

MSO09/3402 W09/2471

Senator the Hon Simon Birmingham
Chair
Standing Committee on Environment, Communications and the Arts References Committee
PO Box 6100
Parliament House
CANBERRA ACT 2600

Dear Senator Birmingham

Thank you for your letter of 29 October 2009 to the former Premier of NSW, the Hon Nathan Rees MP, requesting information on water licences and water rights. Your letter has been referred to me as the information sought falls within my area of responsibility.

With regard to the progress with the National Water Initiative, the recent report by the National Water Commission "Australian Water Reform 2009: Second biennial assessment of progress in implementation of the National Water Initiative" broadly outlines that progress. More specifically, the following information is provided:

1. conversion of water licences to separate tradable entitlements

NSW leads the way in the separation of land and water entitlements. This separation occurs as statutory water sharing plans are developed for a water source. As 90 per cent of water extraction in NSW is now covered by water sharing plans, the most significant areas of water extraction in NSW have had their licences separated and these licences are fully tradable.

Department of **Environment, Climate Change and Water NSW**



2. water planning

In number terms, NSW has now completed 45 of its expected 82 water sharing plans, but in terms of water extraction NSW's completed plans cover over 90 per cent of water extraction. NSW has focused its efforts on the more intensive high priority water sources. Progress on development of the water sharing plans was delayed by the Commonwealth's *Water Act 2007* and the uncertainty around the proposed Basin Plan, and how this would impact on NSW's plans. It is now intended to complete all inland water sharing plans by 2011, and the remaining coastal plans by 2012.

3. integration of planning and management of surface water and groundwater

NSW does integrate the planning and management of surface water and groundwater systems where these are interconnected. A number of water sharing plans have and will continue to be developed, combining surface and groundwater management and water sharing rules.

4. integration of planning and management of entitlement water and other waterintercepting landuses

NSW has a farm dams policy which limits the amount of water that can be captured without a licence. In addition, NSW is finalising a floodplain harvesting policy which will not only licence floodplain harvesting activities, but make them subject to volume limits. This will bring the last major extraction activity in NSW within the formal water entitlements framework. NSW is also developing guidelines to place limits on extraction of water via basic landholder rights.

5. facilitate water trading, including interstate water trading

NSW has the most expansive and robust water trading system in the nation, as evidenced by the significant trading that has occurred over the last few years despite severe drought and limited water availability. NSW has met every requirement under the National Water Initiative to facilitate trade, including inter-state trade. NSW signed inter-state trading arrangements with Victoria and South Australia in 2007.

6. water accounting and metering

NSW has been actively involved with the Bureau of Meteorology in the development of the national framework and standards for water accounting and has undertaken a pilot project in the Murrumbidgee.

Most water users in the regulated rivers and the major inland groundwater aquifers in NSW are metered. Funding has been secured from the Commonwealth for a metering program in the Hawkesbury-Nepean River, and in-principle approval has been received for funding metering across the Murray-Darling Basin covering regulated rivers, unregulated rivers and

groundwater. The Murray-Darling Basin metering project, however, will be dependent on the due diligence assessment by the Commonwealth of a business case for the project.

The following attachments provide information on water licences and entitlements in NSW. Note that water licences in NSW are currently managed under two pieces of legislation – the *Water Act 1912* - and for those areas covered by water sharing plans – the *Water Management Act 2000*. Most water extraction is now covered by water sharing plans and is therefore licensed under the *Water Management Act 2000*.

A definition by the Committee of sleeper licences (i.e. no extraction over a specifically defined period) would be required for the NSW Office of Water to assess the number of these licences and, obviously, this assessment can only be made for those water sources where extractions are largely metered, which is in regulated rivers and inland groundwater aquifers. However, given the growth in water trade there would be few licences which have not used or traded their account water in the regulated river systems in recent years.

A similar position would be likely with the major groundwater systems where entitlements were recently reduced to the sustainable yield and the history of extractions taken into account in this process. With unregulated river systems, as flows are more opportunistic, there may be a higher component of unused licences, however when unregulated river licences were converted to a volume basis, inactive licences were given a lower conversion volume.

I hope this information is of assistance to your Committee.

Yours sincerely

David Harriss

Commissioner, NSW Office of Water

Encl.

WATER ACT 1912 LICENCES

Surface Water Licences

(predominantly unregulated rivers as the major regulated rivers systems come under the Water Management Act.

REGION	NUMBER OF LICENCES	ENTITLEMENT MLs
BARWON	1267	193 110
FAR WEST	398	29 248
HUNTER	98	121 134
LACHLAN	643	61 712
LOWER MURRAY / DARLING	43	2 965
MACQUARIE-WESTERN	. 1238	76 331
MURRAY	464	53 049
MURRUMBIDGEE	872	67 073
NORTH COAST	2955	246 895
SYDNEY SOUTH COAST	3004	279 470
	10982	1 130 987

Groundwater Licences

(excludes the major inland aquifers from which most groundwater is extracted).

REGION	NUMBER OF LICENCES	ENTITLEMENT MLs
BARWON	16180	112 952
FAR WEST	1457	1 203
HUNTER	7409	99 959
LACHLAN	8766	209 103
LOWER MURRAY / DARLING	593	24 016
MACQUARIE-WESTERN	14746	106 983
MURRAY	3853	83 030
MURRUMBIDGEE	8137	97 963
NORTH COAST	12132	41 215
SYDNEY SOUTH COAST	13061	65 731
	86334	842 155
	• .	
TOTAL ALL LICENCES	97 316	1 973 142

The NSW Office of Water is not able to separate licences under the Water Act 1912 into licence types.

WATER MANAGEMENT ACT 2000 LICENCESThe licences are broken into regulated river, groundwater (aquifer) and specific purpose licences. Specific purpose licences are not tradeable – they cover town water, domestic and stock and categories such as Aboriginal cultural licences.

