Engaging communities
in natural hazard and
climate change conversations

Natural hazard and climate change risk community engagement

A framework to aid engagement design

ABOUT THE AUTHORS

Let's Talk About Risk (LTAR) Team

We are a small interdisciplinary group working to improve New Zealand's understanding of the challenges, needs, and options for better public engagement around natural hazard and climate risk.

The team consists of Dr Charlotte Brown (Joint Managing Director, Resilient Organisations Ltd), Dr Chrys Horn (CH & Associates Ltd), Sophie Horsfall (Resilient Organisations), Dr Margaret Kilvington (Independent Social Research, Evaluation and Facilitation (ISREF).

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LET'S talk about RISK
Resilient ORGANISATIONS
Dr Margaret Kilvington Social Research Evaluation Facilitation
CH&Associates Ltd
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1. Introduction

1.1. Why this framework was developed

Increasingly, there is both a community desire and a regulatory need for communities and agencies to come together to talk about natural hazard and climate change risk. The complex and dynamic hazards we face stretch the resources our communities have. Now, more than ever, it is important that agencies work alongside communities to build our collective understanding of the hazards we face, enhance the capacity and preparedness of communities to cope with these events, and enable them to prioritise actions to manage these.

Over the last decade, there has been a steady increase in community engagement on natural hazard and climate change risk. Some of the conversations, particularly where communities are facing or have already sustained significant losses, have proven to be highly emotive and adversarial. In other contexts, engagement is stalled because of uncertainties in the decision-making process. However, there have also been successful experiences where both communities and agencies have shared information and utilised feedback to plan the next steps. While there is substantial literature and guidance on community engagement in general, there is very little advice for practitioners dealing with conversations about natural hazard or climate change risk.

1.2. How the framework was developed

This framework is based on the views of a range of professionals on the challenges of engagement on hazard risk and their ideas about ways to address them. Most of the professionals who contributed are not 'engagement specialists'; rather, they come from diverse backgrounds such as planning, strategic policy, emergency preparedness, community development, and climate risk research. The framework includes hard-earned insights from situations that have been challenging as well as those that have been successful. It is one of the outputs from a 2022 Toka Tū Ake EQC Biennial Grant funding project called Let's Talk About Risk.

The framework was developed through a Delphi survey of practitioners with varying experiences in natural hazard and climate change risk engagement around New Zealand. The Delphi survey panel provided responses to three cycles of questions and collectively reviewed the ideas that emerged. The framework also benefited from discussions with the project reference group, whose members come from a range of local government and natural hazards management backgrounds. In addition, during the project, we ran three "community of practice" online workshops. These had participants from around New Zealand with a diversity of experiences. Participants raised questions, offered perspectives, and shared examples, all of which were used to guide the content of the framework.

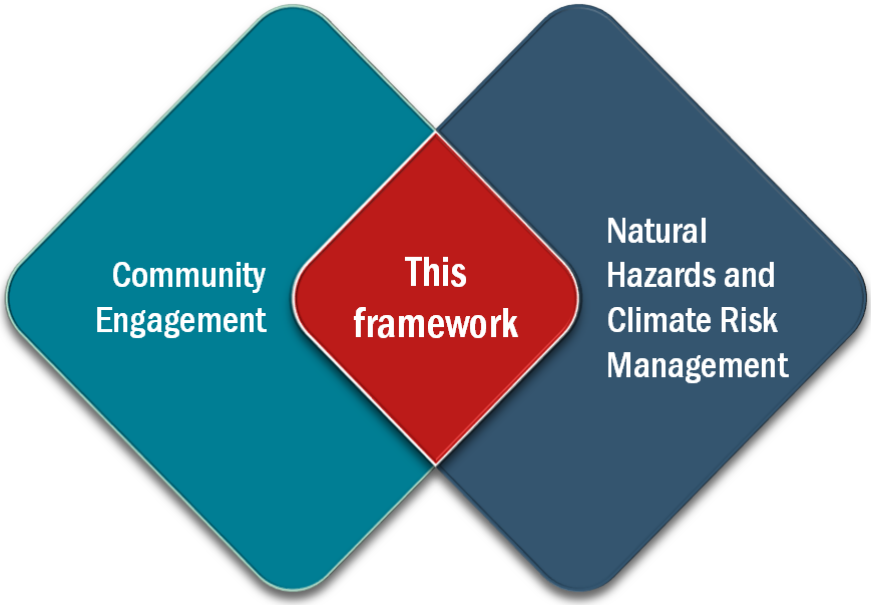
1.3. What this framework offers

The aim of this framework is to help practitioners design their engagement approach to work within a wide range of natural hazard and climate change risk settings. It provides advice and key questions to ask on how to clarify the engagement purpose, better understand the community and hazard context, build teams and key relationships, and choose techniques and strategies that are suited to the situation. It also provides some ideas for how to track progress and measure success.

This framework is designed to complement – not replace - the wealth of literature and knowledge that exists around best practice community engagement. It adds to this by focusing attention on issues specific to natural hazard and climate risk (Figure 1). This framework is not designed as a substitute for

having engagement specialists (those with the skills and expertise to design and lead community engagement) in your team.

Figure 1: This framework focuses on issues specific to natural hazard and climate risk engagement



The framework also does not comment specifically on engagement with mana whenua. We note that there is growing literature on how Māori conceptualise risk and on Mātauranga Māori. The place of mana whenua as Treaty partners means that they must take part in deciding how and when they will be engaged with on these issues. The orientation of the framework is to support greater clarity around the diverse goals for conversations with communities about hazard and climate risk and to help guide engagement practice to be better aligned to the hazard and community context. As part of this, it highlights the role of partnerships along the engagement path. We believe this is equally relevant to engagement with mana whenua.

COMMUNITY ENGAGEMENT RESOURCES

There are many useful resources available from the Ministry for the Environment, Te Puni Kōkiri, Local Government New Zealand, and the International Association for Public Participation around good practice for community engagement. A few are listed in our Resources section along with links to some of the specific experiences and cases the contributors to the framework have been involved in.

For more general guidance for community engagement, see:

- International Association for Public Participation (IAP2)
- Te tari o te pirimia me te komiti matua | Department of the Prime Minister and Cabinet (DPMC) (2023). Community Engagement
- Te Tari Taiwhenua | Department of Internal Affairs (2021) Good Practice Participate: Benefits of community engagement
- United States Department of Health and Human Services, Food and Drug Administration (FDA) (2011). Communicating Risks and Benefits: An Evidence-Based User's Guide

2. Why is risk engagement so challenging?

Effective community engagement is challenging at the best of times. Engagement around natural hazard and climate change risk introduces added layers of complexity. Through the Delphi process, we identified nine specific issues that exacerbate the challenges of community engagement in a natural hazard and climate change risk. These relate to the high-stakes nature of the conversations, the highly technical content, the spatial and temporal variability of hazard risk, different individual risk capacity and appetite, and the organisational complexity in which these conversations, and subsequent policy/planning actions, take place.

These nine challenges provide a useful backdrop for the content included within this framework (Table 1).

Table 1: Nine specific challenges for undertaking natural hazard and climate risk engagement.

High stakes	Emotions such as anger, denial, fear, and distrust are often present in hazard risk conversations. Changes to the hazard risk status of an area trigger fears about loss of property value, loss of future opportunities, and rising insurance costs.
Uncertainty	Uncertainties cause tensions at all stages of the engagement process. These might include: the nature of the hazard, options for mitigation/reduction, compensation (if there will be any and who will pay), and how long the process will take to resolve. Uncertainty can lead to denial, lack of commitment to address the issue, or high emotional intensity.
Technical nature	Natural hazard information is inherently technical. There are challenges in explaining technical aspects (i.e., frequency, probability, impact) and allowing time for people to work through the personal impacts of the information being shared. Equally, there is a tension between the need to share technical risk information and the need to listen and learn from the lived experiences of communities.
Temporal nature	Natural hazard and climate risk are neither static nor predictable, and engagements can take considerable time, with benefits of risk management measures seldom immediate. This dynamic nature affects engagement in several ways: • Risk outcomes need to be envisaged over time, with communities needing to weigh up the needs of both present and future generations. • Engagement processes need to be tailored to the temporal nature of the hazard, e.g., slow onset or imminent, low or high probability/frequency. • Engagement processes need to be adapted to the changing perception of hazard risk over time (e.g., through increased severity of hazard or more recent experience). • Community buy-in and trust in the engagement process needs to be managed, maintained and constantly assessed, especially during long, multi-stage decision processes, where there is likely to be community and staff turnover.

