

I share the concerns raised that some of the decisions of the MDBA as currently represented are inconsistent with the requirements of the Water Act. This is relevant not only to the basin as a whole, but also individual water resources, as the Basin Plan also requires that each WRP must include a long-term average sustainable diversion limit for the WRP area.

This matter was an important part of my submissions to the Northern Basin Review by MDBA and to the Productivity Commission's current Inquiry into implementation of the Basin Plan.

Key arguments of my submissions are outlined, as well as other relevant matters.

### **Proposed change to the SDL in the Northern Basin inconsistent with the Water Act.**

The definition of 'Sustainable Diversion Limit' under the Water Act (Sn. 23(1)) is that it '...**must** reflect an environmentally sustainable level of take', where an environmentally sustainable level of take is the level beyond which, *inter alia*, key environmental assets would be 'compromised', or put at risk (Sn.4). **MDBA have no discretion to modify this number on the basis of other considerations.**

Thus, for a diversion limit to be considered a sustainable diversion limit, the level must be such that it does not compromise, or put at risk, key environmental assets. Any proposed diversion limits which do not meet this criterion, i.e. puts at risk key environmental assets, cannot be considered as sustainable diversion limits and would be inconsistent with the requirements of the Water Act.

The results of the MDBA's scientific studies in the Northern Basin were unequivocal; at the diversion limit that was proposed, many key environmental assets would be compromised - only 32 of the 49 environmental indicators would have been met, (where the environmental indicators were chosen to identify circumstances under which environmental assets would be compromised). In some sub-basins, **none** of the indicators were met.

Findings from MDBA's Northern Basin scientific studies included:

*All recovery scenarios...were a **long way** from meeting all the local environmental needs*

(Summary report, p13)

in the lower Balonne, the proposed diversion limit was:

*likely to result in **a high risk** to native fish species*

(Environmental Outcomes of the Northern Basin Review, p49)

The scientific studies also identified likely negative ecological impacts on the Ramsar listed Narran Lakes Wetland, viz.:

*For the internationally recognised Narran Lakes Ramsar site, the flow indicator that provides large-scale habitat opportunism for waterbirds **is not met** .... **Waterbirds will remain at risk** of having less than two opportunities in their life cycle to breed, which is the minimum requirement to maintain stable populations.*

(Environmental Outcomes of the Northern Basin Review, p29).

This latter conclusion is particularly worrying as one of the primary heads of power for the Commonwealth under the Water Act is their obligations under the Ramsar Convention.

These are by no means isolated examples, and it obviously should have been necessary in a number of sub-basins for MDBA to have considered markedly **increased** recovery volumes to achieve an 'environmentally sustainable level of take' and meet their obligations under the Water Act (2007). They failed to do this, reflecting a disturbing attitude to proper implementation.

## Toolkit measures

The MDBA attempted to 'soften' the blow by proposing several tool-kit measures to replace the need for environmental water. This approach is flawed on a number of grounds:

- Their own scientific studies clearly indicated that such measures should be considered 'complementary'; i.e., required in addition to provision of appropriate flows; viz. :

*largely considered to be **complementary** (in addition) ... rather than being a substitute for water recovery.*

**Environmental Outcomes of the Northern Basin Review, p31.**

- In the main, these off-set/ toolkit measures are currently poorly defined, and it is not possible to evaluate their effectiveness or usefulness; they seem to represent more of a 'thought bubble' than a fully considered measure. If it is argued that the toolkit measures can off-set the hydrological impacts, then, at a minimum:
  - Evidence needs to be provided to clearly demonstrate that this is the case; i.e the proposed water recovery in combination with the tool-kit measures will result in no compromise to environmental outcomes. Moreover, the off-set should be operational prior to the impact. Reliance on 'assurances' by State agencies seems a 'slender reed' on which to base critical environmental outcomes.
  - The measure should meet the additionality principle – i.e. is something that would not happen in the normal course of events. (An area where many off-sets fall down). For example, NSW has a well-established program of provision of fishways, and inclusion of such items in the toolkit is not appropriate.
- Contrary to widely held views, (e.g. S 84(b) of the Issues Paper 2) some of the proposed toolkit measures **are** within the power of MDBA to implement under the Basin Plan. This is primarily through accreditation of State based water resource plans, viz.,
  - Cold water pollution should be covered by the 'water quality management plan' requirements in water resource plans. Cold water pollution is identified in the Basin Plan as a key cause of water quality degradation (Item 5, Schedule 10) and the temperature targets in the Basin Plan (Schedule 11) were primarily designed to manage the impacts of cold water pollution. It would thus be expected that an accredited water resource plan would include measures to deal with cold water pollution;
  - Within the constraints of an SDL, an accredited water resource plan **must** include, where necessary, rules to prescribe:
    - (a) *the times, places and rates at which water is permitted to be taken from a surface water SDL resource unit; and*
    - (b) *how water resources in the water resource plan area must be managed and used.*

