Local Government and Insurance

Sharing Flood Risk Information

Why insurers need flood risk information

Understanding the nature and extent of flood risk is an essential part of living in flood-prone areas. In the absence of accurate flood hazard information, residents and insurers may make assumptions about the risk to their homes and properties. Generally, residents underestimate their exposure. Insurers, due to solvency regulations and the need for business sustainability, tend to be more conservative in their assessment of the risk. Inconsistent views of risk can generate community scepticism about the actual flood risk in a community.

General insurers take on their customers' risk, turning them into a 'policyholder', allowing them to manage the financial burden of damage resulting from a specific event such as a flood. Insurers identify and then manage the costs of these risks to make sure there is enough money coming in through premiums to pay claims.

Broadly speaking, general insurance in Australia is risk rated. In a risk-rated insurance market, an insurer calculates the premium payable on the basis of various factors specific to an individual property (such as the frequency and size of a claim occurring) and therefore the estimated value of such claims during the term of an insurance policy.

For more information on how insurers determine flood insurance premiums please read the ***Pricing Flood Insurance fact sheet.***

The insurance industry has been working increasingly closely with state and local governments to access flood hazard information to inform its understanding of flood risk and ensure that flood cover can be made widely available.
However, there are still gaps in insurers' information and knowledge, which can be reflected in the flood insurance premiums offered to customers.
Insurers try to use the most accurate flood risk information possible. This ideally includes consideration of any local mitigation efforts, and matches the information used by local governments to manage flood risks and inform the community about them. Importantly, as flood risk information can often be updated or changed due to new developments or mitigation works, it is critical that the information insurers rely upon is also updated.

Where information is not accurate or has not been made available by a local or state government, insurers are either unable to offer premiums that accurately reflect the nature of flooding for the location, or may be forced to refer to alternative methods for estimating the risk. That means there is greater potential for the view of flood risk adopted by insurers to differ from the understanding of flood risks held by a local government.

Where the understanding of flood risk is very uncertain, some insurers may be unable to provide cover or may need to price their premiums to compensate for the uncertainty, leading to adverse impacts on property owners.

What local governments can provide

Insurers aim to understand flood risk accurately; any data that describes flooding has value. This data would ideally be sourced from modern flood studies. If this is not available, any data the council uses to understand or mitigate the flood hazard can be considered by insurers.

Typically the data required by insurers to understand flood risk is not the information that a Council may be providing to the community via a website or an information sheet.

Insurers require raw data that can be analysed and uploaded into underwriting systems to facilitate risk assessment on an automatic and broad scale when residents seek a quote. The insurance industry provides in excess of 15,000 quotes for property insurance every working day across Australia. Insurers do not have the capacity to visit each flood prone council's website to review what might be available in response to each individual request for a quote. To provide the best customer service to residents this information needs to be already available, processed and understood.

Insurers typically require geographic information system (GIS) data for flood surfaces and extents for modelled events, as well as historical flood extents, levee details, and minimum floor levels. In New South Wales and Queensland, local councils are usually the primary source of this information.

You can read the ***Insurance Industry Flood Data Requirements*** fact sheet at or contact the Insurance Council of Australia (ICA) for more detailed information.

How this information can be shared with insurers

The ICA Property Resilience and Exposure Program (PREP) facilitates data sharing between local governments and the insurance industry.

PREP centralises raw data in a consistent format that can then be used by all participating insurers. PREP has three levels or layers:

Level 1 — Exchange of relevant hazard data – Local government delivers all locally held hazard mapping, ICA reciprocates by giving councils access to processed information via its DataGlobe. Information is processed by ICA into the National Flood Information Database (NFID) for use by participating insurers, in addition to the raw hazard data being made available through a centralised process on the ICA's DataGlobe.

Level 2 — Provision of building data – Local government provides address-specific building data that may assist insurers to understand building vulnerability to a greater degree (such as floor heights above modelled flooding).

Level 3 — Provision of resilience mapping – Joint identification between industry and local government regarding where buildings are exposed and vulnerable to local hazards, and may benefit from mitigation activity.

Initiating this process with the ICA is simple. Contact the ICA on 1800 734 621 during business hours and ask to speak to somebody about PREP.

Once contact is established the ICA will typically be able to provide you with a tailored briefing about the program and how your local government may benefit from participation.