High variability of risk appetite and risk capacity	No one-size-fits-all approach will work for hazard risk conversations. Between and within communities, views on the acceptability of risk can differ widely (risk appetite), as can the resources of individuals and communities to withstand losses from a hazard event (risk capacity). This raises issues of equity when applying solutions. Risk engagement needs to allow for the diversity of views and circumstances within the community.
Lack of clarity: individual vs community risk ownership	Lack of clarity about who owns and pays for the risk hinders the engagement process. For example, where only a subset of people is directly affected, but the wider community shares the cost, or when there are information gaps around financial liability in high-risk locations.
Multiple expertise and relationships	Engagement needs people with different skills and experience to collaborate, e.g., planners, engineers, community development practitioners, engagement specialists, and communication experts across different departments and agencies and ideally also with community connectors. Coordinating and reaching the necessary people to build a team approach is challenging.
Engagement underutilisation	It can be difficult for some decision makers to see the value and role of community feedback in risk situations, in particular, the importance of listening and drawing on local expertise, and community knowledge to inform the approach to risk management. This makes it hard to secure the resources needed to design and execute effective engagement processes that intersect well with statutory processes and time frames (e.g., LTP and annual plans).
Capability and capacity challenges	Hazard and climate risk engagement face several capability and capacity challenges. It takes resources to ensure engagements are supported by good expertise, and 'upskilling' is required when utilising resources from non-risk spaces on risk communication and engagement. Having people with risk engagement expertise and/or leadership skills to front engagements is scarce. There is also a lack of frameworks, national guidance, case examples, and 'how-to guides', and few opportunities for learning from the experiences of others and building consistency and professionalism. The need to plan for and respond to more frequent and severe hazard events, coupled with increasing psychological trauma and the permanence of some risk mitigation options, is exacerbating the capacity and capability issues. New and enhanced engagement skills are required to navigate this changing landscape.

3. Framework for natural hazard and climate risk engagement

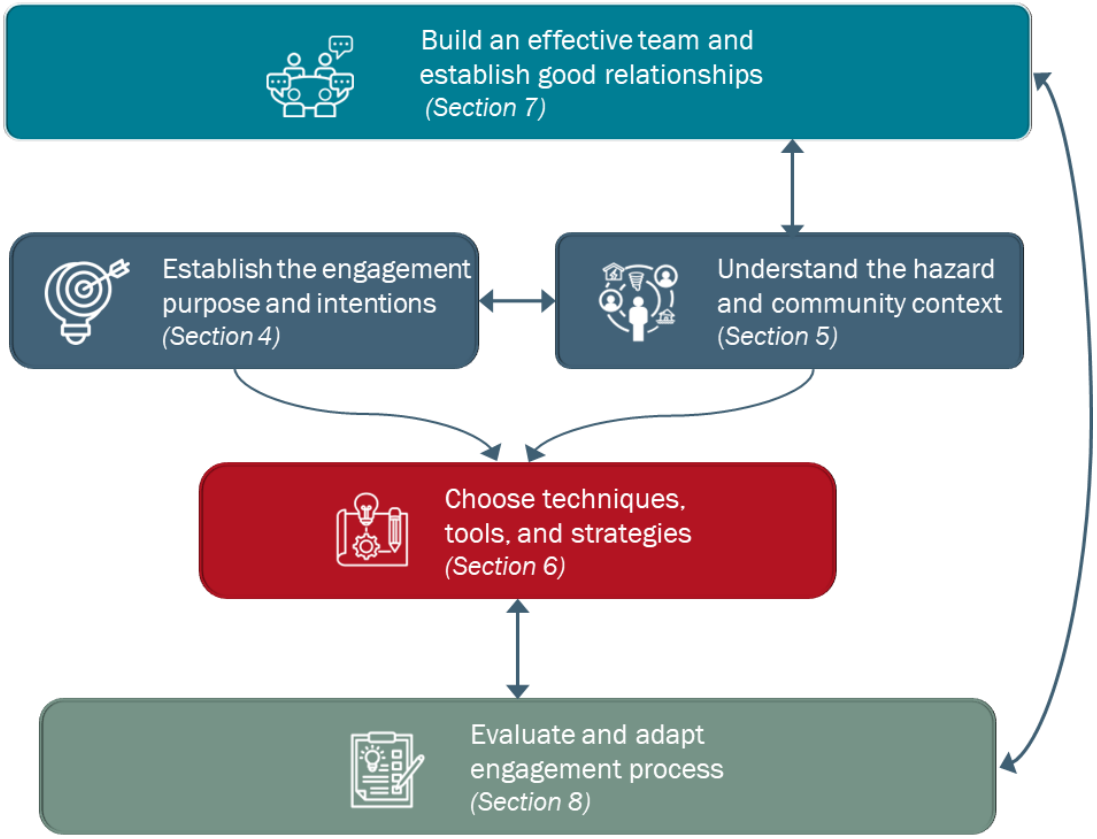
Community engagements around natural hazard and climate risk can vary significantly. But there are some important and common steps to take when designing an engagement process. These are:

- Establish the engagement purpose and intentions.
- Understand the hazard and community context.
- Choose techniques, tools, and strategies.
- Build an effective team and establish good relationships.
- Evaluate and adapt engagement process.

The design of an engagement is an iterative process and is best done with a team. Establishing the engagement purpose and intentions (including any decisions that need to be made) (Section 4) and understanding the community and hazard context (Section 5) will be among the first considerations that will shape the engagement. Establishing a team and identifying and building key relationships (Section 7) is also important to do early during the engagement design, revisiting as you learn more about the context or as you identify engagement risks and opportunities. The selection of techniques, tools, and strategies (Section 6) will be a highly iterative process that will likely be adjusted during engagement implementation as you evaluate progress and adapt your approach (Section 8).

Figure 2 illustrates how these steps come together. While the image illustrates relationships between the steps, it does not constitute a hierarchy or set process. The process will be iterative.

Figure 2: Framework for natural hazard and climate risk engagement



4. Establish the engagement purpose and intentions

4.1. Define the engagement purpose

There is a range of reasons for setting out to talk to communities about natural hazard and climate change related risk. They include pre-event preparation (e.g., risk assessments, planning and preparedness education) through to post-event engagement (e.g., response and recovery). These engagements can have a range of purposes – such as sharing hazard risk information, understanding community concerns, or working collaboratively to inform decision making.

Clarifying the purpose of your engagement before you start helps manage the expectations of the community through and beyond the engagement process. It also ensures your engagement approach is fit for purpose. Factors that can help clarify the purpose include:

- who the decision makers are and what they want from the engagement,
- mandate of those organising the engagement,
- how communities themselves will contribute to the problem-solving and whether there will be community involvement in designing and carrying out the engagement.
- how community feedback will be included in decisions,
- scope and resources available for engagement,
- other considerations (e.g., legal framework, technical, financial) that will influence outcomes.

It is also important to be clear about the level of public participation that is desired and feasible and will contribute best to achieving the purpose of the engagement.

