

Rule summary for the Macquarie Valley Floodplain

A summary of the rules and assessment criteria for flood work approval applications in the Macquarie Valley Floodplain. The rules include amendments made to the plan in 2024.

Plan details

Floodplain management plan: *Floodplain Management Plan for the Macquarie Valley Floodplain 2021*

Plan commencement: 24 September 2021

Term of plan: 10 years

Application: These rules apply to all flood work approvals within the Macquarie Valley Floodplain

Important

This document summarises the rules contained in the *Floodplain Management Plan for the Macquarie Valley Floodplain 2021*. It is intended as a guide only. Consult the floodplain management plan on the [NSW legislation website](#) for further details.

Rules

The following types of rules will differ for each management zone:

- the **type of flood works** is limited in management zones A and D
- specific **requirements for flood work types** permitted in management zones A and D including requirements during construction
- unique rules for **existing flood works** in management zones A and D
- **advertisement** is required for larger works in management zone B and all works in management zone BH (MZBH).

The management zones can be seen on the Plan Map or viewed on the interactive spatial map published on the department's [website](#).

Assessment criteria

There are 2 types of assessment criteria: standard assessment criteria (Table 1) and hydraulic assessment criteria (Table 2). The latter would generally require hydraulic modelling to demonstrate that the criteria has been met.

Standard assessment criteria

Table 1. Standard assessment criteria

Theme	Criteria
Impacts to ecological assets, Aboriginal cultural values or heritage sites	Maintain adequate flood connectivity under a range of flood scenarios, including the large and small design flood, to flood dependent ecological assets, flood-dependent Aboriginal cultural values, flood-dependent heritage sites and facilitate fish passage. Maintain adequate flow connectivity to floodplain ecosystems (in areas outside of the floodway network). Not disturb the ground surface or cause erosion to an Aboriginal cultural value or heritage site during construction or modification of the flood work.
Drainage impacts	Maintain adequate drainage in areas on the property, including neighbouring properties, that may be affected by the flood work.
Cumulative impacts	Consider the cumulative impact of the flood work and other existing works located on the property to adjacent properties, any other properties affected by the flood work, and the floodplain environment. For applications that are required to be assessed against the hydraulic assessment criteria, this criterion will not apply. Instead, the hydraulic assessment criteria includes redistribution of flood flow criteria that address cumulative impacts.

Hydraulic assessment criteria

Table 2. Hydraulic assessment criteria

Theme	Criteria
Redistribution of flood flow	Maximum 5% (or 2% for MZBH) redistribution of peak flood flow on neighbouring properties that may be affected by the flood work (compared to peak flood flow under existing development conditions for a range of flood scenarios including the large design flood).
Change in flood levels	Maximum 10 cm increase in flood levels on neighbouring properties that may be affected by the flood work (compared to flood levels under pre-development and existing development conditions for a range of flood scenarios including the large design flood). Not increase flood levels that would result in impacts to high value infrastructure (compared to flood levels under pre-development and existing development conditions for a range of flood scenarios including the large design flood).
Change in flood flow velocity	Maximum 50% (or 25% for MZBH) increase in flood flow velocity on the property and neighbouring properties that may be affected by the flood work (compared to flood flow velocity under pre-development and existing development conditions for a range of flood scenarios including the large design flood) unless: - increases greater than 50% (or 25% for MZBH) are isolated on the property and average impact across the property is less than 50% (or 25% for MZBH), and - increases are not greater than 50% (or 25% for MZBH) at the property boundary. Not increase flood flow velocity that would result in more than minimal soil erosion on the property and neighbouring properties that may be affected by the flood work, taking into account the ground cover on those properties.

Theme	Criteria
Redistribution of flood flow (Cumulative impact)	Maximum 5% (or 2% for MZBH) redistribution of peak flood flow at any of the peak discharge locations shown on the peak flow distribution map (compared to redistribution under existing development conditions). Maximum 5% (or 2% for MZBH) redistribution of peak flood flow at any location and under any other flood scenario considered relevant by the Minister.

Management zone A

The rules described in Table 3 apply to a flood work or part of a flood work that is located within management zone A.

Table 3. Rules for flood works in management zone A

Type	Rules
Types of flood works	The following types of flood works are permitted subject to meeting the requirements outlined below and standard assessment criteria: • standard access road • primary access road • supply channel • stock refuge • infrastructure protection work • ecological enhancement work • Aboriginal cultural enhancement work • heritage site enhancement work • Aboriginal cultural value protection work • heritage site protection work.

