## Draft NSW Murray Darling Basin Porous Rock Water Resource Plan

The NSW Government is committed to delivering its obligations under the Murray-Darling Basin Plan, and is developing 20 water resource plans across the state. The drafting of water resource plans has drawn on feedback received through stakeholder advisory panels, and now broader input is sought through the public exhibition process.

The draft NSW Murray Darling Basin Porous Rock Water Resource Plan is on public exhibition from . Monday 15 July 2019 until Friday 23 August 2019. As the water resource plans are completed, they will be submitted to the Murray Darling Basin Authority prior to 30 December 2019. The Authority will undertake assessment to inform accreditation by the Commonwealth Minister responsible for water.

The draft NSW Murray Darling Basin Porous Rock Resource Plan covers the groundwater resources of the Murray Alluvium Water Resource Plan area. This area includes the Gunnedah-Oxley Basin, Oaklands Basin, Sydney Basin MDB and Western Porous Rock.

There are proposed changes to the water sharing plan rules that may affect you. These proposed changes will have no impact on existing water access licence holders' shares.

\* Required

1. Email address \*





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## Organisation or business details

#### 6. Name of organisation

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### **Government organisations**

8. What level of government organisation do you represent? Mark only one Mark only one oval.

Commonwealth Skip to question 9. New South Wales Skip to question 9. State - other Skip to question 9. Local Skip to question 9.

## Peak representative organisations

9. Who do you represent?
Mark only one
Mark only one oval.
C Environment
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Other: Self

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### Information on confidentiality and privacy

The NSW Department of Industry Water will consider all submissions received. The NSW Government values your input and accepts that information you provide may be private and personal.

If you want your submission or your personal details to be treated as confidential, please indicate this by ticking the relevant box below.

Be aware that the NSW Department of Industry Water may be required by law to release copies of submissions to third parties in accordance with the Government Information (Public Access) Act 2009.

If you do not make a request for confidentiality, the NSW Department of Industry Water may make your submission, including any personal details contained in the submission, available to the public.

10. I give permission for my submission to be publicly available on the NSW Department of Industry website \*

Mark only one oval.

Ves No

11. I would like my personal details to be kept confidential \* Mark only one oval.



## A copy of your responses will be emailed to the address that you provided.

## Draft NSW Murray Darling Basin Porous Rock Water Resource Plan

The water resource plan has built on existing water planning arrangements such as the statutory water sharing plans. The water resource plan consists of the water resource plan main body, (Chapters 1 to 8), accompanying schedules (A to I) and appendices, boxes, figures and tables. The following components are added as schedules to the water resource plan main body:

Water sharing plan, water resource plan index, consultation information, risk assessment information, extreme events information, water quality management plan, information and methods used in preparing the water resource plan, monitoring, reporting and evaluation plan and information relating to take for consumptive use.

This submission form will give you an opportunity to comment on each individual chapter of the plan and the schedules or appendix that relate to that chapter. Questions are optional to answer, so feel free to skip to the relevant sections.

You will get the opportunity to comment on the water sharing plans under the 'Schedules' area of the form.

Any additional information or supporting documents/files to help us understand your view can be sent via email provided at the end of this form.

#### 12. Water resource plan - main body

After reading the main body of the water resource plan, please provide any general suggestions that may improve the main body of work

## Water resource plan - response per chapter

These next sections of the submission form will give you an opportunity to comment on each chapter of the plan.

#### Chapter 1: introduction

Chapter 1 is the introduction that outlines the key legal framework for a water resource plan, provides the plan objectives and outlines the consultation undertaken during the development of the draft. This chapter also references the objectives in the draft statutory water sharing plans (Schedule A), and the full consultation report (Schedule C).

13. Do you have any comments about the consultation process that was used to develop the plan and how it could be improved for the future?

There was no consultation when irrigation Licence was issured in 2005

14. Do you have any other comments on this chapter?

## Chapter 2: water resource plan area and other matters

Chapter 2 describes the water resource plan area and its connection to other water resources. This is supported by the resource description in "Appendix A".

15. Do you have any comments on this chapter?

when water quota's where reduced down The Namoi River in 2002 irrigation was extanded to the OxLey areq in 2005

#### Chapter 3: risks to water resources

Chapter 3 identifies the risks to groundwater quality, its availability for use and for the environment in the water resource plan area, and specifies strategies to mitigate those risks. This chapter is supported by the "Risk Assessment (Schedule D)".

16. Do you have any comments on the risks identified in this chapter?

The ground natter is being extracted Faster Than recovery now There is adrought no RainFall my bore is down to a Traickle of nater being Pumped OUT

17. Do you have any comments on the strategies to manage the risks identified?

I was told there is a monitoring Bore at spring ridge which has no indication on the water Level where Iam it is it miles away possible Another agrifer 18. Do you have any other comments on this chapter?

The catchment area For the irrigation is not large enough For The amount OF Extraction OF water OF Four Twelve SPAN PIVOTS Pumping water summer & winter CROPS

# Chapter 4: environmental water, cultural flows and sustainable management

Chapter 4 specifies the rules for providing and managing water for the environment, priority environmental assets, held environmental water and planned environmental water. This chapter links directly to Parts 4 and 6 of the draft water sharing plan "Schedule A".

