



# Administration arrangements

Flood risk management guideline AG01 (version 1.01  
April 2024)

Department of Climate Change,  
Energy, the Environment and Water



## Acknowledgement of Country

Department of Climate Change, Energy, the Environment and Water acknowledges the Traditional Custodians of the lands where we work and live.

We pay our respects to Elders past, present and emerging.

This resource may contain images or names of deceased persons in photographs or historical content.

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# 1. Introduction

Flood risk management (FRM) in New South Wales is a partnership across all levels of government, with local councils being primarily responsible in their local government areas (LGAs). The NSW Government may provide additional support to local government or undertake extra FRM responsibilities in areas it identifies as a high priority.

This guideline provides an outline of the current administrative arrangements that support the delivery of the *NSW Flood prone land policy* (the policy), consistent with the *Flood risk management manual: the policy and manual for the management of flood liable land* (the manual; DPE 2023).

The policy and manual outline the overall FRM roles of the different levels of government and articulate the lead roles for agencies in **prevention** and **preparedness** for FRM within the NSW Government broadly across the state. **Response** and **recovery** responsibilities for flood are outlined in the *State Emergency and Rescue Management Act 1989*, *State Emergency Service Act 1989* and related emergency plans. The NSW Government may also take on additional roles in FRM in high priority areas. The role of state government coordinated by Infrastructure NSW in developing and implementing the *Hawkesbury-Nepean Valley flood risk management strategy* is an example of this additional role.

## What are prevention, preparedness, response and recovery activities?

- **Prevention** activities aim to either directly reduce risk or facilitate the reduction of risk, and therefore mitigate the impacts of flooding by preventing floods affecting communities in a certain scale of flood event (rather than the full range of flood events).
- **Preparedness** measures aim to ensure that when a flood event occurs, communities, resources and services are capable of coping with the consequences. This is a state of being prepared to manage the emergency.
- **Response** to flooding involves actions taken in anticipation of, during and immediately after an emergency to ensure its consequences are minimised, and that people affected are given immediate relief and support.
- **Recovery** from flooding is the coordinated process of supporting flood affected communities in reconstruction of the physical infrastructure and restoration of emotional, social, economic and physical wellbeing.

This guideline provides supplementary advice to support the manual. It should be read in conjunction with the manual and supporting guidelines. The guideline provides advice in the following sections:

- Section 2 outlines the basis for the responsibility of local councils under the FRM framework as outlined in the manual.
- Section 3 outlines the legislative and policy framework and the agencies responsible for providing the lead NSW Government agency roles identified in the manual. Note the guideline focuses on statewide roles and responsibilities. This excludes other agencies where the NSW Government has assigned responsibility for delivery of specific priority projects in high-priority areas.
- Section 4 outlines some specific Australian Government agency roles that influence prevention and preparation activities relevant to FRM in New South Wales.
- Section 5 outlines the current guidelines and tools that support delivery of the policy and manual.
- Section 6 provides a glossary of terms used in the toolkit that are not provided in the manual.
- Section 7 provides relevant references and links to more information.

This guideline is maintained by the Biodiversity Conservation and Science Group (BCS) of the NSW Department of Climate Change, Energy, the Environment and Water (the department or DCCEEW) and is available on the Environment and Heritage website.



## 2. Local government responsibilities

Flood risk management is a partnership across governments, with primary responsibility resting with local councils in their service areas. Local government responsibilities for FRM are outlined in the manual. These responsibilities are derived from both the *Local Government Act 1993* (LG Act) and the policy. Local government also has responsibilities for considering flooding in decisions that come through other Acts and documents. While not exhaustive, the key references and associated responsibilities of local government are outlined in Table 1.

