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From: Greg Monaghan [REDACTED]
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To: NRC
Subject: Submission to the Water Sharing Plan for the Greater Metropolitan Unregulated River Water Sources 2011 (27-04-2020)
Attachments: Greater-Metropolitan-Region-Groundwater-Sources-2011.pdf; Water Management (General) 2018 - Regulatory-Impact-Statement.pdf; Colo-Cattai Management Zone Area 210.1 sq kms.jpg; Farm Dams of the Hawkesbury - NSW SIX Viewer (blue shapes).jpg; Farm Dams of Goulburn Area - NSW SIX Viewer (blue shapes).jpg; Farm Dams of Singleton Area - NSW SIX Viewer (blue shapes).jpg; Water NSW Plan - Kellyville 03.jpg; Water NSW Plan - Riverstone Schofleds 04.jpg

Dear Commission,

We are consultants that have been working with the farmers of the Hawkesbury for some years and whilst our knowledge of the way farming is carried out is not extensive, we understand that multiple tiers of bureaucracy cause endless frustration for land owners and farmers.

In recent times, we have been preparing development applications for farming operations for properties on both the alluvial flood plains that draw water directly from the Hawkesbury River and from high lands away from the river. These high lands require water to be pumped for several kilometres from the river and stored in holding dams or drawn from existing dams. Each water source is regulated by the Water Sharing Plan and administered by Water NSW through the issue of Water Access Licences (WALs) and Water Supply Works Approvals (WSWAs). As you would be aware, the later generally cannot exist without WAL units being gained where storage in excess of the Maximum Harvestable Right Dam Capacity (MHRDC). Of course, stock & domestic use of catchment water is exempt from regulation provided the MHRDC for water storage is not exceeded.

The problems have been encountered when attempting to gain development approvals for land owners where available WAL volumes do not exist. Transferring WAL units between catchment management zones and the potential for total volumetric capacity being exceeded for that management zone is an issue that is encountered constantly. The Upper Hawkesbury River (Cattai Creek to Colo River) Management Zone apparently is over allocated by 213 mega-litres (ML) and Water NSW are unable to advise the reasons for this. Whilst there are solutions for land owners to transfer water from immediately adjoining upstream management zones, the fact that the Zone is over allocated presents as a constant impediment to development approval in particular with the General Terms of Approval (GTA) issued by Water NSW.

Over the past twenty (20) years, many small rural market garden holdings in arable areas have been consumed by urban development. Areas such as Kellyville, Schofields, Riverstone, Marsden Park are a few that have lost valuable production for the Sydney Market. Most were highly sustainable as they had been developed from successful immigrant families who brought generations of farming experience to Australia in the 1950s and 1960s. Whilst many of these farms have vanished, many families have continued to operate in new locations such as the Hawkesbury with many new farms being established in the high lands where the threat of flood inundation does not exist. The unfortunate impediment to the establishment and growth of these successful market gardening families is the access to water licences.

Without the benefit of time to prepare a detailed submission, the following points should be considered during the review of the current Greater Metropolitan Unregulated River Sources 2011 Water Sharing Plan (The Plan) although these have been listed in no specific order :-

1. The Water Sharing Plan is a very complex document designed for a holistic application of water management and not for the general public to understand.

2. The Plan would benefit immensely from the preparation of specific documents for each Management Zone and be written in plain language. This would likely remove significant administrative load from the currently under resourced Water NSW who attempt valiantly to keep up with public demands.
3. The metering of Unregulated River flows should only be considered as a control mechanism once land owners have been fully educated or made aware of the volumes of water permissible under the Plan. As most higher volume users are farmers, the need for Plain Language Rules is considered absolutely necessary. Public consultation and communication is also absolutely necessary. The enforcement of metering is likely to be met with fierce opposition both politically and collectively by associations. The use of NRAR as an enforcement agency without the public fully understanding processes required by Local Government and Water NSW is NOT acceptable despite NRAR's power being legislated. Education, engagement and guidance is a far better community process than enforcing complex legislation through penalty and litigation. The later are becoming increasing prevalent and are un-necessary in many instances.
4. Many properties along the Hawkesbury River are not on the alluvial flood plain and have been referred to above as high land properties.
5. These properties have farm dams which were constructed prior to the Water Management Act 2000 and allowed to remain if the containing allotment was created by a subdivision registered prior to 01 January 1999.
6. Many of these properties are within this category although subsequent subdivisions registered after Jan 1999 appear to still contain these older dams.
7. The wording of the Legislation would suggest that the right to retain a dam is extinguished once a later subdivision is registered. An untenable position for Government to administer.
8. Dams up to one megalitre on small properties do not need licencing under current licencing arrangements.
9. From verbal advice received from retired dam construction contractor (ex HCC Councillor), has indicated that many farm dams were constructed during the 1960s, 1970s and 1980s under a NSW Government Incentive scheme which provided around 35% funding for the construction of the private assets in an effort to help control flooding of the Hawkesbury Valley and to provide run off dams for irrigation of crops.
10. Records for the approval of any such dam likely do not exist as up to 1984, would have been approved under the then Colo Shire Council which was amalgamated into Windsor Municipal Council to become Hawkesbury Shire. Records from the Colo period possibly no longer exist.
11. Many of the properties on which these dams were constructed, have never been used for cropping and have only ever had pasture for domestic animals.
12. At face value, these small farm dams appear to contribute significantly to the volumetric storage for each of the Hawkesbury River Colo River to Cattai Creek Management Zone and likely impact on the ability for further allocation of volume under the Water Share Plan although only when the MHRDC is applied.
13. The volume of such dams in many cases, exceed the Maximum Harvestable Rights (MHR) of the subject property.
14. In an area that has been examined as a test to this theory, one property of 10 hectares, has a dam with an estimated 12.5ML and a MHRDC volume of 0.82 ML. This represents a complete failing of the original amnesty period, the community audit process, the compliance process, the Government ability to resource and considering that the construction of many dams is likely to have benefitted from public funding, the removal of the same should NEVER become the burden of the land owner.
15. The test area included 18 properties within 1.25 square kilometres, averaged 600% over the MHRDC volume although this excludes the fact that 6 of the 18 properties currently have WSWAs.
16. Volumes are estimates based upon aerial imagery water areas and experience measuring dam volumes.
17. Many land owners who do not have WALs or WSWAs are not aware of :-
 - a. Maximum Harvestable Right Dam Capacity restrictions
 - b. The fact that the dam on their property may not be used for any other use than for stock & domestic water usage.
 - c. Unaware of when their dam was constructed.
18. Our estimate of the catchment area for this zone is 210.1 square kilometres.
19. Assuming that 50% of that Zone has the potential to contain farm dams, then the total MHRDC capacity would be 840.4 ML
20. The test area of 1.25 square kilometres had an estimated 61 ML of existing dam storage.
21. Therefore, the estimate of farm dams in 50% of the management zone is close to 5,100 ML or six (6) times the MHRDC with many likely to have benefitted from earlier Government financial incentives.

22. For Intensive Plant Agriculture, any storage that exists and possibly has existed prior to 1999, dam volumes over and above the MHRDC requires WAL volume to be purchased from a third party WAL holder or transferred from another WAL held by the owner.
23. Transfer of WAL volumes within specific Management Zones is almost impossible as most land owners in the Hawkesbury retain WAL volume as an asset. This is very different to the way the Riverina where some land owners transfer temporary rights as a form of income.
24. In 2011, the NSW Government paid land owners up to \$3,300 (inc GST) in a WAL Unit buy-back. This set a Per Unit value benchmark which some owners appear to be asking as a purchase price.
25. Analysis of the Colo River to Cattai Creek Management Zone WALs indicates that ONLY 143 ML MAY be available for purchase. This volume is all that has been identified as POSSIBLE VOLUME for PURCHASE and would certainly require negotiations with current holders. Given that holders view WAL Units as a valuable asset, transfers are considered to be highly unlikely.
26. Transfers from immediately adjoining Management Zones are the only option although this has proven to be complex and convoluted.
27. The Water Management (General) Regulation 2018 - Regulatory Impact Statement from 2018 recognises that administrative delays in procuring WALs where units are not available can add significantly to land holding costs and delay business activity immeasurably.
28. Upper Hawkesbury Nepean Management Zone (Colo River to Cattai Creek) is apparently 213 ML over-subscribed. The reason for this is unknown and un-published.
29. It is possible that the small farm dam storage discussed which is over and above the MHRDC, forms part of the existing Management Zone subscription although this is an assumption rather than a presumption.
30. Transparency does not exist for Water NSW to allow the public to assess the data to test the Colo River to Cattai Creek Management apparent over-subscription.
31. Within the Water Sharing Plan for the Greater Metropolitan Region Unregulated River Water Sources 2011 Audit of 2019 by Alluvium under Part 10 Rules assessment (see attached), there have not been any occasions where the Minister has required the modification or removal of a dam to ensure the capability of the dam to capture water has been reduced to reflect the current reduction in share component. This is a great outcome for land owners and considering that it is highly likely that the Government contributed to the construction of many of these dams, it would be totally unreasonable for the Government to enforce the dam capacity reductions to comply with MHRDC volumes.
32. The same Audit of 2019 found that there is no process in place to reduce the dam capacity to reflect the reduction in Share Component.
33. These dams are still able to gain Water Supply Works Approvals under the current legislation and the current Water Share Plan.
34. A contemporary Water Supply Works Approval issued by Water NSW for a 19 ML dam is known to the author. This was issued without any complications nor delays.
35. When land owners who intend to use this water storage apply to Local Government for approval to establish & operate Intensive Plant Agriculture farm (market garden or turf farm), an integrated development requirement is triggered when the size of any proposed storage dam exceeds the MHRDC even if the existing dam is well in excess of the MHRDC.
36. The difficulty with this is that any storage above the MHR regardless of the size of the existing pre 1999 dam, a requirement is that WAL units are required for the difference between the MHRDC and the actual volume of the dam. From experience and unlike the Western Plains or Murray-Darling river systems, WAL units are not available for trade as small volume land owners retain units as an asset with the view of making volume available as they accumulate and grow their land holdings.
37. Land owners are then faced with the issue of owning a property which is likely
 - a. zoned RU1 and suitable for Intensive Plant Agriculture under the current Local Environment Plan (LEP),
 - b. has suitable soils,
 - c. does not have vegetation which requires removal,
 - d. is close to services and transport,
 - e. is within short delivery distance to Sydney Consumer Markets
 - f. to become sterilised from farming due to the fact that WAL units within a non-existent market cannot be found.

RECOMMENDATIONS

- A. The NSW Government through Water NSW automatically grant WAL units to all existing farm dams which were in existence prior to 1999 as these dams have likely been used in calculating the total volumetric storage within each Management Zone.
- B. The NSW Government through Water NSW again offer all land owners an opportunity have the WAL Units granted provided they make application for a Water Supply Works Approval within an 18 month amnesty period and any such application that is not approved within that period although lodged, will have a stay order issued to prevent NRAR taking action.
- C. Items A & B will remove the need to for previously Government subsidised small holding farm dams to be issued with order for volume reductions to meet the MHRDC.
- D. The automatic issue of small farm dam WALs will permit small land holders to use the water storage that exists for new or existing market gardens and turf farms (Intensive Plant Agriculture) and allow the growth of an industry which the present COVID environment has shown that we need to become a successful society without reliance on the increasing imported produce market.
- E. Pre 1999 dams that are have Small Farm Dam WAL units issued, should be surveyed and reported upon in a similar way that Domestic Water Front Licences are established through the NSW Crown Lands Office.
- F. WAL Units issued for Small Farm Dam licences should be attached to the Certificate of Title rather than be transferable as there needs to be indefeasibility for the WAL. This would differentiate small farm dams from larger irrigation WALs within recognised irrigation areas.
- G. Planning Instruments, vegetation mapping, topographic mapping from LIDAR and soil types type mapping should be overlayed to identify all arable areas and where pre 1999 farm dams exist, WAL Units should be made available to all small holdings for properties under 40ha where farm dams are greater than 1 ML or the Maximum Harvestable Right Dam Capacity (MHRDC). A nominal sum for purchase should be applied or accelerate the administrative process, WAL units should be issued free of charge as they were in the early part of the 2000s.

Again, the use of NRAR as a fierce regulatory agency should only be reserved for troublesome offenders and if penalties are to be issued, then there should be sliding scale with only severe offenders being set as examples. First time offenders should be given assistance towards compliance rather than being penalised to the point of destroying livelihoods and families. Government at times are guilty of making errors in judgement yet incumbent individuals are very rarely held to account.

Further, the Water Sharing Plan Review process was not advertised in any location other than on the Commission's web site. Water NSW made direct contact with our office to advise that the submission period was closing. A suggestion to overcome this would be for a hold point to be created within the Commission process that prevents the Review from progressing until ALL stakeholder have been advised and an expression of interest registered. Progress without this important hold point, would excludes those who would most likely be impacted by any change.

Trusting that the above assists and would be happy in providing further advice if necessary.

Best regard

Greg Monaghan

Registered Surveyor



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Water Management (General) Regulation 2018

Regulatory impact statement

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1 Executive Summary

Water is essential for communities across NSW. The *Water Management Act 2000* (the WM Act) establishes a framework for the sustainable management of water in New South Wales. It provides for the development of statutory plans that share water between the environment and water users and it establishes the basis for water trading. The WM Act establishes and empowers a number of irrigation infrastructure providers and water supply authorities.

Section 400 of the WM Act enables the making of regulations to support the implementation of the WM Act. The current regulation, the Water Management (General) Regulation 2011 (the 2011 Regulation) provides procedural and technical matters related to the administration of the WM Act and also specifies exemptions from licence and approval requirements under the WM Act.

The 2011 Regulation is due for staged repeal (and will lapse) on 1 September 2018 in accordance with the *Subordinate Legislation Act 1989*.

To consider remaking the 2011 Regulation, the NSW Department of Industry has prepared this regulatory impact statement (RIS). The RIS explains the need for and the objectives of government action. It establishes and analyses the costs and benefits of a range of options. The options analysed are:

- Option 1 (the base case)—allow the 2011 Regulation to lapse (the WM Act, the *Water Act 1912*, water sharing plans and other statutory orders would remain in force)
- Option 2—reinstate the 2011 Regulation without any change
- Option 3—reinstate the 2011 Regulation with amended provisions (the proposed Regulation).

Option 3, preferred by the department, would retain the 2011 Regulation with some amendments (detailed in Appendix D) that:

- provide for the making of applications for specific-purpose access licences to take water for stock watering in prescribed circumstances
- create new exemptions from requirements for access licences and approvals to cut red tape and remove duplication, and clarify existing exemptions that are complex, unclear or have outdated references
- clarify certain operational matters for water supply authorities.

An assessment of the costs and benefits of the measures available to the state, rural landholders, local government and industry was carried out. The assessment identifies that the benefits of the proposed Regulation will outweigh the anticipated costs and it provides the largest net benefits of the alternatives available.

Table 1-1 summarises the net benefits and costs of quantified impacts from remaking the 2011 Regulation with its current provisions and the incremental impact of making the proposed amendments. A full summary table is included at Table 12-1.

Table 1-1 Summarised costs and benefits

Options	Impact benefit (cost) \$m
Option 1 Base case 2011 Regulation lapses	(\$17,789)
Option 2 Remake 2011 Regulation	\$17,752
Option 3 Remake 2011 Regulation with proposed amendments	\$17,774
Benefits of proposed Regulation	\$17,774

Note: figures in (parentheses) are costs

The analysis shows there is a quantified benefit of \$17,774 million from making the proposed Regulation, with the majority of this associated with the water supply authority provision in Section 10 of this RIS. These benefits are in addition to the unquantified benefits of enhanced transparency in decision-making derived from the proposed Regulation.

2 Consultation

Public consultation on the proposed Regulation was undertaken from 7 August 2017 until 3 September 2017. The proposed Regulation and supporting documentation was exhibited on the Department of Industry's website at www.water.nsw.gov.au. Hard copies of the exhibited documents could be requested from the department. No such requests were received.

Public notice of the exhibition appeared in:

- NSW Government Gazette on 4 August 2017
- NSW Government website *Have Your Say* on 7 August 2017
- Sydney Morning Herald and Daily Telegraph newspapers on 9 August 2017
- The Land newspaper on 10 August 2017.

The following stakeholder groups and government agencies were directly advised of the exhibition:

- Water NSW
- water supply authorities: Cobar Water Board, Central Coast Council, Sydney Olympic Park Authority, Essential Energy
- NSW Irrigators' Council
- NSW Farmers' Association
- NSW Minerals Council
- Nature Conservation Council
- Environmental Defenders Office NSW
- Local Government Association
- Forestry Corporation
- Soil Conservation Service.

On 31 August 2017, the exhibition period was extended to 10 September 2017 following requests for an extension from some stakeholders. The extension was notified on the Department of Industry's website. The above stakeholder groups and government agencies were directly advised of the extension unless the department had already received their submission.

3 Submissions

The Department of Industry received nine submissions from stakeholder groups on the proposed Regulation. These submissions were published on the department's website at www.industry.nsw.gov.au/water.

The department considered all of the comments and submissions received. A report that documents the department's consideration of the submissions and response was also published on the department's website at www.industry.nsw.gov.au/water.

Some amendments to the proposed Regulation have been made based on the department's consideration of the submissions. More information is provided in Appendix E of this RIS.

4 Requirement for regulatory impact statements

The objective of the *Subordinate Legislation Act 1989* is to improve the quality of regulatory proposals by assessing the economic and social impacts of proposed regulations and their alternatives prior to their introduction.

The *Subordinate Legislation Act 1989* requires the preparation of a RIS prior to making regulations. A RIS must state the objective of the regulation and the costs and benefits of alternatives available to achieve these objectives. In considering alternatives, the impact of not proceeding with any regulation must also be evaluated.

Social and economic costs and benefits, both direct and indirect, need to be considered and impacts on resource allocation, administration and compliance with statutory requirements evaluated. Wherever possible, these costs and benefits should be quantified. If quantification of anticipated impacts is not possible, the RIS should facilitate the comparison of alternatives. The *Subordinate Legislation Act 1989* requires that an assessment of the alternative that involves the greatest net benefit, or the lowest net cost to the community, be included in the RIS.

In making statutory instruments, the NSW Guide to Better Regulation identifies principles to cut red tape and reduce costs to business. This RIS sets out the analysis of the impact of the proposed Regulation. The RIS identifies and assesses the relevant costs and benefits of the proposed Regulation other than those parts that deal with matters of a machinery nature.

4.1 Methodology

This RIS relates to the proposed remaking of the Water Management (General) Regulation 2011. It does not include consideration of the by-laws for private irrigation districts under Part 2 of Chapter 4 of the WM Act as these are excluded instruments under Schedule 4 of the *Subordinate Legislation Act 1989*.

The following steps were undertaken to prepare this evaluation for each of the main sets of provisions:

- The Department of Industry identified general objectives for making regulations and possible alternatives for each provision.
- Data relevant to each option was collected from the department's databases.
- Costs and benefits were quantified where appropriate using the assumptions outlined in Appendix B.

Transfer payments are costs to one party but benefits to another. These are noted in each section of the Cost Benefit Analysis (CBA) but are not included in the Net Present Value (NPV) tables as they will have no net effect on the final result. For additional explanation see Appendix B and NSW Treasury TPP17-03.

In a number of areas it was not possible to quantify the costs and benefits of options, so these are defined qualitatively.

Structural changes to the 2011 Regulation are not assessed as they are excluded under the *Subordinate Legislation Act 1989*. Structural changes include administrative changes to machinery clauses (except for material changes to definitions), redundant clauses, the referral of material to schedules, and the consolidation of regulations. By their nature, these only have intrinsic value to the form of the proposed Regulation.

4.2 Option assessment

The base case option involves no new government action (NSW Treasury TPP17-03). Under this option, the 2011 Regulation would lapse from 1 September 2018. The WM Act, the *Water Act 1912*, water sharing plans and various statutory orders would continue to have effect but without the administrative clarity provided by the 2011 Regulation.

Substantive clauses of the 2011 Regulation are considered with regard to:

- remaking the 2011 Regulation in its existing form
- remaking the 2011 Regulation with proposed amendments
- other regulatory and non-regulatory options where these are available.

Marginal changes in the cost to business, cost to government and net social benefit (or cost) are measured quantitatively against the base case option.

4.3 Structure of this document

This RIS is structured around the existing clauses, parts and divisions of the 2011 Regulation as set out below:

- Regulatory framework for water extraction in NSW (see sections 5 and 6 of this RIS)
- Machinery matters (see section 7 of this RIS)
- Form and content of applications (see section 8.1 of this RIS)
- Access licences, including registers and exemptions from the requirement for a water access licence (see section 8 Water access licences of this RIS)
- Approvals, including exemptions from the requirement for an approval (see section 9 Approvals of this RIS)
- Water Supply Authorities (see section 10 of this RIS).

5 Regulatory framework for water extraction in NSW

The proposed Regulation is the Water Management (General) Regulation 2018 and is made under the *Water Management Act 2000*.

The Minister for Regional Water is the minister responsible for recommending that the Governor makes the proposed Regulation.

The Department of Industry and Water NSW are responsible for carrying out functions under the WM Act and its regulations, which will include the proposed Regulation.

5.1 Legislative background

The WM Act is the principal statute providing for the management and allocation of water resources (both surface water and groundwater) in NSW.

The WM Act requires water users to hold:

- a water access licence to take water
- a water supply work approval to construct and use a water supply work (such as a pump, dam or bore)
- a water use approval to use water for a particular purpose at a particular location (such as irrigation or town water supply)
- a controlled activity approval to carry out a controlled activity (such as extracting material from a river bed or constructing a watercourse crossing) at a particular location in, on or under waterfront land.

The WM Act further provides for the creation of categories of water access licences and the issuing of new water access licences of particular categories, the registration of financial interests in those water access licences, and the trade and transfer of those water access licence entitlements and water allocations.

The WM Act also establishes various private irrigation and drainage boards and districts, private water trusts, and water supply authorities.

Section 400 of the WM Act enables regulations, not inconsistent with the WM Act, to be made covering any matter required or permitted by the WM Act. In addition, several provisions of the WM Act explicitly permit regulations to be made to specify particular matters.

The 2011 Regulation makes key elements of the WM Act operational—including but not limited to the following areas:

- defining various procedural matters
- specifying the form and process requirements for applications for water access licences and approvals
- adopting a risk management approach by exempting various persons from the need for a water access licence, water use approval, water supply work approval or controlled activity approval in respect of certain low risk circumstances and activities, which will not be inconsistent with the objects and principles of the WM Act
- keeping public registers and details of the places and locations where they may be viewed
- specifying the categories of new water access licences that can be applied for
- specifying arrangements for private entities established by the WM Act (irrigation corporations, private irrigation districts, private drainage boards and private water trusts)
- specifying the functions, areas of operation, financing and powers of certain water supply authorities.

It is important to note that the WM Act, 2011 Regulation and the water sharing plans are not the only statutes and regulations that affect the water related environment in NSW.

The Department of Industry also supports the NSW Government in the administration of other NSW acts and regulations, including:

- *Dams Safety Act 1978*
- *Googong Dam Catchment Area Act 1975*
- *New South Wales–Queensland Border Rivers Act 1947*
- *Water Act 1912*
- *Water (Commonwealth Powers) Act 2008.*

6 Water Management (General) Regulation 2011

The 2011 Regulation assists in defining and implementing provisions of the WM Act.

Part 1 deals with preliminary matters such as the name of the 2011 Regulation, its commencement and definitions.

Part 2 deals with matters relating to access licences including exemptions.

Part 3 deals with matters relating to approvals including exemptions.

Part 4 deals with requirements and procedures for applications to include or exclude land from an irrigation corporation's area of operations.

Part 5 deals with requirements and procedures for the election of members or directors of a private irrigation board, private drainage board or private water trust.

Part 6 deals with matters relating to the governance of private drainage boards, including the number of directors which constitute a quorum; and requirements regarding financial matters.

Part 7 deals with matters relating to the governance of private water trusts, including requirements regarding particular constitutional and procedural matters, and requirements regarding financial matters.

Part 8 deals with requirements for statements under the WM Act related to works and maintenance programs for the Hunter Valley flood mitigation works.

Part 9 deals with matters relating to water supply authorities including defining the areas of operations of water supply authorities, service and charging functions of water supply authorities, the control of activities in special areas, and promoting operational and administrative best practice.

Part 10 deals with miscellaneous matters.

Schedule 1 identifies excluded works for the purpose of exemptions from requirements for water supply work approvals.

Schedule 2 provides the method of determining the stream order of a watercourse and identifies topographic maps with stream locations for the purpose of defining 'minor stream' in relation to the application of particular exemptions from approval requirements.

Schedule 3 prescribes subcategories of access licences for the purpose of section 57(2) of the WM Act.

Schedule 4 deals with transitional matters relating to access licences and approvals arising from former entitlements, and certain deemed approvals.

Schedule 5 provides exemptions from requirements for access licences and controlled activity approvals.

Schedule 6 provides particular forms for the certification of a preliminary roll of persons who are eligible to vote in the election of members or directors of a private irrigation board, private drainage board or private water trust; and applications for a person's enrolment or rejection in the final role for an election.

Schedule 7–7A provides maps for the purpose of defining 'special areas' of water supply catchment areas of Essential Energy and land declared to be a floodplain.

Schedule 8 provides the penalty notice amount for specified penalty notice offences under the WM Act and 2011 Regulation.

Schedule 9 provides savings and transitional provisions.

7 Machinery matters

The proposed Regulation will remake a number of provisions that are of a machinery nature, and amend some provisions in a machinery manner. Generally speaking, machinery clauses are those that could broadly be described as relating to ‘process’ rather than substantive policy matters. Machinery amendments generally relate to the form of a provision.

Matters of a machinery nature do not require a RIS. This RIS therefore does not consider these matters in detail, but comment on machinery clauses or machinery amendments may be included in submissions and will be considered.

7.1 Machinery clauses

The following machinery clauses in the 2011 Regulation are proposed to be remade without change in the proposed Regulation:

- Clause 1—The name of the Regulation
- Clause 2—The commencement date of the Regulation
- Clause 3—Definitions of certain terms used throughout the Regulation
- Clause 7—Form of notification of available water determinations
- Clause 7A—Form of notices to the holder of an access licence or approval about the imposition of conditions after the licence or approval is granted
- Clause 8—Form of publication of orders authorizing the taking of water under supplementary water access licences
- Clause 9—Form of applications relating to access licences
- Clause 11—Matters to be included on the Water Access Licence Register
- Clause 12—Notice requirements for dealings on default
- Clause 14—Particulars to be recorded in the register of available water determinations
- Clause 15A—Form of appointment of a nominee of a co-holder of an access licence
- Clause 16—Form of claims for compensation relating to access licences
- Clause 22—Definition of ‘aquifer interference activity’
- Clause 23—Form of applications relating to approvals
- Clause 25—Procedure for making an objection to the granting of an approval
- Clause 27—Form of the Register of approvals
- Clause 41A—Definition of ‘designated high risk flood area’
- Clause 42—Form of applications to include land within an irrigation corporation’s area of operations
- Clause 43—Form and procedure for objections to the inclusion of land within an irrigation corporation’s area of operations
- Clause 44—Form of applications to exclude land from an irrigation corporation’s area of operations
- Clause 45—Form and procedure for objections to the exclusion of land from an irrigation corporation’s area of operations
- Clause 46 to 86—Process for election of members or directors of private irrigation board, private drainage board or private water trust
- Clause 87 to 91—Constitution and procedures of private drainage boards
- Clause 92 to 103—Constitution and procedures of private water trusts
- Clause 104—Form of statement of particulars for Hunter Valley flood mitigation works

- Clause 105—Form of statement of cost of maintenance and compensation for Hunter Valley flood mitigation works
- Clause 107—Definitions of certain terms used in Part 9 of the proposed Regulation relating to water supply authorities
- Clause 108 to 114—Areas of operations and functions of water supply authorities
- Clause 115—Process for approval of a water supply authority’s strategic business plan
- Clause 187—Form of notice from public agency of proposed exercise of functions in relation to land in a special area of Essential Energy
- Clause 200—Process for adjustment of a service charge levied by a water supply authority
- Clause 201—Process for objecting to a service charge levied by a water supply authority
- Clause 202—Process for objecting to a water supply authority’s refusal to adjust a service charge
- Clause 203—Form of objection relating to service charge of water supply authority
- Clause 205—Process for declaring land to be a drainage area for a water supply authority
- Clause 208—Process for service of notices by a water supply authority
- Clause 211—Definitions of certain terms used in relation to concessions for eligible pensioners and others for service charges levied by a water supply authority
- Clause 223—Form of application for certificate of compliance for development
- Clause 232—Savings and transitional provisions.

7.1.1 Machinery amendment—circumstances in which approvals may be amended

Section 107 of the WM Act empowers the Minister for Regional Water to amend an approval on the application of the approval holders, or in circumstances prescribed in the regulations.

Historically, where an approval has multiple holders, and all of the approval holders want the approval to be subdivided so they each have their own approval, the approval holders have made an application to the Minister for Regional Water for the approval to be subdivided under section 107(1)(a) of the WM Act.

Section 107(1)(b) was added to the WM Act in 2014 to provide an additional power for the Minister for Regional Water to amend a single approval to create two or more approvals in circumstances prescribed in the regulations. The 2011 Regulation was subsequently amended to specify in clause 26A that a single approval may be subdivided to create two or more approvals where the subdivision of the land benefited by the approval results in part of the land being held by the holder of the approval and part of the land being held by another landholder who was not a holder of the approval.

To recognise the addition of section 107(1)(b) to the WM Act and clause 26A to the 2011 Regulation, it is proposed to amend the 2011 Regulation to specify another circumstances when the Minister for Regional Water may amend a single approval to create two or more approvals is on the application of the holders of the approval.

The purpose of this proposed amendment is to provide consistency in the form of section 107 of the WM Act and the existing clause 26A in the 2011 Regulation, and the substantive operation of these provisions will not change.

7.1.2 Machinery amendment—prescribed Notice of Disposal

Entities which are recognised or established by the WM Act as providing for the sharing of water infrastructure can levy rates and charges to meet their required costs and expenses. These rates and charges are imposed on the owner of the land to which goods and services are supplied.

Section 361 of the WM Act provides that when land that is subject to such rates and charges is sold, the vendor remains liable for those rates and charges until they dispose of the land or give a prescribed notice of disposal to the entity levying those rates and charges.

The Department of Industry has identified that a notice of disposal has not yet been prescribed for the purpose of section 361 of the WM Act.

It is proposed to amend the 2011 Regulation to prescribe the requirements of a notice of disposal for the purpose of section 361 of the WM Act

7.1.3 Machinery amendment—source of Strahler stream order data

The definition of ‘minor stream’ in the 2011 Regulation uses the Strahler system of determining stream order for the purpose of describing where certain exemptions from approval requirements apply.

The source of the data by which the Strahler stream order is determined is specified in Part 2 of Schedule 2 of the 2011 Regulation as certain hard copy topographic maps issued by the NSW Land Information Centre between 1970 and 1999. These maps are not easily accessible and some editions may no longer be available.

It is proposed to amend Part 2 of Schedule 2 and the definition of ‘minor stream’ in the proposed Regulation to specify the source of Strahler stream order data as being the hydroline spatial data published by the Department of Industry on its website.

This change from hard copy data to electronic data that is publicly available on the internet will improve data accessibility without changing the substantive operation of the relevant provisions.

7.1.4 Machinery amendment—exemptions from access licence and approval requirements for which environmental assessment is required

The 2011 Regulation provides the following exemptions that are conditional on the environmental impact of the activity being considered:

- access licence exemption for transport authorities—in relation to water required for the construction and maintenance of rail infrastructure facilities (clause 3 of Schedule 5)
- water use approval exemption for transport authorities—where the access licence exemption in clause 3 of Schedule 5 applies (clause 31(1))
- controlled activity approval exemption for network operators (clause 40(e)).

It is proposed to amend the form of these provisions to clarify their meaning with regard to the requirement for the environmental impact of the activity to be considered. It is not intended to change the substantive operation of these provisions.

7.1.5 Machinery amendment—particular provisions for access licences and approvals arising from former entitlements, and certain deemed approvals

Schedule 4 deals with transitional matters relating to access licences and approvals arising from former entitlements, and certain deemed approvals.

It is proposed to preserve the ongoing operation of Schedule 4 by providing a savings and transitional provision in the proposed Regulation, rather than by replicating Schedule 4 in the proposed Regulation.

This machinery amendment will not affect the substantive operation of matters in Schedule 4.

8 Water Management (General) Regulation option assessment

The option assessment considers the base case of no regulation (the 2011 Regulation lapses), remaking the 2011 Regulation and remaking the 2011 Regulation with amendments for the major substantive areas of the regulation. Costs and benefits of each option are quantified and included in tables within each section of this RIS and summarised in Table 12-1.

8.1 Form and content of applications

Objective

The objective is to standardise documentation and simplify the licence and approval application process to reduce costs and increase transparency.

8.1.1 Option 1—base case—the 2011 Regulation lapses

In the base case, the 2011 Regulation would lapse and with it the procedures and requirements for the making of applications for new water access licences and approvals.

Without standardised information requirements on what details are required to accompany applications:

- applicants will spend additional time to find out exactly what information is needed
- The Department of Industry and Water NSW will spend additional time processing applications that do not provide sufficient information.