What the Insurance Council will do with this information.

The ICA provides insurers with access to the raw data it receives from local councils and state agencies or departments. It also incorporates flood data into National Flood Information Database (NFID).

NATIONAL FLOOD INFORMATION DATABASE

NFID is funded and managed by the insurance industry. It combines all available government flood data into a format that is practical for insurers to use for underwriting flooding risks at address level. Where a local or state government has provided flood data of an appropriate standard, NFID provides participating insurers with estimations for the depth of flooding (if any) at each individual address for the one-in-20 year, one-in-50 year, one-in-100 year and Probable Maximum Flood (PMF) events. Where data has not been made available by government, insurers may not be able to offer premiums that reflect the precise nature of flooding for the location.

Most exchanges of data are carried out under creative commons arrangements. However, when necessary the ICA will enter into a data sharing agreement with a local government to ensure that any concerns about the use of the data can be addressed. Overly restrictive licensing conditions can negate the value of this process, and model agreements have been developed to assist in this dialogue.

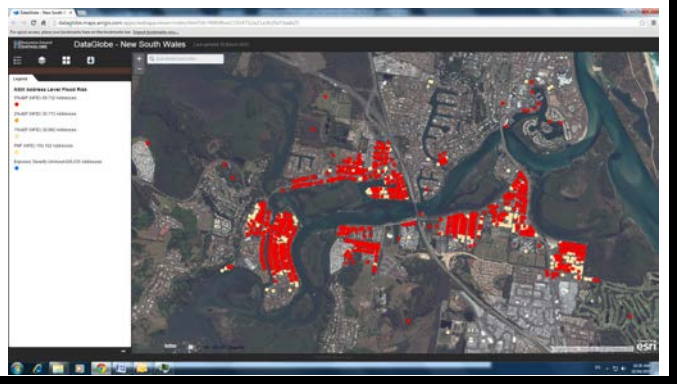
How this information can change flood insurance premiums

The impact of flood data on flood premiums will differ between insurers because each insurer has its own underwriting process and business models.

Generally speaking, new data that provides a different assessment of the flood hazard (compared to previous information used by the insurer) will drive a change in premiums. The ICA monitors the market response to new data closely and can confirm that most premium changes are reductions that benefit residents. . Reduced uncertainty and accurate data allows insurers to provide appropriate cover to protect communities from the financial impact of flood over the long term.

Tweed Shire Council Case Study

When Tweed Shire Council (NSW) released modern accurate GIS flood data, the insurance industry was instantly able to replace information that was more than a decade old. The assessment of flood risk for more than 6000 addresses in the National Flood Information Database was reduced to zero, where they previously were annotated as flood exposed (based on old data). One large insurer reduced flood premiums by an average of 53 per cent for 9300 addresses in the region.



You can read more information sharing case studies in the ***How Sharing Flood Information Can Benefit Residents*** fact sheet.

When councils should give this information to insurers

Any time but particularly:

- ✓ When residents begin raising concerns with council about local prices for flood insurance;
- ✓ When a new flood study is adopted by council;
- ✓ When planning and/or building flood mitigation structures; or
- ✓ Whenever flood risk changes for any built-up location in a local government area.

To minimise the burden on councils of repeated requests for data from individual insurance companies, the ICA encourages local and state governments to provide it with new data when it becomes available (or becomes newly available).

Cost of flood data

The ICA and individual insurers are prepared to pay councils for the administration and extraction costs involved in providing flood data.

Insurers fund the transformation of data into the National Flood Information Database and the ICA's PREP program. This represents a multi-million-dollar investment by insurers since 2007.

The provision of flood insurance that has been accurately priced, rather than based on conservative assumptions or not being available, is a benefit for the community and in particular those property owners with the greatest flood exposure.

Charging insurers an additional fee for flood data itself would represent a significant cost that would be passed on to residents in increased premiums.

How insurers can assist councils

When local governments prepare a flood risk management study and/or plan any potential reduction in premiums generated by management options - such as investment in a flood mitigation structures like levees - is not usually taken into account. Insurers may be able to assist by providing indicative premium impact analysis for various options that can be taken into account in the decision making process. They may also be able to attend or provide input into meetings of floodplain risk management committees.

For more information call the ICA on 1800 743 621 or go to www.insurancecouncil.com.au or www.floods.org.au