

PO Box 398, Parramatta NSW 2124 Level 14, 169 Macquarie Street Parramatta NSW 2124 1300 722 468 www.waternsw.com.au ABN 21 147 934 787

Mr Hugo Harmstorf Chief Executive Officer Independent Regulatory and Pricing Tribunal By email: matthew_mansell@ipart.nsw.gov.au

Dear Mr. Harmstorf

WaterNSW is pleased to submit its formal application for the 2019-20 IPART Annual Review of Regulated Charges for WaterNSW's Murray Darling Basin (MDB) Rural Valley customers pursuant to Rule 34 of the Water Charge (Infrastructure) Rules 2010 Cth (WCIR).

In preparing its submission, WaterNSW has completed the information templates in IPART's WaterNSW - Annual update model 2019-20, in accordance with the form and content requirements set out in Rule 34 of the WCIR, including:

- WaterNSW's forecast of demand for, or consumption of, infrastructure services for the 2019-20 financial year;
- WaterNSW's estimate of demand or consumption for infrastructure services for the current,
 2018-19 financial year;
- Information about how the forecasts and estimates were calculated; and
- Proposed regulated charges for the 2019-20 financial year.

Under Rule 37 of the WCIR, IPART must approve MDB Regulated Charges for the 2019-20 financial year in accordance with IPART's 2017-2021 Rural Valley Bulk Water Determination, unless IPART is satisfied that it is reasonably necessary to make variations to those charges having regard to:

- Changes in demand or consumption forecasts, in this case:
 - Whether or not to update the 20-year rolling average of actual water sales used to set the usage charges;
 - Whether or not to update the entitlement volumes used to set the fixed entitlement charges;
 - Whether or not to update the high security premium using an updated 20 year rolling average of water allocation rates for both high security and general security customers. The high security premium determines the relative value of high security fixed charges to general security fixed charges; and
- Price Stability.

In the current environment of severe drought, Water NSW considers that the short-term pricing impacts resulting in a change in the MDB usage charges (and the 20-year rolling average of actual water sales) would not serve the *immediate* interests of its customers at this time.

I note that the IPART 2017-21 Rural Valley Bulk Water Determination authorises WaterNSW to amend its Bulk Water charges annually by inflation in each year of the determination period. WaterNSW requests that IPART approve MDB Regulated Charges for the 2019-20 financial year which are adjusted for actual inflation (March to March) in line with IPART's 2017-21 Rural Valley Bulk Water

Determination. WaterNSW's estimate of MDB Regulated Charges for the 2019-20 financial year is attached to this letter, along with the resulting bill impacts.

We also attach further information on WaterNSW's demand and consumption forecasts, should IPART decide that it is reasonably necessary to make variations to the 2019-20 MDB charges having regard to changes in demand or consumption forecasts.

If you have any questions about this application, please do not hesitate to contact Michael Martinson, Manager Economic Regulation on 02 9865 2370.



David Harris Chief Executive Officer

Attachments

- Proposed Regulated Charges and estimated bill impact for 2019-20 financial year
- Information on demand and consumption forecasts
- Signed Responsibility Statement
- Completed IPART WaterNSW Annual update model 2019-20

WaterNSW's proposal on 2019-20 MDB Regulated Charges

WaterNSW has calculated the MDB Regulated Charges for the 2019-20 financial year by converting the charges presented in IPART's 2017-21 Rural Valley Bulk Water Determination from 2017-18 dollars into nominal dollars.

The following inflation rates were used to convert the IPART Determined MDB Regulated Charges for the 2019-20 financial year into nominal dollars. The inflation rates below were notified by IPART to WaterNSW:

- 1.9% per annum to inflate prices from 2017-18 dollars to 2018-19 dollars; and
- 2.5% per annum to inflate prices from 2018-19 dollars to 2019-20.

