Storms and Floods

I will outline some information about

Australian’s storms and floods.

I’ll provide the definition of storms

and floods, and their different types.

I’ll outline the process for storm and flood

monitoring and warnings, and the actions

that community members can take to

prepare and stay safe in the event of a storm, and flood.

I’ll describe a brief history of storms and floods.

I’ll explain what you can do in the event of a storm, and/or flood.

Storms and floods are a completely natural process

within the Australian environment.

Floods can be caused by heavy rainfall when the river banks are overtopped on the land

Or they can be caused by inundation from the sea.

There are two types of floods from the sea.

The first one is termed a storm surge, being the excess sea level rise

on the coast produced by weather effects over

and above the expected astronomical tide.

The storm tide is the combination of

astronomical tidal effects, which is caused by the sun and the moon and storm surge. If the consequential storm tide exceeds the highest astronomical tide level, then sea-water can penetrate

inland beyond the normal high water mark – which is the inundation.

Storm surges may occur in association with tropical cyclone events or mid latitude storms that impact the coast.

Storms and riverine floods can combine to cause major floods in low-lying coastal areas as storm surges push on-land and heavy rain leads to river flooding that coincides with coastal storm surges

There have been notable storm and

flood events in Australia’s recent history.

For example, in 2011 there was a storm surge in Trentham, Victoria.

Also 2010 – 2011 Queensland floods were the most extensive flood disaster of recent times.

The Sydney hail storm of April 1999 was (until recently) the most expensive natural disaster in Australia’s history.

Storms and Floods can occur anywhere in Australia.

Who is responsible for monitoring storms and floods?

The Commonwealth Bureau of Meteorology operates a 24 hour / 365 day a year forecasting and monitoring service for heavy rainfall events and their linkages to river flood events.

State and Territory offices of the Bureau of Meteorology work together with State and territory State Emergency Service (SES) organisations.

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together with State and Territory State Emergency Service (SES) organisations.

SES manages responses to emergencies, assisting the community

Local government authorities may play a role in

monitoring for overland flooding caused by heavy rain falling locally and managing local coastal erosion associated with storm surge events.

Warnings for severe thunderstorms and other severe weather events will be communicated on television and radio and on the web pages of the Bureau of Meteorology.

These announcements are usually on ABC or NEWS24.

You can also get warnings and advisories from each State and Territory SES.

How to prepare yourself, your family, your

business or community for storms and floods?

It is worth noting that emergency services in each state have their own process in monitoring and warning for storms and floods.

They are different because each message and content is linked to local conditions.

However, the State Emergency Service web

page on being ‘Storm Safe’ for example may be helpful.

For more information, the national Bureau of Meteorology has a general

flood information website.

In summary

Storms and floods are a natural part of the Australian landscape.

Storms and floods often occur together since heavy

rainfall during a storm can lead to flooding.

Australia has a well-developed detection, monitoring and

early warning system for storms and floods.

There are many actions individuals, families, communities

and businesses can take to help them prepare for storm and flood.

Remember each state has their own guidelines so make

sure you check your own state to follow the correct procedures.