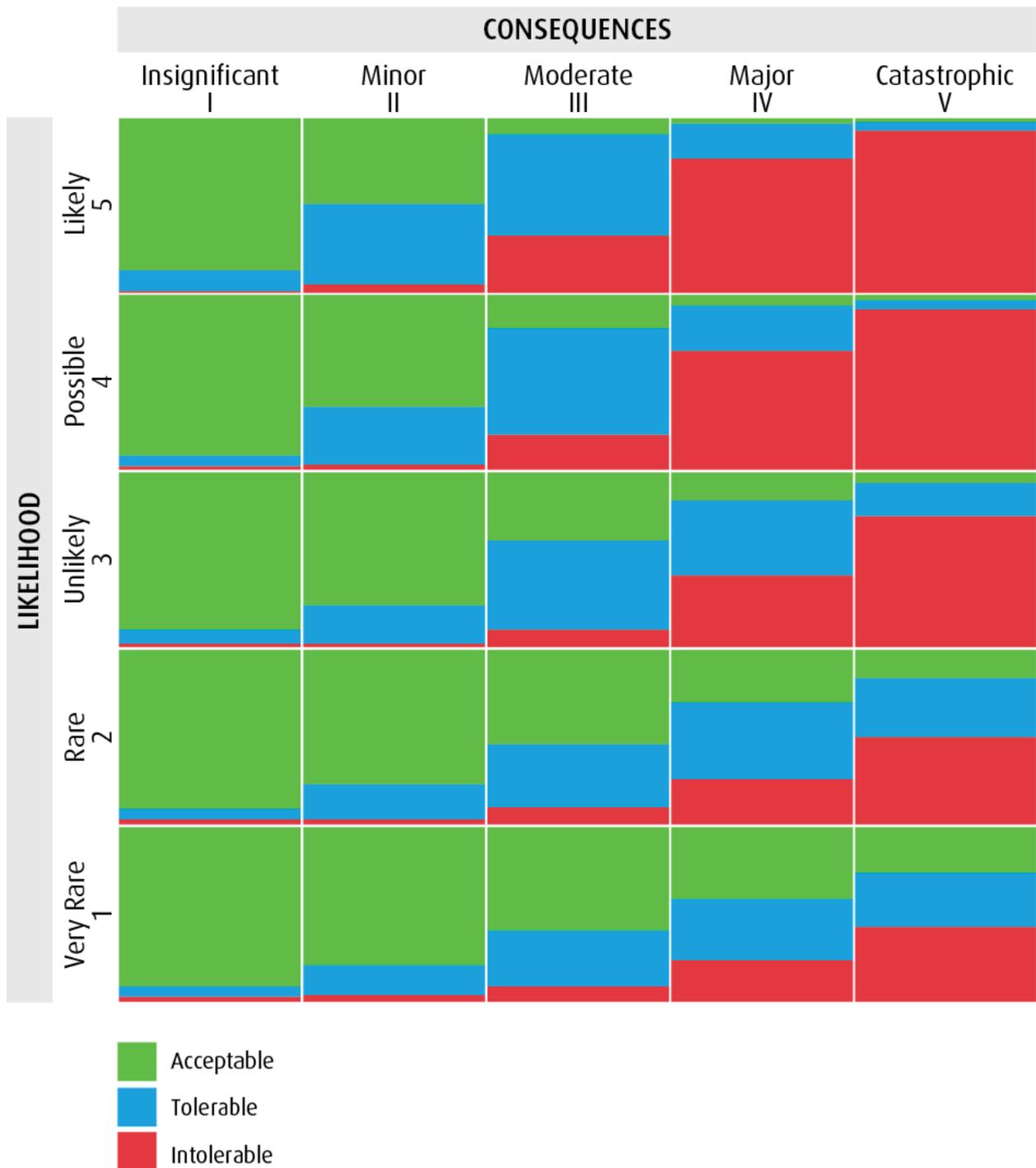
5.3.2 Summary of interpretation of results

The overall opinion is that the results provide a good steer on how a community regards the risk of natural hazard events. The matrix responses, when compared with responses to the questions in Part Two, show people are less tolerant of risk (even as the chance of this decreases) when they are including a consideration of consequences and potential impact of the event. They are more optimistic about risk when they are considering how rules and restrictions might impact on them.

Some of the observations from the final matrix (section 5.3.1) are:

- A catastrophic event is only within the tolerable range to some people if its likelihood is rare or very rare (with a small percentage finding them even acceptable when deemed very rare). The majority find even a rare or very rare catastrophic event intolerable.

- Likelihood does not have such a strong influence on people's judgement about the acceptability or tolerance of risk in the insignificant and minor categories. From the matrix people are prepared to live with the impacts in the insignificant and minor regardless of the likelihood. However if minor events are deemed likely or possible a significant portion of respondents only find this tolerable, i.e. they would like the situation to be improved but are prepared to live with it in the meantime.

- In comparison likelihood has a bigger impact on people's opinions around catastrophic events, making these more palatable when considered less likely or to happen at some far distant future. This implies that overall people were more inclined to be risk takers than risk avoiders. Note an insignificant event is deemed acceptable regardless of risk for the general community but less universally acceptable to those respondents taking part in the iwi/hapū sessions.

- The category which had the closet split of numbers was a catastrophic/very rare event, i.e. close numbers for acceptable/tolerable/intolerable. This can be interpreted that for some people the fact that the event is catastrophic makes it intolerable regardless of the likelihood of it happening. For others the likelihood feels too low to be of concern regardless of the impact. Those who opt for tolerable are possibly acknowledging that there may be circumstances that warrant taking the risk but they are not comfortable saying that no actions are needed to ever reduce this risk.

- For moderate events respondents moved from acceptable to only tolerable where the likelihood increased to possible and likely. Alternately - moderate impacts only become more acceptable when they are rare or very rare (but not for all people). A significant portion of respondents found moderate events that were likely to happen. It is possible to conclude from this that people believe moderate impact events are not desirable and they can understand we might need to put up with this risk to gain some benefits but they would prefer that efforts were made to either make these less likely or to reduce their impact.