Region BARWON	Category regulated river -	Number of access licences	share (entitlement MLs)
DARWON	- general security	. 699	1028682
	- high security	38	19548
	- supplementary	869	485631
		377	
	specific purpose		32097
,	aquifer	1066	258851
•	unregulated river	181	40492
EAD MEAT		3230	1,865,301
FAR WEST	regulated river	0	0
	aquifer	12	716
•	specific purpose	2	152
		14	868
HUNTER	regulated river -		
	 general security 	864	138109
,	- high security	171	21930
· · ·	- supplementary	270	49276
,	specific purpose	625	466796
	aquifer	796	88723
	unregulated river	2319	153537
	- \	5045	918,371
LACHLAN	regulated river -		
•	- general security	838	592816
	- high security	110	26685
•	- conveyance	1	17911
	- supplementary	45	21238
	specific purpose	623	32096
	aquifer	83	105678
	unregulated river	98	8352
	an ogalatod myol	1798	804,776
LOWER MURRAY			*****
/ DARLING	regulated river -	•	,
	- general security	342	110122
	- high security	481	149337
•	- supplementary	· 17	252562
	specific purpose	435	19977
		1275	531,998
MACQUARIE-			
WESTERN	regulated river -		
	 general security 	583	631716
	- high security	73	13828
	- supplementary	560	52438
	specific purpose	330	36394
	aquifer	154	76698
	unregulated river	55	4110
	• • • • • • • • • • • • • • • • • • • •	1755	815,184

Region	Category	Number of access licences	share (entitlement MLs)
MURRAY	regulated river -		
	 general security 	969	1635701
•	 high security 	198	45824
	- conveyance	. 2	330000
	 supplementary 	381	302516
	specific purpose	713	42732
	aquifer	365	117186
:	unregulated river	3	330
		263 <u>1</u>	2,474,289
MURRUMBIDGEE	regulated river -		•
	- general security	. 783	1887470
	- high security	144	356790
	- conveyance	2	2968
•	- supplementary	338	235719
•	specific purpose	542	455759
	aquifer	292	239285
	unregulated river	136	8783
•		2237	3,186,774
NORTH COAST	aquifer	221	10,207
	Unregulated river	535	23811
	specific purpose	102	2232
		858	36,250
SYDNEY SOUTH		4	
COAST	aquifer	1	12
•	Unregulated river	101	5230
	specific purpose	22	238
		124	5,480
	TOTAL	17,347	10,639,291
	,		
·			

·

• ,

. . .

The following provides more information on water licences and entitlements under the *Water Management Act 2000* in each region.

Region	Licence Category	Water Source	No Licences	Entitlement ML
Barwon	Aquifer	Lower Gwydir Groundwater	170	28858
Barwon	Aquifer	Nsw Great Artesian Basin Groundwater	129	38787.5
Barwon	Aquifer	Upper And Lower Namoi Groundwater	767	191206
Barwon	Aquifer(Town Water Supply)	Nsw Great Artesian Basin Groundwater	1	25
Barwon	Domestic And Stock	Gwydir Regulated River Water	68	2506
Barwon	Domestic And Stock	Nsw Border Rivers Regulated River Phillips Creek, Mooki River, Quirindi Creek	30	1120
Barwon	Domestic And Stock	and Warrah Creek Rocky Creek, Cobbadah, Upper Horton and	14	112.5
Barwon	Domestic And Stock	Lower Horton	3	21
Barwon	Domestic And Stock	Tenterfield Creek Upper Namoi And Lower Namoi Regulated	3	18
Barwon	Domestic And Stock Domestic And	River	116	1821
Barwon	Stock(Domestic) Domestic And	Gwydir Regulated River	3	8
Barwon	Stock(Domestic) Domestic And	Nsw Border Rivers Regulated River Phillips Creek, Mooki River, Quirindi Creek	14	52
Barwon	Stock(Domestic) Domestic And	And Warrah Creek Rocky Creek, Cobbadah, Upper Horton And	1	1
Barwon	Stock(Domestic) Domestic And	Lower Horton	3	. 6
Barwon	Stock(Domestic) Domestic And	Tenterfield Creek Upper Namoi And Lower Namoi Regulated	· 1	1
Barwon	Stock(Domestic)	River	10	31
Barwon	Domestic And Stock(Stock)	Gwydir Regulated River	27	230
Barwon	Domestic And Stock(Stock)	Nsw Border Rivers Regulated River	15	100
Barwon	Domestic And Stock(Stock)	Phillips Creek, Mooki River, Quirindi Creek And Warrah Creek	. 7	43.5
Barwon	Domestic And Stock(Stock)	Tenterfield Creek	1	65
Barwon	Domestic And Stock(Stock)	Upper Namoi And Lower Namoi Regulated River	23	262
Barwon	Town Water Supply	Tenterfield Creek	. 1	100
Barwon	Local Water Utility	Gwydir Regulated River	4	3836
Barwon	Local Water Utility	Lower Gwydir Groundwater	2	3572
Barwon	Local Water Utility	Nsw Border Rivers Regulated River Water	3	620
Barwon	Local Water Utility	Nsw Great Artesian Basin Groundwater Phillips Creek, Mooki River, Quirindi Creek	9	1618
Barwon	Local Water Utility	And Warrah Creek	1	1000
Barwon	Local Water Utility	Tenterfield Creek	1	824
Barwon	Local Water Utility	Upper And Lower Namoi Groundwater Upper Namoi And Lower Namoi Regulated	12	11137
Barwon	Local Water Utility Regulated River (General	River	2	2421
Barwon	Security A) Regulated River (General	Nsw Border Rivers Regulated River	119	21920
Barwon	Security B) Regulated River (General	Nsw Border Rivers Regulated River	95	241165
Barwon	Security) Regulated River (General	Gwydir Regulated River	178	509665
Barwon	Security)	Nsw Border Rivers Regulated River	· 4	153
Barwon	Regulated River (General Security)	Upper Namoi And Lower Namoi Regulated River	303	255779.5
Barwon	Regulated River (High Security)	Gwydir Regulated River	14	14817.9
Barwon	Regulated River (High Security)	Nsw Border Rivers Regulated River	8	1233
		,		