19. Do you have any comments on the protection of environmental water?

There should be water For the environment The Native Life Lives on The Planet not all to irregation Should be shared with all Life.

20. Do you have any comments on cultural connections to groundwater and the protection of Indigenous values and uses?

21. Do you have any other comments on this chapter?

Chapter 5: take for consumptive use

22. Do you have any comments on annual actual take?

When the Times are pry There should be a reduction in annual extraction 23. Do you have any comments on annual permitted take?

The dams are well down FROM over Extraction which Then PULS down under ground water

24. Do you have any comments on sustainable diversion limit compliance?

- diversion Flood take should be Reduced so all vseses OF water get a share

25. Do you have any comments on extreme event management and the incident response guide?

26. Do you have any other comments on this chapter?

where Sam There is no Running water CREEKS & Rivers or Springs To Recharge The aquifer a Flood is Meeded Over The Past Thirty years only Three Floods where Slive

#### Chapter 6: water quality management

Chapter 6 identifies the key causes of groundwater quality degradation and risks to water quality in the water resource plan area and specifies the water quality and salinity targets for the area. These measures contribute to meeting the Basin Plan 2012 water quality objectives and mitigate identified risks. This chapter is supported by the Water Quality Management Plan "Schedule F".

27. Do you have any comments on the identified risks to water quality?

28. Do you have any comments on the strategies to mitigate risks to water quality?

29. Do you have any other comments on this chapter?

### Chapter 7: measuring and monitoring

Chapter 7 specifies actions for measuring the take of groundwater from the water resource plan area and for monitoring of the groundwater resources. This chapter is supported by the Environmental Monitoring, Reporting and Evaluation Plan "Schedule H".

30. Do you have any comments on the measuring and monitoring of water resources?

As 9 said in chapter 3 where The Monitoring bore 15 at SpringRidge has no indication OF The level of water My bore is 1,600 Feet The inrigation bore is 1,300 Feet 300 Feet below me on the plain

31. Do you have any comments on the proposed environmental monitoring, reporting and evaluation plan?

There is no Evaluation Plan where Sam

32. Do you have any other comments on this chapter?

Shave Fitting been Takking To state water about The irrigation Since 2005 The water level has affected me since 2009

#### **Chapter 8: information used to prepare the water resource plan** Chapter 8 outlines the key methods, models, data sets and guidelines used to develop the water resource plan. This chapter is supported by "Schedule G".

33. Do you have any comments on chapter 8?

Shave not seen Schedule G

## Further responses to schedules and appendices

"Schedule A" refers to the water sharing plans.

## Schedule A: The draft water sharing plans for the NSW Murray Darling Basin Porous rock groundwater sources

This Plan replaces the Water Sharing Plan for the NSW Murray Darling Basin Porous Rock Groundwater Sources 2011.

34. Do you have any other comments on the revised water sharing plans structure and updated language in the clauses?

where Sam There is no water sharing plan IRRIGATORS TAKE All

35. Do you have any other comments on the revised water sharing plans objectives?

36. Do you have any other comments on the changes made to the water sharing plans included in the NSW Murray Darling Basin Porous Rock alluvial water sharing plans - proposed changes fact sheet?

37. Is there anything else related to the water sharing plan you would like to comment on?

3 would like TO hear more about
The water sharing all is needed
is enough For STOCK a Fan Thousand gallons

### **Response to Minister's Notes**

Minister's notes in the draft water sharing plan provide additional detail on the proposed changes to the statutory water sharing plan that will be made under the Water Management Act 2000.

The Minister's note included in the draft Water Sharing Plan for the NSW Murray Darling Basin Porous Rock Groundwater Sources 2019 are listed below for feedback.

## **Minister's Note**

The existing water sharing plan specifies the process to assess compliance with the long-term average annual extraction limits. An additional rule that directly adopts the Basin Plan provisions for assessing compliance with the Basin Plan long term average sustainable diversion limits is included. This is needed to meet NSW obligations under the Basin Plan.

If compliance action is required, the only option for the Minister under the current water sharing plans is to make available water determinations of less than 1 ML per unit share of access licence share component of lower priority access licences. This draft plan proposed that an additional mechanism is available to the Minister - to limit the maximum water account debit in an water year for lower priority access licences.

Principles for applying the compliance mechanisms are being developed, and will be used to guide the proposed approach in the plan area. Additional explanatory materials are also being developed and will be available on commencement of the plan.

Discussion will be held with stakeholders ahead of the application of any compliance approach.