8.1.2 Option 2—remake the 2011 Regulation

The 2011 Regulation would continue to provide standard procedures and requirements for applications under the WM Act. The 2011 Regulation expressly provides for the electronic lodgement of applications for new access licences and approvals in accordance with the requirements of the *Electronic Transactions Act 2000*.

To estimate the costs and benefits it has been assumed that prescribing the form, content and method of making applications for new water access licences will reduce the number of non-complying applications by 10%. The major benefits for those customers will be:

- a reduced delay in conducting the activity that requires a water licence (estimated to be \$2,450 for one week production loss)
- an estimated two hours of time saved (valued at \$61 per hour) as the need to resubmit applications with additional information will be avoided.

Government avoids the cost of rejecting non-conforming applications. However, as a result of cost recovery this is expected to be a transfer payment.

Clauses 9, 23 and 229 of the 2011 Regulation prescribe the approved form, content and method of making applications for new water access licences and approvals. The following costs and benefits are associated with remaking the Regulation:

- Business avoids costs of \$321,500 each year in lost production through consequential delays (\$306,250) and excess time to complete applications (\$15,250).
- The estimated net present value of the benefit is \$1.32 million.

Table 8-1 Benefit of prescribing the form and content of licence and approval applications

Identified impacts	Estimation units	Net present value \$m
Number of applications per year	1,250	
Total estimated benefit		\$1.32

Source: Department of Industry estimate

8.1.3 Option 3—remake the 2011 Regulation with amendments

No amendments to these provisions in the 2011 Regulation are proposed.

8.2 Water access licences

The WM Act provides for the sharing of water available for extraction in a water source through water allocations made for categories of access licences in accordance with rules in the relevant water sharing plan. Currently there are approximately 35,000 access licences in NSW.

Water allocations are made based on whether the water source is regulated by dams or is unregulated (natural surface water flows and groundwater recharge), and the number of licence shares in the water source.

An access licence specifies the number of shares in the available water held by the licence; and the times, rates and circumstances, and the areas and locations, where water may be taken under the licence. Access licences also have a water allocation account that reflects the water allocations which have been made for the licence category and the amount of water the licence holder is entitled to take at a particular point in time.

The WM Act enables the granting of particular types of access licences and the conversion of entitlements under other legislation to access licences. The WM Act also provides a framework for the trade of access licences, licence shares and water allocations.

Ownership of and security interests in access licences are recorded on a public register administered by NSW Land and Property Information.

8.3 Exemptions for water access licences

Objective

The objective of having exemptions from the WM Act's requirements for access licences is to:

- minimise the regulatory burden on minor or small-scale water users commensurate with the small volume of water taken and the low level of associated impact
- allow the Department of Industry and Water NSW to manage its regulatory responsibilities in a cost-effective and practical manner.

Background

Exemptions from the requirement to hold an access licence provide a net social benefit by avoiding transaction costs for both government and water users where:

- the risks to the environment and other water users are low
or
- those risks are already managed through a different mechanism (such as an approval)
and/or
- there are distinct socio-economic or environmental benefits, such as drought relief or dust suppression.

Clause 18 and Part 1 of Schedule 5 of the 2011 Regulation provide that the following persons are exempt from the requirement to hold a water access licence for the taking and use of water from a water source:

- a roads authority engaged in the construction and maintenance of roads
- a transport authority in relation to water required for the construction or maintenance of rail infrastructure facilities
- any person lawfully engaged in the carriage and use of water for drought relief
- any person lawfully engaged in using water for dust suppression
- any person lawfully engaged in hydrostatic testing of gas pipelines, in relation to water required for that purpose
- any person lawfully engaged in prospecting or fossicking for minerals or petroleum, in relation to water required for that purpose
- any landholder, in relation to water required for generating electricity for domestic consumption provided that the water is returned to the water source from which it was taken
- any person lawfully engaged in the testing of a new bore, in relation to water required for that purpose during the week following completion of the bore's construction
- any person in relation to the taking of water from or by means of an exempt monitoring bore for the purposes of measuring water levels, water pressure or water quality
- any person lawfully engaged in the operation of a hydro-electric power station in connection with a water supply work owned by the Ministerial Corporation in relation to water required for the purpose of generating hydro-electric power in certain circumstances
- any landholder in relation to the taking water from or by means of an excluded work
- any person taking water from an artificial channel in certain circumstances where the water is used to establish sugar cane plantings
- the Ministerial Corporation for approved watering for basic human needs
- a public authority for approved watering for environmental work construction
- holders of certain approvals in relation to the taking of any water from Bungaree Creek or Bingera Creek
- any person in taking water for emergency safety measures complying with a direction given under the *State Emergency Service Act 1989* or the *State Emergency and Rescue Management Act 1989*.

8.3.1 Option 1—base case—the 2011 Regulation lapses

If the base case is adopted and the 2011 Regulation is allowed to lapse, any extraction of water from a water source under the WM Act would require authorisation by an access licence.

Under the WM Act, all water that is taken from a water source requires an access licence. It is an offence to take water from a water source without holding an access licence that authorises the extraction. The defences available are where the water is taken pursuant to a basic landholder right under the WM Act (this type of take does not require a water access licence), an interstate assignment of allocation, an authorisation to take water from uncontrolled flows or if the person was exempt, pursuant to the WM Act or the regulations, from any requirement for a water access licence in relation to the taking of water from that water source. The 2011 Regulation contains all of the exemptions from the requirement for a water access licence.

As discussed above, if the 2011 Regulation was allowed to lapse and the exemptions from requirements for access licences no longer applied, then all of those exempt types of water extraction would require an access licence. The WM Act strictly limits the categories of new access licences. The 2011 Regulations and water sharing plans provide for applications to be made for limited categories of specific purpose access licences only. Accordingly, in the absence of an amendment to the WM Act, the water requirements for those persons that are currently exempt could only be met by the purchase of existing water entitlements on the open market, either on a permanent or temporary basis. In some instances this may be difficult where entitlement is not readily available to be purchased on the water market because demand for entitlement is high, or the water market for a particular water source is not well developed.

In some water sources there are established water trading markets. Historically these are the regulated river systems, but there are recognised markets in a smaller number of unregulated river and groundwater sources. In other unregulated river and groundwater areas there is no history of trading and as a consequence opportunities to purchase entitlement are limited.

There will also be an increased cost to government to process the additional transaction applications that will occur as a result of removal of the exemption provisions, although this could be offset by application fees.

It is difficult to estimate the frequency of an activity that the Department of Industry does not undertake—as these activities are currently exempt. However given the nature of the exempt activities it is expected that there would be a fairly large number conducted each year. For the purpose of the RIS it is estimated that 5,000 activities per year are potentially subject to the licence exemptions. .

The analysis estimates the costs to business based on the additional time taken to apply for the required licences and to prepare documentation to undertake water market transactions to purchase water on the open market, notwithstanding that not all affected persons may be able to buy water to meet their needs. Additional business costs associated with the delay is assumed to be one week (refer Appendix B).

The following costs and benefits are associated with removing the exemptions:

- Transfer from business to government amount to \$4.1 million per year for application fees associated with allocation assignment dealings.
- Transfers between businesses for small amounts of water valued at approximately \$1 million per year.
- Costs of delays in undertaking activities are estimated to be \$12.2 million per year.
- Costs of additional time taken to prepare the additional applications are estimated to be \$1.2 million per year.

Water transfers represent a cost to individual enterprises that currently enjoy an exemption. However there are benefits as well. Where water is available for sale, existing licence holders will benefit from additional water sales revenue.

The major costs associated with the removal of the exemptions would be incurred where water is not available for sale. In these circumstances, activities such as dust suppression—that have well established social, health and environmental benefits—would not take place.

8.3.2 Option 2—remake the 2011 Regulation

The benefits associated with remaking the exemptions are largely avoided costs:

- Business conducting small-scale activities avoid a cost of \$4.1 million per year for application fees (transfer) and water purchase costs \$1 million per year (transfer).
- Government avoids the considerable costs that would be incurred in processing additional water access licence applications that would arise if the licence exemption provisions were removed as well as the additional compliance costs associated with these licences.
- Activities with well-established social, health and environmental benefits such as dust suppression are facilitated.
- Business avoids the costs of delays in undertaking affected activities such as road maintenance estimated to be \$12.2 million per year as there are no delays in obtaining licences and acquiring water on the market.
- Business also avoids the cost of time taken to prepare applications estimated to be \$1.2 million per year.

Table 8-2 Benefit of exemptions for water access licences

Identified impacts	Annual units	Net present value \$m
Number of exempt activities including drought relief	5,000	
Benefit to currently exempt business		\$55.23

Source: Department of Industry estimate

8.3.3 Option 3—Remake the 2011 Regulation with proposed amendments

The exemptions from the need for an access licence can be clarified, extended, limited or eliminated to better meet operational management requirements.

While it is proposed that many exemptions be retained, amendments to the drought relief exemption are proposed, as discussed below.

8.4 Changes to drought relief exemption

Objective

The objective is to clarify the application of an exemption for a person lawfully engaged in carriage of water for drought relief from holding an access licence to circumstances where the drought relief is for domestic consumption and stock watering.

Background

The current drought relief exemption may be interpreted broadly. For example, it was not intended that this exemption extend to the carriage of water to irrigate crops in drought-affected areas.

8.4.1 Option 1—base case the 2011 Regulation lapses

The number of activities undertaken with the benefit of the drought relief exemption varies considerably from year to year. In years where rainfall is plentiful there may be no activities. However, during drought there may be thousands of domestic and stock users across NSW requiring small amounts of water to supplement essential needs.

The estimated costs associated with the removal of the exemption are included in Section 8.3.2 of this RIS.

8.4.2 Option 2—remake the 2011 Regulation

The benefits of remaking the 2011 Regulation are included in the estimates set out in Table 8-2.

8.4.3 Option 3—remake the 2011 Regulation with amendments

It is proposed to limit the exemption to circumstances where the drought relief is for domestic consumption and stock watering. This means only a small volume of water should be taken and there would be a large benefit.

Those water users irrigating crops would need to purchase water on the market. For the purposes of this analysis it is estimated that five businesses per year may be affected by the proposed amendment.

Table 8-3 Estimated costs of drought relief exemption amendment

Identified impacts	Estimation units	Net present value \$m
Estimated number of drought relief activities affected per year	5	
Estimated cost to businesses using drought exemption to irrigate crops		\$0.06

Source: Department of Industry estimates

8.5 New provision to permit applications for domestic and stock specific purpose access licences

Objective

The objective is to ensure that where a domestic and stock specific purpose access licence is attached to a nominated parcel of land, those people purchasing the nominated parcel of land can continue to use water for stock watering purposes.

Background

Domestic and stock specific purpose access licences are generally limited by conditions of the licence to authorise the extraction of water for domestic and stock purposes at a particular landholding. If the landholding is sold, the vendor can no longer use the licence as they no longer occupy the landholding. The licence may be transferred to the purchaser of the landholding under section 71M of the WM Act, however, the vendor is not required by the WM Act to do so.

Many water sharing plans prohibit applications for new domestic and stock specific purpose access licences other than for the subcategory 'domestic'. This means if the purchaser of a landholding does not also purchase an existing domestic and stock specific purpose access licences from the vendor, the purchaser may not be able to access water for stock watering.

This means that the purchaser of a landholding has to purchase an existing domestic and stock specific purpose licences from the vendor to be able to access water for stock watering.

8.5.1 Option 1—base case—the 2011 Regulation lapses

There are approximately 4,300 domestic and stock specific purposes access licences that have a component of stock watering. Of these there are currently about 400 specific purpose access licences where there is a discrepancy between the licence holder and the holder of the approval for the water supply work nominated by the licence.

If the 2011 Regulation lapsed, these licences would not be affected except after the transfer of land ownership. In the circumstance where land is transferred without the specific purpose access licence, the new owners would not be able to apply for a new licence unless that was specifically permitted by the relevant water sharing plan.

The main reasons an existing domestic and stock specific purpose access licence is not transferred to the purchaser of a landholding are:

- the solicitor or conveyancer may incorrectly assumed the licence would be transferred as part of the sale of the land
- the vendor, solicitor or conveyancer did not understand the licence could only be used at the particular landholding.

Although a transfer under section 71M of the WM Act may be possible, it may not always be workable or expedient to negotiate a transfer with the vendor.

8.5.2 Option 2—remake the 2011 Regulation

Where the existing regulation is remade the new owners may apply for a new licence for domestic purposes only. There can be a considerable interruption to businesses caught in this situation requiring access for stock water.

It is expected that this could account for up to \$350 per day for up to six months. It is expected that either the business would not be able to carry stock for this period or that they would need to transport water to the site.

8.5.3 Option 3—remake the 2011 Regulation with proposed amendments

It is proposed to amend the 2011 Regulation to allow a landholder to apply for a new domestic and stock specific purpose access licence in the following circumstances:

- within 12 months of the landholder purchasing the landholding
- if a domestic and stock specific purpose access licence for the landholding was held by the vendor immediately prior to the sale of the landholding
- if the domestic and stock specific purpose access licence held by the vendor has been or should be cancelled under section 77A of the WM Act because it can no longer be used by the vendor
- the domestic and stock specific purpose access licence applied for is of the same subcategory (if any) as held by the vendor immediately prior to sale of the landholding

- the amount of share component applied for under the new specific purpose access licence is no more than the share component of the vendor's specific purpose access licence—so there is not an increase in entitlements to take water.

Table 8-4 Benefit of domestic and stock specific purpose access licence amendment

Identified impacts	Estimation units	Net present value \$m
Average per year	26	
Estimated benefits		\$8.08

Source: Department of Industry estimate

8.6 Security interests and access register

Objective

The objective is to ensure there are exemptions in relation to access licence dealings and security interest holders so that the interests of the security interest holder are not affected.

Background

Persons with a security interest in an access licence (such as a financial institution) must consent to changes being made to information contained in the Access Register in regard to the access licence in which the security interest is held. However, where those changes do not adversely affect the security interest, such consent should not be required.

Clauses 20 and 21 of the 2011 Regulation provide exemptions in relation to security interests in access licences. Clause 20 provides exemptions from the requirement for a security holder to consent to the recording of certain dealings under sections 71U and 71Q of the WM Act in the Access Register. Clause 21 exempts a person claiming a security interest in a replacement access licence from having to advise the holder of the licence of the existence of the security interest claimed and give written notice of the advice to the Director General, if the licence holder requests the Director General, in writing, to register the security interest.

8.6.1 Option 1—base case—the 2011 Regulation lapses

Lapsing of the 2011 Regulation would result in the consent and notification exemptions also lapsing, which would add to the cost and processing times of some dealings in access licences by requiring the consent of security interest holders or notification by persons claiming to be a security interest holder to the holders of replacement access licences. As shown in Table 8-5 the cost is estimated to be \$0.4 million over the five year period.

8.6.2 Option 2—remake the 2011 Regulation

Remaking the 2011 Regulation avoids the unnecessary impost on security interest holders of having to consent to access licence dealings, or notify holders in relation to replacement access licences, where the interests of the security interest holder are not affected. This option meets the objective of ensuring that there are exemptions in relation to access licence dealings and security interest holders, where the interests of the security interest holder are not affected. Table 8-5 summarises the costs and benefits associated with enabling exemption from notification.

Table 8-5 Benefit of enabling exemption from notification

Identified impact	Estimation units	Net present value \$m
Number of dealings per year	750	
Portion involving increase in shares	50%	
Benefit		\$0.4

Source: Department of Industry estimate

8.6.3 Option 3—remake the 2011 Regulation with proposed amendments

No amendments to these provisions of the 2011 Regulation are proposed.

9 Approvals

The WM Act specifies that certain works and activities that have the potential to impact on land and water resources require authorisation by an approval. This requirement ensures potential impacts from these works and activities can be regulated and minimised through conditions on an approval.

Approvals generally have effect for a period not exceeding 10 years and may be extended on application.

The relevant types of approvals are:

- **water supply work approval**—authorises the approval holder to construct and use a specified water supply work such as a pump, bore, dam or pipe, at a specified location. There are 94,310 current water supply work approvals; and 22,974 current water supply work approvals combined with water use approvals
- **flood work approval**—authorises the approval holder to construct and use a specified flood work such as a barrage, causeway, cutting or embankment, at a specified location. There are 1,634 current flood work approvals
- **water use approval**—authorises the approval holder to use water for a particular purpose such as irrigation or commercial use, at a particular location. There are 2,538 current water use approvals, and 22,974 current water supply work approvals combined with water use approvals (as identified above)
- **controlled activity approval**—authorises the approval holder to carry out a specified activity, such as the erection of a building or the construction of a watercourse crossing, at a specified location in, on or under waterfront land. Waterfront land is land within 40 metres of the highest bank of a river, the shore of a lake or the mean high water mark of an estuary. There are approximately 1,200 current controlled activity approvals with an average duration of 3 years.

The WM Act also provides for drainage work approvals and aquifer interference activity approvals.

Requirements for these types of approvals have not yet commenced. Drainage works are currently regulated under Part 2 of the *Water Act 1912* and aquifer interference activities are regulated under Part 5 of that WM Act.

The 2011 Regulation provides for a range of procedural and technical matters related to approvals, which include:

- requirements for advertising approvals and process for making objections to the granting of an approval
- form and content of Register of Approvals
- requirements for security deposits for the fulfilment of obligations under an approval
- exemptions from requirements for approvals
- exemptions from the transfer of approvals to successive landholders.

Requirements to advertise applications for approvals ensure that the community is made aware of applications. Exemptions from the requirement to advertise are prescribed for particular works with short or limited timeframes.

Security deposits may be required as a condition of an approval to ensure that persons undertaking projects under the authority of approvals take all requisite care in the conduct of operations and that the land is satisfactorily remediated once the project is complete.

Exemptions from the requirement to hold an approval are appropriate where the potential impacts from a particular work or activity are managed by another process or authorisation, or are very small and/or of short duration. This approach minimises transactions costs and reduces red tape by eliminating unnecessary duplication and recognising the proportionate risk of a proposed work or activity.

9.1 Exemption for approvals

Objective

The objective is to retain exemptions for approvals in the 2011 Regulation to allow the Department of Industry and Water NSW to:

- manage approval requirements in a cost-effective and practical manner
- minimise the regulatory burden on persons undertaking low impact activities.

Background

Exemptions from the requirement to hold an approval are appropriate where the risk of impacts arising from a particular work or activity are:

- managed via other processes
or
- have only limited and/or short term impacts.

This minimises transaction costs and reduces red tape, and recognises the proportionate risk of a proposed work or activity.

The 2011 Regulation currently exempts certain persons in certain circumstances from requirements for approvals in the WM Act in relation to the:

- use of water
- construction or use of a water supply work or flood work
- carrying out of a controlled activity.

9.1.1 Exemptions for water use approvals

Clause 32(1) of the 2011 Regulation exempts a person from the offence under section 91A (1) of the WM Act of using water without a water use approval in the following situations:

- where a Development Consent is in force under the *Environmental Planning and Assessment Act 1979* other than the use of water for power generation by a major utility
- water for domestic consumption or stock watering
- water taken under a specific purpose access licence for Aboriginal cultural purposes
- environmental purpose in accordance with a plan for implementing an adaptive environmental water condition on an access licence
- a roads authority engaged in the construction and maintenance of roads
- a transport authority in relation to water required for the construction or maintenance of rail infrastructure facilities
- any person lawfully engaged in the carriage and use of water for drought relief
- any person lawfully engaged in using water for dust suppression
- any person lawfully engaged in hydrostatic testing of gas pipelines, in relation to water required for that purpose

- any person lawfully engaged in prospecting or fossicking for minerals or petroleum, in relation to water required for that purpose
- any landholder, in relation to water required for generating electricity for domestic consumption provided that the water is returned to the water source from which it was taken
- any person lawfully engaged in the testing of a new bore, in relation to water required for that purpose during the week following completion of the bore's construction
- any person in relation to the taking of water from or by means of an exempt monitoring bore for the purposes of measuring water levels, water pressure or water quality
- any person lawfully engaged in the operation of a hydro-electric power station in connection with a water supply work owned by the Ministerial Corporation in relation to water required for the purpose of generating hydro-electric power in certain circumstances
- any landholder in relation to the taking water from or by means of an excluded work
- any person taking water from an artificial channel in certain circumstances where the water is used to establish sugar cane plantings
- the Ministerial Corporation for approved watering for basic human needs
- a public authority for approved watering for environmental work construction
- holders of certain approvals in relation to the taking of any water from Bungaree Creek or Bingera Creek
- any person in taking water for emergency safety measures complying with a direction given under the *State Emergency Service Act 1989* or the *State Emergency and Rescue Management Act 1989*.

9.1.2 Exemptions for water supply works approvals

The 2011 Regulation exempts a person from the need to hold a water supply work approval for the construction and/or use of water supply works in certain circumstances.

Clause 34 of the 2011 Regulation provide exemptions from the requirement for a water supply work approval in relation to the construction only (not the use) of the following water supply works:

- water supply work constructed for the purpose of prospecting or fossicking for minerals or petroleum
- water pipe to convey water from one place to another
- water reticulation work located on a landholding for which there is a water use approval.

These exemptions do not apply on specified lands with high conservation value including land declared to be critical habitat, land in a heritage conservation area, SEPP 14 wetlands and state forest within the meaning of the *Forestry Act 2012*.

Clause 35 of the 2011 Regulation provides exemptions from the requirement for a water supply work approval in relation to the use only (not the construction) of the following water supply works:

- water supply work constructed for the purpose of prospecting or fossicking for minerals or petroleum
- water storage work, water reticulation work or water impounding work that was in use before 1 July 2004 to convey or impound water in certain circumstances
- water reticulation work used to convey water to a landholding for which there is a water use approval or which does not require a water use approval
- hydro-electric power station operated in connection with a water supply work owned by Water NSW or the Ministerial Corporation in certain circumstances.

Clause 36 of the 2011 Regulation provides an exemption from requirements for a water supply work approval for the construction *and* use of water supply works in the following circumstances:

- a landholder in relation to an excluded work listed in Schedule 1 of the 2011 Regulation
- any person in relation to an exempt monitoring bore
- the Ministerial Corporation in relation to a work for approved watering for basic human water needs

- any person engaged in an aquifer interference activity in connection with the mining or extraction of any material in relation to the construction or use of a water management work for the purpose of taking and using water from an aquifer
- any person for the purpose of complying with a direction under the *State Service Act 1989* or the *State Emergency and Rescue Management Act 1989* in an emergency in certain circumstances
- any person in relation to a work for the control or prevention of soil erosion which is included in a project under section 10 of the *Soil Conservation Act 1938*.

9.1.3 Option 1—base case—the 2011 Regulation lapses

If the 2011 Regulation is allowed to lapse, all works, uses and activities that are currently exempted from approval requirements would require an approval.

This would result in the following additional burdens on business:

- Additional costs would be incurred including application fees, the expense of preparing applications and the cost of the relevant approval (also noting that approvals will require renewal from time to time which is an additional cost). The cost of preparing applications could be quite significant especially if the proponent is required to engage the services of a consultant.
- There will be duplication of effort for those works, uses and activities which also require development approval from a local council or other consent authority as the work or activity will now require an approval as well as development consent.
- There may be additional delay in the commencement of projects as a result of the additional time required to process approval applications that are submitted to the Department of Industry or Water NSW.

There will also be an increased cost to government in regard to processing the additional transaction applications that will occur as a result of the lapsing of the exemption provisions, although this increased cost will be offset by application fees.

9.1.4 Option 2—remake the 2011 Regulation

Remaking the exemptions contained in the 2011 Regulation ensures that water users avoid the cost of obtaining an approval for the exempted works, uses and activities.

Table 9-1 Benefits of works and water use approval exemptions

Identified impact	Estimation units	Net present value \$m
Number of exempt works and uses	5,000	
Benefit		\$52.7

Note: Short-term, low-risk applications

As shown in Table 9-1 the benefits associated with remaking the exemptions for approvals for water supply works and water use include the removal of a time delay to commence works business valued at \$50.2 million in delayed production and \$2.5 million in time savings to prepare applications.

9.1.5 Option 3—remake the 2011 Regulation with proposed amendments

It is proposed to retain many of the existing exemptions for approvals. However a number of opportunities to make improvements have been identified. It is proposed to make amendments to some existing exemption provisions and also to include some new exemptions for state forest plantations and water tanker trucks used for dust suppression, as discussed in following sections.

9.2 Amendment of application of exemption in plantation areas in state forests

Objective

The objective is to recognise that plantation areas of state forests are not sensitive environmental areas like other areas nominated in Clause 34.

Background

Subclause 34(1) of the Regulation exempts a person from having to hold a water supply work approval to construct a water supply work for certain purposes. Subclause 34(2) of the Regulation states that subclause 34(1) of the Regulation does not apply to water supply works on certain types of land, including, at paragraph 34(2)(g), land within a state forest within the meaning of the *Forestry Act 2012*.

Plantations (as defined in the *Forestry Act 2012*) are not considered to be sensitive environmental areas like the other types of land listed in subclause 34(2) of the 2011 Regulation because they are highly modified and have been assessed as not requiring the same level of protection as more natural areas of state forest.

9.2.1 Option 1—base case—the 2011 Regulation lapses

All new water supply works constructed in state forests would require an approval for construction. Approximately 1,600 works have been constructed in state forests to date.

The estimated costs associated with the removal of the exemption are included in Table 9-1.

9.2.2 Option 2—remake the 2011 Regulation

All new water supply works constructed in state forests would require an approval for construction. Approximately 1,600 works have been constructed in state forests to date with 140 of these being in plantation areas.

9.2.3 Option 3—remake the 2011 Regulation with proposed amendments

Plantation areas account for approximately 16% of the total forest estate, with most of this being under softwood. Of the 1,600 works that have been constructed in state forest to date, approximately 140 have been located in plantation areas.

It is estimated there would be 14 works constructed in plantation areas of state forest per year that would be exempt from requiring a water supply work approval.

Table 9-2 Benefit of amendment for state forests plantations

Identified impact	Estimation units	Net present value \$m
Number of exempt works per year	14	
Benefit		\$0.14

Source: Department of Industry estimate

9.3 Amendment of exemption for water tanker trucks used to take water for dust suppression

Objective

The objective is to expand existing exemptions from approval requirements for dust suppression.

Background

Clause 18 and clause 5 of Schedule 5 of the 2011 Regulation exempts any public authority (including local councils) from holding an access licence in relation to taking water from a water source for the purpose of dust

suppression. Subclause 31(1) of the 2011 Regulation extends the exemption to the need to obtain an approval to use water for that purpose.

Option 1—base case— the 2011 Regulation lapses. The current exemptions from requirements for an access licence and water use approval would not apply. Public authorities undertaking dust suppression activities would be required to hold:

- an access licence to account for any water taken for the purpose of dust suppression
- a water use approval that authorises the use of water for dust suppression.

The estimated costs associated with the removal of the exemption are included in Table 9-1.

9.3.1 Option 2—remake the 2011 Regulation

The current exemptions from requirements for an access licence and water use approval would continue to apply.

9.3.2 Option 3—remake the 2011 Regulation with proposed amendments

Water tanker trucks may have built-in pumps, or they may need to be attached to a stand-alone pump to take water from a water source. It is proposed to amend the 2011 Regulation to clarify that a local council does not need a water supply work approval to use a water tanker truck with an in-built pump to take water for lawful dust suppression activities, but only if the local council is satisfied that the take of water will not have a significant adverse impact on basic landholder rights or sensitive environmental areas (being the land currently identified in clause 34(2)(a)–(j) of the 2011 Regulation).

It is expected that this would mainly apply to local government authorities outside the Sydney metropolitan area. It is estimated that 95 local government authorities have on average two water tankers.

The major benefit would be removal of confusion over whether or not the tanker truck was undertaking a lawful activity.

9.4 Requirement for advertising approvals

Objective

The objective is to ensure that certain applications for approvals are advertised to provide an opportunity for community comment.

Background

Section 92 (7) of the WM Act enables regulations made under the WM Act to require any application or any specified class of applications to be advertised. Clause 24 of the 2011 Regulation identifies the types of applications for an approval that must be advertised. These include river pumps, production bores, and works within a river (weirs and dams). In some cases if the water supply work is to be used for a period of not more than six months, or for purposes that are generally exempt such as dust suppression, the application does not need to be advertised.

This clause also sets out the means by which the Minister for Regional Water publishes, and the content of, an advertisement. The administrative actions associated with advertising take a minimum of 35 days.

9.4.1 Option 1—base case—the 2011 Regulation lapses

If the regulation were to lapse there would be no requirement to advertise applications for approvals.

In the base case, the community would not have the opportunity to comment on any types of applications for approvals under section 93(1) of the WM Act because no applications for approvals would require advertising.

9.4.2 Option 2—remake the 2011 Regulation

The 2011 Regulation requires that prescribed types of applications for approvals be advertised. For certain low-risk activities, for example a water supply work that will not be used for more than 6 months, there is an

exemption available from the requirement to advertise. It is estimated that there are 500 applications advertised per year.

Table 9-3 Cost to affected businesses of works approval advertising

Identified impact	Estimation units	Net present value \$m
Number of advertised approval applications	500	
Cost		\$25.1

Source: Department of Industry estimate

The following impacts are associated with remaking this provision:

- Business incurs advertising fees associated with the requirements to advertise applications. While this is a cost to the affected business it is a transfer payment as the newspapers receiving advertising payments benefit.
- The net present value of delays in conducting the activity are the major costs accounting for \$25.1 million.
- There is a social benefit of remaking the exemption from the increased transparency by actively notifying the community and providing an opportunity to comment.

9.4.3 Option 3—remake the 2011 Regulation with proposed amendments

Only one minor amendment to the existing provision is proposed to clarify the method of advertising. It is proposed to change the advertising method from *advertising applications from 'in a local newspaper' to in a newspaper circulating among the local community*. This amendment recognises some local newspapers have been discontinued.

This amendment will not make a significant impact on the cost of the proposed Regulation.

9.5 Exemption from flood work approvals

Objective

The objective of having exemptions from requirements for flood work approvals is to allow the Department of Industry and Water NSW to:

- minimise the regulatory burden on minor or small-scale flood works commensurate with the small volume of water impeded and the low level of associated impact
- manage its regulatory responsibilities in a cost-effective and practical manner.

Background

Under the WM Act a flood work is defined as a work that:

- is situated in or near a river, estuary or lake, or within a floodplain
- affects the flow of water to or from a river, estuary or lake, or the distribution or flow of floodwater in times of flood, because of its size or configuration
- includes all associated pipes, valves, metering equipment and other equipment.

Examples of flood works are levees, access roads, causeways and embankments.

An approval is required to construct or use a flood work under section 91D(1) of the WM Act. When these approval requirements commenced in 2015 (with the repeal of Part 8 of the *Water Act 1912*), the 2011 Regulation was amended to provide exemptions from requirements for a flood work approval for certain low-risk flood works.

The circumstances when exemptions from requirements for flood work approvals apply include

- any person for the purpose of complying with state emergency directions
- any person in certain urban areas

- persons who own and occupy landholding less than 0.2HA in certain circumstances relating to ring embankments around a dwelling house, shed or storage silo
- certain public authorities if the flood work is constructed or used for the purposes of a railway or public road
- certain earthworks less than 150 mm above the natural surface.

9.5.1 Option 1—base case—the 2011 Regulation lapses

Under the base case, all flood works would require an approval. Levies and embankments have been developed on private and public land over the last 200 years. While it is not possible to determine how many flood works would be impacted by the lapsing of the exemption the number is expected to be extremely large. For the purposes of this assessment it is expected that there would be 5,000 existing works and up to 500 new flood works each year.

For the flood works already established there would be no production delays associated with the obtaining the approvals as the works have already been constructed.

For the 500 new minor or small scale flood works expected to be constructed each year the expected cost of construction delays is estimated to be \$6.13 million over the five years of the analysis.

Additional costs for the time to prepare applications is estimated to be \$0.915 million.

Over the five years of the analysis the total cost estimated to be \$7.04 million.

9.5.2 Option 2—remake the 2011 Regulation

Table 9-4 Impacts of flood work approval exemption

Identified impact	Estimation units	Net present value \$m
Number of existing flood works	5,000	
Number of new flood works	500	
Benefit		7.04

Source: Department of Industry estimate

In addition, there may be circumstances where approval could not be issued under the WM Act for a particular existing work. The costs of infrastructure modifications would be an additional cost.

9.5.3 Option 3—remake the 2011 Regulation with proposed amendments

Clause 41D of the 2011 Regulation provides an exemption from requirements for a flood work approval for ring embankments around dwelling houses, sheds and storage silos. This exemption does not apply unless the embankment:

- does not enclose more than two hectares or 10% of the person's land, whichever is less
- is not located within a designated high-risk flood area.

It is proposed to extend the exemption to apply to partial-ring embankments on sloping land, as these embankments have the same effect as a full-ring embankment that completely enclose an area of land.

Currently there are nine applications for this type of flood work and the impact is expected to be minor over the next five years.

9.6 Exemptions—controlled activity approvals

Clauses 38–40 of the 2011 Regulation provide exemptions from the offence under section 91E(1) of the WM Act of carrying out a controlled activity without a controlled activity approval.

Under the 2011 Regulation, public authorities (excluding Landcom and the Superannuation Administration Corporation) and local councils are exempt from requiring a controlled activity approval in relation to all controlled activities that they carry out in, on or under waterfront land.

