



New South Wales
Government

Floodplain Management Plan for the Gwydir Valley Floodplain 2016 Amendment Order 2023

under the

Water Management Act 2000

I, KEVIN ANDERSON MP, Minister for Lands and Water, in pursuance of section 45 (1) of the *Water Management Act 2000*, being satisfied it is in the public interest to do so, make the following Order to amend the *Floodplain Management Plan for the Gwydir Valley Floodplain 2016*.

Dated 23 January 2023

KEVIN ANDERSON, MP
Minister for Lands and Water

Explanatory note

This Order is made under section 45 (1) of the *Water Management Act 2000*. The object of this Order is to amend the *Floodplain Management Plan for the Gwydir Valley Floodplain 2016*. The concurrence of the Minister for the Environment was obtained prior to the making of this Order as required under section 45 of the *Water Management Act 2000*.

1 Name of Order

This Order is the *Floodplain Management Plan for the Gwydir Valley Floodplain 2016 Amendment Order 2023*.

2 Commencement

This Order commences on the day on which it is published on the NSW legislation website.

Schedule 1 Amendment of Floodplain Management Plan for the Gwydir Valley Floodplain 2016

[1] Clause 5 (1) (d) Management zones

Omit Note to clause 5 (1) (d), and insert instead:

Note—

Gwydir Management Zone D is a special protection zone in the Lower Gingham Watercourse for areas of ecological or cultural significance, or both.

[2] Clause 5 (1) (d)

Insert after clause 5 (1) (d) a new clause 5 (1) (e):

Gwydir Management Zone D1.

Notes—

- 1 Gwydir Management Zone D1 is a special protection zone for areas of ecological or cultural significance, or both.
- 2 Areas of ecological or cultural significance, or both, in Gwydir Management Zone D1 are listed in Schedule 2.

[3] Clause 5 (2)

Omit “(FMP002_Version 1)” and insert instead “(FMP002_Version 2)”.

[4] Clause 5 (2)

After clause 5 (2), insert:

- (3) Gwydir Management Zone D1 is a Management Zone D for the purposes of clause 45 (b) of the *Water Management (General) Regulation 2018*.

[5] Clause 7 Interpretation

After clause 7 (5), insert:

(6) The following maps form part of this Plan:

- (a) Plan Map,
- (b) Management Zones Map,
- (c) Flood Extent Map,
- (d) Floodway Network Map,
- (e) Ecological Assets Map,
- (f) Existing Flood Works Map,
- (g) Peak Flood Flow Distribution (2012) Map.

(7) A number in brackets following the name of a gauge is the gauge number.

[6] Clause 10 Objectives

Omit clause 10 and insert instead:

The objectives of this Plan are as follows:

- (a) to facilitate the orderly passage of floodwaters through the Gwydir Valley Floodplain,
- (b) to establish a framework for the granting or amending of flood work approvals for flood works located in the Gwydir Valley Floodplain,
- (c) to contribute to the minimisation of the risk to life and property from the effects of flooding in the Gwydir Valley Floodplain,
- (d) to maintain flood connectivity to wetlands, other floodplain ecosystems, and areas of groundwater recharge in the Gwydir Valley Floodplain,
- (e) to contribute to the protection of flood-dependent ecological assets and flood-dependent ecological values in the Gwydir Valley Floodplain,
- (f) to contribute to the protection of flood-dependent assets, including flood-dependent Aboriginal cultural values and heritage sites in the Gwydir Valley Floodplain.

[7] Clause 11 Strategies

Omit clause 11 and insert instead:

The strategies of this Plan are:

- (a) to delineate a floodway network that accurately represents the passage of floodwater in the Gwydir Valley Floodplain,
- (b) to establish management zones with rules and assessment criteria for the granting and amendment of flood work approvals in the Gwydir Valley Floodplain,

Note—

Clause 5 establishes management zones in the Gwydir Valley Floodplain and the provisions in Part 8 establish rules and assessment criteria for flood work approvals specific to each management zone. The rules and assessment criteria for flood work approvals assist in the coordination of flood work development in the Gwydir Valley Floodplain. The methodology for delineating the management zones is based on hydraulic, ecological, cultural and existing planning arrangements criteria, and is described in the Technical Manual and Background Document. The Management Zones Map and the provisions in Part 8 contribute to achieving all of the objectives in clause 10 of this Plan.

- (c) to identify areas of the Gwydir Valley Floodplain where flooding may impact life and property,

Note—

Part 4 and the Floodway Network Map identify areas of the Floodplain that are subject to major flood discharge or inundation during times of flooding. The provisions in Part 7 deal with the risk to life and property from the effects of flooding. The floodway network is used to inform the delineation of the management zones in clause 5, and Part 8 establishes rules and assessment criteria for flood work approvals specific to each management zone. The provisions in Part 8 facilitate the approval of flood

protection works in the Floodplain and limit the hydraulic impacts on flood behaviour. These provisions contribute to achieving the objective in clause 10 (c) of this Plan.

- (d) to identify and prioritise flood-dependent ecological assets and values in the Gwydir Valley Floodplain,

Note—

Division 2 of Part 5, Schedule 1 and Schedule 2 identify flood-dependent ecological assets and values in the Gwydir Valley Floodplain. This information is used to inform the delineation of the management zones, and contributes to achieving the objectives in clause 10 (d) and (e) of this Plan.

