

Great Artesian Basin Sustainability Initiative: Phase 3 - State of South Australia Implementation Plan 2009-2010

THE INTERGOVERNMENTAL PARTNERSHIP AGREEMENT
ON THE GREAT ARTESIAN BASIN SUSTAINABILITY INITIATIVE

Preliminaries

1. This Implementation Plan is created subject to the provisions of the *Intergovernmental Agreement on Federal Financial Relations* and the *National Partnership Agreement on the Great Artesian Basin Sustainability Initiative* ('the NPA') and should be read in conjunction with those agreements.
2. The Commonwealth has agreed to provide up to \$5.5 million to the State of South Australia ('the State') under the third phase of the Great Artesian Basin Sustainability Initiative ('the Program') to assist in the capping and piping of all Great Artesian Basin bores legally operating in an uncontrolled state and related activities ('Projects').
3. The State is committed to the capping and piping of all Great Artesian Basin bores legally operating in an uncontrolled manner and has nominally allocated \$1.1 million (GST exclusive) to Projects funded under the NPA for 2009-2010.
4. Should the funding referred to in Clauses 2 and 3 likely be insufficient to cap and pipe all such bores in the State, the State shall ensure such funding meets agreed selection criteria that have the primary aims of maximising water savings and providing the greatest protection to natural springs in the Basin.

Enforceability of this Implementation Plan

5. The Parties do not intend any of the provisions of this Implementation Plan to be legally enforceable. However, that does not lessen the Parties' commitment to this Implementation Plan.

Performance benchmarks and milestones

6. The State agrees to meet the performance benchmarks, indicators and/or milestones identified in the Projects Submission found at Annexure 1 to this Implementation Plan.

Roles and responsibilities of each party

The Commonwealth

7. Having completed an assessment of proposed Projects in accordance with the Assessment Guidelines and Project Eligibility Criteria contained in Schedule A to the NPA, the Commonwealth will provide a financial contribution of up to \$1.1 million (GST exclusive) to South Australia for Projects specified in the Projects Submission for 2009-2010.

The State

8. The State will:

- (a) ensure that Projects specified in the Projects Submission are undertaken efficiently with fair, equitable and transparent processes and in conformity with the State's best technical, environmental and financial practices;
- (b) deliver each approved Project in accordance with the Projects Submission;
- (c) prepare an Annual Performance Report by 31 July 2011 on achievements against performance benchmarks, indicators and milestones specified for all Project activities in the annexed Projects Submission, in a form similar to that outlined in Annexure 2 below;
- (d) ensure to the fullest extent possible that at least 50 per cent of the water saved under the Great Artesian Basin Sustainability Initiative will be directed to restoring pressure in the Basin and not be reallocated for consumptive purposes; and
- (e) ensure that funding will not be used for increasing the watered area of a property (The watered area of a property will be determined by the application of a formula described in the Projects Submission to the current network of open bore drains). Funding will be used to replace bores and existing bore drains, to decommission bores, and for other approved projects. In the case where two bores are replaced by a single bore, additional piping will be installed to maintain the distribution of water to the point of the decommissioned bore. If the geographical location of the watered area on the property supported by the new controlled watering system is altered by a Project, the State will ensure that:
 - i the overall area served by that system is no greater than the watered area served by the current uncontrolled system;
 - ii it is no more costly than the cost that would have been incurred to water the original geographical area with a controlled watering system; and
 - iii that the landholder acts in accordance with the requirements of the "clearing by grazing" section of the Native Vegetation Act 2003, to protect water remote areas .

Funding, milestones and payments

9. The Commonwealth will provide to the State funding in accordance with the following Milestone Funding Schedule:

Milestone	Performance benchmark	Performance indicator	Date for payment on completion of performance benchmark	Payment
1	Approval of the Implementation Plan.	Implementation Plan submitted by South Australia agreed to by Commonwealth Minister.	Within 60 days of Commonwealth's Minister's agreement.	One third of the Commonwealth's share of the total cost of all Projects agreed under the Implementation Plan.
2	South Australia completes specified activities for Projects contained in the agreed Projects Submission annexed to the Implementation Plan.	Authorised South Australia official certifies that the agreed specified activity (that approximates the midpoint of the Project) has been completed in accordance with the agreed Projects Submission.	By 7 February 2011, subject to such certification being made by the authorised official by 31 December 2010.	One third of the Commonwealth's share of the total cost of the agreed Project specified in the Projects Submission.
3	South Australia completes all Projects contained in the agreed Projects Submission annexed to the Implementation Plan.	Authorised South Australian official certifies that specified Projects have been completed in accordance with the agreed Projects Submission.	By 7 June 2011, subject to such certification being made by the authorised official by 30 April 2011.	One third of the Commonwealth's share of the total cost of the agreed Project specified in the Projects Submission.