#### 38. Do you have any comments on the Minister's Note?

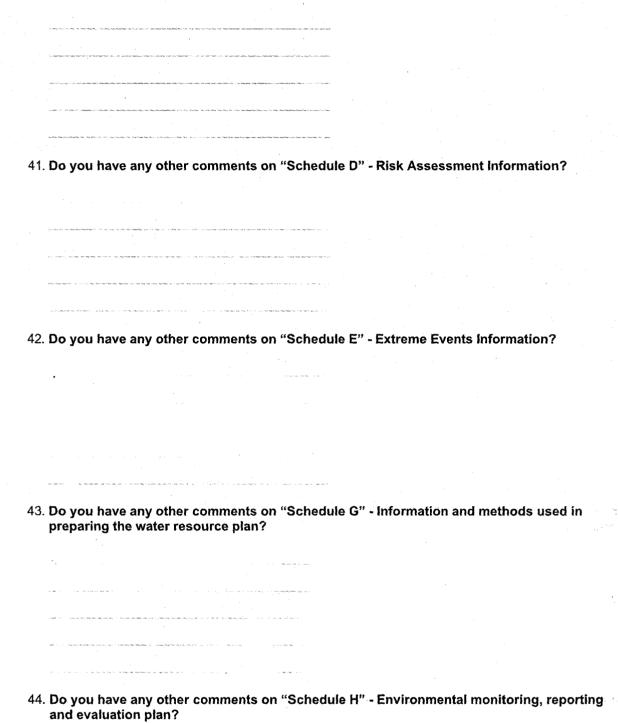
**Responses to other schedules** 

39. Do you have any comments on "Schedule B" - Water Resource Plan Index?"

have not seen schedule Br

no comment

40. Do you have any other comments on "Schedule C" - Consultation Information?



.

45. Do you have any other comments on "Schedule I" - Information relating to take for consumptive use?

At The Moment Just enough is available For Stock when They Start Summer Crop irrigation my bore will RUN DRY is That water Sharing

46. Do you have any comments on "Appendix A" - Water resource plan area description?

## **Additional information**

If you would like to provide any additional information in the form of supporting documents or files to help us understand your view, email <u>nswporousrock.gw.wrp@industry.nsw.gov.au</u> from the same email you provided above.

All submissions will be posted on the NSW Department of Industry website after the public exhibition period closes.

A copy of your responses will be emailed to the address that you provided

## How did you hear about the public exhibition of this plan?

Tick all that apply

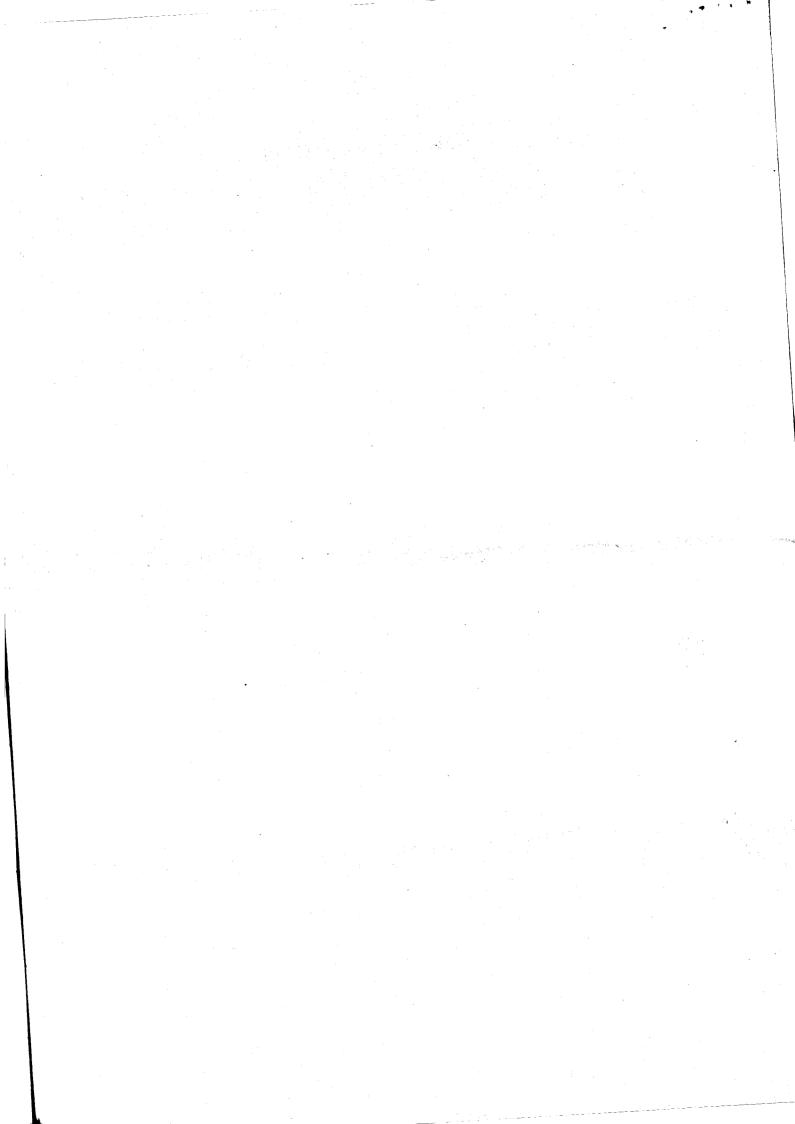
47. Please let us know how you heard about the opportunity to make a submission *Mark only one oval.* 

newspaper
radio
NSW Department of Industry website
"Have your say" website
social media
communication from other organisations

