

# Regional Floodplain Management Strategy Mid-term Implementation Snapshot



## Acknowledgment of Country

The North Central Catchment Management Authority acknowledges Aboriginal Traditional Owners within the region, their rich culture and spiritual connection to Country. We also recognise and acknowledge the contribution and interest of Aboriginal people and organisations in land and natural resource management.



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# Regional Floodplain Management Strategy implementation - the first five years

**44%** of priority actions complete or in progress.

Close to **\$7** million investment directly linked to workplan actions has been secured in the region.

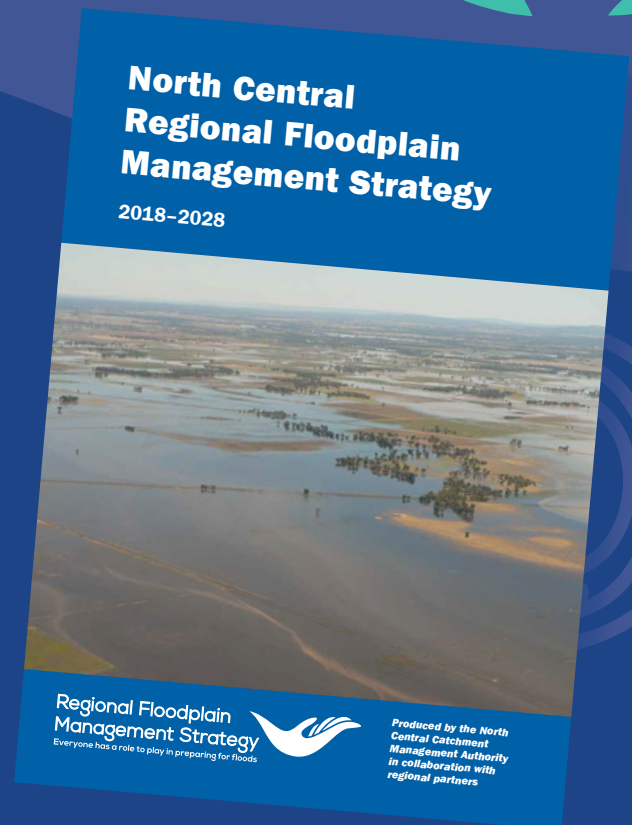
Planning Scheme amendments completed for **10** townships.

Significant investment secured for flood mitigation infrastructure design and construction including:

- Levee construction underway at Carisbrook, Castlemaine and Campbells Creek.
- Levee construction complete at Donald.

Rapid Flood Risk Assessments covering **21** locations complete.

Funding secured to deliver Rapid Flood Risk Assessments covering **11** locations and flood studies at **4** locations.



The next five years of implementation will be guided by the Regional Workplans

**141** actions:

- 73 High Priority
- 45 Medium Priority
- 23 Low Priority

# Background and introduction

The [North Central Regional Floodplain Management Strategy 2018-2028](#) (RFMS) was developed in 2018 to apply policies, actions, and accountabilities of the Victorian Floodplain Management Strategy at a regional and local scale over the ten-year life of the strategy.

Regional Floodplain Management Strategies were a priority action of the [Victorian Floodplain Management Strategy](#) which was developed in 2016.

The RFMS (strategy) was developed by the North Central Catchment Management Authority (CMA) in partnership with the region's fourteen Local Government Authorities (LGAs), water corporations, Victoria State Emergency Service (VICSES), Traditional Owners, the Department of Energy, Environment and Climate Action, Parks Victoria, Department of Transport and Planning, Bureau of Meteorology, and local communities.

The strategy provides a single, regional planning document for floodplain management for the North Central CMA region including to guide investment priorities.

Strategy implementation is at the mid-way point. This snapshot report offers a summary of progress including achievements and challenges during implementation.

An updated regional workplan is included as part of this report to guide future investment and delivery of regional priorities over the next five years of the strategy.

Our collective vision for floodplain management in the region is one where north central Victorian communities are aware of flooding and are actively taking measures to manage their flood risks to minimise the consequences to life, property, community wellbeing, the economy and the environment.

## The RFMS has four objectives:

- 1 Build resilient communities** – through collating and sharing flood risk information.
- 2 Reduce existing flood risk** – by implementing and maintaining flood mitigation infrastructure.
- 3 Avoid future risk** – through effective strategic and statutory land use planning and building controls.
- 4 Manage residual risk** – by improving and coordinating flood warning and response arrangements.

# Regional overview

## Summary points

- The North Central CMA region covers 13% of Victoria's land area.
- More than 780,000 hectares or over 25% of the region is subject to inundation from a 1% Annual Exceedance Probability (AEP) flood event.
- Climate change presents a significant risk for the region. Flooding is likely to be exacerbated by increased frequency and intensity of rainfall events.

The North Central CMA region covers 13% (about three million hectares) of Victoria. It comprises four inland river catchments, the Campaspe, Loddon, Avoca and Avon-Richardson. Each rise on the northern slopes of the Great Dividing Range and flow northward onto the wide, flat riverine plains of northern Victoria. The catchments form part of the Murray-Darling Basin and extend across fourteen LGAs and seven Traditional Owner groups.

The region's waterways encompass more than 100,000 km of streams and 1,600 wetlands within the region that are known for their significant economic, environmental, cultural, and social values. Flooding is a natural hazard in the region, flash flooding and riverine flooding can and has impacted many populated communities.

More than 780,000 hectares, or 25%, of rural and urban land across the region, under both public and private ownership, is subject to inundation by a 1% AEP (i.e., a 1-in-100-year average recurrence interval) flood.

## A Changing Climate

Impacts from climate change to weather patterns are a reality for the region.

This presents a significant bearing to flood risk and the consideration of climate change in planning and flood response is no longer negotiable. Since the development of the strategy, climate change research and scientific evidence about its current and future impacts is more definitive. Recent updates to [Australian Rainfall and Runoff, 2019](#) reflect this.

Flood risks in the region are likely to be exacerbated by increased frequency and intensity of rainfall events. The latest scientific information should now be consistently and transparently applied to all new and updated flood studies and flood modelling and subsequently through planning scheme amendments. The updated workplan reflects this, with several actions to update existing flood studies with climate change scenario modelling to inform future flood planning and response across the region.



# Strategy implementation

The strategy and its regional workplan were developed and are implemented in collaboration with local communities and agencies with flood emergency management functions. The regional workplan identifies actions for implementation. It provides guidance and direction for all agencies with floodplain management functions, including local councils, VICSES and CMAs, to align priorities and maximise community benefits with available funding.



## Funding

Significant funding, in the order of \$6.8 million, directly linked to workplan actions was secured in the region in the first five years of the strategy implementation.

This includes:

- More than \$3 million to support projects linked to priority actions in the workplan over the past five years through the Risk and Resilience Grants Program.
- More than \$3 million of National Flood Mitigation Infrastructure Program funding to support large flood mitigation projects at Carisbrook and Castlemaine and Campbells Creek.

Significant funding has also been obtained through the federal government's National Flood Mitigation Infrastructure Program for large mitigation projects including the Carisbrook township western levee and the Castlemaine and Campbells Creek levees.

Opportunistic funding has provided additional resources to deliver projects that directly link to priority actions in the regional workplan including the federally funded Central Goldfields Flood Mapping Project through the Preparing Australian Communities Grant.

Lead agencies in the North Central CMA region have been proactive and successful in securing funding to deliver priority actions outlined in the regional workplan. This has supported implementation with 44% or 86 of the initial priority actions complete or with funding secured and in progress.

The delivery of actions is not guaranteed and is dependent on available funding, resources, and the lead agency's ability to deliver. Funding to implement actions outlined in the workplan is typically secured through local or state and federal government investment through grants or other funding opportunities when they arise.

To date, the main source of investment has been the Risk and Resilience Grant Scheme which is administered by Emergency Management Victoria and is funded by one third contribution between federal and state governments and the lead agency.



# The spring 2022 flood event and the RFMS

Large, widespread, and sustained flooding occurred across the North Central CMA region from mid-October 2022. These floods were catchment wide, impacting the Loddon, Avoca, Avon Richardson, and Campaspe catchments as well as the Murray River. Flash flooding impacted towns in the upper catchments and riverine flooding impacted many townships in the region and large areas of rural land along these floodplains.

For some areas, the floods were the largest on record with devastating impacts for communities such as Rochester. Only ten years prior Rochester was impacted by then record-breaking floods. The impacts of climate change are now very real for the region and must be considered in all flood planning and response.

The spring 2022 floods highlighted the importance of strategy implementation including recognition that work undertaken by various stakeholders between floods makes a difference to flood preparedness and response.