10. Payment will be provided by the Commonwealth Treasury to the South Australian Treasury in accordance with the above Funding Schedule arrangements. If the Milestone 2 payment is not claimed in accordance with the above Funding Schedule, it will become payable at the same time the Milestone 3 payment is made following the completion of the Projects.

Variation of Projects Submission

11. Where either the Commonwealth or the State considers the performance of a Project will not meet the performance benchmarks or indicators specified in the Projects Submission, the Parties will immediately:
 - a) review the Project with a view to reaching agreement on how best to meet those benchmarks or indicators (such as through varying the Project's activities); and
 - b) if agreement cannot be reached, either Party may thereafter terminate the Project at a subsequent date notified in writing to the other Party.
12. If the Project activities are varied under Clause 11, the Commonwealth's contribution will, in the absence of agreement to the contrary, change proportionately to the variation.
13. If a Project is terminated under Clause 11, the Commonwealth will contribute only for activities completed before the date that the Project is terminated.
14. If a Project is varied or terminated under Clause 11, any such change will be recorded as a variation to the Projects Submission.

Variation or termination of Implementation Plan

15. This Implementation Plan may be varied or terminated at any time by agreement in writing by the Ministers or their delegates and under the terms and conditions as agreed by the Ministers or their delegates.

Notice of Details for this Program

16. A notice relating to this Implementation Plan and relevant Projects, rather than the NPA generally, is to be in writing and dealt with as follows:
 - a) *if given by the State to the Commonwealth:*
 1. Assistant Secretary
 2. Aquatic Systems Health Branch
 3. Water Resource Division
 4. Department of Environment, Water, Heritage and the Arts
 5. GPO Box 787
 6. Canberra ACT 2600
 7. Contact number 02 6274 2223, fax number 02 6274 2186;
 8. email address: tanja.civjanovic@environment.gov.au
 - b) *if given by the Commonwealth to the State:*
 9. Deputy Chief Executive
 10. Department for Water
 11. GPO Box 2834
 12. Phone number 84636949, Fax number 84636999
 13. ADELAIDE 5000
 14. email address: tim.goodes@sa.gov.au

Projects Submission for 2009-2010

NATIONAL PARTNERSHIP AGREEMENT
THE GREAT ARTESIAN BASIN SUSTAINABILITY INITIATIVE

Projects

Summary and duration of Projects

- A1 The projects comprise:
- i. the decommissioning of nine wells and the drilling of two replacement wells;
 - ii. the rehabilitation of one well;
 - iii. Installation of 15 kilometres of piping;
 - iv. an investigation into the failure of FRP well casing and cooling grid upgrades; and;
 - v. an associated management, monitoring and reporting project.
- A2 All on-ground works relate to wells either previously rehabilitated (or attempted to be rehabilitated) under GABSI or other government programs, or wells included on the Department of Water's previous GABSI lists but not completed due to funding constraints.
- A3 Where a project addresses critical infrastructure failure (that is, failure of infrastructure that was previously constructed or rehabilitated by a project funded previously under GABSI or other government programs), no water savings shall be claimed if a claim for water savings was made at the time of the conclusion of the previous project.
- A4 It is anticipated that all projects included in this Implementation Plan will be completed in the 2010-2011 financial year.

Aim of Projects

- A5 The aim of the submitted projects is to achieve further water savings and pressure recovery and protect water savings and pressure recovery already achieved under GABSI or other government programs in the Great Artesian Basin (GAB).

Project Requirements

- A6 All projects will contribute in the following ways to the outcomes of the National Partnership Agreement:
- i. Achieving water savings and contributing towards pressure recovery in the GAB through the replacement of old wells operating in either an uncontrolled state or leaking below ground level and the replacement of legally operating bore drains with an efficient, controlled water reticulation system; and
 - ii. Promoting sustainable water and land management practices through the provision of a handbook (published in 2005) to landholders regarding the operation and maintenance of the proposed infrastructure.