The charges are presented in the tables below:

Murray

Murrumbidgee

	2018-19	2019-20	Variance
Table 1 Entitlement charges for MDB Valleys			
	nominal \$	nominal \$	
High Security Charge			
Border	5.54	5.68	2.5%
Gwydir	11.52	11.81	2.5%
Namoi	17.77	18.21	2.5%
Peel	43.25	44.31	2.5%
Lachlan	16.00	16.39	2.4%
Macquarie	14.05	14.40	2.5%
Murray	1.60	1.64	2.5%
Murrumbidgee	3.07	3.14	2.3%
General Security Charge			
Border	2.06	2.11	2.4%
Gwydir	3.62	3.71	2.5%
Namoi	8.28	8.49	2.5%
Peel	4.18	4.28	2.4%
Lachlan	2.84	2.91	2.5%
Macquarie	2.97	3.04	2.4%
Murray	0.78	0.80	2.6%
Murrumbidgee	1.15	1.18	2.6%
Lowbidgee	0.82	0.84	2.4%
			%
	2018-19	2019-20	Variance
Table 2 Usage charges for MDB Valleys (excludin	g Lowbidgee)		
	nominal \$	nominal \$	
Border	5.66	5.79	2.3%
Gwydir	12.35	12.65	2.4%
Namoi	20.79	21.30	2.5%
Peel	19.11	19.58	2.5%
Lachlan	19.81	20.30	2.5%
Macquarie	14.34	14.69	2.4%

1.99

3.44

2.04

3.53

2.5%

2.6%

			%
Table 2 MDD 4/DDC autitlement aboves	2018-19	2019-20	Variance
Table 3 MDBA/BRC entitlement charges	nominal \$	naminal ^{(†}	
High Security Licence (\$/ML of Entitlement or \$/unit share)	попша ф	nominal \$	
Border	4.80	4.92	2.5%
Murray	7.56	7.75	2.5%
Murrumbidgee	1.67	1.71	2.4%
General Security Licence (\$/ML of Entitlement or \$/unit hare)	1.07	1.71	2.4 /0
Border	1.78	1.83	2.8%
Murray	3.70	3.79	2.4%
Murrumbidgee	0.63	0.65	3.2%
	_		
			%
Table 4 MDDA/DDO was abauma	2018-19	2019-20	Variance
able 4 MDBA/BRC usage charges			
	nominal \$	nominal \$	
Border	0.82	0.84	2.4%
<i>A</i> urray	1.56	1.60	2.6%
Murrumbidgee	0.32	0.32	0.0%
			%
Table E Irrigation corporations and districts discou	2018-19	2019-20	Variance
Table 5 Irrigation corporations and districts discou			
	nominal \$	nominal \$	
Murray Irrigation Limited	598,647.22	613,137.02	2.4%
Vestern Murray Irrigation Limited	18,482.62	18,929.81	2.4%
Vest Corurgan	32,975.86	33,773.40	2.4%
Moira Irrigation Scheme	15,369.58	15,741.43	2.4%
Eagle Creek Scheme	24.46	25.06	2.5%
Murrumbidgee Irrigation Limited	445,100.22	455,911.67	2.4%
Coleambally Irrigation Limited	196,745.46	201,524.36	2.4%
emalong Irrigation Limited	39,821.50	40,764.02	2.4%
			%
	2018-19	2019-20	Variance
Table 6 Entitlement charges for Coastal Valleys			
	nominal \$	nominal \$	
North Coast	12.26	12.56	2.4%
Hunter	13.66	14.00	2.5%
South Coast	32.06	32.84	2.4%
North Coast	9.50	9.73	2.4%
Hunter	10.61	10.87	2.5%
outh Coast	16.81	17.23	2.5%
			%
	2018-19	2019-20	Variance
Table 7 Usage charges for Coastal Valleys			
	nominal \$	nominal \$	
North Coast	18.13	18.57	2.4%
Hunter	13.13	13.46	2.5%
South Coast	17.96	18.41	2.5%

