Great Artesian Basin Sustainability Initiative: Phase 3 - State of Queensland Implementation Plan 2010-2011

NATIONAL PARINERSHIP 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 \$46.5 million to the State of Queensland ('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 \$46.5 million to Projects funded under the NPA.
 - 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 \$4.239 million (GST exclusive) to the State of Queensland for Projects specified in the Projects Submission for 2010-2011.

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 30 September 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 70 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 (noting that the Commonwealth acknowledges that, to the end of the second phase of the Program, the State's water allocation policy for the Great Artesian Basin, which is specified in the *Water Resource (Great Artesian Basin) Plan 2006*, is consistent with the retention of at least 70% of the water saved for restoring pressure); and
 - (e) ensure that funding will not 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. 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
 - i water remote areas are protected.)

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
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1	Approval of the Implementation Plan	Implementation Plan submitted by Queensland 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	Queensland completes specified activities for a Project contained in the agreed Projects Submission annexed to the Implementation Plan	Authorised Queensland 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 June 2011, subject to such certification being made by the authorised official by 20 May 2011.	One third of the Commonwealth's share of the total cost of the agreed Project specified in the Projects Submission
3	Queensland completes a Project contained in the agreed Projects Submission annexed to the Implementation Plan	Authorised Queensland official certifies that a specified Project has been completed in accordance with the agreed Projects Submission	By 7 June 2011, subject to such certification being made by the authorised official by 20 May 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 Queensland Treasury in accordance with the above Funding Schedule arrangements. If the Milestone 2 payment is not claimed in accordance with the above table, it will become payable at the same time the Milestone 3 payment is made following the completion of the Project.

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 anytime 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:

Assistant Secretary Aquatic Systems Health Branch Water Resource Division Department of Environment, Water, Heritage and the Arts GPO Box 787 Canberra ACT 2600

Contact number 02 6274 2223, fax number 02 6274 2186;

email address: tanja.cvijanovic@environment.gov.au

b) if given by the Commonwealth to the State:

Executive Director Strategic Water Initiatives Department of Environment and Resource Management GPO Box 2454 Brisbane QLD 4001

Contact number 07 3330 6109, fax number 07 3330 6116

email address: Greg.Claydon@derm.qld.gov.au

Projects Submission for 2010-2011

NATIONAL PARINERSHIP AGREEMENT ON THE GREAT ARTESIAN BASIN SUSTAINABILITY INITIATIVE

Projects

Summary and duration of Projects

A1 All Projects involve either the replacement of an existing bore drain with a piped reticulation system (piping) or the rehabilitation of an uncontrolled bore by drilling a replacement bore and decommissioning the original (redrill & plug). It is anticipated that all Projects included in this submission will be completed in the 2010-2011 financial year.

Aim of Projects

A2 The aim of the submitted Projects is to achieve water savings and aid in recovering pressure in the Great Artesian Basin (GAB).

Project Requirements

- A3 All Projects will contribute in the following ways to the outcomes of the National Partnership Agreement:
 - achieving water savings and contributing towards pressure recovery in the GAB through the replacement of old bores legally operating in an uncontrolled state and the replacement of legally operating bore drains with an efficient, controlled water reticulation system; and
 - promoting sustainable water and land management practices through the education and training of participating landholders in the operation and maintenance of the proposed infrastructure.

Project Details

- A4 Details for the proposed Projects are provided in Tables 1a, 1b and 1c, which should be read in conjunction with the following information:
 - 'GABSI' means Phase 3 of the Great Artesian Basin Sustainability Initiative.
 - Table 1a contains a list of the proposed Projects for 2010-2011. For all piping Projects, the approximate midpoint can be considered to be the point where all required materials for the Project have been delivered on-site. At this point approximately 90% of the cash costs for a piping Project have been incurred. Cash costs are considered to be the total cost of the Project minus the landholder's in-kind contribution to installation. Please note that for redrill and plug Projects, there is no approximate midpoint. The payment associated with milestone 2 for these Projects will be requested in addition to the payment associated with milestone 3 upon Project completion.

The average cost of rehabilitation works has increased marginally from GABSI Phase 2 and can be attributed to the increased cost of materials and drilling contractors. It is also important to note that the depth of bores across the GAB varies markedly and this can greatly affect the average cost of rehabilitation works on an annual basis.

