



Detailed paper I – Tariffs by water source

Submission to IPART for prices from 1 July 2021 for water management services provided by Department of Planning, Industry and Environment—Water and the Natural Resources Access Regulator on behalf of the Water Administration Ministerial Corporation

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Water Management Prices

When determining water prices, IPART has regard for the National Water Initiative (NWI) pricing principles. The principles aim to achieve pricing transparency and cost recovery for water planning and management. IPART determines the proportion of costs to be recovered from users and the wider public on the basis of impactor pays. We have applied the pricing principles in calculating our proposed charges.

We have modelled prices to recover our target revenue requirement with revenue from fixed (entitlement) charges set to recover 70% of the revenue requirement and variable (water take) charges recovering 30% in all water types except the North Coast regulated river. For this water source we propose to continue the 92:08 revenue split used by IPART in calculating tariffs for previous determinations.

We propose to retain the main characteristics of the current tariff structure for the recovery of the user share of water planning and management costs.

The water management charge tariff structure is made up of three components:

- Entitlement charge – an annual charge that applies to the share component specified on each water access licence.
- Water take charge – a charge that applies to the quantity of water recorded as taken for a water access licence in the billing period.
- Minimum annual charge – an annual charge that applies to a licence if the sum of the entitlement charge and water take charge for a water access licence is less than the value of the minimum annual charge.

The application of existing and proposed tariffs results in the following charge structures, depending on the attributes of the licence held and water take:

- Licences subject to a two-part tariff, made up of a fixed two-part entitlement charge and a water take charge that is calculated on the measured water take.
- Licences subject to a one-part tariff, made up of a fixed, one-part entitlement charge, which is calculated as the fixed two-part entitlement charge plus a premium equal to the water take charge with a 100 per cent activation rate.
- Licences subject to a water take charge only, that is calculated on the measured water take.
- Licences subject to a minimum annual charge, if the sum of any charges applicable to the licence is less than the minimum annual charge.

Cost Recovery

We propose to cap all water management charges at increases of 5% per year, plus inflation, until 2024-25, inclusive. We do not propose to cap fee-for-service charges and have calculated these to recover the total marginal cost of the service.

Based on water take volume forecasts outlined in Detailed Paper H, we expect that capping price increases at 5% per year, plus inflation, will achieve varying levels of cost recovery across the IPART billing valleys. The extent to which charges recover the required revenue from each valley and groundwater source will be determined by IPART's final ruling on the efficient cost of delivering the water management services that are specified in the *Water Management Act 2000*. At a high level, we expect the proposed charges to reach the following levels of cost recovery over the determination period 2021-21 to 2024-25, inclusive:

- Regulated rivers – 72%

- Unregulated rivers - 59%
- Groundwater - 66%
- Total cost recovery (including Minimum Annual Charge revenue) - 70%

Regulated water sources

Regulated rivers users are subject to a 2-part fixed and variable tariff. The entitlement component is fixed by the licence holders' volume of entitlement while the usage component varies with the level of water take.

Table 1. Minimum annual charge for Regulated Rivers (\$2020-21)

Current charge	2021-21	2022-23	2023-24	2024-25
213.74	224.43	235.65	247.43	259.81

Table 2. High Security Entitlement charge for Regulated Rivers (\$2020-21)

Valley		2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Border	\$/ML	2.28	2.39	2.51	2.64	2.77	2.91
Gwydir	\$/ML	1.62	1.70	1.79	1.88	1.97	2.07
Namoi	\$/ML	2.73	2.87	3.01	3.16	3.32	3.48
Peel	\$/ML	2.67	2.80	2.94	3.09	3.25	3.41
Lachlan	\$/ML	1.43	1.50	1.58	1.66	1.74	1.83
Macquarie	\$/ML	1.71	1.80	1.89	1.98	2.08	2.18
Murray	\$/ML	1.54	1.62	1.70	1.78	1.87	1.97
Murrumbidgee	\$/ML	1.41	1.48	1.55	1.63	1.71	1.80
North Coast	\$/ML	3.97	4.17	4.38	4.60	4.83	5.07
Hunter	\$/ML	3.12	3.28	3.44	3.61	3.79	3.98
South Coast	\$/ML	3.34	3.51	3.68	3.87	4.06	4.26

Table 3. General Security Entitlement charge for Regulated Rivers (\$2020-21)

Valley		2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Border	\$/ML	2.28	2.39	2.51	2.64	2.77	2.91

Valley		2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Gwydir	\$/ML	1.62	1.70	1.79	1.88	1.97	2.07
Namoi	\$/ML	2.73	2.87	3.01	3.16	3.32	3.48
Peel	\$/ML	2.67	2.80	2.94	3.09	3.25	3.41
Lachlan	\$/ML	1.43	1.50	1.58	1.66	1.74	1.83
Macquarie	\$/ML	1.71	1.80	1.89	1.98	2.08	2.18
Murray	\$/ML	1.54	1.62	1.70	1.78	1.87	1.97
Murrumbidgee	\$/ML	1.41	1.48	1.55	1.63	1.71	1.80
North Coast	\$/ML	3.97	4.17	4.38	4.60	4.83	5.07
Hunter	\$/ML	3.12	3.28	3.44	3.61	3.79	3.98
South Coast	\$/ML	3.34	3.51	3.68	3.87	4.06	4.26