- (e) to establish rules and assessment criteria for flood work approvals that ensure adequate flood connectivity is maintained in the Gwydir Valley Floodplain,

Note—

The provisions in Part 8 establish assessment criteria for flood work approvals specific to each management zone and contribute to achieving the objectives in clause 10 (d) and (e) of this Plan.

- (f) to identify and prioritise flood-dependent cultural assets and values, including Aboriginal cultural values and heritage sites in the Gwydir Valley Floodplain,

Note—

Division 3 of Part 5 identifies flood-dependent cultural assets and values in the Gwydir Valley Floodplain. This information is used to inform the delineation of the management zones, and contributes to achieving the objective in clause 10 (f) of this Plan.

- (g) to establish assessment criteria for flood work approvals that protects heritage sites in the Gwydir Valley Floodplain, during the construction or modification of flood works.

Note—

The provisions in Part 8 establish assessment criteria that protect heritage sites during flood work construction or modification, and contribute to achieving the objective in clause 10 (f) of this Plan.

[8] Clause 12 Performance indicators

Omit clause 12 and insert instead:

- (1) The performance indicators used to measure the success in achieving the objectives of this Plan are as follows—

- (a) the extent to which the Floodway Network Map and the management zone boundaries accurately represent the passage of floodwater in the Gwydir Valley Floodplain,

Note—

Information about the hydraulic behaviour of monitored floods will be used for this performance indicator.

- (b) the extent to which flood works, approved in accordance with Part 8 of this Plan, and constructed or modified after the commencement of this Plan, have altered the following—
 - (i) the hydraulic behaviour of floodwater in the Gwydir Valley Floodplain,

- (ii) flood connectivity to flood-dependent ecological assets and values in the Gwydir Valley Floodplain,
 - (iii) flood connectivity to flood-dependent cultural assets and values, including Aboriginal cultural values and heritage sites in the Gwydir Valley Floodplain,
 - (iv) the condition of heritage sites in the Gwydir Valley Floodplain.
- (c) the extent to which this Plan has accurately identified flood-dependent ecological assets and values in the Gwydir Valley Floodplain,
 - (d) the extent to which this Plan has accurately identified flood-dependent cultural assets and values, including Aboriginal cultural values and heritage sites, in the Gwydir Valley Floodplain,

Note—

One or more performance indicators may be measured to evaluate each of the objectives listed in clause 10 and strategies listed in clause 11.

- (2) In evaluating the effectiveness of the strategies in meeting the objectives of this Plan, the following will be relevant—
 - (a) the extent to which the strategies and provisions in this Plan have been effectively implemented and complied with,
 - (b) the extent to which external influences on the Gwydir Valley Floodplain have affected progress toward achieving the objectives.

Note—

External influences may include long and short-term climate trends and land use change. There may be other external influences other than the factors listed here.

[9] Clause 14 Natural flooding regime

Insert “(AEP)” after “Annual exceedance probability” in the Note after Table 1.

[10] Clause 16 (2) General

Omit “(FMP004_Version 1)” and insert instead “(FMP004_Version 2)”.

[11] Clause 21 Aboriginal values

Insert “cultural” after “Aboriginal” in the title.

[12] Clause 21 (1)

Insert “cultural” after “Aboriginal” in the first sentence.

[13] Clause 21 (1)

Omit subclauses 21 (1) (a) - (d) and insert instead:

- (a) Aboriginal Heritage Information Management System,

(b) Murray-Darling Basin Authority Aboriginal Submissions Database,

(c) NSW State Heritage Register,

(d) Commonwealth Heritage List,

(e) any other source that, in the Minister's opinion, is relevant.

[14] Clause 21 (2)

Insert "cultural" after "Aboriginal".

[15] Clause 21 (3)

Insert "cultural" after the first "Aboriginal" in subclause (3), after "Aboriginal" in subclause (c), and after "Aboriginal" in Notes 1 and 2.

[16] Clause 22 (c) Heritage sites

Omit "Historic" at subclause 22 (c) and insert instead "Heritage".

[17] Clause 22 (e)

Omit subclause 22 (e) and insert instead "Murray-Darling Basin Authority Aboriginal Submissions Database".

[18] Clause 22 (f)

Omit "Register" and insert instead "List".

[19] Clause 38 (1) (b) Flood works authorised in Gwydir Management Zone A

Omit "below the natural surface level" in clause 38 (1) (b).

[20] Clause 38 (1) (d)

Insert after subclause 38 (1) (d):

(e) an ecological enhancement work,

(f) an Aboriginal cultural value enhancement work,

(g) a heritage site enhancement work.

[21] Clause 38 (2)

Omit "the access road is or is proposed to be" and insert instead "all of the following apply:"

[22] Clause 38 (2) (a) - (d)

Omit subclauses 38 (2) (a) - (d) and insert instead:

(a) the height of the access road at any point of the road is no more than:

(i) 15 cm above the natural surface level if it is not a primary access road, or

Note—

Natural surface level and **primary access road** are defined in the Dictionary.

