

Victorian Floodplain Management Strategy



Acknowledgement of Victoria's Aboriginal communities

The Victorian Government proudly acknowledges Victoria's Aboriginal communities and their rich culture; and pays its respects to their Elders past and present. The government also recognises the intrinsic connection of Traditional Owners to Country and acknowledges their contribution in the management of land, water and resources.

We acknowledge Aboriginal people as Australia's first peoples and as the Traditional Owners and custodians of the land and water on which we rely. We recognise and value the ongoing contribution of Aboriginal people and communities to Victorian life and how this enriches us. We embrace the spirit of reconciliation, working towards the equality of outcomes and ensuring an equal voice.



Aboriginal Scar Tree near Avon River in Gippsland. Source: DELWP

Cover photograph: A washed out bridge on the King River near Whitfield 2010. Source: North East CMA

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Minister's Foreword

Floods are a fact of life in many areas of Victoria, but together we can reduce the impact of floods on our communities.

The Victorian Government recognises the significant impacts flooding can have and is working in partnership with communities to be better prepared for future floods.

The effects of our changing climate can be felt both inland and in our coastal areas. The Victorian Floodplain Management Strategy provides the policy direction for managing floodplains and minimising flood risks in cities, towns, regional areas and rural communities, including guidance on riverine flooding, flash flooding and coastal flooding.

The Strategy incorporates important lessons learnt from the 2010, 2011 and 2012 floods, and the subsequent review into the effectiveness of flood warning and response systems, and inquiry into flood mitigation infrastructure.

Communities know their area best, and preventing and mitigating the effects of flooding can be best managed at a local level, but it is a responsibility we all share. The Strategy supports communities by clarifying the roles and responsibilities of government, agencies and authorities involved in floodplain management for land use planning and infrastructure management, as well as making clear the way floodplain management intersects with emergency management and environmental management. It also focuses on the development and sharing of high quality flood risk information that can

be used for improved planning, flood warning and flood response.

Thank you to the agencies involved in the stakeholder reference committee and the members of the community who provided feedback during the Strategy's development.

The next step is to set priorities at a regional level, through Regional Floodplain Management Strategies developed in consultation with local stakeholders and communities. Councils and catchment management authorities/Melbourne Water will inform communities of the opportunities to get involved. I encourage individuals and communities to work with these agencies to decide on the level of flood mitigation they want and can afford.

The Strategy is an important step towards helping us work together to manage flood risk.



Lisa Neville

Minister for
Environment, Climate
Change and Water

A handwritten signature in blue ink, appearing to read 'Lisa Neville', positioned below the printed name and title.

Executive summary

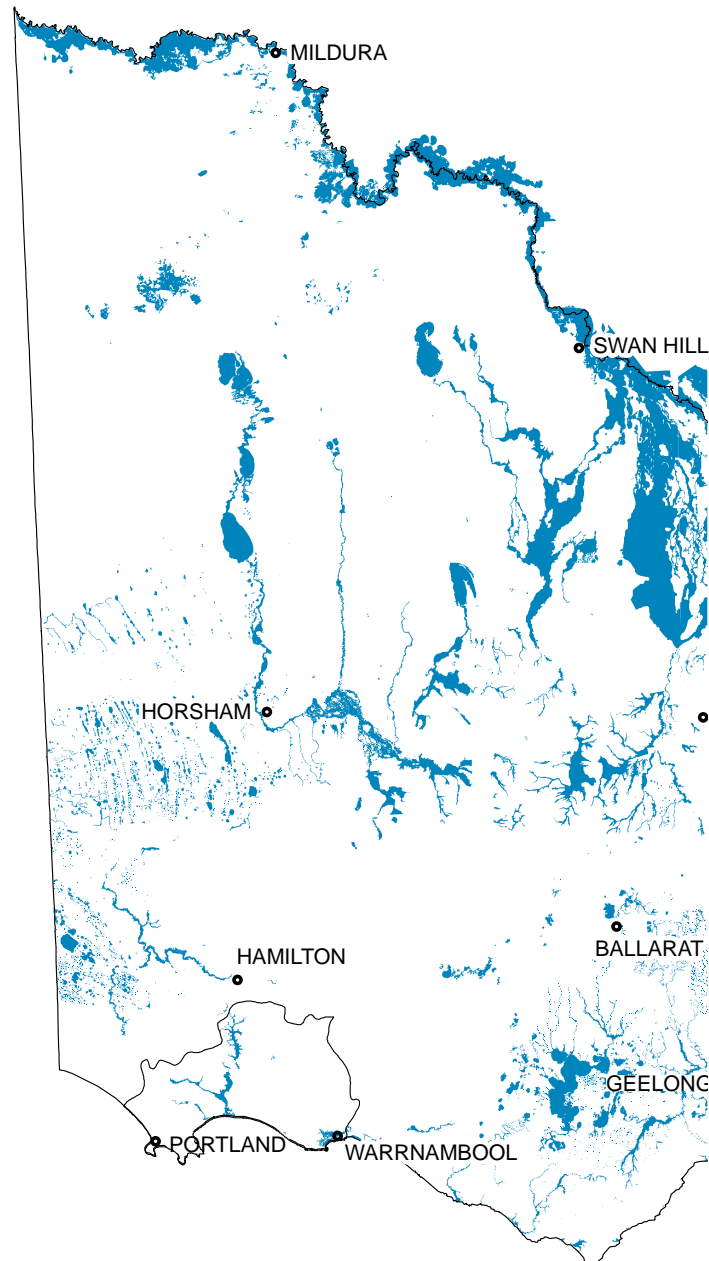
The Victorian Floodplain Management Strategy sets the direction for floodplain management in Victoria. It builds on the technical basis of the *Victoria Flood Management Strategy 1998*.