The costs for any particular project per ML of water saved are variable. For example, the rehabilitation of shallow, high flowing bores is less expensive (per ML of water saved) than is the case for deeper, lower flowing bores. Also, any subsequent piping of rehabilitated bores generally delivers much greater water savings per unit cost as compared with the initial bore rehabilitation.

• Table 1a also highlights costs incurred by the State for RN 4497. This bore was drilled in 1914 with geophysical logging occurring in 1998 which indicated the bore to be in good condition for its age and which backed up information from flow and pressure tests conducted in 1985, 1993 and 2000. The bore was piped under GABSI in 2001. Static tests in 2005 indicated that the pressure had increased from 194kPa in 2000 to 303kPa. The bore failed in 2011. No subsidy has ever been provided for bore rehabilitation, and table 1c indicates the level of State funding being committed; however no commonwealth funding has been listed as water savings occurred through the piping.

Table 1b is not populated as there are no Projects proposed in 2010/2011 that that are targeted toward pressure recovery at specific high-value springs. Projects of this kind will be incorporated into subsequent years of the Program.

Table 1c outlines the cost of managing, monitoring and reporting against the program.

The State will prepare the Performance Report for 2010 – 2011 in a form similar to that outlined at Annexure 2 with actual data for volumes of water saved, length of drain replaced, length of piping installed, and details of actual GABSI funding including State, Commonwealth and landholder contributions, and the amount of government funding per ML of water saved per annum. The Performance report will provide comments as to the completion of projects.

The Performance Report will be used by the Commonwealth to assess Project performance under this Implementation Plan and to inform itself in relation to its assessment of subsequent Implementation Plans.

Additional Information

A5 Additional information about the estimation of water savings, the process for determining voluntary interest, eligibility, application of the available subsidy and quality assurance is contained in table 1d.

Table 1a - GAB - Infrastructure Projects (excluding springs)