Any person (other than a public authority) is exempt from requiring a controlled activity approval in relation to the carrying out of the following controlled activities in, on or under waterfront land:

- activities carried out in accordance with any lease, licence, permit or other right in force under the *Mining Act 1992*, the *Crown Lands Act 1989*, or the *Crown Lands (Continued Tenures) Act 1989*, *Western Lands Act 1901* or a petroleum title in force under the *Petroleum (Onshore) Act 1991*
- activities carried out in accordance with any lease, licence, permit or other right in force in respect of land under the ownership or control of the Maritime Authority of NSW or a Port Corporation (within the meaning of the *Ports and Maritime Administration Act 1995*)
- for which the minister administering the *Ports and Maritime Administration Act 1995* is the consent authority under the Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005
- certain activities comprising the excavation of the bed of a river, lake or estuary for the purpose of facilitating the use of a water supply work
- certain activities carried out pursuant to section 52 of the WM Act in relation to a person's extraction of water with respect to their domestic and stock rights
- activities carried out, in accordance with a harvestable rights order, in connection with the construction or use of a dam on land within the harvestable rights area constituted by the order
- activities carried out in connection with the construction or use of fencing, or of a vehicular crossing or an access track, that does not impound water, being an activity carried out in, on or under waterfront land relating to a minor stream and within a rural zone
- certain activities carried out in connection with the construction or use of a work under a Part 2 licence or Part 8 approval issued under the *Water Act 1912*
- activities comprising nothing more than the removal of vegetation in circumstances that would otherwise be lawful
- carrying out of development in accordance with section 16 of Part E (Rouse Hill Regional Centre) of *Baulkham Hills Development Control Plan*, on the land to which that section applies (being land bounded by Windsor Road, Commercial Road and Withers Road, Rouse Hill)
- carrying out of development in accordance with the *Oran Park and Turner Road Waterfront Land Strategy 2009*, as published in the Gazette on 17 July 2009
- activities carried out on waterfront land relating to a river where the channel of the river is fully concrete lined or is a fully enclosed pipe channel
- certain construction, modification, repair or maintenance of, or emergency work on certain infrastructure by a network operator licensed or authorised under the *Water Industry Competition Act 2006*, the *Gas Supply Act 1996* or the *Electricity Supply Act 1995*, or a licensee under the *Pipelines Act 1967* (a pipeline licensee)
- activities carried out in connection with the erection, alteration, addition to or the provision of ancillary facilities for a dwelling house or dual occupancy building provided they comprise exempt development or are subject of a development consent or complying development certificate and are not being carried out in, on or over the bed of any river, lake or estuary
- activity carried out for the purposes only of complying with a direction given under the *State Emergency Service Act 1989* or the *State Emergency and Rescue Management Act 1989* in an emergency.

9.6.1 Option 1—base case—the 2011 Regulation lapses

Adoption of the base case would result in the lapsing of the existing exemption provisions in the 2011 Regulation which would mean that controlled activities would require a controlled activity approval.

This would result in the following additional burdens on business:

- Additional costs would be incurred including application fees, the expense of preparing applications and the cost of the relevant approval (also noting that approvals may require renewal from time to time which is an additional cost). The cost of preparing applications could be quite significant, especially if the proponent engages the services of a consultant.
- There will be duplication of effort for those activities that also require development approval from a local council or an authorisation from other consent authority.
- There may be additional delay in the commencement of projects as a result of the additional time required to process approval applications that are submitted to the Department of Industry.

There will also be an increased cost to government in regard to processing the additional transaction applications that will occur as a result of the lapsing of the exemption provisions, although this increased cost will be offset by application fees.

9.6.2 Option 2—Remake the 2011 Regulation

If the 2011 Regulation is remade in its current form, there would be no change to the existing exemptions from requirements for controlled activity approvals. The existing exemptions which are considered unclear would not be clarified and the proposed new exemptions would not be created.

Remaking the existing controlled activity exemptions would avoid the costs identified in the base case.

Business would avoid the cost of additional approvals estimated at \$9.3 million over the five years and the delays in conducting minor activities. The cost of the approvals is a transfer to government assuming cost recovery in fees and charges.

The major cost is the cost of delays for business which account for \$50.2 million.

Table 9-5 Benefits of controlled activity exemption

Identified impact	Estimation units	Net present value \$m
Estimated number of controlled activities covered by exemptions	1,000	
Benefit		\$10.54

Source: Department of Industry minimum fee controlled activity approvals

9.6.3 Option 3—Remake the 2011 Regulation with proposed amendments

It is proposed to clarify the operation of several existing exemptions, and also create a number of new exemptions from requirements for controlled activity approvals.

It is proposed to clarify the following existing exemptions:

- removal of vegetation (paragraph 23 of Schedule 5)—clarification the exemption does not apply to the removal of soil or rocks surrounding the vegetation; clarification the exemption only applies when the removal of vegetation is lawful under other legislation including when no authorisation is required; and clarification the exemption does not apply to the removal of large woody debris which is important in providing river bank and bed stability, reducing flow velocities and providing habitat.
- activities on land of Maritime Authority or Port Corporation (paragraph 17 of Schedule 5)—clarification the exemption also applies to land under the ownership or control of port operators as defined in the *Ports and Maritime Administration Act 1996* but only in situations where the environmental impact of the activity has been considered.
- development at Rouse Hill Regional Centre (paragraph 24 of Schedule 5)—clarification of the relevant Development Control Plan.

9.6.4 Proposed new exemptions from controlled activity approvals

Objective

To recognise additional activities as low risk activities that do not require a controlled activity approval; and recognise additional activities which are subject to other assessment and approval requirements.

Background

It is proposed to create new exemptions for the following:

- Any type of controlled activity which is the subject of enforcement action being undertaken by another NSW government agency (for example, direction from EPA to remove an illegal dam constructed across a watercourse using asbestos) but only if the Minister for Regional Water has approved the carrying out of the activity without a controlled activity approval.
- Any type of controlled activity which is required to be carried out by a court.
- Maintenance of existing lawful works on waterfront land, which does not involve changes in the size of the work, or additions or improvements to the work.
- Repair or restoration of storm damage to access tracks, watercourse crossings, water supply works or essential services infrastructure, or removal of storm debris.
- Construction of a jetty, pontoon or mooring pole on waterfront land relating to an estuary or lake in certain circumstances.
- Any type of controlled activity on waterfront land relating to an estuary or lake which has been highly modified by urban/industrial development where we are proposing the exemption should apply—the areas where the exemption applies will be depicted in supporting maps.
- Any type of controlled activity which relates to waterfront land for a 1st, 2nd or 3rd order stream and where the activity is separated from that stream by a public road, carpark, other hard stand area or levee walls.
- Any type of controlled activity carried out by government entities in certain circumstances.

Estimates from the Department of Industry indicate that there are around 600 of these types of applications per year which would be subject to these new exemptions with 75% being in the Sydney region.

In the case of activities subject to enforcement activity by another agency the proposed exemption will streamline regulatory activities and expedite the repair or removal of any harmful works. For the maintenance of lawful works, the proposed exemption avoids duplication of assessment processes.

Some of these activities occur in urban or industrial situations. As such they will require development consent from local government. Any environmental impact, which by definition is low as a result of the highly modified environment, will be dealt with under the *Environmental Planning and Assessment Act 1979*.

In these cases the proposed exemption makes current practice more efficient. It saves the need for local councils to obtain concurrence from the department for these activities.

- Business benefits from a \$0.5 million annual reduction in application fees associated with controlled activity lodgement. While this is a cost to the affected business it is a transfer payment to government
- the net present value of avoided delay is the major benefit accounting for \$5.8 million and time taken to prepare applications is estimated to be \$0.3 million

Table 9-6 Identified impacts of changes to controlled activity exemptions

Identified impact	Estimation units	Net present value \$m
Estimated number of affected activities per year	579	
Benefit		\$6.1m

Source: Department of Industry estimates

9.7 Security deposits for approvals

Objective

Security deposits ensure that project proponents take added care when developing land and that the land is satisfactorily remediated once the project is complete.

Background

There is a risk to the environment, other water users and the community generally that proponents will not fulfil their obligations in regard to the satisfactory construction of works or completion of activities associated with approvals granted by the Minister for Regional Water.

In order to minimise that risk, clause 28 of the 2011 Regulation allows the minister to impose a condition on an approval that compels the proponent to provide security for the cost of performing the holder's obligations under an approval. It also allows for those funds to be paid out to meet the holder's cost of performing their obligations should they default. This relates to obligations such as the rehabilitation of land after the conclusion of an activity or construction of works in a prescribed manner. The financial effect of this provision is to require a capital commitment prior to the commencement of works.

Based on recent figures, approximately 50 security deposits are provided per year. A separate security deposit may be required for different stages of the same project. The amount of the deposit varies according to the anticipated cost of remediation. On average the cost of a security deposit is \$300,000 and the duration it is held is between one and two years.

9.7.1 Option 1—base case—the Regulation lapses

If the 2011 Regulation is allowed to lapse, the conditions of an approval could require a security deposit for the fulfilment of obligations under the conditions of the approval. However, this requirement for a security deposit would not be supported by the framework currently provided in clause 28 of the 2011 Regulation. This may lead to uncertainty regarding how the amount required for a security deposit is determined, how a security deposit is provided, and the status of a security deposit if the approval expires.

In the base case the security deposits would still be collected, and for the purposes of the analysis it is assumed that \$15 million is collected per year. Assuming that the deposits are held for two years, the opportunity costs of capital is estimated to be approximately \$2.1 million per year with a NPV of \$8.6 million over the five years of the analysis.

9.7.2 Option 2—remake the 2011 Regulation

Clause 28 of the 2011 Regulation provides for conditions of approvals to require security deposits for the fulfilment of approval obligations.

The security deposit is released to the approval holder when works are satisfactorily completed. Assuming that the deposits are held for two years, the opportunity costs of the capital (7% assumed) for those companies conducting appropriate remediation is estimated to be approximately \$2.12 million per year with a NPV of \$8.6 million over the five years of the analysis.

The benefit of remaking the regulation is that it provides certainty regarding how the amount required for the security deposit is calculated and the protection against unwarranted costs transfers from businesses to government and the community in the event that the works are not satisfactorily completed.

It is estimated that 5% of sites may be abandoned without appropriate remediation. As a result of the security deposit in place there is an additional \$900,000 per year available to undertake remediation at designated abandoned sites. Over the period of the analysis this amounts to \$3.7 million.

As a result, the NPV of the cost of security deposits is estimated to be \$4.9 million.

Table 9-7 Impacts of security deposits

Identified impact	Estimation units	Net present value \$m
Number of security deposits lodged	50	
Estimated cost of security deposits		\$4.9

Source: Department of Industry estimates

9.7.3 Option 3—remake the 2011 Regulation with proposed amendments

No amendments to the current provisions in the 2011 Regulation are proposed.

10 Water supply authorities

10.1 Background

Sydney Water, Water NSW, and Hunter Water are created by and derive their responsibilities and areas of operations from their respective Acts (*the Sydney Water Act 1994, the Water NSW Act 2014, and the Hunter Water Act 1991*).

The 93 regional urban local water utilities derive their responsibilities from and operate mainly under the *Local Government Act 1993*. Five authorities operate as water supply authorities under the *Water Management Act 2000*. Central Coast Council is a local water utility and a water supply authority.

The 2011 Regulation applies to

- Central Coast Council—incorporates former Gosford City Council and Wyong Shire Council
- Essential Energy (Broken Hill and surrounds)
- Water NSW (Fish River Water Supply Scheme)
- Cobar Water Board
- Sydney Olympic Park Authority.

Central Coast Council and Essential Energy have both water and sewerage functions. Cobar Water Board and Water NSW (Fish River Scheme) have only water supply functions. Sydney Olympic Park Authority supplies recycled water.

Independent Pricing and Regulatory Tribunal (IPART) has a standing reference under the *Independent Pricing and Regulatory Tribunal Act 1992* Schedule 1 for water supply authorities and makes price determinations for Water NSW, Essential Energy and Central Coast Council.

The power for local water utilities to levy developer charges for water supply, sewerage and stormwater derives from section 64 of the *Local Government Act 1993* by reference to section 306 of the *Water Management Act 2000*. Clause 224 of the 2011 Regulation relates to levying of water supply and sewerage developer charges.

In relation to water supply authorities, the 2011 Regulation:

- defines the areas of operations of water supply authorities
- provides for the service and charging functions of water supply authorities in a manner that integrates natural resource management outcomes into water supply authority functions and achieves greater consistency with other authorities undertaking similar functions
- provides for, and controls activities in, special areas
- promotes operational and administrative best practice.

10.1.1 Central Coast Council—Gosford and Wyong

Central Coast Council water supply system serves approximately 138,000 connected properties between the Hawkesbury River in the south, Tuggerah Lake to the north and Mooney Mooney Creek to the west. The system also provides services to a number of large industrial and commercial customers including Vales Point power station. In 2015–16 the system delivered 29,000 megalitres of water.

Gosford City Council and Wyong Shire Council are listed as water supply authorities under the WM Act. Central Coast Council was proclaimed in May 2016 and carries out its water supply and sewerage functions as a water supply authority in the area of operations of the former Gosford and Wyong councils.

10.1.2 Essential Energy

Essential Energy's water-related functions include providing water and sewerage services to about 10,500 connected properties in and around Broken Hill. Essential Energy supplies a total of approximately 6,000 megalitres of water per year.

Essential Energy also provides water supply to two mining companies, Perilya Ltd (Perilya) and CBH Resources Ltd (Broken Hill Operations).

10.1.3 Water NSW (Fish River Water Supply Scheme)

The Fish River Water Supply Scheme is a pipe and pump scheme that supplies around 23,500 properties with approximately 3,700 megalitres of water per year.

The scheme sources water from Oberon Dam and supplies bulk water to four major customers (Energy Australia, Lithgow City Council, Oberon Council and WaterNSW Greater Sydney) and approximately 280 smaller customers along the pipe route. These smaller customers are farmers and some industrial customers (collieries) who use the water for domestic purposes (such as showers and toilets). The scheme also supplements town water supplies in the Blue Mountains.

10.1.4 Cobar Water Board

The Cobar Water Board is a water supply authority with three main stakeholders—Cobar Shire Council, which supplies water to Cobar township and separately provides sewerage services; Endeavour Operations (Elura Gold Mine) and Peak Gold Mines Pty Ltd (Peak Gold Mine).

Peak Gold Mine on-supplies water to Cobar Management Pty Ltd (CSA Mine) under an agreement. The scheme also supplies water to other 'minor' consumers, as approved by its board.

10.1.5 Sydney Olympic Park Authority

The Sydney Olympic Park Authority is constituted under the *Sydney Olympic Authority Act 2001*. The minister responsible for the *Sydney Olympic Authority Act 2001* is the Minister for Sport. The Office of Sport is an executive agency related to the Department of Industry.

The Sydney Olympic Park Authority operates the Water Reclamation and Management Scheme (WRMS) that provides a recycled water option for development within Sydney Olympic Park and surrounding areas. The water is sourced from sewage and stormwater, and the recycled water is used for a variety of purposes including irrigation and toilet flushing in office buildings and apartments as well as homes in the adjacent suburb of Newington.

In 2015–16, the WRMS produced 930 megalitres of recycled water and provided services to an estimated 26,000 residents and workers (SOPA Annual Report 2015–16).

Table 10-1 Water supply authorities' connected properties and water delivered

Customer	Total annual water delivered ML	No. of Connected properties
Central Coast Council	29,000	137,800
Cobar Water Board	3,500	2,260 + Mines
Essential Energy Broken Hill	5,700	10,530 + Mines
Fish River	3,700	23,500
Sydney Olympic Park Authority (recycled water)		
Total	40,900	174,090

Source: NSW Performance Monitoring 2015–16

Table 10-2 Water supply authorities' asset values and revenue

Customer	Asset current replacement costs \$m	Annual revenue \$m
Central Coast Council	5,512	183.1
Cobar Water Board \$m	162	4.14
Essential Energy Broken Hill (water)	674	30.8
Fish River	225	10
Sydney Olympic Park Authority		1.88
Total	6,573	229.92

Source: NSW Performance Monitoring 2015–16 and Sydney Olympic Park Authority Annual Report

10.2 Water supply authority area of operations and functions

Division 2 of Part 9 of the 2011 Regulation defines water supply authorities' areas of operations and specifies which functions (such as water supply and sewerage) apply to each water supply authority.

This division currently requires water supply authorities to carry out their functions in accordance with a strategic business plan that is approved by the Minister for Regional Water. The strategic business plan involves long term planning for water supply authorities' operation, management and infrastructure investment.

This division reduces regulatory burdens by exempting water supply authorities from the requirement under section 292(1)(a) of the WM Act to obtain the minister's approval to construct, maintain and operate non-critical water and sewerage works.

10.3 Water supply and sewerage

Division 3 of Part 9 provides a framework for the provision of urban water services by water supply authorities. Water services cover the water supply pipework from its point of connection to a water supply authority's water supply system up to and including the customer water meter.

This division provides for effective operation and management of water supply works such as meters and fire hydrants, and includes provisions for efficient use and conservation of water. This division defines the responsibilities of property owners and water supply authorities. The provisions in this division are essential for public health safety and maintaining continuity of supply.

Division 4 of Part 9 provides a framework for controlling sewerage system operations and for regulating discharges into sewers. Sewerage system provisions apply to Essential Energy and Central Coast Council. This division provides for installation and maintenance requirements for sewerage service and defines responsibilities of property owners, also provides limitations on sharing sewerage services.

Part of this division, discharges into sewerage systems, applies only to Essential Energy and provides for measures to control discharges into the sewerage system in order to avoid sewerage system failure and to protect the environment. Discharges into the sewerage systems of Central Coast Council are regulated by the similar provisions in the *Local Government (General) Regulation 2005*.

10.4 Plumbing fittings, plumbing work and plumbing permits

Division 5 of Part 9 provides a framework for plumbing to connect to water supply authorities' systems. This division applies to Essential Energy, Cobar Water Board, Water NSW (Fish River Water Supply Scheme) and Sydney Olympic Park Authority.

The main purpose of this division is to ensure any plumbing works on the water supply authorities' water supply and sewerage pipeworks are undertaken with appropriate authority from the water supply authority and that only approved fittings are used. This ensures the drinking water continues to remain safe for public consumption and that the safety, reliability and longevity of the water supply authorities' assets are protected.

10.5 Special areas

Division 6 of Part 9 controls activities within important water catchment areas termed 'special areas' and only applies to Essential Energy.

The main purpose of this division is to identify and control the activities within the drinking water supply dam catchments of Essential Energy. This ensures the drinking water supplied from these dam catchments remains safe for public consumption and the costs of water treatment are minimised.

10.6 General finance

Division 7 of Part 9 of the Regulation provides for the financial functions of water supply authorities.

This division provides the basis for water supply authorities' determination and levying of service charges for their water supply and sewerage services, and sets the requirements for approval of the service charges by the Minister for Regional Water. This subdivision ensures the fees and charges levied to customers are fair, equitable and transparent.

It also provides the water supply authorities with power to levy, collect and adjust the service charges and the terms of payments including the process for service charges objections management.

10.7 Concessions for eligible pensioners and others

Division 8 of Part 9 of the Regulation provides for the reduction of service charges payable by pensioners and certain other eligible people. It regulates the basis for pensioner and hardship concessions for customers.

This division also provides the circumstances under which the water supply authority could restrict or discontinue the provision of water supply and sewerage services to its customers including the record-keeping requirements.

10.8 Miscellaneous

Division 9 of Part 9 contains provisions for the following miscellaneous matters:

- the supply of sewerage plans by a water supply authority on request on behalf of an owner
- information that must accompany applications for certificates of compliance for developments within water supply authorities area under section 305(2) of the WM Act
- the kinds of developments that are subject to the requirements of section 306 of the WM Act—under this section a water supply authority may impose certain requirements before granting certificate of compliance, which enables an authority to provide appropriate infrastructure provisions to service developments

- prescribes Peak Gold Mines Pty Ltd as a mining company that can nominate a member of the Cobar Water Board.

10.9 Option 1—base case—the 2011 Regulation lapses

If the regulation were to lapse, the authorities would continue to exist as statutory entities as they are constituted under the WM Act, and some functions would also continue under the WM Act. The WM Act specifies the area of operation is to be prescribed under the regulation.

If the regulation were to lapse the authorities would not be constrained to provide nominated services to a particular area and this could place authorities, customers and water supplies at risk.

In addition, ministerial approval would be required to construct, maintain and operate water management works and other associated works under section 292(1)(a) of the WM Act including the works exempted under clause 116 of the Regulation.

This means routine maintenance could not be undertaken without minister's approval. This would impose significant costs on government and on the authorities as well as limit their ability to respond to network emergencies and provide ongoing water supply and sewage services.

Approvals would need to be obtained on a daily basis to undertake maintenance on mains and treatment plants.

Without the requirement for strategic plans to be regularly reviewed to consider changed circumstances such as population variation, and for these plans to be approved, service delivery could be at risk.

Without the 2011 Regulation there would be a substantially increased economic burden for local communities and the wider NSW community as water supply authorities would lose their powers to charge customers for water supplied or sewerage service provided. This would have serious detrimental impacts on Central Coast Council, Essential Energy, Water NSW (Fish River Water Supply Scheme) and Cobar Water Board. Without revenues, these bodies will not be able to operate.

Sydney Olympic Park Authority would also be affected, but to a substantially lesser extent. It is assumed that the NSW Government would fund the operating deficit of the Sydney Olympic Park Authority caused by their inability to levy charges.

The customers of these water supply authorities, excluding Sydney Olympic Park, would need to make alternative arrangements for the supply of water and sewerage services. The cessation of water supply and sewerage services and the 'mothballing' of associated infrastructure would have substantial impacts on the cost of water supply and sewerage, property values and regional growth.

In the base case, residential and commercial premises would be retrofitted with rainwater tanks, wastewater tanks and pumps. Water would be purchased and carted from the nearest alternative source. Sewage would be stored onsite and carted to the nearest alternative treatment plant or land disposal area.

The capital and recurrent costs for this are significant at about \$11 billion for capital and about \$1.7 billion for annual recurring costs.

The largest single capital cost is the estimated \$9 billion loss of property values resulting from the replacement of reticulated water supply and sewerage services by onsite water storage and sewage collection tanks for developed properties. This estimate is based on a study undertaken by Hornsby Shire Council in 1999 that indicates that a general property improvement of \$30,000 per residence would be gained in the Galston area if it were sewered (Rolyat Services Pty Ltd 2003).

Total additional costs over the five years are estimated \$17.68 billion.

Table 10-3 Water supply and sewerage service

Identified impact	\$m	Net present value \$m
Capital costs		
Rainwater tanks	977	
Rail head discharge	1	
Wastewater tanks	1,328	
Loss of property value	9,008	
Recurrent costs		
Water price	33	
Water Cartage	489	
Wastewater disposal	880	
Pumping costs	16	
Mothball assets	43	
Loss of development margin	140	
Electricity costs	133	
Total		\$17,679

Source: Department of Industry estimates

10.10 Option 2—remake the 2011 Regulation

The benefits of remaking the 2011 Regulation are primarily avoided costs. These are estimated to have a net present value of approximately \$17.68 billion.

10.11 Option 3—remake the 2011 Regulation with proposed amendments

It is proposed to:

- improve the quality of maps in Schedule 7 of the 2011 Regulation and publish them on the Department of Industry's website instead of in the Regulation itself
- update the 2011 Regulation to reflect that approval of a water supply authority's determination for any charging year is not to be granted unless an integrated water cycle management strategy or a strategic business plan was approved within the last four years, and both the integrated water cycle management strategy and the strategic business plan have been approved by the Minister for Regional Water within the last eight years. This amendment will commence on 1 December 2020.
- clarify that water meters installed, or directed to be installed, by a water supply authority should be installed on the water supply authority's water supply service pipe as close as practicable to the boundary of the land supplied
- add intermittently operating water transfer pipelines as a circumstance when a fire hydrant may not be fully charged.

10.11.1 Integrated water cycle management strategy and Best Practice Management of Water Supply and Sewerage Framework

It is proposed to amend the 2011 Regulation to clarify that the Minister for Regional Water may approve an integrated water cycle management strategy, and to update the current provision regarding the approval of service charge determinations to reflect the NSW Government's Best Practice Management of Water Supply and Sewerage Framework.

Background

The 2011 Regulation grants the Minister for Regional Water power to approve strategic business plans and specifies the approval of a water supply authority's service charges must not be granted unless a strategic business plan has been approved by the minister within the last four years (clauses 115 and 196).

The proposed amendment will update the 2011 Regulation to reflect the NSW Government's Best Practice Management of Water Supply and Sewerage Framework (2016), which requires water supply authorities to update and have an approved integrated water cycle management strategy and strategic business plan alternatively every four years. That is, if an integrated water cycle management strategy is approved this year, in four years' time a strategic business plan is required to be approved, and four years after that an integrated water cycle management strategy, and so on.

Expected impacts

Currently under the NSW Best Practice Management Water Supply and Sewerage Guidelines (2007), integrated water cycle management strategies were to be prepared and implemented by June 2008. The integrated water cycle management strategy was to be reviewed and updated within six years.

Updating the integrated water cycle management strategy is expected to cost \$135,000 for each water supply authority. Currently having an approved updated integrated water cycle management strategy is part of the Best Practice Framework and it is a statutory requirement under the Access Licence Dealing Principles Order (2004) that applies if a water supply authority intends to trade surplus water allocations from a local water utility access licence or access licence of the subcategory town water supply. It is also a requirement under the *Local Government Act 1993* if the water supply authority wishes to pay a dividend.

Central Coast Water and Essential Energy have IPART price reviews currently underway. The IPART final reports and determinations are scheduled for release in May 2019 for commencement 1 July 2019.

This amendment will commence on 1 December 2020 to ensure that all water supply authorities have sufficient time to update their integrated water cycle management strategies and accommodate IPART determinations expected in 2019.

As a result there are no additional costs expected for the water supply authorities to prepare the integrated water cycle management strategy.

10.11.2 Location of water meters

Objective

It is proposed to amend the 2011 Regulation to clarify that water meters installed, or directed to be installed, by water supply authorities should be installed on the water supply authority's water service pipe as close as practicable to the boundary of the land being supplied.

Background

Water supply authorities own the water meters and the pipelines leading to the water meter and are responsible for its repair/replacement. Water supply authorities are responsible to repair any break in a water pipe upstream of the water meter.

The owner of the premises owns and is responsible for the upkeep of the water pipes downstream of the meter. If there is a break in the water pipes downstream of the meter, the owner is responsible for its repair and should pay for the water that has passed through the meter.

In regional areas the water supply authority's supply main can be a considerable distance from the premises requiring water. If the meter is incorrectly located adjacent to the premises and not as close as practicable to the boundary of the land supplied the authority can incur significant additional costs as it will be responsible for any water losses that occur along the length of the pipework upstream of the incorrectly located water meter.

The primary benefits of new meters being installed as close as practicable to the boundary of the land would be more rapid maintenance of leaking service mains, as customers would more readily observe sudden increases in their metered water use, and better cost recovery for water used by the water supply authority's customers.

10.11.3 Supply of water to fire hydrants

It is proposed to amend the 2011 Regulation to set out an additional circumstance in which a fire hydrant may not be fully charged.

10.11.3.1 Option 1—base case—the 2011 Regulation lapses

Under the base case there would be no specific requirement to supply water to fire hydrants. This could lead to considerable addition risk in the community as fire authorities would not be certain that water for firefighting would be available at standpipes.

10.11.3.2 Option 2—remake the 2011 Regulation

Under the 2011 Regulation, a water supply authority must at all times keep charged with water any water main or pipe supplying water to fire hydrants installed by the authority unless prevented from doing so by drought or other emergency or if there are necessary repairs being carried out to the main, pipe or hydrant.

However, some water mains are only intermittently used by water supply authorities, particularly when the water main is used to top up a storage facility or where the main is only used as a backup during drought.

Under these circumstances it is possible that a fire authority may find that they do not have access to the required water for firefighting purposes in an emergency.

10.11.3.3 Option 3—remake the 2011 Regulation with proposed amendments

It is proposed to amend the 2011 Regulation to ensure that water supply authorities are not required to keep charged a water main or pipe supplying water to a fire hydrant installed by the authority if the water main or pipe is a water transfer pipeline which is not in continuous operating mode and the authority has advised the relevant fire services that the supply to that fire hydrant is intermittent.

The main benefits of the proposed amendment are improved transparency and emergency response for fire authorities.

Overall the proposed amendments to the water supply authorities' provisions are not expected to have significant cost impacts. The installation of backflow prevention is expected have benefits in in reduced risk of water supply contamination and these are valued at \$12 million.

Table 10-4 Identified impacts of proposed amendments to water supply authorities' provisions

Identified impacts	Estimation units	Net present value \$m
IWCM	existing requirement	
Location of water meter	minor	
Supply of water to fire hydrants	transparency	
Total		minor

Source: NSW Department of Industry estimates

11 Proposed regulatory option

The proposed option is to remake the 2011 Regulation with amendments.

Table 12-1 shows the estimated benefits of the options of remaking and/or amending the Regulations compared to allowing the 2011 Regulation to lapse (base case).

The proposed benefit of remaking the 2011 Regulation with the proposed amendments is estimated to be \$17,774 million.

The major contributing factors are:

- avoiding production delays arising from requirements to obtain water supply work approvals and water use approvals for currently exempt works
- reducing the regulatory burden on minor or small-scale water users
- retention of the existing water supply authorities' operational capabilities.

The largest beneficiaries are the customers of the water supply authorities, who avoid the cost of re-establishing their access to water supply and sewerage services.

The net incremental impact of the proposed amendments to the 2011 Regulation is modest—a net benefit of around \$12 million. While the incremental quantified impacts of the amendments is relatively small, it must be recognised that they will generally clarify, limit or extend exemptions so that they better reflect their original intent or reduce duplication with other assessment processes.

In addition to the quantified benefits, there are various unquantified impacts, the majority of which are expected to be positive.

12 Conclusion

The objective of the proposed Regulation is to remake, with various changes (where appropriate), the provisions of the Water Management (General) Regulation 2011.

The 2011 Regulation is due to be automatically repealed under clause 10 of the *Subordinate Legislation Act 1989* on 1 September 2018 and the intention is to continue to have regulations in place that support the relevant provisions of the WM Act. The proposed Regulation, the subject of this RIS, provides the preferred regulatory framework from 1 September 2018.

The proposed Regulation remakes the 2011 Regulations, with the amendments to exemptions for water access licences, water use approvals, water supply work approvals and controlled activity approvals.

The focus of these changes relates to exemptions. These changes have been made to ensure better consistency across exemptions, create some new exemptions to reduce red tape and clarify the parameters of some existing exemptions.

The objective of having exemptions from requirements for access licences and approvals is to allow the Department of Industry to:

- manage its regulatory responsibilities in a cost-effective and practical manner by exempting certain instances of water extraction from the requirement to hold an access licence and certain activities from the requirement to hold a water supply work approval, water use approval or controlled activity approval
- minimise the regulatory burden on such persons extracting water or undertaking exempt activities commensurate with the low level of associated impact or recognising other authorisation requirements.

The RIS assesses the costs and benefits of measures available to the state, rural landholders, local government and industry to achieve the objectives of the WM Act and identifies the benefits of the proposed Regulation.

The benefits of the proposed Regulation will outweigh the anticipated costs of maintaining a rigid regulatory framework requiring substantive government involvement. There will be minimal adverse impacts to the state's resources and it provides the largest net benefits of the available alternatives.

Table 12-1 Summary of major identified impacts—net present value over five years (\$million)

Substantive matters	Base case \$m	Remake existing Regulation \$m	Proposed amendments \$m	Proposed Regulation 2018 \$m
General Regulation 2018				
Benefit of prescribing form content and electronic lodgement of applications	-\$1.32	\$1.32		\$1.32
Exemptions for water access licences	-\$55.23	\$55.23		\$57.40
Amendment to drought relief exemption			-\$0.06	-\$0.06
Special Purpose Access Licence	-\$7.03	-\$7.03	\$7.03	\$7.03
Notification exemption security interest	-\$0.46	\$0.46		\$0.46
Cost of delays from works approval advertising		-\$25.10		-\$25.10
Benefit of exemptions for works approvals	-\$21.60	\$21.60		\$21.60
Flood work approvals	-\$15.13	\$15.13		\$15.20
Amendment to flood work			minor	
Impacts of security deposits amendments	\$1.12	\$1.12		\$1.12
Controlled activities				
Controlled activity exemptions	-\$10.0	\$10.0		\$10.0
Additional controlled activity exemptions			\$5.80	\$5.80
Water Supply Authorities	-\$17,679.00	\$17,679.00		\$17,679.00
Fire hydrants			transparency	
Metre locations			minor	
IWCM			existing requirement	
Total NPV \$m	-\$17,789.66	\$17,751.72	\$12.78.00	\$17,773.78

13 References

The Department of Industry (2011) *Water Management (General) Regulation 2011—Regulatory Impact Statement*

Rolyat Services Pty Ltd (2003) *Regulatory Impact Statement Water Supply Authorities Regulation*

NSW Treasury 2017 *NSW Government Guide to Cost-Benefit Analysis* TPP17-03

14 Appendix A—Stakeholder groups and government agencies

Water NSW

Water supply authorities: Cobar Water Board, Gosford City Council, Sydney Olympic Park Authority, Wyong Council, Essential Energy

NSW Irrigators' Council

NSW Farmers' Association

NSW Minerals Council

Nature Conservation Council

Environmental Defenders Office NSW

Local Government Association

Forestry Corporation

Soil Conservation Service

15 Appendix B—Cost-benefit assumptions

- Net Present Value (NPV) is calculated using a 7% discount over five years.
- Cost to business associated with delays in conducting particular activities is estimated at \$350 per day or around \$2,450 per week. In some cases the actual cost may be appreciably more and in some it may be less. The estimate is intended to provide an indication of the order of magnitude potentially associated with delay, rather than to accurately reflect the circumstances of the thousands of individuals or business potentially impacted.
- Estimate of time for preparation of applications is assumed to cost \$61.00 per hour.
- It is difficult to estimate the frequency of an activity that the Department of Industry does not currently undertake—as these activities are exempt. However given the nature of the exempt activities it is expected that there would be a fairly large number conducted each year. For the purpose of the RIS estimates of the number of activities that are potentially subject to the exemptions are:
 - licences 5,000
 - works approvals and use approvals 5,000
 - flood works approvals 5,000
 - controlled activities 1,000.
- Government fees and charges are assumed to be transfer payments between business and government based on full cost recovery (no deadweight loss is calculated).
- Transfer payments are payments that are costs to some members of the community but benefits to others. As a result they appear on both sides of the ledger and do not influence the result of the cost benefit analysis. NSW Government Guide to Cost-Benefit Analysis, NSW Treasury (TPP17-03) indicates they should be noted in the analysis but will have no net effect on the result.
- NSW Government would either fund Sydney Olympic Park Authority's operating deficit if it could not levy charges or Sydney Olympic Park Authority would discharge to the Sydney Water sewer.

