# Queensland Implementation Plan for the Great Artesian Basin Sustainability Initiative Phase 3 – 2013-2014

# Part A

NATIONAL PARTNERSHIP AGREEMENT ON THE GREAT ARTESIAN BASIN SUSTAINABILITY INITIATIVE

### Part 1: Preliminaries

- 1. This Implementation Plan is a schedule to the National Partnership Agreement on the Great Artesian Basin Sustainability Initiative and should be read in conjunction with that Agreement. The objective in the National Partnership is for the Parties to aspire to a sustainable and on-going groundwater management system for the Great Artesian Basin.
- 2. The Commonwealth has agreed to provide up to \$46.5 million to 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). In achieving this objective the State has agreed to:
  - a) 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 per cent of the water saved for restoring pressure); and
  - b) 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. If the geographical location of the watered area on the property supported by the new controlled watering system is altered by a Project.

### Part 2: Terms of this Implementation Plan

3. This Implementation Plan will commence as soon as it is agreed between the State of Queensland, represented by the Minister for Natural Resources and Mines and the Commonwealth of Australia, represented by the Minister for Sustainability, Environment,

Water, Population and Communities, or relevant Minister with portfolio responsibilities for the Great Artesian Basin.

- 4. As a schedule to the National Partnership Agreement on the Great Artesian Basin Sustainability Initiative, the purpose of this Implementation Plan is to provide the public with an indication of how the projects are intended to be delivered and demonstrate Queensland's capacity to achieve the outcomes of the National Partnership.
- 5. This Implementation Plan will cease on completion or termination of the National Partnership or acceptance of a subsequent Implementation Plan.
- 6. This Implementation Plan may be varied by written agreement between the Commonwealth and State Ministers prescribed in Clause 3.
- 7. The Parties to this Implementation Plan do not intend any of the provisions to be legally enforceable. However, that does not lessen the Parties' commitment to the plan and its full implementation.

### Part 3: Strategy for Queensland implementation

### **Project information**

- 8. The Project elements planned include:
  - a) design works;
  - b) reconditioning or repair of existing bore;
  - c) capping of existing bore;
  - d) drilling of new bore and/or plugging of old bore;
  - e) installation of water delivery infrastructure (such as piping, relief valves, tanks and troughs); and
  - f) project management, monitoring and reporting.
- 9. The number and location of proposed Projects are summarised in Table 1.

### Table 1: Proposed Projects

Zone	Barcaldine	Flinders	Surat	Warrego	Central	North West	Management Monitoring and Reporting (State-wide)	TOTAL
Number of Proposed Projects	31	14	5	9	2	1	1	63

### **Estimated costs**

10. Having completed an assessment of the proposed Projects in accordance with the Assessment Guidelines and Project Eligibility Criteria contained in Schedule A to the National Partnership, the Commonwealth will provide a maximum financial contribution of \$6,830,222 to the State for 2013/2014 Projects. All payments are exclusive of GST.

11. The estimated overall budget is set out in Table 2. The budget is indicative only and the State retains the flexibility to move funds between components, as long as outcomes are not affected. The Commonwealth contribution can only be moved between years with the agreement of the Commonwealth.

	Barcaldine \$	Flinders \$	Surat \$	Warrego \$	Central \$	North West \$	Management Monitoring and Reporting (State-wide) \$	TOTAL \$
2013 – 14 projects	7,383,378	3,247,112	3,555,358	4,061,080	769,109	348,546	500,000	19,864,583
<i>less</i> estimated Commonwealth contributions to 2013-14 projects:	2,480,518	1,094,585	1,175,557	1,494,265	230,733	104,564	250,000	6,830,222
<i>equals</i> estimated balance of non- Commonwealth contributions	4,902,860	2,152,527	2,379,801	2,566,815	538,376	243,982	250,000	13,034,361

### Table 2: Estimated financial contributions by Zone

### **Program logic**

- 12. The Projects will achieve the outcomes and objectives set out in the National Partnership by:
  - a) achieving water savings and contributing towards pressure recovery in the Great Artesian Basin 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
  - b) promoting sustainable water and land management practices through the education and training of participating landholders in the operation and maintenance of the proposed infrastructure.