									1												
Project RN No.	Property name	Latitude	Longitude	Zone	Priority	Discharge Prior (I/s)	Design Flow (I/s)	Estimated Water Saved (ML/annum)	Estimated Drain Shutdown (km's)	Estimated Piping Installed (km's)	Will bore piping 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	Financial Year for Completion	GABSI funding STATE	GABSI funding CMWLTH	GABSI funding (cash) L/HOLDER	In-kind contribution from L/HOLDER	Estimate of Government funding \$/ML/annum saved	Critical Infrastructure Failure (Y/N)	Comments
4252	Hulton	-23.3655677	144.9369883	Barcaldine	High	13.51	9.01	142.0	n/a	n/a	n/a	n/a	Redrill & Plug	2010/2011	120000	120000	60000	-	1690	N	Monitor flow regime with data logger
12126	Eversleigh	-21.7267675	144.2926092	Barcaldine	High	1.00	0.10	28.4	n/a	n/a	n/a	n/a	Redrill & Plug	2010/2011	100000	100000	50000	-	7047	N	Bore piped by Landholder.
1647	Powella	-22.8265110	144.8958746	Barcaldine	High	10.92	7.28	114.8	n/a	n/a	n/a	n/a	Redrill & Plug	2010/2011	136000	136000	68000	-	2370	Ν	Monitor flow regime with data logger
1393	Coreena	-23.4584507	145.4580668	Barcaldine	High	1.32	0.88	13.9	n/a	n/a	n/a	n/a	Redrill & Plug	2010/2011	58000	58000	29000	-	8360	Ν	Monitor flow regime with data logger
1349	Barcaldine Downs	-23.714841	145.097545	Barcaldine	High	11.61	7.74	122.0	n/a	n/a	n/a	n/a	Redrill & Plug	2010/2011	130000	130000	65000	-	2130	N	Monitor flow regime with data logger
4239	Crichton	-21.7857926	144.2766792	Barcaldine	High	1.25	0.83	13.1	n/a	n/a	n/a	n/a	Redrill & Plug	2010/2011	92000	92000	46000	-	14003	N	Monitor flow regime with data logger
5297	Myross	-22.8402024	145.4108675	Barcaldine	High	0.88	0.59	9.3	n/a	n/a	n/a	n/a	Redrill & Plug	2010/2011	35000	35000	17500	-	7567	N	Monitor flow regime with data logger
12535	Woolthorpe	-22.34567557	145.3344766	Barcaldine	High	1.60	1.07	16.8	n/a	n/a	n/a	n/a	Redrill & Plug	2010/2011	48000	48000	24000	-	5708	N	Monitor flow regime with data logger
128	Taberna	-22.40400905	145.2955886	Barcaldine	High	4.40	2.93	46.3	n/a	n/a	n/a	n/a	Redrill & Plug	2010/2011	48000	48000	24000	-	2076	N	Monitor flow regime with data logger
4292	Audreystone	-23.45762005	145.1517084	Barcaldine	High	1.44	0.96	15.1	n/a	n/a	n/a	n/a	Redrill & Plug	2010/2011	86000	86000	43000	-	11363	N	Monitor flow regime with data logger
2978	Trent	-23.93456202	145.4064316	Barcaldine	High	2.11	1.41	22.2	n/a	n/a	n/a	n/a	Redrill & Plug	2010/2011	112000	112000	56000	-	10099	N	Monitor flow regime with data logger
1388	The Patrick	-23.7497773	145.2325832	Barcaldine	High	1.90	1.27	20.0	n/a	n/a	n/a	n/a	Redrill & Plug	2010/2011	94000	94000	47000	-	9413	N	Monitor flow regime with data logger
4296	Mildura	-23.28539754	145.2730938	Barcaldine	High	4.91	3.27	51.6	n/a	n/a	n/a	n/a	Redrill & Plug	2010/2011	78000	78000	39000	-	3022	N	Monitor flow regime with data logger
2149	Coreena	-23.3608597	145.311529	Barcaldine	High	1.48	0.99	15.6	n/a	n/a	n/a	n/a	Redrill & Plug	2010/2011	104000	104000	52000	-	13370	N	Monitor flow regime with data logger
4497	Athol	-24.71603	145.1830824	Barcaldine	High		structure failure (E		-				Redrill & Plug	2010/2011	132000	132000	66000	_	13370	Y	Piped under GABSI in 2000/01.
1645	Aviemore	-22.7771830	144.7767692	Barcaldine		19.80	3.50	514.0	35	TBA	v	Y	Piping	2010/2011	150000	150000	128571	71429	584	N	Redrill & Plug under GABSI in 2007/2008.
1045	Aviendre	-22.7771030	144.7707092	Barcaluine	High	19.60	3.50	514.0	35	TBA	T	T	SUB TASK		130000	130000	120371	71429	564	IN	Rednii & Flug under GABSI III 2007/2008.
															has been made ar	nd landholder has co	onfirmed interest				
																ordered and delivere		Midpoint)			
													Installation i	s complete, bore	drain decommissio	ned and water savi	ngs realised (Projec	ct Completed)			
4251	Daunton	-23.2548501	144.7672705	Barcaldine	High	4.67	2.66	63.3	26	TBA	Y	Y	Piping	2010/2011	105000	105000	90000	50000	3318	Ν	Redrill & Plug under GABSI in 2008/2009.
					_								SUB TASK	s							
													Initial appro	ach to landholder	has been made ar	nd landholder has co	onfirmed interest				
													Design com	pleted, contracts	signed, materials o	ordered and delivere	ed on-site (Project	Midpoint)			
													Installation i	s complete, bore	drain decommissio	oned and water savi	ngs realised (Projed	ct Completed)			
3033	Isis Downs	-24.3572618	144.6228314	Barcaldine	High	6.76	3.00	118.6	71	TBA	Y	Y	Piping	2010/2011	195000	195000	167143	92857	3289	Ν	Redrill & Plug under GABSI in 2009/2010.
													SUB TASK	s							
													Initial appro	ach to landholder	has been made ar	nd landholder has co	onfirmed interest				
													Design com	pleted, contracts	signed, materials o	ordered and delivere	ed on-site (Project	Midpoint)			
					-								Installation i	s complete, bore	drain decommissio	ned and water savi	ngs realised (Projec	ct Completed)			I
2980	Gregory Park	-23.8858137	145.3117448	Barcaldine	High	10.00	2.27	243.8	30	TBA	Y	Y	Piping	2010/2011	55000	55000	47143	26190	451	N	Redrill & Plug under GABSI in 2008/2009.
													SUB TASK								
																nd landholder has co					
													-		-	ordered and delivere					
	0	00 5 4 5 5 5 5	444.0075.007					105.								oned and water savi			1005		
3019	Griffdale	-23.5415913	144.6978497	Barcaldine	High	6.01	2.68	105.1	18	TBA	Y	Y	Piping	2010/2011	105000	105000	90000	50000	1998	N	Redrill & Plug under GABSI in 2006/2007.
													SUB TASK		has been made	d landhaldar bar	onfirmed interest				
																nd landholder has co ordered and delivere		Midpoint)			
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				1	1	I	1	I	I	1	1	I	การเลเลียงที่ไ	s complete, pore	urani decontiniissio	neu anu waler savi	nga realiseu(Proje	si completea)		_	ı I