**Table 1 Key local government flood related legislative, policy and program linkages**

Reference	Responsibilities related to prevention and preparedness for flooding
<i>Local Government Act 1993</i>	<p>Section 733 outlines the exemption from liability relating to flood liable land. This provides limited protection for councils and council staff against claims for damages resulting from advice or granting of approvals on floodplains, providing such action was taken in accordance with the principles and guidelines of the manual.</p> <p><b>Integrated planning and reporting/Asset management strategies</b></p> <p>Local councils are required to undertake their planning and reporting activities in accordance with the LG Act and the Local Government (General) Regulation 2005. Section 403 of the LG Act outlines asset management planning as a key component of the resourcing strategy within the community strategic plan, which includes planning and funding maintenance and operational costs associated with flood mitigation assets such as levees and flood warning systems.</p>
The policy	<p>Local government has primary responsibility for FRM in council service areas. The policy provides additional information on the roles and responsibilities of councils under the policy. Section 733 of the LG Act outlines exemption from liability relating to flood liable land.</p>
The manual	<p>Reinforces and provides additional details on the responsibilities of local government under the policy. The manual also links to exemption from liability provisions provided under s 733 of the LG Act.</p>
NSW Floodplain Management Program	<p>Conditions of financial assistance identify that councils are responsible for maintenance of funded works and for making information publicly available from funded projects. Typical conditions of financial assistance are available on the department's website.</p>
<i>Environmental Planning and Assessment Act 1979</i> (EP&A Act)	<p>Statutory responsibility for land-use planning primarily rests with local councils. This includes the preparation of planning proposals, local environmental plans, local strategic planning statements in</p>

**Reference****Responsibilities related to prevention and preparedness for flooding**

consideration of relevant regional or district plans and state environmental planning policies (SEPPs).

Preparation of planning proposals on flood prone land require consistency with directions given by the Minister under s 9.1 of the EP&A Act. The relevant direction is 4.3 Flood prone land.

Section 4.15(1) of the EP&A Act sets out matters for consideration in determining development applications, including environmental planning instruments, development control plans, and likely impacts of the development on natural and built environments, and social and economic impacts on the locality. This also includes consideration of the suitability of the site for the development.

Section 10.7 of the EP&A Act relates to councils issuing planning certificates with specified conditions for prescribed matters, which is relevant to land being subject to flood related development controls.

Relevant SEPPs include *SEPP (Exempt and Complying Development Codes) 2008* clause 3.5. This prescribes flood related development controls and the conditions in which they apply in respect of development for the purposes of industrial buildings, commercial premises, dwelling houses, dual occupancies, multi-dwelling housing or residential flat buildings (other than development for the purposes of group homes or seniors housing).

*Environmental Planning and Assessment Regulation 2000*

Clause 279 of the EP&A Regulation provides that planning certificates must address the matters set out in clause 7A of Schedule 4 of the Regulation.

*Water Management Act 2000 (NSW)*

The department's Water Group (DCCEE Water) has responsibilities for rural floodplain management in the Murray–Darling Basin. Councils should consider rural FRM plans where developed. They can support effective sharing of flood information with rural FRM processes and encourage department Water representation on FRM committees.

*Dam Safety Act 2015*

Councils may have or be proposing structures to manage flooding that require consideration of the requirements of the Dam Safety Act and related guidance. Note this does not cover levees.

*State Emergency and Rescue Management Act 1989 and State Emergency Service Act 1989*

The *NSW State flood plan* is a sub-plan of the *State emergency management plan*, and local flood plans are sub-plans of local emergency management plans. These set out emergency management (EM) arrangements and roles and responsibilities of stakeholders involved in the prevention, preparedness, response and recovery for flooding, including councils.

### 3. State agency responsibilities

The policy and manual outline roles for the NSW Government. The current assignments of the lead agency roles outlined in the manual are provided in Table 2. Response and recovery responsibilities for flood are outlined in the State Emergency and Rescue Management Act, State Emergency Service Act and related emergency plans. The NSW Government may provide additional support to local government or undertake extra FRM responsibilities in areas it identifies as a high priority.