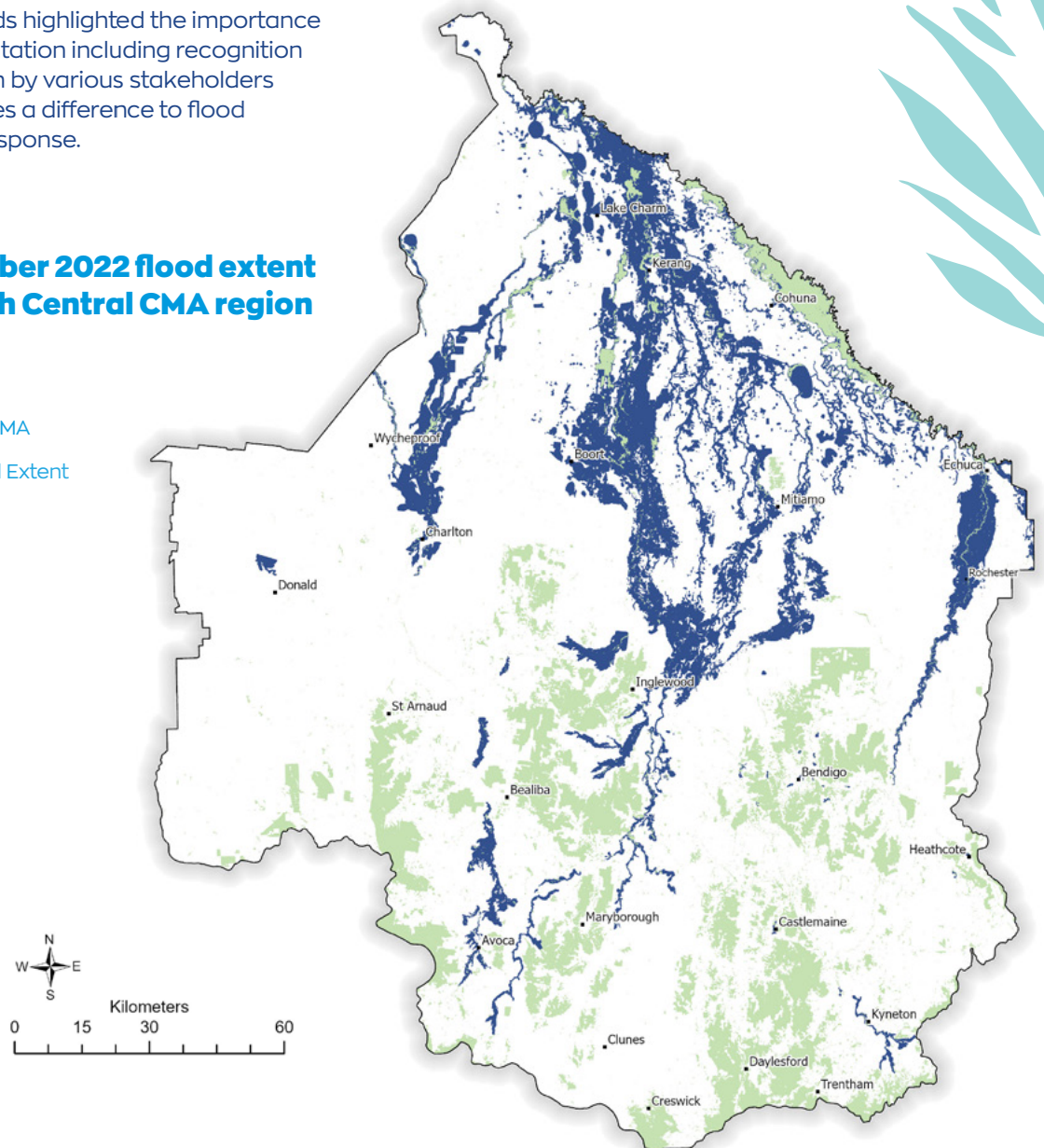
Overall communities within the North Central CMA region were better positioned to respond to the floods of spring 2022 when compared with flooding of 2010-2011. This can be attributed to investment in flood studies, mitigation planning and infrastructure across the region.

Recent flooding has highlighted the importance of continuing the critical work that helps our region and its communities respond to and plan for the next flood event.

The mid-term review includes key learnings from the recent floods that have helped refresh priorities for the region.

## Indicative October 2022 flood extent across the North Central CMA region

- Main Towns
- North Central CMA
- Indicative Flood Extent





## Implementation challenges

Implementation of the strategy has been challenging for lead agencies particularly local government. Local government bodies have a limited rate base and ability to raise revenue to invest in actions which will deliver new flood studies, new flood mitigation infrastructure and/or new community services.

The main source of funding to support the delivery of actions, the Risk and Resilience Grants, requires a one third co-contribution by the lead agency. For local government, and other lead agencies, providing this one third contribution to support the delivery of projects has been challenging therefore some high priority actions have not progressed.

In addition, there have been significant staff shortages in various skill sets such as planning, building, and engineering in recent years. This has further reduced the capacity of local government bodies to deliver extra projects while undertaking business-as-usual activities within existing resource constraints.

Despite this, collaboration between lead and supporting agencies has helped overcome some constraints. For example, North Central CMA in its implementation role has supported a number of LGAs to overcome resourcing and funding challenges by assisting with the preparation of applications, project scopes and the project management of some projects including flood mapping projects.

It is important to note that LGAs resourcing and funding challenges could be compounded over the next five years of the strategy implementation. This is partly due to many of the region's municipalities being severely impacted by recent flooding and now being in a flood recovery stage. It could be difficult for lead agencies to deliver actions in the strategy and the need for further innovation and efficiency will be required.

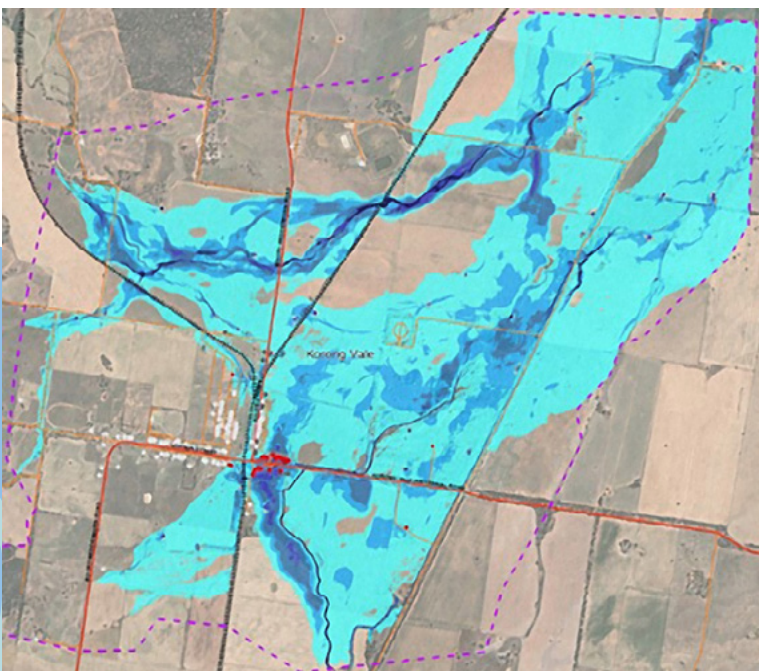
# A more efficient approach to flood mapping projects through Rapid Flood Risk Projects

In 2020 North Central CMA delivered the Rapid Flood Risk Assessment project which was co-funded by the federal and state governments through the Natural Disaster Resilience Grants Scheme (NDRGS). This project enabled the development of flood mapping and the assessment of the flood risk for 21 townships across eight municipalities in the region. These townships were identified through extensive consultation with local councils, VICSES, relevant agencies and local communities through the development of the Regional Floodplain Management Strategy. Although these townships were generally recognised as having some level of flood risk, considered independently they would have been unlikely to warrant a detailed flood study. Therefore, the Rapid Flood Risk Assessment project was proposed as an efficient and cost-effective approach for producing robust flood information for multiple geographical locations within the typical time and budget of a single detailed study.

This project addressed approximately 25% of the flood study actions identified in the regional workplan. Furthermore, the information is also essential to inform land use and development planning, improve emergency management planning and response through the incorporation of flood intelligence, and prioritise townships which warrant further detailed mitigation studies to address the identified flood risk.

Due to the success of this project, a second Rapid Flood Risk Assessment project was funded in 2022 through the Risk and Resilience Grants Program, covering eight townships and three larger rural areas.

Figure: **An example of the output mapping from a Rapid Flood Risk Assessment at Korong Vale.**





# Achievements

## Summary points

- The regional workplan identified and prioritised 194 actions.
- 53 actions complete.
- 33 actions currently in progress with funding secured.
- In summary, 44% or 86 priority actions are complete or in progress.

| Regional priority   | Key achievements   | Actions complete |
|---|--|------------------|
| <b>Priority One:</b><br>Update planning controls to reflect the best available information.   | Flood related Planning Scheme Amendments complete: <ul style="list-style-type: none"> <li>- Carisbrook and Dunolly- Central Goldfields Shire</li> <li>- Creswick and Clunes - Hepburn Shire Council</li> <li>- Castlemaine, Campbells Creek, and Chewton - Mount Alexander Shire</li> <li>- Charlton and Donald - Buloke Shire</li> <li>- Heathcote - City of Greater Bendigo</li> </ul>   | 7                |
| <b>Priority Two:</b><br>Construct new flood mitigation infrastructure, resolving ownership and maintenance accountabilities, and improving floodplain function. | Complete: <ul style="list-style-type: none"> <li>- Quambatook flood mitigation levee</li> </ul> In progress: <ul style="list-style-type: none"> <li>- Carisbrook flood mitigation works</li> <li>- Castlemaine and Campbells Creek flood mitigation works</li> <li>- Koondrook levee design</li> <li>- Detailed assessment and investigation Epsom-Huntly levees</li> <li>- St Arnaud Flood Study detailed design of recommended mitigation actions</li> </ul> | 10               |
| <b>Priority Three:</b><br>Address gaps in flood knowledge through flood mapping projects.   | Complete: <ul style="list-style-type: none"> <li>- Rapid Flood Risk Assessment project covering 21 locations.</li> <li>- Upper and lower Avoca flood mapping</li> </ul> In progress: <ul style="list-style-type: none"> <li>- Echuca, Moama Torrumbarry Flood Study</li> <li>- Harcourt Flood Study</li> <li>- Korong Vale Flood Study</li> <li>- St Arnaud Flood Study</li> <li>- Rapid Flood Risk Assessment project covering 11 locations</li> </ul>        | 23               |
| <b>Priority Four:</b><br>Improve preparedness for flood emergencies.  | Complete: <ul style="list-style-type: none"> <li>- Automated Gauge for Donald</li> <li>- Updated flood prediction service for Charlton</li> <li>- Installation of gauge board for Creswick</li> <li>- Resilient Rochester</li> </ul>   | 12               |
| <b>Priority Five:</b><br>Educate agencies and individuals on the roles and responsibilities in floodplain management.   | Business as usual <ul style="list-style-type: none"> <li>- Delivery of communication plan and educational and/or promotional collateral regarding floodplain and waterway management policies, accountabilities, and actions.</li> </ul>   | 1                |
| <b>Priority Six:</b><br>Incorporate Traditional Owner knowledge into floodplain management activities.  | This priority remains a focus: <ul style="list-style-type: none"> <li>- A grant application submitted for a project in Gannawarra Shire, however the submission was unsuccessful in securing funding.</li> </ul>   | 0                |
| <b>Priority Seven:</b><br>Create a flood-resilient transport network.   | This priority remains a focus: <ul style="list-style-type: none"> <li>- A grant application submitted for a project identifying key transport routes however the submission was unsuccessful in securing funding.</li> </ul>   | 0                |

# Improvements to flood warning and mitigation

Levees and other mitigation work constructed since the 2010-11 flood events mitigated flooding in October 2022 for several townships including Charlton, Quambatook, and Donald.

The flood at Charlton was slightly greater in magnitude than the September 2010 flood event, which resulted in approximately 70-80 properties experiencing over floor inundation.

However, the flood impacts were far less during the October 2022 flood event, with less than five properties inundated over floor. This was due to improvements undertaken by Buloke Shire Council including drainage upgrades, construction of a floodway and a low-level levee bank as well as alterations to impediments in the floodplain.

Photo: Members of the project steering committee for the Donald Flood Management Plan walking along a completed section of the Donald Township Levee, 2017.

