

# Numurkah Flood Mitigation Update



## THE NUMBERS

- **\$236 million** value of properties inside the proposed flood levee.
- **800 megalitres a day** – the maximum flow that can pass under the Melville Street bridge in Numurkah.
- **25,000-30,000 megalitres a day** – the flow that passed under, over and around the Melville Street bridge during the peak of the 2012 flood event.
- **15** – the number of different flood mitigation options developed and modelled to assess their upstream and downstream impact and benefits.
- **10km** – the total length of the proposed levee.

## DEVELOPMENT SEQUENCE

- Upstream flood warning system
- Alignment design
- Planning approval - earthworks and native vegetation
- Preliminary construction design
- Planning approval - land acquisition
- Final design
- Funding bids
- Tender approval
- Construction

### What did the flood study propose?

The flood mitigation study explored options to protect the Numurkah township for a flood event that has a 1% likelihood of occurring in any year; this is known as the Annual Exceedance Probability (AEP). A 90% AEP flood has a high probability of occurring quite often and would be relatively small. A 1% AEP flood has a low probability of occurrence or being exceeded, it would be fairly rare but it would be of extreme magnitude. The March 2012 flood event exceeded the 1% event, particularly around central Numurkah. The levee design has enough freeboard for a 2012 event.

### How much will the levee cost?

Detailed designs will confirm the costs to build the levee system and will be the basis for applying for Victorian and Federal Government funding. Early estimates indicate these works will cost almost \$1,000 for every rateable property across the entire shire.

### What is happening?

An automated upstream flood warning system has now been installed. Detailed designs continue to be developed. To complete the levee design, the flood height needs to be determined based upon the levee alignment to calculate the correct levee elevation. This is currently underway.

### What will the alignment of the levee look like?

The alignment of the levee is slightly different from the preferred Option A, with the Numurkah Flood Mitigation Implementation Committee, as well as the consultant engineers, proposing alterations which need to be modelled in order to assess their impact upon the flood plain. Construction will vary from earthen embankment to concrete depending on location.

### What are the main changes that have been suggested for Option A?

- The levee alignment will extend along the creek to protect the new netball courts before heading south around the oval and through the golf course to Tunnock Road.
- The Katamatite/Nathalia Road to be raised between the railway line and McNamara Drive.

### What is happening next?

There are a number of steps which need to be undertaken to progress the Flood Mitigation Project – the Cultural Heritage Management Plan; the Native Vegetation Assessment for the planning permit; developing an understanding of land tenure issues; and preliminary notices to properties where there is a likelihood of land or easement acquisition.

### Are there any legislative requirements?

Yes, there are a number of legislative requirements that will need to be worked through:

- Planning permit under the Planning and Environment Act;
- Cultural Heritage Management Plan;
- Water Management Scheme to be developed under the Water Act;
- Permissions from DELWP under the Crown Land (reserves) Act;
- Preliminary notices to affected properties plus an acquisition overlay through the Planning and Environment Act;
- Works on Waterways permit from the Goulburn Broken Catchment Management Alliance; and
- Permissions from VicTrack and Regional Roads Victoria to undertake works on land they own or are responsible for.