		·			
_	· ·	Regulated River (High	Upper Namoi And Lower Namoi Regulated		
Baı	rwon	Security) Regulated River (High	River	16	3498
Bai	rwon	Security)(Research) Regulated River (High	Gwydir Regulated River Upper Namoi And Lower Namoi Regulated	1	. 60
Baı	won	Security)(Research)	River	. 1	486
Baı	won '	Supplementary Water	Gwydir Regulated River	169	177346.5
Baı	rwon	Supplementary Water	Lower Gwydir Groundwater	41	13930
Baı	won	Supplementary Water	Nsw Border Rivers Regulated River	123	120001
Baı	won	Supplementary Water	Upper And Lower Namoi Groundwater Upper Namoi And Lower Namoi Regulated	326	58868
Bar	won	Supplementary Water	River Phillips Creek, Mooki River, Quirindi Creek	210	115485.86
Bar	won	Unregulated River	And Warrah Creek Rocky Creek, Cobbadah, Upper Horton And	64	31686.5
	won	Unregulated River	Lower Horton	57	5591
	won	Unregulated River	Tenterfield Creek	60	3215
	West	Aquifer	Nsw Great Artesian Basin Groundwater	.12	716
	West	Local Water Utility	Nsw Great Artesian Basin Groundwater	2	152
Hui		Aquifer	Hunter Unregulated And Alluvial Water	518	79154
	nter	Aquîfer	Kulnura Mangrove Mountain Groundwater	199	3236.5
	nter	Aquifer	Lower North Coast Unregulated And Alluvial	9	1494
	nter	Aquifer	Tomago Tomaree Stockton Groundwater	52	2602.5
	nter	Aquifer	Wybong Creek	18	2236
	nter	Aquifer(Town Water Supply)	Kulnura Mangrove Mountain Groundwater	2	80
	nter	Domestic And Stock	Central Coast Unregulated River	22	129
Hur		Domestic And Stock	Hunter Regulated River	168	1601
Hur		Domestic And Stock	Hunter Unregulated And Alluvial	130	606.5
Hur		Domestic And Stock	Jilliby Jilliby Creek	1	6.5
Hur		Domestic And Stock	Karuah River	2	27
Hur		Domestic And Stock	Lower North Coast Unregulated And Alluvial	21	82.5
Hur		Domestic And Stock	Ourimbah Creek	9 4	40.5 42
Hur Hur		Domestic And Stock Domestic And Stock	Paterson Regulated River Wybong Creek	13	76
Hur	•	Domestic And Stock Domestic And Stock(Domestic)	Central Coast Unregulated River	13	13
Hur	-	Domestic And Stock(Domestic)	Hunter Regulated River	42	143
Hur		Domestic And Stock(Domestic)	Hunter Unregulated And Alluvial	90	98
Hur		Domestic And Stock(Domestic)	Lower North Coast Unregulated And Alluvial	. 14	16
Hur		Domestic And Stock(Domestic)	Ourimbah Creek	1	1
Hur		Domestic And Stock(Domestic)	Paterson Regulated River	2	2
Hur		Domestic And Stock(Domestic)	Wybong Creek	4	5
Hur		Domestic And Stock(Stock)	Central Coast Unregulated River	. 5	20
Hur		Domestic And Stock(Stock)	Hunter Regulated River	. 22	. 20 108
Hur		Domestic And Stock(Stock)	Hunter Unregulated And Alluvial	19	68
Hur		Domestic And Stock(Stock)	Karuah River	5	(
Hur		Domestic And Stock(Stock)	Lower North Coast Unregulated And Alluvial	1	3.5
Hur		Domestic And Stock(Stock)	Ourimbah Creek	2	(
Hur		Domestic And Stock(Stock)	Paterson Regulated River	. 1	
Hur		Domestic And Stock(Stock)	Wybong Creek	. 2	
Hur	nter	Local Water Utility	Central Coast Unregulated River	3	6
Hur	nter	Local Water Utility	Hunter Regulated River	5	1083
Hur		Local Water Utility	Hunter Unregulated And Alluvial	9	536
Hur		Local Water Utility	Karuah River	1	320
Hur	nter	Local Water Utility	Lower North Coast Unregulated And Alluvial	3	250
	•				