# Updated regional workplan

## Summary points

- A review of the regional workplan has resulted in 141 actions prioritised for completion over the next five years.
- The flood events of spring 2022 have identified new priorities.
- Several actions have been consolidated to improve efficiency.
- Several existing flood studies are a decade old and require updates to include climate change scenario modelling and modelling larger magnitude flood events.

At the half-way mark of the 10-year strategy, a review of the workplan was undertaken with lead agencies. The review provided an opportunity for lead agencies to review their actions in the workplan, provide updates and reprioritise to ensure actions are appropriate for the next five years of the strategy. Recent flood events, such as spring 2022, have highlighted new priorities, that have also been included in the updated workplan through this review process.

Priorities have shifted in some instances and several actions are consolidated or removed as they are no longer a priority.

There are now 141 total actions in the regional workplan, each aligning with regional priorities and objectives of the RFMS. Each action is prioritised, has a lead agency, and estimated costs (high, medium, and low) included.

There are 52 new actions identified in the regional workplan including:

- The consolidation of previous actions into projects that are better defined, targeted and/or larger in scale to improve efficiency in delivery and project management.
- New flood studies and updates to existing flood studies.
- Next step or follow on projects resulting from the completion of initial scoping and design or flood studies i.e., mitigation works/construction, planning scheme amendments or more detailed flood studies.

Delivery of all actions over the next five years is dependent on available funding, resources, and the lead agency's ability to deliver.



Photo: **VICSES and community volunteers working together during the Spring 2022 floods.** Photo Credit: **VICSES – Castlemaine Unit**

## Summary of total Regional Workplan Actions for the next five years

| Regional priority  | Total actions                  | In progress | Not yet started |
|--|--------------------------------|-------------|-----------------|
| Update planning controls to reflect the best available information   | 30                             | 4           | 26              |
| Construct new flood mitigation infrastructure, resolving ownership and maintenance accountabilities, and improving floodplain function | 37                             | 9           | 28              |
| Address gaps in flood knowledge through flood mapping projects   | 41                             | 18          | 23              |
| Improve preparedness for flood emergencies   | 21                             | 2           | 19              |
| Educate agencies and individuals on the roles and responsibilities in floodplain management  | This is now business as usual. |             |                 |
| Incorporate Traditional Owner knowledge into floodplain management activities  | 2                              | 0           | 2               |
| Create a flood-resilient transport system  | 10                             | 0           | 10              |
| <b>Total</b>   | <b>141</b>                     | <b>33</b>   | <b>108</b>      |



# Addressing gaps in flood knowledge through flood mapping projects

Flood studies completed since 2011 have provided valuable mapping and intelligence for dozens of towns in our region. This allowed for a much better prepared and effective response in supporting the lead agency for flooding, the Victorian State Emergency Service (VICSES) during the recent flood event. Further studies have been included in the workplan review to extend the available information, review, and update existing studies, include climate change scenario modelling, and consider recent flooding.

An update to the Rochester Flood Management Plan, 2013 is a new, high priority action in the workplan in response to recent record-breaking floods.

The Rochester community was devastated by the October 2022 flood event; despite improved flood warnings, education and information following the 2011 flood event and the communities' best efforts to be prepared in the days leading up to the floods.

The flood was substantially larger than the previous record-breaking flood of January 2011. It exceeded all previously modelled floods including the 0.5% Annual Exceedance Probability (AEP) or 1 in 200-year Average Recurrence Interval (ARI) flood by 300 mm at the Rochester Town Gauge. Initial predictions indicate this flood was far greater than the 1 in 500-year ARI flood event.

Prior to this recent flood, Rochester experienced significant flooding from the Campaspe River just over a decade earlier in January 2011. The January 2011 flood was the largest recorded flood at the time, impacting 80% of the town and was in the order of a 1% AEP flood or 1 in 100-year ARI flood event.




There is now an urgent need to better understand the flood risk for Rochester for the full range of flood events, modelling must also include climate change scenarios and updated flood mapping to inform flood planning and response. It will also be vital to revisit potential mitigation options for the town. This is now included as a new, high priority action in the regional workplan.









Photo: **A flood marker in Rochester, highlights the size of the October 2022 event compared with previous record-breaking floods.**

# Appendix 1: Regional workplan

Table 1: **Regional workplan priorities and actions for the North Central Regional Floodplain Management Strategy**

| Status^ Key  |  |
|--|--|
|  Existing priority, not yet started |  Existing priority, in progress |
|  No longer a priority               |  Completed                      |
|  New priority, not yet started      |  |

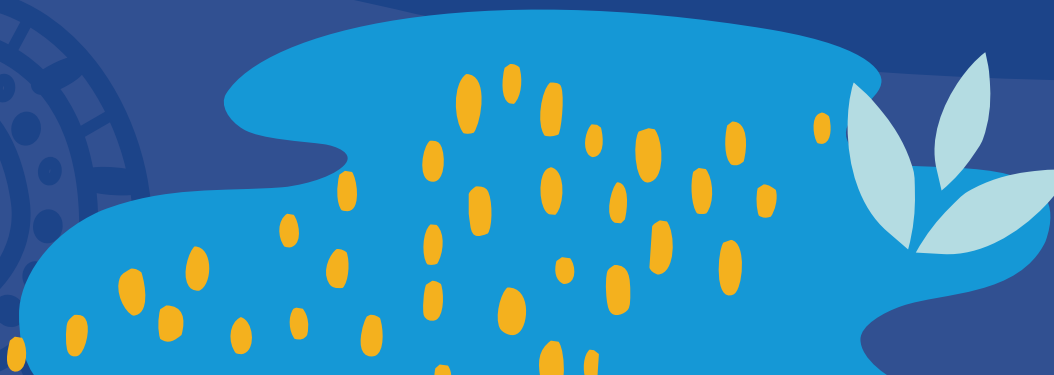
| Regional Priority 1: |          |                   |         | Update planning controls to reflect the best available information |                   |   |   |                     |          |   |
|----------------------|----------|-------------------|---------|--|-------------------|---|---|---------------------|----------|---|
| Unique ID            | Region   | Regional Priority | RFMS ID | Lead Agency  | Supporting Agency | Action  | Cost*   | Expected completion | Priority | Status^   |
| 101                  | Regional | P1                | R.101   | North Central CMA  | LGAs, DEECA       | Identify and coordinate a region-wide collaborative approach to updating planning schemes.                                      | Medium  | 1-2 years           | High     |    |
| 102                  | Ballarat | P1                | CoB.101 | City of Ballarat   | North Central CMA | Extend the Environmental Significance Overlay to all waterways within the North Central CMA boundaries of the City of Ballarat. | Low   | 4+ years            | Low      |    |
| 103                  | Bendigo  | P1                | CGB.101 | City of Greater Bendigo  | North Central CMA | Update planning controls for Heathcote.   |  |                     |          |   |
| 104                  | Bendigo  | P1                | CGB.102 | City of Greater Bendigo  | North Central CMA | Update planning controls for Marong.  | Low   | 1-2 years           | High     |  |
| 105                  | Bendigo  | P1                | CGB.103 | City of Greater Bendigo  | North Central CMA | Update planning controls from rural flood studies (e.g., Axe Creek, Campaspe River, Bullock Creek).                             | Low   | 1-2 years           | High     |  |
| 106                  | Bendigo  | P1                | CGB.104 | City of Greater Bendigo  | North Central CMA | Update planning controls after flood mitigation works have been implemented.  | Low   | 4+ years            | Low      |  |
| 107                  | Buloke   | P1                | B.101   | Buloke Shire   | North Central CMA | Update planning controls for Charlton.  |  |                     |          |   |

| Regional Priority 1: |                    |                   |         | Update planning controls to reflect the best available information |                   |  |        |                     |          |         |
|----------------------|--------------------|-------------------|---------|--|-------------------|--|--------|---------------------|----------|---------|
| Unique ID            | Region             | Regional Priority | RFMS ID | Lead Agency  | Supporting Agency | Action   | Cost*  | Expected completion | Priority | Status^ |
| 108                  | Buloke             | P1                | B.102   | Buloke Shire   | North Central CMA | Update planning controls for Donald.   |        |                     |          | ✓       |
| 149                  | Buloke             | P1                | B.106   | Buloke Shire   | North Central CMA | Update flood related planning controls for Buloke Shire upon completion of flood studies.                        | Low    | 3-4 years           | Medium   | 🔄       |
| 112                  | Campaspe           | P1                | C.101   | Campaspe Shire   | North Central CMA | Update planning controls for Rochester.  | Low    | 1-2 years           | High     | ▶       |
| 114                  | Campaspe           | P1                | C.103   | Campaspe Shire   | North Central CMA | Review and update existing planning controls and schedules for Campaspe Shire.                                   | Low    | 1-2 years           | Medium   | ✗       |
| 115                  | Campaspe           | P1                | C.104   | Campaspe Shire   | North Central CMA | Update planning controls for Echuca.   | Low    | 1-2 years           | Medium   | ✗       |
| 116                  | Campaspe           | P1                | C.105   | Campaspe Shire   | North Central CMA | Update planning controls from rural flood studies (e.g. Mount Hope Creek, Campaspe River, Mount Pleasant Creek). | Low    | 4+ years            | Low      | ✗       |
| 117                  | Central Goldfields | P1                | CG.101  | Central Goldfields Shire   | North Central CMA | Update planning controls for Maryborough.  | Low    | 1-2 years           | High     | ✗       |
| 118                  | Central Goldfields | P1                | CG.102  | Central Goldfields Shire   | North Central CMA | Update planning controls for Carisbrook.   |        |                     |          | ✓       |
| 119                  | Central Goldfields | P1                | CG.103  | Central Goldfields Shire   | North Central CMA | Update planning controls for Dunolly.  |        |                     |          | ✓       |
| 120                  | Central Goldfields | P1                | CG.104  | Central Goldfields Shire   | North Central CMA | Update planning controls from rural flood studies (e.g. Bealiba, Timor-Bowenvale).                               | Low    | 3-4 years           | Medium   | ✗       |
| 150                  | Gannawarra         | P1                | G.105   | Gannawarra Shire   | North Central CMA | Undertake a Shire Wide Planning Scheme Amendment.  | Medium | 3-4 years           | Medium   | 🔄       |