16 Appendix C—Detailed impact tables

16.1 Form and content of applications

Table 16-1 Benefit of prescribing the form and content of licence and approval applications

Identified impacts	Estimation units	Calculation
Number of applications per year (a)	1,250	
Avoided additional non complying applications (b)	10%	
Avoided hours to revise and resubmit per application (c)	2	
Avoided days of lost production per application (d)	7	
Labour cost per hour (e)	\$61	
Daily cost of lost production (f)	\$350	
Hours to assess additional non-complying per application (g)	2	
Avoided cost to business per year	\$306,250	$a*b*d*f$
Time cost to business per year	\$15,250	$a*b*c*e$
Total Benefit NPV \$m	\$1.32	

Source: Department of Industry estimate

Table 16-2 Identified transfer payments

Identified transfers	Estimation units	Calculation
Number of applications (a)	125	
Time costs to government (b)	2 hrs	$a*b*c$
Labour cost per hour (c)	\$61	
Time cost to government	\$15,250	$a*b*c$
Additional cost to business for applications based on costs recovery	\$15,250	
Total NPV transfer \$m	\$0.06	

Source: Department of Industry estimate

16.2 Exemptions for water access licences

Table 16-3 Benefits of exemptions for water access licences

Identified impacts	Estimation units	Calculation
Number of exempt activities including drought relief (a)	5,000	
Labour cost per hour (b)	\$61	
Daily cost of lost production (c)	\$350	
Delays in undertaking specified activities 1 week (d)		
Cost of delays per year \$m	\$12.2	$a*c*d$
Cost of time to prepare applications and water market transactions 4hrs per application \$m per year (e)	\$1.2	$a*b*e$
Benefit to exempt business NPV \$m	\$55.23	
Delays in undertaking activities until market water becomes available	Significant benefit not able to be quantified	

Source: Department of Industry estimate

Table 16-4 Identified transfer payments for exemptions for water access licences

Identified transfers	Estimation units	Calculation
Number of exempt activities including drought relief (a)	5,000	
Average exemption volume per annum (1 ML) (b)	1	
Water trading at \$200/ML (transfer payment) (c)	\$200/ML	
Estimated water trading transfers	\$1 m per year	$a*b*c$
Fee for zero share water access licence (d)	\$326.67	
Standard unregulated water source dealing (e)	\$498.61	
Government fees and charges (transfer payment) (f)	\$4.1 m per year	$a*(d + e)$
Transfers NPV \$m	\$21.02	

Source: Department of Industry estimate

Table 16-5 Estimated costs of amendment to drought relief exemption

Identified impacts	Estimation units	Calculation
Number of exempt activities including drought relief (a)	5	
Labour cost per hour (b)	\$61	
Daily cost of lost production (c)	\$350	
Delays in undertaking specified activities 1 week (d)		
Cost of delays per year \$m	\$0.012	$a*c*d$
Time to prepare applications and water market transactions per transaction (e)	4hrs	
Cost of time per year \$m	\$0.001	$a*b*e$
Cost to exempt business NPV \$m	\$0.06	
Delays in undertaking activities until market water becomes available	Significant benefit not able to be quantified	

Source: Department of Industry estimate

Table 16-6 Identified transfer payments of amendment to drought relief exemption

Identified transfers	Estimation units	Calculation
Number of exempt activities including drought relief (a)	5	
Average exemption volume per annum (5 ML) (b)	5	
Water trading at \$200 per ML (transfer payment) (c)	\$200/ML	
Estimated water trading transfers per year \$m	\$0.005	$a*b*c$
Fee for zero share water access licence (d)	\$326.67	
Standard unregulated water source dealing (e)	\$498.61	
Government fees and charges per year \$m (transfer payment (f))	\$0.004	$a*(d*+e)$
Transfers total NPV \$m	\$0.04	

Source: Department of Industry estimate

16.3 Domestic and stock specific purposes access licences

Table 16-7 Benefit of domestic and stock specific purpose access licence amendment

Identified impacts	Annual Estimation units	Calculation
Total licences domestic and stock specific purpose access licence	4,300	
Number with different address (a)	400	
Years since commencement (b)	15	
Average per year (c)	26	
Time saving—complex negotiations 7-30 days per application (d)	30	
Labour cost per day(e)	\$427	61*7
Estimated time saving per year (f)	\$0.3	c*e*d
Daily cost of lost production (g)	\$350	
Loss to business 6 months (h)	6 months	
Business production loss per year	\$1.6	c*g*h
Total estimated benefits NPV \$m	\$8.08	

Source: Department of Industry database

16.4 Security interests and access register

Table 16-8 Benefit of enabling exemption from notification

Identified impact	Estimation units	Calculation
Number of dealings per year(a)	750	
Portion involving increase in shares (b)	50%	
Impacted dealings (c)	350	a*b
Hours to prepare lodgement (d)	1	
Labour cost per hour (e)	\$61	
Register fees (s711) (f) \$ per application	\$240.7	
Estimated annual benefits	\$0.133	(c*e)+(c*f)
Total estimated benefits NPV \$m	\$0.4	

Source: Department of Industry estimate

16.5 Exemption for approvals

Table 16-9 Works and water use approval exemptions

Identified impact	Annual estimation units	Calculation
Number of exempt works and uses (a)	5,000	
Delays in undertaking specified activities (b)	1 week	
Production loss per day	\$350	
Labour costs per hour	\$61	
Weekly cost of lost production (c)	\$2,450	
Times costs to prepare applications	2 hours	
Annual production delays \$m	\$12.25	a*c
Annual time cost \$m	\$0.61	
Total estimated benefits NPV \$m	\$52.7	

Source: Department of Industry estimate

Note: Short-term, low-risk applications

Table 16-10 Works and use approvals exemptions transfer payments

Identified transfer	Estimation units	Calculation
Number of exempt works and uses (a)	5,000	
Government fees and charges (b)	\$1,053	
Annual transfer	\$5.2 per year	a*b
Total estimated transfer NPV \$m	\$21.6	

Source: Department of Industry estimate

Note: Transfer payments are a cost to one party and a benefit to another. In this case businesses pay additional fees and charges for approvals however there are benefits to government.

Table 16-11 Benefit of amendment for state forests plantations

Identified impact	Estimation units	Calculation
Number of exempt works per year (a)	14	
Delays in undertaking specified activities – (b)	1 week	
Production loss per day ©	\$350	
Benefit per year	\$34,000	a*b*c
Total estimated benefit NPV \$m	\$0.14	

Source: Department of Industry estimate

Table 16-12 State forests plantations transfer payments

Identified transfer	Estimation units	Calculation
Number of exempt works and uses (a)	14	
Government fees and charges (b)	\$1,053	
Transfer per year	\$0.01	a*b
Total estimated transfer NPV \$m	\$0.06	

Source: Department of Industry estimate

Note: Transfer payments are a cost to one party and a benefit to another. In this case businesses pay additional fees and charges for approvals however there are benefits to government.

16.6 Requirement for advertising approvals

Table 16-13 Cost to affected businesses of works approval advertising

Identified impact	Estimation units	Calculation
Number of approval applications (a)	500	
Daily cost of lost production (b)	\$350	
Cost of lost production 35 days per application (c)	\$12,250	$b \times 35$
Estimated annual cost of delay \$m (d)	\$6.1	$a \times c$
Reduced availability for information	Not costed	
Cost of work approval advertising NPV \$m	\$25.1	

Source: Department of Industry estimate

Table 16-14 Estimated transfers from works approval advertising

Identified transfer	Estimation units	Calculation
Number of advertisements (a)	500	
Estimated advertising cost per ad (b)	\$530	
Estimated annual advertising cost \$m (c)	\$0.26	$a \times b$
Total estimated transfer NPV \$m	\$1.08	

Source: Department of Industry estimate

16.7 Exemption from flood work approvals

Table 16-15 Impacts of flood work approval exemption

Identified impact	Estimation units	Calculation
Number of existing flood works (a)	5,000	
Number of new flood works per year(b)	500	
Cost of delay in production per day (c)	350	
Estimated delay days (d)	7	
Delay cost \$m of per year 1–5	1.25	$b*c*d$
Estimated hrs to prepare applications (e)	2	
Time cost to prepare applications (f)	\$61	
Time cost year 1	0.671	$(a+b)*e*f$
Times cost \$m Years 2–5 per year	0.061	$b*e*f*$
Modification of existing works	Not costed	
Total estimated benefits NPV \$m	\$7.04	

Source: Department of Industry estimate

Table 16-16 Estimated transfers from flood works approval exemption

Identified transfer	Estimation units	Calculation
Number of approval applications existing works Year 1 (a)	5,000	
Number of approval applications new works each year Years 1–5 (b)	500	
Max charges for new approval application per application	\$1,286.30	
Transfer Year 1 total		$a*c$
Transfer Year 2–5 total		$b*c*4$
Total estimated transfer NPV \$m	\$9.0	

Source: Department of Industry estimate

16.8 Exemptions—controlled activity approvals

Table 16-17 Impacts of controlled activity exemption

Identified impact	Estimation units	Calculation
Estimated number of controlled activities covered by exemptions per year (a)	1,000	
Delays in conducting activities (b)	1 week	
Cost of delayed activity per day (c)	\$350	
Cost of delay per year	\$2.4m	$a*b*c$
Time cost to prepare application (d)	2 hours	
Time cost per hour (e)	\$61	
Cost to prepare applications per year	\$0.12	$e*d$
Total estimated transfer NPV \$m	\$10.54	

Source: Department of Industry minimum fee controlled activity approvals

Table 16-18 Estimated transfers controlled activity approval exemption

Identified transfer	Estimation units	Calculation
Number of approval applications per year 1 (a)	1,000	
Cost of approval application	\$932	
Transfer per year		$a*c$
Total estimated transfer NPV \$m	\$3.8	

Source: Department of Industry estimate

Table 16-19 Identified impacts of changes to controlled activity exemptions

Identified impact	Estimation units	Calculation
Additional activities exempt (a)	579	
Delays in conducting activities (b)	1 week	
Cost of delayed activity per day (c)	\$350	
Cost of delay per year		$a*b*c$
Times cost to prepare applications	2 hours	
Time cost per hour	\$61	
Times cost saving	\$0.29m	
Benefit of additional exemptions	\$1.41	
Total estimated benefits NPV \$m	\$5.8	

Source: Department of Industry estimate

Table 16-20 Estimated transfers for proposed additional controlled activity approval exemptions

Identified transfer	Estimation units	Calculation
Number of approval applications per year 1 (a)	579	
Cost of approval application (b)	\$932	
Transfer per year		a*c
Total estimated transfer NPV \$m	\$2.2	

Source: Department of Industry estimate

16.9 Security deposits for approvals

The analysis has been completed based on \$15 million in security deposits collected per year. Funds are held for two years. Ninety five per cent of funds \$14.1 million are returned each year. These funds are costed at the opportunity cost of capital for the two years the funds are retained using an interest rate of 7%. Over the period this accounts for \$4.8 million.

Funds amounting to \$900,000 are retained to fund remediation of unsatisfactory works.

Table 16-21 Impacts of security deposits

Identified impact	Estimation units	Calculation
Number of security deposits lodged (a)	50	
Average value of deposit (b)	\$300,000	
Amount collected annually	\$15 million	
Amount returned annually	\$14.1 million	
Number of abandoned sites at 5% (c)	3	
Amount available for abandoned sites	\$0.9 million	
Benefit to society	Improved instream and stream side conditions	
Estimated cost to businesses conducting adequate rehabilitation (d)	\$8.6	
Additional money available for rehabilitation of designated abandoned sites (e)	\$3.7	
Total estimated cost NPV \$m	4.9	d-e

Source: Department of Industry estimate

17 Appendix D—Detailed list of proposed amendments

Following is a detailed list of proposed amendments to the regulation including a reference to how they are treated in the RIS.

17.1 Water access licences

- provide for the making of applications for specific purpose access licences to take water for stock watering in prescribed circumstances—section 8.5 of this RIS

17.2 Exemptions from requirements for water access licences

- clarify the scope of the existing licence exemption for the carriage of water for drought relief—section 8.4 of this RIS
- clarify the meaning of the existing licence exemption for approved watering for environmental work construction—machinery

17.3 Approvals

- specify the Minister for Regional Water may amend an approval to correct an error in a description of the relevant management plan, water source or management zone to which the approval relates—machinery
- specify the Minister for Regional Water may amend an approval to create two or more approvals on the application of all of the approval holders—machinery
- amend the required means of advertising applications for approvals to recognise in some areas some local newspapers are no longer in production—section 9.4 of this RIS
- clarify reporting requirements for exempt monitoring bores—machinery

17.4 Exemptions from requirements for approvals

- specify the existing exemption from the requirement for a water supply work approval to construct a water supply work for certain purposes does apply in plantation areas in state forests (currently the exemption does not apply in any areas in state forests)—section 9.2 of this RIS
- provide a new exemption from the requirement for a water supply work approval for local councils taking water using tanker trucks for the purpose of dust suppression in certain circumstances—section 9.3 of this RIS
- clarify the existing exemption from the requirement for a flood work approval for ring embankments applies to partial ring embankments in certain circumstances—section 9.5 of this RIS
- clarify the existing exemption from the requirement for a controlled activity approval for the removal of vegetation on waterfront land does not apply to the removal or disturbance of soil or other extractive material in connection with the removal of vegetation, or the removal of large woody debris—machinery
- provide new exemptions from the requirement for a controlled activity approval for the following (section 9.6 of this RIS):
 - jetties, pontoons and mooring poles constructed on waterfront land relating to a lake or estuary in certain circumstances
 - certain kinds of development on waterfront land relating to certain mapped lakes and estuaries, where the land has been highly modified by urban or industrial development

- certain kinds of development on waterfront land where the location of the development is separated from a 1st, 2nd or 3rd order watercourse by existing development
- activities which are required to be undertaken in accordance with enforcement action by another NSW government agency or an order of a court
- maintenance of existing lawful works on waterfront land
- repair of storm damage to access tracks, watercourse crossings, water supply works or essential services infrastructure on waterfront land in certain circumstances
- removal of debris deposited on waterfront land as a result of a storm event
- activities carried out on land under the ownership or control of a port operator under the *Ports and Maritime Administration Act 1995* in certain circumstances
- controlled activities carried out by government entities in certain circumstances

17.5 Water supply authorities

- clarify when references to an ‘authority’ are references to a water supply authority—machinery
- provide for the Minister for Regional Water to approve a water supply authority’s Integrated Water Supply Management Strategy on an eight year basis—section 10.11.1 of this RIS
- clarify water meters required to be installed on private properties should be installed on the property’s service main as close as practicable to the boundary of the land supplied—section 10.11.2 of this RIS
- to set out an additional circumstance in which a fire hydrant may not be fully charged—section 10.11.3 of this RIS

17.6 Miscellaneous

- update the source of Strahler stream order data, which is used to identify when exemptions from approval requirements apply, from historic hardcopy topographic maps issued between 1970 and 1999 to data held in the Department of Industry’s digital database, which will be shared publicly on the department’s website
- improve the quality of existing maps—machinery
- update or clarify miscellaneous provisions—machinery, including:
 - updating references to the Department of Industry and Director General
 - updating the reference to the Development Control Plan for the Rouse Hill Regional Centre in relation to the existing exemption from the requirement for a controlled activity approval
 - clarifying the definition of ‘transport authority’ regarding the existing exemption from the requirement for a water access licence in relation to water required for the construction or maintenance of road or rail facilities
 - clarifying the meaning of a project ‘in existence’ under section 10 of the *Soil Conservation Act 1938*
 - extending the expiry date of the current exemption under clause 226C for the Board of Anabranch Water Private Irrigation District until 30 June 2020.

18 Appendix E—Summary of key changes following public consultation on proposed Regulation

Note. The clause numbering in this table refers to the clause numbering in the proposed Regulation that was publically exhibited in August–September 2017.

Table 18-1 Summary of key changes following public consultation on proposed Regulation

Clause in draft regulation	Proposed change	Reason
Clause 9	Omit clause 9 as it is redundant and should not be included in the proposed regulation.	This provision is redundant because section 70 of the <i>Water Management Act 2000</i> has been amended to provide that management plans may make provision for or with respect to the circumstances in which the taking of supplementary water is authorised, rather than by order published in accordance with the regulations.
Clause 3(1)	Correction of typographical error in definition of 'minor stream' in clause 3(1): between sub-clause (a) and sub-clause (b) 'and' should be 'or'.	Typographical error
Clause 198(1)(b)	Delay the commencement of the requirement in clause 198(1)(b) of the proposed regulation until 1 December 2020.	Central Coast Council advised it will not be practical for council to comply with the new requirement in clause 198(1)(b) in time for the commencement of the proposed Regulation. The commencement of this new requirement will be delayed until 1 December 2020 to provide council additional time to comply.
Clause 19(b) of Schedule 4	Correction of typographical error in clause 19(b) of Schedule 4: 'he' should be 'the'.	Typographical error

Clause in draft regulation	Proposed change	Reason
Clause 35 of Schedule 4	<p>Amend clause 35 of Schedule 4 of the proposed regulation to clarify that the application of the provision extends to:</p> <ul style="list-style-type: none"> • a direction, request or order made by the department • any order which can be made by a government agency under an act or law, and which is made by a court • a direction, request or order made under the WM Act or any other act or law, but only if the Minister for Regional Water approves the carrying out of the activity without a controlled activity approval. 	<p>The department identified that this provision as drafted may operate to require the department to provide concurrence to its own direction, request or order for the exemption to apply. This effect is not intended.</p> <p>The department has identified that section 203 of the <i>Fisheries Management Act 1994</i>, which provides for the Minister for Regional Water to make an order requiring the carrying out of remedial work, includes that a court may also make such an order. The department considers this proposed new exemption should extend to any order which can be made by a government agency under an act or law, and which is made by a court.</p> <p>The department has identified that the requirement for the Minister for Regional Water to provide concurrence to a direction, requires or order made by another NSW government agency is unnecessary as it has the same effect as the requirement for the Minister for Regional Water to approve the carrying out of an activity required by a direction, requires or order made by another NSW Government agency without a controlled activity approval.</p>
Clause 37 of Schedule 4	Omit clause 37 of Schedule 4 from the proposed regulation.	<p>The NSW Government is developing a Marine Estate Management Strategy, which sets out the vision and priorities for management of the marine estate.</p> <p>An implementation plan will accompany the final strategy and it is anticipated that some management actions will relate to the drainage of floodplains for agricultural purposes.</p> <p>The department considers that this proposed exemption should be withdrawn, pending further consideration following the development of management actions to implement the Strategy.</p>
NA	Prescribe a notice of disposal in the proposed regulation for the purpose of section 361 of the WM Act.	<p>Section 361 of the WM Act provides that when land which is subject to such rates and charges is sold, the vendor remains liable for those rates and charges until they dispose of the land or give a prescribed notice of disposal to the entity levying those rates and charges.</p> <p>The department has identified that a notice of disposal has not yet been prescribed for the purpose of section 361 of the WM Act.</p> <p>A notice of disposal should be prescribed in the proposed Regulation for the purpose of section 361 of the WM Act.</p>

Clause in draft regulation	Proposed change	Reason
	Use the term 'satisfied' rather than 'reasonably satisfied' where occurring.	<p>EDO NSW raised concern the insertion of the term 'reasonably satisfied' in clause 3 of Schedule 4 of the proposed Regulation with regard to the assessment of whether an activity is likely to significantly affect the environment.</p> <p>The department considers this test should require that the decision-maker be satisfied on grounds that are reasonable in the circumstances that the activity is not likely to significantly affect the environment.</p> <p>This provision has been clarified by using the term 'satisfied' rather than 'reasonably satisfied'.</p>



AUDIT REPORT:

**Audit of the Water Sharing Plan for the Greater Metropolitan Region
Groundwater Sources 2011**

October 2019



**Planning,
Industry &
Environment**

VISTA ADVISORY

Our independence and quality control

In undertaking this assurance engagement, we have complied with the independence and other relevant ethical requirements relating to assurance engagements and applied Auditing Standard ASQC 1 Quality Control for Firms that Perform Audits and Reviews of Financial Reports and Other Financial Information, and Other Assurance Engagements. Our work was carried out by an independent and multi-disciplinary team with experience in water resource management and assurance. In this regard, we note that the Department of Planning, Industry and Environment (Legal and Governance) sought an audit team with subject matter experience and capability.

We performed a limited assurance engagement in accordance with Australian Standard on Assurance Engagements ASAE 3000 'Assurance Engagements other than Audits and Reviews of Historical Financial Information' and ASAE 3100 'Compliance Engagements'. The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

Inherent limitations

A limited assurance engagement is not designed to detect all weaknesses in control procedures or all instances of non-compliance, as audit procedures were not performed continuously over a period of time and the tests performed are on a sample basis only. Any matters raised are only those that came to our attention during the course of performing our procedures and are not necessarily a comprehensive statement of all the weaknesses that exist or improvements that might be made. Accordingly, management should not rely on our report to identify all weaknesses that may exist in the systems and procedures under examination, or potential instances of non-compliance that may exist.

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Abbreviations

ABN	Alleged Breach Notification
the Act	<i>Water Management Act 2000</i> (NSW)
ASAE	Australian Standard on Assurance Engagements
AWD	Available Water Determination
BLR	Basic Landholder Rights
CAIRO	Computer Aided Improved River Operation
CFO	Customer Field Officer
CIRaM	Compliance Investigation Reporting and Management (database tool)
cl.	Clause (of a WSP)
Dol - Water	(former) Department of Industry - Water
DPI - Water	(former) Department of Primary Industries - Water
DPIE – Biodiversity and Conservation	Department of Planning, Industry and Environment – Biodiversity and Conservation
DPIE – Legal and Governance	Department of Planning, industry and Environment – Legal and Governance
DPIE - Water	Department of Planning, Industry and Environment - Water
EMU	Extraction Management Unit
iWAS	Internet Water Accounting System
LTAAEL	Long-term average annual extraction limit
MER	Monitoring, Evaluation and Reporting
NA	Not applicable
NRAR	Natural Resources Access Regulator
OEH	(former) Office of Environment and Heritage
QA/QC	Quality assurance and/ quality control
QMS	Quality management system
s.	Section (of an Act)
WAL	Water access licence
WAS	Water Accounting System
WaterNSW	Water New South Wales
WLS	Water Licencing System
WREAP	Water Regulation Education and Audit Project
WRP	Water resource plan
WSP	Water sharing plan



1 Executive Summary

Background

Water sharing plans (WSPs) are statutory instruments made under the NSW *Water Management Act 2000* (the Act). The Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources 2011 (WSP for the Greater Metropolitan Region Groundwater Sources 2011) commenced on 1 July 2011.

Section 44 of the Act (s.44) states that the Minister is to ensure that a management plan (WSP) is audited within the first five years of the plan, for the purpose of ascertaining whether its provisions are being given effect to. At the time this audit commenced, in October 2018, the Act specified that the audit was to be carried out by an audit panel appointed by the Minister. The Act has since been amended, so that future s.44 audits are to be carried out by the Natural Resources Commission. However, under Schedule 9 of the Act this audit was able to be completed under the audit panel appointed by the Minister.¹

Audit Approach

The audit objective was to examine selected provisions of the WSP for the Greater Metropolitan Region Groundwater Sources 2011 to determine whether the provisions are being given effect to.

In order to form an opinion against the audit objective, the audit team developed audit criteria, based on the selected provisions, supported by lines of inquiry, to evaluate whether the WSP provisions have been given effect to form a basis for the audit finding.

Recommendations have been made only where the audit team found that the clauses were not given effect to. The recommendations are accompanied by an assessment to communicate the likelihood of the objectives of the WSP not being met. The consequence of the objectives of the WSP not being met may depend on different administrative, regulatory, economic, social and environmental circumstances relevant to each WSP and is not included as part of this assessment. The likelihood assessment is based on the professional judgement of the audit team. The likelihood assessment ratings used are found in **Appendix 2**.

The audit has *not*:

- considered all provisions in the WSP but has based its auditing on selected priority provisions
- audited the compliance of holders of water access licences (WALs), water supply work approvals or other regulatory instruments issued under the Act
- ascertained whether the WSP is compliant with legislation
- ascertained whether the WSP is operationally efficient or effective or appropriate in achieving the vision, objectives, strategies or performance indicators
- considered amended plans newly gazetted that are not yet in force
- recommended solutions where provisions were not given effect to.

Methodology

The audit was conducted as a limited assurance engagement² in accordance with the Australian Standards on Assurance Engagements 3000 and 3100.³ The audit team reviewed available documentation that was materially relevant to WSP operationalisation and implementation, and interviewed staff involved in WSP operations.

¹ See the Water Management Act 2000, Schedule 9, Part 11, cl. 101

² The level of assurance in a limited assurance engagement is lower than in a reasonable assurance engagement, the procedures are narrower in scope and the level of evidence required is less.

³ Australian Standards on Assurance Engagements, 3000 *Assurance Engagements other than Audits or Reviews of Historical Financial Information* and ASAE 3100 *Compliance Assurance Engagements*. The ASAEs set out mandatory requirements on ethical practice, audit planning, conduct, quality control and reporting.

The audit team used a risk-based approach to inform the set of provisions to be audited and the nature, timing and extent of evidence gathering procedures. Broadly the WSP provisions have been selected based on materiality and impact to ensure the focus is on areas of possible poor performance and high impact.

Some WSP Parts (and provisions) were not part of the audit criteria as they were either immaterial, assigned a low risk rating, or were captured through other provisions in the WSP.

We thank the audited agencies for their cooperation and assistance during the audit.

Audit conclusion

Sufficient and appropriate evidence was obtained to conclude against the audit objective and criteria, consistent with a limited assurance engagement.

Based on the audit work performed, and evidence obtained, the audit team found that during the audit period the following provisions of the WSP for the Greater Metropolitan Region Groundwater Sources 2011 were **not being given effect to**:

- **Part 2 Vision, objectives, strategies and performance indicators**, cl. 11 Performance indicators used to measure the success of the WSP strategies to reach the objectives of the WSP.
- **Part 6 Limits to the availability of water**, cl. 27 Calculation of current levels of annual extraction, cl. 28 Assessment of average annual extraction against the long-term average annual extraction limit, and cl. 29 Compliance with the long-term average annual extraction limit.

Based on the audit work performed and evidence obtained the audit team found that during the audit period the following provisions of the WSP for the Greater Metropolitan Region Groundwater Sources 2011 were **only partially given effect to**:

- **Part 11 Mandatory conditions**, cl. 53 and cl. 54 – application of mandatory conditions to WALs and water supply work approvals (delay in notification of mandatory conditions; lack of oversight of compliance with mandatory conditions on WALs and water supply work approvals).⁴

The audit team **did** find evidence of procedures, systems and processes that give effect to the following parts of the WSP for the Greater Metropolitan Region Groundwater Sources 2011:

- **Part 5 Requirements for water**, all clauses
- **Part 6 Limits to the availability of water**, Division 2 Available Water Determinations (AWDs)
- **Part 7 Rules for granting access licences**, all clauses
- **Part 8 Rules for managing access licences**, all clauses
- **Part 9 Rules for water supply work approvals**, all clauses
- **Part 10 Access licence dealing rules**, all clauses
- **Part 12 Amendment of this Plan**, all clauses.

⁴ Cl. 6 establishes that the rules specified in the WSP are given effect by the mandatory conditions for access licences and approvals contained in Part 11 of the WSP. The audit team has determined that oversight of compliance with mandatory conditions is therefore an essential component of giving effect to the WSP.

Acknowledgement of current action to address audit findings and recommendations

This audit report focusses on the audit period from WSP commencement to 31 December 2018. An important context for the giving effect to WSPs is the initiation of significant reform action commenced in December 2017, with the NSW Government *Water Reform Action Plan*.⁵ This included the establishment of the Natural Resources Access Regulator (NRAR), roll out of improved metering, development of Water Resource Plans to implement the Murray-Darling Basin Plan and development of Monitoring Evaluation and Reporting arrangements, including for WSP performance indicators. Development of plans, actions, organisational arrangements and improved resourcing were at various stages at the close of the audit period and at the time of writing this audit report in 2019.

The findings of the audit report are based on the evidence available to the audit team of whether WSP clauses were given effect during the audit period from WSP commencement to 31 December 2018. The audit report provides recommendations for improvement, to assist the NSW Government's commitment to improving transparency on the management of water and give the Minister confidence that audit outcomes contribute to the line of evidence in the adaptive improvement of future WSPs.⁶

Recommendations

The audit team considered the audited agencies' responses to the following recommendations (in draft) during the audit. The full responses of each auditee agency to draft audit reports are provided in **Appendix 3**.

Recommendation 1

Finding: The audit team found that Part 2 (cl. 11), Part 6 (cl. 27, cl. 28 and cl. 29) and Part 11 (cl. 53 and cl. 54) of the WSP for the Greater Metropolitan Region Groundwater Sources 2011 were not being given effect in full.

Recommendation: NSW Government to document all roles and procedures so that the provisions of the WSP are fully and consistently operationalised, implemented and there is accountability.

Likelihood assessment:

If the clauses are not being given effect to, then in the opinion of the audit team, the likelihood of the WSP objective not being met is **medium**, due in part to a lack of clear documentation of roles and procedures.


Very low


Low


Medium


High


Very high

Refer to Criterion: There are arrangements to give effect to WSP Provisions

⁵ NSW Government, Securing Our Water: NSW Government Water Reform Action Plan, December 2017.
https://www.industry.nsw.gov.au/__data/assets/pdf_file/0016/136204/nsw-government-water-reform-action-plan.pdf

⁶ NSW Government Department of Industry Section 44 Water Sharing Plans Audit Engagement Plan 6 November 2018

Recommendation 2

Finding: The audit team found that Part 2 cl. 11 Performance Indicators of the WSP for the Greater Metropolitan Region Groundwater Sources 2011 was not being given effect to throughout the audit period.

Recommendation: DPIE - Water to give effect to Part 2 cl. 11 Performance indicators.

Likelihood assessment:


If the clause is not being given effect to, then in the opinion of the audit team, the likelihood of not meeting the intended objectives of the WSP is **medium** as water managers and users have limited knowledge on whether the objectives are being met and what, if any, adaptive management is required to achieve the objectives.


Very low


Low


Medium


High


Very high

Refer to [Criterion: Part 2 Vision, objectives, strategies and performance indicators](#)


Recommendation 3

Finding: The audit team found that Part 6 cl. 27, cl. 28 and cl. 29 of the WSP for the Greater Metropolitan Region Groundwater Sources 2011 were not given effect to.

Recommendation: DPIE - Water to give effect to Part 6 cl. 27, cl. 28 and cl. 29 of the WSP relating to calculation, assessment and compliance with the long-term average annual extraction limit.

Likelihood assessment:

If the clauses are not being given effect to, then in the opinion of the audit team, the likelihood of not meeting the intended objectives of the WSP is **very high**.


Very low


Low


Medium


High


Very high

Refer to [Criterion: Part 6 Limits to the availability of water](#)



Recommendation 4

Finding: The audit team found that Part 11 cl. 53 and cl. 54 of the WSP for the Greater Metropolitan Region Groundwater Sources 2011 were not being given effect from the date of the WSP having effect on 1 July 2011 until February 2018. Written notice of the mandatory conditions that apply to WALs and water supply work approvals were sent to holders with a delay of approximately 6 years and 7 months. During the period of delay, regulatory arrangements remained in force under the Water Act 1912 and/or savings and transitional provisions of the Water Management Act 2000.

Recommendation: DPIE - Water to ensure that there is timely notification of mandatory conditions so they can be given effect to.

Likelihood assessment:

If the clauses are not being given effect to, then in the opinion of the audit team, the likelihood of not meeting the intended objectives of the WSP is **high**. Without the written notice of mandatory conditions to WAL holders, the access rules and other WSP clauses that require mandatory conditions may not be given effect.