•				
•		•		
Hunter	Local Water Utility	Ourimbah Creek	1	500
Hunter	Major Utility	Hunter Unregulated And Alluvial	3	34670
Hunter	Major Utility	Lower North Coast Unregulated And Alluvial	. 1	3000
11	Major Utility(Power	Ukuntan Danislata di Dhana	4	
Hunter	Generation)	Hunter Regulated River	1	3600
Hunter	Major Utility(Urban Water) Regulated River (General	Tomago Tomaree Stockton Groundwater	2	2900
Hunter	Security) Regulated River (General	Hunter Regulated River	768	12854
Hunter	Security) Regulated River (High	Paterson Regulated River	96	956
Hunter	Security) Regulated River (High	Hunter Regulated River	157	2174
Hunter	Security) Regulated River (High	Paterson Regulated River	. 14	19
Hunter	Security)(Town Water Supply)	Paterson Regulated River	1	- 7
Hunter	Supplementary Water	Hunter Regulated River	243	48520.5
Hunter	Supplementary Water	Paterson Regulated River	27	755.
Hunter	Unregulated River	Central Coast Unregulated River	261	10741.
Hunter	Unregulated River	Hunter Unregulated And Alluvial	1182	81688.
Hunter	- · · · · · · · · · · · · · · · · · · ·		25	102
Hunter Hunter	Unregulated River	Jilliby Jilliby Creek Karuah River	25 73	326
	Unregulated River			
Hunter	Unregulated River	Lower North Coast Unregulated And Alluvial	597	4641
Hunter	Unregulated River	Ourimbah Creek	79	213
Hunter	Unregulated River	Wybong Creek	102	8264.
Lachlan	Aquifer	Lower Lachlan Groundwater	. 83	. 10567
Lachlan	Domestic And Stock	Lachlan Regulated River	335	1231
Lachlan	Domestic And Stock Domestic And	Mandagery Creek	12	7.
Lachlan	Stock(Domestic) Domestic And	Lachlan Regulated River	77	18
Lachlan	Stock(Domestic)	Mandagery Creek	. 4	
Lachlan	Domestic And Stock(Stock)	Lachlan Regulated River	178	163
Lachian	Domestic And Stock(Stock)	Mandagery Creek	· 4	1:
Lachlan	Local Water Utility	Lachlan Regulated River	9	1554
Lachlan	Local Water Utility	Lower Lachlan Groundwater	4	232
Lachlan	Regulated River (Conveyance)	Lachlan Regulated River	1	1791
Lachlan	Regulated River (General Security)	Lachlan Regulated River	838	592816.4
Lachlan	Regulated River (High Security)	Lachlan Regulated River	. 110	26685.
Lachlan		Lower Lachlan Groundwater	. 110	20005.
	Supplementary Water			
Lachlan Lower Murray /	Unregulated River	Mandagery Creek	98	835
Darling Lower Murray /	Domestic And Stock Domestic And	Murray And Lower Darling Regulated Rivers	104	2470.
Darling Lower Murray /	Stock(Domestic)	Murray And Lower Darling Regulated Rivers	302	135
Darling Lower Murray /	Domestic And Stock(Stock)	Murray And Lower Darling Regulated Rivers	. 22	136
Darling Lower Murray /	Local Water Utility Regulated River (General	Murray And Lower Darling Regulated Rivers	5	1473
Darling Lower Murray /	Security) Regulated River (High	Murray And Lower Darling Regulated Rivers	342	11012
Darling	Security) Regulated River (High	Murray And Lower Darling Regulated Rivers	481	149337.4
Lower Murray / Darling	Security)(Community And Education)	Murray And Lower Darling Regulated Rivers	2	4
Lower Murray / Darling	Supplementary Water	Murray And Lower Darling Regulated Rivers	17	25256
Lower Yanco System	Domestic And Stock(Domestic)	Murrumbidgee Regulated River	1	
Lower Yanco System	Regulated River (General Security)	Murrumbidgee Regulated River	8	38
			,	

				•
Lower Yanco System	Regulated River (High Security)	Murrumbidgee Regulated River	. 3	4
Macquarie-	Security)	wurtumbagee Regulated River	, , , , , , , , , , , , , , , , , , ,	7
Western	Aquifer	Lower Macquarie Groundwater	117	6545
Macquarie-				
Western	Aquifer	Nsw Great Artesian Basin Groundwater	37	1124
Macquarie- Western	Domestic And Stock	.Castlereagh River Above Binnaway	. 2	1
Macquarie-	Domestic And Stock	Macquarie And Cudgegong Regulated	· ·	'
Western	Domestic And Stock	Rivers	199	505
Macquarie-	Domestic And	0 "		
Western Macquarie-	Stock(Domestic) Domestic And	Castlereagh River Above Binnaway E Macquarie And Cudgegong Regulated	1	
Western	Stock(Domestic)	Rivers	67	32
Macquarie-	•			•
Western	Domestic And Stock(Stock)	Castlereagh River Above Binnaway	1	
Macquarie-	Domestic And Stock(Stock)	Macquarie And Cudgegong Regulated Rivers	35	19
Western Macquarie-	Domestic And Stock(Stock)	· I/IAGI2	ુ ગ	19
Western	Local Water Utility	Castlereagh River Above Binnaway We	2	95
Macquarie-			•.	= =
Western	Local Water Utility	Lower Macquarie Groundwater	4	309
Macquarie- Western	Local Water Utility	Macquarie And Cudgegong Regulated Rivers	9	1880
Macquarie-	Local state: Othity	THEOLOGY .		1000
Western	Local Water Utility	Nsw Great Artesian Basin Groundwater	5	356
Macquarie-	Regulated River (General	Macquarie And Cudgegong Regulated	200	00:
Western	Security)	Rivers	583	63171
Macquarie- Western	Regulated River (High Security)	Macquarie And Cudgegong Regulated Rivers	73	1382
Macquarie-	Regulated River (High	Macquarie And Cudgegong Regulated		1002
Western	Security)(Research)	Rivers	4	434
Macquarie-	Regulated River (High	Macquarie And Cudgegong Regulated	·	
Western Macquarie	Security)(Town Water Supply)	Rivers	1	4
Macquarie- Western	Supplementary Water	Lower Macquarie Groundwater	. 14	239
Macquarie-	cappionionally reacti	Macquarie And Cudgegong Regulated		
Western	Supplementary Water	Rivers	546	50042.9
Macquarie-	Upper and stand Discour	Continuosa Diver Ahare Diagoner	er .	. 444
Western	Unregulated River	Castlereagh River Above Binnaway	55 ·	411 8349
Murray	Aquifer	Lower Murray Groundwater Water	330	
Murray	Aquifer	Lower Murroy Croundwater	35 4	3369
Murray	Aquifer(Research)	Lower Murray Groundwater Water	1	6
Murray	Aquifer(Town Water Supply)	Lower Murray Groundwater Water	2 1	6
Murray	Aquifer(Town Water Supply)	Lower Murrumbidgee Groundwater	400	
Murray	Domestic And Stock	Murray And Lower Darling Regulated Rivers	489	. 11772.9
Murray	Domestic And Stock Domestic And	Upper Billabong Water Source	. 1	
Murray	Stock(Domestic)	Murray And Lower Darling Regulated Rivers	53	31
Murray	Domestic And Stock(Stock)	Lower Murrumbidgee Groundwater Sources	. 1	32
Murray	Domestic And Stock(Stock)	Murray And Lower Darling Regulated Rivers	149	132
Murray	Local Water Utility	Lower Murray Groundwater Water Source	. 2	102
Murray	Local Water Utility	Murray And Lower Darling Regulated Rivers	14	2889
Murray	Regulated River (Conveyance)	Murray And Lower Darling Regulated Rivers	. 2	33000
a.ray	Regulated River (General			
Murray	Security)	Murray And Lower Darling Regulated Rivers	969	163570
N. f. inner	Regulated River (High	Murroy And Lower Doding Desidated Divers	105	41829
Murray	Security) Regulated River (High	Murray And Lower Darling Regulated Rivers	195	41029
Murray	Security)(Research) .	Murray And Lower Darling Regulated Rivers	1	80
•	Regulated River (High		·	
Murray .	Security)(Town Water Supply)	Murray And Lower Darling Regulated Rivers	2	319
Murray	Supplementary Water	Lower Murray Groundwater Water Source	182	484
Murray	Supplementary Water	Lower Murrumbidgee Groundwater Sources	15	42
Murray	Supplementary Water	Murray And Lower Darling Regulated Rivers	184	2498
				,
		•		