Type	Rules
Requirements for flood works: Standard access road (road within private property)	Maximum height of 30 cm above the natural surface of the ground. Causeways at least every 200 m, at the lowest point of the floodway, are no higher than the natural surface of the ground and comprise at least 10% of the total length of the road within management zone A, or is constructed in a way that adequately allows for the passage of floodwater and adequately prevents the diversion of floodwater from natural flow paths. Borrow associated with construction/maintenance is located on the downstream side of the access road and is no deeper than 30 cm below the natural surface of the ground.
Requirements for flood works: Primary access road (private road leading directly to a permanently occupied fixed dwelling)	Maximum height of 50 cm above the natural surface of the ground. Causeways at least every 200 m, at the lowest point of the floodway, are no higher than the natural surface of the ground and comprise at least 10% of the total length of the road within management zone A, or is constructed in a way that adequately allows for the passage of floodwater and adequately prevents the diversion of floodwater from natural flow paths. Borrow associated with construction/maintenance is located on the downstream side of the access road and is no deeper than 30 cm below the natural surface of the ground.
Requirements for flood works: Supply channels	Height must be below the natural surface of the ground. Allow for the passage of floodwater and prevent diversion of water. Spoil associated with construction/maintenance must be: - no higher than 10 cm above the natural surface of the ground, or - located in a heaped line parallel to flow direction and not block more than 5% of the width of management zone A (measured at the location of the channel and perpendicular to flow direction).
Requirements for flood works: Stock refuge	Maximum area of 10 hectares and no other stock refuge in that area. Total maximum area of all stock refuges is no more than 5% of total property area. Does not block more than 5% of the width of management zone A (at the location of the refuge and perpendicular to flow direction).

Type	Rules
Requirements for flood works: Infrastructure protection works	Maximum area enclosed by the work is: 10% of the total area of the property if the maximum area of management zone A on the property is no more than 20 hectares, or 2 hectares or 1% of the total area of the property (whichever is largest) if the maximum area of management zone A on the property is more than 20 hectares. Does not block more than 5% of the width of management zone A (at the location of the work and perpendicular to flow direction).
Requirements for flood works: Ecological enhancement works	The primary purpose must be to improve flood connectivity to a flood-dependent ecological asset that is specified in a local, state or Commonwealth environmental plan, policy or legislation. The improvement in flood connectivity must contribute to the protection or conservation of one or more flood-dependent ecological assets. Must be part of an active government program such as the <u>Reconnecting River Country Program</u>, a cultural watering plan or a natural resource management project with Local Land Services. Comply with both the standard assessment criteria and hydraulic assessment criteria.
Requirements for flood works: Aboriginal cultural enhancement works	The primary purpose must be to improve flood connectivity to a flood-dependent Aboriginal cultural value that is listed on the Aboriginal Heritage Information Management System (AHIMS) or other heritage register. The improvement in flood connectivity must contribute to the protection or conservation of one or more flood-dependent Aboriginal cultural values. Must be part of an active government program such as the <u>Reconnecting River Country Program</u>, a cultural watering plan or a natural resource management project with Local Land Services. Comply with both the standard assessment criteria and hydraulic assessment criteria.

Type	Rules
Requirements for flood works: Heritage site enhancement works	The primary purpose must be to improve flood connectivity to a flood-dependent heritage site that is listed on a heritage register. The improvement in flood connectivity must contribute to the protection or conservation of one or more flood-dependent heritage sites. Must be part of an active government program such as the <u>Reconnecting River Country Program</u>, a cultural watering plan or a natural resource management project with Local Land Services. Comply with both the standard assessment criteria and hydraulic assessment criteria.
Requirements for flood works: Aboriginal cultural protection works	Demonstrate protection for a flood-impacted Aboriginal cultural asset listed on the AHIMS or other heritage register. Does not block more than 5% of the width of management zone A (at the location of the work and perpendicular to flow direction). Maximum area enclosed by the work is: • 10% of the total area of the property if the maximum area of management zone A on the property is 20 hectares, or • 2 hectares or 1% of the total area of the property (whichever is largest) if the maximum area of management zone A on the property is greater than 20 hectares.
Requirements for flood works: Heritage site protection works	Demonstrate protection for a flood-impacted heritage site listed on a heritage register. Does not block more than 5% of the width of management zone A (at the location of the work and perpendicular to flow direction). Maximum area enclosed by the work is: • 10% of the total area of the property if the maximum area of management zone A on the property is 20 hectares, or • 2 hectares or 1% of the total area of the property (whichever is largest) if the maximum area of management zone A on the property is greater than 20 hectares.