**(Sn. 10.17, Basin Plan)**

These requirements, if properly implemented, would help ensure that environmental flows from one catchment are adequately protected as the water moves into an adjacent catchment, as well as providing protection for ecologically important low flows.

### **Consideration of social – economic outcomes.**

Contrary to the conclusions reached in Issues Paper 2, social and economic outcomes can be addressed prior to the determination of an ESLT. There is only a requirement under the Water Act to not compromise **key** environmental assets. Environmental assets that are not considered 'key' can be excluded from consideration. Decision as to what environmental assets are key is a policy decision by MDBA. Thus, if a proposed diversion limit puts at risk ('compromises') a particular environmental asset, MDBA has two policy options:

- decrease the diversion limit to ensure the environmental asset is not compromised; or,
- After consideration of social and economic impacts, **not** include the environmental asset as a 'key' environmental asset.

(See also see S 21(3)(c) of the Water Act where reference is made to Ramsar wetlands as well as '...all other **key** environmental sites').

On this basis, the SDL can change either up or down by the simple process of removing or adding environmental assets to the 'key' or protected category. For example, if, based on social and economic considerations, the MDBA wish to return water to irrigators, it can do this by removing selected environmental assets from the key category, allowing the SDL to be increased and still remain in compliance with the requirements of the Water Act. In mathematical terms, the SDL could be considered as a dependent variable; change can only come about if the key environmental assets are modified.

### **Other matters raised in Issues Paper 2.**

- S22 – reference could also be made to the Aichi targets which give further clarity to the expectations of the Biodiversity Convention <https://www.cbd.int/sp/targets/> These targets could also be seen to provides head of power for water quality (Aichi Target 8).
- S49/ 50 – it is difficult see compromise, when used as a verb, to be interpreted in the way MDBA appear to have done; in any event, it is clear from the definition that compromise is to be avoided,
- S59 – consideration also needs to be given the published uncertainty in the 3856 GL of  $\pm 20\%$  (Tech Background report, Pt1, p115). Thus, the high uncertainty figure would be better expressed as 3900  $\pm$  800 GL, or between 3100 and 4700 GL. The fact that MDBA initially adopted a value at the low end of this range may be debatable, but it is a legitimate policy decision. (see <http://data.water.vic.gov.au/WebDocs/SW/Statsum.pdf> pp 7 ff, where decisions of this nature are further discussed)
- S83 - The fact that 320 GL may or may not give improved outcomes when compared to current 390 GL is irrelevant. The Northern Basin review came about because of the view that the 390 value was not the most scientifically valid. The test is not a relative one, but an absolute one. The Water Act makes it quite clear, a Sustainable Diversion Limit must reflect an environmentally sustainable level of take. It is apparent from the scientific studies commissioned by MDBA that neither the 320 or the 390 figure meet this requirement. In both cases, a number of environmental assets are clearly compromised.

**Further Information:**

Detail of my submissions where I addressed some of these matters:

1. Submission to Northern Basin review:



No.\_31\_\_Mr\_Brian\_  
Bycroft (2).pdf

2. Submission to Productivity Commission Review -

[www.pc.gov.au/\\_data/assets/word\\_doc/0007/226897/sub004-basin-plan.docx](http://www.pc.gov.au/_data/assets/word_doc/0007/226897/sub004-basin-plan.docx)

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**Submission on:**

**Proposed sustainable diversion limits for the northern Murray–Darling Basin**

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Summary

The proposal to reduce the volume of water recovered from the northern basin is not supported. The evidence clearly shows that even the greatest water recovery investigated in the review (415 GL) was insufficient in several sub-basins to ensure an ‘environmentally sustainable level of take’. On this basis, the volumes put forward do not meet the legal requirements of the Water Act for a *(long-term average) sustainable diversion limit*<sup>1</sup>.

Further investigations should be undertaken to determine a true value for the environmentally sustainable level of take for the Northern Basin by inclusion of water recovery scenarios greater than the current 415 GL upper limit.