	,.				
		•			
	•	•			•
	Marron	Unregulated Diver	Linner Billehene Biree	3	220
	Murray Murrumbidgee	Unregulated River Aquifer	Upper Billabong River Lower Murrumbidgee Groundwater	- 3 292	330 239285
		Coleambally Irrigation	, ,		
	Murrumbidgee	(Conveyance)	Murrumbidgee Regulated River	2	130000
	Murrumbidgee	Domestic And Stock	Adelong Creek	11	7 <u>7</u> 22265.5
	Murrumbidgee Murrumbidgee	Domestic And Stock Domestic And Stock	Murrumbidgee Regulated River Tarcutta Creek	275 7	. 22200.0
	wurrambiogee	Domestic And	Tarculta Creek	,	49
	Murrumbidgee	Stock(Domestic) Domestic And	Adelong Creek	12 +	22.5
	Murrumbidgee	Stock(Domestic) Domestic And	Murrumbidgee Regulated River	40	250.15
Í	Murrumbidgee	Stock(Domestic)	Tarcutta Creek	. 7	21
•	Murrumbidgee	Domestic And Stock(Stock)	Adelong Creek	1	2
	Murrumbidgee	Domestic And Stock(Stock)	Murrumbidgee Regulated River	158	13411.5
	Murrumbidgee	Domestic And Stock(Stock)	Tarcutta Creek Adelong Creek	3 1	15 230
•	Murrumbidgee Murrumbidgee	Local Water Utility Local Water Utility	Lower Murrumbidgee Groundwater	3	230
	Murrumbidgee	Local Water Utility	Murrumbidgee Regulated River	· 14	23586
	Murrumbidgee	Local Water Utility	Tarcutta Creek	· 1	30
	Maramolagee	Murrumbidgee Irrigation	raiodita oroon		00
	Murrumbidgee	(Conveyance)	Murrumbidgee Regulated River	2	243000
*	Murrumbidgee	Regulated River (Conveyance)	Murrumbidgee Regulated River	2	2968
	Murrumbidgee	Regulated River (General Security) Regulated River (High	Murrumbidgee Regulated River	783	1887469.7
	Murrumbidgee	Security) Regulated River (High	Murrumbidgee Regulated River	144	356790.95
	Murrumbidgee	Security)(Aboriginal Cultural) Regulated River (High	Murrumbidgee Regulated River	1	500
-	Murrumbidgee	Security)(Research) Regulated River (High	Murrumbidgee Regulated River	2	320
	Murrumbidgee	Security)(Town Water Supply)	Murrumbidgee Regulated River	2	19769
	Murrumbidgee	Supplementary Water	Lower Murrumbidgee Groundwater	112	36940
	Murrumbidgee	Supplementary Water	Murrumbidgee Regulated River	226	198779.8
	Murrumbidgee	Unregulated River	Adelong Creek	50	3778.3
	Murrumbidgee	Unregulated River	Tarcutta Creek	86	5005
	North Coast	Aquifer	Alstonville Plateau Groundwater Bellinger River Area Unregulated And	156	5646
	North Coast	Aquifer	Alluvial Coffs Harbour Area Unregulated And	4	203
	North Coast	Aquifer	Alluvial Dorrigo Plateau Surface Water Source And The Dorrigo Peacelt Croundwater	27 10	658 265
	North Coast North Coast	Aquifer Aquifer	The Dorrigo Basalt Groundwater Stuarts Point Groundwater	24	3435
	HOLLI OUDSE	Aquiloi	Dorrigo Plateau Surface Water Source And	27	0700
	North Coast	Aquifer(Aboriginal Cultural)	The Dorrigo Basalt Groundwater	1	10
	North Coast	Domestic And Stock	Apsley River	1	5.5
	North Coast	Domestic And Stock	Bellinger River Area Unregulated And Alluvial Coffs Harbour Area Unregulated And	8	32
	North Coast	Domestic And Stock	Alluvial	3	12
	North Coast	Domestic And Stock	Commissioners Waters	6	34.5
	North Coast	Domestic And Stock	Coopers Creek Dorrigo Plateau Surface Water And Basalt	9	36
·	North Coast	Domestic And Stock Domestic And	Groundwater Bellinger River Area Unregulated And	4	100
	North Coast	Stock(Domestic) Domestic And	Alluvial Coffs Harbour Area Unregulated And	11 .	86
	North Coast	Stock(Domestic) Domestic And	Alluvial	19	. 20
	North Coast	Stock(Domestic) Domestic And	Commissioners Waters	2	2
	North Coast	Stock(Domestic)	Coopers Creek	13	16
1					
ı			•		
				•	