2981	Lara	-23.8020634	145.1844892	Barcaldine	High	8.60	1.58	221.4	25	ТВА	Y	Y	Piping 2010/2011 65000 65000 55714 30952 587 N Redrill & Plug under GABSI in 2003/20
													SUB TASKS
													Initial approach to landholder has been made and landholder has confirmed interest
													Design completed, contracts signed, materials ordered and delivered on-site (Project Midpoint)
													Installation is complete, bore drain decommissioned and water savings realised (Project Completed)
4347	Saxby Downs	-19.8190313	142.4147690	Flinders	High	1.05	0.70	11.0	n/a	n/a	n/a	n/a	Redrill & Plug 2010/2011 142000 142000 71000 - 25730 N Monitor flow regime with data logge
1731	Lydia	-20.2398645	142.3367172	Flinders	High	22.00	14.67	231.3	n/a	n/a	n/a	n/a	Redrill & Plug 2010/2011 120000 120000 60000 - 1038 N Monitor flow regime with data logge
13867	Langdale	-20.8140291	142.5894954	Flinders	High	5.65	3.77	59.4	n/a	n/a	n/a	n/a	Redrill & Plug 2010/2011 142000 71000 - 4782 N Monitor flow regime with data logge
2447	Valwin	-20.76986544	141.5270084	Flinders	High	2.00	1.33	21.0	n/a	n/a	n/a	n/a	Redrill & Plug 2010/2011 70000 70000 35000 - 6659 N Monitor flow regime with data logge
2315	Caiwarra	-20.5707012	141.3008984	Flinders	High	1.00	0.67	10.5	n/a	n/a	n/a	n/a	Redrill & Plug 2010/2011 70000 70000 35000 - 13318 N Monitor flow regime with data logge
1875	Yan Yean	-20.5223601	142.9836571	Flinders	High	11.02	1.56	298.3	23	ТВА	Y	Y	Piping 2010/2011 40000 40000 34286 19048 268 N Redrill & Plug under GABRP in 1997/1
					0								SUB TASKS
													Initial approach to landholder has been made and landholder has confirmed interest
													Design completed, contracts signed, materials ordered and delivered on-site (Project Midpoint)
													Installation is complete, bore drain decommissioned and water savings realised (Project Completed)
3607	Riverdale	-20.7945796	143.4119901	Flinders	High	8.82	2.86	187.8	11	ТВА	Y	Y	Piping 2010/2011 45000 45000 38571 21429 479 N Redrill & Plug under GABRP in 1999/2
0001	, and a second sec	2011 0 101 00	1.011110001	1 mildoro	g.	0.02	2.00	10110		12/1	·		SUB TASKS
													Initial approach to landholder has been made and landholder has confirmed interest
													Design completed, contracts signed, materials ordered and delivered on-site (<i>Project Midpoint</i>)
													Installation is complete, bore drain decommissioned and water savings realised (Project Completed)
1320	Ayrshire Downs	-22.0126350	142.6664490	Flinders	High	6.67	2.07	145.0	26	ТВА	Y	Y	Piping 2010/2011 100000 100000 85714 47619 1380 N Redrill & Plug under GABSI in 2009/20
													SUB TASKS
													Initial approach to landholder has been made and landholder has confirmed interest
													Design completed, contracts signed, materials ordered and delivered on-site (Project Midpoint)
													Installation is complete, bore drain decommissioned and water savings realised (Project Completed)
1893	Molesworth	-20.5788658	142.6374156	Flinders	High	8.81	1.39	234.0	16	ТВА	Y	Y	Piping 2010/2011 45000 45000 38571 21429 385 N
													SUB TASKS
													Initial approach to landholder has been made and landholder has confirmed interest
													Design completed, contracts signed, materials ordered and delivered on-site (Project Midpoint)
													Installation is complete, bore drain decommissioned and water savings realised (Project Completed)
13349	Molesworth	-20.4870861	142.5228270	Flinders	High	5.24	0.92	136.2	11	ТВА	Y	Y	Piping 2010/2011 45000 45000 38571 21429 661 N Redrill & Plug under GABSI in 2008/20
					0								SUB TASKS
													Initial approach to landholder has been made and landholder has confirmed interest
													Design completed, contracts signed, materials ordered and delivered on-site (Project Midpoint)
													Installation is complete, bore drain decommissioned and water savings realised (Project Completed)
72275	Rutland Plains	-15.6581957	141.8554906	Gulf	High	2.00	0.20	56.8	n/a	n/a	n/a	n/a	Redrill & Plug 2010/2011 60000 60000 30000 - 2114 N Bore piped by Landholder.
4400	Yilgangandi	-28.2057643	148.6367053	Surat	High	8.20	2.82	169.7	55	ТВА	Y	Y	Piping 2010/2011 165000 165000 110000 110000 1945 N Reline under GABSI 1999/2000.
					_								SUB TASKS
													Initial approach to landholder has been made and landholder has confirmed interest
													Design completed, contracts signed, materials ordered and delivered on-site (Project Midpoint)
													Installation is complete, bore drain decommissioned and water savings realised (Project Completed)
4043	Dunwinnie	-28.66058847	148.6571438	Surat	High	11.67	4.12	238.1	53	тва	Y	Y	Piping 2010/2011 50250 50250 33500 33500 422 N Reline under GABRP 1993/1994
													SUB TASKS
													Initial approach to landholder has been made and landholder has confirmed interest
													Design completed, contracts signed, materials ordered and delivered on-site (Project Midpoint)
													Installation is complete, bore drain decommissioned and water savings realised (Project Completed)
						F F 4	0.74		33	ТВА	Y	Y	
4042	Nulky	-28.76549222	148.2740625	Surat	High	5.54	2.71	89.2		IDA	T	ř	Piping 2010/2011 36750 36750 24500 24500 824 N Reline under GABSI 1999/2000
4042	Nulky	-28.76549222	148.2740625	Surat	High	5.54	2.71	89.2		1DA	T	ř	Piping 2010/2011 36750 24500 24500 824 N Reline under GABSI 1999/2000 SUB TASKS Sub Tasks

