



National Risk Resource Model

A joint message from NRFA, NZFS, NZPFU, and UFBA.

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Leading integrated fire and emergency services for a safer New Zealand

Delivering on Vision 2020 will ensure the New Zealand Fire Service (NZFS) and the National Rural Fire Authority (NRFA) achieve the goals that our communities, partners, and the Commission are asking of us – a safer New Zealand.

Assessing the risks presented to our communities is a challenge. To help our decision making, we have developed a modeling tool called the National Risk Resource Model (NRRM).

At the heart of NRRM is a series of computer models that use robust datasets reflecting New Zealand community profiles. These include demographics, climate, industrialisation, and geography. It uses this information to produce assessments of risk, and the necessary resource profile to treat those risks.

The information produced by NRRM is used as just one set of inputs into decision making about resource allocation – with these decisions made by leadership teams.

The project established to ensure NRRM delivers the information we need, is explained below.

National Risk Resource Model (NRRM) Project

The purpose of the NRRM project is to produce accurate and objective insights about risk profiles that will be used to inform decision making.

The original idea behind using a national model was purely to help inform decisions about resource allocation. Now, a decade later, we are using risk management techniques that will result in a model that is aligned to other risk management processes at the NZFS and NRFA.

What is NRRM?

NRRM is a framework that brings together risk models from several sources to assist decision making on resourcing. NRRM helps us:

- understand the relationship between risks in communities and our location of stations and resources;
- make decisions about the most effective places to position personnel, equipment, training, risk reduction activity, and station type so we best match the risk in the community.

NRRM is just one element of decision making – this is not a “push button” answer, and requires regional and national experts to make actual decisions about resourcing. When NRRM is active, it will be used to improve our community risk management and fire outcomes.

What is NRRM not going to do?

NRRM will not replace the judgment of experts, or make decisions for the NZFS or Rural Fire Authorities. NRRM will not make resourcing decisions. NRRM will not require stations to relocate 200m up the road. NRRM will not issue instructions for staff to relocate.

What's new?

The model being worked on in NRRM is richer and more detailed than previous models. The original NRRM only focused on the risk posed by fire and hazardous materials; we now include the full range of events that we are being asked to respond to including rescue, medical, vegetation fire, motor vehicle accidents, and others.

Why does modelling our risk matter?

Demand for NZFS to respond to an increasing range of services continues to grow, and we have social and population changes, as well as urban density changes.

NRRM will help to consistently evaluate our resources and stations using the same criteria, and help inform the distribution of funds and resources. As these become available, NRRM can be included in business cases that bid for funding.

It is important that our operational staff have the right resources, in the right place, at the right time, to work effectively. Using NRRM will help us get this right.

When will I see something?

Output from NRRM is expected to be available for use in annual planning for the 2015/16 financial year. This will be made available to Fire Region Managers, Area Managers, Principal Rural Fire Officers, and Planning and Performance Managers.

What does this mean for my community?

The risks your community faces will be better defined, making it easier for us to plan how to reduce them, and ensure we have the right resources in the right place.

Who is working on NRRM?

The NRRM project has a dedicated manager (Rob McIver), and is overseen by a steering group that is chaired by the Deputy National Commander (Paul McGill), and includes the National Rural Fire Officer, senior NHQ and operations staff, and key partners from the NZPFU (Derek Best) and UFBA (Bill Butzbach).