**Table 2 Key agency roles in prevention and preparedness**

Agency	Role in prevention and preparedness	Relevant legislation / policy
DCCEEWS BCS	FRM lead agency as outlined in the manual	Policy and manual
DCCEEWS and NSW State Emergency Service (NSW SES) working in partnership	Managing flood information from studies undertaken under the NSW Floodplain Management Program for the NSW Government. Note, local councils are responsible for making flood information from these studies publicly available	Policy and manual
Department of Planning, Housing and Industry (DPHI)	Land-use planning lead agency as outlined in the manual	<i>Environmental Planning and Assessment Act 1979</i>  Environmental Planning and Assessment Regulation 2000
DCCEEWS Water	Lead agency for rural floodplain management in the Murray–Darling Basin as outlined in the manual.  The Natural Resources Access Regulator was established under the <i>Natural Resources Access Regulator Act 2017</i> to be an independent, transparent and effective water regulator with total responsibility for the compliance and enforcement of water laws (including the <i>Water Management Act 2000</i> ).  WaterNSW is responsible for determining flood work approvals in accordance with the rules and assessment criteria of the relevant rural floodplain management plans	<i>Water Management Act 2000</i>
NSW Reconstruction Authority	Undertakes responsibilities outlined in the <i>NSW Reconstruction Authority Act 2022</i>	<i>NSW Reconstruction Authority Act 2022</i>



NSW SES

Flood combat and flood EM lead agency as outlined in the manual

*State Emergency and Rescue Management Act 1989*

*NSW State Emergency Service Act 1989*

## 4. Australian Government support

Table 3 outlines some of the key roles and responsibilities of Australian Government agencies relevant to prevention and preparedness for flood risk management.

**Table 3 Australian Government roles in prevention and preparedness**

Department	Role in prevention and preparedness	Relevant legislation / policy
Bureau of Meteorology	Lead national agency with responsibility for flood forecasting and warning	<i>Meteorology Act 1955</i> Intergovernmental Agreement on the Provision of Bureau of Meteorology Hazard Services to the states and territories
National Emergency Management Agency	Leads the Australian Government disaster and emergency management response  Provides financial assistance to states and territories under relevant funding programs	<i>National Emergency Declaration Act 2020</i> <i>National disaster risk reduction framework (DoHA 2018)</i> <i>National strategy for disaster resilience (COAG 2011)</i>

## 5. Flood risk management toolkit

This section outlines the NSW Government's FRM toolkit of guidance and tools that support the implementation of the policy through the manual. The manual and toolkit are available on the department's website. The toolkit will be updated as new or updated guidance and tools become available. Links to **flood risk management guidelines and tools**, including those listed in Table 4, can be found in the 'More information' section in this guideline. Table 4 outlines the guidelines and tools, their version numbers and release dates. The tools generally fall into the following categories:

- administration arrangements – this guideline
- delivery under the FRM framework
- understanding flood behaviour, constraints and risk
- understanding and assessing management measures
- emergency management
- land-use planning
- additional guidance/tools.

The guidelines have been developed to assist in understanding and managing flooding in both coastal communities and inland urban communities in the Murray–Darling Basin to assist in scoping and undertaking studies under the NSW Floodplain Management Program.

Current guidance for rural floodplain management is available through the department's Water's Healthy Floodplains Project webpage.

These guidelines aim to inform understanding of flood behaviour and risk and the management of risk, along with providing the information that may be needed from studies under the FRM process to support informed decisions in areas such as EM and land-use planning.