- (ii) 50 cm above the natural surface level if it is a primary access road,
- (b) the access road is constructed:
- (i) with causeways that:

- (A) are situated at no higher than the natural surface level, and
- (B) are located at low points of the floodway, and
- (C) occur at least once every 200 metres, and
- (D) total at least 10% of the total length of the access road that is in the Gwydir Management Zone A, and

Note—

This applies to access roads within a single property and that span multiple properties.

- (ii) with any borrow associated with the construction and maintenance of the access road being located on the downstream of the road and no deeper than 15 cm below the natural surface level.

Note—

Borrow is defined in the Dictionary.

[23] Clause 38 (3)

Omit “below the natural surface level”.

[24] Clause 38 (3) (a)

Insert “from natural flow paths” after “diversion of floodwater”.

[25] Clause 38 (3) (b) (ii)

Omit the full stop after subclause 38 (b) (ii) and insert instead “, and”.

[26] Clause 38 (3) (b)

Insert after subclause 38 (b) (ii):

- (c) below the natural surface level.

[27] Clause 38 (7)

Insert after subclause 38 (7):

- (8) Subject to subclause (1) and clause 40, a flood work approval must not be granted or amended to authorise the construction of an ecological enhancement work in the Gwydir Management Zone A unless, in the Minister’s opinion, the work is for

the purpose of providing a positive outcome for a flood-dependent ecological asset or any other ecological asset specified in local, state or Commonwealth environmental plans, policy or legislation, including any of the following:

- (a) *Basin Plan 2012* (Cth),
 - (b) *Biodiversity Conservation Act 2016*,
 - (c) *Environment Protection and Biodiversity Conservation Act 1999* (Cth),
 - (d) the long-term watering plan for the Gwydir surface water resource plan area under the *Basin Plan 2012* (Cth),
 - (e) *National Parks and Wildlife Act 1974*,
 - (f) *Fisheries Management Act 1994*,
 - (g) NSW Wetland Policy 2010,
 - (h) Fisheries NSW *Policy and Guidelines for Fish Habitat Conservation and Management* (2013 update),
 - (i) any other source that, in the Minister's opinion, is relevant.
- (9) Subject to subclause (1) and clause 40, a flood work approval must not be granted or amended to authorise the construction of an Aboriginal cultural value enhancement work in the Gwydir Management Zone A unless, in the Minister's opinion, the work is for the purpose of providing a positive outcome for a flood-dependent Aboriginal cultural value or any other Aboriginal cultural value listed in any of the following:
- (a) Aboriginal Heritage Information Management System,
 - (b) Murray-Darling Basin Authority Aboriginal Submissions Database,
 - (c) NSW State Heritage Register,
 - (d) Commonwealth Heritage List,
 - (e) any other source that, in the Minister's opinion, is relevant.
- (10) Subject to subclause (1) and clause 40, a flood work approval must not be granted or amended to authorise the construction of a heritage site enhancement work in the Gwydir Management Zone A unless, in the Minister's opinion, the work is for the purpose of providing a positive outcome for a flood-dependent heritage site or any other heritage site listed in any of the following:
- (a) Aboriginal Heritage Information Management System,
 - (b) Murray-Darling Basin Authority Aboriginal Submissions Database,

- (c) NSW State Heritage Register,
- (d) NSW State Heritage Inventory,
- (e) Historic Heritage Information Management System,
- (f) Commonwealth Heritage List,
- (g) any other source that, in the Minister's opinion, is relevant.

[28] Clause 39 (1) (b) (ii) Existing flood structure and works in Gwydir Management Zone A

Omit "below the natural surface level".

[29] Clause 39 (3)

Omit "under" and insert instead "referred to in".

[30] Clause 40 (2) Assessment criteria for flood works in Gwydir Management Zone A

Omit subclause 40 (2) and insert instead:

- (2) A flood work approval must not be granted or amended to authorise the construction of a flood work in Gwydir Management Zone A unless, in the Minister's opinion, the flood work can be constructed to maintain adequate flood connectivity to the following under a range of flood scenarios including, at a minimum, scenarios for the small and large design floods:

- (a) flood-dependent ecological assets,
- (b) facilitation of fish passage.

Note—

Ecological assets that have been identified as flood-dependent assets for the purposes of this Plan are identified in Schedule 1 and shown on the *Ecological Assets Map*.

- (2A) A flood work approval must not be granted or amended to authorise the construction of a flood work in Gwydir Management Zone A unless, in the Minister's opinion, the flood work can be constructed to maintain adequate flood connectivity to the following under a range of flood scenarios, including, at a minimum, scenarios for the small and large design floods:

- (a) flood-dependent Aboriginal cultural values,
- (b) flood-dependent heritage sites.

Notes—

- 1 Aboriginal cultural values that are flood-dependent assets for the purposes of this Plan are the Aboriginal cultural values identified in clause 21.

- 2 Heritage sites that have been identified as flood-dependent assets for the purposes of this Plan are sites, objects or places listed in at least one of the sources referred to in clause 22.

[31] Clause 42 (2) Assessment criteria in Gwydir Management Zone B

Omit subclause 42 (2) and insert instead:

- (2) A flood work approval must not be granted or amended to authorise the construction of a flood work in Gwydir Management Zone B unless, in the Minister’s opinion, the flood work can be constructed to maintain adequate flood connectivity to the following under a range of flood scenarios including, at a minimum, scenarios for the small and large design floods:

- (a) flood-dependent ecological assets, and
- (b) facilitation of fish passage.

