What is flood modelling?

Flood modelling is like making a detailed weather forecast, but for flooding. It helps predict where water will spread and how deep it will be when it rains heavily or waterways overflow.

What information is used in flood modelling?

Flood experts use a range of information:

Infrastructure data

Roads, levees and drainage systems all affect water flows.

Natural terrain

Soil type, ground height, and land use.

Climate factors

Rainfall patterns, rising sea levels, and extreme weather help predict future floods.

How does flood modelling help Melbourne?

Flood models help:

Emergency services
Early flood warnings help emergency services respond quickly and give people time to evacuate or protect their home.

Council planning

Flood models help engineers and planners to design buildings, drainage, roads and other infrastructure to withstand and reduce the impacts of flooding.

Communities

Flood models give us the information we need to educate communities on how to prepare for flooding.

How does flood modelling help you?

Flood models are used to create flood information and maps, which you can use to:

Know your flood risk

They help identify an area's flood risk, which can influence your decision to buy property or renovate your home.

Protect your home

Flood maps show you how a flood could affect your property, which can help you take action to prevent flood damage.

Prepare for disruption

Flood maps show you which roads and buildings could be most affected by a major flood, including schools, hospitals and businesses.
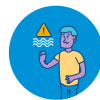
Where can you learn more?

Click on the links below to explore flood models and how they impact your area.

Understanding flood impact

How to assess your personal flood information

Understanding your community flood risk

VICTORIA State Government | Melbourne Water