													Design con	npleted, contracts	signed, materials o	rdered and delivere	ed on-site <i>(Project I</i>	Midpoint)			
-													Installation	is complete, bore	drain decommissio	ned and water savi	ngs realised (Projec	t Completed)			
4533	Middleton	-28.5707161	146.6468510	Warrego	High	15.43	1.10	451.9	65	ТВА	Y	Y	Piping	2010/2011	100000	100000	66667	66667	443	N	Reline under GABRP 1992/1993.
													SUB TASP	s							
													Initial appro	bach to landholde	r has been made an	d landholder has co	onfirmed interest				
													Design con	npleted, contracts	signed, materials o	rdered and delivere	ed on-site (Project I	Midpoint)			
														is complete, bore	drain decommissio	ned and water savi	ngs realised <i>(Projec</i>	t Completed)			
1319	Avondale	-28.3753893	146.3544582	Warrego	High	25.20	16.80	264.9	n/a	n/a	n/a	n/a	Redrill & Plug	2010/2011	100000	100000	50000	-	755	Ν	Monitor flow regime with data logger
8522	Charlotte Plains	-28.0034467	146.2261778	Warrego	High	0.50	0.33	5.3	n/a	n/a	n/a	n/a	Redrill & Plug	2010/2011	80000	80000	40000	-	30441	Ν	Monitor flow regime with data logger
4538	Tilbooroo	-27.7617888	144.9442477	Warrego	High	38.00	25.33	399.5	n/a	n/a	n/a	n/a	Redrill & Plug	2010/2011	90000	90000	45000	-	451	N	Monitor flow regime with data logger
2000	Wardilla	-26.4087210	146.1568300	Warrego	High	0.54	0.36	5.7	n/a	n/a	n/a	n/a	Redrill & Plug	2010/2011	90000	90000	45000	-	31710	Ν	Monitor flow regime with data logger
3887	Wyanga	-24.7795020	146.0050401	Warrego	High	9.03	6.02	94.9	n/a	n/a	n/a	n/a	Redrill & Plug	2010/2011	192000	192000	96000	-	4045	N	Monitor flow regime with data logger
4519	Roscoe Downs	-28.5842795	146.5528450	Warrego	High	1.41	0.94	14.8	n/a	n/a	n/a	n/a	Redrill & Plug	2010/2011	90000	90000	45000	-	12144	N	Monitor flow regime with data logger
4705	Aqua Downs	-27.13344033	146.9339379	Warrego	High	0.45	0.3	4.7	n/a	n/a	n/a	n/a	Redrill & Plug	2010/2011	68000	68000	34000	-	28750	Ν	Monitor flow regime with data logger
TOTALS								5027	498	ТВА					\$3,989,000	\$3,989,000	\$2,392,452	\$687,048			