Note—

Ecological assets that have been identified as flood-dependent assets for the purposes of this Plan are identified in Schedule 1 and shown on the *Ecological Assets Map*.

- (2A) A flood work approval must not be granted or amended to authorise the construction of a flood work in Gwydir Management Zone B unless, in the Minister’s opinion, the flood work can be constructed to maintain adequate flood connectivity to the following under a range of flood scenarios including, at a minimum, scenarios for the small and large design floods:

- (a) flood-dependent Aboriginal cultural values, and
- (b) flood-dependent heritage sites.

Notes—

- 1 Aboriginal cultural values that are flood-dependent assets for the purposes of this Plan are the Aboriginal cultural values identified in clause 21.
- 2 Heritage sites that have been identified as flood-dependent assets for the purposes of this Plan are sites, objects or places listed in at least one of the sources referred to in clause 22.

[32] Clause 42 (5) (a)

Omit “2012” and insert instead “large”.

[33] Clause 42 (5) (b)

Omit “2012” and insert instead “large”.

[34] Clause 42 (5) (c)

Omit “2012 design flood, or” and insert instead:

large design flood unless:

- (i) increases of more than 50% are in isolated areas on the landholding and the landholder mitigates the impact on the flood wave so that the average impact across the landholding does not exceed 50%, and

- (ii) increases in flow velocity do not exceed 50% at the boundary of the landholding, or

Note—

Flood wave is defined in the Dictionary.

[35] Clause 42 (5) (d)

Insert after subclause 42 (5) (d):

- (e) increase flood levels resulting in impacts on high value infrastructure when compared to flood levels under pre-development conditions and existing development conditions for a range of flood scenarios including, at a minimum the large design flood.

Note—

High value infrastructure is defined in the Dictionary.

[36] Clause 42 (7)

Omit “2004” and insert instead “large” in Note to subclause 42 (7).

[37] Clause 43 (2) Assessment criteria in Gwydir Management Zone C

Omit subclause 43 (2) and insert instead:

- (2) A flood work approval must not be granted or amended to authorise the construction of a flood work in Gwydir Management Zone C unless, in the Minister’s opinion, the flood work can be constructed to maintain adequate flood connectivity to the following under one or more flood scenarios including, at a minimum, scenarios for the large design flood and the 1% AEP flood:

- (a) flood-dependent ecological assets, and
- (b) facilitation of fish passage.

Note—

Ecological assets that have been identified as flood-dependent assets for the purposes of this Plan are identified in Schedule 1 and shown on the *Ecological Assets Map*.

- (2A) A flood work approval must not be granted or amended to authorise the construction of a flood work in Gwydir Management Zone C unless, in the Minister’s opinion, the flood work can be constructed to maintain adequate flood connectivity to the following under one or more flood scenarios including, at a minimum, scenarios for the large design flood and the 1% AEP flood:

- (a) flood-dependent Aboriginal cultural values, and
- (b) flood-dependent heritage sites.

Notes—

- 1 Aboriginal cultural values that are flood-dependent assets for the purposes of this Plan are the Aboriginal cultural values identified in clause 21.
- 2 Heritage sites that have been identified as flood-dependent assets for the purposes of this Plan are sites, objects or places listed in at least one of the sources referred to in clause 22.

[38] Clause 43 (5) (c)

Insert the following after “scenarios”:

unless,

- (i) increases of more than 50% are in isolated areas on the landholding and the landholder mitigates the impact on the flood wave so that the average impact across the landholding does not exceed 50%, and
- (ii) increases in flow velocity do not exceed 50% at the boundary of the landholding,
or

[39] Clause 43 (5) (d)

Delete full stop after the final “landholdings” in subclause 43 (5) (d) and insert instead “, or”.

[40] Clause 43 (5) (d)

Insert the following after subclause 43 (5) (d):

- (e) increase flood levels resulting in impacts on high value infrastructure when compared to flood levels under pre-development conditions and existing development conditions for one or more flood scenarios.

[41] Clause 43 (6)

Omit “2012” and insert instead “large” in Note to subclause 43 (6).

[42] Clause 44 (1) Flood works authorised in Gwydir Management Zone D

Insert the following after “work” in subclause 44 (1) (b):

, or

- (c) an ecological enhancement work, or
- (d) an Aboriginal cultural value enhancement work, or
- (e) a heritage site enhancement work.