North Coast Stock(Domestic) Domestic And Stock(Stock) Apsle Coffs North Coast Domestic And Stock(Stock) Apsle Coffs North Coast Domestic And Stock(Stock) Alluvi North Coast Domestic And Stock(Stock) Commonth Coast Domestic And Stock(Stock) Commonth Coast Domestic And Stock(Stock) Coop North Coast Local Water Utility Alsto Dorric North Coast Local Water Utility Stuar North Coast Unregulated River Apsle North Coast Unregulated River Apsle North Coast Unregulated River Coffs North Coast Unregulated River Commonth Coast Unregulated River Commonth Coast Unregulated River Commonth Coast Unregulated River Commonth Coast Unregulated River Uppe Sydney South Coast Aquifer Kulnucoast Sydney South Coast Domestic And Stock Wand Sydney South Coast Stock(Domestic) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand Sydney South Loca		
North Coast Stock(Domestic) Domestic And Stock(Stock) Apsle Coffs North Coast Domestic And Stock(Stock) Apsle Coffs North Coast Domestic And Stock(Stock) Alluvi North Coast Domestic And Stock(Stock) Commonth Coast Domestic And Stock(Stock) Commonth Coast Domestic And Stock(Stock) Coop North Coast Local Water Utility Alsto Dorric North Coast Local Water Utility Stuar North Coast Unregulated River Apsle Bellin North Coast Unregulated River Apsle River Coffs North Coast Unregulated River Commonth Coast Unregulated River Commonth Coast Unregulated River Commonth Coast Unregulated River Commonth Coast Unregulated River Uppe Sydney South Coast Aquifer Kulnucast Sydney South Coast Domestic And Stock Sydney South Coast Stock(Domestic) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand Coast Sydney South Coast Local Water Utility Wand Coast Local Water Utili		
North Coast Stock(Domestic) Domestic And Stock(Stock) Apsle Coffs North Coast Domestic And Stock(Stock) Apsle Coffs North Coast Domestic And Stock(Stock) Alluvi North Coast Domestic And Stock(Stock) Commonth Coast Domestic And Stock(Stock) Commonth Coast Domestic And Stock(Stock) Coop North Coast Local Water Utility Alsto Dorric North Coast Local Water Utility Stuar North Coast Unregulated River Apsle North Coast Unregulated River Apsle North Coast Unregulated River Coffs North Coast Unregulated River Commonth Coast Unregulated River Commonth Coast Unregulated River Coop North Coast Unregulated River Unregulated River Unregulated River Coop Dorric North Coast Unregulated River Uppe Sydney South Coast Aquifer Kulnucoast Sydney South Coast Domestic And Stock Wand Sydney South Coast Stock(Domestic) Kang Sydney South Coast Stock(Domestic) Kang Sydney South Coast Stock(Domestic) Wand Sydney South Coast Stock(Domestic) Kang Sydney South Coast Stock(Domestic) Wand Sydney South Coast Stock(Domestic) Kang Sydney South Coast Stock(Domestic) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand Sydney South Local Wat		
North Coast Stock(Domestic) Domestic And Stock(Stock) Apsle Coffs North Coast Domestic And Stock(Stock) Apsle Coffs North Coast Domestic And Stock(Stock) Alluvi North Coast Domestic And Stock(Stock) Commonth Coast Domestic And Stock(Stock) Coop North Coast Local Water Utility Alsto Dorric North Coast Local Water Utility Stuar North Coast Unregulated River Apsle North Coast Unregulated River Apsle North Coast Unregulated River Coffs North Coast Unregulated River Commonth Coast Unregulated River Unpersonant Coast Sydney South Coast Domestic And Stock Kang Sydney South Coast Stock(Domestic) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand Sydney South Coast Local W	go Plateau Surface Water Source And	•
North Coast Domestic And Stock(Stock) Apsle Coffs North Coast Domestic And Stock(Stock) Alluvi North Coast Domestic And Stock(Stock) Alluvi North Coast Domestic And Stock(Stock) Commonth Coast Domestic And Stock(Stock) Coop North Coast Local Water Utility Alsto Dorris North Coast Local Water Utility Stuar North Coast Local Water Utility Stuar North Coast Unregulated River Apsle Bellin North Coast Unregulated River Commonth Coast Unregulated River Coop Dorris North Coast Unregulated River Coop Dorris North Coast Unregulated River Uppe Sydney South Coast Aquifer Kulnus Sydney South Coast Domestic And Stock Wand Sydney South Coast Stock(Domestic) Kang Sydney South Coast Stock(Domestic) Kang Sydney South Coast Stock(Domestic) Wand Sydney South Coast Stock(Domestic) Wand Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand Sydney South	Oorrigo Basalt Groundwater	8 2
North Coast Domestic And Stock(Stock) Apslet Coffs North Coast Domestic And Stock(Stock) Alluvi North Coast Domestic And Stock(Stock) Commonth Coast Domestic And Stock(Stock) Coop North Coast Local Water Utility Alston Dorrig North Coast Local Water Utility The I North Coast Local Water Utility Stuar North Coast Unregulated River Apsletin North Coast Unregulated River Coffs North Coast Unregulated River Commonth Coast Unregulated River Unpersulated River Unpersulated River Coop Dorrig North Coast Unregulated River Uppersulated River Uppersu		
North Coast Domestic And Stock(Stock) Alluvi North Coast Domestic And Stock(Stock) Commonth Coast Domestic And Stock(Stock) Coop North Coast Domestic And Stock(Stock) Coop North Coast Local Water Utility Alsto Dorri North Coast Local Water Utility The Dorri North Coast Local Water Utility Stuar North Coast Unregulated River Apsle Bellin North Coast Unregulated River Coffs North Coast Unregulated River Commonth Coast Unregulated River Commonth Coast Unregulated River Coop North Coast Unregulated River Coop North Coast Unregulated River Coop North Coast Unregulated River Uppe Sydney South Coast Aquifer Kulnu Sydney South Coast Domestic And Stock Sydney South Coast Stock(Domestic) Kang Sydney South Coast Domestic And Stock Sydney South Coast Stock(Domestic) Wand Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand	r Brunswick River	5