### **Risk management**

13. The Commonwealth has a risk management plan is in place. Risks have been actively identified, entered into a risk log and categorised in terms of impact and likelihood.

### **Relevant State Context**

- 14. The Parties have agreed to details of specific Projects and the methodology by which eligibility criteria and specific performance benchmarks have been determined, having due regard to relevant State considerations, but such details and methodology do not form part of this Implementation Plan.
- 15. In developing this Implementation Plan consideration has been given to:
  - a) the Queensland Water Resource (Great Artesian Basin) Plan 2006;
  - b) protection of Queensland GAB springs;
  - c) protection of water remote areas in Queensland.

### Part 4: Performance and reporting arrangements

### **Milestones**

16. To qualify for the associated payment, the State must meet the milestones set out in Table 3.

### Table 3: Mlestones

Milestone Number	Milestone	Performance indicator	Date for payment on completion of performance benchmark	Payment
1	Project designs completed and incorporated into the 2013/2014 Implementation Plan	Satisfactory Implementation Plan submitted by Queensland agreed to by Commonwealth Minister	Within 60 days of Commonwealth Minister's agreement	\$2,276,741
2	Queensland completes specified activities for a Project contained in the agreed 2013/2014 Projects Submission provided in addition 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 8 May 2014, subject to such certification being made by the authorised official by 30 April 2014	\$2,276,741
3	Queensland completes a Project contained in the agreed 2013/2014 Projects Submission provided in addition to the Implementation Plan	Authorised Queensland official certifies that a specified Project has been completed in accordance with the agreed Projects Submission	By 8 June 2014, subject to such certification being made by the authorised official by 31 May 2014	\$2,276,740

### Sign off

17. The Parties have confirmed their commitment to this agreement as follows:

### Signature

Date

### [By State Minister]

\_\_\_\_\_

### Signature

Date

[By Commonwealth Minister]

### Part 4: Performance and reporting arrangements

Milestones

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Sign off

17. The Parties have confirmed their commitment to this agreement as follows:

Auchen Crin Signature

Date 31/10/2013

By State Minister]

Signature

Date 5/6/14.

By Commonwealth Minister]

## Queensland Implementation Plan - 2013-2014 Part B - Projects Submission

NATIONAL PARTNERSHIP AGREEMENT ON THE GREAT ARTESIAN BASIN SUSTAINABILTY 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 2013-2014 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 (Annexure 1) contains a list of the proposed Projects for 2013-2014. 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 2013-2014 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.

- Table 1b (Annexure 1) is not populated as there are no Projects proposed in 2013/2014 that that are targeted toward pressure recovery at specific high-value springs. It should be noted that typically all projects will have some benefit to springs (through pressure recovery), but we have chosen not to try and quantify this.
- Table 1c (Annexure 1) outlines the cost of managing, monitoring and reporting against the entire program.
- The State will prepare the Performance Report for 2013-2014 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 Performance under this Implementation Plan and to inform itself in relation to its assessments 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 (Annexure 1).