Refer to [Criterion: Part 11 Mandatory conditions](#)

Recommendation 5

Finding: The audit team found inadequate evidence that Part 11 of the WSP for the Greater Metropolitan Region Groundwater Sources 2011 was being given effect to in full due to a lack of oversight (during the audit period) of compliance with the mandatory conditions that apply to WALs and water supply work approvals. During the audit period, NRAR had not established a proactive compliance auditing plan or strategy.

Recommendation: NRAR to give effect to Part 11 cl. 53 and cl. 54 of the WSP to ensure there is oversight of compliance with the mandatory conditions that give effect to the WSP.

Likelihood assessment:

If the clauses are not being given effect to, then in the opinion of the audit team, the likelihood of not meeting the intended objectives of the WSP is **high**. Without information about rates of noncompliance water managers and water users lack information as to whether the plan objectives have been met.



Refer to [Criterion: Part 11 Mandatory conditions](#)



2 Introduction

Background

Water sharing plans (WSPs) set rules for sharing water between water users and the environment managed under the *Water Management Act 2000* (the Act).

NSW WSPs have effect for 10 years from 1 July, following their commencement date. Amendments to WSPs are made throughout their life to ensure they comply with changing legislation and to facilitate implementation. However, changes to water allocations may trigger compensation provisions, unless these are provided for in Part 12 of the WSP (Amendment of this Plan). Compensation may also be payable in other circumstances.

Under the Act, WSPs must be consistent with the water management principles. The principles provide that the sharing of water from a water source must protect the water source and its dependent ecosystems; and protect the basic rights of landholders to extract water. WSPs provide the legal basis for sharing water between the environment and consumptive purposes.

Among licensed water users, access to town water supplies and stock and domestic water is given priority over extractions for commercial purposes such as irrigation and other industries.

The water sharing plan for the Greater Metropolitan Region Groundwater Sources 2011 (WSP for the Greater Metropolitan Region Groundwater Sources 2011) (Figure 1) applies to 13 groundwater sources, 2 of which (Botany Sands Groundwater Source and Sydney Basin Nepean Groundwater Source) are divided into management zones, as set out in cl. 4 and cl. 5 of the WSP.⁷ 12 of the groundwater sources include all water contained within all aquifers below the ground surface. The other, the Hawkesbury Alluvium Groundwater Source, includes all water contained in the alluvial sediments below the ground surface.

⁷ <https://www.legislation.nsw.gov.au>



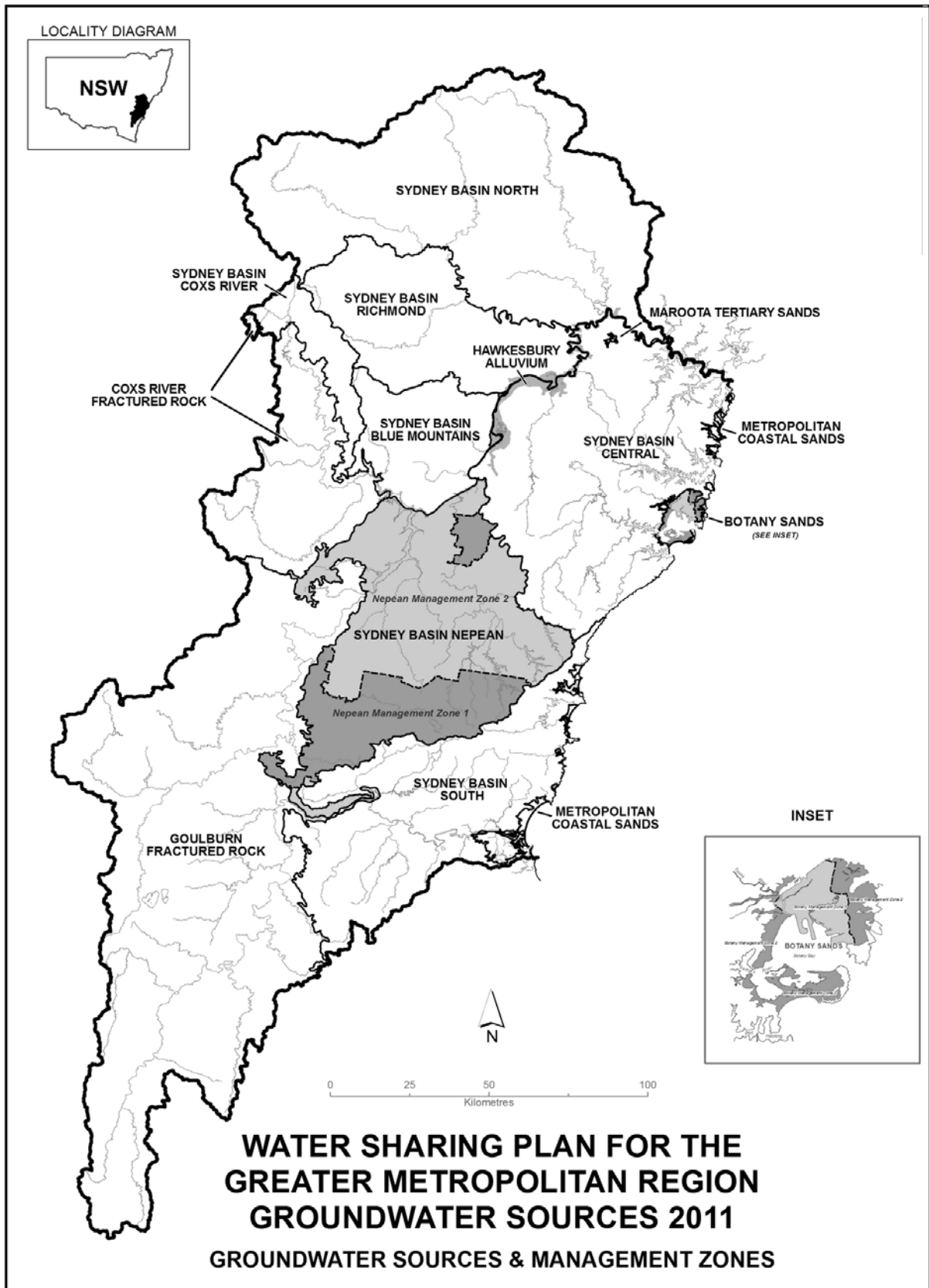


Figure 1. Plan map for the WSP for the Greater Metropolitan Region Groundwater Sources 2011⁸

⁸ <https://www.legislation.nsw.gov.au>

The WSP for the Greater Metropolitan Region Groundwater Sources 2011 commenced on 1 July 2011 and is valid for 10 years from 1 July 2011. The WSP has had 36 amendments, 7 insertions, 4 repeals, and 11 substitutions.⁹

Section 44 of the Act (s.44) states that the Minister is to ensure that a management plan (WSP) is audited within the first five years of the plan, for the purpose of ascertaining whether its provisions are being given effect to. At the time this audit commenced, in October 2018, the Act specified that the audit was to be carried out by an audit panel appointed by the Minister. The Act has since been amended, so that future s.44 audits are to be carried out by the Natural Resources Commission. However, under Schedule 9 of the Act, this audit was able to be completed under the audit panel appointed by the Minister.¹⁰

The WSP for the Greater Metropolitan Region Groundwater Sources 2011 has not previously been audited.

Alluvium Consulting Australia, as an independent and suitably accredited auditor, was appointed by the Minister (via the s.44 Audit Panel) to audit 25 WSPs, including the WSP for the Greater Metropolitan Region Groundwater Sources 2011 without bias or conflict of interest in accordance with the statutory requirements.

Audit objective

The objective of the audit is to examine selected provisions of the WSP for the Greater Metropolitan Region Groundwater Sources 2011 to determine whether the provisions are being given effect to, in accordance with s.44.

The audit also provides recommendations for improvement to assist the NSW Government's commitment to improving transparency on the management of water and give the Minister confidence that audit outcomes contribute to the line of evidence in the adaptive improvement of future WSPs.¹¹

Scope

The audit examined selected provisions, considered as a priority by the audit team based on knowledge of the known and perceived performance and other risks in the WSP for the Greater Metropolitan Region Groundwater Sources 2011.

The audit was undertaken based on provisions in force at the time of the audit. Amendments made (and commenced) between commencement of the WSP and 31 December 2018 were subject to audit from the date of their commencement.

The audit was scoped to enable the audit to be completed and reported on by 1 August 2019, in accordance with the schedule agreed to by the Department of Industry and the audit team.

This audit has been conducted in accordance with an audit plan, consistent with the overall audit approach approved by the Audit Panel in December 2018.

Recommendations have been made only where the audit team found that the clauses were not given effect to. The recommendations are accompanied by an assessment to communicate the likelihood of the objectives of the WSP not being met. The consequence of the objectives of the WSP not being met may depend on different administrative, regulatory, economic, social and environmental circumstances relevant to each WSP and is not included as part of this assessment. The likelihood assessment is based on the professional judgement of the audit team. The likelihood assessment ratings used are found in **Appendix 2**.

⁹ <https://www.legislation.nsw.gov.au/#/view/regulation/2011/615/history>

¹⁰ See the Water Management Act 2000, Schedule 9, Part 11, cl. 101

¹¹ NSW Government Department of Industry Section 44 Water Sharing Plans Audit Engagement Plan 6 November 2018

The audit has *not*:

- considered all provisions in the WSP but has based its auditing on selected priority provisions
- audited the compliance of holders of WALs, water supply work approvals or other regulatory instruments issued under the Act
- ascertained whether the WSP is compliant with legislation
- ascertained whether the WSP is operationally efficient or effective or appropriate in achieving the vision, objectives, strategies or performance indicators
- considered amended plans newly gazetted that are not yet in force
- recommended solutions where provisions were not given effect.

Audited agencies

The following four agencies are involved in giving effect to the provisions of the WSP and are therefore the auditees for this audit.

- **The NSW Department of Planning, Industry and Environment - Water (DPIE - Water):** DPIE - Water is the lead agency responsible for water resource management in NSW. DPIE - Water prepares and administers legislation, NSW policy and water management planning products, including WSPs, acting as delegate for the Minister, under the Act.
- **The Natural Resources Access Regulator (NRAR):** NRAR leads compliance and enforcement of water legislation in NSW. NRAR's principal objectives are (a) to ensure effective, efficient, transparent and accountable compliance and enforcement measures for the natural resources management legislation, and (b) to maintain public confidence in the enforcement of the natural resource management legislation. NRAR also has a role in licensing and water supply work approvals, set out elsewhere in this audit.
- **WaterNSW:** WaterNSW is a state-owned corporation, which operates as a bulk water supplier and system operator, carrying out water infrastructure planning, delivery and operation, as well as providing water transaction and information services to customers for water licensing and water supply work approvals.
- **The NSW Department of Planning, Industry and Environment – Biodiversity and Conservation (DPIE – Biodiversity and Conservation):** DPIE – Biodiversity and Conservation is responsible for the delivery of water for the environment in NSW that is held environmental water entitlements and allocations, or that is discretionary, actively managed allocations of planned environmental water. DPIE – Biodiversity and Conservation prepares annual watering plans and annual outcomes reports on the use of water for the environment. This includes water held by the Commonwealth Environmental Water Holder. From 1 July 2019, DPIE – Biodiversity and Conservation took over the functions previously administered by the former Office of Environment and Heritage (OEH).

Note that the audit client for this engagement is NSW Department of Planning, Industry and Environment – Legal and Governance division, who administer the s.44 Audit Panel on behalf of the Minister.

Audit methodology

The audit has been conducted in accordance with the Australian Standards on Assurance Engagements (ASAE) 3000 for *Assurance Engagements other than Audits or Reviews of Historical Financial Information* and ASAE 3100 for *specific Compliance Assurance Engagements*.¹² The audit is a limited assurance engagement.¹³

¹² The standards set out mandatory requirements on ethical practice, audit planning, audit conduct including evidence, audit quality control and reporting.

¹³ The level of assurance in a limited assurance engagement is lower than in a reasonable assurance engagement, the procedures are narrower in scope and the level of evidence required is less.

Audit criteria

The audit criteria, the benchmarks used to measure or evaluate the underlying subject matter,¹⁴ are detailed in **Appendix 1**.

A risk-based approach was used to inform the set of WSP provisions to be audited and the nature, timing and extent of evidence-gathering procedures.

Broadly the WSP provisions have been selected based on materiality and impact to ensure the focus is on areas of possible poor performance and high impact.

Some WSP Parts (and provisions) are not part of the audit criteria as they are:

- immaterial to giving effect to the WSP and/ or assigned a low risk rating and/or
- covered by other provisions in the WSP.

Specifically, Part 3 establishes the Bulk Access Regime and Part 4 establishes Planned Environmental Water provisions, but both parts establish these by reference to other WSP provisions. Therefore, the audit has considered the Bulk Access Regime and Planned Environmental Water by considering the operative parts of the plan which have been "called up" by Part 3 and Part 4 respectively.

The audit plan included common audit criteria focused on the frameworks that are materially relevant to WSP operationalisation and implementation. These include:

- QA/QC systems, risk management, data collection and verification and management processes
- manuals and guidelines for rule implementation
- plans for monitoring performance indicators and subsequent reporting.

Processes for gathering audit evidence

Sufficient and appropriate evidence was obtained to conclude against the audit objective and criteria, consistent with a limited assurance engagement.

Broadly, the audit team have examined whether the selected provisions of the WSP for the Greater Metropolitan Region Groundwater Sources 2011 have been given effect to by:

- reviewing generic/overall systems, procedures and frameworks that are materially relevant to WSP implementation for each of the audited agencies. These included, QA/QC systems, risk management, data collection, verification and management
- reviewing documentation on how the WSP has been operationalised. This included implementation plans, annual organisational business plans or work area plans, presence of manuals, guidelines for available water determinations (AWDs), plans for monitoring of performance indicators, the register of shares, water accounts, water dealings and associated manuals, systems and procedures
- interviewing staff of the Department and other implementation agencies responsible for implementation of the selected provisions
- reviewing data management that supports the WSP implementation
- reviewing the monitoring and evaluation arrangements (for performance indicators, long-term annual average extraction limits, water accounting and other key aspects of WSPs that require monitoring), as well as the subsequent reporting

¹⁴ Criteria are defined as the benchmark used to measure or evaluate the underlying subject matter. ASAE 3000 paragraphs 12c and A10. Criteria are used to form a conclusion against the objective.

- reviewing the consultative arrangements for holders of WALs, water supply work approval and other instruments, as well as landholders and others, where relevant to WSP implementation.

Appendix 1 details the types of evidence that was sought in order to make findings against the criteria.

At or just after each audit interview the audit team requested additional information or documents when required. If no evidence was provided before finalisation of the audit report the audit team either made a finding on its own judgement using its own consideration of the matter being considered or report that judgement cannot be made, as evidence was not available.



3 Audit findings

This section of the report presents the audit findings and recommendations considering the evidence examined in the audit against the audit criteria.

Criterion: There are arrangements to give effect to WSP provisions

Areas examined

The audit team examined whether arrangements were in place to give effect to the WSP provisions, including whether there were documents that operationalised the WSP, clear roles, responsibilities and data management to support implementation, and monitoring and evaluation arrangements in place and being implemented.

Conclusion

Overall, the audit team found that most central and overarching agency arrangements are in place to give effect to the WSP provisions and are supported by documented procedures or guidance for officer level implementation.

Staff have a sound understanding of the role and responsibility of their agency in regard to WSP operationalisation, however they have less clarity of other agencies' roles and responsibilities.

There is no single document that describes the interrelated roles of the agencies, clearly defines how WSP provisions are operationalised, or describes each agency's role in operationalising WSP provisions. DPIE - Water advised that it intends to develop WSP implementation plans. However, to date, these have not progressed due to resourcing constraints.

The audit team found some gaps in DPIE - Water procedures to operationalise the WSP including monitoring and reporting arrangements for WSP performance indicators (Part 2 cl. 11) and calculation, assessment and compliance with the long-term average annual extraction limit (Part 6 cl. 27, cl. 28 and cl. 29). Another gap is NRAR's lack of procedures for WSP implementation, concerning monitoring and compliance auditing to provide oversight of compliance with mandatory conditions. NRAR had not begun delivering this function at the time of this audit.

Findings against criterion lines of inquiry

Is there clear delineation of roles and responsibilities for giving effect to WSP provisions?

Roles and responsibilities for giving effect to WSP provisions have been documented broadly for the public¹⁵, and more specifically for government agencies in documents including the WaterNSW Operating Licence 2017-22¹⁶, a Deed of Business Transfer¹⁷, the NRAR Act 2017¹⁸ and instruments made under the Act.¹⁹ The latter sets out the functions conferred or imposed on the Minister to roles within DoI, including those conferred to NRAR (as it sits within DoI). The Deed of Business Transfer handed over "certain staff, functions and assets from DPI [Department of Primary Industries] Water to WaterNSW".

Broad functions of the audited agencies are described on agency websites.²⁰ A brochure titled *Roles of water management agencies in NSW*, published in June 2018 and available for download from the Department's website, sets out agency responsibilities, many of which relate directly to WSP implementation and are helpful for communicating broad roles of agencies to the public as set out in **Table 1**.²¹

¹⁵ <https://www.industry.nsw.gov.au/water/what-we-do/how-water-is-managed>

¹⁶ WaterNSW Operating Licence 2017-22

¹⁷ Deed of Business Transfer 2016 – Between Department of Industry, Skills and Regional Development and WaterNSW

¹⁸ Natural Resources Access Regulator Act 2017 (cl. 11 *Functions of the Regulator*, and Schedule 2 *Additional functions of the Regulator*)

¹⁹ Water Management Instrument of Delegation No. 2 2013; Water Management Instrument of Delegation No. 3 2018

²⁰ <https://www.industry.nsw.gov.au/water/what-we-do/how-water-is-managed>

²¹ Note that the brochure titled 'Roles of water management agencies in NSW' does not acknowledge NRAR's role in licensing assessments and approvals

Table 1. Roles of water management agencies in NSW

	DPIE - Water	WaterNSW	NRAR	DPIE - Biodiversity and Conservation
Broad roles of water management agencies in NSW	Water planning, policy and regulation Regional water security Government relations Stakeholder engagement Local water utilities	Source water protection Bulk water supply System operator Bulk water supply infrastructure planning, delivery and operation Customer water transaction and information services	Compliance monitoring and enforcement Prosecutions Compliance information Responds to community reports Collaboration and liaison Impact assessments Dams Safety Committee	Environmental water holder - Manages WALs held by the NSW Government and advises on the DPIE - Water on planned environmental water made under water sharing plans Environmental water planning Collaboration – advises on environmental water priorities and planning
Roles of water management agencies in licensing and compliance services	Legislation, plans, policies and governance Policy setter Planner and rule maker Inter- and intra-governmental collaboration	System operations Water delivery and operations Licensing Assessments and water supply work approvals Dealings Customer services Enquiries and advisory services Ordering, meter reading, trades and billing Water and market information services	Licensing Assessments and water supply work approvals Compliance education Communication and education strategies to promote voluntary compliance Monitoring & investigations On-site and remote monitoring, audits and inspections Case management and investigations Compliance hotline Responding to community reports Enforcement Statutory actions including notices and prosecutions	NA

The audit team found that roles within agencies are well understood and documented through organisation charts.²² Interviews with staff of each agency demonstrated that they had a clear understanding of the roles and responsibilities of their respective agency. However, the audit team found that the roles and responsibilities of the four audited agencies, for giving effect to WSP provisions, are not immediately clear to all staff of the agencies. Agency staff advised that this uncertainty is a result of organisational changes including the transfer of some agency functions, restructures within the Department, the establishment of NRAR and the complex nature of the WSPs. The audit team considers that updated communication about the roles of all agencies involved in WSP operationalisation would reduce this uncertainty.

NRAR performs some functions that mirror the responsibilities of WaterNSW in licensing for a subsection of customers and water supply work approvals for certain instances (described below). The brochure, *Roles of water management agencies in NSW*, does not acknowledge NRAR's role in licensing assessments and

²² WaterNSW organisation chart 2018 Intranet Version-20181220, NRAR Org Chart - People Leaders January 2019, NRAR Org Charts 10-01-2019, Department of Industry organisation structure excerpts - mid-2018

approvals. Agency staff advised that this split in responsibility is intentional to reduce perceived or actual conflicts of interest due to close working relationships between WaterNSW and those customers.

The audit team was informed that DPIE - Water is working on a review of the WaterNSW Operating Licence in consultation with WaterNSW with the intent of providing greater clarification of each agencies' role in relation to WSP implementation. The audit team was also informed that DPIE Water is investing to increase the resourcing for WSP implementation and to better clarify roles in WSP implementation. However, these actions had mostly not commenced during the audit period.²³

Is there overall documentation that operationalises WSP provisions to enable them to be given effect to? (Including AWDs, monitoring performance indicators, register of shares, water accounts)

The audit team found that there is no single document that describes the interrelated roles of the agencies, that clearly defines how WSP provisions are operationalised, or describes each agency's role in operationalising WSP provisions.

The audit team found that implementation plans for current WSPs have not commenced due to resourcing constraints. DPIE - Water advised it intended to develop implementation plans for current WSPs and to prepare implementation plans for future WSPs.

Manuals, procedures or decision trees are available for DPIE - Water, WaterNSW, NRAR and DPIE - Biodiversity and Conservation. They capture processes that are applied at the team level – see **Table 2**. The audit team found many of these procedures have been inherited and do not reflect current agency arrangements: some are under review; some procedures had been developed by individuals to assist in their roles, but not formalised; and some procedures do not exist.

Some procedures that lacked documentation during the audit period, as highlighted in **Table 2**, include:

- Part 2 cl. 11 – the monitoring of performance indicators and the evaluation of water sharing plans
- Part 6 cl. 27, cl. 28 and cl. 29 – calculation, assessment, and compliance relating to the long-term average annual extraction limit
- Part 11 – oversight of compliance with mandatory conditions.

These issues are covered in greater detail in this audit report under [Part 2](#) Vision, objectives, strategies and performance indicators, [Part 6](#) Limits to the availability of water, and [Part 11](#) Mandatory conditions, respectively.

The audit team were provided with examples showing draft WSP amendments intended to provide greater clarity on the role of specific agencies in implementing system operations parts of the WSPs.²⁴ The audit team note that the clearer drafting of obligations in the WSPs does not in itself provide evidence that responsibilities within agencies are clear, nor that responsibilities within agencies are clear for implementing clauses ascribed to “the Minister” or clauses that prescribe that an action “shall” be carried out.

Is there data management that supports the WSP implementation?

Water monitoring data plays a role in giving effect to WSP provisions. WAL holders may have specific conditions aligned with the information from the network of water monitoring stations. The audit team found evidence of data management that supports the WSP implementation that is incorporated into both the Water Monitoring – Quality Management System (QMS) and Oracle system.

Systems that support WSP implementation rely on an Oracle database. The Oracle database stores data that is used by the Water Licensing System, Water Accounting System and another database called Groundwater Hydstra (this database is only used for groundwater sources).

²³ Appendix 3, DPIE Water letter dated 1 October 2019 (ref: OUT19/11454)

²⁴ DRAFT Water Sharing Plan for the Lachlan Regulated River Water Source 2016 (amended 2019);

Are there systems for Quality Assurance/Quality Control (QA/QC), risk management, data collection, verification and management and modelling QA?

There is a quality management system in place for WaterNSW water monitoring data, which is documented in the Water Monitoring – QMS Manual.

Are there monitoring and evaluation arrangements for meeting the plan objectives and have they been reported to government within the required time frame?

This issue is addressed in the next section of this report: Part 2 Vision, objectives, strategies and performance indicators.

Table 2. Review of procedures to operationalise WSPs by agency functions

Agency	Function	Documentation
DPIE - Water	Making amendments to WSPs	Amendment order process WSP Amendments Register shell
DPIE - Water	Resource assessments for groundwater licence applications, water supply work approvals and dealings	Assessing groundwater applications fact sheet September 2018 DoI Groundwater Dealings Assessment Guideline: Water supply works and dealing applications
DPIE - Water	Keeping track of annual water take compared to the long-term average annual extraction limit (LTAAEL)	There is no actively maintained spreadsheet to calculate and assess compliance against groundwater LTAAEL; nor written procedures.
DPIE - Water	Drafting and coding of mandatory conditions	Water Allocations Resource - Assessment and Allocation Process Process for AWD submissions and public notification
DPIE - Water	Calculating Available Water Determinations (AWDs)	Water Allocations Resource - Assessment and Allocation Process Process for AWD submissions and public notification
DPIE - Water	Monitoring and evaluation of WSP performance indicators	No procedure was available during the audit period
DPIE – Water/NRAR	Drafting and coding of mandatory conditions	Giving effect to mandatory conditions – generic process Licencing Procedure Manual, operations section: conditions Quality control procedure for the application of mandatory conditions (draft) 2018
WaterNSW	Managing water allocation accounts	Water Accounting Rules for Water Sharing Plans in accordance with WMA 2000 Assessments of Water Usage Procedure (under review) WAS - Entering an AWD process Water Allocation Procedure – (under review) WLS Functional specification Integrated Receipting Assessments of Water Usage Procedure (under review) Meter Reading Procedure (under review) Negative Account Balance Procedure (under review)
WaterNSW	Water licencing and approvals	WLS user guide Licencing Procedure Manual, Operations section: Receiving, assessing and determining an application for a water access licence Assessment Summary Sheets Licencing procedure manual, operations section: Water access licence dealings Assessment Summary Sheet – Water Use and Water Supply Work Approval for Bores
NRAR	Monitoring and compliance auditing	NRAR intend to develop procedures for compliance auditing which is documented in the NRAR Establishment Plan 2018 Interim compliance audit procedures Interim Management of compliance evidence Interim managing a compliance audit program guidance

Agency	Function	Documentation
NRAR	Investigations and prosecutions	NRAR Prosecution guidelines February 2018 NRAR Statutory and other powers: Guidance for the exercise of powers to gather evidence Triage questions Workflow diagram Case Escalation Process (flowchart) Enforcement Committee Terms of Reference Interim CIRaM Standard operating procedure: Reference guide for effective case management within CIRaM Interim interviewing witnesses and suspects Interim Investigation guidelines Interim court procedures and giving evidence Interim protocol for engaging the Crown Solicitors Office
NRAR	Water licensing and approvals	WLS user guide Licensing Procedure Manual, Operations section: Receiving, assessing and determining an application for a water access licence Licensing Procedure Manual, Operations section: conditions Assessment summary sheets - access licence for domestic and stock, access licence for town water supply, access licence for specific purpose town water supply, access licence for specific purpose, access licence with a zero share, access licence for specific purpose aboriginal and cultural, water use and water supply work approval for bores, amendment of an existing approval Quality control procedure for the application of mandatory conditions – draft
DPIE - Biodiversity and Conservation	Concurrence role	OEH Water Sharing Plan Concurrence Procedure (2018)

The provisions that were not being given effect to:

Procedures and systems for full and consistent implementation of the WSP are lacking for Part 2, Part 6 and Part 11. This has resulted in these parts of WSP not being implemented in full.

The audit team found through interviews that the following broad factors that have contributed to the lack of procedures and systems:

- organisational changes including the transfer of functions
- unclear roles and responsibilities between auditee agencies and within auditee agencies
- restructures within the audited agencies
- the establishment of NRAR and time required to build capability.



Recommendation 1

Finding: The audit team found that Part 2 (cl. 11), Part 6 (cl. 27, cl. 28 and cl. 29) and Part 11 (cl. 52A, cl. 53 and cl. 54) of the WSP for the Greater Metropolitan Region Groundwater Sources 2011 were not being given effect in full.

Recommendation: NSW Government to document all roles and procedures so that the provisions of the WSP are fully and consistently operationalised, implemented and there is accountability.

Likelihood assessment:

If the clauses are not being given effect to, then in the opinion of the audit team, the likelihood of the WSP objective not being met is **medium**, due in part to a lack of clear documentation of roles and procedures.


Very low


Low


Medium


High


Very high

Criterion: Part 2 Vision, objectives, strategies and performance indicators

Areas examined

The audit team examined whether there are systems and processes in place to monitor and report on the performance indicators specified in Part 2 cl. 11 of the WSP.

Conclusion

Overall, the audit team found limited evidence of targeted monitoring and no evidence reporting of performance indicators in the WSP for the Greater Metropolitan Region Groundwater Sources 2011 during the audit period.

Findings against criterion lines of inquiry

Are there plans/systems/processes in place to monitor performance indicators of the WSP?

Part 2 cl. 11 specifies nine performance indicators to be used to measure the success of the WSP's strategies to reach its objectives, including:

- change in groundwater extraction relative to the long-term average annual extraction limit,
- extent of groundwater level fluctuations,
- change in the ecological condition of representative groundwater dependent ecosystems, where groundwater extraction is recognised as the primary risk to their condition,
- the extent to which basic landholder rights requirements have been met,
- the change in local water utility access,
- the extent to which local water utility requirements have been met,
- the extent to which native title rights requirements have been met,
- the change in the economic benefits derived from groundwater extraction and use, and
- the extent of recognition of spiritual, social and customary values of water to Aboriginal people.

The audit team found that DPIE - Water published guidelines in August 2018 for setting and evaluating WSP objectives²⁵, and MER Plans are being developed for all NSW Murray-Darling Basin and coastal valleys (including groundwater) that will contain monitoring targeted at meeting WSP reporting requirements. However, the audit team found no evidence of plans and processes in place to monitor the performance indicators in the WSP for the Greater Metropolitan Region Groundwater Sources 2011 during the audit period. Staff advised that funding for monitoring and evaluation has fluctuated over the audit period.²⁶ For the part of the Plan area that intersects with the Sydney Catchment Area, the lack of data quality and monitoring was also highlighted in a 2016 catchment audit.²⁷ For this area, 18 indicators are used to monitor catchment health²⁸, but several datasets for indicator measures had not been updated since the previous (2013) catchment audit.

Are there plans/systems/processes in place to report on the performance indicators of the WSP?

The audit team found no evidence of reporting on the performance indicators in the WSP for the Greater Metropolitan Region Groundwater Sources 2011. The WSP does not specify when or how often the indicators are to be used to measure and report on the success of the strategies to reach the objectives of the WSP, however WSP review periods and the connection between performance indicators, strategies and objectives are specified in the Act (cl. 35, and cl. 43A).

The provisions that were not being given effect to:

Part 2 cl. 11 Performance indicators, regarding indicators to be used to measure the success of the strategies to reach the objectives of the Plan, was not given effect to.

The audit team found through interviews and evidence that the contributing factors to not using the performance indicators were:

- the responsible agency (DPIE - Water and preceding agencies) has found the WSP performance indicators hard to monitor and report on²⁹
- a MER Framework or plan was not in place to monitor and report on plan performance indicators over the audit period
- monitoring has not been targeted or coordinated against the performance indicators to allow for an assessment of whether the plan is achieving its intended outcomes
- funding and resourcing to monitor and report on plan performance indicators has not always been available³⁰
- agency roles and responsibilities for collecting and reporting on performance indicators have not always been clear.³¹

²⁵ Guidelines for setting and evaluating plan objectives for water management, August 2018

²⁶ Audit interview notes

²⁷ 2016 Audit of the Sydney Drinking Water Catchment, Volume 1 – Main Findings (Alluvium, 2017)

²⁸ These indicators cover water quality, water availability, biodiversity and habitats, and land use and human settlements.

²⁹ Audit interview notes

³⁰ Audit interview notes

³¹ Audit interview notes




Recommendation 2

Finding: The audit team found that Part 2 cl. 11 of the WSP for the Greater Metropolitan Region Groundwater Sources 2011 was not being given effect to throughout the audit period.

Recommendation: DPIE - Water to give effect to Part 2 cl. 11 Performance indicators.

Likelihood assessment:


If the clause is not being given effect to, then in the opinion of the audit team, the likelihood of not meeting the intended objectives of the WSP is **medium** as water managers and users have limited knowledge on whether the objectives are being met and what, if any, adaptive management is required to achieve the objectives.


Very low


Low


Medium


High


Very high

Criterion: Part 3 Bulk access regime and Part 4 Planned environmental water provisions

Part 3 establishes the bulk access regime and Part 4 establishes planned environmental water provisions, but both parts establish these by reference to other WSP provisions. The audit has considered Part 3 Bulk access regime and Part 4 Planned environmental water provisions by considering the operative parts of the plan which have been “called up” by Part 3 and Part 4.

Criterion: Part 5 Requirements for Water

Part 5 establishes the requirements for water in the relevant water sources, including the total shares for WALs.

Areas examined

The NSW Water Register is maintained by WaterNSW and provides public access to information about share components for each WAL. The NSW Water Register is complemented by the Water Access Licence Register maintained by NSW Land Registry Services, which provides more detailed information about every WAL in NSW. The issuing of shares occurs once, following the WSP commencement, by conversion of Water Act 1912 licences to WALs. Following this, available water determinations are distributed according to shares, while changes in shares can only occur through dealings (except for special purpose access licences).

The issuing of shares occurs once, following the WSP commencement, by conversion of Water Act 1912 licences to WALs. This process occurs under Schedule 10 of the Water Management Act 2000. As such, this process is out of scope for this audit. Following this, available water determinations are distributed according to shares, while changes in shares can only occur through dealings (except for special purpose WALs).

The policy, processes, systems and procedures to manage share components are described under the criterion “There are arrangements to give effect to WSP Provisions”. Related policy, processes, systems and procedures with respect to available water determinations and dealings are described under the criteria for Part 6 and Part 10.

Criterion: Part 6 Limits to the availability of water

Areas examined

The audit team examined policies, processes, systems and procedures for the management of water available for extraction on a long-term basis in this water source.