4.2. Determine the desired depth of engagement

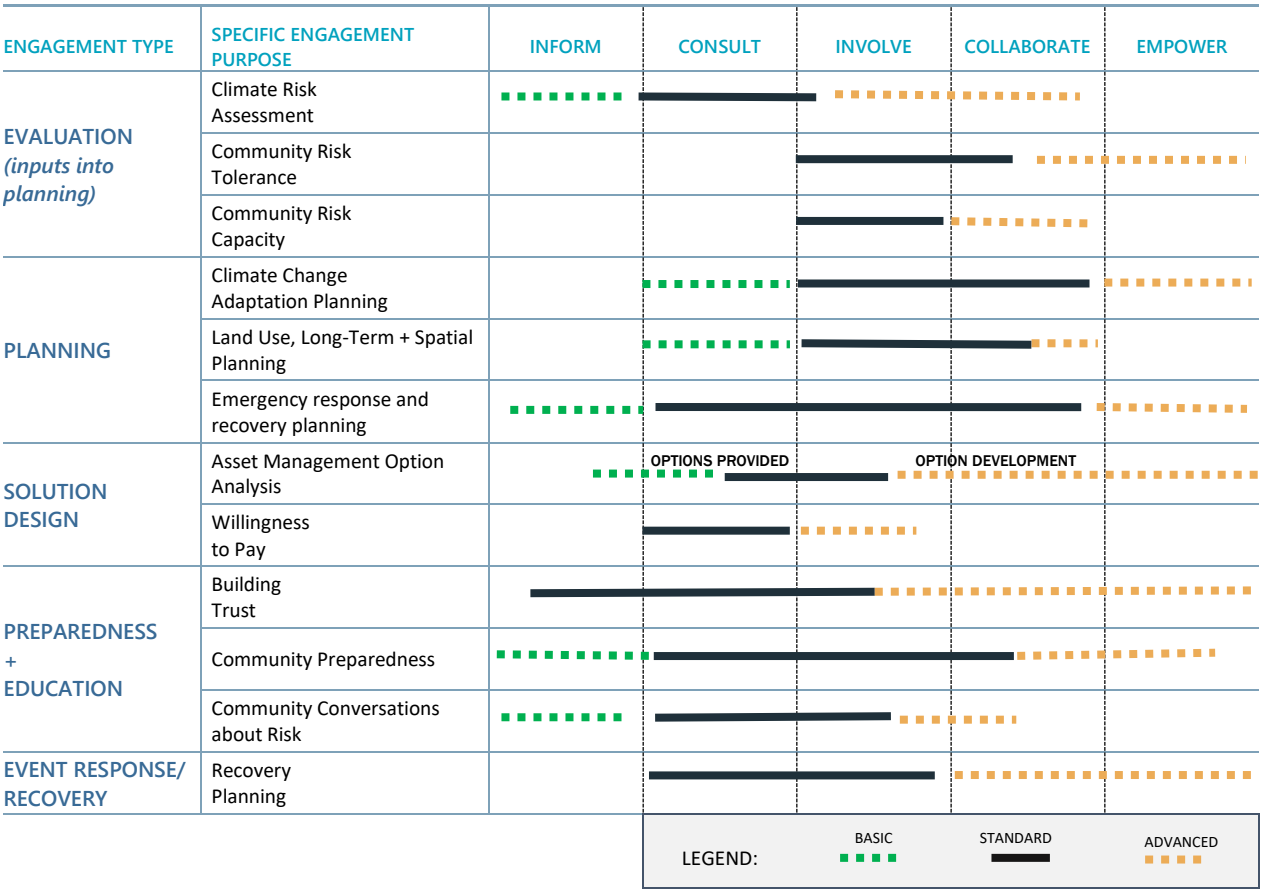
The depth of the engagement will depend on the purpose and the extent to which the community can influence the decision making. The IAP2 scale of public participation is the common standard used by local government agencies to determine the degree of engagement needed to achieve the desired engagement goal. For some engagement purposes, a low degree of participation might be acceptable, such as providing information about general hazard management. Situations that call for interpretation of the impacts of hazards or involve choices about hazard management options will call for a higher level of participation. This enables people to have a better understanding of the potential impacts and be involved in providing information on what hazard management solution works for the community. Where ownership of outcomes and/or individual behaviour change is important, such as community preparedness initiatives or adaptation planning, a collaborative or co-design approach might be useful.

Generally, engagement that sits on the collaboration or empowerment end of the IAP2 spectrum contributes to stronger relationships and a better understanding of the perspectives of both agencies and the community. Collaborative approaches to hazard and climate risk engagement are becoming more common. Though they can be resource-intensive and require skills that are not always available within regional and local government agencies, these resources and capacities can often be found within communities themselves.

In Figure 3 below, 12 risk-specific engagement purposes have been mapped into five main engagement types: evaluation, planning, solution design, preparedness and education, and event response/recovery. Each risk-specific engagement orientation has then been mapped to the IAP2 spectrum of public participation (inform, consult, involve, collaborate, and empower). This provides a high-level indication

of the likely extent of public participation required for each engagement purpose. The exact extent of engagement required should be based on the community context, policy direction and desired outcomes.

Figure 3: 12 risk-specific engagement purposes mapped into five engagement types.



The questions below can be used as prompts to help better understand and define the engagement purpose and desired depth of engagement.

- What are the expected outcomes for the engagement for the agency and for the community?
- What is driving the engagement? (e.g., is the community asking for help? Is there new technical information driving action? or is there a statutory requirement that needs to be met?)
- Who are the decision makers, and what do they need from the engagement (outputs/evidence/action)?
- What is the level of central government support/involvement, and how might this affect the situation?
- What do we want participants to get out of the engagement (e.g., better information, empowered to take action)?
- What capacity is there for engagement (e.g., resources, skills)?
- What are the benefits of this engagement for the community in the short, medium, and long term?

5. Understand the hazard and community context

5.1. Why is context so important?

Understanding how the specific nature of the hazard risk intersects with the environmental, historical, social, cultural, and economic context of the community enables two important things to happen:

1. The techniques of the engagement can be adapted to the character of the community and enable good participation.
2. Discussions about the hazard and climate risk can be grounded in 'what a hazard means for us'.

In all engagement, there are several general factors that can affect the ability and willingness of a community to engage (e.g., demographics and levels of trust). These are provided in Table 2, alongside some question prompts.

In hazard and climate risk engagements, there are additional risk-specific contextual factors that can influence how communities receive and process information about the risk situation (Table 3).

These general and specific contextual factors need to be identified and accounted for in the engagement design. This includes allowing for input and knowledge from the community to guide engagements alongside collecting good baseline community data/demographics, etc. For example, if the hazard impacts are expected to vary significantly across the community, you may need to engage with community members differently based on their level of impact (e.g., direct vs indirect). You may also need to provide counsellors and have "follow up strategies" to support conversations where there is a high degree of perceived or actual loss.

WHAT DO WE MEAN BY 'COMMUNITIES'?

Communities can be defined by several factors, including locality, communication systems, system of social structure, history, culture, and tradition.

You might have several "communities" within one geographic area. Finding commonality of experiences, risk, views, and drivers for change may strongly vary and be difficult across these communities. Directed engagement approaches may be required for set communities or groups, such as those at higher risk of disaster (e.g., those with disabilities, see the Leave Nobody Behind Project) within your engagement process. It is important to clarify what you mean by *community* early in your engagement planning.

Table 2: General factors that impact the engagement approach.

FACTORS	KEY QUESTIONS TO CONSIDER
Demographics	• What is the community profile (age, socio-economic status, property ownership status, language, time-poverty etc)?
Nature of relationship between community and council/agency (trust)	• What level of trust is there between the Council and the community? • What long-term relationships does the council have with different parts of the community? • Are there any legacy issues that might affect this engagement?
Factors impacting the community's ability to engage	• How likely are different community members to turn up? (Consider age, socio-economic status, etc.) • Where do people go (if they are not going to turn up)? Can we go there? • How busy or stressed is this community already, and how might this affect their capacity to take the time and give their headspace to your engagement? • What are the barriers to engagement and/or taking action in the community?
Previous engagement experience	• What engagement has been done previously? • How did it go?
Size of community and community connectedness (trust)	• What are relationships like within the community? • Is there trust between different groups in the community? • Are any groups marginalised? • How big and/or hard to reach is the community?
Community buy-in to the engagement	• Who initiated the engagement process? The community or the Council? • What level of desire is there to be engaged with?
Values and norms (and agreement on these across community)	• What are the values and concerns of the community? • What is top of mind for them? • What is the community reality?