Project RN	Landholder Name	Lat.	Long.	Zone	Priority	Discharge Prior (L/s)	Design Flow (L/s)	Estimated Water Saved ML/Annum	Est. Drain Shutdown (km's)	Est. piping installe d (km's)	Will bore piping extend outside the geog. boun. of the current watered area (Y/N)	Activity	Estimated Financial Year for Completio n	Planned GABSI Funding STATE	Planned GABSI Funding CMWLTH	Planned GABSI Funding L/HOLDER	Landholder cash funding	Critical Infrast. Failure	Estimated \$ of Govt funding per ML/annum saved	Comments
88	Marathon Trust	-22.9966565	145.2003317	Barcaldine	High	34.0	2.2	1002	29	tba	N	Piping	2013/2014	\$42,494	\$42,494	\$56,658	\$36,423		85	
1207	Dalmar	-22.9009893	145.3073089	Barcaldine	High	9.7	1.8	246	38	tba	N	Piping	2013/2014	\$63,368	\$63,368	\$84,490	\$54,315		515	Redrill and Plug under GABSI in 2012/13
1228	Dalmar	-22.9928969	145.3839242	Barcaldine	High	22.2	0.6	680	4	tba	N	Piping	2013/2014	\$19,010	\$19,010	\$25,347	\$16,295		56	Reline under GABRP in 1989/90
1255	Kingsborough	-22.7040102	145.0372608	Barcaldine	High	7.4	1.7	180	11	tba	N	Piping	2013/2014	\$31,684	\$31,684	\$42,245	\$27,158		352	Reline under GABRP in 1998/99
1638	Bowen Downs	-22.5680293	144.9180287	Barcaldine	High	3.3	1.3	65	24	tba	N	Piping	2013/2014	\$62,622	\$62,622	\$83,496	\$53,676	Y	1927	Redrill and Plug under GABSI in 2004/05
1641 1647	Reedy Creek Tuaburra	-22.8265110	144.8958746	Barcaldine Barcaldine	High	7.3	2.7	ping completed 146	26	tba	2. N	Redrill & Plug Piping	2013/2014 2013/2014	\$72,420 \$82,378	\$72,420 \$82,378	\$36,210 \$109,837	\$36,210 \$70,610	Ť	1128	
1921	Summer Hill	-23.0234557	144.8958740	Barcaldine	High	2.0	0.5	47	7	tba	N	Piping	2013/2014	\$14,224	\$14,224	\$18,966	\$12,192		605	Redrill and Plug under GABSI in 2010/11
1922	Marchmont	-23.1476229	144.7006016	Barcaldine	High	2.5	1.7	27	20	tba	N	Piping	2013/2014	\$44,730	\$44,730	\$59,640	\$38,340		3313	Redrill and Plug under GABSI in 2009/10 Redrill and Plug under GABSI in 2011/12
1927	Camoola Park	-23.0537347	144.6197686	Barcaldine	High	1.0	0.8	8	11	tba	N	Piping	2013/2014	\$44,730	\$44,730	\$59,640	\$38,340		11183	Redrill and Plug under GABSI in 2011/12 Redrill and Plug under GABSI in 2012/13
2172		-22.2151205	145.2928097		0	0.4	0.0	14	2	n/a	n/a	Plug	2013/2014	\$11,715	\$11,715	\$5,858	\$5,858		1674	
2179		-22.1776211	145.2205880			2.6	0.7	61	12	tba	N	Redrill & Plug	2013/2014	\$77,639	\$77,639	\$61,806	\$48,671		2546	
2110		22.1170211	140.2200000	-		2.0	0.7	01	12	104		& Piping Redrill & Plug	2010/2014		<i><b></b></i>	φ01,000			2040	
2235	The Springs	-22.1984539	145.2889207	Barcaldine	High	4.8	0.9	124	16	tba	N	& Piping	2013/2014	\$75,988	\$75,988	\$63,155	\$48,777		1226	
5125		-22.2095650	145.2844763			2.7	0.4	74	6	tba	N	Redrill & Plug & Piping	2013/2014	\$55,913	\$55,913	\$37,275	\$31,950		1511	
E120	-	00.0700047	145 2020240			E 0	0.5	140	10	the	N	Redrill & Plug	2012/2014	¢c7.004	¢c7.004	¢50.705	¢44.000		004	
