5 LEVEE MYTHS

Myth 1

I live behind a levee, so my property will not be impacted by a flood.

Fact:

All floods are different. Just because the levee has successfully resisted a flood of a certain height does not mean it will be safe from the next flood. Levees may reduce flood risk, but they don't eliminate it. It is always possible that a flood will exceed the capacity of a levee, no matter how well the structure is built. Levees are designed to manage a certain amount of floodwater and can be overtopped or even fail during flood events that exceed the level for which they were designed.

If you live behind a levee you should investigate your flood risk and take actions to be prepared.

Learn:

- **Where levees are located**
- **What size flood levees are designed for**
- **What condition levees are in**
- **When you might need to evacuate.**

Myth 2

Flooding can only happen when levees overtop.

Fact:

Levees can be overtopped by rising waters. They can also fail due to breaching.A levee breach occurs when part of a levee gives way, creating an opening through which floodwaters may pass. A breach may occur gradually or quickly. Floodwater can then rise quickly with little warning. Levee breaches can occur due to erosion, seepage or poor levee maintenance. Some levees act to divert floodwater to reduce the frequency of high velocity flooding. Flooding can still occur behind the levee as floodwater backs-up into areas behind a levee - that is, the flooding may come from another direction. Levees can also trap stormwater behind them when simultaneous heavy rain and river flooding occurs, threatening low-lying properties behind levees.

Myth 5

If a levee is going to be overtopped, it can be sandbagged to make it higher.

Fact:

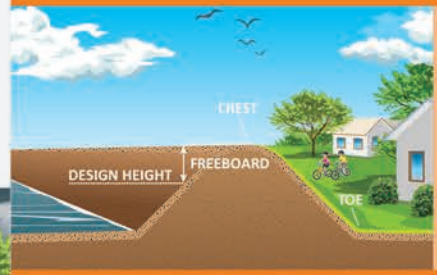
When flooding occurs, there is often little time in most communities to undertake properly engineered works to raise a levee or to conduct repairs if there are problems with a levee. Any such works, if performed, cannot be relied upon to protect the safety of the population living behind a levee.

Myth 3

All levees have been designed & constructed to modern engineering standards.

Fact:

Levees built in recent decades have been designed and constructed to modern standards. However, many levees in NSW were constructed during the 1950s and 60s during floods and have subsequently been topped up during later flood events. Though these levees have protected communities from flooding, they have never been designed or constructed to modern standards. Such levees have a higher chance of breaching. A levee that is in poor condition cannot be relied upon to withstand floods.



Myth 4

A levee provides reliable flood protection to the top of its crest.

Fact:

Levees provide protection to their design height or operating level. These levels are always below the crest of the levee. The height between the design or operating level and the levee crest is known as freeboard. Freeboard is added to the levee to ensure it can withstand a flood that reaches its design height; it takes into account factors such as wind or wave action of the water, erosion or settling of the earth over time. Freeboard should <u>not</u> be relied upon to hold back water.

For more information visit www.ses.nsw.gov.au

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