[43] Clause 44 (5)

Insert the following after subclause 44 (5):

- (6) Subject to subclause (1) and clause 46, a flood work approval must not be granted or amended to authorise the construction of an ecological enhancement work in the Gwydir Management Zone D unless, in the Minister’s opinion, the work is for the purpose of providing a positive outcome for a flood-dependent ecological

asset or any other ecological asset specified in local, state or Commonwealth environmental plans, policy or legislation, including any of the following:

- (a) *Basin Plan 2012* (Cth),
 - (b) *Biodiversity Conservation Act 2016*,
 - (c) *Environment Protection and Biodiversity Conservation Act 1999* (Cth),
 - (d) the long-term watering plan for the Gwydir surface water resource plan area under the *Basin Plan 2012* (Cth),
 - (e) *National Parks and Wildlife Act 1974*,
 - (f) *Fisheries Management Act 1994*,
 - (g) NSW Wetland Policy 2010,
 - (h) *Fisheries NSW Policy and Guidelines for Fish Habitat Conservation and Management* (2013 update),
 - (i) any other source that, in the Minister's opinion, is relevant.
- (7) Subject to subclause (1) and clause 46, a flood work approval must not be granted or amended to authorise the construction of an Aboriginal cultural value enhancement work in the Gwydir Management Zone D unless, in the Minister's opinion, the work is for the purpose of providing a positive outcome for a flood-dependent Aboriginal cultural value or any other Aboriginal cultural value listed in any of the following:
- (a) Aboriginal Heritage Information Management System,
 - (b) Murray-Darling Basin Authority Aboriginal Submissions Database,
 - (c) NSW State Heritage Register,
 - (d) Commonwealth Heritage List,
 - (e) any other source that, in the Minister's opinion, is relevant.
- (8) Subject to subclause (1) and clause 46, a flood work approval must not be granted or amended to authorise the construction of a heritage site enhancement work in the Gwydir Management Zone D unless, in the Minister's opinion, the work is for the purpose of providing a positive outcome for a flood-dependent heritage site or any other heritage site listed in any of the following:
- (a) Aboriginal Heritage Information Management System,
 - (b) Murray-Darling Basin Authority Aboriginal Submissions Database,
 - (c) NSW State Heritage Register,

- (d) NSW State Heritage Inventory,
- (e) Historic Heritage Information Management System,
- (f) Commonwealth Heritage List,
- (g) any other source that, in the Minister’s opinion, is relevant.

[44] Clause 45 (3) Existing flood structures and works in Gwydir Management Zone D

Omit “under” and insert instead “referred to in”.

[45] Clause 46 (2) Assessment criteria in Gwydir Management Zone D

Omit subclause 46 (2) and insert instead:

- (2) A flood work approval must not be granted or amended to authorise the construction of a flood work in Gwydir Management Zone D unless, in the Minister’s opinion, the flood work can be constructed to maintain adequate flood connectivity to the following under a range of flood scenarios including, at a minimum, scenarios for the small and large design floods:
 - (a) flood-dependent ecological assets, and
 - (b) facilitation of fish passage.

Note. Ecological assets that have been identified as flood-dependent assets for the purposes of this Plan are identified in Schedule 1 and shown on the *Ecological Assets Map*.

- (2A) A flood work approval must not be granted or amended to authorise the construction of a flood work in Gwydir Management Zone D unless, in the Minister’s opinion, the flood work can be constructed to maintain adequate flood connectivity to the following under a range of flood scenarios including, at a minimum, scenarios for the small and large design floods:
 - (a) flood-dependent Aboriginal cultural values, and
 - (b) flood-dependent heritage sites.

Notes—

- 1 Aboriginal cultural values that are flood-dependent assets for the purposes of this Plan are the Aboriginal cultural values identified in clause 21.
- 2 Heritage sites that have been identified as flood-dependent assets for the purposes of this Plan are sites, objects or places listed in at least one of the sources referred to in clause 22.

[46] Clause 46 (5)

Insert the following after subclause 46 (5):

Division 6 Rules for granting or amending flood work approvals in Gwydir Management Zone D1

[47] Division 6

Insert the following after the new Division 6 heading:

46A Flood works authorised in Gwydir Management Zone D1

Note—

Applicants for flood work approvals may be required to submit technical studies or supporting information to demonstrate that a flood work or proposed flood work meets the criteria outlined in this clause.

- (1) A flood work approval must not be granted or amended to authorise the construction of a flood work in Gwydir Management Zone D1 unless, in the Minister's opinion, the flood work approval is for one of the following:
 - (a) an ecological enhancement work, or
 - (b) an Aboriginal cultural value enhancement work, or
 - (c) a heritage site enhancement work.
- (2) Subject to subclause (1) and clause 46C, a flood work approval must not be granted or amended to authorise the construction of an ecological enhancement work in Gwydir Management Zone D1 unless, in the Minister's opinion, the work is for the purpose of providing a positive outcome for a flood-dependent ecological asset or any other ecological asset specified in local, state or Commonwealth environmental plans, policy or legislation, including any of the following:
 - (a) *Basin Plan 2012* (Cth),
 - (b) *Biodiversity Conservation Act 2016*,
 - (c) *Environment Protection and Biodiversity Conservation Act 1999* (Cth),
 - (d) the long-term watering plan for the Gwydir surface water resource plan area under the *Basin Plan 2012* (Cth),
 - (e) *National Parks and Wildlife Act 1974*,
 - (f) *Fisheries Management Act 1994*,
 - (g) NSW Wetlands Policy 2010,
 - (h) *Fisheries NSW Policy and Guidelines for Fish Habitat Conservation and Management* (2013) update,
 - (i) any other source that, in the Minister's opinion, is relevant.
- (3) Subject to subclause (1) and clause 46C, a flood work approval must not be granted or amended to authorise the construction of an Aboriginal cultural value enhancement work in Gwydir Management Zone D1

unless, in the Minister's opinion, the work is for the purpose of providing a positive outcome for a flood-dependent Aboriginal cultural value or any other Aboriginal cultural value listed in any of the following:

- (a) Aboriginal Heritage Information Management System,
- (b) Murray-Darling Basin Authority Aboriginal Submissions Database,
- (c) NSW State Heritage Register,
- (d) Commonwealth Heritage List,
- (e) any other source that, in the Minister's opinion, is relevant.