The Strategy aligns with the Victorian Government's responses to the Victorian Floods Review and the parliamentary inquiry into flood mitigation infrastructure. It also aligns with the broader emergency management framework set out in the *Emergency Management Act 2013*. Importantly, it helps integrate floodplain management with the *Victorian Waterway Management Strategy 2013* and the *Victorian Coastal Strategy 2014*.

There are five parts to this Strategy:

1. 'Assessing flood risks and sharing information' provides the technical basis for assessing flood risk and commits to sharing flood risk information. It sets the framework to prioritise flood mitigation activities based on the level of flood risk.
2. 'Avoiding or minimising future risks' endorses the use of planning controls to manage the potential growth in flood risk. It sets accountabilities in land use planning to avoid increased stormwater runoff from new developments and recognises planning benchmarks that consider predicted increases in sea levels.
3. 'Reducing existing risks' clarifies the institutional arrangements to mitigate the risk and consequence of floods. It also explains how flood warning systems will be tailored to meet community needs.
4. 'Managing residual risks' focuses on how access to better information can reduce the consequence of flood events. The response and recovery activities align the Strategy with the broader emergency management Framework.
5. 'From planning to action' describes how the policies, actions and accountabilities defined in the Strategy will be implemented at the state, regional and local levels.

Blue denotes areas affected by 1% AEP floods – based on currently available mapping.



Provide access to better quality mapping to support emergency services response and recovery. Pages 33-36



Assist councils to implement water management schemes for flood mitigation infrastructure. Pages 70-72



Clarify the arrangements for flood warning systems, with DELWP as the oversight agency and providing direction for new flood gauges to be included as part of the water monitoring partnership. **Pages 60-65**



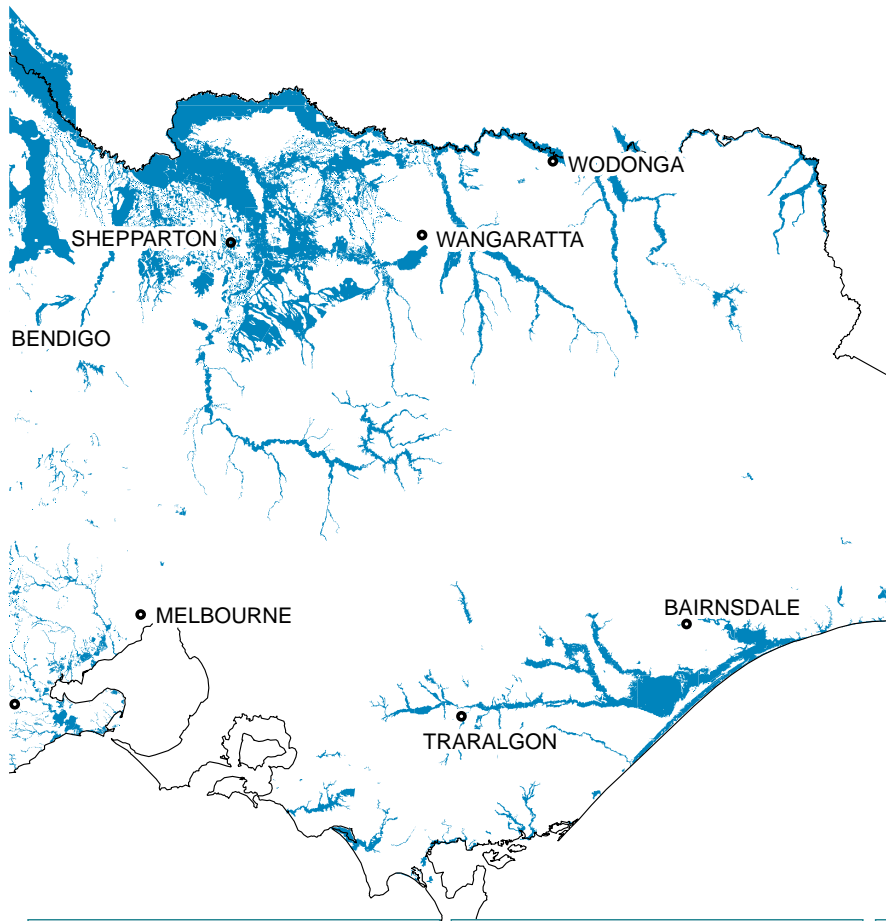
Clarify the arrangements for the management of urban and rural flood mitigation Infrastructure. **Pages 66-80**