Other: D.P.I. CALALA Tamworth

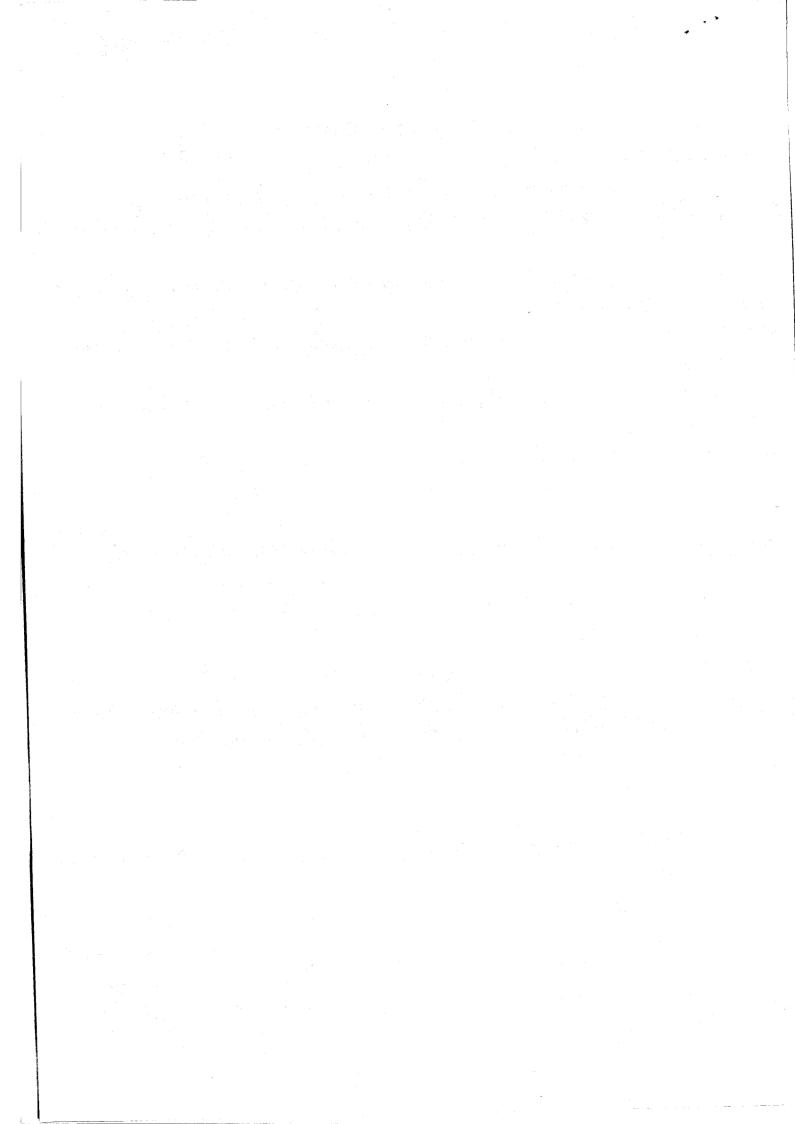
A copy of your responses will be emailed to the address you provided

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23-8-2019

In 1997 State water in Tamworth stopped giveing out orrigation licences In 2002 irrigation allocations were being reduced from Quirindi down the namoi valley and surrounds for ground water and surface 52005-06 fire licences where issued across the plain to below me on the mountain. 32000 my bore the bore on the property next to me showed signo of low out put. christmas 2011 the property next door to the irrigation bore of Lavender's went obry. my base is 1600 feet above sea level the irrigation base is 1300 feet with four pivoto of 12 spans going 24 hrs seven dadys a week from october to march they are extracting more water out then is recharging the aquifer especially the last three years with low rainfall no flooding for nine and a half years the catchment is not large enough for what he has been allocated. The monitoring bare at springsidge is sevention miles away which has no effect on measuring how far down the water table has dropped where my bore is or the vrigating bare. my bore pressure NOV 19-2017 last pressure MAR 13-2018 Stopped origating MAY 13 - 2018 Bore pressure up irragating winter crop last pressure JUNE 7-2018 June 22 - 2018 Bore pressure up vigating summer crop lost pressure Selp 22 - 2018 Alec 24 - 2018 flow down to trickle mar 16-2019 bore surging orrigating whater cap bore surging may 20 - 2019 Truched in water 5-1-19 12-1-19 26-1-19





Tuesday 27 August 2019



water.relations@dpi.nsw.gov.au

#### **SUBMISSION**

#### Draft NSW Murray-Darling Basin Porous Rock Water Resource Plan

#### Introduction

The Inland Rivers Network (IRN) is a coalition of environment groups and individuals concerned about the degradation of the rivers, wetlands and ground waters of the Murray-Darling Basin. It has been advocating for the conservation of rivers, wetlands and groundwater in the Murray-Darling Basin since 1991.