(4) Subject to subclause (1) and clause 46C, a flood work approval must not be granted or amended to authorise the construction of a heritage site enhancement work in Gwydir Management Zone D1 unless, in the Minister's opinion, the work is for the purpose of providing a positive outcome for a flood-dependent heritage site or any other heritage site that is listed in any of the following:

- (a) Aboriginal Heritage Information Management System,
- (b) Murray-Darling Basin Authority Aboriginal Submissions Database,
- (c) NSW State Heritage Register,
- (d) NSW State Heritage Inventory,
- (e) Historic Heritage Information Management System,
- (f) Commonwealth Heritage List,
- (g) any other source that, in the Minister's opinion, is relevant.

46B Existing flood structures and works in Gwydir Management Zone D1

(1) A flood work approval in Gwydir Management Zone D1 may be granted for flood works that do not comply with the requirements of clause 46A, provided the flood work meets all of the following criteria:

- (a) the flood structure was constructed as at the date of commencement of this Plan,
- (b) the flood structure is, in the Minister's opinion, for:
 - (i) an access road, or
 - (ii) a supply channel, or
 - (iii) a stock refuge, or

- (iv) an infrastructure protection work,
- (c) as at the date of application, the flood structure is not the subject of:
 - (i) an undetermined controlled work application under Part 8 of the *Water Act 1912*, or
 - (ii) a previously refused Part 8 application under the *Water Act 1912*, or
 - (iii) an undetermined flood work application under the Act, or
 - (iv) a previously refused flood work application under the Act.
- (2) An amendment of a flood work approval in Gwydir Management Zone D1 may be granted for a flood work that does not comply with the requirements of clause 46A, provided the flood work meets all of the following criteria:
 - (a) the flood work was constructed as at the date of commencement of this Plan, and
 - (b) the proposed modification to the flood work will, in the Minister's opinion, reduce the impact of the works on flow patterns (distribution of flows, drainage, depth or velocity) in Gwydir Management Zone D1.
- (3) An application referred to in this clause must be assessed against the assessment criteria outlined in clause 46C of this Plan.

46C Assessment criteria in Gwydir Management Zone D1

Note—

The Department may require applicants for flood work approvals to submit technical studies or supporting information to demonstrate that a flood work or proposed flood work meets the criteria outlined in this clause.

- (1) Flood work applications in Gwydir Management Zone D1 must be assessed against the assessment criteria outlined in this clause.
- (2) A flood work approval must not be granted or amended to authorise the construction of a flood work in Gwydir Management Zone D1 unless, in the Minister's opinion, the flood work can be constructed to maintain adequate flood connectivity to the following under a range of flood scenarios including, at a minimum, scenarios for the small and large design floods:
 - (a) flood-dependent ecological assets, and

(b) facilitation of fish passage.

Note—

Ecological assets that have been identified as flood-dependent assets for the purposes of this Plan are identified in Schedule 1 and shown on the *Ecological Assets Map*.

(3) A flood work approval must not be granted or amended to authorise the construction of a flood work in Gwydir Management Zone D1 unless, in the Minister’s opinion, the flood work can be constructed to maintain adequate flood connectivity to the following under a range of flood scenarios including, at a minimum, scenarios for the small and large design floods:

(a) flood-dependent Aboriginal cultural values, and

(b) flood-dependent heritage sites.

Notes—

- 1 Aboriginal cultural values that are flood-dependent assets for the purposes of this Plan are the Aboriginal cultural values identified in clause 21.
- 2 Heritage sites that have been identified as flood-dependent assets for the purposes of this Plan are sites, objects or places listed in at least one of the sources referred to in clause 22.

(4) A flood work approval must not be granted or amended to authorise the construction of a flood work in Gwydir Management Zone D1 if, in the Minister’s opinion, the construction of the flood work is likely to disturb the ground surface of a heritage site or cause more than minimal erosion to a heritage site.

Note—

Heritage sites that have been identified as flood-dependent assets for the purposes of this Plan are sites, objects or places listed in at least one of the databases referred to in clause 22.

(5) A flood work approval must not be granted or amended to authorise the construction of a flood work in Gwydir Management Zone D1 unless, in the Minister’s opinion, the flood work can be constructed to maintain adequate drainage on adjacent landholdings and other landholdings that may be affected by the proposed flood work.

(6) A flood work approval must not be granted or amended to authorise the construction of a flood work in Gwydir Management Zone D1 unless the Minister has considered the cumulative impact that the proposed flood work and other existing works on the landholding may have on adjacent landholdings, other landholdings and the floodplain environment.

[48] Clause 52 (c) Part 5

Insert “cultural” after “Aboriginal” in subclause 52 (c).