- Major category events showed the greatest shift from intolerable (when likely) to acceptable/tolerable (when very rare). A third of respondents found major impact events tolerable when their likelihood is possible. Furthermore, when deemed unlikely or rare a significant portion of respondents considered the risk of a major impact event acceptable (i.e. had no expectation that any actions need be taken to reduce their likelihood or impact). This indicates a significant portion of respondents were risk-taking. However, only when this risk of a major event became very rare did the number of people who found this acceptable exceed those finding it only tolerable – and then only by a small margin. So although there is a consistent voice that is comfortable with taking risks it is not anywhere close to the majority response.

5.3.3 Summary of analysis of iwi/hapū session results

When iwi/hapū responses were separated from overall community responses the results showed some anomalies, such as a perceived greater tolerance for unlikely events than for rare events even though rare events are deemed less likely than unlikely events. This could be due to the wording that was used to accompany the likelihood definitions which focussed on the impact for different generations.

Amongst some of the iwi participants the impact on future generations is less tolerable than when it occurs directly to the individuals present now. It could also be due to how the matrix was completed. In the first iwi/hapū session that was run the matrices were handed out before instructions were given, resulting in some participants beginning to complete them without a full understanding of the task.

Compared to the general community, the iwi/hapū respondents illustrated similar intolerance zones but had fewer acceptable combinations of consequence and likelihood. While the overall community responses showed a balance of acceptable/tolerable that was weighted towards acceptable, the iwi/hapū responses were more weighted towards tolerable. A conclusion could be drawn that overall iwi/hapū respondents were more inclined to want a situation to be improved, to minimise risk, even though they were prepared to live with this risk in the interim.

An outcome of the hui sessions was that representation was sought from local iwi hapū on Civil Defence groups or committees at a governance level.

There should be caution taken in reading too much into the difference between iwi/hapū and general community responses. The number of iwi/hapū sessions were fewer than general meetings and the largest iwi/hapū session occurred early in the engagement process while the method was still being refined. In addition, this first session involved people who had been significantly adversely affected by the recent Rena disaster and saw this as an opportunity to discuss this important event and its impact with council.

5.3.4 Summary of analysis of differences between groups

The session responses to both the matrices and the questions were scanned to see if any notable themes emerged that were unique to particular groups. No statistical analysis has been done to determine if observed differences between groups are valid rather than accidental. Comments below are a product of reviewing the responses in each session in comparison with the overall summary response and combining this with facilitators' observations about the individual sessions.

In general, the groups showed only minor trend differences towards acceptability or intolerability when compared with the overall summary responses, which is in keeping with random variability in the participant make-up. Only two out of 10 groups showed stronger divergence than others, one towards being more risk averse than the overall summary (ECE group) and one to being more influenced by likelihood than overall summary responses (Lifelines group). Both of these groups were more focussed around a common interest than the general community sessions. The ECE group had a number of participants from the Papamoa area (an area affected by flooding and potentially by tsunami). Participants in the Lifelines group professionally regularly assess risk in terms of likelihood and return period.

The Interested Parties session, the Youth Jam and the ECE groups all showed more commonality of response amongst the group than the other general community sessions, for example there were fewer mixed categories (e.g. acceptable/tolerable) and fewer outliers (e.g. majority view acceptable – some intolerable) in comparison with the matrix responses overall. In the case of the Interested parties session this could be a consequence respondents feeling that they were considering the implications of the various risk scenarios for those who were not present, i.e. wider society not just their own risk personal risk preferences. One participant commented that they felt the burden of this responsibility.

Part 6: Limitations and further work

The approach used is analogous to a focus group methodology. In the analysis percentages were assigned to responses in order to analyse the spread of views. However, these do not correspond to any statistical representation of views across the region. This work could be extended and opened to wider participation which would provide sufficient statistical basis for this type of analysis.

Appendices

Appendix A – Minutes of the Natural Hazards Engagement Workshop meeting held on Thursday, 16 January 2014

Minutes of the Natural Hazards Engagement Workshop meeting held in the Armoury Room, Classic Flyers, on Thursday, 16 January 2014.

Present:　Andy Ralph, Tauranga City Council (TCC) Manager City Planning and Growth, Esta Farquhar, Bay of Plenty Regional Council (BOPRC), Planner, Janie Stevenson, BOPRC Community Engagement Advisor, Kerry Gosling, BOPRC Community Engagement Team Leader, Linda Albertyn, Whakatāne District Council (WDC) Senior Policy Planner, Marc Faurvel, Western Bay of Plenty District Council (WBOPDC) Senior Policy Analyst, Marcel Currin, TCC Communications Team, Margaret Kilvington, Consultant Facilitator, Martin Butler, BOPRC Regional Planner, Matemoana McDonald, BOPRC Māori Policy Advisor, Matthew Harrex, Bay of Plenty Civil Defence Emergency Management Group, Emergency Management Coordinator, Namouta Poutasi, Integrity Professionals Project Manager, Nicole Head, BOPRC Graphic Designer, Paul Baunton, TCC Manager Emergency Management and Safety, Paul Spurdle, Rotorua District Council (RDC) Environmental Consents Planner, Rachael Pentney, ARC Principal Specialist Hazards, Stephanie Macdonald, BOPRC Community Engagement Advisor, Wendy Saunders, GNS Science Natural Hazards Planner

Welcome from Martin.

- Background of RPS and the Natural Hazards framework to date.
- Discussed the development of thresholds for incorporation into the RPS based on the communities' level of risk they are willing to accept.
- Methodology – Acceptable, tolerable and intolerable risk.
- Not many tolerable risks.
- Challenge to get people to identify acceptable level of risk.