IRN appreciates the opportunity to comment on the draft NSW Murray-Darling Basin (MDB) Porous Rock Water Resource Plan (draft WRP).

#### Background

IRN submitted substantial comments to the Status and Issues Paper on the NSW MDB Porous Rock WRP released in 2017.

We raised the issue of the high level of unallocated water in this water source and the need to protect water availability near Groundwater Dependent Ecosystems (GDEs).

We also raised that the impacts of mining on groundwater levels and water quality is a major community concern. The issues raised in our initial submission have not been addressed.

The WRP area is highly complex containing four different unconnected resource units with different characteristics, use rates and risks.

The draft WRP identifies a number of areas of high risk for this groundwater source and high levels of poor water quality in the western areas. There is a lack of data on both these important planning matters.

There are a high number of priority groundwater dependent ecosystems (GDEs) supported by this groundwater source, as listed in Schedule 2 of the draft water sharing plan (WSP). We consider that this list is not exhaustive and should be added to with more rigorous on ground assessment of springs, particularly in the top of river catchments.

It is of great concern that there is currently no monitoring of groundwater dependent vegetation and condition and that none is proposed in the draft WRP.

IRN is also concerned that consultation has occurred with only four First Nations peoples of the 15 First Nations peoples with country in the WRP area. The draft WRP should not be on exhibition for comment with this significant lack of information.

The Sustainable Diversion Limit (SDL) and Long Term Average Annual Extraction Limit (LTAAEL) are far too high in this groundwater source and have no relationship to the historic level of take or current entitlements.

IRN does not support the draft WRP and accompanying WSP because of the information gaps and failure to prevent no net reduction in the protection of planned environmental water or to adequately protect the environmental values supported by this groundwater source.

#### **Groundwater Dependent Ecosystems (GDEs)**

There are a significant number of high and very high value GDEs occur in the WRP area. These include wetlands listed under Ramsar and the Directory of Important Wetlands in Australia, karst, springs, endangered ecological communities, threatened species, Basin target vegetation, extensive riparian vegetation corridors and in some areas, base flows.

Ecological values include groundwater dependent woodland forests and wetlands including black box, lignum, river red gum, yellow box and coolibah and non woody wetlands.

Connectivity between groundwater sources and to surface water sources is an important aspect of this extensive groundwater source.

The risk assessment outcomes for potential risks to GDEs associated with groundwater extraction causing drawdown were medium and high in the NSW MDB Porous Rock WRP area.

Distance rules for water supply works approvals are the key management tool for protecting GDEs in groundwater sources.

The rules in the current WSP are:

To protect bores located near sensitive environmental areas:

No water supply works (bores) granted or amended within:

- 100 m of a high priority GDE in the case of a water supply work used solely to take water for to basic landholder rights
- 200 m of a high priority GDE in the case of a water supply work used for production and a distance of greater than 200 m if the bore is likely to cause drawdown at the perimeter of the GDE
- 500 m of a high priority karst GDE or escarpment
- 40 m from the top of the high bank of a river or stream

Proposed new rules:

Cl 43 Rules for water supply works located near high priority groundwater-dependent ecosystems

(1) A water supply work approval must not be granted or amended if, in the Minister's opinion, the water supply work is located within any of the following:(a) 40 metres of the top of the high bank of a river,

(b) 200 metres of any other high priority groundwater-dependent ecosystem shown on the High Priority Groundwater-Dependent Ecosystem Map,

(c) 500 metres from a high priority karst environment groundwater-dependent ecosystem shown on the High Priority Groundwater-Dependent Ecosystem Map,(d) 500 metres from the edge of an escarpment, where the location of the water supply work is above the escarpment.

The proposed new rules are similar but remove the protection of 'greater than 200 m if the bore is likely to cause drawdown at the perimeter of the GDE.'

This is a loss of protection for high priority GDEs in the groundwater source. There should be no permissible drawdown of GDEs.

The following proposed rules are not acceptable because they decrease the protection of high priority GDEs in the groundwater source.

Cl 43 (2) (d) the location of the water supply work at a lesser distance than that specified in subclause (1) would result in no more than minimal impact on any high priority groundwater-dependent ecosystem shown on the High Priority Groundwater-Dependent Ecosystem Map.

There should be no permissible impact of water extraction on high priority GDEs

Cl 43 (3) The location restrictions in subclause (1) (b) do not apply to high priority groundwater-dependent ecosystems shown on the High Priority Groundwater-Dependent Ecosystem Map unless a high probability of groundwater dependence has been confirmed by the Department.

High priority GDEs are on the map because they are groundwater dependent. This clause is a direct threat to the protection of high priority GDEs.

Cl 45 Rules for Basic Rights bores set back remain unchanged.

However, IRN does not support the additional exemptions in sub clause 2:

(2) The location restrictions specified in subclause (1) do not apply to the granting or amending of a water supply work approval if the Minister is satisfied of any of the following:

(a) the water supply work is a replacement groundwater work,

(b) the location of the water supply work at a lesser distance than that specified in subclause (1) (c) would result in no more than minimal impact on any high priority groundwater-dependent ecosystem shown on the High Priority Groundwater-Dependent Ecosystem Map,

(c) the location of the water supply work at a lesser distance than that specified in subclause (1) (d) will result in no more than minimal impact on any groundwater-dependent culturally significant area.