[49] Dictionary, *Aboriginal values*

Insert “cultural” after “Aboriginal”.

[50] Dictionary, *Annual Exceedance Probability*

Insert “(AEP)” after “*Annual Exceedance Probability*”.

[51] Dictionary, *connectivity*

Omit the definition of *connectivity*.

[52] Dictionary, *design flood*

Omit “annual exceedance probability” and replace with “AEP”.

[53] Dictionary, *fish passage*

Insert the following definition after the definition of *fish passage*:

flood connectivity refers to the unimpeded passage of floodwater through the floodplain. Connectivity is important for instream aquatic processes and biota and the conservation of natural riverine systems.

[54] Dictionary, *flood structure*

Insert the following definition after the definition of *flood structure*:

flood wave means a rise in flows associated with flooding, culminating in a peak and followed by a recession to lower flows.

[55] Dictionary, *heritage sites*

Insert the following definition after the definition of *heritage sites*:

high value infrastructure includes houses/dwellings, infrastructure protection works, town levees, stockyards, sheds and pump sites but does not include farm levee banks, irrigation development and fences.

[56] Dictionary, *infrastructure protection work*

Insert the following definition after the definition of *infrastructure protection work*:

large design flood is as defined in clause 16 (4).

[57] Dictionary, *natural surface level*

Insert the following definition after the definition of *natural surface level*:

primary access road is an access road providing access from a public road to a permanently occupied fixed dwelling via a direct route.

[58] Dictionary, *primary access road*

Insert the following definition after the definition of *primary access road*:

small design flood is as defined in clause 16 (4).

[59] Dictionary, *small design flood*

Insert the following definition after the definition of *small design flood*:

wetland refers to areas of land that are wet by surface water or groundwater, or both, for long enough periods that plants and animals in them have adapted to, and depend on, moist conditions for at least part of their lifecycle; they include areas that are inundated cyclically, intermittently or permanently with fresh, brackish or saline water, which is generally still or slow moving except in distributary channels.

Note—

Examples of wetlands includes lakes, lagoons, rivers, floodplains, swamps, billabongs and marshes.

[60] Schedule 1 clause 2 (1) Ecological values identified for the purposes of this Plan

Omit subclause 2 (1) (c) and insert instead:

(c) wetlands that were identified in the following, now repealed, rural floodplain management plans:

(i) *Lower Gingham Watercourse Floodplain Management Plan 2006*

(ii) *Moomin Creek Floodplain Management Plan 2010*.

Note—

The Midkin Nature Reserve was identified in the floodplain but is not flood-dependent and therefore was not considered when prioritising the ecological assets.

[61] Schedule 1 clause 2 (3) (c)

Insert the following after subclause 2 (3) (c) and before the note to subclause 2 (3) (c):

(d) observed threatened waterbird species:

- (i) Australasian bittern (*Botaurus poiciloptilus*),
- (ii) Australian painted snipe (*Rostratula australis*),
- (iii) black-necked stork (*Ephippiorhynchus asiaticus*),
- (iv) black-tailed godwit (*Limosa limosa*),
- (v) blue-billed duck (*Oxyura australis*),
- (vi) brolga (*Grus rubicunda*),
- (vii) Caspian tern (*Hydroprogne caspia*),
- (viii) comb-crested jacana (*Irediparra gallinacean*),
- (ix) common greenshank (*Tringa nebularia*),

- (x) freckled duck (*Stictonetta naevosa*),
- (xi) gull-billed tern (*Gelochelidon nilotica*),
- (xii) Latham's snipe (*Gallinago hardwickii*),
- (xiii) little curlew (*Numenius minutus*),
- (xiv) magpie goose (*Anseranas semipalmata*),
- (xv) marsh sandpiper (*Tringa stagnatilis*),
- (xvi) red-necked stint (*Calidris ruficollis*),
- (xvii) sharp-tailed sandpiper (*Calidris acuminata*),
- (xviii) wood sandpiper (*Tringa glareola*),

(e) colonial nesting waterbird species:

- (i) Australasian darter (*Anhinga novaehollandiae*),
- (ii) cattle egret (*Ardea ibis*),
- (iii) intermediate egret (*Ardea intermedia*),
- (iv) eastern great egret (*Ardea modesta*),
- (v) white-necked heron (*Ardea pacifica*),
- (vi) little egret (*Egretta garzetta*),
- (vii) white-faced heron (*Egretta novaehollandiae*),
- (viii) nankeen night-heron (*Nycticorax caledonicus*),
- (ix) great cormorant (*Phalacrocorax carbo*),
- (x) little black cormorant (*Phalacrocorax sulcirostris*),
- (xi) little pied cormorant (*Microcarbo melanoleucos*),
- (xii) pied cormorant (*Phalacrocorax varius*),
- (xiii) Australian white ibis (*Threskiornis molucca*),
- (xiv) glossy ibis (*Plegadis falcinellus*),
- (xv) royal spoonbill (*Platalea regia*),
- (xvi) straw-necked ibis (*Threskiornis spinicollis*),
- (xvii) yellow-billed spoonbill (*Platalea flavipes*).