5130		-22.2762317	145.2639216			5.3	0.5	149	12	tba	N	& Piping	2013/2014	\$67,361	\$67,361	\$50,765	\$41,003		904	
2178		-22.2429370	145.2346611	_		1.9	-		18	-				1						Redrill and Plug under GABSI in 2012/13
10901	Thistlebank	-22.2656273	145.1312041	Barcaldine	High	12.1	2.3	537	15	tba	N	Piping	2013/2014	\$144,940	\$144,940	\$193,253	\$124,234		540	
11841	Maria Daura	-22.2421296	145.1663421	-		2.5			11					1						
11987	Marie Downs	-22.1956772	145.1289227			2.9			30			Redrill & Plug		<u> </u>						Redrill and Plug under GABSI in 2012/13
2485	Castle Hill	-22.1315266	142.2856213	Barcaldine	High	15.7	1.5	448	26	tba	N	& Piping	2013/2014	\$275,090	\$275,090	\$180,411	\$155,916		1228	
2653	Darracourt	-24.1135804	145.5480042	Barcaldine	High	2.5	0.3	71	2	n/a	n/a	Redrill & Plug	2013/2014	\$145,905	\$145,905	\$72,953	\$72,953		4110	Landholder piped
2977	Mooney Valley	-24.0356732	145.3697663	Barcaldine	High	10.2	2.8	233	20	tba	N	Piping	2013/2014	\$63,740	\$63,740	\$84,987	\$54,635		547	Redrill and Plug under GABSI in 2011/12
3655	Maroomba	-22.0567948	144.1803219	Barcaldine	High	3.3	1.0	73	19	tba	N	Piping	2013/2014	\$45,103	\$45,103	\$60,137	\$38,660		1236	Redrill and Plug under GABSI in 2008/09
4005	Verastan	-22.5067922	144.4539332	Barcaldine	High	4.9	1.8	98	33	tba	N	Piping	2013/2014	\$67,095	\$67,095	\$89,460	\$57,510		1369	Redrill and Plug under GABSI in 2011/12
4254	Garches	-23.5162324	144.9122680	Barcaldine	High	1.8	1.1	20	3	tba	N	Piping	2013/2014	\$5,591	\$5,591	\$7,455	\$4,793		559	Redrill and Plug under GABSI in 2011/12
4007	Weewondilla	-22.6401258	144.3733796	Barcaldine	High	3.0	1.7	42	12	tba	N	Piping	2013/2014	\$54,422	\$54,422	\$72,562	\$46,647		2592	Redrill and Plug under GABSI in 2011/12
4301		-23.1003985	145.0833737			9.2	6.1	97	n/a	n/a	n/a	Redrill & Plug	2013/2014	\$104,370	\$104,370	\$52,185	\$52,185		2152	Flow regime with data logger to be fitted to monitor
4303 4304	Leichhardt Farms	-23.1098424	145.1811501	Barcaldine	High	14.9 7.3	1.8	643	33 35	tba	N	Piping	2013/2014	\$135,283	\$135,283	\$180,378	\$115,957		421	Redrill and Plug under GABRP in 1990/91
		-23.1248427	145.1169844									Redrill & Plug		<u> </u>						Redrill and Plug under GABRP in 1990/91
4485	Tarbarah	-24.7001148	144.9434730	Barcaldine	High	1.1	1.0	2	5	tba	N	& Piping	2013/2014	\$251,766	\$251,766	\$158,188	\$139,728		251766	
10679	Lilarea	-22.3987237	144.8624390	Barcaldine	High	12.9	1.3	365	38	tba	N	Redrill & Plug & Piping	2013/2014	\$171,402	\$171,402	\$147,596	\$112,227		939	
10927	-	-22.3546627 -22.4060031	145.1041301 145.1931660	_		7.3	2.3	541	15 27	tba	N	Piping	2013/2014	\$81,745	\$81,745	\$108,994	\$70,067		302	
11888 10937	Woolthorpe	-22.4746683	145.0894997	Barcaldine	High	12.2 10.3			27					i						
11794		-22.4746683	145.0894997			5.4	1.3	453	8	tba	N	Piping	2013/2014	\$61,969	\$61,969	\$82,626	\$53,117		274	
11295	Stockholm	-22.2344000	144.4354000	Barcaldine	High	11.3	1.4	313	50	tba	N	Piping	2013/2014	\$99,431	\$99,431	\$132,574	\$85,226		635	Dedrill and Diversides CADCL in 2044/42