Project Details

A7 Details for the proposed projects are provided in the following tables:

- i. Table 1A - GAB Infrastructure Projects 2009 - 2010, which contains a list of projects outside the South West Springs Zone.
- ii. Table 1B – GAB Infrastructure Projects 2009-2010 – Springs, which contains a list of projects in the South West Springs Zone, which will maintain or improve the flow of water to mound springs.
- iii. Table 1C – Proposed other projects, which contains details of the Management, Monitoring and Reporting Project; FRP Project and the Redesign of Cooling Infrastructure Project.
- iv. Table 1 D – Additional Required Data, which provides additional information concerning estimation of water savings, selection criteria and quality assurance.

A8 A mid-point for a project described at Tables 1A or 1B (the attainment of which is required for a Milestone 2 payment) will be reached when the mid-point of progress payments made to a contractor under the project has been achieved.

Table 1A - GAB - Infrastructure Projects 2009 - 2010

Well Name (Project RN No.)	Unit No.	Pastoral lease (landholder name)	Latitude	Longitude	GAB Mgmt Zone	Priority	Discharge Prior Flow (l/s)	Design Flow (l/s)	Estimated Water Saved (ML/a) ¹	Estimated Drain Shutdown (km ³)	Estimated Piping Replaced (km ³) ²	Will bore piping extend the geographic boundaries of the current welded area (Y/N)	If so, have measures been implemented to protect water remote areas (Y/N/NA)	Activity ³	Estimated Financial Year for Completion	Planned GABSI funding STATE (\$,000)	Planned GABSI funding CMMW/TH (\$,000)	Planned GABSI funding U/HOLDER (\$,000)	Planned in- kind contribution in form U/HOLDER ⁴ (\$,000)	Critical Infrastructure Failure (Y/N)	Estimated \$ of Government funding per ML/a saved ⁵
WHITE BULL KIDMANS No 2	6442-2	Kalamuna	27.901545	132.925643	Central	3	-	-	tbd	-	0	N		Rehabilitate	10/11	825	825	0	0	Y	-
NEW KIDMANS No 2	7036-7	Dunyambie	30.942925	140.261712	Central		u.g.	0	0.24	0	0	N		Decommission	10/11	125	125	0	0	Y	-
		Dunyambie			Central			tbd	tbd		tbd	N	N/A	New replacement bore	10/11	125	125	0	0		

NOTES

- 1 A water savings target is not required for Critical Infrastructure Failure Projects.
- 2 Pipe means water delivery infrastructure such as piping, relief valves, tanks and troughs.
- 3 Bore rehabilitation means: recondition or repair of existing bore, Bore decommissioning means shut down of existing bore.
- 4 If no landholder contribution explain reasons.
- 5 tbd - to be determined.
- u.g. - underground flow, unable to determine rate.

Well Name (Project RN No.)	Unit No.	Comments
WHITE BULL	6442-2	<ul style="list-style-type: none"> • Well used as a critical infrastructure failure • A significant damnable leak has developed and work is required to prevent potential well failure • Rehabilitation of a lined well would cost significantly more due to aquifer characteristics. Well depth - 150m, water temperature - 9°C, shut in pressure - 1250 KPa, flow rate after fix
KIDMANS No 2	7036-7	<ul style="list-style-type: none"> • This well is part of the GAB dedicated monitoring network. • Well is leaking down hole and transmitting minimal flow to surface • The replacement well is also to be used as a monitoring well as part of the national GAB artesian network.
NEW KIDMANS No 2		