Insert after Schedule 1:

Schedule 2 Areas of ecological or cultural significance, or both in Gwydir Management Zone D1

(clauses 5, 11 and 12)

ID Number	Name	Easting	Northing	Zone
1	Collytootela Lagoon	690858	6706988	55
2	Crinolyn	706377	6766143	55
3	Goddard's Lease	731738	6760884	55
4	Mallowa Wetlands	712710	6722319	55
5	Moboullboona Waterhole	807450	6729114	56
6	Mongyer Lagoon	701259	6717814	55
7	Old Dromana	726327	6750732	55
8	Yarraman Lagoon	778937	6741369	55
9	Bengerang Waterhole	740721	6783798	55
10	Lochleven Billabong	714385	6737992	55
11	Talmoi Waterhole	746783	6760837	55
12	Wallon Waterhole	766349	6767968	55
13	Whittaker Lagoon	757896	6730916	55
14	Baroona Waterhole	740420	6762832	55
15	Tillaloo Waterhole	741952	6761980	55
16	Bulyeroi Lagoon	707842	6745772	55
17	Burrandoon Watercourse	703261	6739193	55
18	Carlyle Lagoon	760697	6728877	55
19	Cobban Waterhole	742094	6728475	55
20	Derra Waterhole	719696	6731264	55
21	Gouramundi Lagoon	727469	6759122	55
22	Gunnyanna Waterhole	754042	6783890	55
23	Marshall's Pond Lagoon	772076	6751966	55

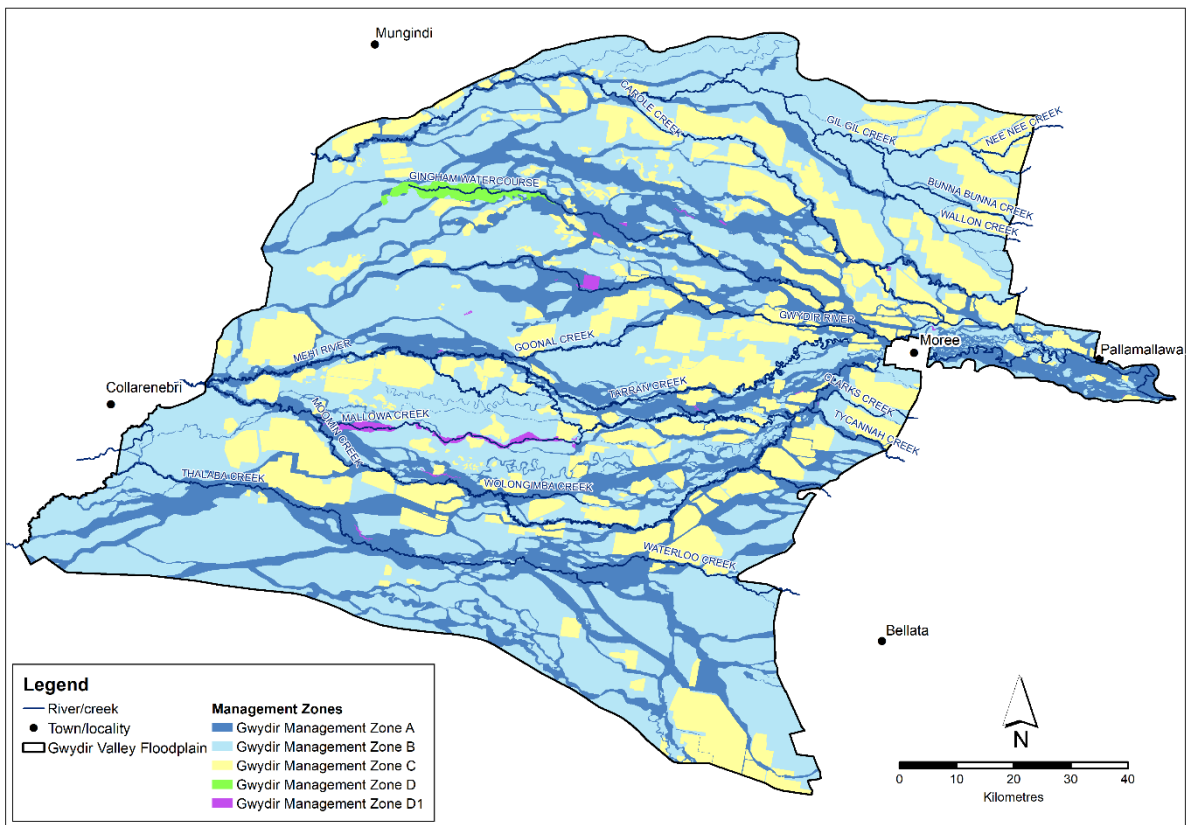
24	Wadden Wadden Waterhole	748152	6785462	55
25	Wandoona Waterhole	721129	6751291	55
26	Yinnar Waterhole	720433	6752913	55

Note—

Coordinates were calculated using GDA 1994 MGA Zone 55 and 56.

[63] Appendix 2 Overview of the Management Zones Map

Omit existing map and replace with the following map:



[64] Appendix 3 Inspection of maps and notifications

Omit both references to “DPI Water NSW Department of Primary Industries” and insert instead “NSW Department of Planning and Environment”.

[65] Appendix 5 Overview of the Floodway Network Map

Omit existing map and replace with the following map:

