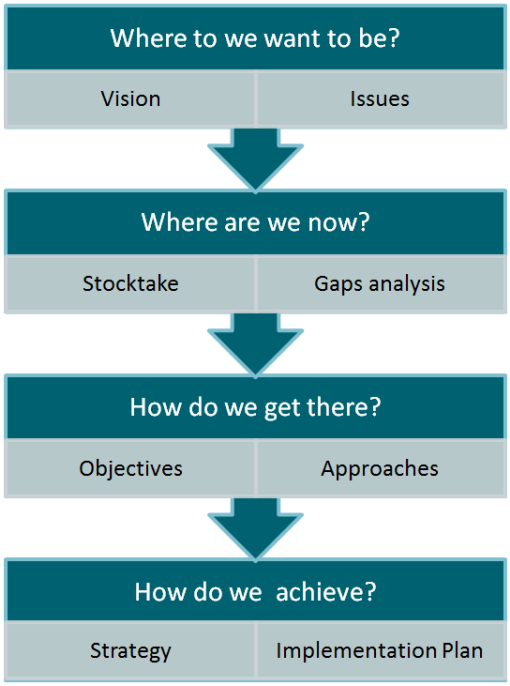
WELLINGTON REGION
NATURAL HAZARDS MANAGEMENT STRATEGY

Hazards stocktake and issues report overview

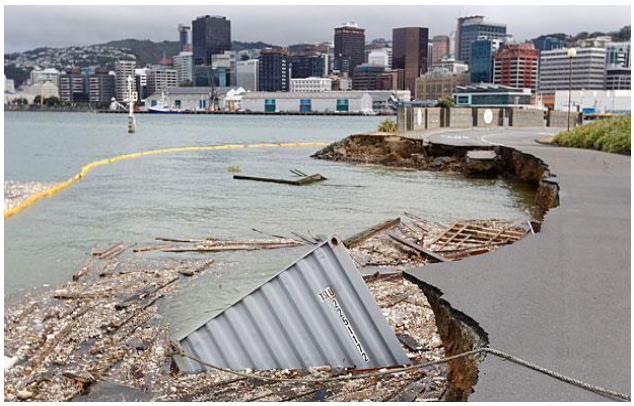
A core piece of work in the Wellington Region Natural Hazards Management Strategy has recently been completed called the "Stocktake and Issues Report".



It is part of the "Where are we now?" stage of the strategy (see left). The report identifies the main natural hazards we face in the region and outlines what councils currently know about these hazards and how the risks they pose are currently being managed.

The report also introduces what is considered good practice hazards management and compares this to how we are doing in order to pinpoint gaps in current practice.

The report highlights the areas we are doing well in and the areas that require more work. In doing so, the key issues for natural hazards management in the region have been set out and will form the basis of discussions with key interest groups and the community leading to the development of the Strategy. Analysis is undertaken by hazard area but individual councils are not named in the report because the aim is to end up with a coordinated regional approach.



The data collection, assessment and gaps analysis is covered by three main themes and aims to gain a regional perspective:

1. Natural hazards information and how this data is managed
2. Hazard planning provisions in the city/district/regional plans
3. Operational responses to hazard management

Some key points arising from the report are:

- Variability in hazard information mapped and available in council GIS databases, both internally and online
- Variable staff awareness of what information is available to assist with planning and decision making
- Inconsistencies in how hazards information is identified, mapped and updated leading to different interpretations and application of the information for planning purposes
- General lack of long term planning for climate change and sea level rise
- Difficulty in applying a risk based approach to hazards planning and management
- Gaps in the monitoring of hazard events and in monitoring the effectiveness of hazard reduction planning approaches

In general there is a reasonable amount of research that has been undertaken across the region, particularly seismic and flooding hazards and this information is frequently used for general advice and consent decision making. However, there is variability in the way this information is used in strategic hazard management and planning.

Whilst some variation is appropriate to reflect the varying risk from natural hazards across the region, some of the variability is a result of inconsistent resourcing due to financial and time constraints and a lack of coordination into research on natural hazards that affect communities across jurisdictions.

There is also limited prioritisation of hazard management and research and it is not always clear how research and policy development decisions have been made.

There has been recent progress towards the integration of a risk based planning approach and risk assessment in natural hazards provisions but there is little evidence of this element of good practice in older operative provisions.

With regards to monitoring and responses, there are operational inconsistencies in protocols relating to the review and updating of information. Regionally, it could be regarded as ad hoc and often reliant on external parties to provide updated information. Related to this, there is no systematic approach to the monitoring of risk management and reduction programmes which is important for assessing the effectiveness of a particular approach.

The report highlights the numerous challenges we face as a region, however, we are not starting from a 'zero' position. We have the building blocks from which to build an effective regional hazards strategy. These 'gaps' effectively point the way toward developing a much more integrated and robust approach to managing natural hazards and will guide the development of key objectives in the strategy.

Summary of key issues in stocktake and issues report

Hazard information:

Earthquakes

• There is a marked variability of earthquake information that is mapped and available online through council GIS systems.

• Council staff awareness of the existing information sources held by other agencies is limited.

Coastal Hazards

• There is inconsistency in how councils identify and map coastal hazards.

• There is little use of coastal hazard information internally within councils.

• There is a lack of progress in preparing and adopting long term climate change adaptation plans.

• Large variations in the knowledge of coastal hazards were evident, with reliance on tsunami evacuation maps and increasing need to incorporate sea-level rise.

Flooding

• Improvements are required in the mapping of residual flood risks (i.e. potential losses if flood protection is breached or overtopped).

• There is a need to integrate sea-level rise considerations into the mapping of flood risk in coastal areas.

• Flooding hazards appear to be well documented and mapped with a greater regional approach in place.

Natural hazard planning provisions:

• There is a lack of provisions relating to liquefaction hazards.

• The information contained in the planning documents and in the development of planning provisions associated with coastal hazards is limited.

• There is a lack of information and provisions relating to flood hazards in the planning documents. A common theme is for this information to relate to only certain water bodies without explanation as to why this is the case.

• While landslides are addressed in Council Plans, this tends to be through earthworks provisions. Naturally occurring or historical landslide hazards are not provided for.

• There is limited recognition in planning documents of other hazards including climate change impacts.

• The District Plans also provide little explanation as to why their focus is on certain hazards and not others.

• While the existence of cross-boundary issues is acknowledged, little direction is provided in the plans and policy statements on how these issues should be addressed.

• There is a lack of hazard-specific provisions in the district plans. At present the objectives, in particular, tend to be generic to all natural hazards and do not provide clearly identifiable or measurable outcome statements.

• In many instances the planning approaches are outdated and are not based on a clear risk-based model.

• Related to this, there is no clear evaluation involving community input about what levels of risk are considered acceptable.

Operational responses:

Monitoring

• There is no systematic approach to the monitoring of natural hazard risk outcomes or the effectiveness of risk reduction.

• There are key gaps in the monitoring protocols associated with landslides and coastal erosion.

Information Management

• There is a lack (in most councils) of a protocol relating to the review and updating of information. Some councils are taking an ad hoc approach to this and seem to be reliant on external parties to provide updated information.

• There is also no indication from the responses that a co-ordinated approach is taken by the councils the management and updating of information.

• In some instances the councils are relying on older data and information, which does not meet current good practice expectations.

• The quality of information and accessibility to information about natural hazards varies considerably.

• The level of uncertainty in the information is not always explicitly recognised.

Find the full Stocktake Report on the Greater Wellington Regional Council website.