The proposed toolkit measures are ill-defined and stated benefits are not clearly demonstrated. The measures appear to fall into two categories:

- Those already within the power of MDBA to deal with, through the water resource plan accreditation process (e.g., improved management of environmental flows, cold water pollution)
- Measures which might be required **in addition to** water recovery (e.g., fishways).

Accordingly, the toolkit measures in no way reduce MDBAs obligation to determine an ‘environmentally sustainable level of take’ and should not be used to influence the volume of water recovered.

Full details of my submission are given below, separated into major themes.

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<sup>1</sup> Cwlth Water Act (2007) Sn. 23

### Trade-off methodology

It is unclear how the MDBA arrived at the recommendation to reduce the volume of water recovered in the Northern Basin. To make an informed decision, it is necessary to know as clearly as possible the likely environmental gains and losses as a result of the various water recovery scenarios. This information and more detailed explanation of the recommendation should have been succinctly reported in the summary document, 'The Northern Basin Review'.

Deliberately or otherwise, important information is 'hidden' and scattered throughout the many companion documents, e.g., the summary environmental report<sup>2</sup>. Table 6 from this report makes it clear that for several sub-catchments, important environmental indicators will **not** be met even for the greatest volume of water recovered considered. The text also makes it clear that these indicators are not necessarily independent and the failure of only one may be sufficient to prevent an environmental outcome being achieved.

For truly accountable and informed decision making, explicit information should be provided as to the environmental outcomes willing to be sacrificed for the various water recovery scenarios. E.g., for the recommended 320 GL recovery, sustainable bird breeding in Narran Lakes is unlikely to be achieved (at high risk). The information needs to be presented in this or similar way to allow informed choices to be made.

Moreover, frequently the environmental impacts have been benchmarked as relative changes against current plan settings (despite these being recognised as likely to be inadequate) or among the scenarios tested. This is inappropriate and is, at best, poor science, and at worst, deceitful; the environmental impacts of the various scenarios should be explicitly described as indicated above.

### Proposed 'Sustainable Diversion Limits'

From the environmental analysis undertaken, it is clear that in some sub-basins, even the maximum volume of water recovery considered would put at risk or 'compromise', many key environmental assets and environmental outcomes. Accordingly, these numbers, whatever they represent, **do not** represent an 'environmentally sustainable level of take' as defined in the Water Act and can thus not be considered as possible Sustainable Diversion Limits.<sup>3</sup>

For example:

*All recovery scenarios...were a **long way** from meeting all the local environmental needs*

(Summary report, p13)

in the lower Balonne, all of the recovery scenarios examined are:

*likely to result in **a high risk** to native fish species*

Environmental Outcomes of the Northern Basin Review, p49)

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<sup>2</sup> 'Environmental Outcomes of the Northern Basin Review'

<sup>3</sup> See C'wlth Water Act (2007), Sn.23., Sn. 4 definitions.

These are by no means isolated examples, and it is obviously necessary in a number of sub-basins to consider markedly **increased** recovery volumes, above the current 415 GL upper limit, to achieve an ‘environmentally sustainable level of take’ and meet MDBAs obligations under the Water Act (2007).

Specifically the environmental report identifies likely negative ecological impacts from the scenarios considered on the Ramsar listed Narran Lakes Wetland, viz.:

*For the internationally recognised Narran Lakes Ramsar site, the flow indicator that provides large-scale habitat opportunism for waterbirds is **not met under any scenario**. **Waterbirds will remain at risk** of having less than two opportunities in their life cycle to breed, which is the minimum requirement to maintain stable populations.*

**Environmental Outcomes of the Northern Basin Review, p29.**

Consequently, if the recommendation is adopted, the Australian Government would be obliged to report this matter to the Ramsar Convention under Article 3.2.<sup>4</sup>

### Toolkit measures

It is clearly stated in the environmental report that the toolkit measures are

*largely considered to be **complementary** (in addition) ... rather than being a substitute for water recovery.*

**Environmental Outcomes of the Northern Basin Review, p31.**

Elsewhere, however, it is implied, contrary to the expert evaluation, that the toolkit measures may be able to ‘off-set’ some of the impacts caused by inadequate flows. This seems to be the basis on which the recommendation to reduce the water recovery was made.

The fact that matters other than those covered by the Basin Plan would need to be addressed in the Basin has always been recognised. There is certainly the lack of an overarching ‘river health/ catchment action plan’ addressing all stressors (factors other than flow and water quality). This in no way diminishes the responsibility of the MDBA to determine an environmentally sustainable level of take. Emphasis in this review on these toolkit measures seems to be more a case of MDBA blame shifting rather than accepting their responsibilities.