	2018-19	2019-20	Varian
Table 9 Fish River Supply Scheme customers			
	nominal \$	nominal \$	
Major Customers	0.41	0.42	2.4
Minor Customers	0.41	0.42	2.4
First tier usage charge	• • • • • • • • • • • • • • • • • • • •	· · · -	
Major Customers	0.25	0.26	4.0
Minor Customers	0.25	0.26	4.0
Second tier usage charge	0.20	0.20	1.0
Major Customers	0.66	0.68	3.0
Minor Customers	0.66	0.68	3.0
ivilior Gustomers	0.00	0.00	3.0
	2018-19	2019-20	Varian
Table 10 Fish River Supply Scheme customers			Variati
	nominal \$	nominal \$	
Major Customore	0.05	0.67	0
Major Customers	0.65	0.67	3.
Minor Customers	0.79	0.81	2.5
First tier usage charge	2.22	0.00	•
Major Customers	0.38	0.39	2.0
Minor Customers	0.48	0.49	2.1
Second tier usage charge			
Major Customers	1.03	1.05	1.9
Minor Customers	1.27	1.31	3.
Table 11 Meter corvine charges	2018-19	2019-20	Varian
Table 11 Meter service charges			Varian
	nominal \$	nominal \$	
50mm	nominal \$ 459.68	nominal \$ 470.96	2.5
50mm 80mm	nominal \$ 459.68 461.82	nominal \$ 470.96 473.15	2.t 2.t
50mm 80mm 100mm	nominal \$ 459.68 461.82 461.81	nominal \$ 470.96 473.15 473.14	2.t 2.t 2.t
50mm 80mm 100mm 150mm	nominal \$ 459.68 461.82 461.81 467.24	nominal \$ 470.96 473.15 473.14 478.71	2.5 2.5 2.5 2.5
50mm 80mm 100mm 150mm 200mm	nominal \$ 459.68 461.82 461.81 467.24 469.92	nominal \$ 470.96 473.15 473.14 478.71 481.45	2.! 2.! 2.! 2.!
50mm 80mm 100mm 150mm 200mm 250mm	nominal \$ 459.68 461.82 461.81 467.24 469.92 472.41	nominal \$ 470.96 473.15 473.14 478.71 481.45 484.00	2.5 2.5 2.5 2.5 2.5 2.5
50mm 80mm 100mm 150mm 200mm 250mm 300mm	nominal \$ 459.68 461.82 461.81 467.24 469.92 472.41 478.83	nominal \$ 470.96 473.15 473.14 478.71 481.45 484.00 490.58	2.5 2.5 2.5 2.5 2.5 2.5 2.5
50mm 80mm 100mm 150mm 200mm 250mm 300mm 350mm	nominal \$ 459.68 461.82 461.81 467.24 469.92 472.41 478.83 507.68	nominal \$ 470.96 473.15 473.14 478.71 481.45 484.00 490.58 520.13	2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5
50mm 80mm 100mm 150mm 200mm 250mm 300mm 350mm 400mm	nominal \$ 459.68 461.82 461.81 467.24 469.92 472.41 478.83 507.68 524.85	nominal \$ 470.96 473.15 473.14 478.71 481.45 484.00 490.58 520.13 537.72	2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5
50mm 80mm 100mm 150mm 200mm 250mm 300mm 350mm 400mm	nominal \$ 459.68 461.82 461.81 467.24 469.92 472.41 478.83 507.68 524.85 528.16	nominal \$ 470.96 473.15 473.14 478.71 481.45 484.00 490.58 520.13 537.72 541.12	2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5
50mm 80mm 100mm 150mm 200mm 250mm 300mm 350mm 400mm 450mm 500mm	nominal \$ 459.68 461.82 461.81 467.24 469.92 472.41 478.83 507.68 524.85 528.16 542.23	nominal \$ 470.96 473.15 473.14 478.71 481.45 484.00 490.58 520.13 537.72 541.12 555.53	2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5
50mm 80mm 100mm 150mm 200mm 250mm 300mm 350mm 400mm 450mm 500mm 600mm	nominal \$ 459.68 461.82 461.81 467.24 469.92 472.41 478.83 507.68 524.85 528.16 542.23 560.26	nominal \$ 470.96 473.15 473.14 478.71 481.45 484.00 490.58 520.13 537.72 541.12 555.53 574.00	2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5
50mm 80mm 100mm 150mm 200mm 250mm 300mm 350mm 400mm 450mm 500mm 600mm 700mm	nominal \$ 459.68 461.82 461.81 467.24 469.92 472.41 478.83 507.68 524.85 528.16 542.23 560.26 581.68	nominal \$ 470.96 473.15 473.14 478.71 481.45 484.00 490.58 520.13 537.72 541.12 555.53 574.00 595.95	2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5