Table 1B – GAB - Infrastructure Projects 2009 – 2010 – Springs

Name RN No.)	Unit No.	Pastoral Lease (Landholder name)	Latitude	Longitude	GAB Mgmt Zone	Priority	Discharge Prior (l/s)	Design Flow (l/s)	Estimated Water Saved (ML/yr)	Estimated Drain Shutdown (hrs)	Estimated Piping Installed (km ²)	Will bore extend outside the geographic boundaries of the current watered area (Y/N)	If so, have measures been implemented to protect water remote areas (Y/N/NA)	Activity	Estimated Financial Year for Completion	Planned GABS funding STATE (\$,000)	Planned GABS funding CROWTH (\$,000)	Planned GABS funding LANDHOLDER (\$,000)	Planned in- kind contribution from LANDHOLDER (\$,000)	Critical Infrastructure Failure (Y/N)	Estimated \$ of Government funding per ML saved
11YTH	6141-34	Peake	28.057497	136.054324	South West Springs	1	30	0	946	5	0	N		Decommission	10/11	225	225	0	0	N	476
11S N03	6241-5	Peake	28.312224	136.521234	South West Springs	2	15	0	473	3.8	0	N		Decommission	10/11	225	225	0	0	N	951
5 NEST 2)	6439-6	Muloolina	29.377324	137.761978	South West Springs		10	0	334	4.1	0	N		Decommission	10/11	17.5	17.5	0	0	N	105
1 FORD	6239-4	Anna Creek	29.239015	136.658864	South West Springs			0	tbid?	0.65	0	N		Decommission	10/11	10	10	0	0	N	-
105 1 RE	6538-39	Murree	29.657142	138.113647	South West Springs			0		0	0	N		Decommission	10/11	17.5	17.5	0	0	N	-
CREEK	8538-4	Murree	29.613525	138.104821	South West Springs			0		0	0	N		Decommission	10/11	10	10	0	0	N	-
SONS 1 RE	6538-2	Murree	29.544847	138.077019	South West Springs			0		0	0	N		Decommission	10/11	17.5	17.5	0	0	N	-
AVIDS PIPING		Murree			South West Springs			tbid	tbid		15	N	N/A	New replacement bore	10/11	105	105	0	0	-	-
1 ONG ING 1 RE	5538-12	Mundowdna	29.661299	138.147741	South West Springs			0	tbid?		0	N		Decommission	10/11	12.5	12.5	0	0	N	-

Notes: A water savings target is not required for Critical Infrastructure Failure Projects

¹ Pipe means water delivery infrastructure such as piping, relief valves, tanks and troughs

² Bore rehabilitation means recondition or repair of existing bore, Bore decommissioning means shut down of existing bore

³ If no landholder contribution explain reasons

tbid – to be determined

u.g. – underground flow, unable to determine rate.

Well Name (Project RN No.)	Unit No.	Comments
BIG BLVTH 6141-34	6141-34	<ul style="list-style-type: none"> Well was drilled in 1918 and has been discharging in an uncontrolled state since then. Casing is no longer evident at surface and well is surrounded by a large wetland. Well is located in close proximity to numerous GAB springs. Previous attempts to rehabilitate well were not successful. Decommissioning will result in a significant flow saving and recovery in aquifer pressures are anticipated. This will enhance pressure readings in the Spring Zone through the GAB dedicated monitoring network.
JOHNSONS N03 6241-5	6241-5	<ul style="list-style-type: none"> Well was drilled in 1918 and has been discharging in an uncontrolled state since then. Casing is no longer evident at surface and well is surrounded by a wetland. Previous attempts to rehabilitate well were not successful. A replacement well was drilled under the GABS 2 program. Decommissioning will result in a significant flow saving and recovery in aquifer pressures are anticipated. This will enhance pressure readings in the Spring Zone through the GAB dedicated monitoring network.

CROWS NEST (L2)	6439-6	<ul style="list-style-type: none"> Decommission only Well is no longer required as replacement infrastructure has been previously installed Well remove potential for future pressure loss in Spring Zone
BESSYOND	6239-4	<ul style="list-style-type: none"> Decommission only Well is no longer required as replacement infrastructure has been previously installed
DAVIDS	6538-39	<ul style="list-style-type: none"> All three wells have failed down hole and no longer flow to surface All three wells are to be decommissioned and replaced by a single well (New Davids Bore) Appropriate piping and water delivery infrastructure will be required to maintain water supply at the three sites
FROME CREEK BORE	6538-4	
BRANSONS BORE	6538-2	
NEW DAVIDS BORE + PIPING		<ul style="list-style-type: none"> The Davids Bore replacement well will replace 3 existing unaccounted wells - Davids, Frome Creek and Branson Bore - and pipe the water to the relevant location. Location of the new well is yet to be determined but it is likely to be in the vicinity of the FN WAP Decommission only Well no longer flows to surface. Leaking down hole
COOLONG SPRING BORE	6538-12	