15463	Tara	-23.5151194	145.2333745	Barcaldine	High	0.3	0.0	9	1	n/a	n/a	Plug	2013/2014	\$6,390	\$6,390	\$3,195	\$3,195		1420	Redrill and Plug under GABSI in 2011/12
12607	Cluny	-24.8678924	139.8588172	Central	High	31.6	2.5	920	20	tba	N	Piping	2013/2014	\$82,751	\$82,751	\$110,334	\$70,929		180	Reline under GABSI in 2003/04
13088	Adria Downs	-25.53238759	138.987906	Central	High	9.4	3.5	187	28	tba	N	Piping	2013/2014	\$147,982	\$147,982	\$197,309	\$126,842		1583	Reline under GABRP in 1998/99
91	Glen Nevis	-20.86569279	142.9306043	Flinders	High	16.4	10.9	172	n/a	n/a	n/a	Redrill & Plug	2013/2014	\$153,786	\$153,786	\$76,893	\$76,893		1788	Flow regime with data logger to be fitted to monitor
1735	Rothbury Park	-20.13514255	142.2978281	Flinders	High	7.0	0.6	201	23	tba	N	Piping	2013/2014	\$45,642	\$45,642	\$60,856	\$39,121		454	Redrill and Plug under GABSI in 2010/11
1749	Rockvale	-20.48875535	142.2664401	Flinders	High	30.3	2.3	1078	47	tba	N	Piping	2013/2014	\$242,343	\$242,343	\$222,836	\$164,742		450	Redrill and Plug under GABRP in 1992/93
15573	Rockvale	-20.4229182	142.1210606	T III GOIS	riigii	6.2	2.5	1070	15	iba		Redrill & Plug & Piping	2013/2014	φ242,343	ψ242,040	ΨΖΖΖ,000	\$104,74Z		400	
1892	Gracedale	-20.3651735	142.7372494	Flinders	High	5.7	0.6	162	11	tba	N	Piping	2013/2014	\$22,738	\$22,738	\$30,317	\$19,490		281	Redrill and Plug under GABSI in 2012/13
1968	Glenlyon	-21.35930125	142.8981075	Flinders	High	0.1	0.1	0	38	tba	N	Piping	2013/2014	\$85,360	\$85,360	\$113,813	\$73,166			Redrill and Plug under GABSI in 2012/13
2329	Viola	-20.24931348	141.3770068	Flinders	High	2.4	1.6	24	16	tba	N	Piping	2013/2014	\$47,712	\$47,712	\$63,616	\$40,896		3976	Redrill and Plug under GABSI in 2012/13
2338	Werrina	-20.44236779	141.4572848	Flinders	High	2.6	0.3	74	16	tba	N	Piping	2013/2014	\$49,576	\$49,576	\$66,101	\$42,494		1340	Redrill and Plug under GABSI in 2011/12
2449 2457	Argyle	-20.58069943	141.8122811	Flinders	High	1.9	0.2	54	25	tba tba	N	Piping	2013/2014	\$48,830 \$13,122	\$48,830	\$65,107 \$17,406	\$41,855 \$11,248		1809 847	Redrill and Plug under GABSI in 2011/12
2457 3273	Eddington Glenbervie	-20.60819961 -21.23736478	141.5745068 141.8750629	Flinders Flinders	High High	1.3 3.6	0.3 2.2	31 44	7	tba tba	N	Piping Piping	2013/2014 2013/2014	\$13,122 \$48,830	\$13,122 \$48,830	\$17,496 \$65,107	\$11,248 \$41,855		847 2220	Reline under GABRP in 1994/95
3768	Fairlea	-21.23736478	142.0375548	Flinders	High	3.6	6.3	927	23	tba	N	Piping	2013/2014 2013/2014	\$48,830 \$47,339	\$48,830	\$63,107	\$41,855		102	Reline under GABRP in 1994/95
	Debella	-19.96731204	142.0425698	Flinders	High	26.3	3.7	711	36	tba	N	Piping	2013/2014	\$81,632	\$81,632	\$108,843	\$69,971		230	Reline under GABRP in 1991/92 Reline under GABRP in 1989/90
6734		=			J												· · · · ·			
6734 6840	Galliat	-20.69181019	141.5053416	Flinders	High	3.3	0.3	95	2	n/a	n/a	Redrill & Plug	2013/2014	\$79,875	\$79,875	\$39,938	\$39,938		1682	Landholder piped