Martin's presentation

- Regional Policy Statement (RPS) reviewed under Resource Management Act (RMA) –
- Notified next generation plan and decisions with policy around Natural Hazards.
- This policy was appealed by a number of parties and now working on a variation as per Environment Court direction.
- Other streams also working towards variation.
- Resource Management Act process.
- This engagement workstream needs to be established – acceptable, tolerable, intolerable levels of risk. What is acceptable? Where do you draw the line?
- Participants need to consider how can we engage community in where we draw the line?
- Explanation around the science around earthquakes, volcanoes and tsunami's and how this relates to us in New Zealand.

Discussion:

- Difficult science messages associated with these hazards need to be communicated simply and clearly – background and science important to communicate.

- GNS – Christchurch earthquakes – communicated well.

- High impact events – easy to communicate versus sea level rise/coastal erosion.

- Type of hazard – important how you package communications.

- Science basic principles not disputed – its peoples understanding probability and the false sense of security.

- People's perception of risk flavoured by experiences.

- When talking about a return period – people associate it from today, not since the last event.

- Terminology needs to be clearer to enable better understanding.

- Communicating likelihood/risk – how do you want to live.

- Plan for stability?, i.e. framing communication and outcome from decisions.

- Science complex and need to keep it simple.

- Putting it in context of known risk – step away from accepted level of risk, i.e. just look at risk – put it into real life – comparable in natural hazards context.

- Range of statutes relating to Natural Hazards, Civil Defence Emergency Management (CDEM) – what's left over after more focussed land use provisions don't go to.

- Regional Policy Statement influences regulation.

- Existing uses – can be addressed by RPS and potentially the Building Act

- Timing of RMA reform will impact on this work.

- Resource Management Act requires mitigation could fall under CDEM. – assess risk is tolerable.

- Risk management international standards – page 8 presentation.

- Risk definition CDEM Act – best definition important to define as used in other senses – also used interchangeably with likelihood – i.e. hit by a bus.

- Consistent terminology – tolerable. Intolerable – could vary in each community.

- Another way of dealing with deaths – annual average death fatality rise – been around a while.

- Paul Bounton – questions communicating deaths to the community as an annual average and difficulty in understanding.

- Communities make value judgements – these are not always based on science.

- Table of consequences – take back to project team.

- Need community to help decide what the tolerable level of risk is setting the number or line.

- Community input – we need to know what you think and what matters to the community.

- Annual fatality risk – 1/10,000 pa.

- 1×10^{-4} how to relate to 500 year return period? – use consequence/likelihood and use of death.

- Participants thought this terminology was difficult to understand.

Margaret Kilvingtons presentation

- Potential for Local Government to be more conservative.

- Leads to other conversations – who is going to pay for it?

- Accepting risk:
    - Diffused over space and time – gradually.
    - Process that exposed them in setting that risk.

- Comparative risk, i.e. road toll risks aren't comparable – no same degree of control.

- Communicating level of risk through tangible risk preferences – averaging results has too many flaws.

- Community engagement may require hand picking people to engage with.

Discussion

- Risk – not am I going to die – tomorrow or in 50 years.

- Budgetometer – using risk – likelihood deaths.

- What risk do people find tolerable? - Difficult as people's understanding different.

- Need to use clean common language and explanation of definition of terms.

- Communities perception is they trust someone has done thinking behind rules in the plan and therefore that's why I can build my house in a particular location. E.g.
    - House in flood, floor level not flood.
    - Earthquake and house won't fall down.
    - Tsunami – can't stop that, just tell me how to get away.

- Should identifying acceptable levels of risk and tolerance not be guided from central government on a national scale?

- Terminology of value = people know what they value.

- Analysis = science in terms of policy it's about establishing values.

- Language and how to converse.

- Potential use of focus groups.

- Resources – not quantitative – something that gives you ideas where tolerable/intolerable fits with own science background.

- Strong community involvement in setting these limits.

- Example of Waikato RPS and draft. Thames/Coromandel District Council to set. Waikato has not set a tolerance level and are leaving this for District Council to set

- Kerry suggested using two tables and people put a star on.

- Three options:
    - Focus group
    - Bang the table
    - Budget meter

- Need to ask right questions – need to know where they live.

- Need to make most of existing data

- Have a limited timeframe set by the Court therefore engagement process only has 6 weeks. Need to establish what is doable?
    ▪ Tolerable risk to be avoided – RPS direction can actually operationalise that in a district level.
    ▪ Idea about process.

- In each individual district – further opportunity as go through notification process.

- Don't want tolerable/intolerable litigated.

- Spread of input from different parts of community – i.e. coastal, urban, rural.

- Representation from Councillors.

- Using what we already have:
    ▪ Group perception survey (CDEM).
    ▪ Tsunami data from TCC?
    ▪ Insurance companies' information on risk.

- Who is going to undertake the work?

- $40 K budget (external).
    ▪ Small working group with funding for project oversee it being done.

- Engagement of elected members – regional council politicians – district level.
    ▪ Joint committees already.
    ▪ Make use of these.

- Have conversation about Hazard Policy management.

- About regional council process about developing a plan.

- "Meaningful" consultation. Reassurance that engagement is meaningful.

Working Group

- Six to eight week timeframe for engagement process.

- Need to set up an internal team and then engage relevant specialists as necessary.

- Internal team to consist of Kerry Gosling, Stephanie Macdonald, Nicole Head, Marcel Currin, Linda Albertyn, Katrina Knill, Namouta Poutasi, Esta Farquhar

- Two to three hour – first meeting - one to three hour following weeks.

- Get an understanding of the communities level of tolerable risk.

- Number of responses from a range of communities, clear and easy to respond without irate calls,no surprises when comes to notifying process.
    ▪ Suitable consultants to assist with this process.
    ▪ People with expertise with community engagement.
    ▪ People with natural hazards expertise.
    ▪ Social media, overviewer.

Working Group Meeting

- Thursday next week – 2:00 pm regional council. Video conference with Mount and Whakatāne.