Involve communities in flood mapping and management studies, local studies have been undertaken in a number of townships since the 2010 and 2011 floods. **Pages 30-36**



Plan for stormwater management to reduce smaller scale flooding over the medium to longer term. **Pages 46-48**



Increase access to information to encourage flood insurance to be taken up commensurate with an individual's risk. **Pages 86-87**



Provide guidance for preparing Regional Floodplain Management Strategies based on a risk assessment framework. **Pages 30-32**



Increase land-use planning coverage for areas in the 1% Annual Exceedance Probability (AEP). **Pages 40-45**



1. Flooding in Victoria

Flooding is a natural hazard in Victoria; it is a question of when, not if, floods will occur. Floods caused by high rainfall, storm surges or inadequate drainage can severely disrupt communities by causing injury, loss of life, property damage, personal hardship and disruptions to regional economies.

Fortunately, the location, the scale of effects and the probability of occurrence can be estimated, with reasonable accuracy, for a range of floods.

Understanding flood behaviour enables us to assess the likely costs of flooding. It also enables us to assess the benefits of different options for managing the community's exposure to flood risk.

Flood risks are created by people's interactions with floodplains. Those interactions expose people, animals and the built environment to flood hazards. The higher the probability of floods occurring, and the greater the consequences of those floods, the greater the flood risk.

Because the probability of floods of different heights and extents can be estimated, it can also be considered in decision-making. As a result, floods are potentially the most predictable disasters confronting Victoria.

This Victorian Floodplain Management Strategy sets out a systematic approach to evaluating Victoria's flood risks. It also provides a systematic approach to sharing information between the individuals, communities, government agencies and other organisations responsible for managing the various aspects of flood risk. Most importantly, it clarifies which agency is accountable for each aspect of floodplain management.



Businesses prepare for floodwaters in Echuca, January 2011. *Source: North Central CMA*

2. The development of this Strategy

The Department of Environment, Land, Water and Planning (DELWP) developed the Strategy with input from key stakeholders in floodplain management and the broader Victorian community (Figure 1). It draws on extensive consultation after the floods in Victoria during 2010-12 and builds on the existing government policy in response to a review of the Flood Warnings in Victoria and the Government’s Response to the Victorian Floods Review.

Following the release of the Draft Victorian Floodplain Management Strategy on 26 June 2014, feedback was sought from the community and key stakeholders. The aim was to identify opportunities to improve the Strategy. People and organisations provided their feedback directly by attending one or more of the 12 information sessions held across Victoria. Many also provided a written submission.

Figure 1: Documents contributing to the development of the Final Strategy



In total, 76 written submissions on the Draft were received. Local Government Authorities (LGAs) made up the largest cohort of submitters, followed by state and regional river, land and coastal managers, and members of the public. Also represented were Catchment Management Authorities (CMAs), water corporations, the insurance and other industries, professional associations, special interest and lobby groups, emergency services and Traditional Owners.