51555	COUIADUINA	-24.00/0001	140.0013317	110111110051	I	All Cauy Gai	meu unuer rij	and combiered		1 111 2003/200	J <del>*1</del> .	INCUINI & FIUS	2013/2014	ψ10 <del>4</del> ,304	ψ104,004	ψιυ <del>σ,</del> 4τυ	φ100, <del>4</del> 10		1 1	
23	Chesterfield	-27.4243157	148.3493137	Surat	High	3.2	0.3	91	84	tba	N	Piping	2013/2014	\$350,701	\$350,701	\$467,601	\$233,801		7708	Redrill and Plug under GABSI in 2012/13
39	Powrunna	-27.63426105	148.1474445	Surat	High	6.5	2.9	114	38	tba	Ν	Redrill & Plug & Piping	2013/2014	\$283,170	\$283,170	\$232,010	\$159,670		4968	
127	Thomby	-27.92945142	148.9120426	Surat	High	6.5	0.6	183	94	tba	N	Piping	2013/2014	\$336,540	\$336,540	\$325,180	\$214,420		3678	Redrill and Plug under GABSI in 2011/12
1959	Belleview	-27.81144585	148.5057127	Surat	High	9.5	2.7	213	21	tba	N	Piping	2013/2014	\$92,256	\$92,256	\$123,008	\$61,504		866	Redrill and Plug under GABSI in 2011/12
2107	Coomburra	-28.61423464	147.0481980	Surat	High	13.1	8.7	137	n/a	n/a	n/a	Redrill & Plug	2013/2014	\$112,890	\$112,890	\$56,445	\$56,445		1648	Flow regime with data logger to be fitted to monitor
148	Whynot Trust	-26.71649195	143.8959128	Warrego	High	10.8	3.8	221	100	tba	Ν	Redrill & Plug & Piping	2013/2014	\$355,178	\$355,178	\$343,995	\$210,870		3214	
401	Thargomindah	-27.98346627	143.8137087	Warrego	High	24.7	2.5	702	2	n/a	n/a	Redrill & Plug	2013/2014	\$155,490	\$155,490	\$77,745	\$77,745		443	Landholder piped
1057	Bonavista	-24.8851274	144.1967308	Warrego	High	2.1	1.4	21	4	tba	N	Piping	2013/2014	\$18,265	\$18,265	\$24,353	\$15,656		1740	Redrill and Plug under GABSI in 2012/13
1460	Duck Creek	-27.33534286	144.6089918	Warrego	Alr	ready claimed u	nder Piping co	ompleted under	the BDRP (pre C	GABSI) in 199	95/1996.	Redrill & Plug	2013/2014	\$132,060	\$132,060	\$66,030	\$66,030	Y		
1728	Thylungra	-25.6757965	143.6915729	Warrego	High	7.0	1.2	182	35	tba	Ν	Redrill & Plug & Piping	2013/2014	\$418,135	\$418,135	\$292,686	\$225,785		4595	
1809	Clover Downs	-28.33543264	145.980409	Warrego	High	26.7	17.8	281	n/a	n/a	n/a	Redrill & Plug	2013/2014	\$117,150	\$117,150	\$58,575	\$58,575		834	Flow regime with data logger to be fitted to monitor
4551	Pitherty	-28.5478476	145.0868199	Warrego	High	10.2	1.0	290	26	tba	N	Piping	2013/2014	\$72,207	\$72,207	\$96,276	\$48,138		498	Redrill and Plug under GABSI in 2012/13
4884	Weelamurra	-28.16586027	146.2164153	Warrego	High	30.0	20.0	315	n/a	n/a	n/a	Redrill & Plug	2013/2014	\$117,150	\$117,150	\$58,575	\$58,575		744	Flow regime with data logger to be fitted to monitor
5065	Wallen	-27.63817136	145.6936811	Warrego	High	14.0	9.3	147	n/a	n/a	n/a	Redrill & Plug	2013/2014	\$108,630	\$108,630	\$54,315	\$54,315		1478	Flow regime with data logger to be fitted to monitor
		•	•		•	•		14,433	1371		•	•	•	\$6,580,222	\$6,580,222	\$6,204,139	\$4,391,732			