50mm 80mm 100mm 150mm 200mm 250mm 300mm 350mm 400mm 450mm 500mm 600mm 700mm	nominal \$ 459.68 461.82 461.81 467.24 469.92 472.41 478.83 507.68 524.85 528.16 542.23 560.26 581.68 611.68	nominal \$ 470.96 473.15 473.14 478.71 481.45 484.00 490.58 520.13 537.72 541.12 555.53 574.00 595.95 626.68	2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5
50mm 80mm 100mm 150mm 200mm 250mm 300mm 350mm 400mm 450mm 500mm 600mm 700mm 750mm 800mm	nominal \$ 459.68 461.82 461.81 467.24 469.92 472.41 478.83 507.68 524.85 528.16 542.23 560.26 581.68 611.68 631.94	nominal \$ 470.96 473.15 473.14 478.71 481.45 484.00 490.58 520.13 537.72 541.12 555.53 574.00 595.95 626.68 647.45	2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5
50mm 80mm 100mm 150mm 200mm 250mm 300mm 350mm 400mm 450mm 500mm 600mm 700mm 750mm 800mm	nominal \$ 459.68 461.82 461.81 467.24 469.92 472.41 478.83 507.68 524.85 528.16 542.23 560.26 581.68 611.68 631.94 638.36	nominal \$ 470.96 473.15 473.14 478.71 481.45 484.00 490.58 520.13 537.72 541.12 555.53 574.00 595.95 626.68 647.45 654.02	2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5
50mm 80mm 100mm 150mm 200mm 250mm 300mm 350mm 400mm 450mm 500mm 600mm 700mm 750mm 800mm 900mm	nominal \$ 459.68 461.82 461.81 467.24 469.92 472.41 478.83 507.68 524.85 528.16 542.23 560.26 581.68 611.68 631.94	nominal \$ 470.96 473.15 473.14 478.71 481.45 484.00 490.58 520.13 537.72 541.12 555.53 574.00 595.95 626.68 647.45	2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5
50mm 80mm 100mm 150mm 200mm 250mm 300mm 350mm 400mm 450mm 500mm 600mm 700mm 750mm 800mm	nominal \$ 459.68 461.82 461.81 467.24 469.92 472.41 478.83 507.68 524.85 528.16 542.23 560.26 581.68 611.68 631.94 638.36	nominal \$ 470.96 473.15 473.14 478.71 481.45 484.00 490.58 520.13 537.72 541.12 555.53 574.00 595.95 626.68 647.45 654.02	2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5
50mm 80mm 100mm 150mm 200mm 250mm 300mm 350mm 400mm 450mm 500mm 600mm 700mm 750mm 800mm 900mm	nominal \$ 459.68 461.82 461.81 467.24 469.92 472.41 478.83 507.68 524.85 528.16 542.23 560.26 581.68 611.68 631.94 638.36 650.22 6,024.59	nominal \$ 470.96 473.15 473.14 478.71 481.45 484.00 490.58 520.13 537.72 541.12 555.53 574.00 595.95 626.68 647.45 654.02 666.18	2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5
50mm 80mm 100mm 150mm 200mm 250mm 300mm 350mm 400mm 450mm 500mm 600mm 750mm 800mm 900mm 1,000mm Channel	nominal \$ 459.68 461.82 461.81 467.24 469.92 472.41 478.83 507.68 524.85 528.16 542.23 560.26 581.68 611.68 631.94 638.36 650.22	nominal \$ 470.96 473.15 473.14 478.71 481.45 484.00 490.58 520.13 537.72 541.12 555.53 574.00 595.95 626.68 647.45 654.02 666.18	2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5
50mm 80mm 100mm 150mm 200mm 250mm 300mm 350mm 400mm 450mm 500mm 600mm 700mm 750mm 800mm 900mm	nominal \$ 459.68 461.82 461.81 467.24 469.92 472.41 478.83 507.68 524.85 528.16 542.23 560.26 581.68 611.68 631.94 638.36 650.22 6,024.59	nominal \$ 470.96 473.15 473.14 478.71 481.45 484.00 490.58 520.13 537.72 541.12 555.53 574.00 595.95 626.68 647.45 654.02 666.18 6,172.40	2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5