Table 1b – Springs - Proposed infrastructure Projects

There are no Projects involving springs proposed for 2010/2011. Projects involving springs will be incorporated into subsequent years of the Program.

Table 1c - Proposed other Projects

Project	Zone	Performance Target(s)	Proposed GABSI funding State ¢	Proposed GABSI funding C'wealth	Estimated Financial Year for Completion
Managamant		Ongoing, managed delivery of the proposed Projects listed in table 1a			
Management, Monitoring and Reporting in regards to the 2010- 2011 GABSI program.	N/A	Certification, by 21 May 2011, of achievements against Projects and Project subtasks listed in Tables 1a and 1c	\$250,000	\$250,000	2010/2011
		SUB TASKS			
		Strategic oversight of the GABSI Pr	0		
		Manage the selection process and	advice to applicants		
		Monitor, review and report of progre	ess towards GABSI objectives		
		Co-ordinate the activities of officers	of the Department of Environme	ent and Resource Manage	ement who
		have direct involvement in GABSI Ensure consistency of Project delive Management Plan	ery with funding agreements and	d the objectives of the GA	B Strategic
		Conduct workshops and advertising	for participants in GABSI as requ	ired and manage all GABS	I related enquiries
		Provide an interface with other initiat required		and other entities including	regional NRM bodies, as
		Maintain design and quality assurar	o		
		Provide certification to the Commor Proiect subtasks listed in Tables 1a of this certification report completes	and 1c of the 2010-2011 Queer	• •	
		Provide an annual Performance Re bv 30 September 2011	port to the Commonwealth on th	ne delivery of GABSI 3 in 2	2010-2011

Table 1d - Additional Information

Estimation of Water Savings

Bore Rehabilitation - For all 2010/2011 bore rehabilitation works, water savings have been estimated at 30% of the free flow of the bore prior to rehabilitation. This saving has traditionally been achieved by the landholder reducing the discharge from the bore in the cooler, winter months as, due to

the reduced evaporation, a lesser flow of water is required to run the same length of bore drain. Prior to rehabilitation the bore could not be controlled and the flow could not be reduced as required. This is consistent with the methodology used to estimate water savings as a result of bore rehabilitation in Phase 1 and 2 of GABSI.

In order to secure the estimated 30% water savings, as a requirement of participation landholders will select one of the following two options, , and this selection will be reflected in the works contracts between the Department of Environment and Resource Management (DERM) and the participating landholders:

S OPTION 1 - A correctly sized orifice plate will be installed in the bore upon completion of the rehabilitation works to ensure that the free flow of the bore cannot exceed 70% of the original flow. The size of the orifice plate will be calculated and specified by qualified engineers based on the bore's head-discharge characteristic and the desired flow. The theory and practical use of orifice plates to regulate flow is universally accepted and is well documented in engineering texts. Orifice plates are also used extensively in re-measurement work on GAB bores in Australia and, as such, there is significant precedent for their suitability and use for regulating flow. OPTION 2 - The landholder agrees to a flow regime that ensures the annual discharge from the bore does not exceed 70% of the original flow. This regime will most likely consist of individual, specified maximum discharge rates for summer, autumn, winter and spring although it will be tailored to individual

circumstances, as required, as long as the annual flow does not exceed 70% of the original. The landholder will be required to reduce the discharge of the bore at various times of the year in accordance with the specified regime. In order to ensure compliance, monitoring equipment (generally a suitable pressure transducer or flow meter that meets Australian Standards and has been selected by qualified engineers) and a data logger will be installed in the bore upon completion of the rehabilitation. DERM staff will check the stored data within 6 months of installation and annually thereafter until the end of the Program or until the bore drain is replaced with piping (whichever comes first), and compare this data with the specified flow regime to ensure compliance. The costs of this compliance monitoring will be incorporated into implementation plans for subsequent years of GABSI 3.