### Table 1b – Springs - Proposed infrastructure Projects

There are no Projects involving springs proposed for 2013/2014. It should be noted that typically all projects will have some benefit to springs (through pressure recovery), but we have chosen not to try to quantify this.

### Table 1c - Proposed other Projects

Project	Zone	Performance Target(s)	Proposed GABSI funding State \$	Proposed GABSI funding Commonwealth \$	Estimated Financial Year for Completion				
Management, Monitoring and Reporting in regards to the 2013- 2014 GABSI program.	N/A	Ongoing, managed delivery of the proposed Projects listed in table 1a. Certification of achievements against Projects and Project subtasks listed in Tables 1a and 1c.	\$250,000	\$250,000	2013/2014				
		Strategic oversight of the Manage the selection pro- Monitor, review and repor Co-ordinate the activities involvement in GABSI Ensure consistency of Pro- Management Plan Conduct workshops and a related enquiries	Ensure consistency of Project delivery with funding agreements and the objectives of the GAB Strate Management Plan Conduct workshops and advertising for participants in GABSI as required and manage all GABSI						

maintain design and quality assurance guidelines and procedures
Provide certification to the Commonwealth of achievements against Projects and Project subtasks listed in Tables 1a and 1c of the 2013-2014 Queensland Implementation Plan.
Provide an annual Performance Report to the Commonwealth on the delivery of GABSI 3 in 2013-2014.

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#### **Estimation of Water Savings**

Bore Rehabilitation - For all 2013/2014 bore rehabilitation works, water savings have been estimated using one of the following options:

- 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 gualified 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 gualified engineers) and a data logger will be installed in the bore upon completion of the rehabilitation. DNRM 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 (i.e. with maximum stock numbers and maximum peak daily demand) the estimate is often conservative.

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.

### **Process for Determining Voluntary interest**

A letter and application package was sent in December 2011 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. These responses will be collated and phone contact made with non-responding landholders to determine the likely level of voluntary interest in GABSI stage 3. Once the level of voluntary interest can be more accurately estimated, DNRM will develop plans as required to assist in achieving the level of participation necessary to fully expend available funding for GABSI stage 3.

### 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, and those which have become uncontrolled due to corrosive water (in department designated corrosive areas e.g. "Flinders Water Bore Corrosion Area".

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 DNRM, 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, gualified 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, DNRM, November 2009.
- All pipeline design is completed by gualified 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, DNRM, 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, DNRM, November 2009 and the Australian Standard AS2033-1980 Installation of Polyethylene pipe systems.
- Quality assurance standards and specifications form part of the contracts signed between DNRM and the landholder/s.

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 re-growth, watercourse protection buffers, essential habitat, soil erosion and stock routes. Relevant staff are trained in cultural awareness and environmental management.

# ANNEXURE 2 : -Performance Report for 2013-2014 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, 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.

Project 1	Land holder name	Lat.	Long.	Zone	Priority	Discharge prior	Design Flow	Actual Water Saved (ML/a)	Actual Drain shutdown (km)	Actual Piping Installed (km)	Activity 1	Estimated Financial Year for Completion	Actual GABSI funding State \$	Actual GABSI funding Commonwealth \$	Actual GABSI funding landholders \$	Actual in- kind contributio n 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							

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

### Table 2c - Proposed other Projects

Project 2	Zone	Performance Target(s)	Actual GABSI funding State \$	Actual GABSI funding Commonwealth \$	Estimated and/or Actual Financial Year for Completion
TOTAL					

Legend

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