Verification and testing in situ	4,468.52	4,578.15	2.5%
Lab verification and testing	6,686.65	6,850.70	2.5%
			%
	2018-19	2019-20	Variance
Table 13 Environmental gauging station charge			
	nominal \$	nominal \$	
	12,209.09	12,508.62	2.5%
			%
	2018-19	2019-20	Variance
Table 14 Other Miscellaneous Charges	2018-19	2019-20	Variance
Table 14 Other Miscellaneous Charges	2018-19 nominal \$	2019-20 nominal \$	Variance
Table 14 Other Miscellaneous Charges Trade processing charge per application			Variance 2.0%
	nominal \$	nominal \$	
Trade processing charge per application	nominal \$	nominal \$	
Trade processing charge per application Fish River Connection Charge	nominal \$ 49.50	nominal \$ 50.47	2.0%
Fish River Connection Charge Low complexity connection	nominal \$ 49.50	nominal \$ 50.47	2.0%

Bill Impacts

WaterNSW has calculated the bill impacts of its proposed 2019-20 MDB Regulated Charges using IPART's WaterNSW - Annual update model 2019-20 (model sent to WaterNSW).xlsx.

The results are shown in the tables below:

TABLE 15 - INDICATIVE BILLS FOR HIGH SECURITY CUSTOMERS - WaterNSW CHARGES

	Bill in 2018- 19 using the determination charges for 2018-19 nominal \$	Bill in 2019- 20 using the determination charges for 2019-20 nominal \$	% Variance
Small consumption customers		·	
Border	1,120	1,148	2.5%
Gwydir	2,387	2,447	2.5%
Namoi	3,856	3,952	2.5%
Peel	6,236	6,392	2.5%
Lachlan	3,581	3,671	2.5%
Macquarie	2,839	2,910	2.5%
Murray	359	368	2.5%
Murrumbidgee	651	668	2.6%
Lowbidgee	N/A	N/A	N/A
Medium consumption customers			
Border	5,600	5,740	2.5%
Gwydir	11,935	12,235	2.5%
Namoi	19,280	19,760	2.5%
Peel	31,180	31,960	2.5%
Lachlan	17,905	18,355	2.5%
Macquarie	14,195	14,550	2.5%
Murray	1,795	1,840	2.5%
Murrumbidgee	3,255	3,340	2.6%
Lowbidgee	N/A	N/A	N/A
Large consumption customers			
Border	11,200	11,480	2.5%
Gwydir	23,870	24,470	2.5%
Namoi	38,560	39,520	2.5%
Peel	62,360	63,920	2.5%
Lachlan	35,810	36,710	2.5%
Macquarie	28,390	29,100	2.5%
Murray	3,590	3,680	2.5%
Murrumbidgee	6,510	6,680	2.6%
Lowbidgee	N/A	N/A	N/A

Note: based on a 100% utilisation rate for High Security customers.

TABLE 16 - INDICATIVE BILLS FOR GENERAL SECURITY CUSTOMERS - WaterNSW CHARGES

	Bill in 2018- 19 using the determination charges for 2018-19 nominal \$	Bill in 2019- 20 using the determination charges for 2019-20 nominal \$	% Variance
Small consumption customers		·	
Border	546	559	2.5%
Gwydir	1,103	1,131	2.5%
Namoi	2,075	2,128	2.5%
Peel	1,565	1,603	2.5%
Lachlan	1,473	1,510	2.5%
Macquarie	1,157	1,186	2.5%
Murray	197	202	2.5%
Murrumbidgee	321	330	2.6%
Lowbidgee*	82	84	2.4%
Medium consumption customers			
Border	2,728	2,795	2.5%
Gwydir	5,515	5,653	2.5%
Namoi	10,377	10,638	2.5%
Peel	7,823	8,017	2.5%
Lachlan	7,363	7,548	2.5%
Macquarie	5,787	5,930	2.5%
Murray	987	1,012	2.5%
Murrumbidgee	1,607	1,649	2.6%
Lowbidgee*	410	420	
Large consumption customers			
Border	5,456	5,590	2.5%
Gwydir	11,030	11,306	2.5%
Namoi	20,754	21,276	2.5%
Peel	15,646	16,034	2.5%
Lachlan	14,726	15,096	2.5%
Macquarie	11,574	11,860	2.5%
Murray	1,974	2,024	2.5%
Murrumbidgee	3,214	3,298	2.6%
Lowbidgee*	820	840	2.4%

^{*} refers to supplementary licences holders in the Lowbidgee Note: based on a 60% utilisation rate for General Security customers.