| Regional Priority 1: |                    |                   |         | Update planning controls to reflect the best available information |                   |   |       |                     |          |         |
|----------------------|--------------------|-------------------|---------|--|-------------------|---|-------|---------------------|----------|---------|
| Unique ID            | Region             | Regional Priority | RFMS ID | Lead Agency  | Supporting Agency | Action  | Cost* | Expected completion | Priority | Status^ |
| 125                  | Hepburn            | P1                | H.101   | Hepburn Shire  | North Central CMA | Update planning controls for Creswick and Clunes.   | ✓     |                     |          |         |
| 126                  | Hepburn            | P1                | H.102   | Hepburn Shire  | North Central CMA | Update planning controls for Trentham.  | Low   | 3-4 years           | Medium   | ✗       |
| 148                  | Hepburn            | P1                | H.103   | Hepburn Shire  | North Central CMA | Update planning controls for Glenlyon.  | Low   | 1-2 years           | High     | 🔄       |
| 151                  | Loddon             | P1                | L.106   | Loddon Shire   | North Central CMA | Undertake a Shire Wide Planning Scheme Amendment.   | Low   | 1-2 years           | High     | 🔄       |
| 132                  | Macedon Ranges     | P1                | MR.101  | Macedon Ranges Shire   | North Central CMA | Update planning controls for Woodend.   | Low   | 1-2 years           | High     | ✗       |
| 133                  | Mount Alexander    | P1                | MAS.101 | Mount Alexander Shire  | North Central CMA | Update planning controls for Newstead.  | Low   | 1-2 years           | High     | ✗       |
| 134                  | Mount Alexander    | P1                | MAS.102 | Mount Alexander Shire  | North Central CMA | Update planning controls for Harcourt.  | Low   | 1-2 years           | High     | ✗       |
| 135                  | Mount Alexander    | P1                | MAS.103 | Mount Alexander Shire  | North Central CMA | Update planning controls from rural flood studies (e.g., Campbells Creek (rural) and Muckleford Creek). | Low   | 3-4 years           | Medium   | ✗       |
| 136                  | Mount Alexander    | P1                | MAS.104 | Mount Alexander Shire  | North Central CMA | Update planning controls for Maldon.  | Low   | 4+ years            | Low      | ✗       |
| 137                  | Mount Alexander    | P1                | MAS.105 | Mount Alexander Shire  | North Central CMA | Update planning controls for Castlemaine, Campbells Creek, and Chewton.                                 | ✓     |                     |          |         |
| 138                  | Northern Grampians | P1                | NG.101  | Northern Grampians Shire   | North Central CMA | Update planning controls for St Arnaud.   | Low   | 1-2 years           | High     | ✗       |
| 139                  | Northern Grampians | P1                | NG.102  | Northern Grampians Shire   | North Central CMA | Update planning controls for Richardson River and Avon River catchments.                                | Low   | 4+ years            | Low      | ✗       |






| Regional Priority 1: |                    |                   |         | Update planning controls to reflect the best available information |                   |   |       |                     |          |         |
|----------------------|--------------------|-------------------|---------|--|-------------------|---|-------|---------------------|----------|---------|
| Unique ID            | Region             | Regional Priority | RFMS ID | Lead Agency  | Supporting Agency | Action  | Cost* | Expected completion | Priority | Status^ |
| 140                  | Northern Grampians | P1                | NG.103  | Northern Grampians Shire   | North Central CMA | Update planning controls for the Avoca River.   | Low   | 3-4 years           | Medium   | ✘       |
| 146                  | Northern Grampians | P1                | NG.104  | Northern Grampians Shire   | North Central CMA | Update planning controls for Marnoo.  | Low   | 1-2 years           | High     | 🔄       |
| 141                  | Pyrenees           | P1                | P.101   | Pyrenees Shire   | North Central CMA | Update planning controls for Avoca, Amphitheatre and Natte Yallock.                               | Low   | 1-2 years           | High     | ▶       |
| 142                  | Pyrenees           | P1                | P.102   | Pyrenees Shire   | North Central CMA | Update planning controls for Lexton.  | Low   | 1-2 years           | High     | ✘       |
| 143                  | Pyrenees           | P1                | P.103   | Pyrenees Shire   | North Central CMA | Update planning controls for Waubra.  | Low   | 4+ years            | Low      | ✘       |
| 144                  | Swan Hill          | P1                | SH.101  | Swan Hill Rural City   | North Central CMA | Update planning controls for Tyntynder Flats, Swan Hill, Pental Island and Woorinen.              | Low   | 1-2 years           | High     | ✘       |
| 145                  | Swan Hill          | P1                | SH.102  | Swan Hill Rural City   | North Central CMA | Update planning controls for Lower Loddon and Avoca floodplains, based on regional flood mapping. | Low   | 1-2 years           | High     | ✘       |




Regional Priority 2:

Construct new flood mitigation infrastructure; resolving ownership and maintenance accountabilities; and improving floodplain function

| Unique ID | Region   | Regional Priority | RFMS ID | Lead Agency             | Supporting Agency                   | Action  | Cost*  | Expected completion | Priority | Status^   |
|-----------|----------|-------------------|---------|-------------------------|-------------------------------------|---|--------|---------------------|----------|---|
| 203       | Regional | P2                | R.203   | North Central CMA       | LGAs                                | <p>Investigate the current situation and potential future options for improved floodplain function in identified areas, including but not limited to:</p> <ul style="list-style-type: none"> <li>The lakes system from Kerang to the Little Murray River outfall (including investigation of 6/7 Channel, the Washpen Creek and levees and the Sheepwash Creek and levees).</li> </ul> <p>Investigate installation of regulating structure on Sheepwash Creek):</p> <ul style="list-style-type: none"> <li>Lake Meran and surrounds, including outlet structure an floodway.</li> <li>The Avoca River downstream of Quambatook, particularly Hogan's Weir and Farley's Weir, diverting flows to Sandhill Lake, Lake Lookout and the Back Creek, and issues with flooding over the Kerang-Quambatook Road.</li> <li>Additional sites identified in consultation with the community.</li> </ul> | Medium | 1-2 years           | High     | ✘   |
| 244       | Regional | P2                | R.204   | North Central CMA       | LGAs                                | Investigate drainage course declarations in areas of high residual water risk.  | Medium | 3-4 years           | Medium   |    |
| 245       | Regional | P2                | R.205   | North Central CMA       | LGAs                                | Identify and investigate ring levees for houses where appropriate.  | Medium | 3-4 years           | Medium   |  |
| 250       | Regional | P2                | R.206   | North Central CMA       | LGAs & VICSES                       | Deliver Levees: Flood readiness and response strategies project.  | High   | 1-2 years           | High     |  |
| 204       | Bendigo  | P2                | CGB.201 | City of Greater Bendigo | North Central CMA, DEECA, Parks Vic | Formalise management arrangements for Bendigo Creek Levee Stage One: Undertake flood modelling.   | ✓      |                     |          |   |
| 251       | Bendigo  | P2                | CGB.204 | City of Greater Bendigo | North Central CMA, DEECA, Parks Vic | Formalise management arrangements Bendigo Creek Levee Stage Two: Detailed design.   | Low    | 1-2 years           | High     | ▶   |

| Regional Priority 2: |          |                   |         | Construct new flood mitigation infrastructure; resolving ownership and maintenance accountabilities; and improving floodplain function. |  |  |        |                     |          |         |
|----------------------|----------|-------------------|---------|---|--|--|--------|---------------------|----------|---------|
| Unique ID            | Region   | Regional Priority | RFMS ID | Lead Agency   | Supporting Agency                              | Action   | Cost*  | Expected completion | Priority | Status^ |
| 252                  | Bendigo  | P2                | CGB.205 | City of Greater Bendigo   | North Central CMA, DEECA, Parks Vic            | Formalise management arrangements Bendigo Creek Levee Stage Three: Construction.   | High   | 3-4 years           | Medium   |         |
| 241                  | Bendigo  | P2                | CGB.203 | City of Greater Bendigo   | North Central CMA, DEECA, Parks Vic, Vic Track | Complete detailed design and construction of Racecourse Creek Levee and formalise ongoing management and maintenance arrangements.   | High   | 1-2 years           | High     |         |
| 205                  | Bendigo  | P2                | CGB.202 | City of Greater Bendigo   | North Central CMA, DEECA, Parks Vic            | Formalise management arrangements for the constructed (lined) section of Bendigo Creek.  | ✓      |                     |          |         |
| 206                  | Buloke   | P2                | B.201   | Buloke Shire  | North Central CMA                              | Determine community support and financial viability for constructing Charlton flood mitigation levee treatments and associated works (this may include improvements to town drainage to ensure the integrity of the levees). | ✓      |                     |          |         |
| 239                  | Buloke   | P2                | B.203   | Buloke Shire  | North Central CMA                              | Investigate and design works to reduce the risk and frequency of flooding in Charlton including reinstating natural flow paths to the east of Charlton.  | Medium | 1-2 years           | High     |         |
| 240                  | Buloke   | P2                | B.204   | Buloke Shire  | North Central CMA                              | Construct community supported works to reduce the risk/frequency of flooding in Charlton.  | High   | 3-4 years           | Medium   |         |
| 242                  | Buloke   | P2                | B.205   | Buloke Shire  | North Central CMA                              | Develop a waterway management plan for the Lower Avoca River.  | Low    | 3-4 years           | Medium   |         |
| 247                  | Buloke   | P2                | B.206   | Buloke Shire  | North Central CMA                              | Upgrade Donald Levee to include demountable sections on Donald Levee to replace the existing earthen fill sections.  | High   | 1-2 years           | High     |         |
| 208                  | Campaspe | P2                | C.201   | North Central CMA   | Campaspe Shire, Gannawarra Shire               | Investigate the future of the Torrumbarry levees and define permitted works and ongoing management arrangements.   | Medium | 1-2 years           | High     |         |
| 209                  | Campaspe | P2                | C.202   | Campaspe Shire  | North Central CMA                              | Undertake feasibility assessment for identified flood mitigation works at Rochester as per Rochester Flood Management Plan 2013.   | ✓      |                     |          |         |

