

Response to flood

The Scheme was developed in response to the catastrophic floods that struck the Hunter Valley in February 1955, resulting in 14 fatalities and causing an estimated \$2 billion in damages (present day value). The flooding was extensive, severely affecting both rural and urban communities across the entire floodplain, from the Upper Hunter to Newcastle.

At the time, the Scheme was designed based on the best available information and methods, aiming to protect the townships and agricultural lands of the 1950s and 1960s.

Since its construction, the Scheme has withstood numerous significant flooding events – notably in 1971, 1977, 2007, 2011, 2012, 2013, 2015, 2021, 2022, and most recently in May 2025. These events have demonstrated the Scheme's capacity to manage varying flood levels across the Hunter Valley.

However, future challenges may arise due to climate change, which is expected to increase both the frequency and severity of flooding across Australia. Under climate change projections, a 1-in-100-year flood event (or even less severe events) may occur more frequently. In response, the NSW Department of Climate Change, Energy, the Environment and Water is conducting periodic reviews of the Scheme to evaluate the potential impacts of climate change and assess the ongoing effectiveness of the Scheme's infrastructure.

Managing the Scheme

The Water Administration Ministerial Corporation is the owner of the Scheme assets, located on the traditional lands of the Awabakal, Wonnarua, and Worimi peoples.

The Hunter Valley Flood Mitigation Scheme (HVFMS) manages the Scheme under the delegation of the NSW Minister of Water. The Scheme maintenance is funded by Hunter Local Land Services, Climate Change Fund, NSW Treasury and Hunter Catchment Contributions.

Any development on the declared floodplain will require consent under Section 256 of the *Water Management Act 2000*. If you are planning on developing within the declared floodplain, please contact your local council to request your Section 256 consent to develop.

Our services

In partnership with approved government contractors, Scheme assets are maintained by works such as levee slashing, flood pipe relining, weed management and other reactive and preventative maintenance activities.

Summit Open Space Services and Soil Conservation Services are the maintenance contractors for Scheme assets in the Lower Hunter Valley and Upper Hunter Valley.

We need you

Occasionally, the NSW Department of Climate Change, Energy, the Environment and Water, along with their contractors, will need to access properties to maintain Scheme assets.

Maintaining the Scheme's assets is crucial to ensuring its operation and effectiveness in mitigating the risk of minor to moderate flood events.

To help keep landowners informed, the Hunter Valley Flood Mitigation Scheme maintains a private and secure register for those who wish to stay up to date with current maintenance schedules. This register is used to notify landholders when access to Scheme assets is required for essential maintenance.

Contact us

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Department of
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the Environment and Water



Hunter Valley Flood Mitigation Scheme

Protecting life and property
from the impacts of flooding
to the Hunter community.



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Hunter Valley Flood Mitigation Scheme

The Hunter Valley Flood Mitigation Scheme is designed to mitigate minor to moderate flood risk as an integrated system operating across multiple local government areas, covering urban, peri-urban and rural areas.

Today the Scheme provides protection for over 250,000 people in the Hunter Valley. The Scheme management is transitioning from a traditional grey infrastructure approach relying on levees, spillways and floodgates, to a holistic approach incorporating both existing grey infrastructure with green infrastructure such as riverbank revegetation and log revetments. This holistic approach is enhancing flood resilience, floodplain management and disaster risk reduction which will be implemented by best practice asset management systems.

How the Scheme works:

- The Scheme provides protection for people, industry, the environment, property and infrastructure.
- Levees and controlled floodways protect rural areas and major towns from minor to moderate flooding.
- Maitland floodways divert major flood flows in a controlled manner around the city.
- Levees mitigate flood risk to towns in moderate to major floods and rural lands in minor floods.
- Channels and floodgates facilitate the drainage of floodwaters reducing adverse impacts of flooding on local landholders.

The primary goal of the Scheme is to mitigate flood risk by reducing flood velocities, and managing the direction and depth of floodwaters. The Scheme currently includes the following components:

- 185 km of levees and control banks
- 3.8 km of spillways
- 165 km of drainage channels
- 259 floodgates
- 36 km of bank protection works.

While the levees and spillways offer significant protection, it is important to note that they are not designed to manage extreme flood events. The Scheme covers 15 areas across the local councils of Newcastle, Port Stephens, Dungog, Maitland, Singleton, Muswellbrook, and the Upper Hunter.



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