These exemptions reduce the protection of high priority GDEs. There should be no permissible impact of water extraction on high priority GDEs.

IRN supports a state-wide set back distance of 200m from GDEs for basic landholder rights bores. This is because basic rights bores are unlicensed and unmetered and there are no restrictions on the number of basic rights bores.

Cl 46 Replacement water supply works should not be exempt from the set back rules.

IRN does not support that the proposed set back rules in the draft WSP will provide protection for high priority GDEs in this groundwater source.

Cl 55 (2) provides provisions relating to access licences associated with EP&A Act development.

IRN does not support Cl 58 (3) (a), (c) or (d) giving provision for minimal harm. There should be no harm to priority GDEs, other water users, public health and safety or to groundwater dependent culturally significant areas.

These provisions should be consistent with Cl 58 (3) (b) with no adverse effect.

EP&A Act development should have no impacts on other groundwater uses.

#### Connectivity

The draft WRP states that 'Groundwater sources generally store large volumes of water, often accumulated over thousands of years, and this stored water is also replenished from time to time by rainfall, river and flood flows, and through flow from other groundwater sources.'<sup>1</sup>

The four resource units of the NSW MDB Porous Rock WRP area have varying degrees of connectivity to their associated surface water systems. It is recognised that groundwater extraction can, over time, potentially impact the surface water/groundwater flux. It is also recognised that bores drilled through overlying unconsolidated alluvial sediments or other rock aquifers may draw water from porous rock groundwater sources.

<sup>&</sup>lt;sup>1</sup> Draft WRP 4.1.1 p 32

The Gunnedah-Oxley Basin is buried beneath other SDL resource units consisting of alluvial sediments, basalt, and the Great Artesian Basin sediments. There is limited information on the degree of connection between the Gunnedah-Oxley Basin MDB and the overlying strata. However, the Pilliga Sandstone areas have a potential for groundwater exchange.

This is a significant area that needs more investigation, particularly in regard to coal and coal-seam gas development.

The surface expression of the basin extends from south of Dubbo in the south west to north of Narrabri in the north, and is generally cut by three major river systems being the Namoi River in the north, Castlereagh River in the west, and the Macquarie River in the south.

The surface water systems overlying the Gunnedah-Oxley Basin are considered to be in low hydraulic connection with a lag time in groundwater pumping impacts. However, this resource unit has the highest number of aquifer access licences in the groundwater source. The dependence on groundwater during times of drought could have future impacts on surface water connectivity.

The overlying river systems are currently under extreme pressure with drought and climate change related water shortages. There needs to be improved understanding of the relationship between groundwater extraction and surface water impacts in this resource unit before any more access to unassigned water is granted through controlled releases of new allocations.

The Sydney Basin MDB is the western edge the Sydney Basin with higher elevated areas, along with the higher rainfall and more incised nature of the sediments. This can facilitate groundwater to discharge as baseflow into creeks along the upper catchments. As such, streamflows may be reliant on groundwater discharge during drought times.

The main surface water features include the upper tributaries of the Talbragar River in the north, Cudgegong River in the central area, and the Turon / Crudine River system in the south. These are all tributary systems of the Macquarie catchment that is currently under extreme stress of water shortages due to drought.

The protection of the connectivity to surface flows is very important. This is particularly in regard to the impacts of coal mining interception in the resource unit.

For example the Ulan Coal Mine has approval under the EP&A Act to intercept base flows to the Talbragar River. This drawdown will continue for a long time after mining operations cease. This impact on GDEs and instream ecological values will be exacerbated by reduction in rainfall through climate change, as is being experienced in that surface water source now.

The Western Porous Rock resource unit lies within the Murray Geologic Basin bounded on three sides by older fractured rocks of the Adelaide, Kanmantoo and Lachlan Fold Belts which also form the underlying basement rocks. This resource unit has been described as the major cause of outflow of saline ground water to the rivers and land surface within the area. The management of this through salt interception schemes and salt management licences must be further understood in regard to the connectivity to surface water sources and management of freshwater flows.

The extent of the Western Porous Rock resource unit covers much of the Lower Darling catchment. Surface water drainage is dominated by the two main river systems of the MDB being the Murray and Darling rivers.

Within this resource unit water tables are generally below surface water systems, representing a "losing system" for streams or rivers where water is lost from the surface water flow to the groundwater system. The lower Murray River prior to reaching the South Australian border alternates from losing to gaining conditions.

This connectivity is extremely important and must be a prime consideration before any more water is allocated for extraction from this resource unit.

The Lower Darling water source is under extreme risk from climate change and poor upstream water management. Further losses of streamflow into the Western Porous Rock resource unit caused by increased levels of extraction near the river must be avoided.

The Oaklands Basin resource unit is completely buried under the alluvium associated with the Murray and Murrumbidgee alluvial areas with no surface topographical features. There is no longer any recharge to the system, therefore it contains fossil water.