In the main, these off-set/ toolkit measures are currently poorly defined and it is not possible to evaluate their possible effectiveness or usefulness; they seem to represent more of a ‘thought bubble’ than a fully considered measure. If it is argued that the toolkit measures can off-set the hydrological impacts, then, at a minimum:

- Evidence needs to be provided to clearly demonstrate that this is the case; i.e the proposed water recovery in combination with the tool-kit measures will result in no compromise to environmental assets or environmental outcomes. Moreover, the off-set should be operational prior to the impact.

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<sup>4</sup> “A notification is required if the ecological character of a site *has* changed, *is* changing, or *is likely to* change as the result of technological developments, pollution or other human interference”.

Reliance on 'assurances' by State agencies seems a 'slender reed' on which to base critical environmental outcomes.

- The measure should meet the additionality principle – i.e. is something that would not happen in the normal course of events. (An area where many off-sets fall down). For example, NSW has a well-established program of provision of fishways, and inclusion of such items in the toolkit is not appropriate;

Some of the measures suggested are within the power of MDBA to implement under the Basin Plan and do not need to rely on third parties. This is primarily through accreditation of State based water resource plans, viz.,

- Cold water pollution is covered by the 'water quality management plan' requirements in water resource plans. Cold water pollution is identified in the Basin Plan as a key cause of water quality degradation (Item 5, Schedule 10) and the temperature targets in the Basin Plan (Schedule 11) were primarily designed to manage the impacts of cold water pollution. It would thus be expected that an accredited water resource plan would include measures to deal with cold water pollution;
- Within the constraints of an SDL, an accredited water resource plan **must** include where necessary rules to prescribe:

*(a) the times, places and rates at which water is permitted to be taken from a surface water SDL resource unit; and*

*(b) how water resources in the water resource plan area must be managed and used.*

**(Sn. 10.17, Basin Plan)**

Full reliance on MDBAs Basin Plan powers should be used before any uncertain reliance on third-parties. Failure to use its full powers could be seen as a dereliction of duty by MDBA.

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**Brian Bycroft**  
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# Murray Darling Basin Plan: Five-year Assessment

## Submission

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The attached submission identifies some specific instances where implementation of the Basin Plan is insufficient and has fallen short of what is required.

Two instances are covered in my submission:

- The changes to the Sustainable Diversion Limit (SDL) which were proposed by the Murray Darling Basin Authority (MDBA) in the Northern Basin; this proposal was contrary to the requirements of the Water Act.
- Inadequacy of actions to achieve the water quality objectives in the Basin Plan.

### **Proposed change to the SDL in the Northern Basin.**

There have been a number of criticisms about the MDBA proposal to increase the SDL in the Northern Basin (since disallowed by the Senate). For example, the assumptions made in a number of the scientific analysis by the MDBA have been questioned by some. However, even taking the assumptions at face value, it seems apparent that the MDBA ignored the requirements of the Water Act in framing their recommendation.

The definition of 'Sustainable Diversion Limit' under the Water Act (Sn. 23(1)) is that it '**...must** reflect an environmentally sustainable level of take', where an environmentally sustainable level of take is the level beyond which, *inter alia*, key environmental assets would be 'compromised', or put at risk (Sn.4). **MDBA have no discretion to modify this number on the basis of other considerations.**

Thus, for a diversion limit to be considered a sustainable diversion limit, the level must be such that it does not compromise, or put at risk, key environmental assets. Any proposed diversion limits which do not meet this criterion, i.e. puts at risk key environmental assets, cannot be considered as sustainable diversion limits and would be inconsistent with the requirements of the Water Act.

The results of the MDBAs scientific studies are unequivocal; at the level of take that was proposed, many key environmental assets would be compromised - only 32 of the 49 environmental indicators would have been met, (where the environmental indicators were chosen to identify circumstances under which environmental assets would be compromised). In some sub-basins, **none** of the indicators were met.