| Regional Priority 2: |                    |                   |         | Construct new flood mitigation infrastructure; resolving ownership and maintenance accountabilities; and improving floodplain function. |                          |  |                             |                     |          |         |
|----------------------|--------------------|-------------------|---------|---|--------------------------|--|-----------------------------|---------------------|----------|---------|
| Unique ID            | Region             | Regional Priority | RFMS ID | Lead Agency   | Supporting Agency        | Action   | Cost*                       | Expected completion | Priority | Status^ |
| 210                  | Campaspe           | P2                | C.203   | Campaspe Shire  | North Central CMA        | Invest in mobile pumps for flood water management.   | Medium                      | 1-2 years           | High     | ✘       |
| 211                  | Campaspe           | P2                | C.204   | Campaspe Shire  | North Central CMA        | Upgrade flood valves around Echuca and Rochester to an automated system.   | Medium                      | 1-2 years           | High     | ✘       |
| 213                  | Central Goldfields | P2                | CG.202  | Central Goldfields Shire  | North Central CMA        | Undertake ongoing management of drains through Carisbrook.   | ✓ and now business as usual |                     |          |         |
| 214                  | Central Goldfields | P2                | CG.203  | Central Goldfields Shire  | North Central CMA, DEECA | Develop an agreed waterway management plan for the urban area of Carisbrook.   | ✓                           |                     |          |         |
| 215                  | Central Goldfields | P2                | CG.204  | Central Goldfields Shire  | North Central CMA        | Complete implementation of flood mitigation works at Carisbrook. This includes: (1) western floodway and levee to divert overland flows to the west of the township, (2) a smaller levee near Williams Road to divert additional overland flow into McCallums Creek, and (3) a non-return valve on culverts under Landrigan Rd near Camp St. | High                        | 1-2 years           | High     | ▶       |
| 216                  | Central Goldfields | P2                | CG.205  | Central Goldfields Shire  | North Central CMA        | Design and construct priority flood mitigation works as per Dunolly Flood Investigation 2014.  | ✓                           |                     |          |         |
| 217                  | Gannawarra         | P2                | G.201   | Gannawarra Shire  | North Central CMA        | Design and construct priority flood mitigation works as outlined in the Quambatook Flood Management Plan 2013.   | ✓                           |                     |          |         |
| 219                  | Gannawarra         | P2                | G.203   | North Central CMA   | Gannawarra Shire         | Investigate community's desire and willingness for ongoing management of levees along the Murray River, Pyramid Creek, Gunbower Forest and Loddon River. Implement ongoing management arrangements.  | Medium                      | 3-4 years           | Medium   | ✘       |
| 243                  | Gannawarra         | P2                | G.204   | Gannawarra Shire  | North Central CMA        | Complete design and construction of Koondrook levee upgrade.   | High                        | 1-2 years           | High     | 🔄       |
| 246                  | Gannawarra         | P2                | G.205   | Gannawarra Shire  | North Central CMA        | Investigate mitigation options for Golf Links Estate Cohuna.   | Medium                      | 3-4 years           | Medium   | 🔄       |

| Regional Priority 2: |            |                   |         | Construct new flood mitigation infrastructure; resolving ownership and maintenance accountabilities; and improving floodplain function. |                   |  |        |                       |          |   |
|----------------------|------------|-------------------|---------|---|-------------------|--|--------|-----------------------|----------|---|
| Unique ID            | Region     | Regional Priority | RFMS ID | Lead Agency   | Supporting Agency | Action   | Cost*  | Expected completion   | Priority | Status^   |
| 248                  | Gannawarra | P2                | G.206   | Gannawarra Shire  | DTP               | Undertake an investigation into the potential flood mitigation benefit of a low level weir on the Loddon River to divert water around Kerang via a third bridge over the Murray Valley Highway.  | Medium | 3-4 years             | Medium   |  |
| 220                  | Hepburn    | P2                | H.201   | Hepburn Shire   | North Central CMA | Undertake further investigations into the local drainage issues and potential stormwater mitigation works for Clunes.  | Low    | 3-4 years             | Medium   | ✘   |
| 221                  | Hepburn    | P2                | H.202   | Hepburn Shire   | North Central CMA | Undertake a detailed investigation into drainage issues in Creswick.   | Medium | 3-4 years             | Medium   | ✘   |
| 222                  | Hepburn    | P2                | H.203   | Hepburn Shire   | North Central CMA | Undertake ongoing management of drains through Creswick and Clunes.  | Low    | Ongoing - as required | High     | ✘   |
| 223                  | Hepburn    | P2                | H.204   | Hepburn Shire   | North Central CMA | Review of Clunes Flood Mitigation and Urban Drainage Plan. Further investigate and provide opportunity for the community to comment on levee options.  | Medium | 1-2 years             | High     | ✘   |
| 224                  | Hepburn    | P2                | H.205   | Hepburn Shire   | North Central CMA | Develop a levee management system (maintenance plan) for the Creswick levees and associated drainage infrastructure.   | Low    | 1-2 years             | High     | ▶   |
| 225                  | Loddon     | P2                | L.201   | North Central CMA   | Loddon Shire      | Review Serpentine to Boort floodplain Management Plan, including an extension of the plan to include floodways and road crossings in the Yando area, and to include a review of the impacts of changes to the Flume Creek bridge on Boort-Pyramid Road (near Durham Ox). | Medium | 4+ years              | Low      | ✘   |
| 226                  | Loddon     | P2                | L.202   | Loddon Shire  | North Central CMA | Investigate protection of old Inglewood Reservoir.   | ✓      |                       |          |   |

**Regional Priority 2:**

**Construct new flood mitigation infrastructure; resolving ownership and maintenance accountabilities; and improving floodplain function.**









| Unique ID | Region             | Regional Priority | RFMS ID | Lead Agency              | Supporting Agency | Action   | Cost*  | Expected completion | Priority | Status^ |
|-----------|--------------------|-------------------|---------|--------------------------|-------------------|--|--------|---------------------|----------|---------|
| 227       | Loddon             | P2                | L.203   | Loddon Shire             | North Central CMA | Construct mitigation works at Pyramid Hill.  | High   | 3-4 years           | Medium   | ▶       |
| 228       | Loddon             | P2                | L.204   | Loddon Shire             | North Central CMA | Construct mitigation works at Serpentine.  | High   | 4+ years            | Low      | ✘       |
| 229       | Loddon             | P2                | L.205   | Loddon Shire             | North Central CMA | Construct mitigation works at Boort.   | High   | 1-2 years           | High     | ▶       |
| 249       | Loddon             | P2                | L.206   | Loddon Shire             | North Central CMA | Implement recommended mitigation options from Korong Vale Flood Study.   | High   | 3-4 years           | Medium   | 🔄       |
| 230       | Macedon Ranges     | P2                | MR.201  | Macedon Ranges Shire     | North Central CMA | Develop a levee management system (maintenance plan) for the Woodend levee.  | Low    | 1-2 years           | High     | ✘       |
| 231       | Macedon Ranges     | P2                | MR.202  | Macedon Ranges Shire     | North Central CMA | Complete construction of Woodend Detention dam.  | ✓      |                     |          |         |
| 232       | Mount Alexander    | P2                | MAS.201 | Mount Alexander Shire    | North Central CMA | Implement recommended mitigation options of Castlemaine, Campbells Creek and Chewton flood Management Plan (levees and minor creek improvement works). | High   | 1-2 years           | High     | ▶       |
| 233       | Mount Alexander    | P2                | MAS.202 | Mount Alexander Shire    | North Central CMA | Upgrade and resolve ownership and maintenance arrangements for Newstead levee.   | High   | 1-2 years           | High     | ✘       |
| 241       | Mount Alexander    | P2                | MAS.203 | Mount Alexander Shire    | North Central CMA | Upgrade and resolve ownership, management and maintenance arrangements for gates and pumps associated with the Newstead levee.                         | Medium | 1-2 years           | High     | 🔄       |
| 234       | Northern Grampians | P2                | NG.201  | Northern Grampians Shire | North Central CMA | Implement recommended mitigation options from St Arnaud Flood Study.   | High   | 1-2 years           | High     | ▶       |





| Regional Priority 2: |                    |                   |         | Construct new flood mitigation infrastructure; resolving ownership and maintenance accountabilities; and improving floodplain function. |                           |   |        |                     |          |         |
|----------------------|--------------------|-------------------|---------|---|---------------------------|---|--------|---------------------|----------|---------|
| Unique ID            | Region             | Regional Priority | RFMS ID | Lead Agency   | Supporting Agency         | Action  | Cost*  | Expected completion | Priority | Status^ |
| 236                  | Northern Grampians | P2                | NG.203  | North Central CMA   | Northern Grampians Shire  | Investigate reconnecting natural flood flows to Lake Batyo Catyo.   | Medium | 1-2 years           | High     | ▶       |
| 237                  | Swan Hill          | P2                | SH.201  | North Central CMA   | Swan Hill Rural City      | Investigate community's desire and willingness for ongoing management of Pental Island levees and Pental Island floodway. Implement ongoing management arrangements.                                      | Medium | 1-2 years           | High     | ▶       |
| 238                  | Swan Hill          | P2                | SH.202  | North Central CMA   | Swan Hill Rural City, GMW | Investigate community's desire and willingness for ongoing management of Little Murray River levees, Tyntynder Flats levees, Avoca Floodway and Avoca Outfall. Implement ongoing management arrangements. | Medium | 3-4 years           | Medium   | ✘       |

| Regional Priority 3: |          |                   |         | Address gaps in flood knowledge through flood mapping projects |                   |   |        |                     |          |         |
|----------------------|----------|-------------------|---------|--|-------------------|---|--------|---------------------|----------|---------|
| Unique ID            | Region   | Regional Priority | RFMS ID | Lead Agency  | Supporting Agency | Action  | Cost*  | Expected completion | Priority | Status^ |
| 301                  | Regional | P3                | R.301   | DEECA  | North Central CMA | Complete regional flood mapping for Lower Loddon and Lower Avoca.                             | Medium | 1-2 years           | High     | ▶       |
| 303                  | Bendigo  | P3                | CGB.301 | City of Greater Bendigo  | North Central CMA | Undertake a flood mitigation study for the Bendigo urban area.                                | ✓      |                     |          |         |
| 304                  | Bendigo  | P3                | CGB.302 | City of Greater Bendigo  | North Central CMA | Undertake a high-level gap analysis of rural flood mapping in City of Greater Bendigo region. | Low    | 4+ years            | Low      | ✘       |
| 305                  | Bendigo  | P3                | CGB.303 | City of Greater Bendigo  | North Central CMA | Undertake a rapid flood risk assessment for Redesdale.  | ✓      |                     |          |         |