**Table 4 List of guidelines and tools that support delivery under the manual**

FRM ref.	Guideline	Description	Version
AG01	Administration arrangements (this guideline)	Outlines current roles and responsibilities in relation to FRM and their legislative links, and current guidance and tools available for FRM	1.01
FG01	Delivery under the flood risk management framework	Describes delivery of FRM under the FRM framework (included in the manual) as well as key steps in undertaking an FRM project and links to technical support and guidance	1
FG02 <sup>1</sup>	FRM Committee handbook (DCCEEW n.d.)	Describes the typical make-up of committees, and roles and responsibilities of committees and their members. It also provides an outline of the FRM process for committee members	Existing <sup>1</sup>
FB01	Understanding and managing flood risk	Understanding and managing flood risks	1
FB02	Flood function	Methods to determine flow conveyance and storage areas of the floodplain	1
FB03	Flood hazard	Determining flood hazard in studies under the Floodplain Management Program	1
FB04 <sup>2</sup>	Incorporating 2016 Australian Rainfall and Runoff into studies	Application of Australian Rainfall and Runoff (ARR) 2016 data to FRM studies in New South Wales. Also known as ARR2016	Existing <sup>2</sup>
FB05 <sup>2</sup>	Modelling the interaction of catchment flooding and oceanic inundation in coastal waterways	Outlines approaches that can be used to derive ocean boundary conditions and design flood levels for flood investigations in coastal waterways considering the interaction of catchment flooding and oceanic inundation for the various classes of estuary waterways found in New South Wales and likely corresponding ocean boundary conditions	Existing <sup>2</sup>
MM01	Flood risk management measures	Outlines typical FRM measures to address risk to the existing community and future development and supports the identification and assessment of FRM measures (including flood damage assessment)	1

FRM ref.	Guideline	Description	Version
EM01	Support for emergency management planning	Outlines key EM principles for flooding. Provides advice on FRM information to support EM, flood emergency response classification of communities and considering flood EM constraints in decision-making	1
EM01a	Part A – FRM and EM planning	Provides an overview of EM planning and how it links to the FRM framework	
EM01b	Part B – EM information from the FRM process	Describes the information needed for flood EM that is derived in the FRM process	
EM01c	Part C – Flood emergency response classification of communities	Describes how to classify areas of the community based on their flood emergency response issues	
EM01d	Part D – Considering flood EM constraints in decision-making	Discusses how flood EM constraints can be considered in council decision-making	
LU01	Flood impact and risk assessment	Outlines considerations for assessment of flooding in studies to support developments	Existing <sup>2</sup>
BT01 <sup>3</sup>	Brief development tool	Guidance and a tool to support brief development for studies under the FRM process	Existing
DT01 <sup>4</sup>	Flood damage assessment tool	Tool to support the assessment of flood damages in line with FRM guideline MM01	1 <sup>4</sup>
MR01 <sup>2</sup>	Modelling reports and supporting information (including model files) for review	Outlines the requirements for modelling reports and supporting information including model files to facilitate effective peer review as part of flood studies and FRM studies	Existing <sup>2</sup>

#### Notes

- 1 This handbook is provided direct to FRM committee members by DCCEEW Environment flood staff.
- 2 These are existing guidelines published and available on the web.
- 3 BT01 is available to consultants and councils through the NSW Flood Data Portal.
- 4 DT01 tool will be made available to consultants and councils through the NSW Flood Data Portal.



## 6. Glossary

The manual provides a glossary of terms. Additional terms used in the toolkit but not included in the manual's glossary are outlined below.

Term	Shortened form	Definition	Context for use/additional information
Afflux		Rise in water level in a waterway or flowpath caused by a structure, obstruction or impediment to flow.	
Astronomical tide		The variation in sea level caused by the gravitational effects of (principally) the moon and sun.	It includes highest and lowest astronomical tides (HAT and LAT), which occur when relative alignment and distance of the sun and moon from the Earth are 'optimal'. Water levels approach to within 20 cm of HAT and LAT twice per year around midsummer and midwinter 'king tides'.
Australian Rainfall and Runoff	ARR	A national guideline document, data and software suite that can be used for the estimation of design flood characteristics in Australia.	ARR should be used in studies under the Floodplain Management Program considering any specific advice in relation to its use.
Average annual damage	AAD	The average damage per year due to flooding that would occur in a nominated scenario in an area over a very long period of time.	In many years there may be no damage, in some years there will be minor damage (caused by small, relatively frequent flood events) and in some years there will be major damage (caused by large, rare flood events).
Backwater flooding		A mechanism by which upstream flooding is influenced by downstream conditions or controls.	
Emergency management plan	EMPLAN	The overarching EM arrangements for New South Wales, including the agreed roles and functions of	It is supported by other plans, including sub-plans that detail the response to specific hazards and the