Suggestions for brief

- Focus Group – wording and format.
- Broad brush/online – organisation about who and where (reach).
- Iwi participation.
- Councillors – consultant to carry out work.
- Saturday or Sunday market?
- Focus group – three days.
- Need to know and nice to know.
- Need to get content right up front before racing out to consultants and the community with it.
- Communications meeting Monday
- Basic approach to table of consequences.
- How it can relate to a generation.
- Put it into words.
- Margaret may be used as a consultant for focus group.
- Each question draw across to policy needs.
- Incentive is a good idea.
- Survey Monkey.

Appendix B – Promotion Plan

RPS Natural Hazards Policy Variation 2 –

Work Stream A: Risk Threshold Engagement

Promotion Plan

Developed 25 February 2014

Background

As a result of work to resolve appeals to the Regional Policy Statement, Council has been directed by the Environment Court to conduct 'meaningful' community consultation on the proposed Natural Hazards Policy.

A project team has been established to develop and lead the required community consultation process which will involve a series of community sessions delivered at various locations throughout the district.

The purpose of this plan is to outline key messages to the community about this project and recommend actions to promote and encourage attendance at the community sessions, which are scheduled as follows:

- Tauranga   Monday 10 March   4 – 6 pm
- Rotorua   Wednesday 12 March   4 – 6 pm
- Whakatāne   Thursday 13 March   4 – 6 pm
- Ōpōtiki   Friday 14 March   10 - 12 noon
- Paengaroa   Tuesday 11 March   4 – 6 pm

Meetings and consultation with iwi will be co-ordinated and promoted separately by the Māori Policy team.

Objective

To attract as many attendees as possible to a series of community consultation sessions using free and/or low cost media.

Key messages

- We can't stop natural disasters from happening but we can make decisions that will minimise damage to lives and livelihoods if disaster strikes
- Regional Council is currently reviewing the Natural Hazards Policy of the Bay of Plenty Regional Policy Statement. This policy guides district and city plan rules that influence where people live and work, and how they develop land and infrastructure.
- Feedback from the community will help ensure the policy appropriately balances individual and collective responsibilities and risks
- Everyone is invited to attend one of five 'Living with risk' community sessions being held across the region the week of 10 March
- For details and to register your interest phone 0800 884 880 or email: livingwithrisk@boprc.govt.nz or visit www.boprc.govt.nz/livingwithrisk

Audiences

General audience local residents of Tauranga, Whakatāne, Rotorua, Paengaroa and Ōpōtiki. Estimated number of households and primary print & radio media by district is as follows.

District	Estimated no. of households (for mail delivery)	Primary print & radio media
Tauranga	21,155 urban 5479 rural	BOP Times (daily) Sunlive (daily) & Weekend Sun (Fri) Bay News (Thurs) Radio: Newstalk ZB, Classic Hits, More FM, Radio Live
Paengaroa	2640 rural Te Puke 2089 urban Te Puke	BOP Times (daily) Te Puke Times (Thurs) Mai Maketū (monthly) Radio: Newstalk ZB, Classic Hits, More FM, Radio Live, 1XX
Rotorua	16,070 urban 3762 rural	Daily Post (daily) Rotorua Weekender (Fri) Rotorua Review Radio: National, Newstalk ZB, Classic Hits, More FM, Radio Live
Whakatāne/Ōhope/Matata	6231 urban 2700 rural	Whakatāne Beacon (Tues, Wed, Fri) Bay Weekend (Sat) Whakatāne News (wed) Radio: Radio Live, 1XX
Opotiki	1460 town 1240 rural	Ōpōtiki News (Tues & Thurs) Radio: 1XX, Mulcher FM

Action plan

Note costs do not include staff time

What	Audiences	Channel	When	Who	Cost	Done
Distribute flyer at Waihī Beach 'storm in a tea cup'	Attendees with flood concerns at Waihī Beach & northern Western Bay	Community w/shop	Tues 18 Feb	WBOPDC	$16.00 printing	18/2
Regional & locally tailored media releases	Tauranga/ Paengaroa	Print, radio & online media	Wed 19 Feb	Trina	$0	19/2
	Rotorua		Tues 25th Feb			27/2
	Whakatāne/Opotiki					
Editorial	Tauranga	Weekend Sun editorial	Fri 28 Feb	Trina	$0 – part of regular comms team Backyard booking	21/2 for publishing 29/2
Publish web page so can reference from flyers, email, social media etc.	Passive all	www.boprc.govt.nz/livingwithrisk	By Fri 21 Feb	Trina	$0	19/2
Identify & distribute info via local & regional council and other local large organisation email distribution lists	Random all	Includes: • BOPRC Council Catch-up list (c.600) • BOPRC staff networks • District Council staff & community networks • Smartgrowth networks • District Health Board staff & community networks	By Mon 3 Mar	Trina & Project team (TLA & CDEM reps)	$0	27/2 21/2 request 24/2 request 25/2 request 3/3
Social media postings	Random all		By Wed 26 Feb	Trina	$0	

Task	Area	Details	Deadline	Responsible	Cost	Status
• BOPRC Facebook • BOPRC Twitter • BOPCDEM Facebook • TLAs Facebook & Twitter						• 21/2 • 21/2 • 20/2 • RDC 25/2
Explore options with TLA's for inclusion in their regular advertorial pages in local papers	All	TBC but could include: • TCC page in Bay News • WBOPDC	TBC • 6 Mar	Trina & Project team (TLA & CDEM reps)	$0-?	TLA request sent 24/2
Produce all sessions A4 version of flyer	All	Web, email and distribution at events and public venues	By Mon 18 Feb	Content – Trina Graphics – Nicole Printing – Lisa B	Printing $0.16c/copy	100 printed 18/2
Produce 5x localised A5 versions of flyer	All	Mail drops & distribution at events and public venues	By Wed 26 Feb	Content – Trina Graphics – Nicole Printing – Lisa B	Printing $0.16c/copy	Printed 25/2
Distribute flyers at council offices & libraries	Tauranga/Paengaroa	BOPRC, TCC & WBOPDC offices & libraries at Mt, Grey St, Barkes Corner, Te Puke, Katikati & Waihī Beach		Distribution - Trina	$48 printing (300 copies)	27 & 28/2
	Rotorua	RDC & BOPRC Offices & libraries	By Mon 24 Feb	Distribution – Janie	$32 printing (200 copies)	28/2
	Whakatane	BOPRC, WDC & KDC Offices & libraries	By Mon 24 Feb	Distribution WDC & BOPRC – Trina Distribution KDC – Abby	$48 printing (300 copies)	27/2
	Opotiki	Council Offices & library	By Mon 24 Feb	Distribution - Abby	$16 printing (100 copies)	28/2