Conclusion

The audit team found that under Division 1 Long-term average annual extraction limit:

- calculation of the current annual extractions against the LTAAEL required by the plan (cl. 27), assessment of average annual extractions against the LTAAEL (cl. 28), and subsequent management of compliance with the LTAAEL (cl. 29), has not occurred.

The audit team found that under Division 2 Available Water Determinations:

- procedures are in place for the calculation and announcement of AWDs.
- a schedule is in place for the assessment of AWDs at the beginning of the water year, and if the initial AWD is less than 100%, the process also occurs at regular intervals throughout the water year to monitor whether additional resources are available to make further AWDs.
- the calculations are reviewed by a manager who signs off on work to ensure its accuracy and appropriateness.

Findings against criterion lines of inquiry

Have the long-term average annual extraction limits been managed in accordance with the clauses in Division 1?

The WSP establishes a long-term average annual extraction limit (LTAAEL) to which extractions are managed. The long-term average annual extraction limit for the water sources in this WSP are defined in cl. 26.

Cl. 27 requires that, after each water year, the total volume of water taken under all categories of WALs and pursuant to basic landholder rights must be calculated for these groundwater sources. Cl. 28 and cl. 29 set out how assessment and compliance with the LTAAEL is to be managed.

No information was provided to the audit team that suggested these clauses were given effect to during the period covered by the audit. DPIE - Water advised that activities required to give effect to these clauses did not occur.³² There are no written procedures or other documentation, including no actively maintained spreadsheet for the water sources in this WSP.³³ The audit team was informed that all sources in the WSP are not fully allocated, and the amount of available water is much greater than the amount currently licenced.³⁴ For this reason, the risk of exceedance of LTAAEL was informally assessed as being low. No documented risk assessment was provided to the audit team. However, the audit team note that the WSP does not provide for a risk-based approach and states that the LTAAEL “must be calculated” and an assessment “is to be conducted” after each water year. The audit team determined that clauses 27, 28 and 29 regarding calculation of current levels of annual extraction, assessment of average annual extraction and compliance with the LTAAELs, were not being given effect to in accordance with Part 6 Division 1.

Where discretionary judgement is to be applied, is there clarity in regard to roles, responsibilities and oversight and process?

The audit team found no evidence of documentation concerning roles, responsibilities and oversight for Part 6 Division 1, regarding the LTAAEL (refer Recommendation 1).

³² Audit interview notes

³³ Audit interview notes

³⁴ Audit interview notes



Are there policies, processes, systems and procedures in place for making available water determinations in line with the rules?

Part 6 Division 2 concerns AWDs, which inform licensed water users how much water they can extract. Each year, an AWD is to be made defining how much of the share component will be available under each category of licence. Specific purpose access licences, such as domestic and stock or local water utility access licences, generally receive 100 per cent of their share component. AWDs are also used to manage growth in extractions above the LTAAEL, whereby the maximum AWD is reduced to less than one megalitre per unit share.

The agencies involved in making AWDs are WaterNSW and DPIE - Water. Data is provided by WaterNSW on the water balance, resource assessment and remaining allocations in accounts to DPIE - Water. DPIE - Water officers then undertake a resource assessment to assess the supply and determine the AWD.

The AWD at 1 July may be less than 100% if the rolling average of annual extraction over the specified preceding period is exceeded by the trigger amount or analysis deems that an exceedance is likely, based on the data available at the time of the assessment. AWDs are then credited to allocation accounts through the Water Accounting System by WaterNSW (when instructed to do so by DPIE - Water).

The audit team found that schedules, procedures, templates and checklists³⁵ are in place for making AWDs in line with the rules. The audit team found that there is a quality assurance process whereby each AWD is prepared, checked, and endorsed and that these roles in DPIE - Water are clearly defined.³⁶ The audit team found no evidence that Part 6 Division 2 of the WSP was not being given effect to.

The provisions that were not being given effect to:

The audit team found that cl. 27, cl. 28 and cl. 29 of the WSP regarding calculation, assessment and compliance with the LTAAEL were not given effect to. The audit team was advised that the following broad factors have contributed to this issue:

- the lack of a documented procedure for the groundwater LTAAEL compliance process
- the lack of resources for groundwater LTAAEL activities
- the lack of broad scale metering or water use information in these groundwater water resources
- the view within DPIE – Water that risk of exceedance of LTAAEL was low, because the amount of available water is much greater than the amount currently licenced, notwithstanding that the WSP provides at Part 6 cl. 27, cl. 28 and cl. 29 that LTAAEL “must be calculated” and an assessment “is to be conducted” after each water year
- restructures within the DPIE – Water.

³⁵Water Allocations Team Calendar Critical Dates - 2017-18, Process for AWD submissions and public notification, Temp Restriction Order Template for WNSW July 2017 SW, Temp Restriction Order Template for WNSW July 2017 GW, Briefing - Operational - Annual Water Allocations

³⁶ Water Allocation Valley Assignments – 2018/19

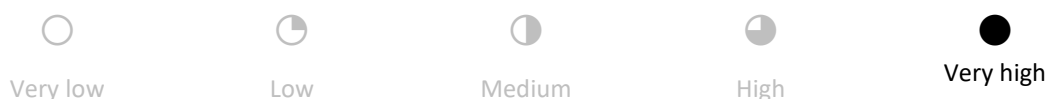
Recommendation 3

Finding: The audit team found that Part 6 cl. 27, cl. 28 and cl. 29 of the WSP for the Greater Metropolitan Region Groundwater Sources 2011 were not given effect to.

Recommendation: DPIE - Water to give effect to Part 6 cl. 27, cl. 28 and cl. 29 of the WSP relating to calculation, assessment and compliance with the long-term average annual extraction limit.

Likelihood assessment:

If the clauses are not being given effect to, then in the opinion of the audit team, the likelihood of not meeting the intended objectives of the WSP is **very high**.



Criterion: Part 7 Rules for granting access licences

Areas examined

The audit team examined policy, processes, systems and procedures for the granting of WALs.

Conclusion

The audit team found that the Water Licensing System utilised by WaterNSW and NRAR facilitates the assessment of applications and the granting of WALs that are subject to mandatory conditions and discretionary conditions.

Recommendation

No recommendations are made with respect to giving effect to Part 7 of the WSP.

Findings against criterion lines of inquiry

Are there guidelines for decision makers to give effect to the provisions for granting WALs?

The audit team was advised that the conversion of Water Act 1912 licences to WALs and water supply work approvals occurs under Schedule 10 of the Water Management Act 2000. The scope of Part 7 of the WSP and of this part of the audit report is limited to the assessment and granting of new WALs.

WaterNSW and NRAR staff utilise a Water Licensing System to assess applications and grant WALs that are subject to mandatory conditions and discretionary conditions. Decision makers have guidance in assessing applications through assessment sheets³⁷, which seek to ensure assessments are made in accordance with the applicable legislation and the relevant WSP. Mandatory conditions and discretionary conditions to be applied to WALs are identified by the assessing officer during the assessment of an application. Most mandatory conditions are programmed into the Water Licensing System and are automatically applied to the licence if it is granted. Occasionally, mandatory conditions require manual entry by the officer if that condition is specific to the WAL, for example, a condition for a specific purpose water access licence.³⁸

According to interviews with staff and the examination of the Licensing Procedure Manual³⁹, if an application satisfies all policy and statutory requirements, an assessing officer will submit the application to a determining officer with their recommendation to grant the WAL. The determining officer then confirms that, in

³⁷ Assessment Summary Sheets

³⁸ Licensing procedure manual Operations section: Receiving, assessing and determining an application for a water access licence (WAL)

³⁹ Licensing procedure manual Operations section: Receiving, assessing and determining an application for a water access licence (WAL)

accordance with the signed assessment sheet, all the administrative and legislative responsibilities and obligations have been discharged, the reason/s for the recommendation seem reasonable and justifiable, and the conditions are relevant, reasonable, and related to the application. The determining officer may amend the recommendation, including the conditions, and grant or refuse an application.

Cl. 32 of the WSP outlines the requirements for the granting of a specific purpose access licence. Applications for specific purpose access licences, other than those permitted under the Water Management (General) Regulation 2011, may not be made in these groundwater sources, except for a major utility (subcategory "urban water") WAL or a licence of an environmental subcategory. The audit team found there is a factsheet used to guide the process of granting applications for new WALs, to ensure that the share and extraction component of the WAL is the minimum required to meet the circumstances in which the WAL is proposed to be used. The audit team found that no specific purpose access licences of the subcategory "Aboriginal Cultural" have been granted in the plan water sources.

Is there a QA/QC process to ensure the rules are being given effect to?

The determining officer confirms and to varying degrees may review the work done by the assessing officer in granting or refusing a WAL. The determining officer is, where feasible, at a higher grade. Although there is no formal QA/QC process, the audit team found that the determining officers used their judgement to determine how closely to review the work of an assessing officer based on several risk factors such as officer experience, past performance and workload.

The drafting of mandatory conditions that are programmed into the Water Licensing System by NRAR also goes through a process of review to ensure where possible that mandatory conditions give effect to the rules in a WSP. The audit team found through interviews that errors are occasionally found in the drafted mandatory conditions, and that it is sometimes difficult to interpret the intent of a WSP provision and write a mandatory condition because a rule may be interpreted in a number of ways.

Staff also advised that, while controls are in place, there is a risk of error in coding the mandatory conditions into the Water Licensing System due to constraints in the system's functionality. For example, table headers in the user interface do not have the freeze panel functionality to view row or column names during scrolling.

Overall, the audit team found that some processes have appropriate QA/QC. However, there is risk of human error that may result in WSP rules not being given effect to. The audited agencies do not have visibility of the number of errors that result in noncompliance with the WSP; therefore, the audit team did not have information to determine the level of risk.

Criterion: Part 8 Rules for managing access licences

Areas examined

The audit team examined policy, processes, systems and procedures for complying with rules for managing WALs.

Conclusion

Overall the audit team found with respect to Part 8, that a Water Accounting System is in place that applies the water allocation account management rules, and that there was no evidence that the management of those accounts was inconsistent with the provisions in Part 8.

Recommendations

No recommendations are made with respect to giving effect to Part 8 of the WSP.

Findings against criterion lines of inquiry

How are individual water allocation account management rules administered and managed? (Including roles, responsibilities, decision makers and oversight)

The audit team found that water allocation accounts and the rules that apply to those accounts as per Part 8 of the WSP are administered and managed by WaterNSW in the Water Accounting System. The Water

Accounting System has many functionalities that allow for the keeping of water allocation accounts for WALs. One of the functions is the water allocation account which is a ledger of all transactions relating to water allocation for a WAL. The types of transactions vary according to the account rules for a water source and may include:

- accounting parameters for the water source which apply for the duration of the WSP (Water Order Debit, Carryover sub-accounts allowed etc.)
- announcements that have been made at the start of the year which define the general operating parameters for the water source and licence category (e.g. Daily Account Limit, Annual Use Limit) and which apply to the WAL
- announcements that have been made during the year for the Water Source and Licence Category and which apply to the WAL (e.g. AWDs)
- usages throughout the year
- allocation Assignments in/out (Licence dealings and transfers in/out)
- adjustments arising from exceeding account limits
- water order debiting
- adjustments to cater for domestic and stock rights usage.⁴⁰

The Water Accounting System also has other functionality including water usage reporting, licence searching by water type or WSP with search criteria including holder, water source, category and status.⁴¹

Water accounting rules that give effect to the Act and Part 8 (Rules for managing access licences) of the WSP are coded into the system by WaterNSW when a new WSP is gazetted or a WSP is amended, and are applied to the relevant water allocation accounts under a WSP. Evidence of the coded rules was provided to the audit team.⁴² The audit team found that specialist knowledge on the coding of rules into the Water Accounting System is held by a limited number of agency staff. Although the audit team was advised that within WaterNSW the roles and responsibilities are clear⁴³, the audit team found no evidence that this is documented, including no documented procedure for coding the rules into the Water Accounting System.

Is there a QA/QC process to ensure they are being given effect to in line with the plan?

No formal QA/QC process was found to be in place to ensure the coded rules give effect to the WSP.

How is the Department ensuring that water is being accounted for consistently and transparently?

The audit team was advised that for WALs that require the holder to keep a logbook, there is currently no procedure in place to monitor usage, whether usage is within account limits, or whether the carryover amount in the correlating water allocation account is accurate. The audit team was advised that for these accounts that are not yet required to have water meters, the carryover amount shown in accounts is the maximum allowed regardless of usage.⁴⁴ The oversight of WSP rules including logbook monitoring or verification and WAL holder compliance in regard to the licence conditions is discussed further in [Part 11 Mandatory conditions](#).

⁴⁰ Water Accounting Rules for Water Sharing Plans in accordance with Water Management Act 2000 Version 1.1 December 2009 State Water Corporation

⁴¹ WAS – Basic Function Training

⁴² Water Source Configuration Rules and screen shots of the Water Accounting System

⁴³ Audit interview notes

⁴⁴ Audit interview notes

Criterion: Part 9 Rules for water supply work approvals

Areas examined

The audit team examined policy, processes, systems and procedures for complying with rules for water supply work approvals.

Conclusion

The audit team found no evidence that the management of water supply work approvals was inconsistent with the provisions in Part 9.

Recommendations

No recommendations are made with respect to giving effect to Part 9 of the WSP.

Findings against criterion lines of inquiry

How are rules applying to the granting or amending of approvals for water supply works that take groundwater given effect to? (Including roles, responsibilities, decision makers, oversight and QA/QC processes)

Part 9 establishes rules for granting or amending approvals for water supply works that take water from these groundwater sources. The audit team found that the rules are coded into the Water Licensing System by NRAR and applied by WaterNSW and NRAR. This process is described in detail against the criterion relating to [Part 11 Mandatory conditions](#).

Part 9 is administered by WaterNSW, NRAR and DPIE - Water. Initially an application for a water supply work approval (e.g. for a bore) is assessed by either WaterNSW or NRAR against the rules. All groundwater applications are also referred to DPIE - Water for assessment by a hydrogeologist. The impact of a new or amended bore is assessed using a drawdown analysis and assessment against the rules. The application is then returned to WaterNSW or NRAR with a recommendation on the decision with discretionary conditions such as an extraction limit on a bore. The audit team reviewed an example of an assessments performed by hydrogeologists related to the implementation of cl. 38, cl. 39 and cl. 41 in this Part.⁴⁵ The audit team found the assessments gave effect to the WSP.

How were the distance restrictions in Part 9 given effect to?

As set out in cl. 39, an approval must not be granted or amended to authorise construction of a water supply work which, in the Minister's opinion, is located within the distances specified in Table A. These distance restrictions are also referenced in cl. 40, cl. 41, and cl.42, regarding works located near contamination sources, near sensitive environmental areas, and near groundwater-dependent culturally significant sites. They are also referenced in cl. 44, which sets out rules for the use of water supply works located within these restricted distances.

The audit team was advised by DPIE - Water and WaterNSW that distance restrictions are enforced through hydrogeological assessments, with a standardised approach across the state.⁴⁶ Following an initial assessment by WaterNSW, an application may be referred to a DPIE - Water hydrogeologist, who would make an assessment using ALGO Water (an internal modelling tool) to predict the drawdown impacts of a bore in a certain location.⁴⁷ It is the same assessment for all types of distance restrictions, with the exception of water supply work for basic landholder rights, which are generally lower yielding and therefore lower risk.⁴⁸ However, in other correspondence with DPIE - Water, the audit team was advised that, with regard to basic landholder rights bores and other criteria that trigger assessments, there is no record of assessments for these groundwater sources. The audit team therefore found no evidence that the distance restrictions in Part 9 were not given effect to.

⁴⁵ Groundwater Assessment Advice for Dealing/Application No: A012149

⁴⁶ Audit interview notes

⁴⁷ Audit interview notes

⁴⁸ Audit interview notes

Criterion: Part 10 Access licence dealing rules

Areas examined

The audit team examined policies, processes, systems and procedures for compliance with assignment of rights dealings (under section 71Q of the Act, previously known as permanent trade) and assignment of water allocations dealings (under section 71T of the Act, previously known as temporary trade).

Conclusion

The audit team found that the full range of dealings is managed by WaterNSW through the Water Licensing System. The audit team also found:

- WaterNSW has effective systems and processes to manage dealings
- The NSW Land registry Service keeps the record of all water access licenses (the WAL register)
- This record is separate to the NSW Water Licensing System, however once a dealing is approved it only takes effect once it is registered by the NSW Land Registry Services on the WAL register.

Recommendations

No recommendations are made with respect to giving effect to Part 10 of the WSP.

Findings against criterion lines of inquiry

How does the Department ensure WAL dealing rules are applied and adhered to?

For this WSP, dealings are generally allowed within a groundwater source but not into or out of a groundwater source, and certain dealings between management zones are also prohibited.^{49,50}

The audit team found that roles and responsibilities with regard to dealings are clear and well understood. WaterNSW maintains overall responsibility for both assignment of rights dealings (previously known as permanent trade) and assignment of water allocations dealings (previously known as temporary trade).

Assignment of rights dealings are managed by WaterNSW through the Water Licensing System. The Licensing procedure manual⁵¹ documents in detail how these dealings are received and processed by WaterNSW. This procedure has been inherited from the former DPI Water and therefore references to agency roles are out of date, although WaterNSW has not identified this as an issue in its use.

Dealing Assessment Checklists⁵² are completed by officers in the Water Licensing System which include a validity check to ensure the dealing is permitted. The Assessment Checklists ensure that any dealings that are recommended for approval by an assessing officer comply with the WSP, the Dealing Principles Order 2004, and the objects and principles of the Act. The decision to approve or refuse the dealing is made by the determining officer before a notification can be made to WAL holders. The determining officer may amend the recommendation (or conditions) and approve or refuse the application.

For a dealing related to a groundwater WAL, the Assessment Checklist flags the requirement for a hydrogeologist's assessment and recommendation for the dealing to be granted. This function is implemented by DPIE - Water.

In accordance with the requirements of s.71 of the Act, all WALs and dealings (excluding dealings for s.71T and s.71V) are recorded on the WAL. The WAL Register is administered by NSW Land Registry Services.⁵³

Assignment of water allocation dealings are processed by Customer Service Officers at WaterNSW in the Customer Helpdesk System, and are implemented in the Water Accounting System by crediting and debiting

⁴⁹ Water Sharing Plan for the Greater Metropolitan Groundwater Sources: Background document – July 2011

⁵⁰ <https://www.legislation.nsw.gov.au/#/view/regulation/2011/111/part10>

⁵¹ The Licensing procedure manual, Operations section: Water access licence dealings – January 2015

⁵² Dealing Assessment Checklist 71W, Dealing Assessment Checklist 71P, Dealing Assessment Checklist 71Q,

⁵³ The Licensing procedure manual, Operations section: Water access licence dealings – January 2015

the water allocation accounts of the buyer and seller respectively. The Water Allocation Assignment Procedure⁵⁴ documents the stages involved in processing and approving allocation assignments. Allocation assignment is not registered on the WAL Register because this dealing only operates at the level of water allocation accounts. The audit team sighted the Customer Helpdesk System and the Water Accounting System that supports this process. A QA/QC measure to ensure these dealings comply with cl. 50 (regarding assignment of allocations between certain management zones or water sources) is that the Water Accounting System does not allow non-compliant dealings to be processed. A Water Assignment Checklist⁵⁵ supports the return of incorrect or incomplete applications to the applicant or agent.

There were 19 assignment of rights dealings and 13 assignment of water allocations dealings for the Greater Metropolitan Region Groundwater Sources during the audit period.⁵⁶ All but one of these dealings were in the Goulburn Fractured Rock and Sydney Basin Nepean groundwater sources. The audit team reviewed these dealings and found no evidence of non-compliance based on publicly available information.⁵⁷

Criterion: Part 11 Mandatory conditions

Areas examined

The audit team examined systems and procedures to check that WALs and water supply work approvals have the required mandatory conditions to give effect to the WSP rules. The audit team also examined the oversight of compliance with these mandatory conditions that give effect to the WSP. The audit team reviewed information regarding compliance activities during the audit period.

Conclusion

The audit team found that mandatory conditions are currently drafted and coded into the Water Licensing System by NRAR. WaterNSW and NRAR follow a documented procedure using the Water Licensing System to assess applications for WALs and water supply work approvals in which the coded mandatory conditions are applied to WALs and water supply work approvals.⁵⁸

The audit team found that there was a delay in giving effect to mandatory conditions. For the WSP for the Greater Metropolitan Region Groundwater Sources 2011 this delay was approximately 6 years and 7 months. The written notice of conditions to holders of WALs and water supply work approvals was sent in February 2018. During the period of delay, regulatory arrangements remained in force under the Water Act 1912 and/or savings and transitional provisions of the Water Management Act.

The audit team found that the role of oversight of compliance has shifted a number of times throughout the audit period and has consisted of both reactive and proactive mechanisms. The audit team found that the oversight in place at the time of the audit depends on reactive investigations following the report of an alleged breach and that proactive monitoring of compliance with mandatory conditions by NRAR had not commenced.

Findings against criterion lines of inquiry

Were the mandatory conditions given effect from the date of the WSP having effect?

For the mandatory conditions to be given effect, written notice of conditions to holders of WALs and water supply work approvals is required. The written notice of conditions to holders of WALs and water supply work approvals were sent in February 2018.⁵⁹ The audit team found that there was a delay in the giving effect of mandatory conditions. For the WSP for the Greater Metropolitan Region Groundwater Sources 2011 this delay was approximately 6 years and 7 months from when the WSP had effect. Part 11 cl. 53 and cl. 54 of the WSP require WALs and water supply work approvals to have mandatory conditions to give effect to various rules in the WSP. During the period of delay, regulatory arrangements remained in force under the Water Act 1912 and/or savings and transitional provisions of the WM Act. The audit team found no evidence to assess the material impact of this delay. The audit team understand that during the delay period, WAL holders were

⁵⁴ WNSW-0087_Water Allocation Procedure - UNDER REVIEW.

⁵⁵ Checklist Application to Assign Surface Water Allocation, Checklist Application to Assign Groundwater Allocation

⁵⁶ NSW Water Register

⁵⁷ Assessment advice (based on NSW Water Register)

⁵⁸ Licensing Procedure Manual, Operations section: conditions

⁵⁹ Notification of conditions and compliance reporting

subject to their Water Act licence conditions, which can be more or less stringent than the conditions required to be imposed by the WSP.

Officers of DPIE Water, WaterNSW and NRAR showed and described to the audit team the systems and procedures for developing mandatory conditions on WALs and water supply work approvals, to give effect to WSP rules. While systems and procedures were in place, the audit team concluded that the process lacked consistency and assurance across the state and the net effect was that notification of mandatory conditions was not timely to give effect to WSP rules during the entire audit period.

See [Criterion: Part 5 Requirements for water](#) for commentary on the conversion of licences under the Water Act 1912 to the Water Management Act 2000 and audit report scope.

Are there policies in place on the requirements for WALs to have mandatory conditions to give effect to rules in the WSP?

The plan sets out provisions that will be applied as mandatory conditions to WALs and water supply work approvals. These mandatory conditions are designed to protect the rights of all users in the water source and to give effect to the environmental water rules of the plan. They cannot be removed or altered unless the plan itself is amended.

The audit team found that mandatory conditions are applied to WALs through the Water Licensing System. The Licensing Procedure Manual, Operations section: conditions⁶⁰ documents the processes by which WaterNSW and NRAR officers follow to process and grant WALs with the necessary conditions to give effect to the relevant rules in the WSPs.

The audit team reviewed a random sample of WALs from the Greater Metropolitan Region Groundwater Sources 2011 and reviewed the mandatory conditions applied to them and found no evidence that WALs currently (in 2019) lack the required mandatory conditions required to give effect to the requirements of cl. 53 of the WSP.⁶¹

Are there policies in place on the requirements for water supply work approvals to have mandatory conditions to give effect to the requirements of Part 11 of the WSP?

The audit team found that mandatory conditions are applied to water supply work approvals through the Water Licensing System. The WLS Approval Transactions Module (ATM) - New approvals - Specification⁶² documents the procedures assessing officers follow to process applications and ensure that applications are made in accordance with relevant legislation and policy requirements. The six broad steps in the system include receiving the application, accepting the application, assessment, recommendation, determination and notification of applicant. At the recommendation stage, the assessing officer specifies the conditions. An assessment sheet⁶³ for approvals supports the decision-making process and ensures the application is permitted under the relevant legislation including the WSP.

The audit team reviewed a random sample of Water Supply Works and Water Use approvals from Greater Metropolitan Region Groundwater Sources 2011 and reviewed the mandatory conditions applied to them and found no evidence that the approvals currently (in 2019) lack the required mandatory conditions required to give effect to the requirements of Part 11 of the WSP.⁶⁴

What processes are in place for verifying meters and logbooks? Is there any QA process?

The audit team was advised that where meters are required by a licence condition, they are read by WaterNSW Customer Field Officers (CFO) for the purpose of “determining water take and collating customer usage for billing and revenue collection”.⁶⁵ The audit team was also advised that the installation and

⁶⁰ Licensing Procedure Manual, Operations section: conditions

⁶¹ WAL numbers: 24526, 24125, 24714, 30984, 30311, 24184, 24205, 24325, 36446, 24908, 35525, 24440 and 24517

⁶² WLS Approval Transactions Module (ATM) - New approvals - Specification

⁶³ Assessment Sheet – Water Use Approval and or Water Supply Work Approval

⁶⁴ Approval numbers: 10CA114725, 10CA118041, 10CA116096, 10CA112777, 10CA114821, 10CA107757, 10CA108047, 10CA109371, 10CA116393, 10CA111700, 10CA112515, 10CA117911 and 10CA106672

⁶⁵ WaterNSW Meter reading and determining water take procedure (under review)

maintenance of water meters is a legal requirement under the Act. The meter reading procedure⁶⁶ outlines the processes used by CFOs when reading water meters and monitoring their legal take. Part of this process includes inspecting the meter and ensuring that it is operating properly by one or more of checking methods outlined in the procedure. If a breach is suspected, the procedure requires CFOs to record compliance notes and submit an Alleged Breach Notification to NRAR. The audit team was advised that the frequency of water meter readings varies according to business requirements and risk factors such as extraction and compliance history.

The audit team was advised that there is no formal process in place to check that logbooks are kept in line with mandatory conditions on WALs or verify their contents. The audit team was also advised that logbooks are not required for billing purposes as WAL holders are charged under a one- or two-part tariff. The two-part tariff utilises water use data from alternate methods to logbook checks such as self-reporting through iWAS.

The audit team notes that a new metering framework (NSW Non-Urban Water Metering Policy) commenced on 1 December 2018 and will require verification or installation of compliant and verified meters through a staged roll-out over five years.⁶⁷

Is there oversight to ensure that conditions imposed on WALs and water supply works are followed by water WAL holders?

The audit team found that currently NRAR has the responsibility for ensuring that conditions imposed on WALs and water supply works are followed by water WAL holders. The NRAR Establishment Plan outlines a number of strategies that NRAR will provide on an ongoing basis to address enduring regulatory risks and issues, including compliance with conditions imposed on WALs and supply works. Some of these processes have already commenced, while others are yet to commence. The audit team found that reactive processes that respond to alleged breaches are in place; however, proactive monitoring and compliance auditing had not commenced during the audit period. The audit team notes that in April 2019, NRAR published a “Regulatory Priorities” document.⁶⁸

As a recently established regulator, NRAR has some interim procedures that have been inherited from the former DPI Water. The NRAR Establishment Plan 2018 outlines the intent to develop its own processes and procedure manuals in ‘Program 4: Capability development – systems and processes’.⁶⁹

NRAR also plans to increase compliance with the legislation through education strategies that inform the regulated community about the rules, guiding them to work within the rules and raising awareness about the consequences of noncompliance.⁷⁰ The audit team was provided evidence of a draft education strategy.⁷¹

The procedures and system for managing reactive responses to alleged breaches have been inherited from the Department.⁷² The audit team was advised that 483 legacy alleged breach notifications (ABN) were inherited by NRAR; investigating and responding to these ABNs was a priority for the regulator. Alleged breaches may be reported by the general public or government employees through the water compliance hotline (phone), email or an online reporting form.

ABNs are managed in a system called CIRaM (Compliance Investigation Reporting and Management). New NRAR cases go through a process referred to as risk triage⁷³ before the case is assigned to a team for investigation. Alleged breaches that are identified by NRAR through proactive monitoring will also be managed through this system. NRAR has developed guidelines for prosecution⁷⁴, and has an Enforcement Committee to review enforcement recommendations made by officers. The terms of reference also state that “the

⁶⁶ WaterNSW Meter reading and determining water take procedure (under review)

⁶⁷ See <https://www.industry.nsw.gov.au/water-reform/metering-framework>

⁶⁸ NRAR Regulatory Priorities March 2019 – March 2021. Available at https://www.industry.nsw.gov.au/__data/assets/pdf_file/0020/227324/NRARs-regulatory-priorities-2019-to-2021.pdf

⁶⁹ NRAR Establishment Plan 2018

⁷⁰ NRAR How the Natural Resources Access Regulator delivers outcomes-focused and risk-based regulation January 2019

⁷¹ NRAR-Education Strategy final draft_31.01.19

⁷² Managing alleged breach notifications – Interim guidance for responding to notifications of alleged breaches

⁷³ NRAR Instructions for triage processes, Triage workflow diagram

⁷⁴ Enforcement Committee Terms of Reference December 2018

Committee may undertake random reviews of enforcement work to provide feedback on the process and decisions to ensure consistency of approach between teams”.⁷⁵

The audit team found evidence of some monitoring and compliance auditing conducted by DPI Water across NSW over the years 2012 to 2017⁷⁶, but could not find any information on proactive monitoring for the period August 2017 to December 2018. A separate monitoring program named Water Regulation Education and Audit Project (WREAP) was conducted between February 2015 and July 2017, where 14 noncompliance cases were identified from 241 audits. It is unknown which water types were targeted because this information was not reported on at the time and organisational knowledge has been lost.

The National Framework for Compliance and Enforcement Systems for Water Resource Management Report⁷⁷ describes DPI Water’s previous program of monitoring and compliance audit between February 2012 and December 2015. A total of 19,966 audits of water supply work approvals, related approvals and WALs were conducted during this period, 2,649 of these related to surface water sources and the remaining 17,317 related to groundwater audits. It is unknown whether any of these audits were of the Greater Metropolitan Region Groundwater Sources. This information was not available because knowledge has been lost in restructures of the Department and the transfer of the compliance function to NRAR.

The rate of detected non-compliance resulting from the auditing between February 2012 and December 2015 was 1.4% in groundwater compared to 8.7% for surface water. The audit team did not have the information to identify the detected rate of non-compliance in groundwater sources, or whether any of these audits occurred in the Greater Metropolitan Region Groundwater Sources.

The audit team found inadequate evidence that Part 11 was being given effect to in full due to a lack of oversight of compliance with the mandatory conditions during the audit period. The audit team was unable to determine whether NRAR’s oversight of compliance was adequate as the proactive function had not commenced during the audit period. This should be followed up in future audits.

The types of regulatory responses or compliance activities that NRAR may issue or pursue include advisory letters, formal warnings, penalty infringement notice, statutory notices, or prosecutions. Since plan commencement the number of finalised compliance activities relating to the WSP for the Greater Metropolitan Region Groundwater Sources 2011 is 9.⁷⁸ While information was available on the number of different compliance activities that had occurred, there were no outcomes-based performance indicators such as an estimated rate of compliance within the WSP area (or the state). In public information, NRAR announced in July 2019 that it has doubled its initial staffing, tripled the number of penalty notices, issued four times as many directions to remove unlawful water management works and finalised 80% of the initial legacy case load.⁷⁹ In addition, NRAR now publishes quarterly reports on compliance, investigation and enforcement activity.⁸⁰

The provisions that were not being given effect to:

From the commencement of the WSP in July 2011 to February 2018, Part 11 cl. 53 and cl. 54 were not given effect with regard to the application of the mandatory conditions and written notice to holders of WALs and water supply work approvals. Part 11 cl. 53 and cl. 54 of the WSP require WALs and water supply work approvals to have mandatory conditions to give effect to various rules in the WSP. During the period of delay, regulatory arrangements remained in force under the Water Act 1912 and/or savings and transitional provisions of the WM Act.

The audit team were advised that the following broad factors have contributed to this issue:

⁷⁵ Enforcement Committee Terms of Reference December 2018

⁷⁶ National framework for compliance and enforcement, systems for water resource management, Final report to the Commonwealth, NSW 2016

⁷⁷ National Framework for Compliance and Enforcement Systems for Water Resource Management Report, Final Report to the Commonwealth, New South Wales 2016

⁷⁸ NRAR-0083_Issue 11 – Offence count by WSP. The accuracy of this data is limited because it has been extracted based on local government areas that fall within the WSP area

⁷⁹ “Water regulator marks first anniversary with an 80 percent increase in cases finalised”, media release, NRAR, 2 July 2019.

⁸⁰ <https://www.industry.nsw.gov.au/natural-resources-access-regulator/reports-data>

- lack of appropriate resourcing for drafting and coding mandatory conditions in time for WSP commencement
- lack of recognition of the complexity of applying WSP rules to WALs and water supply work approvals as mandatory conditions
- lack of clear responsibility within and between agencies for drafting the mandatory conditions over the audit period
- transition of responsibilities between agencies and restructures within agencies
- lack of adequate documented procedures of the responsibilities for giving effect to mandatory conditions.