Table 3: Contextual factors specific to risk conversations

FACTORS	DESCRIPTION
Temporal proximity to hazard	Temporal proximity to a hazard affects people's perceptions of the likelihood of experiencing an event and perhaps also the seriousness of an event. • hazard frequency (likelihood of hazard occurring in the short, medium, and long term), • stage of disaster management cycle, e.g., response, recovery, reduction, or readiness. The more distant a hazard seems, the harder it is to get buy-in for engagement. ***Questions to consider:*** • *Is the community currently dealing with the impacts of a hazard (e.g. in response or recovery)?* • *When is the community likely to experience the impacts of the hazard? In the short, medium, or long term?*
Spatial proximity to hazard	Spatial proximity to a hazard includes consideration of whether community members are directly or indirectly impacted. The less direct threat a hazard is perceived to be, the harder it is to get buy-in for engagement. ***Questions to consider:*** • *How will the hazard impact different groups in the community?* • *Are there some groups that will be directly impacted (e.g., through loss of property)?* • *Are some groups indirectly impacted (e.g., through loss of access to a community amenity)?*
Hazard familiarity and acceptance	Hazard familiarity is built up over time and can include previous experience with hazards (and the recency of the experience), local history, Mātauranga Māori, individual knowledge, previous engagements on hazards, agreement on the science, the complexity of the problem, and levels of trust. Hazard familiarity and acceptance can affect how willing people are to engage on the topic, how tolerant people might be to risk and how they might understand what a hazard event means for them. ***Questions to consider:*** • *How personally familiar are people in this community with the short and long-term effects of hazards or significant hazard events?* • *Has there been previous engagement with the community on the impacts of the hazard?* • *Will you need to effectively communicate the effects of the hazard for these groups before you engage in the piece you are interested in?* • *To what extent do you think there will be agreement on the science/problem?*

FACTORS	DESCRIPTION
Distribution of impact / Inequitable impacts	Hazards have different impacts across a community – some can be more homogenous, and others quite divergent in distribution. Distributional impacts can affect buy-in for engagement and perceived relevancy of information by different groups in a community. ***Questions to consider:*** • *How might hazard impacts (e.g., to council, social and physical infrastructure, business, individual, households, or even central government) accrue across this community?* • *How might different stakeholders have differential access to decision makers, and how might this affect the outcomes of engagement?* • *Are there groups you may need to make a particular effort to engage with to amplify their voices relative to voices that are already strongly heard?*
Competing priorities	When discussing hazards, we often talk about events that will happen in the future. For communities where resources are stretched, it is hard to move the focus away from day-to-day needs. Issues such as the cost of living and housing pressures can make communities unwilling to engage in conversations about strategic or long-term hazard risk issues. The less capacity a community has, the harder it is for them to engage constructively, and fatalism is more likely to be present. ***Questions to consider:*** • *What other issues are currently front of mind for this community?* • *What other priorities do people with a stake in this community have that might affect their capacity to engage?*
Connection to place	Communities differ in the values that they hold for their geographic location, whether their homes are viewed as temporary (albeit significant) investments through to an irreplaceable connection to a sense of place. Connection through ahi kā makes a profound commitment to a specific place. ***Questions to consider:*** • *Does this place have particular significance for tangata whenua?* • *Does this place have characteristics that make it special and of importance for the people who live there or who use the area?*

TE AO MĀORI PERSPECTIVES OF RISK

There is no one way to understand or conceptualise risk. Often our technical information and the questions we ask about risk are produced and conveyed from a Western perspective. This perspective often centres around the notion that a hazard is a threat to be controlled. Te Ao Māori perspectives of risk can be quite different, as such, the way we have risk conversations may need to change.

Recent research on natural resource management highlights that "Māori perspectives of environmental risk are inherently holistic, multi-dimensional, interconnected and value-based, and can be used to guide ethical and moral risk assessment as an alternative to using scientific tools and frameworks." Māori look for opportunities to enhance the mana of the natural environment rather than being limited to reducing adverse risks. As such, some aspects of natural hazards are not perceived as a risk that needs to be prevented. Māori recognise the importance of working alongside hazards and nature. Where the Western view is to protect people and places, Māori focus on the risk to the relationship they have with their tūpuna, rivers, mountain, etc. Māori also tend to focus on the bigger picture rather than breaking the process into small pieces (as is often done in reductionist Western science). Māori take a much longer-term and often precautionary perspective of risk/impact and acknowledge that change is the only constant.

Research into this area is ongoing:

- Awatere et al. (2021) He huringa āhuarangi, he huringa ao: a changing climate, a changing world.
- Hyslop, J., et al. (2023) Kia aiō ngā ngaru, kia hora te marino: smoothing the waters in natural resource management to mitigate risk and uncertainty. AlterNative: An International Journal of Indigenous Peoples, 19(2), 229-239.
- Kia manawaroa - Ngā Ākina o Te Ao Tūroa: Resilient to Nature's Challenges a Natural Science Challenges (2019-2024) Ngā tirohanga Māori ki te tūraru: Māori perspectives on risk.
- Ministry for the Environment (2022) Exploring an indigenous worldview framework for the national climate change adaptation plan.

5.2. How do you understand the context?

COMMUNITY STAKEHOLDERS AND PARTNERS

A core part of any engagement process, not just those related to natural hazard and climate risk, is forming or leveraging existing partnerships with key community groups or stakeholders. Relationships with community groups or stakeholders form a basis for building trust, ownership, and capacity in both the engagement process and ongoing risk management. Community stakeholders can provide valuable insight to help you understand the community context and how conversations about natural hazard and climate change might be received. Community groups or representatives are also sometimes involved in co-designing their own engagement processes to ensure the engagement is fit for the purpose and context.

OTHER SOURCES

Table 4 provides additional suggestions for how to understand the context.

Table 4: How to understand the context.

FACTORS	RESOURCES
Resources you can utilise	• Rates database for information (e.g., % of owner-occupiers vs. absentee owners, business owners, etc. • Statistics New Zealand / Census data. • GIS databases. • Council files to understand past issues. • Surveys using research companies.
Physical reconnaissance	• Know the physical geography of the area – go out and see the hazards and see if your plans are possible (e.g., they might look good on maps but aren't physically possible). Understand the different types of activities being undertaken (residential v commercial). In the first instance, you should ask locals to take you around the area and show you the issues/concerns and their solutions.
Seek out others with experience working in the community.	• Talk with other members of your organisation/council who might have worked in/with the community. • Talk with local organisations (i.e., community associations), local representatives/local champions, and/or community members. Partnerships with key community groups can provide intel on community behaviours and preferences. • Talk with people who have undertaken engagement in that community before. • Seek out existing networks and find out what they usually do (don't try and reinvent the wheel). • Ask yourself if there is anyone else it would be helpful to talk to about this (build up a local contact list).

6. Choose techniques, tools, and strategies

6.1. General considerations

PROVIDE GOOD PLATFORMS FOR AUTHENTIC CONVERSATIONS

Effective engagement is founded on trusted, truthful, accessible, and inclusive communication channels. The best engagement processes create a platform for experts and communities to engage in two-way conversations, which allow participants to see issues from a range of perspectives.

Learning is important for both participants and those seeking the engagement. Recognising and acknowledging local expertise, assets, and skills allows for community and council knowledge to be integrated, creating a shared understanding of issues and options. Mutual learning builds trust and demonstrates respect for the views being shared.

As part of this it is important to build capacity into the process for understanding community concerns, needs, and frustrations, even if they are not directly relevant to the topic at hand. Without acknowledging these issues, the engagement will likely stall. If necessary, this could include connecting people to the right services.

Follow-through on actions is critical for retaining and building trust. Trust is a two-way process: listening and facilitating feedback and acting on it, where possible (not just collecting it), throughout the process. This may take time and patience, multiple engagements over time, and an agile process.

PERSONALISE THE ENGAGEMENT

Engagement methods and data collation must match the context of the community, the hazards they face, the actions that are desired and/or the decisions they can influence. Objectives and outcomes need to be clearly defined at the outset of an engagement process to ensure effective process design and clear and shared expectations between participants and those undertaking the engagement.

The ultimate way to personalise an engagement is to co-design the engagement methodology with the community. This allows the community to determine how they want to be engaged with. *The How Project* is an example of a co-designed engagement process undertaken in New Brighton, Canterbury (an evaluation of the How Team and lessons learnt is available by emailing renew.brighton@gmail.com).

Table 5 provides some examples of how engagement might be designed based on the hazard and community contextual factors described in Section 5.

ENSURE DIVERSE VIEWS ARE REPRESENTED

Careful consideration of representation is important due to the temporal and spatial diversity of natural hazard and climate hazard impacts, as well as the breadth of risk perspectives and tolerances. It is likely you will need to collect views from those both directly and indirectly affected, strongly and weakly impacted, amongst other demographic splits (age, socio-economic status, land ownership status).

During the engagement, it can be helpful to group those with similar hazard exposure together and engage with each group separately. This prevents discussion from being dominated by those with the least or greatest risk and allows for discussions appropriate to people's circumstances. Note people may move across groups through the risk management process and that factors such as connection to place and hazard familiarity will change over time (influenced by transient communities and changes in property ownership). A flexible/adaptable approach is necessary.

DURATION OF ENGAGEMENT PROCESS

Communities need time to engage meaningfully with a process. Equally, if engagements are drawn out, communities can lose interest or feel that their time is being wasted. The duration of the engagement process needs to meet the communities' needs and capacity. For example, in some cases, time needs to be allowed for stakeholders to seek wider views within their communities (for example, iwi members will generally need to consult their hapū before sharing their views).