Type	Rules
Existing flood works	The following types of flood works are permitted if they were constructed prior to the commencement of the plan (24 September 2021) and comply with the standard assessment criteria: • standard access road • primary access road • infrastructure protection work • stock refuge • supply channel (above ground and below ground). The flood works must not be the subject of a previously refused application for a flood work approval under the <i>Water Management Act 2000</i> or an application for a controlled work under the repealed Part 8 of the <i>Water Act 1912</i>.
Existing approved flood works	Modifications to flood works that are covered by a current flood work approval are permitted if the proposed modification will have a reduced impact on flow patterns in management zone A, including impacts on flow distribution, depth, drainage or velocity. Comply with the standard assessment criteria.
Advertisement	Not applicable in management zone A.
Assessment criteria	All flood works must meet the standard assessment criteria. Enhancement flood works must also meet the hydraulic assessment criteria.

Management zone BH

The rules described in Table 4 apply to a flood work or part of a flood work that is located within management zone BH.

Table 4. Rules for flood works in management zone BH

Type	Rules
Types of flood works	Any type of flood work is permitted, subject to meeting the relevant assessment criteria.
Advertisement	All flood work applications must be advertised.

Type	Rules
Assessment criteria	All flood works must meet both the standard assessment criteria and hydraulic assessment criteria.

Management zone B

The rules described in Table 5 apply to a flood work or part of a flood work that is located within management zone B.

Table 5. Rules for flood works in management zone B

Type	Rules
Types of flood works	Any type of flood work is permitted, subject to meeting the relevant assessment criteria.
Existing flood works	Same rules apply to both existing flood works or proposed flood works in management zone B.
Advertisement	Flood work applications must be advertised for flood works that are: • greater than 40 cm above the natural surface of the ground, or • a stock refuge with an area greater than 10 hectares and no other stock refuge in that area, or • a stock refuge on a property and the total maximum area of all stock refuges is larger than 5% of total property area, or • an infrastructure protection work with an area that is larger than 1% of the total area of the property.
Assessment criteria	All flood works must meet both the standard assessment criteria and hydraulic assessment criteria.

Management zone C

The rules described in Table 6 apply to a flood work or part of a flood work that is located within management zone C.

Table 6. Rules for flood works in management zone C

Type	Rules
Types of flood works	Any type permitted, subject to meeting relevant assessment criteria.
Existing flood works	Same rules apply to both existing flood works or proposed flood works in management zone C.
Advertisement	Not applicable in management zone C.
Assessment criteria	All flood works must meet the standard assessment criteria, and if determined by the Minister then the flood work must also meet the hydraulic assessment criteria.

Management zone CU

The rules described in Table 7 apply to a flood work or part of a flood work that is located within management zone CU.

Table 7. Rules for flood works in management zone CU

Type	Rules
Types of flood works	Any type permitted, subject to meeting relevant assessment criteria.
Existing flood works	Same rules apply to both existing flood works or proposed flood works in management zone CU.
Advertisement	Not applicable in management zone CU.
Assessment criteria	All flood works must meet the standard assessment criteria, and if determined by the Minister then the flood work must also meet the hydraulic assessment criteria.

Management zone D (special protection)

The rules described in Table 8 apply to a flood work or part of a flood work that is located within management zone D.

Table 8. Rules for flood works in management zone D

Type	Rules
Types of flood works	The following types of flood works are permitted subject to meeting the requirements outlined below and standard assessment criteria: • standard access road • stock refuge • infrastructure protection work • Aboriginal cultural value protection work • Heritage site protection work • ecological enhancement work • Aboriginal cultural enhancement work • heritage site enhancement work.
Requirements for flood works: Standard access road (road within private property)	Maximum height of 30 cm above the natural surface of the ground. Causeways at least every 200 m, at the lowest point of the floodway, are no higher than the natural surface of the ground and comprise at least 10% of the total length of the road within management zone D, or is constructed in a way that adequately allows for the passage of floodwater and adequately prevents the diversion of floodwater from natural flow paths Borrow associated with construction/maintenance is located on the downstream side of the access road and is no deeper than 30 cm below the natural surface of the ground.
Requirements for flood works: Stock refuge	Maximum area of 10 hectares and no other stock refuge in that area. Total maximum area of all stock refuges is no more than 5% of total property area. Does not block more than 5% of the width of management zone D (at the location of the refuge and perpendicular to flow direction).