| Regional Priority 3:<br>Address gaps in flood knowledge through flood mapping projects |         |                   |         | Address gaps in flood knowledge through flood mapping projects |                   |  |        |                     |          |         |
|--|---------|-------------------|---------|--|-------------------|--|--------|---------------------|----------|---------|
| Unique ID  | Region  | Regional Priority | RFMS ID | Lead Agency  | Supporting Agency | Action   | Cost*  | Expected completion | Priority | Status^ |
| 306  | Bendigo | P3                | CGB.304 | City of Greater Bendigo  | North Central CMA | Undertake a flood mitigation study for the Bendigo urban area.   | Medium | 4+ years            | Low      | ▶       |
| 307  | Bendigo | P3                | CGB.305 | City of Greater Bendigo  | North Central CMA | Undertake a flood mitigation study for the Kangaroo Flat/Golden Square area, considering climate change scenarios (when available) and revised Australian Rainfall and Runoff guidance. The study will consider best practice advocated by Australian Rainfall and Runoff, and any updated information from CSIRO or other agencies to improve regional estimates of climate change impacts. |        | ✓                   |          |         |
| 308  | Bendigo | P3                | CGB.306 | City of Greater Bendigo  | North Central CMA | Future review of the Bendigo Urban Flood Study to consider climate change scenarios (when available) and revised Australian Rainfall and Runoff guidance. The review will consider best practice advocated by Australian Rainfall and Runoff, and (updated) information from CSIRO or other agencies to improved regional estimates of climate change impacts.                               |        | ✓                   |          |         |
| 309  | Bendigo | P3                | CGB.307 | City of Greater Bendigo  | North Central CMA | Undertake a flood study for Marong.  |        | ✓                   |          |         |
| 366  | Bendigo | P3                | CGB.308 | City of Greater Bendigo  | North Central CMA | Heathcote Flood Study update.  | Medium | 3-4 years           | Medium   | 🔄       |
| 370  | Bendigo | P3                | CGB.309 | North Central CMA  | North Central CMA | Undertake shire based regional mapping for areas not currently mapped.   | Medium | 3-4 years           | Medium   | 🔄       |
| 313  | Buloke  | P3                | B.304   | Buloke Shire   | North Central CMA | Undertake a flood study, including irrigation channel and informal levees, for Tyrrell Creek.  |        | ✓                   |          |         |
| 314  | Buloke  | P3                | B.305   | Buloke Shire   | North Central CMA | Undertake a flood study, including irrigation channel and informal levees, for Lalbert Creek.  |        | ✓                   |          |         |



| Regional Priority 3: |                    |                   |         | Address gaps in flood knowledge through flood mapping projects |                   |   |        |                     |          |   |
|----------------------|--------------------|-------------------|---------|--|-------------------|---|--------|---------------------|----------|---|
| Unique ID            | Region             | Regional Priority | RFMS ID | Lead Agency  | Supporting Agency | Action  | Cost*  | Expected completion | Priority | Status^   |
| 316                  | Buloke             | P3                | B.307   | Buloke Shire   | North Central CMA | Undertake a flood study, including irrigation channel and informal levees, for Mosquito Creek/North-East floodplains Stream.  |        |                     |          | ✓   |
| 362                  | Buloke             | P3                | B.309   | Buloke Shire   | Buloke Shire      | Undertake Shire wide flood modelling project that includes: <ul style="list-style-type: none"> <li>Regional mapping for priority areas not currently mapped.</li> <li>Update of detailed flood modelling for Charlton and Donald.</li> <li>Detailed flood mapping for Wycheproof.</li> <li>Investigation into the impact of channel decommissioning.</li> </ul> | High   | 1-2 years           | High     |    |
| 318                  | Campaspe           | P3                | C.301   | Campaspe Shire   | North Central CMA | Undertake a flood study for Echuca and Torrumbarry, include calibration with October 2022 flood event.  | Medium | 1-2 years           | High     |    |
| 320                  | Campaspe           | P3                | C.303   | Campaspe Shire   | North Central CMA | Conduct a rapid flood risk assessment for the area between the Campaspe River and Mt Hope Creek north of Rochester to the Murray River.   | Medium | 3-4 years           | Medium   |    |
| 321                  | Campaspe           | P3                | C.304   | North Central CMA  | Campaspe Shire    | Conduct a rapid flood risk assessment for Axe Creek and Campaspe River downstream of Lake Eppalock to Rochester, and including Mt Pleasant Creek and the townships of Axedale and Elmore.   | Medium | 1-2 years           | High     |   |
| 364                  | Campaspe           | P3                | C.305   | Campaspe Shire   | North Central CMA | Rochester Flood Management Plan update.   | High   | 1-2 years           | High     |  |
| 375                  | Campaspe           | P3                | C.306   | North Central CMA  | North Central CMA | Undertake shire based regional mapping for areas not currently mapped.  | Medium | 4+ years            | Low      |  |
| 323                  | Central Goldfields | P3                | CG.301  | Central Goldfields Shire                                       | North Central CMA | Undertake flood study for Maryborough.  | Medium | 1-2 years           | High     |  |
| 324                  | Central Goldfields | P3                | CG.302  | Central Goldfields Shire                                       | North Central CMA | Undertake a rapid flood risk assessment across whole of Central Goldfields Shire to determine priorities for new mapping projects.  | Medium | 1-2 years           | High     |  |

| Regional Priority 3: |                    |                   |         | Address gaps in flood knowledge through flood mapping projects |                   |   |        |                     |          |   |
|----------------------|--------------------|-------------------|---------|--|-------------------|---|--------|---------------------|----------|---|
| Unique ID            | Region             | Regional Priority | RFMS ID | Lead Agency  | Supporting Agency | Action  | Cost*  | Expected completion | Priority | Status^   |
| 325                  | Central Goldfields | P3                | CG.303  | Central Goldfields Shire                                       | North Central CMA | Undertake a rapid flood risk assessment for Bealiba.  |        | ✓                   |          |   |
| 326                  | Central Goldfields | P3                | CG.304  | Central Goldfields Shire                                       | North Central CMA | Undertake a rapid flood risk assessment for Timor-Bowenvale.  |        | ✓                   |          |   |
| 365                  | Central Goldfields | P3                | CG.305  | Central Goldfields Shire                                       | North Central CMA | Carisbrook Flood Study update.  | Medium | 3-4 years           | Medium   |    |
| 376                  | Central Goldfields | P3                | CG.306  | Central Goldfields Shire                                       | North Central CMA | Dunolly Flood Study update.   | Medium | 4+ years            | Low      |    |
| 327                  | Gannawarra         | P3                | G.301   | Gannawarra Shire   | North Central CMA | Undertake a study on protection provided by Koondrook Township levee.   |        | ✓                   |          |   |
| 328                  | Gannawarra         | P3                | G.302   | Gannawarra Shire   | North Central CMA | Investigate opportunity to produce Murray Flood Plan in partnership with NSW Office of Environment and Heritage and Murray River Council.   | Medium | 3-4 years           | Medium   | ✗   |
| 369                  | Gannawarra         | P3                | G.303   | Gannawarra Shire   | North Central CMA | Gannawarra Shire Flood Modelling Project <ul style="list-style-type: none"> <li>Detailed flood modelling for Cohuna and updated modelling for Quambatook.</li> <li>Regional mapping for priority areas not currently mapped.</li> <li>Investigation into the impact of channel decommissioning and other infrastructure.</li> </ul> | High   | 3-4 years           | Medium   |   |
| 330                  | Hepburn            | P3                | H.301   | Hepburn Shire  | North Central CMA | Undertake flood study of Coomoora.  |        | ✓                   |          |   |
| 331                  | Hepburn            | P3                | H.302   | Hepburn Shire  | North Central CMA | Undertake a rapid flood risk assessment for Daylesford/Hepburn Springs.   |        | ✓                   |          |   |
| 332                  | Hepburn            | P3                | H.303   | Hepburn Shire  | North Central CMA | Undertake a rapid flood risk assessment for Newlyn North and Smeaton.   |        | ✓                   |          |   |
| 333                  | Hepburn            | P3                | H.304   | Hepburn Shire  | North Central CMA | Undertake a rapid flood risk assessment for Trentham.   | Medium | 3-4 years           | Medium   |  |

| Regional Priority 3: |                     |                   |         | Address gaps in flood knowledge through flood mapping projects |                      |   |        |                     |          |         |
|----------------------|---------------------|-------------------|---------|--|----------------------|---|--------|---------------------|----------|---------|
| Unique ID            | Region              | Regional Priority | RFMS ID | Lead Agency  | Supporting Agency    | Action  | Cost*  | Expected completion | Priority | Status^ |
| 367                  | Hepburn             | P3                | H.305   | Hepburn Shire  | North Central CMA    | Clunes Flood Study update.  | Medium | 3-4 years           | Medium   |         |
| 373                  | Hepburn             | P3                | H.306   | North Central CMA  | North Central CMA    | Undertake shire based regional mapping for areas not currently mapped.  | Medium | 3-4 years           | Medium   |         |
| 377                  | Hepburn             | P3                | H.307   | Hepburn Shire  | North Central CMA    | Undertake a flood study for Trentham.   | Medium | 4+ years            | Low      |         |
| 336                  | Loddon              | P3                | L.303   | Loddon Shire   | North Central CMA    | Undertake a rapid flood risk assessment for Korong Vale.  | ✓      |                     |          |         |
| 338                  | Loddon              | P3                | L.305   | Loddon Shire   | North Central CMA    | Undertake a rapid flood risk assessment for Tarnagulla.   | Low    | 4+ years            | Low      |         |
| 362                  | Loddon              | P3                | L.306   | Loddon Shire   | North Central CMA    | Undertake a detailed flood study for Korong Vale.   | Medium | 1-2 years           | High     |         |
| 363                  | Loddon & Gannawarra | P3                | L.307   | Loddon Shire & Gannawarra Shire                                | North Central CMA    | Loddon and Gannawarra Shire Flood Modelling Project <ul style="list-style-type: none"> <li>Detailed flood modelling for Pyramid Creek, Wedderburn, and Boort.</li> <li>Detailed flood modelling for the Barr Creek.</li> <li>Regional mapping for priority areas not currently mapped.</li> <li>Investigation into the impact of historical infrastructure on floodplain</li> </ul> | High   | 3-4 years           | Medium   |         |
| 378                  | Loddon              | P3                | L.308   | Loddon Shire   | North Central CMA    | Undertake a flood study for Inglewood.  | Medium | 4+ years            | Low      |         |
| 339                  | Macedon Ranges      | P3                | MR.301  | North Central CMA  | Macedon Ranges Shire | Undertake a flood study for Kyneton.  | ✓      |                     |          |         |
| 341                  | Macedon Ranges      | P3                | MR.303  | Macedon Ranges Shire   | North Central CMA    | Undertake flood study for urban waterways in Woodend and investigate if a flood warning system is warranted.  | Medium | 1-2 years           | High     |         |
| 374                  | Macedon Ranges      | P3                | MR.304  | North Central CMA  | North Central CMA    | Undertake shire based regional mapping for areas not currently mapped.  | Medium | 4+ years            | Low      |         |