Radio advertising	All	Classic Hits, Newstalk ZB, 1xx, Hauraki & Bay Rock	By Sun 9 March	Trina	$2007.00	Agreed to proceed 25/2 403ads aired 1-12/3
Insert display adverts in local papers	All	Te Puke Times, Bay Weekend, Daily Post, Weekend Sun & Ōpōtiki News	By Sun 9 March	Trina - content Nicole - graphics	$1894.40 + gst	Booked 3/3, published 6 & 7/3
Letters & flyers sent to landowners	Approx. 25 BOPRC region landowners in Taupō District	Direct mail	By Sun 9 March	Trina – content Marie – mail out	Approx.. $30 postage & printing	7/3

Pick-up log

(Note - this is not a comprehensive list of all media coverage, it is likely that article was also picked up by unmonitored media including Katikati Advertiser, Waihī Leader and Te Puke Times)

Wed 19/2

BOP Times article - http://www.nzherald.co.nz/bay-of-plenty-times/news/article.cfm?c_id=1503343&objectid=11205704

Thurs 20/2

Sunlive - http://www.sunlive.co.nz/news/64768-call-hazard-feedback.html#sthash.1WPLERX4.dpuf

BOP Civil Defence sent the flyer and session times to their neighbourhood watch email list (reaches 8000) plus to their local civil defence teams to get them for share, plus will also put on their Facebook Page.

Approx. 20 flyers distributed at a Paengaroa kindergarten meeting

Fri 21/2

BOP Times p.5 briefs http://www.nzherald.co.nz/bay-of-plenty-times/news/article.cfm?c_id=1503343&objectid=11205704

Sat 22/2

Daily Post p. 3 briefs

Tues 25/2

CDEM email from Clinton Naude to CDEM Group

RDC posted media release on www.rdc.govt.nz, on social media & in weekly staff newsletter

Fri 28/2

Weekend Sun article

Sat 1 /3

Mai Maketū article

Radio ads on NewstalkZB, Tauranga & Paengaroa

Sun 2/3

Radio ads on NewstalkZB, Tauranga & Paengaroa

Mon 3/3

Radio ads on NewstalkZB & Classic Hits, Tauranga & Paengaroa

Tues 4/3

Whakatāne Beacon article

Radio ads on NewstalkZB & Classic Hits, Tauranga & Paengaroa

Wed 5/3

Radio ads on Classic Hits, Newstalk ZB & Radio Hauraki in Rotorua

Radio ads on NewstalkZB & Classic Hits, Tauranga & Paengaroa

Thurs 6/3

Ōpōtiki News article
http://www.opotikinews.co.nz/uploads/88879/files/228982/06_March_2014.pdf

Display ads in Te Puke Times, Daily Post & Ōpōtiki News

Radio ads on Classic Hits, Newstalk ZB & Radio Hauraki in Rotorua

Radio ads on NewstalkZB & Classic Hits in Tauranga & Paengaroa

Fri 7/3

Display ads in Bay Weekend & Weekend Sun

Radio ads on Classic Hits, Newstalk ZB & Radio Hauraki in Rotorua

Radio ads on NewstalkZB & Classic Hits, Tauranga & Paengaroa

Radio ads on 1XX & Bay Rock, Whakatane

Sat 8/3

Radio ads on Classic Hits, Newstalk ZB & Radio Hauraki in Rotorua

Radio ads on NewstalkZB & Classic Hits, Tauranga & Paengaroa

Radio ads on 1XX & Bay Rock, Whakatane

Sun 9/3

Radio ads on Classic Hits, Newstalk ZB & Radio Hauraki in Rotorua

Radio ads on NewstalkZB & Classic Hits, Tauranga & Paengaroa

Radio ads on 1XX & Bay Rock, Whakatane

Mon 10/3

Rotorua TV news story http://www.youtube.com/watch?v=xPALG227_Bw&feature=youtube

Radio ads on Classic Hits, Newstalk ZB & Radio Hauraki in Rotorua

Radio ads on 1XX & Bay Rock, Whakatane

Tues 11/3

Radio ads on Classic Hits, Newstalk ZB & Radio Hauraki in Rotorua

Radio ads on 1XX & Bay Rock, Whakatane

Wed 12/3

Radio ads on 1XX & Bay Rock, Whakatane

Appendix C – Community session presentation PowerPoint

Living with risk

Proposed Regional Policy Statement
Preparation of Variation 2 (Natural Hazards)

Bay of Plenty
REGIONAL COUNCIL
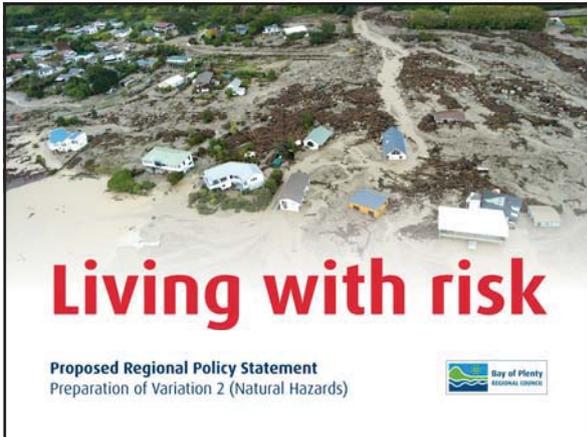
We aim to….