TABLE 17 - INDICATIVE BILLS FOR HIGH SECURITY AND GENERAL SECURITY CUSTOMERS - MDBA/BRC CHARGES

	Bill in 2018- 19 using the determination charges for 2018-19	Bill in 2019- 20 using the determination charges for 2019-20	% Variance
HIGH SECURITY	nominal \$	nominal \$	
Small consumption customers			
Border	562	576	2.5%
Murray	912	935	2.5%
Murrumbidgee	199	204	2.5%
Medium consumption customers			
Border	2,810	2,880	2.5%
Murray	4,560	4,675	2.5%
Murrumbidgee	995	1,020	2.5%
Large consumption customers			
Border	5,620	5,760	2.5%
Murray	9,120	9,350	2.5%
Murrumbidgee	1,990	2,040	2.5%
GENERAL SECURITY Small consumption customers			
Border	227	232	2.3%
Murray	464	475	2.5%
Murrumbidgee	82	85	3.2%
Medium consumption customers			
Border	1,136	1,162	2.3%
Murray	2,318	2,375	2.5%
Murrumbidgee	411	424	3.2%
Large consumption customers			
Border	2,272	2,324	2.3%
Murray	4,636	4,750	2.5%
Murrumbidgee	822	848	3.2%

TABLE 4.8 - INDICATIVE BILLS FOR CUSTOMERS IN THE FRWS

	Bill in 2018- 19 using the determination charges for 2018-19	Bill in 2019- 20 using the determination charges for 2019-20	% Variance
	nominal \$	nominal \$	
Raw water - major customer	3,741	3,895	4.1%
Raw water - minor customer	394	288	-27.1%
Filtered water - minor customer	607	408	-32.8%

Note: FRWS customer bills for 2019-20 is based on the updated 20-year average of total usage in each customer class / customers within class, as at 2019-20. FRWS customer bills for 2018-19 is based on the updated 20-year average of total usage in each customer class / customers within class, as at 2018-19.

Information on consumption forecasts

WaterNSW's forecast of demand for, or consumption of, infrastructure services for the 2019-20 financial year; In the current environment of severe drought, Water NSW considers that the short-term pricing impacts resulting in a change in the MDB usage charges (and the 20-year rolling average of actual water sales) would not serve the *immediate* interests of its customers at this time.

Therefore, WaterNSW requests that IPART approve MDB Regulated Charges for the 2019-20 financial year which are adjusted for actual inflation (March to March) in line with IPART's 2017-21 Rural Valley Bulk Water Determination.

The following information on WaterNSW's demand and consumption forecasts is disclosed for IPART's consideration, should IPART decide that it is reasonably necessary to make variations to the 2019-20 MDB charges having regard to changes in demand or consumption forecasts:

- Updated 20 year rolling average of actual water usage
- Updated Entitlement volumes
- Updated High Security Premium

WaterNSW's forecast of expected demand in the MDB valleys for the 2019-20 financial year is based on:

- the 20-year rolling average of actual water sales (with a two year lag) from 1998-1999 to 2017-2018.
- Actual entitlement volumes in the 2017-18 financial year.

The results are shown below.

		Entitlement
Valley	Usage	volumes*
Border	148,885.13 MLs	266,422.00 MLs
Gwydir	252,046.69 MLs	536,584.90 MLs
Namoi	158,374.64 MLs	265,394.70 MLs
Peel	12,035.29 MLs	47,002.00 MLs
Lachlan	191,208.88 MLs	690,468.40 MLs
Macquarie	253,053.20 MLs	675,154.10 MLs
Murray	1,495,614.93 MLs	2,346,826.20 MLs
Murrumbidgee	1,652,892.02 MLs	2,706,290.20 MLs
Lowbidgee	N/A	747,000.00 MLs
Total	4,164,110.77 MLs	8,281,142.50 MLs

^{*} Entitlement volumes which are billable under the fixed charge. For example, excludes supplementary licences except for the Lowbidgee, where WaterNSW levies a fixed charge on supplementary water holders.

WaterNSW's forecast of expected demand in the Fish River Water Scheme (FRWS) for the 2019-20 financial year is based on:

- For Energy Australia: the 20-year rolling average of actual water sales (with a twoyear lag) from 1998-1999 to 2017-2018, excluding past usage from the Wallerawang Power Plant.
- For minor customers: the 20-year rolling average of actual water sales (with a two year lag) from 1998-1999 to 2017-2018,
- Minimum Annual Quantity (MAQ) levels as defined in WaterNSW's licence to operate the FRWS issued under the Water Act 1912 NSW.