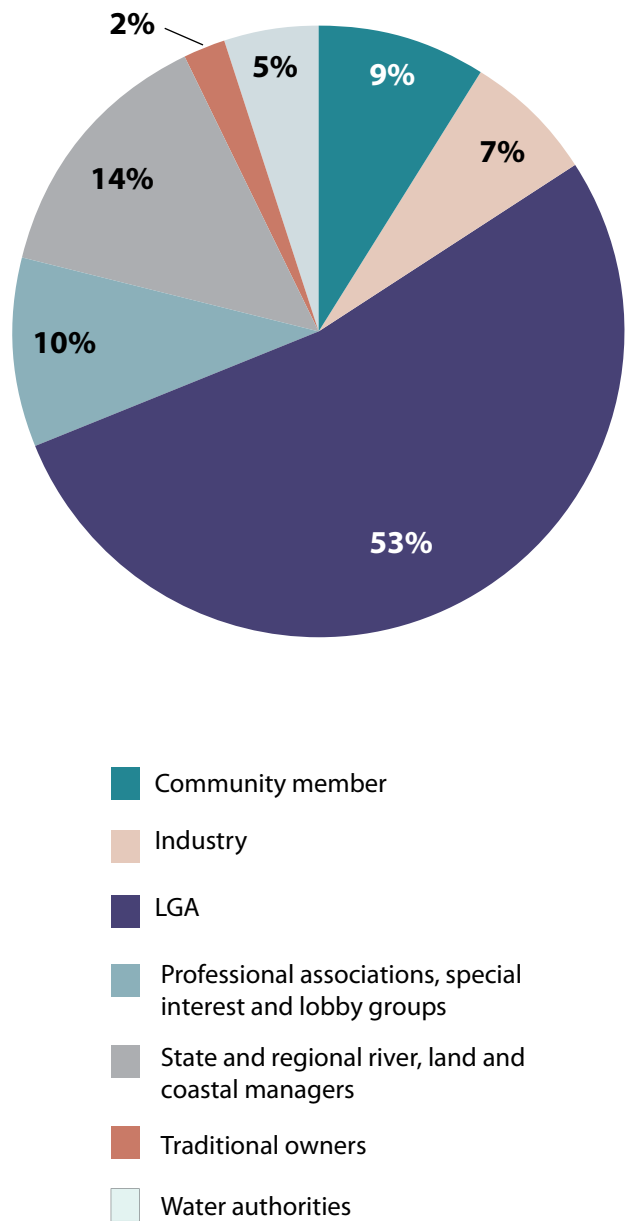
The range of responses meant that feedback was received on most aspects of the Strategy, but some key themes were repeated across multiple submissions. Importantly, the feedback identified some gaps in the scope of the Draft Strategy.

These submissions informed the development of the Revised Draft Strategy and highlighted the need to further test stakeholder input to the revised proposed policies, actions and accountabilities.

The Revised Draft Victorian Floodplain Management Strategy was released on 13 June 2015 for an eight-week consultation period. Written submissions were invited from the wider community. Individuals and organisations who made submissions on the previous draft were contacted directly for feedback. Nine targeted roundtable workshops were held across the state with key stakeholders and a further five meetings were held with individual organisations at their request.

A total of 58 written submissions were received on the Revised Strategy. Again, LGAs made up the largest cohort of submitters, followed by state and regional river, land and coastal managers, professional associations, special interest groups and lobby groups. Traditional Owners, community members, water corporations and industry were also represented. Figure 2 shows the percentage of submissions contributed by stakeholder groups.

Figure 2: Who submitted responses to the Strategy



3. A short history of floodplain management

Waterways and floodplain areas have long been important places for Aboriginal people to come together as families and communities for cultural, social and recreational activities. Access to floodplain areas is vitally important for these activities to continue and for future generations of Aboriginal people to learn about their culture. Traditional Owners talk about waterways moving back and forth across floodplains over time, effectively scattering artefacts and influencing the way cultural practices are undertaken.

Victoria's early European settlers also valued access to rivers and streams for water supply, transport, fertile soils and waste disposal. Many settlements along rivers and streams grew into substantial but flood-prone communities.

The settlers became increasingly aware of their flood risks in the late 1800s. Their initial response was to build levees that, at the time, were not subject to planning controls or engineering construction standards. Typically, these early levees were built to poor standards with unsuitable soils and significant failures were common during floods. Moreover, the nature of flooding was not well understood and levees were often constructed too close to waterways. They constricted the floodplains, causing high-energy, erosive flows rather than taking advantage of the floodplain's natural capacity to slow down, convey and store floodwater. Table 1 lists major flood events in Victoria since European settlement.

Table 1: Flood history and management timeline

| | | | |
|---------|---------------------------|------------------------------------|-----------------------------------------------------------------------------|
| 1880s | | | Development of flood mitigation infrastructure (levees) in Victoria |
| 1909 | Major regional flooding | Western Victoria | |
| 1916 | Major regional flooding | Melbourne, North Central Victoria | |
| 1917 | Major regional flooding | North Central Victoria | |
| 1934 | Major regional flooding | Melbourne, Gippsland | |
| 1946 | Major regional flooding | Western Victoria | |
| 1956 | Major regional flooding | North West Victoria | |
| 1971 | Major regional flooding | East Gippsland | |
| 1973 | Major local flooding | Seymour and Yea | |
| 1974 | Widespread flooding | Central and Northern Victoria | |
| 1975 | Major local flooding | Nhill | Land use planning in flood risk management begins |
| 1990 | Major local flooding | Upper Mitchell and Avon rivers | |
| 1993 | Major regional flooding | North Central Victoria | Introduction of integrated floodplain management |
| 1998 | Major regional flooding | North Central Victoria | Victoria Flood Management Strategy |
| 2007 | Major regional flooding | Gippsland | |
| 2010 | Major flooding | North East Victoria | |
| 2011 | Major widespread flooding | Victoria | |
| 2012 | Major flooding | North West and South West Victoria | |
| 2012-13 | | | Victorian Flood Review ENRC Inquiry into Flood Mitigation Infrastructure |

Introduction

Until the widespread major floods of 1973-75, floodplain management in rural Victoria was largely a local government responsibility; state government agencies had very little involvement. The institutional arrangements were changed dramatically in 1975 when government agencies were given statutory functions to delineate flood-prone land, and building regulations were strengthened. This approach was codified in the 1978 handbook, *Flood Plain Management in Victoria*. It ultimately led to the systematic use of flood studies, disciplined evaluations of flood mitigation and acquisition of the skills necessary to provide flood advice to Local Government Authorities (LGAs).