- to get your input on what level of natural hazard risk you want your community to be safeguarded from
  (not about specific details like how a tsunami might affect your house)

- yours is one of 13 sessions we are running around BOP

Session outline

Three parts:

<u>Introduction</u> - *what IS natural hazard risk and how might it effect us in the Bay of Plenty – or "what are the chances?"*

<u>Part Two</u> - *what do you expect from your local councils?*

<u>Part Three</u> - *I can live with this – your view on what risks are acceptable or not.*

Background

- *The Bay of Plenty has the widest range of natural hazards in New Zealand*

- *Councils want to reduce the harm to communities*

So what's it all about…..

- *Natural hazards policy that will guide district and city plan rules that influence where people live and work, and how they develop land and infrastructure*

To do this we…

- *include rules within formal policies and plans*

Part of the challenge of risk reduction is

Bay of Plenty
REGIONAL COUNCIL

7

Your input will…..

- *help the Regional Council find this balance*

  safeguarding what is important to communities and allowing for the freedom to improve and develop the places where we live, work and play

Bay of Plenty
REGIONAL COUNCIL

8

So …a natural hazard risk

When is it
- **acceptable** *- part of daily life - these things happen*
- **tolerable** *- when it's awful but you know that your family and the community can recover from it in time*
- **intolerable** *- NO WAY - risk is so great that it can't be justified*

Bay of Plenty
REGIONAL COUNCIL

9

Part Two

- *We aim to explore two areas – firstly we will look at your opinion on our Councils responsibility in managing the potential consequences of natural hazard events*

Bay of Plenty
REGIONAL COUNCIL

10

Let's go to the questionnaire….

Bay of Plenty
REGIONAL COUNCIL

- **What do you think Councils should be responsible for?**

11

---

1. I expect regional and local councils to take action to reduce the possible consequences of a major natural hazard event.

2. It is important to me that regional and local councils take action to safeguard both privately owned assets, as well as publicly owned community assets.

3. I expect all our councils to take a long-term view using the most recent information available.

Bay of Plenty
REGIONAL COUNCIL

12

---

4. Councils should stick to providing information about natural hazard risks and leave people to decide for themselves if it is acceptable or not.

5. If a council allows people to knowingly choose to take on a risk themselves, council rates should be available to compensate those who suffer loss.

6. It is important that Councils do restrict activities now for low likelihood natural hazard events (may not occur for a long time).

13

Part Three

- *acceptable* - part of daily life - these things happen
- *tolerable* - when it's awful but you know that your family and the community can recover from it in time
- *intolerable* - NO WAY - risk is so great that it can't be justified

14

Living with risk

15

16

17

18

Where do the risk thresholds lie for other factors?

- Intolerable
- Tolerable
- Acceptable
- Negligible

Building damage Lifelines Cost to the economy

19 Bay of Plenty REGIONAL COUNCIL
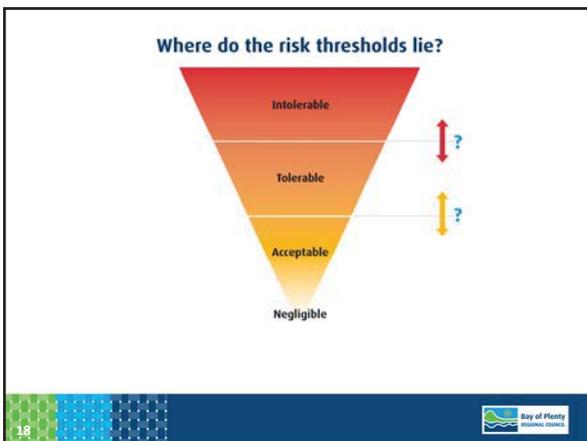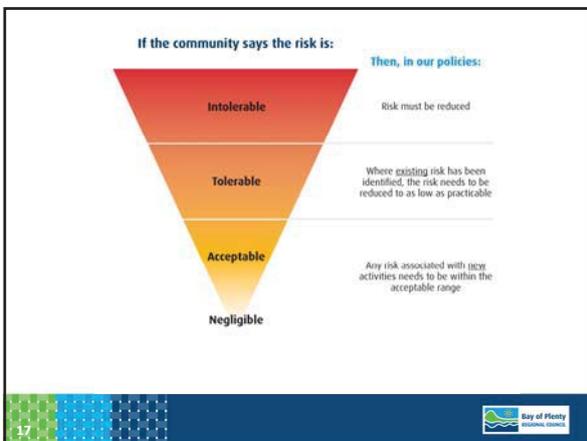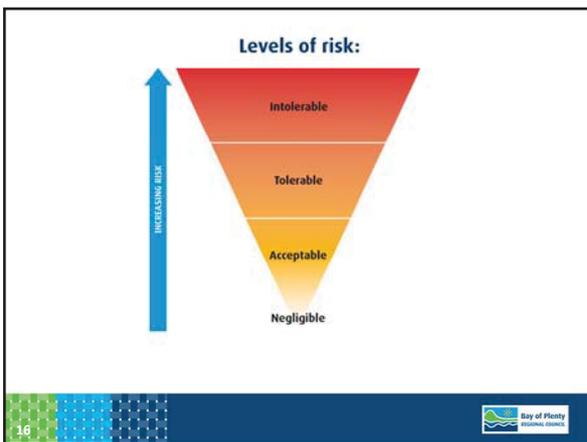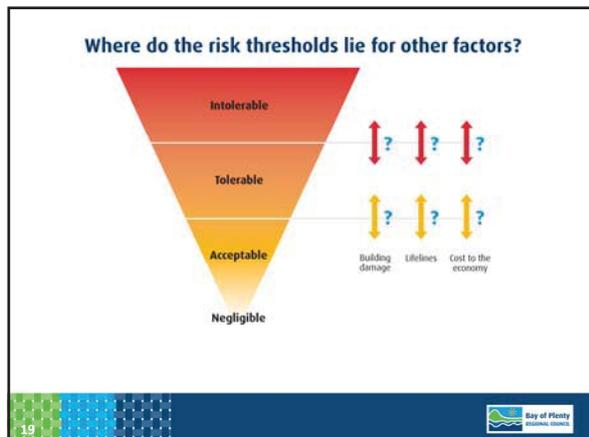
In determining this we need to…

- *consider the* <u>*likelihood*</u> *that a hazard event will happen and the impact or* <u>*consequences*</u> *if it does*

e.g. knowing that a building may flood BUT only rarely may be acceptable.