North Coast Domestic And Stock(Stock) Alluvi North Coast Domestic And Stock(Stock) Composition And Stock(Stock) Coop North Coast Domestic And Stock(Stock) Coop North Coast Local Water Utility Alston Dorrig North Coast Local Water Utility The E North Coast Local Water Utility Stuar North Coast Unregulated River Apsle Bellin North Coast Unregulated River Coffs North Coast Unregulated River Comporrig North Coast Unregulated River Comporrig North Coast Unregulated River Coop Dorrig North Coast Unregulated River Unppe Sydney South Coast Aquifer Kulnu Sydney South Coast Domestic And Stock Sydney South Coast Stock(Domestic) Sydney South Coast Stock(Domestic) Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Stock(Domestic) Wand Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand Sydney South Coast Local Water Utility Wand	y River	1 4.
North Coast Domestic And Stock(Stock) Coop North Coast Domestic And Stock(Stock) Coop North Coast Local Water Utility Alsto Dorrig North Coast Local Water Utility The D North Coast Local Water Utility Stuar North Coast Unregulated River Apsle Bellin North Coast Unregulated River Coffs North Coast Unregulated River Commonth Coast Unregulated River Commonth Coast Unregulated River Commonth Coast Unregulated River Coop North Coast Unregulated River Coop North Coast Unregulated River Upper Sydney South Coast Aquifer Kulnu Sydney South Coast Domestic And Stock Sydney South Coast Stock(Domestic) Kang Sydney South Coast Domestic And Stock Sydney South Coast Stock(Domestic) Wand Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Domestic And Stock Sydney South Coast Stock(Domestic) Wand Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand	Harbour Area Unregulated And	2
North Coast Local Water Utility Alston Dorrig North Coast Local Water Utility The D North Coast Local Water Utility The D North Coast Local Water Utility Stuar North Coast Unregulated River Apsle Bellin North Coast Unregulated River Coffs North Coast Unregulated River Comp North Coast Unregulated River Unperpulated River Unperpulated River Worth Coast Unregulated River Worth Coast Unregulated River Worth Coast Unregulated River Unperpulated River Unperpul	missioners Waters	2 9.
North Coast Local Water Utility The I North Coast Local Water Utility The I North Coast Local Water Utility Stuar North Coast Unregulated River Apsle Bellin North Coast Unregulated River Alluvi North Coast Unregulated River Commonth Coast Unregulated River Commonth Coast Unregulated River Commonth Coast Unregulated River Commonth Coast Unregulated River Coop Dorrig North Coast Unregulated River The I North Coast Unregulated River Upper Sydney South Coast Aquifer Kulnus Sydney South Coast Domestic And Stock Kang Sydney South Coast Stock (Domestic) Kang Sydney South Coast Stock (Domestic) Kang Sydney South Coast Stock (Domestic) Wand Sydney South Coast Stock (Domestic) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand S	ers Creek Water	1
North Coast Local Water Utility The Dorright North Coast Local Water Utility Stuar North Coast Unregulated River Apsle Bellim North Coast Unregulated River Alluvi North Coast Unregulated River Coffs North Coast Unregulated River Commonth Coast Unregulated River Coop Dorright North Coast Unregulated River Coop Dorrigh North Coast Unregulated River The Dorright North Coast Unregulated River Upper Sydney South Coast Unregulated River Upper Sydney South Coast Aquifer Kulnus Sydney South Coast Domestic And Stock Kang Sydney South Coast Stock (Domestic) Kang Sydney South Coast Stock (Domestic) Kang Sydney South Coast Stock (Domestic) Wand Sydney South Coast Domestic And Stock (Stock) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand Sydney South Coast Local Water Uti	nville Plateau Groundwater	4 123
North Coast Local Water Utility Stuar North Coast Local Water Utility Stuar North Coast Unregulated River Apsle Bellin North Coast Unregulated River Coffs North Coast Unregulated River Component North Coast Unregulated River Component North Coast Unregulated River Component North Coast Unregulated River Unregulated River Unregulated River Upper Sydney South Coast Stock (Stock Upper Sydney South Coast Unregulated River Utility Wand Sydney South Coast Unregulated River Unility Upper Sydney South Coast Unregulated River Unility Upper Sydney South Coast Unregulated River Unility Wand Sydney South Coast Unregulated River Unility Wand Sydney South Coast Unregulated River Component Coast Unregulated River Unility Upper Sydney South Coast Unregulated River Unility Wand Sydney South Coast Unregulated River Unility Wand Sydney South Coast Unregulated River Unility Wand Sydney South Coast Unregulated River Un	go Plateau Surface Water Source and	4 123
North Coast Unregulated River Apslet Bellin North Coast Unregulated River Alluvi North Coast Unregulated River Coffs North Coast Unregulated River Commonth Coast Unregulated River Commonth Coast Unregulated River Coop Dorrig North Coast Unregulated River The End of the End o	Orrigo Basalt Groundwater	1 30
North Coast Unregulated River Coffs North Coast Unregulated River Commonth Coast Unregulated River Coop Dorrig North Coast Unregulated River Coop Dorrig North Coast Unregulated River The E North Coast Unregulated River Upper Sydney South Coast Aquifer Kulnus Sydney South Coast Domestic And Stock Kang Sydney South Coast Stock(Domestic) Kang Sydney South Coast Stock(Domestic) Kang Sydney South Coast Stock(Domestic) Wand Sydney South Coast Stock(Domestic) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand	ts Point Groundwater	1 30