Table 1C - Proposed other projects

Project	Zone	Performance Target(s)	Proposed GABSI funding State \$(GST inc)	Proposed GABSI funding C'wealth \$(GST inc)	Estimated Financial Year for Completion
Management, Monitoring and Reporting for the 2009-2010 GABSI program.	N/A	<p>Ongoing, managed delivery of the proposed projects listed in Table 1a.</p> <p>Certification, by 30 April 2011, of milestone 1 and 2 achievements against Projects and Project subtasks listed in Tables 1a, 1b and 1c</p> <p>Certification, by 30 April 2011, of milestone 3 achievements against Projects and Project subtasks listed in Tables 1a, 1b and 1c</p> <p>Develop infrastructure management agreements between landholders and others utilising the water distribution system.</p>	\$175,000	\$175,000	2010-2011
<p>SUB TASKS</p> <p>Strategic oversight of GABSI project direction in South Australia</p> <p>Tendering and Contract management for Works</p> <p>In-field coordination of Works with Drilling Contractors and other Contractors</p> <p>Monitoring, review and reporting of progress towards GABSI objectives</p> <p>Provide a certification report to the satisfaction of the Australian Government on progress against projects listed in Table 1a and 1b of the 2009-2010 SA Implementation Plan as at 31 March 2011.</p> <p>Ensure consistency of project delivery with funding agreements and Strategic Management plan objectives</p> <p>Provide an interface with other initiatives and government departments including regional NRM bodies, and others as required</p> <p>Maintain design and quality assurance guidelines and procedures</p> <p>Provide an annual Performance Report on the delivery of GABSI 3 in 2009-2010 by 31 March 2011</p> <p>Gain in principal agreement of landholders and others utilising the wells for the program of works to be carried out.</p> <p>Locate suitable site for new well taking into consideration landholder and other user requirements and existing infrastructure</p> <p>Design water distribution infrastructure</p> <p>Develop a management agreement between all parties to ensure that both water rights and ongoing</p>					

Project	Zone	Performance Target(s)	Proposed GABSI funding State \$(GST inc)	Proposed GABSI funding C'wealth \$(GST inc)	Estimated Financial Year for Completion
<p>maintenance costs are distributed in a fair and equitable manner</p> <p>Inspect works carried out to ensure compliance with the project design and program requirements</p>					
Fibre Reinforced Plastic (FRP) casing	N/A	A report detailing casing failure, resin type, casing life expectancy and other relevant and pertinent facts in so far as possible given the extended time lapse and failure scenarios	\$50,000	\$50,000	2010 - 2011
<p>SUB TASKS</p> <p>Desk top study of the use of and failure rates of FRP in the GAB.</p> <p>Research and documentation into resin types and casing construction methodology.</p> <p>Limited field work to recover casing and test geophysical methodologies for detecting casing failure.</p> <p>Literature search and report on the use, issues associated with, advances in manufacture and suppliers of FRP type casing worldwide.</p>					
Redesign of cooling grid and cooling pond infrastructure.	central	<p>Test redesigned cooling grid</p> <p>Test pond construction methods to reduce pond water loss through seepage</p>	\$20,000	\$20,000	2010 - 2011
<p>Gain in principal agreement of landholders for the program of works to be carried out.</p> <p>Literature search and report on cooling grid and pond designs</p> <p>Locate suitable site for works (existing cooling grid) taking into consideration landholder and other user requirements</p> <p>Redesign cooling grid and pond infrastructure based on literature search</p> <p>Test development from redesign</p> <p>Report on costs associated with redesign and construction of new ponds/grids and produce estimates of long-term asset management costs.</p> <p>Develop a management process to ensure grids/ponds are maintained</p> <p>Inspect works carried out to ensure compliance with the project design and program requirements</p>					