20 Bay of Plenty REGIONAL COUNCIL

Before we take that risk…

- *we have to weigh up*

Risk

Rules & regulations Freedom

Lifelines Infrastructure Buildings

Wellbeing Social & cultural Response Economic

21 Bay of Plenty REGIONAL COUNCIL

What risk do you want to live with?

- **acceptable** - *part of daily life - these things happen*
- **tolerable** - *when it's awful but you know that your family and the community can recover from it in time*
- **intolerable** - *NO WAY - risk is so great that it can't be justified*

22 Bay of Plenty REGIONAL COUNCIL

I can live with this risk…

- *put your lucky number in top right hand corner*
- *we will talk the process through before you start*

Think of an event that could happen in your community then apply this image when working through this table - read the scenario then scroll across the page and mark your thoughts in each space using the symbols as per below:

- *Acceptable - this is part of life that I could put up with*
- *Tolerable - my family and community could recover in time if we had to*
- *Intolerable - NO WAY - this risk is too great. It can't be justified*

23 Bay of Plenty REGIONAL COUNCIL

Likelihood				
Once every 50 years (Likely)	Once every 100 years (Possible)	Once every 100-1000 years (Unlikely)	Once every 1000-2500 years (Rare)	More than 2,500 years (Very Rare)
90% chance for me	80 - 90% chance for me	15-80% chance in my and my grandchild's lifetime	5-15% chance in my and my grandchild's lifetime	Less than 5% chance in my and my grandchild's lifetime

24 Bay of Plenty REGIONAL COUNCIL

Slide 25

Consequences

(V) The natural event is catastrophic. Nearly half of the liveable homes are wiped out. Some can be rebuilt but many can never return. One quarter of hospitals/marae etc have been badly damaged and are unable to be safely used. Many are beyond repair. It kills over 100 people. Businesses and livelihoods are lost. [up to 10% GDP or annual income]

(IV) Up to a quarter of schools, hospitals and marae have been damaged (and are struggling to function). Half of the homes in your community have been damaged, some of those can be rebuilt but many can't. It may take up to six months to fix the water and roads. Over 10 people died with more than 100 injured. About 20% of the town centre will be closed off for anything from a week to a month. [10% of GDP or annual income]

(III) In your community of 1,000 homes about 60 - 100 houses are unliveable, the natural event knocks out power and water networks. For a week daily life revolves around getting bottled water and queuing up at the portaloos. Some businesses can't open. The natural event injures up to 100 people. [1% of GDP or annual income]

(II) This event has affected 20 - 100 houses in your community of 1,000, with the local marae and school out of action for up to a day and the town centre is closed briefly. The hospital is able to function but has some damage. You may need to use a bucket for the toilet for the day. No-one died but 10 people were injured.

(I) You have had a big fright from this event but basically there has been no real damage and the local shops were only closed for a couple of hours. No-one was injured.

25 · Bay of Plenty REGIONAL COUNCIL

Slide 26

	Likelihood				
	Once every 50 years (Likely)	Once every 100 years (Possible)	Once every 100-1000 years (Unlikely)	Once every 1000-2500 years (Rare)	More than 2,500 years (Very Rare)
	90% chance for me	*80 - 90% chance for me*	*15-80% chance in my and my grandchild's lifetime*	*5-15% chance in my and my grandchild's lifetime*	*Less than 5% chance in my and my grandchild's lifetime*
(V) The natural event is catastrophic. Nearly half of the liveable homes are wiped out. Some can be rebuilt but many can never return. One quarter of hospitals/marae etc have been badly damaged and are unable to be safely used. Many are beyond repair. It kills over 100 people. Businesses and livelihoods are lost. [up to 10% GDP or annual income]					
(IV) Up to a quarter of schools, hospitals and marae have been damaged (and are struggling to function). Half of the homes in your community have been damaged, some of those can be rebuilt but many can't. It may take up to six months to fix the water and roads. Over 10 people died with more than 100 injured. About 20% of the town centre will be closed off for anything from a week to a month. [10% of GDP or annual income]					
(III) In your community of 1,000 homes about 60 - 100 houses are unliveable, the natural event knocks out power and water networks. For a week daily life revolves around getting bottled water and queuing up at the portaloos. Some businesses can't open. The natural event injures up to 100 people. [1% of GDP or annual income]					
(II) This event has affected 20 - 100 houses in your community of 1,000, with the local marae and school out of action for up to a day and the town centre is closed briefly. The hospital is able to function but has some damage. You may need to use a bucket for the toilet for the day. No-one died but 10 people were injured.					
(I) You have had a big fright from this event but basically there has been no real damage and the local shops were only closed for a couple of hours. No-one was injured.					

Slide 27

Checking in….

Living with risk

Proposed Regional Policy Statement
Preparation of Variation 2 (Natural Hazards)

27 · Bay of Plenty REGIONAL COUNCIL

Slide 28

Here is a second chance….

- *Has anything changed for you – based on this session and the discussions?*

- *Consider the answers you gave initially and if you want to change your response - use the red coloured pen*

28 · Bay of Plenty REGIONAL COUNCIL

Slide 29

We are here

from this September

Slide 30

Just checking….

- Did you change any of your answers/thinking?

- Did anything change for you on what Councils should/should not do?

- Do you feel comfortable that your opinions will help direct Council's RPS natural hazards policy?

- Are there any ways you think we can improve this session?

30 · Bay of Plenty REGIONAL COUNCIL

http://www.getthru.govt.nz/

Thanks….

- and the spot prizes go to….

- any further questions feel free to stay on

Appendix D – Part Two questions

What do you think Councils should be responsible for?