Table 4. Usage charge for Regulated Rivers (\$2020-21)

Valley		2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Border	\$/ML	1.78	1.87	1.96	2.06	2.16	2.27
Gwydir	\$/ML	1.40	1.47	1.54	1.62	1.70	1.79
Namoi	\$/ML	1.84	1.93	2.03	2.13	2.24	2.35
Peel	\$/ML	4.76	5.00	5.25	5.51	5.79	6.08
Lachlan	\$/ML	1.92	2.02	2.12	2.22	2.33	2.45
Macquarie	\$/ML	1.85	1.94	2.04	2.14	2.25	2.36
Murray	\$/ML	1.10	1.16	1.21	1.27	1.34	1.40
Murrumbidgee	\$/ML	0.94	0.99	1.04	1.09	1.14	1.20
North Coast	\$/ML	6.12	6.43	6.75	7.08	7.44	7.81
Hunter	\$/ML	2.14	2.25	2.36	2.48	2.60	2.73
South Coast	\$/ML	5.32	5.59	5.87	6.16	6.47	6.79

Unregulated water sources

Unregulated river users with a meter or meter equivalent are subject to a 2-part fixed and variable tariff. Unregulated river users without a meter or meter equivalent are subject to a 1-part fixed charge. The fixed 1-part fixed charge is calculated on the entitlement volume plus a premium equal to the water take charge with a 100 per cent activation rate.

Table 5. Minimum annual charge for Unregulated Rivers (\$2020-21)

Current charge	2021-21	2022-23	2023-24	2024-25
213.74	224.43	235.65	247.43	259.81

Table 6. One-part entitlement charge for Unregulated Rivers (\$2020-21)

Valley		2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Border	\$/ML	4.78	5.02	5.27	5.53	5.81	6.10
Gwydir	\$/ML	4.78	5.02	5.27	5.53	5.81	6.10
Namoi	\$/ML	4.78	5.02	5.27	5.53	5.81	6.10
Peel	\$/ML	4.78	5.02	5.27	5.53	5.81	6.10
Lachlan	\$/ML	5.60	5.88	6.17	6.48	6.81	7.15
Macquarie	\$/ML	5.60	5.88	6.17	6.48	6.81	7.15
Murray	\$/ML	6.85	7.19	7.55	7.93	8.33	8.74
Murrumbidgee	\$/ML	9.08	9.53	10.01	10.51	11.04	11.59
Far West	\$/ML	6.66	6.99	7.34	7.71	8.10	8.50
North Coast	\$/ML	9.52	10.00	10.50	11.02	11.57	12.15
Hunter	\$/ML	3.43	3.60	3.78	3.97	4.17	4.38
South Coast	\$/ML	3.24	3.40	3.57	3.75	3.94	4.14

Table 7. Two-part entitlement charge for Unregulated Rivers (\$2020-21)

Valley		2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Border	\$/ML	2.31	2.43	2.55	2.67	2.81	2.95
Gwydir	\$/ML	2.31	2.43	2.55	2.67	2.81	2.95
Namoi	\$/ML	2.31	2.43	2.55	2.67	2.81	2.95

Valley		2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Peel	\$/ML	2.31	2.43	2.55	2.67	2.81	2.95
Lachlan	\$/ML	2.69	2.82	2.97	3.11	3.27	3.43
Macquarie	\$/ML	2.69	2.82	2.97	3.11	3.27	3.43
Murray	\$/ML	2.64	2.77	2.91	3.06	3.21	3.37
Murrumbidgee	\$/ML	3.27	3.43	3.61	3.79	3.97	4.17
Far West	\$/ML	4.13	4.34	4.55	4.78	5.02	5.27
North Coast	\$/ML	4.59	4.82	5.06	5.31	5.58	5.86
Hunter	\$/ML	1.30	1.37	1.43	1.50	1.58	1.66
South Coast	\$/ML	1.75	1.84	1.93	2.03	2.13	2.23

Table 8. Two-part usage charge for Unregulated Rivers (\$2020-21)

Valley		2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Border	\$/ML	2.47	2.59	2.72	2.86	3.00	3.15
Gwydir	\$/ML	2.47	2.59	2.72	2.86	3.00	3.15
Namoi	\$/ML	2.47	2.59	2.72	2.86	3.00	3.15
Peel	\$/ML	2.47	2.59	2.72	2.86	3.00	3.15
Lachlan	\$/ML	2.91	3.06	3.21	3.37	3.54	3.71
Macquarie	\$/ML	2.91	3.06	3.21	3.37	3.54	3.71
Murray	\$/ML	4.21	4.42	4.64	4.87	5.12	5.37
Murrumbidgee	\$/ML	5.81	6.10	6.41	6.73	7.06	7.42
Far West	\$/ML	2.53	2.66	2.79	2.93	3.08	3.23
North Coast	\$/ML	4.93	5.18	5.44	5.71	5.99	6.29
Hunter	\$/ML	2.13	2.24	2.35	2.47	2.59	2.72
South Coast	\$/ML	1.49	1.56	1.64	1.72	1.81	1.90