The results are shown below:

Fish River – Energy		
Australia	1,761.18 MLs	8,184.00 MAQ
Fish River – Raw Water		
Filtered customers	50.32 MLs	16.60 MAQ*
Fish River – Filtered		
Water Filtered		
customers	106.71 MLs	45.60 MAQ*
Total	1918.21 MLs	8,246.20 MAQ

^{*} MAQ (Minimum Annual Quantity) for minor customers is 200KLs for each minor customer multiplied by the number of minor customers. For instance, 16.60 MAQ MLs is derived by multiplying 83 raw water customers by 200Kls per customer. 45.60 MAQ is derived by multiplying 228 filtered water customers by 200KLs per customer

WaterNSW's estimate of the updated high security premium is determined by multiplying the following factors:

- the reliability ratio which is the ratio of the 1) 20-year rolling average of
 water allocation rates for high security licences and 2) the 20-year rolling
 average of water allocation rates for general security licences, with a two
 year lag; and
- the conversion factor which is a fixed factor set by IPART, using
 information sourced from each valley's water sharing plan. The factor
 represents the 'units' of general security water required to secure one 'unit'
 of high security water.

The updated high security premium is shown in the table below:

	Updated 20-year average		Reliability		Conversion		High		
	of act	tual	annual wa	ter	Ratio		factor		Security
			allocatio	ons					Premium
	HS		GS						
Valley	Licences		Licences						
Border	100%	/	47%	=	2.11	Χ	1.25	=	2.64
Gwydir	100%	/	41%	=	2.45	Χ	1.40	=	3.42
Namoi	100%	/	55%	Ш	1.82	Χ	1.25	=	2.27
Peel	98%	/	64%	II	1.54	Χ	6.54	=	10.04
Lachlan	83%	/	35%	=	2.33	Χ	2.50	=	5.81
Macquarie	100%	/	42%	=	2.39	Χ	1.88	=	4.50
Murray	95%	/	59%	=	1.60	Χ	1.31	=	2.10
Murrumbidgee	97%	/	60%	=	1.61	Χ	1.69	=	2.73

WaterNSW's estimate of demand or consumption for infrastructure services for the current, 2018-19 financial year;

WaterNSW notes that the 2018-19 demand forecasts are not used as an input into prices. Nevertheless, the WCIR requires that WaterNSW disclose its estimate on current year demand as part of the annual review process for MDB regulated charges.

WaterNSW's forecast of expected demand in the MDB valleys for the 2018-19 financial year is based on its estimated demand under the 'minimum scenario', which considers:

- the amount of water remaining in our customers' accounts;
- the BoM's forecast to the end of the 2018-19 financial year, including the extent to which rainfall may suppress demand;
- water usage trends observed in similar season's in the past; and
- Verbal information on expected usage from key/large customers.

These estimates are shown below:

	2018-19 Year End	2018-19 YTD
Valley	Usage	Entitlements*
Border	114,000.00 MLs	266,359.00 MLs
Gwydir	70,000.00 MLs	536,585.00 MLs
Namoi	50,000.00 MLs	265,395.00 MLs
Peel	15,000.00 MLs	47,002.00 MLs
Lachlan	216,000.00 MLs	690,418.00 MLs
Macquarie	240,000.00 MLs	675,145.00 MLs
Murray	700,000.00 MLs	2,351,099.60 MLs
Murrumbidgee	957,000.00 MLs	2,706,293.00 MLs
Lowbidgee	N/A	747,000.00 MLs
Total	2,362,000.00 MLs	8,285,296.60 MLs

^{*} Entitlement volumes which are billable under the fixed charge. For example, excludes supplementary licences except for the Lowbidgee, where WaterNSW levies a fixed charge on supplementary water holders. Year to date estimate as at January 2019.

WaterNSW's forecast of expected demand in the FRWS was based on:

- For Minor Customers: year to date usage recorded in WaterNSW's billing system as at January 2019;
- For Energy Australia: year to date usage recorded in WaterNSW's billing system as at January 2019 extrapolated out to the end of the year on a straight-line basis.

The estimates are shown below:

Fish River – Energy		
Australia	4,700 MLs	8,184.00 MAQ
Fish River – Raw Water		
Filtered customers	28.10 MLs	16.80 MAQ
Fish River – Filtered		
Water Filtered		
customers	75.30 MLs	45.20 MAQ
Total	4,803.4 MLs	8,247.00 MAQ