Term	Shortened form	Definition	Context for use/additional information
		various agencies. All NSW Government agencies with responsibilities and functions in disaster response and recovery contribute to this plan.	roles and responsibilities of specific NSW Government agencies.
Emergency management response strategy	EM response strategy	A strategy identified by the combat agency typically used to plan, prepare for and respond to a hazard.	In the flood context this refers to a strategy identified by the NSW SES typically within flood sub-plans (local and state) as the flood combat agency in prevention, preparedness and response to flooding to address public safety risks.
Events per year	EY	Number of events per year.	
Flash flood		Flood that is sudden and unexpected.	It is often caused by sudden local or nearby heavy rainfall. Often defined as flooding that peaks within 6 hours of the causative rain.
Flood classifications (used in flood warnings)		<ul style="list-style-type: none"> <li>• <b>Minor flooding</b> – Causes inconvenience. Low-lying areas next to watercourses are inundated. Minor roads may be closed and low-level bridges submerged. Flooding is usually below the floor level of dwellings and may require removal of stock and equipment from low-lying areas.</li> <li>• <b>Moderate flooding</b> – In addition to the above, the area of inundation is more substantial. Main traffic routes may be affected. Some buildings may be affected above the floor level. Evacuation may be required.</li> <li>• <b>Major flooding</b> – In addition to the above, extensive rural areas and/or urban areas are inundated. Many buildings may be affected above the floor level. Properties and towns are likely to be isolated and</li> </ul>	<p>The Bureau of Meteorology uses a 3-tiered classification scheme that defines flooding as minor, moderate or major at key river height stations. Each classification is defined by the water level that causes certain impacts upstream and downstream of the station.</p> <p>Major flooding, as the highest classification, can cover events of significantly varying scales of impacts.</p>

Term	Shortened form	Definition	Context for use/additional information
		major rail and traffic routes closed. Evacuation of flood affected areas may be required. Utility services may be impacted.	
Flood emergency response classification of communities	FERCC	Classification of the floodplain in consideration of the EM constraints and consequences.	FERCCs may be a key flood related constraint on land.
Flood evacuation capability		The ability to safely evacuate to an area of relative safety within the effective warning time, having regard to the suitability and capacity of the route and the possible prevailing environmental conditions.	People are usually evacuated to areas outside of flood prone land with access to adequate community support.
Flood hazard categorisation		Categorisation of flood affected areas based on the degree of hazard that the flood conditions may present to people, vehicles and structures.	Hazard categorisation is discussed in FRM guideline FB03.
Flood mitigation standard		The design flood selected as part of the FRM process that forms the basis for physical works to modify the impacts of flooding.	
Flood planning constraint categories	FPCCs	Categorisation of the floodplain into areas of different degrees and types of flood related constraints.	Flood planning constraints categories are discussed in FRM guideline FB01.
Flood proofing		Measures incorporated in the design, construction or alteration of individual buildings or structures that are subject to flooding, to reduce structural damage and potentially, in some cases, reduce contents damage.	This can include the use of flood compatible building materials.
Flood watches		Provide the community with early advice of a developing situation that may lead to flooding.	A flood watch is not a warning of imminent flooding.