Further, conclusions from MDBAs scientific studies included:

*All recovery scenarios...were a **long way** from meeting all the local environmental needs*

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in the lower Balonne, the proposed recovery was:

*likely to result in **a high risk** to native fish species*

Environmental Outcomes of the Northern Basin Review, p49)

The scientific studies also identified likely negative ecological impacts on the Ramsar listed Narran Lakes Wetland, viz.:

*For the internationally recognised Narran Lakes Ramsar site, the flow indicator that provides large-scale habitat opportunism for waterbirds **is not met** .... **Waterbirds will remain at risk** of having less than two opportunities in their life cycle to breed, which is the minimum requirement to maintain stable populations.*

**Environmental Outcomes of the Northern Basin Review, p29.**

This latter conclusion is particularly worrying as one of the primary heads of power for the Commonwealth under the Water Act is their obligations under the Ramsar Convention.

These are by no means isolated examples, and it obviously should have been necessary in a number of sub-basins for MDBA to have considered markedly **increased** recovery volumes to achieve an 'environmentally sustainable level of take' and meet their obligations under the Water Act (2007). They failed to do this.

The MDBA attempted to 'soften' the blow by proposing a number of tool-kit measures to replace the need for environmental water. This approach is flawed on a number of grounds:

- Their own scientific studies clearly indicated that these measures were 'complementary'; i.e., required in addition to provision of appropriate flows:

*largely considered to be **complementary** (in addition) ... rather than being a substitute for water recovery.*

**Environmental Outcomes of the Northern Basin Review, p31.**

- Some of the measures suggested are already within the power of MDBA to implement under the Basin Plan and do not need to rely on third parties. This is primarily through accreditation of State based water resource plans, viz.,
  - Cold water pollution should be covered by the 'water quality management plan' requirements in water resource plans. Cold water pollution is identified in the Basin Plan as a key cause of water quality degradation (Item 5, Schedule 10) and the temperature targets in the Basin Plan (Schedule 11) were primarily designed to manage the impacts of cold water pollution. It would thus be expected that an accredited water resource plan would include measures to deal with cold water pollution;
  - Within the constraints of an SDL, an accredited water resource plan **must** include, where necessary, rules to prescribe:
    - (a) *the times, places and rates at which water is permitted to be taken from a surface water SDL resource unit; and*
    - (b) *how water resources in the water resource plan area must be managed and used.*

**(Sn. 10.17, Basin Plan)**

These requirements, if properly implemented, would help ensure that environmental flows from one catchment are adequately protected as the water moves into an adjacent catchment, as well as providing protection for ecologically important low flows.

Full reliance on MDBAs Basin Plan powers should be used before any uncertain reliance on third-parties. Failure to use its full powers could be seen as a dereliction of duty by MDBA.

Moreover, it is ironic that other proposed complementary measures such as better provision of fish passage were the subject of a former MDBA program, the 'Native Fish Strategy for the Murray Darling Basin' that had been largely disbanded.

*Does this mean the MDBA ignores socio-economic considerations.*

No. There is only a requirement under the Water Act to provide protection for **key** environmental assets. Environmental assets that are not considered 'key' are not necessarily protected. Decision as to what environmental assets are key is a policy decision by MDBA. If a proposed diversion limit puts at risk ('compromises') a particular environmental asset, MDBA has two policy options:

- Increase the diversion limit to ensure the environmental asset is not compromised; or,
- Do not include the environmental asset as a 'key' environmental asset.

MDBA have done neither.

From the above example, one is forced to conclude that the MDBA give little regard to the requirements of the Water Act in implementation of the Basin Plan.

### **Inadequacy of actions to achieve the Water Quality Objectives in the Basin Plan.**

Actions relating to achievement of water quality objectives are addressed in two parts of the Basin Plan.

Sn 9.14 deals with consideration of the water quality objectives and associated targets in making a number of operational flow-management decisions.

More importantly, the water quality objectives are meant to be primarily addressed by the development of a Water Quality Management Plan (WQMP) as part of the Water Resource Plan (WRP) accreditation. It is this aspect of the Basin Plan that is the focus of my submission.

There has been a failure to fully and properly implement the requirements for a WQMP. As well as a comprehensive analysis of key causes and scientifically based-targets, the WQMP requires the inclusion of measures to address any water quality issues. It is clear that MDBA have adopted the view that only flow measures need be addressed in the WQMP. Thus:

*The cause of the remaining medium, high and very high risks identified in the WQM Plan was outside the scope of management by the Water Act 2007 (Cth) and Water Act 2000 (Qld). The WQM Plan recognises the land management responses under the HWMP to address these risks however they are not formally listed for accreditation under the Basin Plan 2012.– (from the Warrego-Parro-Nebine Water Resource Plan, the only accredited plan at the time of writing) <https://www.mdba.gov.au/publications/policies-guidelines/water-resource-plan-warrego-paroo-nebine>*

The original intent of the WQMP requirements was not so restrictive. There is no limitation on the types of measures to be considered and included for accreditation purposes. I can say this with some authority, as I was the primary author of the water quality section of the Basin Plan.