Type	Rules
Requirements for flood works: Infrastructure protection works	Maximum area enclosed by the work is: 10% of the total area of the property if the maximum area of management zone D on the property is no more than 20 hectares, or 2 hectares or 1% of the total area of the property (whichever is largest) if the maximum area of management zone D on the property is more than 20 hectares. Does not block more than 5% of the width of management zone D (at the location of the work and perpendicular to flow direction).
Requirements for flood works: Aboriginal cultural protection works	Demonstrate protection for a flood-impacted Aboriginal cultural asset listed on the AHIMS or other heritage register. Does not block more than 5% of the width of management zone D (at the location of the work and perpendicular to flow direction). Maximum area enclosed by the work is: 10% of the total area of the property if the maximum area of management zone D on the property is 20 hectares, or 2 hectares or 1% of the total area of the property (whichever is largest) if the maximum area of management zone D on the property is greater than 20 hectares.
Requirements for flood works: Heritage site protection works	Demonstrate protection for a flood-impacted heritage site listed on a heritage register. Does not block more than 5% of the width of management zone D (at the location of the work and perpendicular to flow direction). Maximum area enclosed by the work is: 10% of the total area of the property if the maximum area of management zone D on the property is 20 hectares, or 2 hectares or 1% of the total area of the property (whichever is largest) if the maximum area of management zone D on the property is greater than 20 hectares.

Type	Rules
Requirements for flood works: Ecological enhancement works	The primary purpose must be to improve flood connectivity to a flood-dependent ecological asset that is specified in a local, state or Commonwealth environmental plan, policy or legislation. The improvement in flood connectivity must contribute to the protection or conservation of one or more flood-dependent ecological assets. Must be part of an active government program such as the <u>Reconnecting River Country Program</u>, a cultural watering plan or a natural resource management project with Local Land Services. Comply with both the standard assessment criteria and hydraulic assessment criteria.
Requirements for flood works: Aboriginal cultural enhancement works	The primary purpose must be to improve flood connectivity to a flood-dependent Aboriginal cultural value that is listed on the Aboriginal Heritage Information Management System (AHIMS) or other heritage register. The improvement in flood connectivity must contribute to the protection or conservation of one or more flood-dependent Aboriginal cultural values. Must be part of an active government program such as the <u>Reconnecting River Country Program</u>, a cultural watering plan or a natural resource management project with Local Land Services. Comply with both the standard assessment criteria and hydraulic assessment criteria.
Requirements for flood works: Heritage site enhancement works	The primary purpose must be to improve flood connectivity to a flood-dependent heritage site that is listed on a heritage register. The improvement in flood connectivity must contribute to the protection or conservation of one or more flood-dependent heritage sites. Must be part of an active government program such as the <u>Reconnecting River Country Program</u>, a cultural watering plan or a natural resource management project with Local Land Services. Comply with both the standard assessment criteria and hydraulic assessment criteria.

Type	Rules
Existing flood works	The following types of flood works are permitted if they were constructed prior to commencement of the plan (24 September 2021) and comply with the standard assessment criteria: • access road • infrastructure protection work • stock refuge • supply channel. The flood works must not be the subject of a previously refused application for a flood work approval under the <i>Water Management Act 2000</i> or an application for a controlled work under the repealed Part 8 of the <i>Water Act 1912</i>.
Existing approved flood works	Modifications to flood works that are covered by a current flood work approval are permitted if the proposed modification will have a reduced impact on flow patterns in management zone D, including impacts on flow distribution, depth, drainage or velocity. Comply with the standard assessment criteria.
Advertisement	Not applicable in management zone D.
Assessment criteria	All flood works must meet the standard assessment criteria. Flood enhancement works must also meet the hydraulic assessment criteria.

Exemptions

Some activities considered low risk, such as some small ring embankments and low-level farm tracks, or covered by other legislation may be exempt from requiring a flood work approval. Please contact [WaterNSW](#) to discuss your individual circumstances.

More information

To read the floodplain management plan and supporting fact sheets, visit the department's website: water.nsw.gov.au/macquarie-floodplain-management-plan