North Coast Unregulated River Coffs North Coast Unregulated River Commonth Coast Unregulated River Coop Dorrig North Coast Unregulated River Coop Dorrig North Coast Unregulated River The E North Coast Unregulated River Uppe Sydney South Coast Aquifer Kulnu Sydney South Coast Domestic And Stock Kang Sydney South Coast Stock(Domestic) Kang Sydney South Coast Stock(Domestic) Wand Sydney South Coast Stock(Domestic) Wand Sydney South Coast Stock(Domestic) Kang Sydney South Coast Stock(Domestic) Kang Sydney South Coast Stock(Domestic) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand	y River Water Source	9 . 32
North Coast Unregulated River Commonth Coast Unregulated River Coopy Dorright Coast Unregulated River Coopy Dorright Coast Unregulated River The Expense Sydney South Coast Aquifer Kulnus Sydney South Coast Domestic And Stock Kang Sydney South Coast Stock (Domestic) Wand Sydney South Coast Stock (Domestic) Kang Sydney South Coast Stock (Domestic) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand Coast Local Wat	ger River Area Unregulated and	
North Coast Unregulated River Coop North Coast Unregulated River Coop Dorrig North Coast Unregulated River The E North Coast Unregulated River Uppe Sydney South Coast Aquifer Kulnu Sydney South Coast Domestic And Stock Kang Sydney South Coast Stock(Domestic) Kang Sydney South Coast Stock(Domestic) Wand Sydney South Coast Stock(Domestic) Wand Sydney South Coast Stock(Domestic) Kang Sydney South Coast Stock(Domestic) Kang Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand		85 2587.2
North Coast Unregulated River Coop Dorrig North Coast Unregulated River The E North Coast Unregulated River Upper Sydney South Coast Aquifer Kulnu Sydney South Coast Domestic And Stock Kang Sydney South Coast Stock(Domestic) Kang Sydney South Coast Stock(Domestic) Wand Sydney South Coast Stock(Domestic) Wand Sydney South Coast Stock(Domestic) Kang Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand	9	68 2835.
North Coast Unregulated River The II North Coast Unregulated River Uppe Sydney South Coast Aquifer Kulnu Sydney South Coast Domestic And Stock Kang Sydney South Coast Domestic And Stock Wand Sydney South Coast Stock(Domestic) Kang Sydney South Coast Stock(Domestic) Wand Sydney South Coast Stock(Domestic) Wand Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand Sydney South Coast Local Water Utility Wand	•	41 217
North Coast Unregulated River The Days of the Sydney South Coast Aquifer Kulnu Sydney South Coast Domestic And Stock Kang Sydney South Coast Domestic And Stock Wand Sydney South Domestic And Coast Stock(Domestic) Kang Sydney South Coast Stock(Domestic) Wand Coast Stock(Domestic) Wand Coast Stock(Domestic) Wand Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand Coast Local Water Utility		13 5770.
North Coast Unregulated River Upper Sydney South Coast Aquifer Kulnu Sydney South Coast Domestic And Stock Kang Sydney South Coast Domestic And Stock Wand Sydney South Domestic And Coast Stock(Domestic) Kang Sydney South Domestic And Coast Stock(Domestic) Wand Sydney South Coast Stock(Domestic) Wand Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand Coast Local Water Utility Water Util	go Plateau Surface Water Source and Porrigo Basalt Groundwater Source	03 944
Sydney South Coast Aquifer Kulnu Sydney South Coast Domestic And Stock Kang Sydney South Coast Domestic And Stock Wand Sydney South Domestic And Coast Stock(Domestic) Kang Sydney South Domestic And Coast Stock(Domestic) Wand Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand		16 67
Coast Aquifer Kulnu Sydney South Coast Domestic And Stock Kang Sydney South Coast Domestic And Stock Wand Sydney South Domestic And Coast Stock(Domestic) Kang Sydney South Domestic And Coast Stock(Domestic) Wand Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand Coast Local Water Utility Wand	DIGITOWICK (VIVOI	10 07
Sydney South Coast Domestic And Stock Kang Sydney South Coast Domestic And Stock Wand Sydney South Domestic And Coast Stock(Domestic) Kang Sydney South Domestic And Coast Stock(Domestic) Wand Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand Coast Local Water Utility Wand	ra Mangrove Mountain Groundwater	1 1
Sydney South Coast Domestic And Stock Wand Sydney South Domestic And Coast Stock(Domestic) Kang Sydney South Domestic And Coast Stock(Domestic) Wand Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand Coast Local Water Utility Wand	-	-
Coast Domestic And Stock Wand Sydney South Domestic And Coast Stock(Domestic) Kang Sydney South Domestic And Coast Stock(Domestic) Wand Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand Coast Local Water Utility Wand	aroo River	3 17.
Sydney South Coast Stock(Domestic) Kang Sydney South Coast Stock(Domestic) Wand Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand Coast Local Water Utility Wand	iella Creek	2 1
Coast Stock(Domestic) Kang Sydney South Domestic And Coast Stock(Domestic) Wand Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand	Cita OfCGR	_
Sydney South Coast Stock(Domestic) Wand Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand	aroo River	5 4.
Sydney South Coast Domestic And Stock(Stock) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand		
Coast Domestic And Stock(Stock) Kang Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand	lella Creek	1
Sydney South Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand	aroo River	9 . 39.
Coast Local Water Utility Kang Sydney South Coast Local Water Utility Wand	NOO LUIGO	J . Ja.
Coast Local Water Utility Wand	aroo River	1 8
Cudnou Couth	lella Creek	1 7
Sydney South Coast Unregulated River Kang	aroo River	85 467
Sydney South	WOO 171401	30 407
	lella Creek	16 55