Bore Drain Replacement (Piping) - For all bore drain replacement works the water savings are estimated using computer modelling of the pipeline design and stock water demands. The modelled, maximum daily demand of the designed pipeline system is subtracted from the original daily flow of the bore prior to piping and the resultant figure is multiplied by 365 to estimate the annual water savings. As the model is based on a peak demand scenario (ie with maximum stock numbers and maximum peak daily demand) the estimate is often conservative.

Process for Determining Voluntary interest

A letter and application package were sent in December 2009 to all landholders with an eligible bore and/or licensed bore drains explaining the benefits of the program, the available subsidy and asking them to register their interest in the program. A follow up telephone survey of non respondents was conducted in mid 2010 to indentify interest by landholders in the initiative and to discuss any barriers to participation. Further information and departmental assistance was also offered if required.

Selection Criteria Used to Determine Successful Applicants

Eligibility - Bores eligible for rehabilitation in the GABSI are those uncontrolled bores that were constructed prior to the introduction of state legislation regarding the construction and control of artesian bores in 1954. Bores that: (i) were constructed post 1954; (ii) are located in the "Flinders Water Bore Corrosion Area" as defined by drawing A3-507421 (Appendix A); (iii) are legally constructed of steel bore casing; and (iv) have become uncontrolled due to corrosive water are also eligible for rehabilitation. Any bore that discharges into an existing bore drain and is licensed to do so is eligible for piping.

Selection Criteria and Ranking of Applicants - At this stage, the level of voluntary participation from eligible landholders does not exceed the available funding. As such, eligible bores and bore drains are being ranked on a first come, first served basis. This process will be reviewed if voluntary participation increases.

Funding Formulae Proposed

Bore Rehabilitation - The maximum government contribution for eligible bore rehabilitation activities will be 40% Commonwealth and 40% State with 20% of the Project's total cost to be met by the involved landholders as a cash contribution.

Bore Drain Replacement (Piping) - The maximum government contribution for eligible bore drain replacement activities will be 30% Commonwealth and 30% State, with 40% of the Project's total cost to be met by the involved landholders as a combination of cash and in-kind contributions. The available subsidy may only be used to replace the existing function of the bore drain and cannot be used to extend the pipeline system outside the watered area. For an existing bore drain, the 'watered area' is the area within the paddock that contains the bore drain that falls within 2 km either side of that bore drain.

If, due to the available funding for a financial year being fully committed, an eligible bore rehabilitation or bore drain replacement Project cannot commence upon signing a contract with DERM then provision will be made to ensure the landholder's contribution to the proposed works will be capped at the amount agreed to in the contract.

Standards and Quality Assurance

Bore Rehabilitation -

- All design, construction and rehabilitation of bores carried out under GABSI are in accordance with the Minimum Construction Requirements for Water Bores in Australia, Edition 2, Sept 2003
 and Minimum Standards for the Construction and Reconditioning of Water Bores that Intersect the Sediments of Artesian Basins in Queensland, NR&M, 2004. These documents set down
 Australian Standards, and additional Queensland standards for bore rehabilitation and construction.
- All works are audited during critical phases of construction, particularly grouting operations
- All bore design, construction and rehabilitation 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

Bore Drain Replacement (Piping) -

- Pipeline schemes are designed in accordance with Guidelines for Investigation and Design of Bore Drain Replacement Schemes, Department of Primary Industries Water Resources, October 1994 (modified 1997 and 2004) and Construction Guidelines for Bore Drain Replacement Schemes in the Great Artesian Basin Sustainability Initiative, DERM, November 2009.
- All pipeline design is completed by qualified engineers.
- All materials used in the construction of piped reticulation systems are manufactured to the relevant Australian and Industry Standards and are in accordance with the specification contained in Construction Guidelines for Bore Drain Replacement Schemes in the Great Artesian Basin Sustainability Initiative, DERM, November 2009.
- All pipeline designs are certified by a Registered Professional Engineer of Queensland prior to being supplied to landholders.
- Pipeline installation and construction is fully supervised during critical stages. Construction is in accordance with the document Construction Guidelines for Bore Drain Replacement Schemes in the Great Artesian Basin Sustainability Initiative, DERM, November 2009 and the Australian Standard AS2033-1980 Installation of Polyethylene pipe systems.