Even without today's sophisticated computer models, the flood studies of that time helped transform people's understanding of floods. Rather than continuing the practice of attempting to clear floodwaters as quickly as possible, engineers started to mimic nature by slowing the floodwater. They built retarding basins and recognised the benefits of maintaining access to the natural flood-storage capacity of floodplains. At the same time, LGAs started to introduce planning controls to avoid — or at least minimise the growth in — future flood risks.

Gradually, Victorians recognised the need for an overall floodplain management strategy embracing a mix of structural and non-structural measures to deal with flood risks.

In 1998, the landmark Victoria Flood Management Strategy codified the accumulated wisdom of best practices in floodplain management to that date.

The 1998 strategy remains directly relevant to the contemporary challenges of floodplain management in Victoria. Its technical basis is still sound and will continue to be used into the future. This enduring foundation means that the challenges for the 2015 Victorian Floodplain Management Strategy are not technical, they are institutional.

For example, there is an opportunity to strengthen the role of one of the 1998 strategy's programs, land use planning. Melbourne Water's collaborations with LGAs in Melbourne provide an example of how it is possible for land use planning to be applied throughout a region. There are still significant opportunities on large parts of Victoria's rural floodplains to increase the coverage of appropriate planning controls. This Strategy aims to ensure that those remaining areas are covered.

Two other 1998 strategy programs — flood warning systems and flood mitigation infrastructure — are driving reforms in Victorian floodplain management, triggered by the devastating consequences of the 2010-12 floods. The Victorian Floods Review and the Parliamentary, Environment and Natural Resources Committee Inquiry into Flood Management Infrastructure enabled the Victorian Government to set processes in train that will ensure Victoria is better protected for the future.

This Strategy sets out actions and policies that will help to implement the Victorian Government's response to those inquiries. It also develops institutional arrangements to ensure continual improvement in all aspects of floodplain management.



Spring Spring Creek flooding in Bendigo 2015. Source: Bendigo Advertiser

4. The strategic approach

The lessons from the 2010, 2011 and 2012 flood emergencies, and the history of flooding in Victoria, highlight the need for a modern framework to manage floods, protect communities and save lives.

It is critical that steps are taken in the immediate future to ensure exposure to flooding does not increase significantly. The key elements of integrated strategic flood risk management are shown in Figure 3.

The 2011 flood in Brisbane was a stark example of what can happen when development occurs without due consideration of flood risk. In many areas, the 2011 flood was smaller than the 1974 flood yet the damage was nearly 10-fold greater.

Enhanced effort in municipal planning, supported by increased knowledge of flood hazards, will go a long way towards securing resilience to floods. Flood overlays need to be introduced or updated as soon as possible after new flood maps are produced to maximise the returns on investment in flood information and help manage risk.

Beyond planning controls, knowledge about flood hazards must be used to guide the placement and ongoing protection of essential infrastructure such as roads, power sub-stations, gas lines and telecommunications. Government has a role to play, but communities and businesses must also act to manage their own risks.

There are no quick fixes in reducing the damage caused by widespread flooding. Two centuries of development on floodplains and low-lying areas mean that legacy issues will remain into the future. The constant message in emergency management reforms is that the job is a shared responsibility. In practice, the focus needs to be on specific accountability. Flood emergency management relies on absolute clarity about who is accountable for what.

Figure 3: Strategic approach to flood management



Introduction

Clear accountabilities must not be blurred by shared responsibilities. 'Responsibility' is about ownership of an endeavour. 'Accountability' is about being answerable for the outcome of those efforts. Responsibility can be shared; accountability cannot. This Strategy focuses on identifying accountabilities.

The State Government is actively reforming and integrating emergency management across multiple hazards (e.g. fire and flood). However, response and recovery assistance cannot offset the damage caused by such emergencies. The government is therefore driving a focus on structural and non-structural mitigation options to reduce the need for response and recovery. This Strategy reflects that drive.