Recommendation 4

Finding: The audit team found that Part 11 cl. 53 and cl. 54 of the WSP for the Greater Metropolitan Region Groundwater Sources 2011 were not being given effect from the date of the WSP having effect on 1 July 2011 until February 2018. Written notice of the mandatory conditions that apply to WALs and water supply work approvals were sent to holders with a delay of approximately 6 years and 7 months. During the period of delay, regulatory arrangements remained in force under the Water Act 1912 and/or savings and transitional provisions of the Water Management Act 2000.

Recommendation: DPIE - Water to ensure that there is timely notification of mandatory conditions so they can be given effect to.

Likelihood assessment:


If the clauses are not being given effect to, then in the opinion of the audit team, the likelihood of not meeting the intended objectives of the WSP is **high**. Without the written notice of mandatory conditions to WAL holders, the access rules and other WSP clauses that require mandatory conditions may not be given effect.


Very low


Low


Medium


High


Very high

The provisions that were not being given effect to:

Part 11 cl. 53 and cl. 54 are only partially given effect to, as procedures and systems to ensure oversight of compliance with mandatory conditions are not established.

The audit team was advised that the following broad factors have contributed to this issue:

- the lack of resourcing for proactive compliance auditing in the past⁸¹
- the recent establishment of NRAR and the time required to plan and build capability
- proactive monitoring of compliance (initiated from 2018) is focussed on higher risk areas and issues and it is not clear whether any residual monitoring of compliance in lower risk areas and issues occurs
- the competing priority of investigating legacy alleged breach notifications.⁸²

⁸¹ Water: compliance and enforcement, A Special Report to Parliament under section 31 of the Ombudsman Act 1974, NSW Ombudsman, 17 August 2018

⁸² Audit interview notes


Recommendation 5

Finding: The audit team found inadequate evidence that Part 11 of the WSP for the Greater Metropolitan Region Groundwater Sources 2011 was being given effect to in full due to a lack of oversight (during the audit period) of compliance with the mandatory conditions that apply to WALs and water supply work approvals. During the audit period, NRAR had not established a proactive compliance auditing plan or strategy.

Recommendation: NRAR to give effect to Part 11 cl. 53 and cl. 54 of the WSP to ensure there is oversight of compliance with the mandatory conditions that give effect to the WSP.

Likelihood assessment:

If the clauses are not being given effect to, then in the opinion of the audit team, the likelihood of not meeting the intended objectives of the WSP is **high**. Without information about rates of noncompliance water managers and water users lack information as to whether the plan objectives have been met.


Very low


Low


Medium


High


Very high

Criterion: Part 12 Amendment of this Plan

Areas examined

The audit team examined processes, procedures and guidelines in place for managing WSP amendments.

Conclusion

The audit team found some documented processes and tools in place for management of WSP amendments by DPIE - Water.

Recommendation

No recommendations are made with respect to giving effect to Part 12.

Findings against criterion lines of inquiry

What processes, procedures and guidelines are in place for managing WSP amendments?

Part 12 allows amendments to be made to certain provisions over the life of the plan to allow for adaptive management.

The process of amendments is documented in a flowchart.⁸³ The Amendment Register⁸⁴ is a tool that has been used by DPIE - Water to document and manage WSP issues that may require amendments. The Amendment Register is reviewed to determine the priority of amendments. If the amendment requires public consultation, this may occur through existing Stakeholder Advisory Panels, targeted consultation or public exhibition, depending on the proposed amendment. Following consultation, a policy officer drafts an amendment order, and it is reviewed by planning staff including a manager/team leader and by legal. Legal advice may be incorporated into the order before a final review.

Were the WSP amendment provisions followed?

The audit team found plan amendments made to date were allowed by Part 12. The audit team found that the level of consultation is guided by the scale of the amendment and who it is likely to impact.

⁸³ Amendment order process (flowchart)

⁸⁴ WSP Amendments Register shell

How did amendments consider monitoring, evaluation and reporting of the performance indicators?

The audit team found no evidence that amendments considered monitoring, evaluation and reporting of the performance indicators. We have discussed this in detail in the section related to Part 2.



Appendix 1 Audit Criteria, method of testing and evidence sources

Criteria (WSP parts)	Lines of Inquiry	Method of testing	Sources of evidence (including but not limited to)
<p>All parts (Criterion: There are arrangements in place to give effect to the WSP provisions)</p>	<p>Is there clear delineation of roles and responsibilities for giving effect to WSP provisions?</p> <p>Is there overall documentation that operationalises WSP provisions to enable them to be given effect to? (Including AWDs, monitoring performance indicators, register of shares, water accounts)</p> <p>Is there data management that supports the WSP implementation?</p> <p>Are there systems for Quality Assurance/Quality Control (QA/QC), risk management, data collection, verification and management and modelling QA?</p> <p>Are there monitoring and evaluation arrangements for meeting the plan objectives and have they been reported to government within the required time frame?</p>	<p>Review documentation</p> <p>Interview auditee agencies' staff and stakeholders (earlier audits of WSPs in 2019)</p> <p>Review data</p>	<ul style="list-style-type: none"> • Delegations, organisation business plans or work area plans setting out responsibilities • Schedule of timing of key actions, reports etc. • Operating manuals • Decision trees • Workflow guidance • QA/QC systems • Risk management plans/policy • Water Registers • Data management policy, procedures and systems.

Criteria (WSP parts)	Lines of Inquiry	Method of testing	Sources of evidence (including but not limited to)
Part 2 Vision, objectives, strategies and performance indicators	<p>Are there plans/systems/processes in place to monitor the performance indicators of the WSP?</p> <p>Are there plans/systems/processes in place to report on the performance indicators of the WSP?</p>	Reviewing the monitoring and evaluation arrangements and the subsequent reporting to government	<ul style="list-style-type: none"> • M&E plans and reports • Framework of data requirements for performance indicators and meet reporting obligations • Delegations, organisation business plans or work area plans setting out responsibilities • Schedule of timing of key actions, reports etc.
Part 3 Bulk access regime Part 4 Planned environmental water provisions	Part 3 establishes the Bulk access regime and Part 4 establishes Planned environmental water provisions. The audit has considered Part 3 Bulk access regime and Part 4 Planned environmental water provisions by considering the operative parts of the plan which have been “called up” by Part 3 and Part 4.	Not applicable	Not applicable
Part 5 Requirements for water	Part 5 sets share components called up in other operative provisions. Therefore, assessment of Part 5 of the WSP has been included in the audit of other relevant Parts of the WSP. Specifically, Part 6 (Limits to the availability of water) and Part 8 (Rules for managing access licences).	Not applicable	Not applicable

Criteria (WSP parts)	Lines of Inquiry	Method of testing	Sources of evidence (including but not limited to)
Part 6 Limits to the availability of water	<p>Have the long-term average annual extraction limits been managed in accordance with the clauses in Division 1?</p> <p>Where discretionary judgement is to be applied, is there clarity in regard to roles, responsibilities and oversight and process?</p> <p>Are there policies, processes, systems and procedures in place for making available water determinations in line with the rules?</p>	<p>Document and data review</p> <p>Interview auditee agencies' staff and stakeholders (earlier audits of WSPs in 2019)</p>	<ul style="list-style-type: none"> Operational manual QA/QC process and reports Data management policy, procedures and systems Decision trees.
Part 7 Rules for granting access licences	<p>Are there guidelines for decision makers to give effect to the provisions for granting WALs?</p> <p>Is there a QA/QC process to ensure the rules are being given effect to?</p>	<p>Document and data review</p> <p>Interview auditee agencies' staff and stakeholders (WaterNSW interview conducted for this WSP)</p>	<ul style="list-style-type: none"> Manuals, guidelines QA/QC process and reports Appropriate security and anticorruption measures.

Criteria (WSP parts)	Lines of Inquiry	Method of testing	Sources of evidence (including but not limited to)
Part 8 Rules for managing access licences	<p>How are individual water allocation account management rules administered and managed? (Including roles, responsibilities, decision makers and oversight)</p> <p>Is there a QA/QC process to ensure they are being given effect to in line with the plan?</p> <p>How is the Department ensuring that water is being accounted for consistently and transparently?</p>	<p>Document and data review</p> <p>Interview auditee agencies' staff and stakeholders (WaterNSW interview conducted for this WSP)</p>	<ul style="list-style-type: none"> • Water accounts/registers • Operating model, including workflow processes • QA/QC on data and compliance with the rules • Appropriate security and anticorruption measures • Data management policy, procedures and systems • Information available to licensees/ approvals holders (e.g. water levels, allocations).
Part 9 Rules for water supply work approvals	<p>How are rules applying to the granting or amending of approvals for water supply works that take groundwater given effect to? (Including roles, responsibilities, decision makers, oversight and QA/QC processes)</p> <p>How were the distance restrictions in Part 9 given effect to?</p>	<p>Document and data review</p> <p>Interview auditee agencies' staff (earlier audits of WSPs in 2019)</p> <p>Interview WaterNSW & NRAR staff (WaterNSW interview conducted for this WSP – NRAR interview in earlier audits of WSPs in 2019)</p>	<ul style="list-style-type: none"> • Operating manual • QA/QC process and reports • Data management policy, procedures and systems • Information available to licensees / approvals holders (e.g. water levels, allocations).

Criteria (WSP parts)	Lines of Inquiry	Method of testing	Sources of evidence (including but not limited to)
Part 10 Access licence dealing rules	How does the Department ensure WAL dealing rules are applied and adhered to?	Document and data review Interview auditee agencies' staff and stakeholders (an interview with WaterNSW staff was conducted for this WSP)	<ul style="list-style-type: none"> • Water registers and accounts • Workflows and manuals • QA/QC processes and reports • Appropriate security and anticorruption measures • Data management policy, procedures and systems.
Part 11 Mandatory conditions	<p>Are there policies in place on the requirements for WALs to have mandatory conditions to give effect to rules in the WSP?</p> <p>Are there policies in place on the requirements for water supply approvals to have mandatory conditions to give effect to the requirements of Part 11 of the WSP?</p> <p>What processes are in place for verifying meters and logbooks? Is there any QA process?</p> <p>Is there oversight to ensure that conditions imposed on WALs and water supply works are followed by water WAL holders?</p>	Document and data review Interview auditee agencies' staff and stakeholders (WaterNSW interview conducted for this WSP)	<ul style="list-style-type: none"> • QA/QC processes and reports • Appropriate security and anticorruption measures • Data management policy, procedures and systems • Asset management.

Criteria (WSP parts)	Lines of Inquiry	Method of testing	Sources of evidence (including but not limited to)
Part 12 Amendment of this Plan	<p>What processes, procedures and guidelines are in place for managing WSP amendments?</p> <p>Were the WSP amendment provisions followed?</p> <p>How did amendments consider monitoring, evaluation and reporting of the performance indicators?</p>	<p>Document and data review</p> <p>Interview auditee agencies' staff and stakeholders (earlier audits of WSPs in 2019)</p>	<ul style="list-style-type: none"> • Delegations of statutory functions; WSP Implementation Plans; Organisational business plans, work area plans • QA/QC system / process • Water resource modelling - model capability reports and QA; workflows for routine runs (e.g. LTAAEL; allocations); model audit/review schedule • Schedule of time-dependent actions and reports • Consultative arrangements (to the extent required by WSP provisions) • MER Framework, data requirements for performance indicators and meeting reporting obligations.



Appendix 2 Likelihood Assessment Rating Criteria

The audit team have considered the risk of the recommendations in the following way. The event of interest for this risk assessment is that the objectives of a given WSP are not met. Risk is evaluated by assessing likelihood and consequence. The consequence of the objectives of a WSP not being met may depend on different administrative, regulatory, economic, social and environmental circumstances relevant to each WSP and is not included as part of this assessment.

The likelihood of the objectives of the WSP not being met depends on the importance to the WSP of any provisions that are not being given effect to. The likelihood assessment is based on the professional judgement of the audit team.

The following likelihood ratings are used in this assessment.

Table 3. Likelihood criteria

Rating	Description
Very High	Risk will occur
High	Risk is likely to occur
Medium	Risk may occur
Low	Risk not likely to occur
Very Low	Risk will only occur in exceptional circumstances



Appendix 3 Responses from audited agencies to draft audit reports





Our ref: OUT19/11454

Alluvium Consulting

Email to:

Dear

Subject: Response to section 44 water sharing plans compliance audit reports – 25 reports

Thank you for providing the Department with the 25 draft audit reports completed by Alluvium Consulting.

As noted in previous correspondence, while the results were to some degree expected, we have already made substantial progress towards addressing many of the fundamental issues that have been raised. Our previous letters in response to the provision of the first two tranches of reports discussed some key reform areas relevant to all water sharing plans, and provided some detailed comments with respect to individual reports.

The enclosed table provides advice in response to issues common to all of the audits and in response to some specific issues identified for individual water sharing plans. It also includes specific comments in relation to the additional issue of the delay in giving effect to mandatory conditions, as identified in your letter of 22 August 2019. The table does not deal with minor typographical corrections that may be required.

I note that Appendix 3 does not contain any information at the moment. I request that a copy of Appendix 3 is provided for each report before the reports are released.

Yours sincerely

A handwritten signature in blue ink that reads 'Jim Bentley'.

Jim Bentley
Chief Executive Officer – Water (Deputy Secretary)
Water Group

1 October 2019

Comments and suggested editorial corrections in relation to all draft audit reports

No	Reference	Audit Statement	COMMENT	ACTION
1.	Various reports Appendix 1 Parts 3 & 4	Appendix 1 to some reports contains a statement that the bulk access regime does not establish any independent provisions, rules or other matters to be implemented.	<p>Appendix 1 appears to be inconsistent between reports in relation to this issue. For those reports in which Appendix 1 contains a statement that the bulk access regime does not establish any independent provisions, rules or other matters to be implemented, the Department recommends reconsidering this expression in reports where it is used as we believe it could be improved. The audit has in effect examined whether the bulk access regime has been given effect to because it is all of the provisions, rules and other matters in the other parts of the WSP.</p> <p>This may be better restated to note that the bulk access regime is established under Part 3 but by reference to other provisions of the water sharing plan. Therefore, the audit has considered the bulk access regime but by considering the operative parts of the plan which have been "called up" by Part 3.</p>	Request that the authors revise Appendix 1 for all reports for consistency and to reflect the body of the reports.
2.	3 Audit findings Criterion (1) There are departmental arrangements to give effect to WSP Provisions	<p>Audit found gaps in Department procedures to operationalise WSPs.</p> <p>Audit found no single document describing interrelated roles of agencies that clearly define how WSP provisions are operationalised or each agency's role in operationalising WSP provisions.</p>	<p>It is acknowledged that roles and responsibilities at a high level are not well defined between and within agencies. Regulated river water sharing plans are currently being redrafted to better clarify agency roles in the implementation of particular rules. The Department is working on a review of the WaterNSW Operating Licence in consultation with WaterNSW with the intent of providing greater clarification of each agencies' role in relation to WSP implementation.</p> <p>The Department is investing to increase the resourcing required to implement WSPs. Recruitment has commenced to expand the existing Water Planning Implementation Unit within the Water Group to service conditioning of water access licences and is considering resourcing models to service the full range of water sharing plan implementation activities, including evaluation and reporting. Implementation programs for water sharing plan will be developed that clearly articulate each agency's role, responsibilities and timing for implementation activities</p>	Request that the authors revise this text

			<p>The Department is investing to increase the resourcing required to implement WSPs. Implementation plans will be developed across NSW, and will clearly articulate each agencies' roles, responsibilities and timing for implementation activities.</p> <p>We also note that a significant number of WSPs are being amended to meet Basin Plan requirements. Implementation plans will be put in place once the amendments are finalised.</p> <p>Also see entry at item 5 against the Part 6 criterion.</p>	
3.	3 Audit findings Criterion Part 2	<p>Audit found limited evidence of targeted monitoring and no evidence of reporting on monitoring activities against the WSP performance indicators.</p> <p>Audit team found no evidence of finalised plans or processes in place to monitor performance indicators.</p>	<p>Similar findings were found as part of departmental implementation audits and Natural Resources Commission water sharing plan term reviews in 2013. The Department acknowledges that monitoring, evaluation and reporting (MER) will require a shift from previous practices and an ongoing commitment.</p> <p>The audit team was provided with a range of material outlining monitoring of performance indicators as part of implementing WRPs for the Murray-Darling Basin. Implementation of these plans will commence from 2019.</p> <p>The Department has undertaken a review of WSP objectives and performance indicators and has undertaken substantial revision of the approach to setting objectives. The approach follows best practice for setting objectives and evaluating WSPs, and is documented in https://www.industry.nsw.gov.au/_data/assets/pdf_file/0005/172373/guidelines-for-setting-and-evaluating-plan-objectives.pdf</p> <p>Further, an MER framework has been developed for all valleys and draft individual MER plans have now been developed for each Basin WSP area. These MER plans use the outcomes of water resource plan risk assessments to guide the extent of performance monitoring effort within each WSP area. This approach will also be expanded to coastal WSPs. Example MER plans can be found in each of the water resource plan packages currently on public exhibition (see an example at https://www.industry.nsw.gov.au/_data/assets/pdf_file/0020/201908/macquarie-castlereagh-schedule-j-monitoring-evaluation-and-reporting-plan.pdf)</p>	Request that the authors revise this text

<p>4.</p>	<p>3 Audit findings Criterion: Part 2 Vision, objectives, strategies and performance indicators Findings against criterion lines of inquiry</p>	<p>In March 2018, DPIE - Water published a Monitoring, Evaluation and Reporting (MER) framework for the Basin Plan implementation. This includes a framework for monitoring and reporting on WSP requirements³⁰. MER Plans are being developed for all NSW Basin and coastal valleys that will contain monitoring targeted at meeting WSP reporting requirements.</p>	<p>This may be read as implying that the MER plans are for surface waters only, which is incorrect.</p> <p>There is a single MER plan for MDB groundwater WRPs that contains information specific to each groundwater WRP area. Groundwater WRP areas do not align with surface water WRP areas or valley boundaries. They may be smaller (for instance NSW Border Rivers Alluvium WRP area), or much larger (for instance NSW MDB Fractured Rock underlies almost all of the NSW MDB area).</p> <p>We suggest that the authors consider revising this statement to include a reference to groundwater, for example: “MER Plans are being developed for all NSW Murray-Darling Basin water resource plan areas (including groundwater) and coastal valleys”.</p>	<p>Request that the authors revise the text to include reference to groundwater MER</p>
<p>5.</p>	<p>3 Audit findings Criterion Part 6</p>	<p>Audit found Part 6 (assessment and compliance of LTAAELs) was only partially being given effect to.</p>	<p>Steps are already being taken to address these gaps, including in the unregulated river systems where it has been more difficult to determine compliance.</p> <p>In the unregulated Murrumbidgee, Murray and Lower Murray-Darling river systems take of water is limited and relatively small in volume when compared with the associated regulated systems. A risk based system has been informally put in place, with a focus on cap accounting in the regulated systems and LTAAEL accounting in the groundwater systems. Transitional SDL accounting in surface and groundwater systems is also an indicator of LTAAEL compliance. Note full SDL accounting requirements commenced on 1 July 2019.</p> <p>Further compliance with the LTAAEL in these unregulated plans has been difficult to determine to date as there are no numerical models or metering in place to undertake LTAAEL assessment. Notwithstanding this, monitoring against the plan limit will be addressed by the Department with the implementation of the Non-Urban Metering Regulations and</p>	<p>Suggest the authors consider revising text</p>

			<p>Policy and a greater focus on the implementation of WSPs. An overview of metering roll out dates can be found at:</p> <p>https://www.industry.nsw.gov.au/_data/assets/pdf_file/0016/205450/Fact-sheet-preparing-for-the-roll-outdates-NSW-non-urban-water-metering-framework.pdf</p> <p>The Department is also developing a system to assess access conditions for unregulated rivers that will make it clear where and when water users can and cannot pump waters from unregulated rivers. This is expected to be in place in 2020.</p>	
6.	3 Audit findings Criterion Part 11 / 12	One of the questions the report addresses is whether “there is oversight to ensure that conditions imposed on WALs and water supply works are followed by water licence holders”.	<p>The WSPs require mandatory conditions to be imposed. NSW has established the Natural Resource Access Regulator (NRAR), which represents a significant investment in capacity to undertake compliance against conditions imposed on Water Access Licences (WALs) and water supply works approvals. NRAR is committed to undertaking both reactive, as well as proactive compliance.</p>	Request that the authors revise this text
7.	3 Audit findings Criterion Part 11 / 12	The audit team found that there was a delay in giving effect to mandatory conditions.	<p>The Department is working to impose mandatory conditions as part of the stronger focus on implementation of the WSPs. The Department is committed to expanding its implementation capacity, and a major task over the next six months is a focus on conversion of WSP clauses to conditions on water access licences.</p> <p>The Department notes that there is significant work relevant to all WSPs underway. Steps already being taken to address the timely notification of mandatory conditions to holders of water access licences and water supply works approvals in NSW include:</p> <ul style="list-style-type: none"> • Clear delineation of responsibilities between WaterNSW and the Department, including the development and implementation of comprehensive protocols for licence conditioning; • Increased resources, led by the Planning Implementation team within DPIE Water, directed towards drafting mandatory conditions that give effect to new or amended water sharing plans; 	Request that the authors include text to acknowledge the commitments and work that is already in place and is underway

			<ul style="list-style-type: none"> • Clear processes, including QA and approval protocols, to upload mandatory conditions onto water access licences and water supply work approvals in the Water Licensing System (WLS) database and written notification to licence and approval holders; • Appropriate access and training in WLS for all staff involved to ensure an adequate pool of expertise and continuity of service to cover staff absences and reassignment; • Processes to monitor, measure and record conditioning and notification outcomes against agreed key performance indicators. <p>The audit looked at whether systems and procedures were in place to give effect to mandatory conditions but did not provide any comments on what was found about systems and procedures. The Department considers that it would be useful, and provide a more complete report, if the audit team note the extent to which systems and procedures were found to be in place. To have been able to notify the conditions at all suggests there were some systems and procedures in place.</p>	
8.	3 Audit findings Criterion Part 11 / 12	Factors that contributed to giving effect to mandatory conditions	<p>In relation to the factors contributing to the delay, the underlined editorial suggestions would better describe the factors:</p> <ul style="list-style-type: none"> • <i>the lack of appropriate resourcing for drafting and coding mandatory conditions in time for <u>WSP commencement</u></i> • <i>lack of recognition of the complexity of <u>applying WSP</u> rules to WALs and water supply work approvals as mandatory conditions</i> • <i>the lack of clear responsibility within and between agencies for drafting the mandatory conditions over the audit period</i> • <i>transition of responsibilities between agencies and restructures within agencies</i> • <i>Lack of adequate documented procedures of the responsibilities for giving effect to mandatory conditions</i> <p>The Department does not consider that treating mandatory conditions drafting and notification as a project caused delay. Rather, the main contributing factor was the lack of resourcing.</p>	Request that the authors revise this text

			We therefore suggest that the audit team consider removing the last dot point.																	
9.	Recommendation 4	During the period of delay, regulatory arrangements remained in force under the Water Act 1912 and/or savings and transitional provisions of the Water Management Act 2000.	<p>For the reports specified below, this recommendation needs to clarify some water sources are excluded from the statement. These water sources were incorporated into the relevant audited plans at the end of the initial 2004 plan terms. Mandatory conditions would have been applied to water access licences and work approvals under the prior water sharing plan made under the <i>Water Management Act 2000</i>.</p> <table border="1"> <thead> <tr> <th>WSP audited</th> <th>Plan incorporated</th> </tr> </thead> <tbody> <tr> <td>WSP for the Castlereagh River Unregulated and Alluvial Water Sources 2011</td> <td>WSP for the Castlereagh River Above Binnaway Water Source 2003</td> </tr> <tr> <td>WSP for the Greater Metropolitan Region Unregulated River Water Sources 2011</td> <td>WSP for the Kangaroo River Water Source 2003</td> </tr> <tr> <td>WSP for the Gwydir Unregulated and Alluvial Water Sources 2012</td> <td>WSP for the Rocky Creek, Cobbadah, Upper Horton and Lower Horton Water Source 2003</td> </tr> <tr> <td>WSP for the Lachlan Unregulated and Alluvial Water Sources 2012</td> <td>WSP for the Mandagery Creek Water Source 2003</td> </tr> <tr> <td rowspan="3">WSP for the Murrumbidgee Unregulated and Alluvial Water Sources 2012</td> <td>WSP for the Adelong Creek Water Source 2003</td> </tr> <tr> <td>WSP for the Tarcutta Creek Water Source 2003</td> </tr> <tr> <td>WSP for the Upper Billabong Water Source 2003</td> </tr> <tr> <td>WSP for the Namoi Unregulated and Alluvial Water Sources 2012</td> <td>WSP for the Phillips Creek, Mooki River, Quirindi Creek and Warrah Creek Water Sources 2003</td> </tr> </tbody> </table>	WSP audited	Plan incorporated	WSP for the Castlereagh River Unregulated and Alluvial Water Sources 2011	WSP for the Castlereagh River Above Binnaway Water Source 2003	WSP for the Greater Metropolitan Region Unregulated River Water Sources 2011	WSP for the Kangaroo River Water Source 2003	WSP for the Gwydir Unregulated and Alluvial Water Sources 2012	WSP for the Rocky Creek, Cobbadah, Upper Horton and Lower Horton Water Source 2003	WSP for the Lachlan Unregulated and Alluvial Water Sources 2012	WSP for the Mandagery Creek Water Source 2003	WSP for the Murrumbidgee Unregulated and Alluvial Water Sources 2012	WSP for the Adelong Creek Water Source 2003	WSP for the Tarcutta Creek Water Source 2003	WSP for the Upper Billabong Water Source 2003	WSP for the Namoi Unregulated and Alluvial Water Sources 2012	WSP for the Phillips Creek, Mooki River, Quirindi Creek and Warrah Creek Water Sources 2003	Request that the authors revise this text for the new recommendation across all relevant audit reports.
WSP audited	Plan incorporated																			
WSP for the Castlereagh River Unregulated and Alluvial Water Sources 2011	WSP for the Castlereagh River Above Binnaway Water Source 2003																			
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WSP for the Namoi Unregulated and Alluvial Water Sources 2012	WSP for the Phillips Creek, Mooki River, Quirindi Creek and Warrah Creek Water Sources 2003																			

			<p>WSP for the NSW Border Rivers Unregulated and Alluvial Water Sources 2012</p> <p>WSP for the Richmond River Area Unregulated, Regulated and Alluvial Water Sources 2010</p>	<p>WSP for the Tenterfield Creek Water Source 2003</p> <p>WSP for the Coopers Creek Water Source 2003</p>	
10.	3 Audit findings Criterion: Part 11 / 12 Mandatory conditions		<p>The process of conditioning WALs follows the conversion of licences under the <i>Water Act 1912</i> to WALs under the <i>Water Management Act 2000</i>. These may be separate processes but they are closely linked. It would be beneficial for the reader if the commentary in this new finding refers to the licence conversion process or provides a cross reference to the text discussing licence conversions and audit report scope in Criterion: Part 5 Requirements for Water, Areas examined.</p>		Request that the authors revise this text.
11.	Part 13 / 12 Findings against criterion lines of inquiry (Tweed River Area Unregulated and Alluvial WSP, Murrah-Wallaga Area Unreg and Alluvial WSP and Towamba Unregulated and Alluvial WSP in particular)	<p>Consultation arrangements are in place for future amendments through the Stakeholder Advisory Panels or other similar existing community groups, as well as targeted consultation or public exhibition processes</p>	<p>Stakeholder Advisory Panels are not established on the coast. Consultation is more targeted at a local level, which is appropriate for coastal catchments.</p>		Request that the authors revise this text

12.	<p>3 Audit findings</p> <p>Criterion: There are arrangements to give effect to WSP provisions</p> <p>Is there data management that supports the WSP implementation</p>	<p>Reference to "flows"</p>	<p>Reference to "flows" in the generic words used in the audit reports are only applicable to surface water monitoring. Groundwater flows cannot be monitored, only groundwater levels. Consequently for the water sharing plans that only cover groundwater this reference is not strictly correct.</p> <p>Suggested editorial correction for groundwater only plans:</p> <p><i>Is there data management that supports the WSP implementation? Water monitoring data plays a role in giving effect to WSP provisions based on the water monitoring network. Licence holders may have specific conditions aligned with the information from the network of water monitoring stations. The audit team found evidence of data management that supports the WSP implementation that is incorporated into both the Water Monitoring – Quality Management System (QMS) and Oracle system.</i></p> <p><i>Appendix 1 Part 7 Rules for granting access licences Policy, processes, systems and procedures for complying with the water allocation rules, and access rules.</i></p> <p><i>Information available to licensees / approvals holders (e.g. water levels, allocations).</i></p>	<p>Request that the authors revise this text</p>
13.	<p>3 Audit findings</p> <p>Criterion: Part 8 Rules for managing access licences</p> <p>Findings against criterion lines of inquiry</p> <p>How do daily access rules get administered and managed?</p>	<p>Cl. 47 discussion including the statement</p> <p>'As the access rules were found on WALs in the form required by the WSP and no further guidance has been given on the specification of reference points in these pools the audit team did not investigate this issue</p>	<p>The commentary regarding the lack of established of reference points included in the Namoi Unregulated and Alluvial WSP report has not been included in other WSP audit reports where access to in river and off river pools is allowed either through similar clauses or via the establishment of a WSP schedule (such as in the WSP for the NSW Border Rivers Unregulated and Alluvial Water Sources 2012).</p> <p>The implementation issue identified in the Namoi report is relevant to several other reports and it would be beneficial to include this commentary in those reports.</p> <p>It is noted a reference is provided to the findings for Part 11 Mandatory conditions, however this issue is not mentioned in that section.</p>	<p>Request that the authors consider including in and off river pool access implementation commentary in all other relevant audit reports</p>

		further on the basis that the provision is being given effect'		
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Comments and suggested editorial corrections in relation to draft audit report for the Water Sharing Plan for the Gwydir Unregulated and Alluvial Water Sources 2012

No	Reference	Statement	COMMENT	ACTION
14.	3 Audit findings Criterion: Part 6 Limits to the availability of water Findings against criterion lines of inquiry Has the long-term average annual extraction limit been managed in accordance with the clauses in Division 1 for this resource? Pg. 27	For groundwater, the available determination at 1 July may be less than 100% if high extraction volumes for the current year trigger LTAAEL compliance action or analysis deems that an exceedance is likely, based on the data available at the time of the assessment. For some aquifer licences, allocations are also linked to the high security or general security allocations of the associated regulated river.	<p>The statement '...if high extraction volumes for the current year trigger LTAAEL compliance action...' regarding cl. 31(2) is misleading because it implies high extraction in one year alone may warrant reduced AWDs. Extraction may be limited in the subsequent year if the rolling average over the specified preceding period is exceeded by 10% or more. For the Upper Gwydir Alluvial Groundwater Source it is a 5 year period which equates to extraction averaged over years 1-5, 2-6, 3-7, 4-8 etc. Not all plans have the same averaging period.</p> <p>The groundwater AWD may be less than 100% for aquifer (high security) access licences particularly in drought years as the AWD calculation incorporates 70% of the AWD for regulated river (high security) access licences. In other plan areas the calculation may be linked to general security licences which more frequently have AWDs that are less than 100%. It would be more accurate to say 'may be reduced' instead of 'may be less than 100%'. It would be helpful to acknowledge groundwater AWDs are based on a percentage of the specified surface water AWD to reflect the degree of connectivity and responsiveness between groundwater and surface water systems.</p>	Request that the authors revise this text and reviewing other reports to see if a similar problem is present.
15.	As above	The audit team was advised that the data reported to the MDBA for unregulated rivers, including the	References the wrong plan	Request that the authors correct this text or clarify that the Peel is

		Namoi unregulated river water sources...		included in Namoi reporting to MDBA
16.	As above	...annual extractions.in the preceding three water...	Typographical error (also present in the Peel and Namoi reports)	Request that the authors correct this text

Comments and suggested editorial corrections in relation to draft audit report for the Water Sharing Plan for the Peel Valley Regulated, Unregulated, Alluvium and Fractured Rock Water Sources 2010

No	Reference	Statement	COMMENT	ACTION
17.	2 Introduction Background	<i>Namoi report pg. 10:</i> 'applies to 26 unregulated water sources grouped into the Namoi Unregulated Rivers Extraction Management Unit' <i>Peel report pg. 11:</i> 'Namoi Unregulated Rivers Extraction Management Unit (composed of five unregulated water sources)'	The Namoi Unregulated Rivers Extraction Management Unit contains water sources from both the Namoi and Peel plans. The wording in the Namoi and Peel reports should reflect this.	Request that the authors consider revising this text
18.	3 Audit findings Criterion: Part 2 Vision, objectives, strategies and performance indicators Findings against criterion lines of inquiry Pg. 23	WSP for the Peel Valley Regulated, Unregulated, Alluvial and Fractured Rock Water Sources WSP 2012.	Alluvial should be Alluvium. Plan year should be 2010.	Request that the authors correct this text

19.	3 Audit findings Criterion: Part 6 System operation rules In regard to the environmental release rules how do the auditee agencies ensure the rules are followed? Pg. 25	No statement provided on either the stimulus flow or the ECA; only the minimum daily release rules are mentioned	The enlargement of Chaffey Dam was completed in 2016 which triggered a major change in the operation of cl. 31. The audit report does not address this transition or processes to support the transition.	Suggest the authors consider revising text to address both stimulus flow and ECA and 2016 operational transition. Suggest authors review other sections of the WSP that may have changed as a result of the enlargement of Chaffey Dam and provide commentary if required.
20.	3 Audit findings Criterion: Part 7 Limits to the availability of water Pg. 26	The Peel Unregulated Rivers Water Source is part of the Namoi Unregulated Rivers EMU	Reference should be 'The Peel Unregulated River Water Sources are part of the Namoi Unregulated Rivers EMU'.	Request that the authors correct this reference
21.	3 Audit findings Criterion: Part 7 Limits to the availability of water Conclusion Pg. 26	Peel Unregulated Water Sources	Reference should be to 'Peel Unregulated River Water Sources'	Request that the authors correct this reference
22.	3 Audit findings Criterion: Part 7 Limits to the availability of water Findings against criterion lines of inquiry Has Division 1 Long term average annual extraction limits been given effect to? Pg. 27	Statements regarding LTAAEL assessment for the Peel Regulated River	Note that for the Peel Regulated River Water Source clause 39 specifies the LTAAEL as the lesser of the stated LTAAE in 39(2)(a) or in 39(2)(b) (MDB cap). For this water source the cap figure is lower. Given annual assessments have been provided to MDBA as stated in paragraph 4, Recommendation 3 may need to be reviewed.	Request that the authors consider reviewing text in Recommendation 3 regarding the Peel Regulated River Water Source

23.	As above	... Namoi Regulated River Water Source...	Either 'Upper Namoi Regulated River Water Source' or 'Lower Namoi Regulated River Water Source' or both should be used unless the reference is meant to be to the Peel Regulated River Water Source.	Request that the authors correct this reference
24.	3 Audit findings Criterion: Part 7 Limits to the availability of water Findings against criterion lines of inquiry Are available water determinations managed in line with Division 2? Pg. 28	Dol officers	Reference should be updated to the appropriate department name	Request that the authors correct this reference
25.	3 Audit findings Criterion: Part 7 Limits to the availability of water Findings against criterion lines of inquiry Are available water determinations managed in line with Division 2? Pg. 28	Specific purpose access licences, such as domestic and stock or local water utility access licences, generally receive 100 per cent of their share component	Although the statement is generally true, it would be more accurate in this report to refer to the specific arrangements in place under cl. 48 for Tamworth Regional Council. In the Peel Regulated River Water Source, an available water determination of 70% of share components is made at the commencement of each water year for local water utility access licences. This may be increased to 100% via an additional AWD if additional water is available.	Request that the authors consider revising text

Comments and suggested editorial corrections - draft audit report for the Water Sharing Plan for the Namoi Unregulated and Alluvial Water Sources 2012

No	Reference	Statement	COMMENT	ACTION
26.	3 Audit findings Criterion: Part 6 Limits to the availability of water Findings against criterion lines of inquiry	... Namoi Regulated River Water Source...	Either 'Upper Namoi Regulated River Water Source' or 'Lower Namoi Regulated River Water Source' or both should be used.	Request that the authors correct this reference

	Has Division 1 Long term average annual extraction limits been given effect to? Pg. 25			
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Comments and suggested editorial corrections – draft audit report for the Water Sharing Plan for the Richmond River Area Unregulated, Regulated and Alluvial Water Sources 2010

No	Reference	COMMENT	ACTION
27	Clause 39	Metering data is limited for the water sources of this plan. Improved data should be available via the new metering requirements.	Consider mentioning that this will be improved by the roll out of the new metering requirements



CM9 Ref. BN19/6751

Alluvium Consulting
Building 2, 54 McCaughey St Turner
ACT 2612
Email:

Dear

Comment on s.44 Water Sharing Plan audit reports

Thank you for your letter of 22 August 2019 to the Natural Resources Access Regulator, requesting comment on s.44 WSP audit reports.