The engagement also needs to be carefully designed to make the best use of people's time. It may be useful, for example, to allocate time for sharing, discussing, and learning about hazard or risk information before asking for feedback. This approach can also lead to better risk conversations.

Time spent early on is critical to enable trust and set the process up for positive interactions.

TIMING OF ENGAGEMENT

In many cases, the timing of an engagement process is dictated by statutory or organisational processes and timelines. However, there is a window of opportunity following a natural hazard event to promote hazard awareness and encourage behaviour change. Where the purpose of your engagement is to inform and encourage community action on risk (e.g., preparedness and educational activities), this is a good time to engage with communities not directly affected by (and busy recovering from) an event.

MANAGING TECHNICAL CONVERSATIONS

Natural hazard and climate change conversations are often supported by technical information that is inherently complex and involves probabilities and other uncertainties. Engagement must allow people time to take in, discuss, and question this information to build their understanding. It is important to be transparent about the models and assumptions that the technical information is based on and why those models have been used. Some members of the community will want to understand the details, and having this available will help build trust in the process and the data. Working with technical presenters to create an environment they feel comfortable in is also important. For both community participants and technical presenters, this often involves reducing the potential for discussions to be hijacked or overtly confrontational.

Drop-in sessions are useful for coping with highly technical information. These need to be curated based on the learning that needs to take place and to include opportunities for both sharing and listening/feedback. Opportunities for long conversations over tea and biscuits are ideal.

To reduce the potential for conversations to be stalled over discussion around the validity and accuracy of technical information, it is useful to begin conversations with communities around their desired objectives and outcomes. This, then, reorients the conversation from 'What do we do based on the technical information?' to 'How do we use the information to help us achieve our objectives?' The focus becomes agreeing on the decisions/actions rather than agreeing on the assumptions.

More information on communicating technical information is provided in Section 6.3.

LINKING ENGAGEMENT WITH DECISION-MAKING

The engagement process needs to be designed with the engagement purpose and specific, clear engagement outcomes in mind. This ensures agency and community expectations are aligned. It also ensures the correct type of information will be collected to inform the subsequent action or decision making. Strategies for better linking engagement processes to decision making include:

- Setting clear objectives/outcomes before technical information is added.

- Ensuring political decision makers accept the process and the decision criteria and are prepared to consider information resulting from engagement.
- Co-creating engagement plans with the community, including determining decision criteria.

More information is provided in Section 6.4.

DUTY OF CARE

The high stakes nature of many natural hazard and climate risk conversations requires a duty of care to both participants and the engagement team.

Participants can experience a range of emotions associated with grief and loss (or the fear of loss) depending on their situations. Helping people move towards a sense of acceptance helps achieve more constructive, forward-looking interactions and aids in building trust.

It is always important to lead with empathy in these situations. This is not about taking responsibility for how participants are feeling but rather acknowledging the feelings that exist. It is also useful to have mental health professionals/counsellors on hand to support participants during engagements or training the engagement team to deal with emotion. Ensuring the engagement team understand/runs through human ethics processes for each engagement ensures the engagement methods reduce harm to participants and provide team members with pre-thought out avenues to deal with people in highly distressed situations (see Section 10 for ethics resources). Takeaway resources can also be helpful.

For the engagement team, working in highly emotive situations can be hard professionally and personally. Training and expert support is necessary; this includes having an element of internal support networks. Safety plans and strategies for dealing with confrontation are also important.

PROVIDE A SENSE OF AGENCY/SELF-EFFICACY

Due to the high-stakes nature of these risk conversations, it is useful to give or help communities/individuals find ways to act and reduce risk. Ensuring people have a degree of agency to act reduces fatalism or disinterest in dealing with the risk. At one end of the spectrum, this could include having preparedness personnel (e.g., emergency management staff) available to talk about preparedness activities. At the other end of the spectrum, this can be achieved through co-design of the engagement process. Either way, it is important to be clear on how community input will influence decisions/actions and the process involved.

It is also important to recognise that the act of engagement will build social capital within communities. Through participation in engagement activities, the ties within communities and between communities and authorities will be strengthened, and this will be beneficial in future hazard events.

6.2. Context specific considerations

In Section 5, seven risk specific contextual factors were identified. The presence of these factors will help shape the design of the engagement process. Table 5 presents these seven factors alongside some practical strategies/ingredients for engagement in these situations. For some of the factors, two sets of ingredients are provided to reflect the situation. For example, temporal proximity to hazard has both near-term and long-term situations provided, as the strategies for dealing with each situation are quite different.

The ingredients provided are ideas to get you started. The exact design of your engagement will depend on the engagement purpose and community/hazard context. This is particularly the case where, as is not uncommon, two or more risk specific contextual factors might apply.

Table 5: Strategies for managing risk specific contextual factors.

CONTEXTUAL FACTOR		KEY INGREDIENTS (E.G., UNIQUE SKILLS, INFORMATION REQUIRED, TIMING, TYPE OF ENGAGEMENT ETC)
Temporal proximity to hazard	Near term impact (high probability hazard event/post-event response)	• Recognise the potential for increased emotions (e.g., have mental health professionals available). • Provide trigger warnings and enable people to leave an engagement if they are uncomfortable or distressed. • Demonstrate empathy.
	Long-term impact (e.g., climate change impacts/low probability hazard event)	• Use storytelling to bring hazard alive and make it current, such as the use of visuals (story maps and infographics) scenarios. • Focus on consequences/impacts and/or what can be done now rather than hazards. • Take time to explain how probabilities work, including comparisons to more familiar probabilities (although noting caution in doing this) • Use comparisons to similar events to illustrate potential long-term impacts (e.g., how landslides move and evolve over time). • Show the consequences of choosing to transfer risk into the future.
Spatial proximity to hazard	Directly	• Recognise potential for increased emotions (addressing these or having mental health professionals available). • Demonstrate empathy.
	Indirectly	• Use storytelling to bring hazard alive and make it current, such as the use of visuals (story maps and infographics) scenarios. • Focus on consequences/impacts and/or what can be done now rather than hazards. • Take time to explain how probabilities work, including comparisons to more familiar probabilities (although noting caution in doing this). • Use comparisons to similar events to illustrate potential long-term impacts (e.g., how landslides move and evolve over time).
Hazard familiarity and acceptance	High familiarity	• Include community members as experts. • Recognise the relevance of lived experience. • Recognise the potential for increased emotions associated with hazard (have mental health professionals available). • Build on past engagement (i.e., what was shared/presented previously), incorporate feedback from previous sessions, and pre-empt and prepare for issues from past engagements.

CONTEXTUAL FACTOR		KEY INGREDIENTS (E.G., UNIQUE SKILLS, INFORMATION REQUIRED, TIMING, TYPE OF ENGAGEMENT ETC)
	Low familiarity	• Acknowledge that participants may not fully understand what the risk and impacts mean; use plain language and simple exercises/scenario building to slowly build up knowledge. • Use examples from elsewhere and/or community members that have lived experience. • Make hazard and risk information easier to relate to. This can include providing ways to understand what the personal impact will be, having a consistent approach to the use of terminology, being transparent about key assumptions behind technical interpretations of risk, and unpacking what goes into developing technical outputs (e.g., models). • Have multiple access points to key information, • Have realistic demonstrations of hazard to enhance understanding of risk. • Use interpretation/translation skills to support risk literacy and comprehension. • Have time for long Q&As to unpack information and explain relevance. • Utilise conversations about other hazards to discuss other less visible threats.
Degree of loss (actual, potential, and perceived)	Low	• Share stories from those that are or will be affected. • Provide effective and robust technical information. • Be clear on the relevance of hazard/risk to participants.
	High	• Acknowledge the high impact and/or scariness of the situation. • Build time into the engagement to deal with the emotions that arise. • Demonstrate empathy. • Have smaller group sessions instead of townhall meetings to allow for people to voice their opinion, • Have senior staff and decision makers in the room. • Offer professional counsellor services as well as takeaway resources. • Find ways to provide community members with a sense of agency can help to navigate these feelings, empowering communities to deal with the risk. • Share case studies of where similar communities have achieved similar goals. • Remind people of what hazards contribute, e.g., if we didn't have big earthquakes or ongoing environmental processes, we wouldn't have the land we call home. This helps to balance out what it could potentially take away or change for us and helps mitigate reactions to loss.