There is an ongoing role for structural measures, such as levees, retarding basins, culverts and floodways, and the flood-proofing of existing houses. There is a bigger role however for non-structural measures such as land use planning (zones, overlays, freeboard requirements, set backs), flood insurance, flood warning systems, flood education and flood awareness initiatives (Figure 4).

Attempts over the past century to use engineering solutions to mitigate flooding have had mixed results. The risks associated with unmaintained, low-construction-standard levee systems are high. Spending funds on levees, and other flood mitigation infrastructure, without understanding their full costs and benefits doesn't make sense. It is time to rethink and reset the approach, working more with the environment to allow wetlands to reduce the impacts of flooding by holding and slowing floodwater at appropriate times.

More focus is required on providing certainty around the ongoing management and maintenance of flood mitigation infrastructure. Apart from the risks of levee failure, there remains a real likelihood that levees may overtop. Regular auditing of the infrastructure and its maintenance is required. The risks must be documented, communicated and incorporated into municipal emergency planning.

Flooding within urbanised environments is a further legacy issue. Developments on old creek lines and associated impervious urban surfaces have increased rainfall runoff, causing damage and disruption. Opportunities to reduce flooding through improved integration of water and urban planning need to be explored.

The role of insurance in reducing exposure to flooding for communities and businesses, as well as government, cannot be over-estimated. Insurance policies should be affordable, while being priced to reflect the true nature of the risk. Once again, knowledge of the flood risk is fundamental. Insurance provides the opportunity to reduce exposure to residual risks; it will also guide future development on floodplains as improved understanding of flood behaviour influences premiums.

Technology enables forewarning of potential floods to a much greater extent than ever before. Weather forecasting services are widely available on mainstream media. Individual stream gauge information is available online. Coupled with online weather radar services, this information helps people make judgements about looming floods. If the community flood risk warrants it, these basic services can be supported by more comprehensive flood warning systems.

There will still be a need for localised flood warnings (driven by local knowledge and community networks), even in high-risk areas where there are more sophisticated formal flood warning systems. Communities along more than 100,000 km of rivers and creeks in Victoria need different levels of warning service to reflect their different risks. Planned levels of warning service must be documented, maintained and communicated to communities to ensure they have the capacity to use the information provided during a flood.

Local knowledge is invaluable in helping understand flood behaviour and the options for flood mitigation infrastructure. It helps identify gaps in warning systems and provides a reality check when validating information on flood behaviour. It is government's role to provide opportunities to capture local knowledge. Community consultation will continue with the development of Regional Floodplain Management Strategies; it will help identify gaps and set regional priorities. Community involvement in local flood studies will also help gauge the community's willingness and capacity to pay for ongoing mitigation costs.

Understanding potential changes in flooding under climate change is evolving. Anticipated changes in the intensity of storms and in average stream flows may be greater under different climate scenarios, and the variability from year to year may increase. This could shift the likelihood and consequence of floods in different parts of Victoria. Decision-making must be responsive to the latest scientific information, and this information should be consistently and transparently applied through planning schemes.

4.1 Regional risk assessments

Regional priorities for government investment in floodplain management need to be informed by structured and standardised analyses and judgements regarding the relative priority of flood risks. To that end, DELWP has refined its Rapid Appraisal Methodology for setting regional priorities.

The refined methodology will allow more rapid and consistent evaluation of floodplain management measures in a cost-benefit analysis framework. Rapidity is required primarily because of the number of floodplain management programs requiring evaluation and the limited funds available for that evaluation. Consistency is needed to ensure comparability between evaluations.

Having a consistent approach to assessing the flood risks for different towns enables communities with similar risks to be treated equitably. This approach is consistent with the National Emergency Risk Assessment Guidelines.

Regional risk assessments will be at the heart of the Regional Floodplain Management Strategies called for in Section 26 of this Strategy.

Action 4a

- DELWP will refine a rapid and robust methodology for establishing regional floodplain management priorities in ways that allow statewide floodplain management priorities to be established.

4.2 Statewide risk assessment

Once the regional floodplain management priorities are established, the next task is to set priorities at the state level. Again, a structured and standardised methodology is needed.

With a consistent methodology at the regional level, it will be possible to rank risks consistently at the state level and, in turn, set mitigation priorities.

VICSES's Community Emergency Risk Assessment (CERA) approach is also used in municipal assessments. The CERA tool provides a robust framework for a 'community of interest' to identify and prioritise the emergency risks that are likely to create most disruption to them. The assessment helps users identify and describe hazards, and assess impacts and consequences based on the vulnerability or exposure of the community or its functions.

Regional risk assessments will also identify priority areas where flash flooding, coastal storm surges and sea level rise pose significant risks. That information will help set priorities for flash flood warning services (Section 16.7).

This Strategy builds on lessons from the 2010 to 2012 floods and the history of flooding in Victoria. By providing a consistent statewide framework for the management of flood-related issues, it aims to inform consistent decisions and actions over the next 10 years.