NRAR is now working to a risk-based, proactive Monitoring and Audit schedule. The following region and/or industry specific campaigns have been undertaken recently:

- Coffs Harbour Horticulture Water Compliance Project
- Operation Yadhala Mil, auditing the Barwon-Darling from Bourke to Mungindi
- Operation Dhirri Dhirri in the Hunter

Performance indicators may be further refined for the monitoring and audit program, to better estimate compliance within each WSP area.

Reactive monitoring and inspections continue, in response to reports, incidents or other intelligence.

Procedures continue to be documented to ensure consistent, risk-based and best practice operations.

NRAR has worked with DPIE to refine agency roles and responsibilities in regard to mandatory conditions, including notification. These arrangements will take effect shortly.

I refer you to the Progress Report for the Natural Resources Access Regulator for the financial year ended 30 June 2019. This provides an overview of NRAR's activities for the first 12 months since establishment. It has been prepared for presentation to the Parliament of New South Wales, as required by and in accordance with the Natural Resources Access Regulator Act 2017. The Report may be accessed via this link:

https://www.industry.nsw.gov.au/data/assets/pdf_file/0007/272689/NRAR-progress-report-2018-19.pdf

Thank you again for your letter. I have asked that Anna Browne, Project Officer, be available should you need further information or wish to discuss this matter further. Ms Browne can be contacted on [REDACTED].

Yours sincerely

Grant Barnes
Chief Regulatory Officer

3/10/2019

3 October 2019

Project Manager
Alluvium Consulting Australia
Building 2, 54 McCaughey St
Turner ACT 2612

Dear

Draft Section 44 Compliance Audit Reports for 25 Water Sharing Plans

Thank you for your letter dated 22 August 2019 on section 44 Compliance Audit Reports (Reports).

Please find below additional comments on specific recommendations pertaining to WaterNSW.

A. Greater Metropolitan Region Unregulated River Water Sources 2011 (Recommendation 3)

Finding: The audit team found that Part 6 cl. 39A of the WSP for the Greater Metropolitan Region Unregulated River Water Sources 2011 was only partially given effect during the audit period. Environmental release rule investigations for a number of structures operated by utilities required under this clause of the WSP by the end of year 5 were not all given effect, and related mandatory conditions were not all imposed. The audit team found that Part 6 cl. 39A (5)(a), cl. 39A (7)(a) and cl. 39A (10) were not given effect as required by the end of year 5 of the WSP.

Recommendation: DPIE – Water, NRAR and WaterNSW to give effect to Part 6 cl. 39A investigations into environmental release rules, including giving effect to mandatory conditions to require the investigations.

WaterNSW Comments:

We disagree with the recommendation, in so far as it applies to WaterNSW. Given the changes in the water sector with the formation of WaterNSW and NRAR, investigations into environmental release rules is no longer our responsibility. We can carry out investigations under direction from DPIE or NRAR but they are the ones that need to drive this process.

B. Peel Valley Regulated, Unregulated, Alluvium and Fractured Rock Water Sources 2010 (Recommendation 5)

Finding: The audit team found evidence that Part 12 of the WSP for the Peel Valley Regulated, Unregulated, Alluvium and Fractured Rock Water Sources 2010 was not being given effect to in full. Errors were found in the application of the mandatory conditions that apply to WALs. The error found was the absence of mandatory conditions that were required to implement the provisions for part of the audit period.

Recommendation: WaterNSW and NRAR to give effect to Part 12 cl. 89 of the WSP to ensure licences have the mandatory conditions required to implement the provisions of the WSP.

WaterNSW Comments:

For Peel Valley, WaterNSW will need to wait for DPIE to develop the proposed changes to Part 12 Clause 89 as they are responsible for drafting the mandatory licence conditions. WaterNSW will thereafter notify licence holders of the mandatory licence conditions, as per the provisions of the WSP.

C. Tweed River Area Unregulated and Alluvial Water Sources 2010 (Recommendation 5)

Finding: The audit team found that Part 11 cl. 58 of the WSP for the Tweed River Area Unregulated and Alluvial Water Sources 2010 was only partially given effect to, because WaterNSW and DPIE - Water have not been able to identify the benchmark number of shares in the Rous River Tidal Pool Management Zone at the commencement of the WSP.

Recommendation: DPIE - Water and WaterNSW to give effect to Part 11 cl. 58 of the WSP by having information and resources in place to enable this clause to be implemented.

WaterNSW Comments:

WaterNSW depends on DPIE to provide information to "benchmark number of shares in the Rous River Tidal Pool Management Zone". Once this information is available, WaterNSW will act accordingly.

D. Tweed River Area Unregulated and Alluvial Water Sources 2010 (Recommendation 4)

Finding: The audit team found that Part 9 cl. 42 and cl. 43 of the WSP for the Tweed River Area Unregulated and Alluvial Water Sources 2010, regarding flow class conditions, was only partially given effect to. The flow classes have not been specified on water access licences (WALs) but have been specified on water supply work approvals. The flow classes have been given legal (regulatory) effect to in that, in practice, the WALs only allow taking of water in compliance with approval conditions. However, there may be a risk to enforceability and a risk of licensee confusion where rules are not given effect to as intended by the WSP.

Recommendation: WaterNSW to give effect to Part 9 cl. 42 and cl. 43 of the WSP by installing these conditions onto WALs.

E. Towamba River Unregulated and Alluvial Water Sources 2010 (Recommendation 4)

Finding: The audit team found that Part 8 cl. 40 and cl. 41 regarding flow class conditions was only partially given effect to. The flow classes have not been specified on water access licences (WALs) but have been specified on water supply work approvals. The flow classes have been given legal (regulatory) effect to in that, in practice, the WALs only allow taking of water in compliance with approval conditions. However, there may be a risk to enforceability and a risk of licensee confusion where rules are not given effect to as intended by the WSP for the Towamba River Unregulated and Alluvial Water Sources 2010.

Recommendation: WaterNSW to give effect to Part 8 cl. 40 and cl. 41 of the WSP by installing these conditions onto WALs.

F. Murrah-Wallaga Area Unregulated and Alluvial Water Sources 2010 (Recommendation 4)

Finding: The audit team found that Part 9 cl. 42 and cl. 43 of the WSP for the Tweed River Area Unregulated and Alluvial Water Sources 2010, regarding flow class conditions, was only partially given effect to. The flow classes have not been specified on water access licences (WALs) but have been specified on water supply work approvals. The flow classes have been given legal (regulatory) effect to in that, in practice, the WALs only allow taking of water in compliance with approval conditions. However, there may be a risk to enforceability and a risk of licensee confusion where rules are not given effect to as intended by the WSP.

Recommendation: WaterNSW to give effect to Part 9 cl. 42 and cl. 43 of the WSP by installing these conditions onto WALs.

WaterNSW Comments for D, E and F above

WaterNSW depends on DPIE to "install these conditions onto WALs". Once these conditions are on water access licences, WaterNSW will then ensure licence holders are notified and that usage is allocated as per the WSP.

Whilst it's true that WaterNSW is the accountable party for notifying customers of conditions relevant to their WALs, there is a dependency on DPIE to create those conditions and load those conditions into the Water Licencing System and other associated IT infrastructure in order to allow WaterNSW to conduct the process to notify customers.

We have not made specific comments to the recommendations within the audit reports that are addressed to the NSW Government. We understand that through the Regional Water Senior Officers Group; DPIE Water, NRAR and OEH will map out the post audit government response. We also understand that coordination with WaterNSW was discussed when the group met on 14 June 2019 and that DPIE will be in touch with WaterNSW.

WaterNSW is committed to meeting its obligations and maintaining a high level of compliance.

Please contact Clarita Imperial on [REDACTED] should you wish to discuss any aspect of WaterNSW's response.

Yours sincerely,

A handwritten signature in blue ink, appearing to be "D. Harris", written over the "Yours sincerely," text.

David Harris
Chief Executive Officer



DOC19/853922

Project Director
Alluvium Consulting
Building 2, 54 McCaughey St
Turner ACT 2612

Dear

Draft section 44 Water Sharing Plans compliance audit reports – 25 reports

Thank you for your letter seeking comments on the 25 draft s44 audit reports for the following Water Sharing Plans:

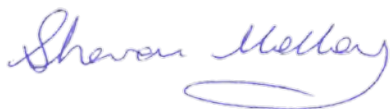
Water Sharing Plans

1. Belubula Regulated River Water Source 2012
2. Lachlan Unregulated and Alluvial Water Sources 2012
3. Castlereagh River Unregulated and Alluvial Water Sources 2011
4. Macquarie Bogan Unregulated and Alluvial Water Sources 2012
5. NSW Border Rivers Unregulated and Alluvial Water Sources 2012
6. Barwon-Darling Unregulated and Alluvial Water Sources 2012
7. Murrumbidgee Unregulated and Alluvial Water Sources 2012
8. Lower Murray-Darling Unregulated and Alluvial Water Sources 2011
9. Murray Unregulated and Alluvial Water Sources 2011
10. Intersecting Streams Unregulated and Alluvial Water Sources 2011
11. Peel Valley Regulated, Unregulated, Alluvium and Fractured Rock Water Sources 2010
12. Namoi Unregulated and Alluvial Water Sources 2012
13. NSW Murray Darling Basin Porous Rock Groundwater Sources 2011
14. Gwydir Unregulated and Alluvial Water Sources 2012
15. Lower Murray Shallow Groundwater Source 2012
16. NSW Murray Darling Basin Fractured Rock Groundwater Sources 2011
17. NSW Great Artesian Basin Shallow Groundwater Sources 2011
18. Tweed River Area Unregulated and Alluvial Water Sources 2010
19. Murrah-Wallaga Area Unregulated and Alluvial Water Sources 2010
20. Towamba River Unregulated and Alluvial Water Sources 2010
21. Richmond River Area Unregulated, Regulated and Alluvial Water Sources 2010
22. Bega and Brogo Rivers Area Regulated, Unregulated and Alluvial Sources 2011
23. North Western Unregulated and Fractured Rock Water Sources 2011
24. Greater Metropolitan Region Unregulated and Fractured Rock Water Sources 2011
25. Greater Metropolitan Region Unregulated River Water Sources 2011

The Department of Planning, Industry and Environment – Biodiversity and Conservation Division has checked the accuracy of findings of the draft audits and has no further comments to add.

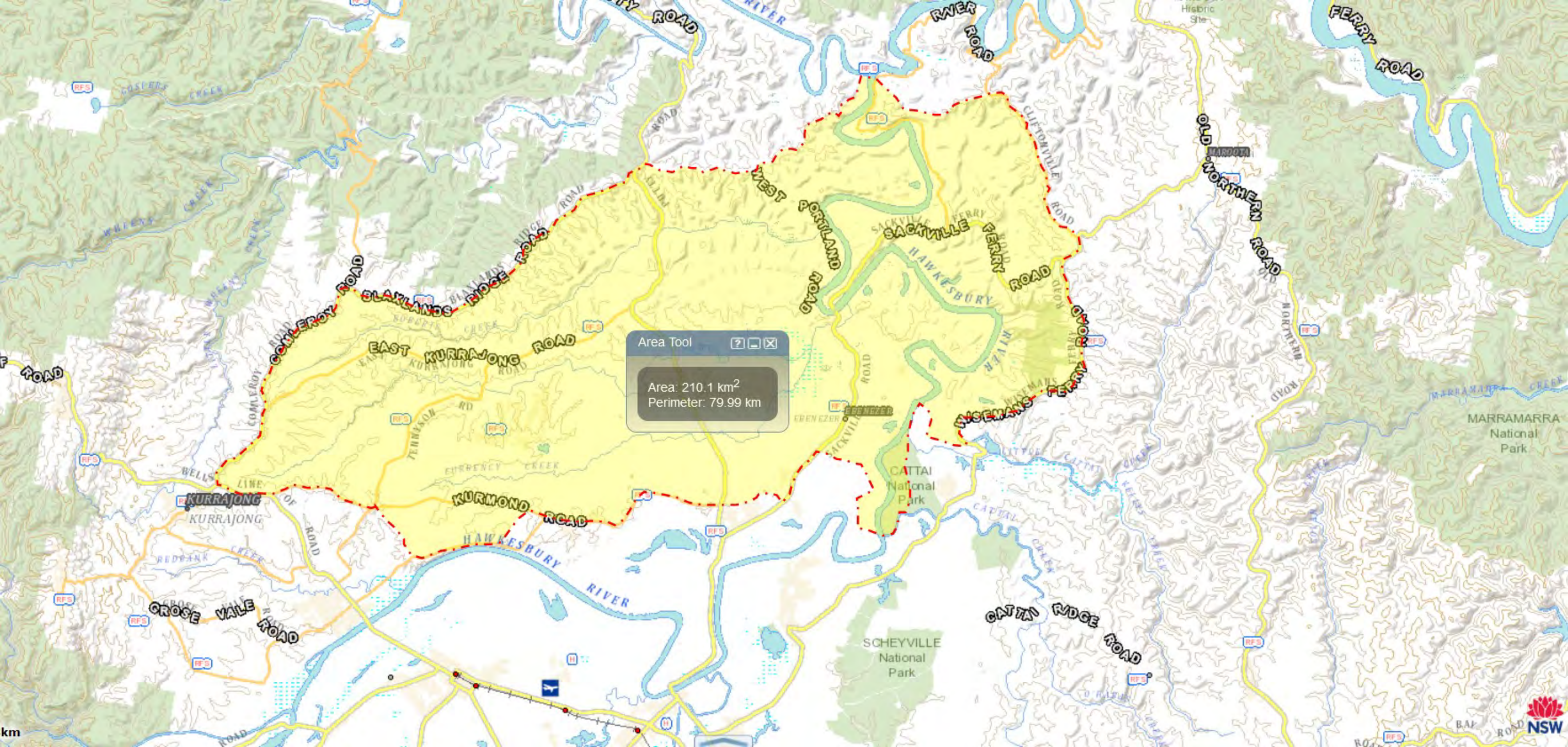
If you require any additional information please contact Justen Simpson, Manager Environmental Water Governance at [REDACTED]

Yours sincerely



Sharon Molloy
Acting Executive Director
Biodiversity and Conservation Division

Date 8/10/2019



Area Tool
Area: 210.1 km²
Perimeter: 79.99 km



POMEROI ROAD

RANGE ROAD

GURRUNDAH ROAD

COPPERMINE HILL

BALD HILL

BAW BAW HILL

LAKE SOOLEY

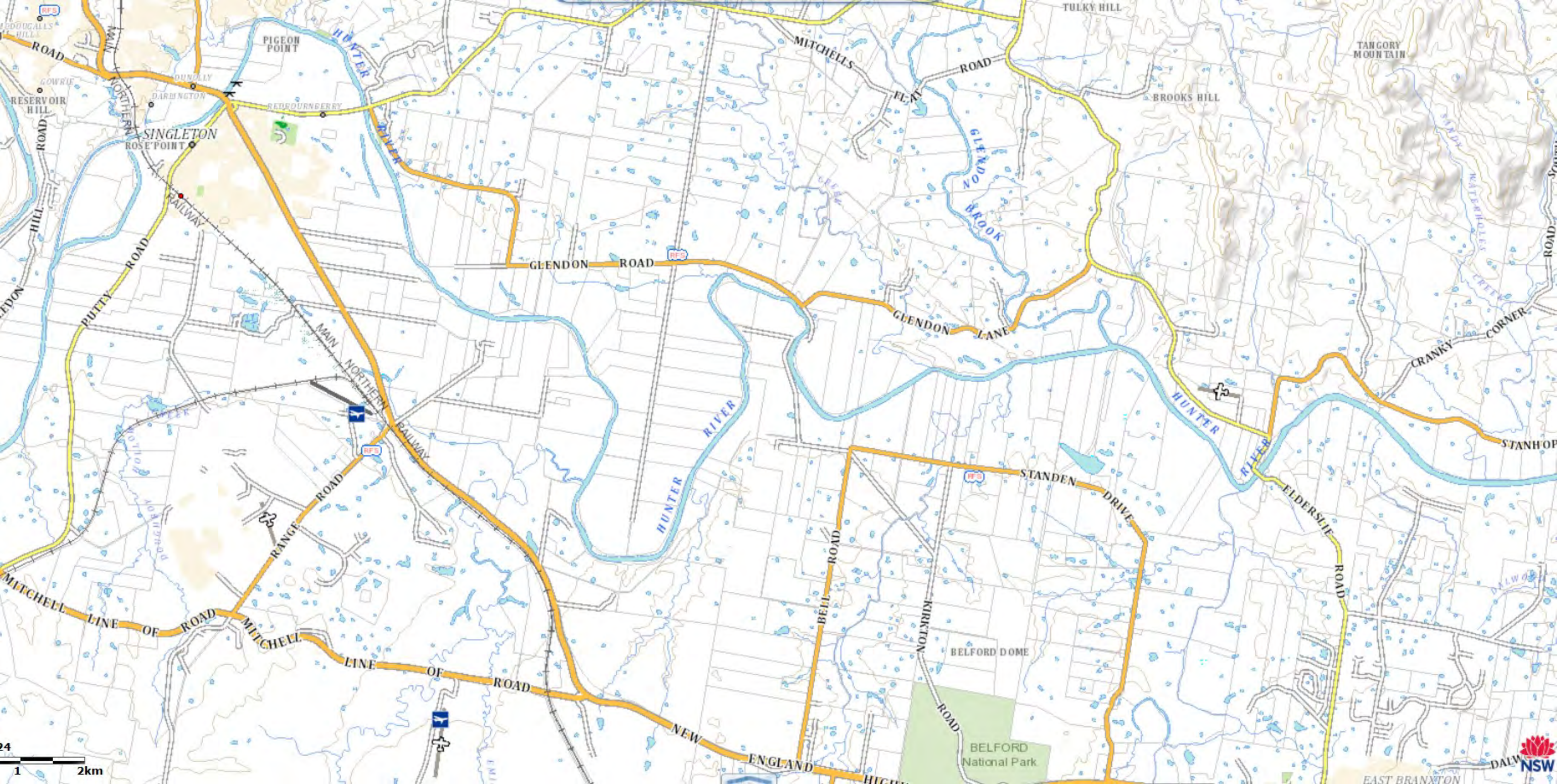
SOOLEY DAM

MONASTERY HILL

GOULBURN

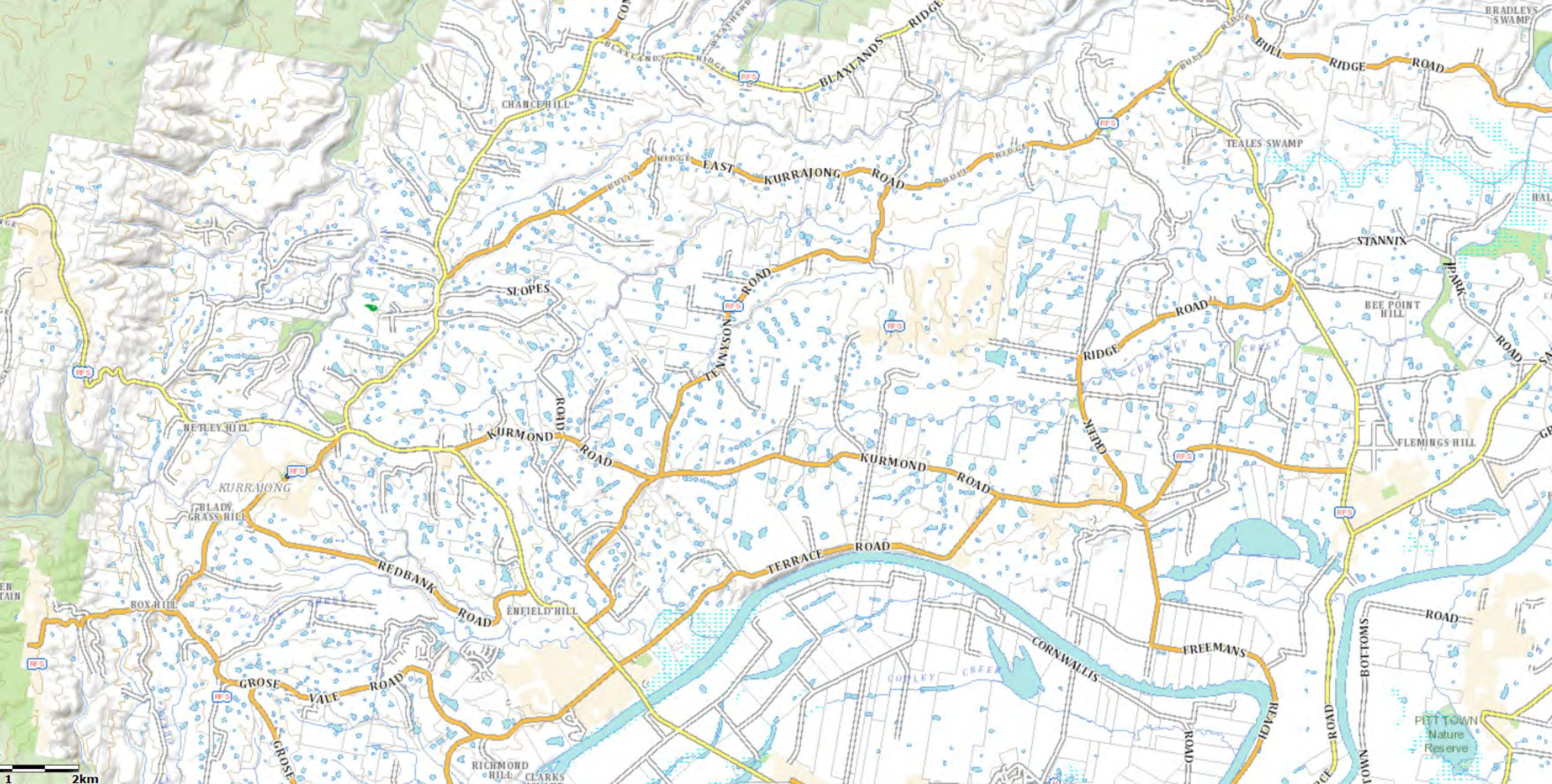
2km



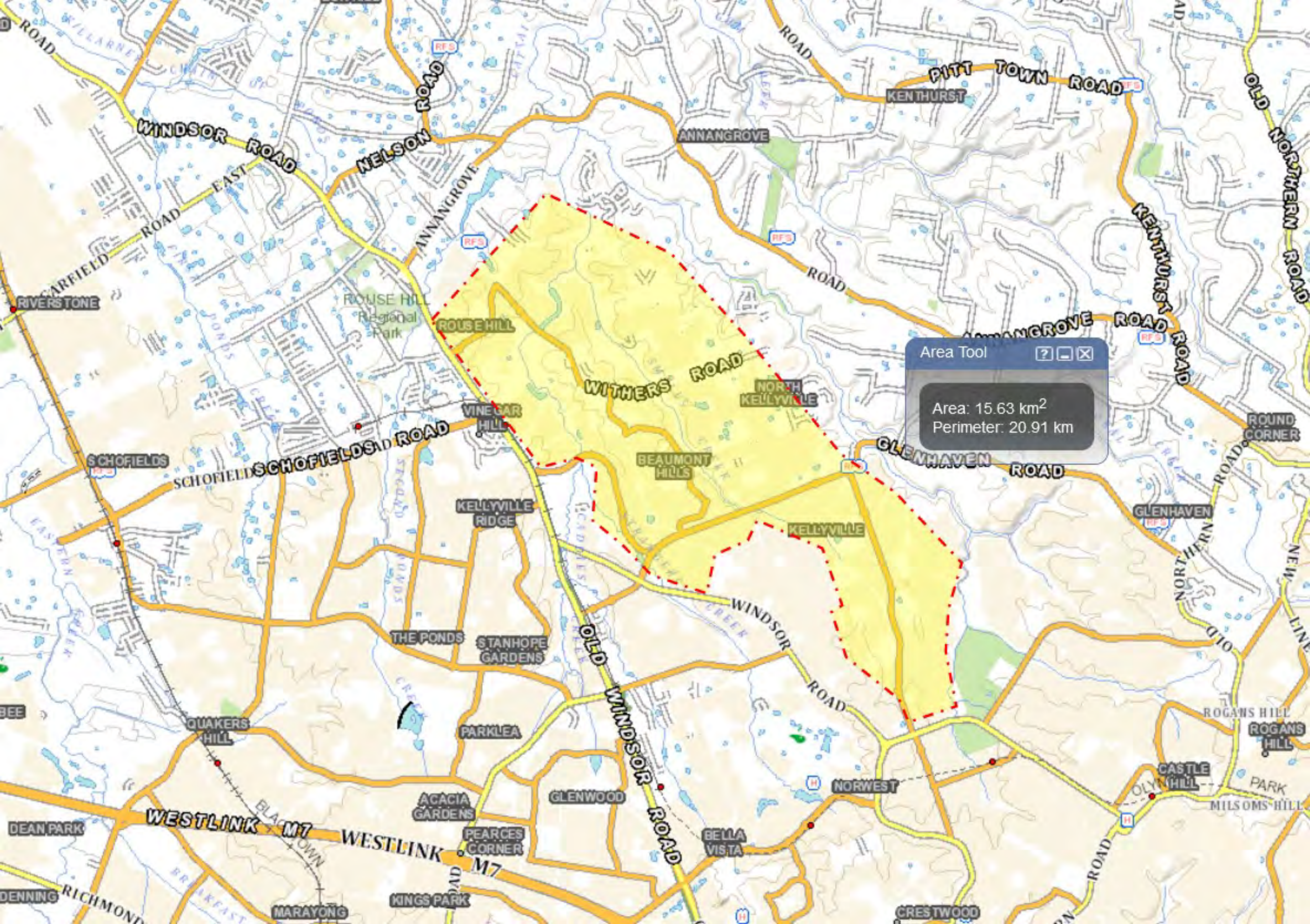


24
1 2km

DALW NSW

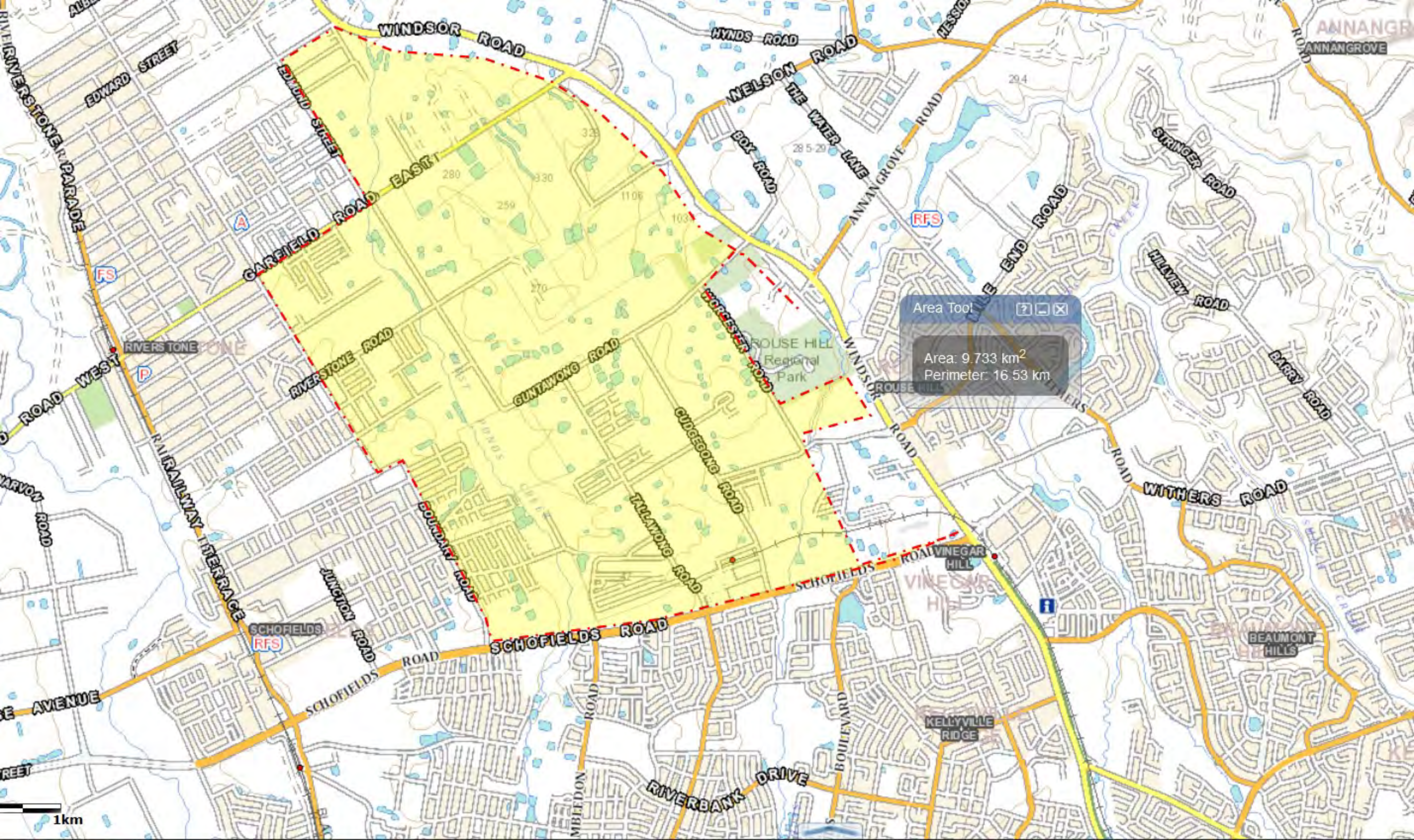


1 2km



Area Tool

Area: 15.63 km²
Perimeter: 20.91 km



Area Tool ? □ ✕

Area: 9.733 km²
Perimeter: 16.53 km

1km