Due to the depth, high salinity and expected low yields, this resource unit is not a target for groundwater supply and there is no recorded groundwater extraction from this basin.

IRN considers that there should be no access to this water by a future controlled release of unassigned water through supplementary licence allocation, as noted in the draft WSP. This would result in a net reduction of protection of planned environmental water in this resource unit.

The issue of connectivity across state borders for the Gunnedah-Oxley Basin and Western Porous Rock resource units has not been addressed in the draft WRP.

The draft WSP has provisions for interstate trade from and to this groundwater source. This would be subject to there being in place inter-state agreements and administrative processes to enable such.

There appears to be no policy or statutory imperative for addressing the impacts of groundwater extraction in one state, on other uses across the border. IRN considers that connectivity issues for this groundwater source are very complex and need more research to better understand the impacts of extraction from the various resource units.

Improved monitoring and information about connectivity is imperative before any consideration of controlled allocation releases is undertaken.

#### Recharge

This groundwater source has varying degrees hydrological connectivity to surface waters and adjacent groundwater sources across the various resource units. As it contains water accumulated over thousands of years, the protection of recharge is highly significant for long term sustainability.

Recharge is important for maintaining water quality and quantity and the structural integrity of aquifer systems.

IRN strongly opposes the proposed removal of the protection of recharge by changing the definition of planned environmental water as specified in WSP.

#### **Risk Assessment**

The risk assessment for the draft WRP has identified a number of high and medium risks to this groundwater source.

The Gunnedah-Oxley Basin resource unit has the highest level of risk including a high risk of groundwater use causing local drawdown to GDEs and instream ecological values.

The Western Porous Rock resource unit also has a number of assessed risks including impacts on GDEs.

For these reasons IRN strongly objects to the proposal to release further allocations of unassigned water in either of these resource units.

IRN considers that the SDL/LTAAEL for these resource units is too high and will cause future impacts on dependent high priority GDEs if they are fully developed.

The risk of increased poor water quality, including to GDEs, is not acceptable and will not be adequately managed by the proposed rules in the WSP.

We do not accept that the risk of climate change impacts is low in all of the resource units. The impact of climate change on recharge and connectivity is already being felt in the NSW MDB with the current drought of record on top of the impacts of the Millenium Drought.

We also do not accept that the risk of mining interception reducing groundwater availability to GDEs and instream ecological values is low, particularly in the Sydney Basin MDB and Gunnedah-Oxley Basin resource units.

Impacts of mining on baseflows is already occurring in both these resource units.

IRN does not consider that the proposed strategies for managing risk in this groundwater source are adequate or that the rules in the draft WSP will protect GDEs and instream ecological values from risk.

## Water Quality

We note that Water Quality Management Plan (WQMP) aims to provide a framework to protect, enhance and restore water quality that is fit for purpose for a range of outcomes that:

- Fulfil First Nation peoples spiritual, cultural, customary and economic values
- Protect and improve ecological processes and healthy aquatic ecosystems
- Provide essential and recreational amenities for rural communities
- Assist agriculture and industry to be productive and profitable

Salinity levels are generally high in all the resource units of the NSW MDB Porous Rock groundwater source with the exception of the Spring Ridge area of the Gunnedah-Oxley Basin and in freshwater lenses associated with the Murray River in the Western Porous Rock resource unit.

There is hyper salinity in areas of the Western Porous Rock resource unit.

The risk assessment has identified risk of groundwater extraction inducing connection with poor quality GW and risk of land management induced salinity impacting on GDEs and instream ecological values.

IRN does not support that the strategies and associated water management actions and mechanisms, as outlined in Table  $6-1^2$  will adequately address the risks of poor water quality.

As outlined above, the provisions under Part 9 of the draft WSP do not adequately protect GDEs or instream ecological values. These provisions will not protect GDEs and environmental values from the risk of salinity impacts.

We note that there is no information on water quality within the Oaklands Basin resource unit and there are no water licences nor basic landholder rights for this unit. IRN maintains that there should be no supplementary water licences released for access to water in this resource unit.

IRN does not support that the proposed WQMP for the NSW MDB Porous Rock groundwater source will meet its objectives.

## LTAAEL/SDL and Access Rights

The draft WRP identifies that in the NSW MDB Porous Rock WRPA, the current level of entitlement volume is generally far less than the LTAAEL/SDLs. This is considered to be 'unassigned water.'

During the life of the WRP, it is proposed that periodic controlled allocation processes are held to offer opportunity to purchase additional water entitlements for specified resource units.

 $<sup>^2</sup>$  Ibid p 60

IRN does not support this approach and considers that the main purpose of this release of 'unassigned' water is for the purpose of enabling increased interception by mining and coal-seam gas development.

A variety of risks have been assessed for this groundwater source that will not be mitigated through the release of more water access.

These issues indicate that the LTAAEL/SDL are too high and need to be reduced to the current level of access rights, as has occurred in other resource units.

IRN strongly opposes the proposed release of supplementary water licences to access the fossil water in the Oaklands Basin resource unit.