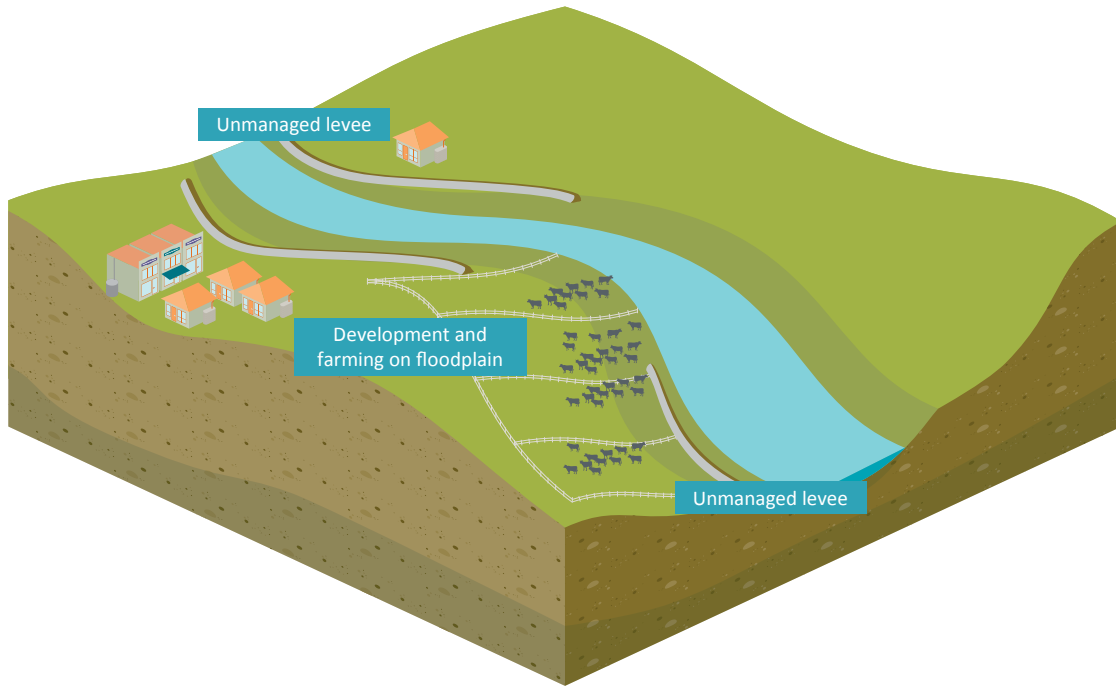
The Strategy's vision and objectives are described in Table 2, along with the expected outcomes.



Flooding on the Wimmera River at Campbell's Bridge, north of Stawell, 2011.
Source: Wimmera CMA