CONTEXTUAL FACTOR		KEY INGREDIENTS (E.G., UNIQUE SKILLS, INFORMATION REQUIRED, TIMING, TYPE OF ENGAGEMENT ETC)
Distribution of impact/ inequitable outcomes	Highly varied	• Acknowledge how different groups will be impacted how options will/will not be able to cater to them. • Use bottom-up-top-down approaches that aim to meet in the middle. • Use role-playing to help groups understand others' perspectives.
Competing priorities	Multiple competing priorities	• Acknowledge other pressing priorities (e.g., cost of living, etc). • Provide a sense of agency within the means the community has. • Look for opportunities to identify or communicate co-benefits of actions/preparedness.
Connection to place	High	• Acknowledge the strong connection. • Allow time for participants to share stories. • For Māori, recognise the risk to identity of loss of place.
	Low	• Share stories from those that are or will be affected. • Provide effective and robust technical information. • Be clear on the relevance of hazard/risk to participants.

6.3. Technical risk communication

Technical risk information can be challenging to communicate in a way that will resonate and be meaningful for communities. Language barriers (e.g., where English is a second language) and subjective perceptions of risk can exacerbate this challenge. The changing nature of hazards can also be a challenge. For example, climate change is changing some of our weather-related hazard profiles for rainfall and flooding, which means frequencies and intensity will not be like those experienced in the past. However, technical information and the uncertainties around it need to be communicated.

The Auckland Council National Hazard Risk Communication Toolbox is a useful reference that provides simple explanations of a range of natural hazard risk terminologies and provides suggestions for how to communicate these concepts.

TIPS FOR COMMUNICATING TECHNICAL INFORMATION

- Be measured and objective in your presentation of technical information. Don't catastrophise or scaremonger or be defensive.
- Be transparent about the models and assumptions the information is based on. Have detail for those who want it, as this will help build trust in the process and data.
- Spend time explaining terminology, even to those used outside the engagement. It is helpful if all accounts, such as media, use and reinforce the same terminology.
- Ensure all specialists and those engaging with the community use a common language when talking about hazards and are consistent with the terms they are using.
- Anchor people with one source of truth, e.g. FAQs (see whakatane.govt.nz/residents/awatarariki-managed-retreat-programme/faqs-awatarariki-fanhead-matata-managed-retreat).
- Avoid information dead ends and be as honest about the 'unknowns' as the 'knowns'.
- Illustrate the relevance of the information for the community in their context (not only the 'purpose' of the engagement team).
- Balance technical hazard information with user-centric information. For example, what does a particular hazard mean in terms of level of service or felt impact?
- Risk information needs to be accessible to the widest possible audience (ideally multiple access points and opportunities to engagement for non-experts).
- Be adaptable and flexible to the information needs of the community.

Acknowledging and, where possible, reducing uncertainty wherever it appears helps communities focus on building their understanding and developing options and steps forward. In saying that, it is important to be honest with the information you have and any uncertainties that exist. Technical experts can help to provide context and can add authenticity/reliability to the technical data.

6.4. Pathway to action

As noted in Section 4, risk conversations are undertaken for a range of reasons. Some conversations, such as those around preparedness and education, focus on building knowledge and preparedness with the aim of promoting certain behaviours. Other conversations, such as for evaluation, planning, solution design and event recovery, are often gathering community perspectives to inform council processes or to collaborate in decision making. For these engagement situations, it is imperative that data is gathered and analysed in a way that supports quality decision making.

ENGAGEMENT TO INFORM COMMUNITY ACTION/ATTITUDES/ BEHAVIOUR CHANGE

To support the promotion of certain behaviours in the community, information needs to be accessible, applicable (relevant to the community) and actionable. The engagement process needs to provide people with pathways to increased risk understanding and aid in the building of skills and knowledge for decision-making.

ENGAGEMENT TO INFORM DECISION MAKING

The design of the engagement process is critical for successfully integrating engagement outcomes into decision making. The basis of this is a clear understanding of the information required to inform the decision process.

Robust records of the engagement process and outcomes are essential to ensure community perceptions are accepted by decision makers. The method by which these perceptions are collected needs to be robust, well-recorded, transparent, and effectively analysed. If not, decision members may disregard or invalidate community views. This is also important where Council decisions may undergo judicial reviews, where conclusions need to be defended in court.

As well as the method, it is **important to demonstrate the range/diversity of views** heard. Varying/conflicting views are often found in engagements, which makes it difficult to identify trends. Navigating this complexity is made harder when there are those with vested interests, loud voices (e.g., beachfront property owners), people of influence (highly politically connected individuals), and those gaming the process to prevent views from those who are less able or politically motivated to be involved.

It is important to **represent diverse views in the analysis of the data**. For example, not just counting those 'for and against' but ensuring minority views are not lost, accounting for bias and diversity, and providing meaningful feedback and opportunities where people understand the implications of their choices.

Keeping decision-makers (e.g., councillors) on board throughout the engagement process is another important way to maximise buy-in and increase the potential that community views will be appropriately considered.

While working with a clear line of sight to a decision or organisational objective, it is equally important that engagement activities are framed in terms of outcomes for the community.

6.5. Identifying engagement risks

As part of an effective community engagement programme design, it is important to identify and manage key engagement risks. Much of the guidance within this framework is designed to minimise these risks, but it is good practice to identify potential risks specific to the engagement situation and ensure there are strategies for addressing them.

Typical engagement risks and potential mitigation measures are summarised in Table 6.

Table 6: Engagement risks and mitigation measures

ENGAGEMENT RISKS	POTENTIAL MITIGATION MEASURES
Strong dissenting voices affecting the validity/effectiveness of the engagement process	• Work one-on-one with detractors, addressing their concerns. • Try to build up enough rapport/support in the community to provide a balanced view, particularly in meetings. Let the community go in to bat for you. • Find and address the core issue, not the symptom. What is the underlying need that is not being addressed? • Build relationships in the community before wider community engagement.
Disinformation being spread	• Have readily available Fact Sheets. • Be transparent with models/technical information (e.g., assumptions used).
Low or ineffective participation	• Do thorough engagement planning. • Use varied means of communication. • Use representatives for different aspects of the community. • Identify what matters to the community and link engagement (where possible) to these. • Identify community champions that have the capacity to harness community energy and keep community accountable - delegate as much as possible to champions.
Lack of even participation across the community	• Identify what matters to different community groups and link engagement (where possible) to these. • Meet people where they are rather than asking them to come to you. • Consider ways to hear from 'representative voices' i.e., those who can speak for the interests of people unlikely to participate directly.
Lack of genuine engagement from the organisation/ decision makers	• Identify how outcomes will be affected. • Identify any co-benefits of engagement so that other funding can be leveraged.
Loss of trust	• Always follow through. Do not over commit, be realistic in expectations of self and acknowledge when you drop the ball. • Acknowledge any issues that are raised by participants (even if they are out of scope of your current engagement) and be honest about your capacity to deal with these. • If circumstances change (e.g., organisational support, resourcing, or funding) be transparent with the issues.
Community disruption (e.g., disaster event)	• Recognise and acknowledge any impacts on participants. • Acknowledge any capacity constraint in engagement team and be honest about capacity. • Reprioritise/reschedule where possible.
Lack of uptake by community (where behaviour change is an engagement objective)	• Evaluate progress regularly. • Adapt approach based on participant feedback.
Lack of relevant subject matter experts	• Have subject matter expert(s) available by phone if they can't attend a session, so that any issues that arise can be discussed or resolved to enable participant(s) to 'move forward' in engagement session.

7. Build an effective team and establish good relationships

7.1. Key considerations

Engagement teams comprise the roles, skills, and relationships necessary to engage successfully with a community and to take the engagement from community discussions through to the decision making and implementation phase (if appropriate). There are several key questions to ask when bringing together a team to support an engagement process.

1. **Who is needed across your organisation?**
    a. Which departments will be involved in the hazard risk assessment/mitigation/decision making?
    b. Who has skills to offer in (i) experience working with the affected community? (ii) explaining/communicating technical information?
    c. Who is the final decision maker and how involved do they need to be?
    d. Are there any other departments that may have interest in the engagement outcomes (e.g., Emergency Management personnel may be interested in outcomes of engagement around risk tolerance)
2. **What agencies/community groups should be part of the team or close partners in the process?**
    a. What other agencies have interests that need to be represented, or skills and resources to offer?
    b. What is your capacity to include community groups/representatives in planning or contributing to the engagement?
    c. Is there an opportunity for co-development of the engagement process?
3. **What skills/capacity is needed/available?**
    a. What skills do we have within the team already?
    b. What new skills do we need?
4. **What resources (time / money) do we have available?**
    a. What capacity do team members have?
    b. What capacity do community members have to participate?

Forming a well-functioning and integrated team of people with strong community connections is vital to a successful engagement process. Below is some guidance to support the above considerations.

7.2. Skills and roles

The exact makeup of an engagement team will depend on the engagement purpose, the technical nature of the conversations and the hazard and community context. It may also vary across the length of the overall project. Ensuring there is some core consistency throughout the entire length of the engagement will help retain knowledge and connections.

Engagement processes can include communication and engagement experts, mental health professionals, decision makers, implementers, technical experts, project managers and other agencies, and ideally community connectors.

Table 7: Likely skills and roles within an engagement team

SKILLS/ROLES	WHY
Communication and engagement experts	Important for designing and directing risk engagement, increasing the capacity to respond to the contexts and needs of different communities/ individuals.
SCIENCE COMMUNICATION EXPERTS E.g., science communicators, graphic designers, GIS, storytellers, communicators	Connects communities to the risk through accessible, easy to understand information enabling communities to understand and get onboard with engagement. Particularly useful where there is low familiarity with, or acceptance of, the hazard and the anticipated impacts.
EXPERT FACILITATORS E.g., conflict management, behavioural psychology, facilitators	These skills (i.e., empathetic skilled communication) also help manage heightened emotions, particularly in environments with low trust, legacy issues, or where hazards can lead to high individual loss.
COMMUNITY DEVELOPMENT PRACTITIONERS	Skilled at supporting and empowering community members to identify issues and plan actions. Ideally, they will already be embedded in the community you are working with.
IWI LIAISON	Ensure iwi are appropriately involved throughout engagement process, including co-design where applicable.
Mental health professionals	Provides support and can deal with the emotions that arise. Particularly important in situations with a high degree of actual or perceived loss.
Senior management, decision-maker and/or councillors	Adds credibility to the engagement, especially at public events. Presence also adds value to engagements in environments with low trust or legacy issues.
Technical experts E.g., scientists, technical experts, technical leadership, subject matter experts, cost, and feasibility experts	Ensure transparency and allow community members to ask questions. Particularly useful where there is low familiarity with, or acceptance of, the hazard and the anticipated impacts.
Agencies with mandates in the area E.g., critical infrastructure	Ensures impacts to assets/services are properly accounted for in decision-making.
Those involved in 'end product' implementation E.g., infrastructure staff, planners, response agencies, emergency mangers, community connectors, other TLAs, Regional Council, Central Government, Boundary Organisations (e.g., East Coast Lab), community representatives.	Anyone, either council department or outside agency, is involved in end-product implementation to ensure that the engagement's solutions are feasible and carried through.

7.3. Strengthening relationships

Before designing any engagement, it is important to recognise and/or develop relationships and partnerships with key stakeholders or groups in the community. Ideally, these relationships are ongoing and trust-based, rather than developed just for one engagement process. Most councils have existing relationships with tangata whenua and other community groups in their area. These relationships often form the basis of an engagement process around natural hazard risk.

Building an engagement process off existing relationships or using the engagement process to develop and strengthen relationships has both short- and long-term benefits. In the short term, relationships with community stakeholders and groups can be a good way to quickly understand a community's needs and perspectives. Community stakeholders can also help you understand how best to share and frame technical information and can help to navigate diverse community views (for example, where there is mistrust of hazard information). In some situations, these relationships enable opportunities for iwi, community groups or representatives to co-design their engagement processes and/or be part of the governance structure supporting a particular process.

In the longer term, engagement created around relationships will help build capacity in the community and trust between the Council and community. Hazard and climate risk management is a long-term game. Strong, reciprocal relationships will contribute to better ongoing engagement and collective planning and decision making.

As noted, this framework is not specifically designed to address engagement with mana whenua. However, when considering community relationships, it is important to acknowledge the role of mana whenua in decision making and the expectations that whānau, hapū or iwi may have in how they want to be engaged as Treaty partners. Strong, ongoing local partnerships with mana whenua are imperative.

7.4. Resourcing engagement efforts

Getting sufficient resources (time, money, and people) to undertake effective engagement can be a challenge. Below are some tips for advocating for resources within councils or agencies:

- Provide clear link to statutory requirements (where applicable).
- Highlight reduced potential for appeal/judicial review.
- Demonstrate opportunities for extra returns or "dividends" beyond scope of project including building relationships and capacity/capability building.
- Demonstrate community buy-in.
- Highlight some of the many benefits to the community and the agency undertaking the engagement summarised in the following tables.
- Highlight the risks of not engaging.

Further benefits to the community and council are included in Table 8 and Table 9 below.

While community engagement does provide benefit to the community, it also takes time and energy from community members. It is important to acknowledge the time and commitment of community members in an engagement process. In some instances, such as where the engagement leads to a shared output, it might be appropriate to honour people's participation with a payment or koha.

Table 8: Benefits of effective engagement to the community.

BENEFITS TO THE COMMUNITY	TIMEFRAME
Better understanding of risk which not only raises risk awareness but also enables people to understand their risk appetite and make informed risk decisions for now and in the future (i.e., mitigate/avoid risks).	Both short- and long-term benefits
Greater understanding of the process the council is following to understand and address risk (which might reassure people).	Short term
Increased level of communication and trust between council and community.	Long term
Greater relationships with the council – feeling listened to, feeling like community worries/anxieties are being addressed.	Short/long – depends on process outcomes
Sense of agency – community have some input into decisions relating to the risk and can help create relevant solutions owned by the community.	Short/long – depends on process outcomes
Shared community experience – internal community relationships.	Short term
Creates movement for long term action and change led by the community (bureaucrats change but people are there for the long term).	Long term
Better prepared community through increased social capital (within communities and between communities and authorities).	Short term

Table 9: Benefits of effective engagement to local government agency/other agencies undertaking engagement.

BENEFITS TO LOCAL GOVERNMENT/AGENCY UNDERTAKING ENGAGEMENT	TIMEFRAME
Greater understanding of community context (opinions, aspirations, concerns).	Short term
Better informed decision-making.	Long term
Greater trust with the community.	Long term
Ability to influence future behaviour.	Short term
Developing shared understanding of risk.	Short term
Outputs that have social license (i.e., a co-created plan etc).	Short term
High quality and robust decision-making process.	Long term
Development of institutional knowledge (creation and testing of risk engagement processes).	Long term
Better prepared community/better emergency response outcomes (e.g., taken action to reduce risks).	Short term
Creating buy in – creating a space for communities to see value and provide input makes future engagements easier.	Long term
Novel solutions that may not have been developed by technical experts.	Short term

8. Evaluate and adapt engagement process

8.1. Why undertake evaluation?

There is growing awareness that public engagement for sensitive topics, such as addressing hazard and climate change risk, needs to include a way to track progress and assess effectiveness throughout the engagement.

There are two main reasons for this:

1. Long term processes (hazard and climate risk decision making is frequently a lengthy process) need to be aware of how they are building capacity, establishing trust, and responding to concerns.
2. Awareness of how public feedback has been received and used is part of the due diligence of risk decision making and needs to stand up to scrutiny.

Evaluation also provides insight that can help the engagement team to adapt their approach, if necessary. This can enable or enhance the personalisation/contextualisation of approaches so that the engagement is effective and engaging; communications are accessible, applicable, and actionable; and any barriers to engagement are identified and managed.

Being able to accommodate community perceptions, values, and desired outputs also allows for increased ownership and agency in the community. It demonstrates to the community that you are listening to their feedback. To be effective, this needs to be envisioned and enabled from the start of the project and be incorporated the whole way through via iterative and adaptive methods.

8.2. Evaluation process design

Hazard risk engagement projects can employ independent evaluators, but it can be a useful contribution to engagement planning and design to do this 'in house' by using the engagement team, and those you have key relationships with to identify what success looks like in your situation.

While there are different ways to set up an evaluation – using a rubric is common one that is adaptable to many different circumstances. In a rubric you identify the key components needed to achieve success and describe how you will recognise you have achieved these.

Here are two examples of assessment of engagement effectiveness for hazard risk engagement – both of which use their own "engagement success rubric".