Table 1D -Additional Required Data

<p>Estimation of Water Savings</p>
<p><i>Bore Decommissioning, Rehabilitation and Replacement-</i></p> <p>For 2009-2010: bore decommissioning will result in 100% water savings, bore rehabilitation will result in water savings in the case of high flowing bores, bore decommissioning and replacement will result in water savings for higher flowing bores. The uncertainty associated with the last two categories is due to the unknown water losses that occur underground. This approach is consistent with the methodology used to estimate water savings as a result of bore decommissioning, rehabilitation and replacement in GABSI-1 and GABSI-2. Water savings have traditionally been achieved by the landholder reducing the discharge from the bore in the cooler winter months when reduced evaporation means less flow is required to run the length of a bore drain. All rehabilitated and replacement bores will be fitted with control valves and closed cooling and distribution systems.</p> <p>For subsequent years of GABSI-3 the estimated water savings will be enforced by the requirement of the Water Allocation Plan for the Far North Prescribed Wells Area which contains the following stated Objectives:</p> <ol style="list-style-type: none"> 1. To ensure the drilling, plugging, backfilling or sealing of a well occurs in a manner that will minimise wastage and protect the quality of the underground water resources. 2. To protect the underground water resources from pollution, deterioration and undue depletion. 3. To ensure the integrity of the headworks of wells are maintained. <p>All rehabilitated and replacement bores will be fitted with control valves and closed cooling (when required) and distribution systems.</p> <p><i>Bore Drain Replacement (Piping)</i> - For all bore drain replacement works the water savings are estimated based on existing estimated historical bore drain flow less the combined flow required for allocated water points at 0.3l/s per watering points.</p> <p>In order to ensure the integrity of the estimated water savings in cases where the bore has been previously rehabilitated, the estimated water savings from bore drain replacement are reduced by the amount of water savings already attributed to the bore rehabilitation.</p>
<p>Process for Determining Voluntary interest</p>
<p>South Australia has instituted a program to rehabilitate/decommission or replace all uncontrolled wells and replace all bore drains with piped systems.</p>
<p>Selection Criteria For Decommissioning, Rehabilitation and Replacement Works</p>
<p><i>Eligibility</i> - The major infrastructure renewal/replacement activities to be supported under GABSI 3 will comprise:</p> <ul style="list-style-type: none"> • bore rehabilitation (including planning, management, relining, capping, plugging and redrilling); and • bore drain replacement (including planning, management and installing piping and watering points). <p>In general, the Commonwealth will not fund rehabilitation/replacement of any infrastructure constructed after the introduction of relevant State legislation that prevented the drilling of uncontrolled bores or water reticulation through open bore drains. Some exceptions to this might include bores and water distribution infrastructure previously rehabilitated under GABSI 1 or 2 or earlier government programs that have failed in highly corrosive areas or as a result of a generic failure of technology not due to the constructor's poor workmanship (which is subject to remedy under commercial law). Any such exceptions are to be negotiated with the Australian Government and specified in the respective Agreement.</p>

Selection Criteria and Ranking of Applicants

Projects selected for inclusion in the 2009-10 program were taken from the Department of Water's GAB well rehabilitation and decommissioning priority list developed during the GABSI 1 and 2 initiatives.

The selection criteria for inclusion included -

- proximity to mound spring complexes;
- the State's level of exposure to the risk of well failure and the consequence of such a failure;
- impact on pressure recovery and contribution to water saving targets; and
- technical complexity of project.

The State's intention, subject to funding availability, is that all wells on the priority list will be either rehabilitated or decommissioned by the end of this tranche of funding in 2014.

Eligibility - The priority order for the decommissioning, rehabilitation, replacement of bores has already been established based on:-

- Location;
- Access; and
- Scope of works.

Location and access are used as priorities in the bore decommissioning, rehabilitation and replacement program in order to deal with bores systematically rather than moving the machinery and equipment back and forth across the basin. This results in significantly reducing the overall cost of the program of works.

Funding Formulae Proposed

Bore Decommissioning and Rehabilitation and Replacement - The maximum government contribution for eligible bore decommissioning and rehabilitation activities will be 50% Commonwealth and 50% State for bore decommissioning and replacement consistent with the approach applied in GABSI-1 and GABSI-2.

Standards and Quality Assurance

Bore Decommissioning, Rehabilitation and Replacement -

- All design, construction and decommissioning, rehabilitation and replacement of bores undertaken within GABSI is in accordance with the *Minimum Construction Requirements for Water Bores in Australia*, Edition 2, Sept 2003. This document set down Australian Standards for bore decommissioning and construction.
- All works are audited during critical phases of construction, particularly grouting operations which will be audited by the Drilling Inspector.
- All bore design, construction and decommissioning is conducted by experienced drilling supervisors, qualified engineers and drilling contractors appropriately licensed under the national drillers licensing system
- The development permit for the construction of the works specifies the standards required for the bores construction

Pre Design Assessments are completed prior to the design or commencement of any construction works. These assessments identify potential issues, assets and resources relating to wetlands, cultural heritage, Aboriginal heritage, biodiversity, water remote areas, remnant vegetation, high value regrowth, watercourse protection buffers, essential habitat, soil erosion and stockroutes. Relevant staff are trained in cultural awareness and environmental management.