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, biodiversity, water remote areas, remnant vegetation, high value regrowth, watercourse protection buffers, essential habitat, soil erosion and stock routes. Relevant staff are trained in cultural awareness and environmental management.



Appendix A - Flinders Water Bore Corrosion Area - A3 507421

Performance Report for 2009-2010 NATIONAL PARTNERSHIP AGREEMENT ON THE GREAT ARTESIAN BASIN SUSTAINABILTY INITIATIVE

- 1. The State will prepare the Performance Report in a form similar to that outlined at Table 2a, 2b and 2c below.
- 2. The Performance Report will be used by the Commonwealth to assess Project performance under this Implementation Plan and to inform itself in relation to its assessment of subsequent Implementation Plans.

												(8					
									Actual				Actual	Actual	Actual	Actual in- kind contribution from landholders \$		Are Activities on schedule
								Actual	Drain	Actual		Estimated	GABSI	GABSI	GABSI		Actual ML/annum	
Project	Land					Dis-	Dealers	Water	shutd	Piping	A - 11-11-1	Financial	funding	funding	funding		of water saved per	
1	holder name	Lat.	Long.	Zone	Priority	charge prior	Design Flow	Saved (ML/ann)	own (klms)	Installed (klms)		Year for Completion	State \$	C'wealth \$	landholders \$		\$ of government funding	
					,	•			/				-		-			
											1							
											2							
											3							
											4							
											5 6	-						
											6 7							
											1							
											Total							

 Table 2a - GAB – Performance Report - Infrastructure Projects (excluding springs)

vater saved per	3
v	ML/annum of water saved per \$ of government

Legend ¹ Itemise for each specific activity for each Project

1. Design

2.Cap only

3. Bore Rehabilitation[#]

4.Redrill & plug

5. Plug only 6. Pipe^{##}

7. Other (please specify)
 [#] Bore Rehabilitation means recondition or repair of existing bore.
 ^{##} Pipe means water delivery infrastructure such as piping, relief valves, tanks and troughs

³ Itemise for each specific Project

I. Yes, completed (YC)

II. Yes, on track (YT)

III. No (please specify)

Project 1	Land holder name	Lat.	Long.	Zone	Priority	Dis- charge prior	Design Flow	Actual Water Saved (ML/a)	Actual Drain shutd own (km)	Actual Piping Installed (km)	Activity	Estimated Financial Year for Completion	Actual GABSI funding State \$	Actual GABSI funding C'wealth \$	Actual GABSI funding landholders \$	Actual in-kind contribution from landholders \$	Actual ML/annum of water saved per \$ of government funding	Are Activities on schedule ³
											1 2 3 4 5 6 7							
											Total							Are
Project 2	Land holder name	Lat.	Long.	Zone	Priority	Dis- charge prior	Design Flow	Actual Water Saved (ML/a)	Actual Drain shutd own (km)	Actual Piping Installed (km)	Activity	Estimated Financial Year for Completion	Actual GABSI funding State \$	Actual GABSI funding C'wealth \$	Actual GABSI funding landholders \$	Actual in-kind contribution from landholders \$	Actual ML/annum of water saved per \$ of government funding	Activities on schedule ³
											1 2 3 4 5							
											6 7							
											Total							

Table 2b – GAB – Performance Report - Springs

Legend

¹ Itemise for each specific activity for each Project

1. Design 2.Cap only

3. Bore Rehabilitation[#]

³ Itemise for each specific project I. Yes, completed (YC)

I. Yes, completed (YC) II. Yes, on track (YT) III. No (please specify) 4.Redrill & plug

5. Plug only 6. Pipe^{##}

7. Other (please specify)

[#]Bore Rehabilitation means recondition or repair of existing bore ^{##}Pipe means water delivery infrastructure such as piping, relief valves, tanks and troughs

Table 2c -Proposed other Projects

Project	Zone	Performance Target(s)	Actual GABSI funding State \$	Actual GABSI funding C'wealth \$	Estimated and/or Actual Financial Year for Completion
TOTAL					

Legend

² Itemise for each specific Project

A. Education and Extension

B. Basin Monitoring Network (may wish to delete this clause if not applicable)

C. Involvement of community in resourcing, development and implementation of Projects

D. Best practice infrastructure maintenance

E. GABSI Program Mgt, Monitoring and Reporting

F. Other (please specify)

ADDITIONAL REQUIRED INFORMATION

Volume and location of unallocated GAB Water allocated during last financial year