Term	Shortened form	Definition	Context for use/additional information
Habitable room		<p>In a residential development – a room used for normal domestic activities that:</p> <ul style="list-style-type: none"> <li>• includes a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom, family room, home theatre and sunroom</li> <li>• excludes a bathroom, laundry, water closet, pantry, walk-in wardrobe, corridor, hallway, lobby, photographic darkroom, clothes-drying room, vehicle parking area, storage area and other spaces of a specialised nature occupied neither frequently nor for extended periods.</li> </ul> <p>In an industrial or commercial situation – an area used for offices or to store valuable possessions susceptible to flood damage in the event of a flood.</p>	
Hydrograph		A graph that shows how the discharge or stage/flood level at any location varies with time during a flood.	
Lifecycle costing		All of the costs associated with the project. This usually includes investigation, design, construction, operation, monitoring, maintenance, asset and performance management and, in some cases, renewal, upgrade, decommissioning and disposal of a management measure.	
Mainstream flooding		Inundation resulting from overbank flow from a waterway rather than by local run-off.	Also often called riverine flooding.

Term	Shortened form	Definition	Context for use/additional information
the manual for flood liable land gazetted under section 733 of LG Act	the manual	The <i>Flood risk management manual: the policy and manual for the management of flood liable land</i> (DPE 2023)	This manual was gazetted in 2023. The previous manual was the <i>Floodplain development manual: the management of flood liable land</i> gazetted in 2005 (DIPNR 2005).
Peak flow		The maximum flow occurring during a flood of a given annual exceedance probability.	
Severe thunderstorm warnings		Warnings provided to communities of the threat of dangerous thunderstorms. They are issued when a severe thunderstorm is occurring or likely to occur.	Severe thunderstorm warnings relevant to flooding are issued for very heavy rain that may lead to flash flooding.
Severe weather warnings		Warnings provided for potentially hazardous or dangerous weather that is not solely related to severe thunderstorms, tropical cyclones or bushfires. They are issued whenever severe weather is occurring in an area or is expected to develop or move into an area.	Severe weather warnings relevant to flooding are issued for: <ul style="list-style-type: none"> <li>• very heavy rain that may lead to flash flooding</li> <li>• abnormally high tides (or storm tides) expected to exceed highest astronomical tide</li> <li>• unusually large surf waves expected to cause dangerous conditions on the coast.</li> </ul>
Stage hydrograph		A graph that shows how the water levels at a particular location change with time during a flood. It must be referenced to a particular datum.	
Survey plan		A plan prepared by a registered surveyor.	
Temporal pattern		The variation of rainfall intensity with time during a rainfall event.	
Tidal anomaly		The difference between recorded storm surge levels and predicted astronomical tide level.	



Term	Shortened form	Definition	Context for use/additional information
Tipping point		The critical point in a situation, process or system beyond which a significant and often unstoppable effect or change takes place.	<p>As many measures have a threshold or tipping point at which their benefits diminish significantly or they no longer provide the intended protection, these points are important to understanding the likelihood of consequences to the community.</p> <p>Examples include:</p> <ul style="list-style-type: none"> <li>• a levee overtopping in a flood larger than its design flood</li> <li>• land-use planning control exceeded in floods larger than the event used to set controls – generally the defined flood event</li> <li>• area goes from being accessible to isolated by flooding</li> <li>• area goes from isolated but with land above flood level to fully inundated</li> <li>• EM actions or approach changes; from watch to act, evacuate to rescue.</li> </ul>
Total warning system	TWS	A total warning system describes a means of collecting information about an impending emergency, understanding the nature of the threat, communicating that information to those likely to be affected by it, and facilitating protective action and timely response.	Australia's TWS defines the essential elements of delivering warnings effectively, with a lifecycle of action before, during and after emergency. It is made possible with commitment to a partnership approach across agencies and with communities.
Total warning system for flood	TWSF	An integrated system defining the level of flooding at which a warning will be initiated, the physical means by which it will be relayed, and the persons to whom it will be given. The system includes all necessary hardware	<p>It relates to the application of the total warning system to flood.</p> <p>The role of warnings in a public information and warnings context is to provide point-in-time information about a hazard that is impacting or is</p>