| Regional Priority 3: |                 |                   |         | Address gaps in flood knowledge through flood mapping projects |                       |   |        |                     |          |         |
|----------------------|-----------------|-------------------|---------|--|-----------------------|---|--------|---------------------|----------|---------|
| Unique ID            | Region          | Regional Priority | RFMS ID | Lead Agency  | Supporting Agency     | Action  | Cost*  | Expected completion | Priority | Status^ |
| 342                  | Mitchell Shire  | P3                | M.301   | Mitchell Shire   | North Central CMA     | Undertake rapid flood risk assessment of the North Central CMA region to determine flood risk.    | ✓      |                     |          |         |
| 343                  | Mount Alexander | P3                | MAS.301 | Mount Alexander Shire  | North Central CMA     | Undertake a flood study for Newstead.   | Medium | 1-2 years           | High     | ✗       |
| 344                  | Mount Alexander | P3                | MAS.302 | Mount Alexander Shire  | North Central CMA     | Undertake a flood study for Harcourt.   | Medium | 3-4 years           | Medium   | ▷       |
| 345                  | Mount Alexander | P3                | MAS.303 | Mount Alexander Shire  | North Central CMA     | Undertake a flood study for Muckleford Creek.   | Low    | 1-2 years           | High     | ▷       |
| 346                  | Mount Alexander | P3                | MAS.304 | Mount Alexander Shire  | North Central CMA     | Undertake a flood study for Campbells Creek (rural).  | Low    | 1-2 years           | High     | ▷       |
| 347                  | Mount Alexander | P3                | MAS.305 | Mount Alexander Shire  | North Central CMA     | Undertake a rapid flood risk assessment for Sutton Grange.  | Low    | 1-2 years           | High     | ▷       |
| 348                  | Mount Alexander | P3                | MAS.306 | North Central CMA  | Mount Alexander Shire | Undertake a rapid flood risk assessment for Baringhup. Update to include October 2022 flood data. | Low    | 4+ years            | Low      | ▷       |
| 350                  | Mount Alexander | P3                | MAS.308 | Mount Alexander Shire  | North Central CMA     | Undertake a rapid flood risk assessment for Guildford.  | ✓      |                     |          |         |
| 351                  | Mount Alexander | P3                | MAS.309 | Mount Alexander Shire  | North Central CMA     | Undertake a rapid flood risk assessment for Taradale.   | Low    | 1-2 years           | High     | ▷       |
| 352                  | Mount Alexander | P3                | MAS.310 | Mount Alexander Shire  | North Central CMA     | Undertake a rapid flood risk assessment for Metcalfe.   | ✓      |                     |          |         |
| 371                  | Mount Alexander | P3                | MAS.311 | North Central CMA  | North Central CMA     | Undertake shire based regional mapping for areas not currently mapped.                            | Medium | 3-4 years           | Medium   | ✗       |







| Regional Priority 3: |                    |                   |         | Address gaps in flood knowledge through flood mapping projects |                               |   |        |                     |          |         |
|----------------------|--------------------|-------------------|---------|--|-------------------------------|---|--------|---------------------|----------|---------|
| Unique ID            | Region             | Regional Priority | RFMS ID | Lead Agency  | Supporting Agency             | Action  | Cost*  | Expected completion | Priority | Status^ |
| 353                  | Northern Grampians | P3                | NG.301  | Northern Grampians Shire                                       | North Central CMA             | Undertake a flood study for Marnoo.   | Medium | 4+ years            | Low      | ▶       |
| 354                  | Northern Grampians | P3                | NG.302  | Northern Grampians Shire                                       | North Central CMA             | Undertake a flood study for St Arnaud.  | ✓      |                     |          |         |
| 355                  | Northern Grampians | P3                | NG.303  | Northern Grampians Shire                                       | North Central CMA             | Undertake a flood study for the Richardson River and Avon River upstream of Donald.   | Medium | 3-4 years           | Medium   | ✘       |
| 372                  | Northern Grampians | P3                | NG.305  | North Central CMA  | North Central CMA             | Undertake shire based regional mapping for areas not currently mapped.  | Medium | 3-4 years           | Medium   | 🔄       |
| 357                  | Pyrenees           | P3                | P.301   | Pyrenees Shire   | North Central CMA             | Undertake a rapid flood risk assessment of Lexton.  | ✓      |                     |          |         |
| 358                  | Pyrenees           | P3                | P.302   | Pyrenees Shire   | North Central CMA             | Undertake a flood management plan for Lexton.   | Medium | 1-2 years           | High     | ✘       |
| 359                  | Pyrenees           | P3                | P.303   | Pyrenees Shire   | North Central CMA             | Undertake a flood study of the Upper Avoca River to inform flood intelligence and planning scheme maps for Amphitheatre, Avoca and Natte Yallock and the rural areas in between, and potential flood mitigation for Avoca recreation Reserve. | ✓      |                     |          |         |
| 360                  | Pyrenees           | P3                | P.304   | Pyrenees Shire   | North Central CMA             | Undertake a flood study for Waubra.   | ✓      |                     |          |         |
| 368                  | Swan Hill          | P3                | SH.302  | North Central CMA  | Swan Hill Rural City          | Swan Hill Flood Study (to include Murrabit and levee breach scenarios for Pental Island and Tyntynder).   | High   | 3-4 years           | Medium   | 🔄       |
| 361                  | Swan Hill          | P3                | SH.301  | Swan Hill Rural City   | North Central CMA, Mallee CMA | Review flood mapping in Woorinen area.  | Medium | 3-4 years           | Medium   | ✘       |

| Regional Priority 4: |          |                   |         | Improve preparedness for flood emergencies |                                |   |        |                     |          |         |
|----------------------|----------|-------------------|---------|--|--------------------------------|---|--------|---------------------|----------|---------|
| Unique ID            | Region   | Regional Priority | RFMS ID | Lead Agency                                | Supporting Agency              | Action  | Cost*  | Expected completion | Priority | Status^ |
| 410                  | Regional | P4                | R.410   | LGAs                                       | North Central CMA, VICSES, DTP | Install road signage at priority locations with known flood risk that enable more efficient closure (and reopening) of arterial roads and major local roads.  | Medium | 3-4 years           | Medium   | ✘       |
| 411                  | Regional | P4                | R.411   | North Central CMA                          | LGAs                           | Undertake discussions with neighbouring councils for cost-sharing arrangements for flood warning infrastructure.  | ✓      |                     |          |         |
| 440                  | Regional | P4                | R.409   | VICSES                                     | North Central CMA, LGAs        | Prepare a plan and deliver operational readiness training/exercising regularly (in accordance with VICSES KPIs) for all priority areas that incorporate MFEP in operational response (in Incident Control Centres or at other tiers as required).   | Low    | 1-2 years           | High     | 🔄       |
| 441                  | Regional | P4                | R.410   | VICSES                                     | North Central CMA, LGAs        | Develop standardised community messaging tailored for relevant towns/communities with known impacts for various AEPS and include in all MFEPs.  | Low    | 1-2 years           | High     | 🔄       |
| 442                  | Regional | P4                | R.411   | VICSES                                     | North Central CMA, LGAs        | Structured engagement with all high flood risk towns and/or flood affected communities, identify needs, and deliver relevant awareness products. This may include installing community signs, gauge boards or community led response plans.   | Medium | 1-2 years           | High     | 🔄       |
| 443                  | Regional | P4                | R.413   | VICSES                                     | North Central CMA, LGAs        | Review all Municipal Flood Emergency Plans across the region to incorporate learnings from previous events and with consideration of all currently available flood intelligence. Proactively consult Traditional Owners when updating MFEPs to assist in identifying any risks to cultural heritage and further opportunities for engagement.<br><br>Following initial Review of MFEPs continue to review as part of a three-year cycle or following a major flood. | Medium | 1-2 years           | High     | 🔄       |

| Regional Priority 4: |          |                   |         | Improve preparedness for flood emergencies |                                       |   |        |                     |          |         |
|----------------------|----------|-------------------|---------|--|---------------------------------------|---|--------|---------------------|----------|---------|
| Unique ID            | Region   | Regional Priority | RFMS ID | Lead Agency                                | Supporting Agency                     | Action  | Cost*  | Expected completion | Priority | Status^ |
| 444                  | Regional | P4                | R.414   | VICSES                                     | North Central CMA, LGAs               | Update all existing Local Flood Guides in the region.   | Medium | 1-2 years           | High     |         |
| 445                  | Regional | P4                | R.415   | VICSES                                     | North Central CMA, LGAs               | Identify locations requiring new LFGs and develop as required.  | Medium | 1-2 years           | High     |         |
| 446                  | Regional | P4                | R.416   | VICSES                                     | North Central CMA, LGAs               | Implement regular review of Local Flood Guides across the region as part of a three-year cycle or following a major flood and update to incorporate learnings from previous events and all currently available flood intelligence.  | Medium | 3-4 years           | High     |         |
| 447                  | Regional | P4                | R.417   | VICSES                                     | North Central CMA, LGAs               | Capture existing informal and formal community flood observer networks or individuals and identify new observers where necessary for relevant LGAs. Ensure details are captured in MFEP (appendix not for public distribution) and new personnel are inducted using the new multiagency/community-based Field Observer role. Provide regular opportunities for professional development, collaboration, and group discussion (place-based). | Low    | 1-2 years           | High     |         |
| 412                  | Bendigo  | P4                | CGB.401 | North Central CMA                          | VICSES, City of Greater Bendigo       | Investigate a local flash flood warning system for Bendigo Creek.   | Low    | 1-2 years           | High     |         |
| 414                  | Bendigo  | P4                | CGB.403 | North Central CMA                          | City of Greater Bendigo               | Review flood class levels for Redesdale.  |        |                     |          |         |
| 415                  | Buloke   | P4                | B.401   | Buloke Shire                               | VICSES                                | Install gauge board within Donald township (e.g., at Bullocks head or Sunraysia Highway).   |        |                     |          |         |
| 416                  | Buloke   | P4                | B.402   | Buloke Shire                               | BoM, DEECA, North Central CMA, VICSES | Update flood warning prediction services Charlton and Donald, Coonooer Bridge and Culgoa.   |        |                     |          |         |