1. **Queenstown Lakes District Council public engagement on risks of debris flow in Reavers Lane and Brewery Creek.** – (letstalk.qldc.govt.nz/brewery-creek-and-reavers-lane-natural-hazard-review). The assessment of effectiveness here relied on a framework for robustness in public engagement based on three components: valid process, valid interpretation of feedback, and valid and transparent integration into a decision.
2. **The How Team – community co-design of public engagement for adaptation to sea level rise and responding to earthquake issues in South Brighton and Southshore**. [A copy of the evaluation of the How Team and lessons learnt is available by emailing Renew.Brighton@gmail.com].

Below is an example of how the framework within this document could be used to set up an evaluation rubric (Table 10).

Table 10: Example evaluation rubric based on this framework.

Key components		Example criteria for success	How well has this been done?		
			Fully achieved	Partially achieved	Not achieved
Engagement planning	Team building	Good representation of agencies/departments with interests in the situation.			
	Relationships	Identified key internal and external relationships for short and long term.		✓ e.g., short term sorted but others needed for long term.	
	Purpose and intentions	• Clear on goals, purpose and type of approach that is suitable. • Overall orientation matches with the values/principles of lead organisations/key relationships/community expectations.			
	Capacity	Secured adequate time, resources, skills.			
	Hazard context	Good understanding of the hazard context and how this will influence the engagement.			
	Community Context	Good understanding of the community context and any issues that will influence the engagement.			
	Connection to decision makers	Decision makers are aware of the engagement and have suitable opportunities to intersect with this.			
	Participation	• Good platforms for authentic engagement – range of opportunities • Good uptake of opportunities • Engagement personalised/suited to community. • Diverse views represented. • Adequate time given to “upskill” in technical matters. • Challenging issues are sensitively managed and there is support available for those who have difficulties		✓ e.g., good attendance at x but poor turn out for Y. Those who participated were very engaged	

Key components		Example criteria for success	How well has this been done?		
			Fully achieved	Partially achieved	Not achieved
Engagement implementation	Technical communication	• Range of formats/ strategies for different audiences • Hazard risk is meaningfully understood in terms of personal impact as well as probability. • People understand the implications of policy/planning/engineering responses. • Timely availability of information			
	Feedback, analysis, and use	• Good/multiple avenues to provide feedback. • Analysis of feedback is sound – i.e., doesn't simply "aggregate responses/views". • Transparent pathway for how feedback will be used in decision making			
	Duration and timing	• Different stages of engagement are well communicated. • Expectations are managed to reduce uncertainty.			

9. Advice for practitioners

"it can be quite nerve wracking to stand up in front of community and talk about risk. It can often sit right outside someone's comfort zone, even for the more experienced…nerves or apprehension about undertaking community engagement are a good thing. They are usually based on the uncertainty of the community's response to the engagement, and in my experience, this just highlights a respect for the knowledge already held by the community. If the solution to the risk is already agreed and obvious, then an engagement process would not be needed. Show up, be humble and be willing to learn."

Alice Lake-Hammond – Delphi panel member

Community engagement on natural hazard and climate change risk is challenging. Conversations are often high stakes, involve technical information and have high degrees of uncertainty. Through the compilation of this document, our Delphi panellists have provided advice for practitioners, beyond the methodological advice, on how to thrive in these challenging conversations.

Be open, honest, and genuine

- Have an open mind, be genuine about listening to feedback and how it can influence decision-making and take the time to do it properly.
- Be patient. Be open and humble (being nervous is a sign of respect for the knowledge shared with you).
- Be prepared to listen and learn. There will be experts in your community.
- Be honest – if you don't know, say, and look to find out from trusted sources.

Work with other practitioners

Work with other practitioners and learn from them. Networks like the practitioner-only Aotearoa Climate Adaptation Network are invaluable in sharing resources.

Localise your process

Engagement processes need to be localised, and the science needs to demonstrate local impacts.

Know how to deal with grief

During engagement, it is likely you will encounter people in various stages of grief. Understanding how to deal with this both personally and professionally will ensure you can help participants work through their grief stages and minimise the mental health impact personally.

Talk to someone who has done it before

Talk to someone who has done it before. People are usually happy to have a chat and provide help and advice. It is particularly important to get local advice if you are new to working in a given community.

Tested tools are the best

Tools that are tested with communities are best. But always make sure the tools you choose are suited to your decision and community context.

Use a set of principles but tailor your process

Engage utilising a set of principles (e.g., generalised 10-step process in the MfE Coastal hazards and climate change guidance) and then tailor the engagement to the setting. Ask questions so you fully understand the context and can design a suitable bespoke process E.g., Strengths and disadvantages of the different methods, who are you dealing with, who do you need etc.

10. Resources

GENERAL ENGAGEMENT AND RISK COMMUNICATION

- International Association for Public Participation (IAP2). iap2.org/mpage/Home
- Te tari o te pirimia me te komiti matua | Department of the Prime Minister and Cabinet (DPMC) (2023). Community Engagement. dpmc.govt.nz/our-programmes/policy-project/policy-methods-toolbox/community-engagement
- Te tari o te pirimia me te komiti matua | Department of the Prime Minister and Cabinet (DPMC) (2023). The Policy Project. https://www.dpmc.govt.nz/our-programmes/policy-project
- Te Tari Taiwhenua | Department of Internal Affairs (2021) Good Practice Participate: Benefits of community engagement. DIA, New Zealand. dia.govt.nz/Good-Practice-Participate
- United States Environmental Protection Agency (2023) Public participation guide: Public meetings. https://www.epa.gov/international-cooperation/public-participation-guide-public-meetings
- United States Department of Health and Human Services, Food and Drug Administration (FDA) (2011). Communicating Risks and Benefits: An Evidence-Based User's Guide. fda.gov/files/about%20fda/published/Communicating-Risk-and-Benefits---An-Evidence-Based-User%27s-Guide-%28Printer-Friendly%29.pdf

NATURAL HAZARDS

- Social Recovery Reference Group Australia. The co-production journey to community-led recovery. knowledge.aidr.org.au/media/8780/community-led-recovery-visual.pdf
- Saunders, W., Beban, J., and Kilvington, M. (2013). Risk-based land use planning for natural hazard risk reduction. GNS Science, Miscellaneous Series: 67. tools.envirolink.govt.nz/assets/Uploads/RISK-R7-120Risk-based20land-use20planning20for20natural20hazard20risk20reduction.pdf

CLIMATE CHANGE

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11. Let's Talk About Risk community engagement framework

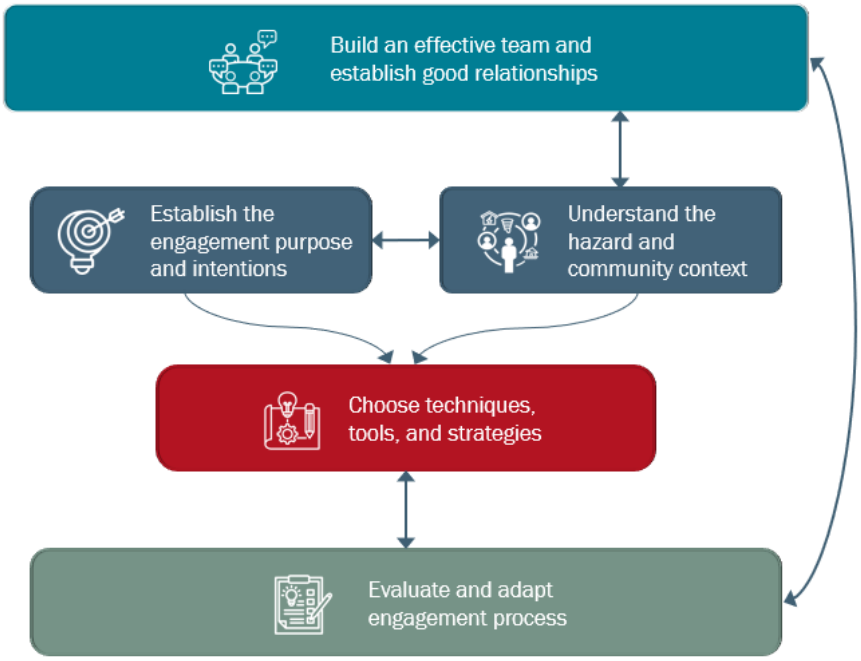

Figure 4: Framework diagram for external use. Please cite as: "Let's Talk About Risk community engagement framework" by Let's Talk About Risk team, 2023, https://www.resorgs.org.nz/our-projects/risk-and-resilience-decision-making/lets-talk-about-risk/