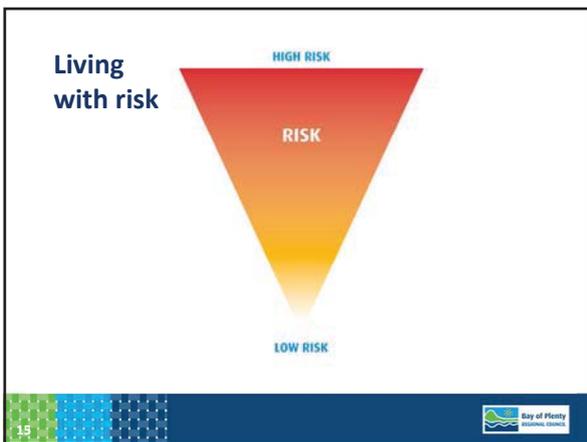**Bay of Plenty REGIONAL COUNCIL**

I am ☐ Male ☐ Female ☐ *Māori* ☐ *NZ European* ☐ *Pacific Islander* ☐ *Other*

☐ *rural* ☐ *urban* ☐ coastal ☐ Employed ☐ Unemployed ☐ Self-employed ☐ Retired

and my age bracket is:

☐ less than 20 years ☐ 20–30 years ☐ 31–40 years ☐ 41–50 years
☐ 51–60 years ☐ 61–70 years ☐ 71–80 years ☐ 81-90+ years

1   **I expect regional and local councils to take action to reduce the possible consequences of a major natural hazard event (e.g. by setting rules to control where and how new development/roading/infrastructure occurs).**

☐ Strongly agree ☐ Slightly agree ☐ No opinion ☐ Slightly disagree ☐ Strongly disagree

Why? ....

....

2   **It is important to me that regional and local councils take action to safeguard both privately owned assets (e.g. homes, farms and other businesses) as well as publicly owned community assets e.g., (schools, hospitals, roads, water and waste services).**

☐ Strongly agree ☐ Slightly agree ☐ No opinion ☐ Slightly disagree ☐ Strongly disagree

Why? ....

....

3   **I expect all our councils to take a long-term view using the most recent information available (e.g. by setting rules to control how new development occurs). Policy reviews should include the latest information about natural hazard risks.**

☐ Strongly agree ☐ Slightly agree ☐ No opinion ☐ Slightly disagree ☐ Strongly disagree

Why? ....

....

4   **Councils should stick to providing information about natural hazard risks and leave people to decide for themselves if it is acceptable or not.**

☐ Strongly agree ☐ Slightly agree ☐ No opinion ☐ Slightly disagree ☐ Strongly disagree

Why? ....

....

5   **If a council allows people to knowingly choose to take on a risk themselves, council rates should be available to compensate those who suffer loss.**

☐ Strongly agree ☐ Slightly agree ☐ No opinion ☐ Slightly disagree ☐ Strongly disagree

Why? ....

....

6   **It is important that Councils do restrict activities now for low likelihood natural hazard events (may not occur for a long time).**

☐ Strongly agree ☐ Slightly agree ☐ No opinion ☐ Slightly disagree ☐ Strongly disagree

Why? ....

....

Appendix E – Part Three Risk Tolerability Matrix[9]

---

9 It should be noted that the order of the likelihood and consequence levels used in Part three matrix from the sessions have been reversed in the final Risk Tolerability Matrix in section 5.3.1. This was done to align the matrix with the GNS toolbox and to enable easier analysis of the results.

I can live with this risk….

Your councils could spend millions of dollars and set new rules to protect the community from all sorts of natural disasters, but some of those disasters might not happen for another 1,000 years. Or, they might happen tomorrow. That's the risk. How much do you think we need to plan for?

Nothing we do is free from risk, so how often do you think the community would put up with each of these disasters? (before marching into the council to politely but firmly suggest that they should never happen again?) *We have based these assumptions of lifetime on an 80 year lifespan.*

		Likelihood			
*Think of an event that could happen in your **community** then apply this image when working through this table - read the scenario then scroll across the page and mark your thoughts in each space using the symbols as per below:* • *Acceptable - this is part of life that I could put up with* ✔ *Tolerable - my family and community could recover in time if we had to* ✗ *Intolerable - NO WAY - this risk is too great. It can't be justified*	Once every 50 years (Likely) 90% chance for me	Once every 100 years (Possible) 80 - 90% chance for me	Once every 100-1000 years (Unlikely) 15-80% chance in my and my grandchild's lifetime	Once every 1000-2500 years (Rare) 5-15% chance in my and my grandchild's lifetime	More than 2,500 years (Very Rare) Less than 5% chance in my and my grandchild's lifetime
(V) The natural event is catastrophic. Nearly half of the liveable homes are wiped out. Some can be rebuilt but many can never return. One quarter of hospitals/marae etc have been badly damaged and are unable to be safely used. Many are beyond repair. It kills over 100 people. Businesses and livelihoods are lost. [up to 10% GDP or annual income]					
(IV) Up to a quarter of schools, hospitals and marae have been damaged (and are struggling to function). Half of the homes in your community have been damaged, some of those can be rebuilt but many can't. It may take up to six months to fix the water and roads. Over 10 people died with more than 100 injured. About 20% of the town centre will be closed off for anything from a week to a month. [10% of GDP or annual income]					
(III) In your community of 1,000 homes about 60 - 100 houses are unliveable, the natural event knocks out power and water networks. For a week daily life revolves around getting bottled water and queuing up at the portaloos. Some businesses can't open. The natural event injures up to 100 people. [1% of GDP or annual income]					
(II) This event has affected 20 - 100 houses in your community of 1,000, with the local marae and school out of action for up to a day and the town centre is closed briefly. The hospital is able to function but has some damage. You may need to use a bucket for the toilet for the day. No-one died but 10 people were injured.					
(I) You have had a big fright from this event but basically there has been no real damage and the local shops were only closed for a couple of hours. No-one was injured.					

Consequences