#### *Basis of confusion and myths*

1. As the plan is about protection of the water resource, it is confined to flow matters.

This view fails to recognise the comprehensive nature of the definition of water resources (Sn.4) under the Water Act, that:

*...includes **all** aspects of the water resource (**including** water, organisms and **other components** and ecosystems **that contribute to the physical state and environmental value of the water resource**).*

Clearly, water quality is covered under the definition.

However, more fundamentally,

2. A misinterpretation of Sn. 22(10) of the Water Act.

This section prevents the Basin Plan **directly** regulating land use, natural resources or pollution matters. I.e., the Plan cannot **explicitly** require particular measures of this nature to deal with water quality issues. However, it does not limit the measures adopted by a State in its WQMP who may, and would be likely to include, such measures in their accredited WQMP. The legal opinions supporting this approach, at the time of the development of the Basin Plan, was unequivocal.

Moreover, it mirrors the general approach to implementation of water resource plan requirements; viz:

- The Basin Plan identifies the outcomes and targets (SDL, water quality targets)
- The State jurisdictions, **using their own legislative powers and instruments**, identify how they will address the targets.

In a similar fashion, the Basin Plan does not directly regulate specific allocation approaches or water quality management measures, nor does it exclude any from possible inclusion.

That this broader approach to consideration of measures was the original intent is indicated explicitly in the Plan under S.10.33(3): *'The measures may include land management measures'*. I.e., inclusion of measures is not confined to flow management measures.

Moreover, the absurdity of the limited approach taken in consideration of the water quality management measures becomes clear when the requirements of the WQMP are looked at holistically.

There are essentially three elements:

1. Establishment of key causes of water quality degradation;
2. Development or adoption of water quality targets
3. Consideration of water quality management measures.

For the first two elements, the analysis is comprehensive and holistic. I.e., there **must** be an analysis of **all likely key causes** of water quality degradation, whether or not they are related to flow. For examples

the key causes which must be considered include 'poor soil conservation practices'; 'cold water pollution' (Schedule 10).

The water quality targets are similarly wide-ranging.

Thus, in order to provide balance, a wide view of possible measures is appropriate. If a narrow view is taken, the need to undertake a comprehensive analysis of key causes and have a broad range of water quality targets would be unnecessary and irrelevant. The narrow approach to consideration of possible water quality measures ensures the Plan's objectives for water quality (Sn. 9.03 – 9.08) will be a long way from being achieved.

The farcical nature of this narrow approach is illustrated by the water quality measures incorporated into the accredited Warrego, Paroo and Nebine Water Resource Plan. The **only** real measure is trivial and not really relevant, being just a re-statement of the process for developing alternative targets, viz.:

*Establishment of Environmental Values (EVs) and Water Quality Objectives (WQOs) for the waters of the Warrego, Paroo and Nebine plan area under Schedule 1 of the Queensland Environmental Protection (Water) Policy 2009, to inform statutory and non-statutory planning and decision making.*

To achieve the water quality objectives in the Basin Plan, it would be necessary for a broad range of measures to be incorporated, addressing **all** of the key causes. The original intent was for an accredited Water Resource Plan to incorporate other State instruments such as those already used by the State for water quality planning. Thus, in the case of the Warrego, Paroo, Nebine Plan the measures identified in Sn. 9.1.2 – 9.1.4 of the 'Healthy Waterways Management Plan' should also form part of the instrument for accreditation. ( <https://www.ehp.qld.gov.au/water/policy/pdf/hwmp-warrego-paroo-bullo-nebine.pdf> )

The comprehensive scope expected for water quality management plans can be found in current national guidelines for water quality management. In particular:

- 'Implementation Guidelines' (1998) Document 3 of the National Water Quality Management Strategy, <http://www.agriculture.gov.au/water/quality/nwqms/nwqms-implementation-guidelines>
- 'The Framework for Marine and Estuarine Water Quality Protection: A Reference Document', (2002) <http://webarchive.nla.gov.au/gov/20130904194802/http://www.environment.gov.au/water/publications/quality/water-quality-framework.html>

Both of these national guideline documents give detailed analysis of what a water quality management plan should entail. The narrow approach adopted by the MDBA is inconsistent with this national guideline material.

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