Term	Shortened form	Definition	Context for use/additional information
		such as water level actuators, and radio transmitting and receiving equipment.	<p>expected to impact communities. It describes the impact and expected consequences for communities and includes advice on what people should do.</p> <p>The goal of flood warning is to help government and flood affected communities understand the nature of developing floods so they can take action to reduce their impacts.</p>
Water surface profile		A graph showing the flood stage at any given location along a watercourse at a particular time.	
Wave set-up		The increase in water levels in coastal waters (within the breaker zone) caused by waves transporting water shoreward. The zone of wave set-up against the shore is balanced by a zone of wave 'set-down' (i.e. reduced water levels) seawards of the breaker zone.	
Wind fetch		The horizontal distance in the direction of wind over which wind waves are generated.	
Wind set-up		The increase in water levels in coastal and inland waterways caused by the wind driving the water shoreward and 'piling it up' against the shore.	

## 7. References

COAG (Commonwealth of Australian Governments) (2011) *National strategy for disaster resilience*, Commonwealth of Australia.

DIPNR (Department of Infrastructure, Planning and Natural Resources, NSW) (2005) *Floodplain development manual: the management of flood liable land*, DIPNR, Sydney.

DoHA (Department of Home Affairs) (2018) *National disaster risk reduction framework*, Commonwealth of Australia.

DPE (Department of Planning and Environment, NSW) (2023) 'Flood risk management manual: the policy and manual for the management of flood liable land' DPE, Parramatta.

### More information

#### Flood risk management guidelines and tools

FRM no.	Guideline title	Citation
FRM guideline AG01	<u>'Administration arrangements: flood risk management guideline AG01'</u>	DPE 2023
FRM guideline FG01	<u>'Delivery under the flood risk management framework: flood risk management guideline FG01'</u>	DPE 2023
FRM guideline FG02	FRM committee handbook – unpublished handbook provided to committee members	n/a
FRM guideline FB01	<u>'Understanding and managing flood risk: flood risk management guideline FB01'</u>	DPE 2023
FRM guideline FB02	<u>'Flood function: flood risk management guideline FB02'</u>	DPE 2023
FRM guideline FB03	<u>'Flood hazard: flood risk management guideline FB03'</u>	DPE 2023
FRM guideline FB04	<u>'Floodplain risk management guideline: incorporating 2016 Australian Rainfall and Runoff into studies'</u>	OEH 2019
FRM guideline FB05	<u>Floodplain risk management guideline: modelling the interaction of catchment flooding and oceanic inundation in coastal waterways [PDF 772KB]</u>	OEH 2015
FRM guideline MM01	<u>'Flood risk management measures: flood risk management guideline MM01'</u>	DPE 2023
FRM guideline EM01	<u>'Support for emergency management planning: flood risk management guideline EM01'</u>	DPE 2023
FRM guideline LU01	<u>'Flood impact and risk assessment: flood risk management guideline LU01'</u>	DPE 2023

FRM no.	Guideline title	Citation
FRM tool BT01	Brief development tool – Available through the <a href="#">NSW Flood Data Portal</a>	
FRM tool DT01	Flood damage assessment tool – Available through the <a href="#">NSW Flood Data Portal</a>	
FRM guideline MR01	<a href="#">Flood risk management guideline: modelling reports and supporting information (including model files) for review [PDF 199KB]</a>	DECC 2007

## Other links

See links on the following department webpages:

- [Flood risk management manual](#)
- [Flood risk management guidelines](#)
- [Floodplains](#)

Other web pages referred to in this guideline:

- [Environment and Heritage website](#)
- [Floodplain Management Program](#)
- [Rural floodplain management plans – DCCEE Water webpage](#)
- [NSW Flood Data Portal](#)
- [NSW State Flood Plan](#)