| Regional Priority 4: |                    |                   |         | Improve preparedness for flood emergencies |  |   |        |                     |          |         |
|----------------------|--------------------|-------------------|---------|--|--|---|--------|---------------------|----------|---------|
| Unique ID            | Region             | Regional Priority | RFMS ID | Lead Agency                                | Supporting Agency                                | Action  | Cost*  | Expected completion | Priority | Status^ |
| 417                  | Buloke             | P4                | B.403   | North Central CMA                          | BOM, DEECA, VICSES, Buloke Shire                 | Investigate improvements to flood warning for Coonooer Bridge and Culgoa.   |        | ✓                   |          |         |
| 419                  | Campaspe           | P4                | C.402   | North Central CMA                          | VICSES, Campaspe Shire                           | Staged implementation of a flood warning system for Rochester.  |        | ✓                   |          |         |
| 420                  | Campaspe           | P4                | C.403   | North Central CMA                          | BoM  | Review flood class levels for Campaspe River at Echuca.   | Medium | 1-2 years           | High     | ✗       |
| 421                  | Campaspe           | P4                | C.404   | North Central CMA                          | BOM, DEECA, VICSES, Campaspe Shire               | Investigate the possibility of a flood warning prediction service for the Campaspe River at Echuca.   | Medium | 1-2 years           | High     | ✗       |
| 422                  | Campaspe           | P4                | C.405   | BOM  | VICSES, DEECA, North Central CMA, Campaspe Shire | Update flood forecasting service for Echuca upon completion of the Echuca Flood Study.  | Medium | 1-2 years           | High     | ✗       |
| 423                  | Central Goldfields | P4                | CG.401  | North Central CMA                          | Central Goldfields Shire, VICSES, BOM, DEECA     | Investigate the possibility of a flood warning prediction service for Carisbrook.   | Low    | 1-2 years           | High     | ▶       |
| 425                  | Central Goldfields | P4                | CG.403  | Central Goldfields Shire                   | VICSES, North Central CMA                        | Installation of a gauge board within Dunolly township.  |        | ✓                   |          |         |
| 426                  | Gannawarra         | P4                | G.401   | North Central CMA                          | Gannawarra Shire, Loddon Shire                   | Investigate the benefits of a streamflow gauge at Durham Ox.  |        | ✓                   |          |         |
| 427                  | Gannawarra         | P4                | G.402   | VICSES                                     | Gannawarra Shire                                 | Flood intelligence from Quambatook flood study to be incorporated into MFEP.  |        | ✓                   |          |         |
| 431                  | Gannawarra         | P4                | G.406   | North Central CMA                          | Gannawarra Shire, VICSES, GMW                    | Investigate options for the management of flood flows through the Kerang Lakes and Ghow Swamp to inform management actions during flood events. | Medium | 1-2 years           | High     | ✗       |



| Regional Priority 4: |                 |                   |         | Improve preparedness for flood emergencies |   |   |        |                     |          |   |
|----------------------|-----------------|-------------------|---------|--|---|---|--------|---------------------|----------|---|
| Unique ID            | Region          | Regional Priority | RFMS ID | Lead Agency                                | Supporting Agency                       | Action  | Cost*  | Expected completion | Priority | Status^   |
| 432                  | Hepburn         | P4                | H.401   | Hepburn Shire                              | North Central CMA                       | Installation of gauge board upstream of the Water Street bridge to assist in future flood warning for Creswick.   |        | ✓                   |          |   |
| 433                  | Loddon          | P4                | L.401   | VICSES                                     | Loddon Shire, North Central CMA         | Develop Municipal Flood Emergency Plan for Loddon Shire (including flood intelligence from Bridgewater Flood Management Plan and the operational rules for Lake Boort and Lake Lyndger).  |        | ✓                   |          |   |
| 435                  | Macedon Ranges  | P4                | MR.401  | Melbourne Water                            | Macedon Ranges Shire, North Central CMA | Review and update the Flood Management Plan for Macedon Ranges, Melbourne Water and North Central CMA (June 2013).  |        | ✓                   |          |   |
| 448                  | Mount Alexander | P4                | MAS.402 | Mount Alexander Shire                      | North Central CMA                       | Installation of staff gauges near bridge and low roads for community information.   | Low    | 3-4 years           | Medium   |    |
| 449                  | Regional        | P4                | R.418   | North Central CMA                          | LGA, VICSES                             | Loddon Catchment - review of total flood warning system to identify gaps and make recommendations for future opportunities.   | Medium | 1-2 years           | High     |    |
| 450                  | Regional        | P4                | R.419   | North Central CMA                          | LGA, VICSES                             | Avoca Catchment - review of total flood warning system to identify gaps and make recommendations for future opportunities.  | Medium | 1-2 years           | High     |    |
| 451                  | Regional        | P4                | R.420   | North Central CMA                          | LGA, VICSES                             | Campaspe Catchment - review of total flood warning system to identify gaps and make recommendations for future opportunities.   | Medium | 3-4 years           | Medium   |  |
| 452                  | Regional        | P4                | R.421   | North Central CMA                          | LGA, VICSES                             | Avon Richardson Catchment - review of total flood warning system to identify gaps and make recommendations for future opportunities.  | Medium | 3-4 years           | Medium   |  |
| 453                  | Regional        | P4                | R.422   | North Central CMA                          | VICSES                                  | Provide updates to Flood Eye to link flooding to floor levels at the following locations: <ul style="list-style-type: none"> <li>• Bridgewater</li> <li>• Carisbrook*</li> <li>• Quambatook</li> <li>• Echuca</li> <li>• Creswick*</li> </ul> | Medium | 1-2 years           | High     |  |

| Regional Priority 5: |          |                   |         | Educate agencies and individuals on the roles and responsibilities in floodplain management |                           |   |       |                         |          |         |
|----------------------|----------|-------------------|---------|---|---------------------------|---|-------|-------------------------|----------|---------|
| Unique ID            | Region   | Regional Priority | RFMS ID | Lead Agency   | Supporting Agency         | Action  | Cost* | Expected completion     | Priority | Status^ |
| 501                  | Regional | P5                | R.501   | North Central CMA   | LGAs, VICSES, Water Corps | Develop communication plan and promotional material for the education of LGAs, authorities and individuals on floodplain and waterway management policies, accountabilities, and actions. |       | ✓ Now business as usual |          |         |

| Regional Priority 6: |          |                   |         | Incorporate Traditional Owner knowledge into floodplain management |                         |  |        |                     |          |         |
|----------------------|----------|-------------------|---------|--|-------------------------|--|--------|---------------------|----------|---------|
| Unique ID            | Region   | Regional Priority | RFMS ID | Lead Agency  | Supporting Agency       | Action   | Cost*  | Expected completion | Priority | Status^ |
| 601                  | Regional | P6                | R.601   | VICSES   | LGAs, North Central CMA | Incorporate Traditional Owner knowledge into Municipal Flood Emergency Management Plans.   | Medium | 1-2 years           | High     | ✗       |
| 602                  | Regional | P6                | R.602   | North Central CMA  | VICSES                  | Develop regional guidelines for how to include Traditional Owner interests and knowledge into flood emergency and planning response. | Medium | 1-2 years           | High     | ✗       |

| Regional Priority 7: |                    |                   |         | Create a Flood-Resilient Transport Network |                   |  |        |                     |          |         |
|----------------------|--------------------|-------------------|---------|--|-------------------|--|--------|---------------------|----------|---------|
| Unique ID            | Region             | Regional Priority | RFMS ID | Lead Agency                                | Supporting Agency | Action   | Cost*  | Expected completion | Priority | Status^ |
| 701                  | Regional           | P7                | R.701   | DTP  | LGAs              | Identify key transport routes between townships to determine priorities for road upgrades. | Medium | 1-2 years           | High     | ✗       |
| 702                  | Buloke             | P7                | B.701   | DTP  | Buloke Shire      | Construct major culvert at Calder Highway floodway over Yeungroon Creek.                   | High   | 3-4 years           | Medium   | ✗       |
| 703                  | Central Goldfields | P7                | CG.701  | Central Goldfields Shire                   | DTP               | Upgrade London Bridge in Talbot.   | High   | 4+ years            | Low      | ✗       |

| Regional Priority 7: |                    |                   |         | Create a Flood-Resilient Transport Network |                       |   |        |                     |          |         |
|----------------------|--------------------|-------------------|---------|--|-----------------------|---|--------|---------------------|----------|---------|
| Unique ID            | Region             | Regional Priority | RFMS ID | Lead Agency                                | Supporting Agency     | Action  | Cost*  | Expected completion | Priority | Status^ |
| 704                  | Central Goldfields | P7                | CG.702  | Central Goldfields Shire                   | DTP                   | Upgrade Vinecombes Ford.  | High   | 4+ years            | Low      | ✘       |
| 705                  | Central Goldfields | P7                | CG.703  | Central Goldfields Shire                   | DTP                   | Consider elevating bridges to provide access during a major flood event for any future bridge upgrades at Dunolly.                        | High   | 4+ years            | Low      | ✘       |
| 706                  | Central Goldfields | P7                | CG.704  | Central Goldfields Shire                   | DTP                   | Replace highway bridge with a clear-span structure when bridge is due for replacement (or when funding becomes available) for Carisbrook. | High   | 4+ years            | Low      | ✘       |
| 707                  | Mount Alexander    | P7                | MAS.701 | DTP  | DTP                   | Investigate options for Pyrenees and Midland Highway floodways (multiple sites).  | Medium | 3-4 years           | Medium   | ✘       |
| 708                  | Mount Alexander    | P7                | MAS.702 | Mount Alexander Shire                      | DTP                   | Investigate broader project to assess economic impacts of road closures across the shire.   | Medium | 3-4 years           | Medium   | ✘       |
| 709                  | Mount Alexander    | P7                | MAS.703 | DTP  | Mount Alexander Shire | Develop plan to ensure roads are closed in a timely manner and confirm responsibility for the closures of certain roads.                  | Low    | 4+ years            | Low      | ☰       |
| 710                  | Gannawarra         | P7                | G.701   | DTP  | Gannawarra Shire      | Install a series of culverts under the Murray Valley Highway at Wandella Creek to ensure connectivity is maintained during a flood event. | High   | 1-2 years           | High     | ☰       |

\*Cost is estimated as follows: Low: <\$50,000, Medium: \$50,000 - \$300,000, High: >\$300,000

## Regional Workplan ACRONYMS

BoM Bureau of Meteorology  
 CMA Catchment Management Authority  
 DEECA Department of Energy, Environment and Climate Action.  
 DTP Department of Transport and Planning  
 LGA Local Government Authority  
 MFEP Municipal Flood Emergency Plan  
 TFWS Total Flood Warning System  
 VICSES Victoria State Emergency Service

### Status^ Key

|   |                                    |
|---|------------------------------------|
| ✘ | Existing priority, not yet started |
| ☰ | No longer a priority               |
| ▶ | Existing priority, in progress     |
| ☰ | New priority, not yet started      |
| ✓ | Completed                          |