Figure 4: The evolution of flood risk management within the landscape

Historical floodplain management



Integrated floodplain management

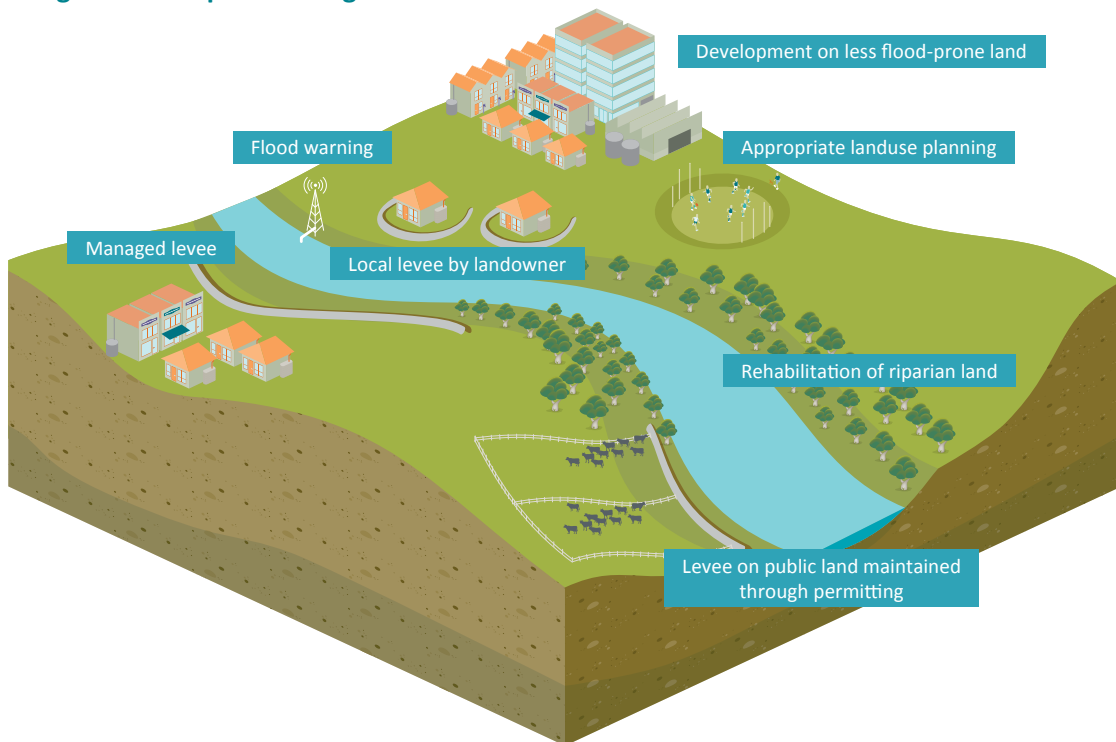


Table 2: Vision, objectives and outcomes of the Victorian Floodplain Management Strategy

VISION

Victorian communities, businesses and government agencies are aware of flooding and are actively taking measures to manage their flood risks to minimise the consequences to life, property, community wellbeing and the economy

OBJECTIVES

| | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p style="font-size: 2em; font-weight: bold; background-color: #008080; color: white; padding: 5px; display: inline-block;">1</p> <p style="text-align: left; padding-top: 10px;">Encouraging communities to act responsibility to manage their own risks</p> | <p style="font-size: 2em; font-weight: bold; background-color: #008080; color: white; padding: 5px; display: inline-block;">2</p> <p style="text-align: left; padding-top: 10px;">Reducing legacy issues to minimise exposure to future flood risk and consequences</p> | <p style="font-size: 2em; font-weight: bold; background-color: #008080; color: white; padding: 5px; display: inline-block;">3</p> <p style="text-align: left; padding-top: 10px;">Not making things worse</p> | <p style="font-size: 2em; font-weight: bold; background-color: #008080; color: white; padding: 5px; display: inline-block;">4</p> <p style="text-align: left; padding-top: 10px;">Providing support to emergency services by focusing on prevention activities</p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

OUTCOMES

- | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Resilient communities taking ownership of flood mitigation • Local knowledge Incorporated in all aspects of planning for and responding to floods • Local communities determining their own flood service needs, such as the need for mitigation infrastructure • Communities accessing and acting on high-quality flood risk information • Local communities actively involved in the flood studies being undertaken for their flood-prone towns • Communities enabled to maintain levees on Crown land. | <ul style="list-style-type: none"> • Insurance affordability driven by an informed market • Priority flood-prone areas in Victoria covered by high-quality flood maps • Flood mitigation infrastructure built and maintained where it is cost effective • Ongoing management and maintenance arrangements for flood mitigation infrastructure • Benefiting communities contributing to the capital costs, and the ongoing maintenance and management costs, of flood mitigation infrastructure • Individuals maintaining levees on Crown land under streamlined arrangements. | <ul style="list-style-type: none"> • Better understanding and communication of flood risk and application of land use planning tools • Integrated Water Management helping manage the long-term potential impacts of overland flooding in larger urban centres • The Victorian Flood Database providing ready access to high-quality flood data. | <ul style="list-style-type: none"> • The Flood Intelligence Platform providing emergency managers with high-quality decision support services • Community networks providing dependable flood information to emergency managers during floods • Total Flood Warning Systems providing flood-prone communities with services matched to their risks • Accountability and auditing regime to provide a better understanding of risks of failure • Emergency management planning underpinned by high-quality information. |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Table 3: Links to activities undertaken by other portfolios

| | Minister for Environment, Climate Change and Water | | | Minister for Planning | Minister for Emergency Services | Minister for Local Government |
|----------|----------------------------------------------------|----------------------------------------|-------------------------------------------|---------------------------------------------------------------------------|--------------------------------------|-------------------------------|
| STATE | Victorian Coastal Council | DELWP | DELWP | DELWP | VICSES | |
| | Coastal Strategy | Victorian Waterway Management Strategy | Victorian Floodplain Management Strategy | Policy and Victoria Planning Provisions (State Policy Planning Framework) | State Flood Emergency Plan | |
| REGIONAL | Coastal Boards | CMAs | CMAs & DELWP | Regional Growth Plans | Regional Flood Emergency Plans | |
| | Regional Coastal Plans | Regional Waterway Strategies | Regional Floodplain Management Strategies | Regional Growth Plans | Regional Flood Emergency Plans | |
| LOCAL | Local Councils | CMAs | CMAs and/or local councils | Local Councils | Local Councils | |
| | Coastal Management Plans | Works on Waterways permits | Local flood studies | Local Planning Policy Framework and local planning scheme controls | Municipal Emergency Management Plans | |

Figure 5: The VFMS within the context of the floodplain management strategic framework