The release of unassigned water in the NSW MDB Porous Rock groundwater source will result in a net reduction in the protection of planned environmental water.

#### Water Sharing Plan Objectives

IRN supports the broad environmental objective of the NSW MDB Fractured Rock Groundwater Sources WSP.

This is to protect the condition of the groundwater sources and their groundwaterdependent ecosystems over the term of the plan.

This support includes the targeted objective to protect the extent and condition of high priority groundwater-dependent ecosystems that rely on the groundwater sources. Also to protect the structural integrity of the aquifers.

We note that there is no targeted objective to improve salinity levels in the groundwater source. This should be included.

The performance measures need to include the maintenance of the structural integrity.

A targeted objective to contribute to the maintenance of the structural integrity of the aquifer and improved salinity levels should also be included in the economic, social and cultural objectives.

#### **Proposed WSP Rules**

1. Minimum distance rules

As stated above, IRN does not support the proposed minimum distance rules for water supply works.

These will not provide the required protection to GDEs and instream ecological values from risk, as proposed in the risk management strategies and WQMP.

2. Removal of protection of recharge

IRN does not support the proposed rule change for the protection of planned environmental water. The protection of recharge inflows to this groundwater source is critical to meet the objectives of the WRP.

3. Time period for LTAAEL compliance

IRN does not support a time period of five years over which compliance with the LTAAEL is assessed in the NSW MDB Fractured Rock groundwater source.

IRN considers that consistency of compliance to LTAAEL should be a three year rolling average across all water sources in NSW.

This will give much greater assurance that planned environmental water is protected.

4. Compliance triggers

IRN supports that triggers for requiring action to ensure compliance with the LTAAEL remain at 5% across all resource units in the NSW MDB Fractured Rock groundwater source.

5. Operation of water allocation accounts

IRN does not support Cl 38 (3) (a) 1.25 ML per unit share as the maximum water account debit in a water year for access licenses in this groundwater source. Maximum water account debit in a water year must not exceed 1 ML per unit share.

IRN does not support .25 ML carry over of aquifer access licenses in this groundwater source.

6. Interstate trade

We note that provisions in Cl 52 allow for the transfer of access licences interstate from the Gunnedah–Oxley Basin MDB and Western Murray Porous Rock resource units. These may only be permitted where administrative arrangements have been agreed to and implemented by the States.

There appears to be no policy or statutory imperative for addressing the impacts of groundwater extraction in one state, on other uses across the border.

While the draft WSP includes provisions to give effect to any future arrangements in regard to interstate trade, there needs to be careful consideration given to the protection of GDEs and instream ecological values in any trade rules.

7. Amendments to WSP

IRN supports Cl 65 that allows adjustment to the SDL/LTAAEL as per the Basin Plan. We recommend that this adjustment occur at the commencement of the WSP so that the SDL/LTAAEL is lowered.

#### Conclusion

IRN does not consider that the draft NSW MDB Porous Rock WRP will meet the requirements of the Basin Plan.

The proposed WSP rules will not protect GDEs and instream ecological values, or planned environmental water, and will not achieve management of risk or improve water quality.

For more information please contact:



Department of Planning, Industry and Environment water.relations@dpi.nsw.nsw.gov.au

## **RE: Draft NSW Border Rivers Alluvium Water Resource Plan** 29.08.19

Dear Sir/Madam,

I wish to express my concern that the Draft NSW Border Rivers Alluvium Water Resource Plan genuinely achieves its objective to protect water sources within its defined area to facilitate future sustainable water use within the whole Murray Darling Basin. There is need to recognize the significant over allocation of ground water extracted already. This seems ignored in the draft plan.

Whilst drought conditions may be stated as prevailing currently in NSW it is likely that this will be the way of the future as our Murray Darling Basin dries out further with predicted reduced amount of rainfall. All draft Water Resource Plans, including the NSW Border Rivers Alluvium must have the capacity to take account of changing climatic conditions and work as well integrated plans to manage these changing conditions.

For Border Rivers this is especially pertinent given its catchment covers areas in Queensland. The hydrological connectivity between the groundwater cannot be sustainably managed unless the different administrative regimes are recognized. The intent of the Murray Darling Basin Plan is to facilitate sustainable management across the whole basin and any inconsistencies in administration resolved to meet this objective.

The WRP fails to properly protect planned environmental waters as it moves along the river. In its current draft I have no confidence that the intent of Murray Darling Basin management objectives to achieve sustainable water use and restore good ecological function to the whole system will be met.

The final NSW Border Rivers Alluvium Water Resource Plan must recognize that this is a long term process after years of European over use of water and polluting land uses both in surface and ground systems. In the interest of all Australians, I trust that the final NSW Border Rivers Alluvium Water Resource Plan will fully reflect the objects of the legislation that guides it for the benefit of both current and future residents along the river and for visitors.

Yours sincerely

#### **Cathy Merchant**

PS There is some confusion on your website as on one page this WRP is stated as on exhibition but not on the documents page so I hope you can accept my late submission.