Groundwater Sources

Groundwater users with a meter or meter equivalent are subject to a 2-part fixed and variable tariff. Groundwater users without a meter or meter equivalent are subject to a 1-part fixed charge. The fixed 1-part fixed charge is calculated on the entitlement volume plus a premium equal to the water take charge with a 100 per cent activation rate.

Table 9. Minimum annual charge for Groundwater Sources (\$2020-21)

Current charge	2021-21	2022-23	20223-24	2024-25
213.74	224.43	235.65	247.43	259.81

Table 10. One-part entitlement charge for Groundwater Sources (\$2020-21)

Source		2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Inland	\$/ML	6.99	7.34	7.71	8.09	8.50	8.92
Murrumbidgee	\$/ML	4.64	4.87	5.12	5.37	5.64	5.92
Coastal	\$/ML	5.05	5.30	5.57	5.85	6.14	6.45

Table 11. Two-part entitlement charge for Groundwater Sources (\$2020-21)

Source		2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Inland	\$/ML	3.86	4.05	4.26	4.47	4.69	4.93
Murrumbidgee	\$/ML	2.56	2.69	2.82	2.96	3.11	3.27
Coastal	\$/ML	1.76	1.85	1.94	2.04	2.14	2.25

Table 12. Two-part usage charge for Groundwater Sources (\$2020-21)

Source		2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Inland	\$/ML	3.13	3.29	3.45	3.62	3.80	3.99
Murrumbidgee	\$/ML	2.08	2.18	2.29	2.41	2.53	2.65
Coastal	\$/ML	3.29	3.45	3.63	3.81	4.00	4.20

Minimum annual charge

The Minimum Annual Charge (MAC) seeks to recover minimum costs of managing a licence. This includes the costs of the following activities:

- W08-01 - Regulation Systems Management
- W08-02 - Consents management and licence conversion
- W08-03 - Compliance Management (80%)
- W10-01 - Customer Management
- W10-03 - Billing Management (80%)

At the time of the last WAMC review in 2015, the Department estimated the minimum costs per licence at \$235 (\$2015-16). At the time of the 2016 Determination IPART set the MAC less than half of that value at \$105.34 (\$2015-16). IPART's 2016 Determination proposed that the MAC be increased annually to \$200 (\$2015-16) with an ultimate aim of recovering the total minimum costs within a second determination period.

If the same methodology and Activity Codes were to be applied by IPART in 2021, the current draft forecast of the minimum costs of managing a licence is estimated to be \$600 (\$2020-21). This is due to the increase in W08-03 Compliance Management costs.

To mitigate the impact on customers of large increases in the MAC, we propose that IPART set the Minimum Annual Charge so that it will rise by 5% per annum (plus inflation). This charge aims to recover the fixed annual costs of managing each water licence, while maintaining annual bill increases for these smaller users at an acceptable level.

Table 13. Proposed minimum annual charge, number of customers and revenue (\$2020-21)

	2020-21	2021-22	2022-23	2023-24	2024-25
MAC	\$213.74	\$224.43	\$235.65	\$247.43	\$259.81
Number of customers	24,389	24,389	24,389	24,389	24,389
% customers paying the MAC	64%	64%	64%	64%	64%
MAC Revenue	\$5,212,978	\$5,473,627	\$5,747,308	\$6,034,674	\$6,336,407
% total revenue	12%	12%	12%	13%	13%

Table 14 below shows the forecast distribution of MAC customers by valley and water source.

Table 14. Average annual number of customers paying the minimum annual charge

Valley	Regulated	Unregulated	Groundwater	Total
Border	249	235		484
Gwydir	221	150		371
Namoi	352	223		575
Peel	77	179		256

Valley	Regulated	Unregulated	Groundwater	Total
Lachlan	1,181	385		1,566
Macquarie	1,175	855		2,030
Far West	-	124		124
Murray	2,734	192		2,926
Murrumbidgee	1,293	575		1,868
North Coast	28	2,301		2,329
Hunter	955	2,294		3,249
South Coast	87	2,756		2,843
Inland			2,334	2,334
Murrumbidgee			201	201
Coastal			3,233	3,233
Total	8,352	10,269	5,768	24,389

Customer bill impacts

Our proposal to cap annual price increases at 5%, plus inflation, means that the maximum increase in WAMC bills that customers will face will be 5% (real) per year, or 22% (real) from 2021-22 to 2024-25 inclusive. We propose that this price path be in effect until prices are reviewed in 2025. It is up to IPART to decide if 5% annual price increases are appropriate. IPART will publish the final prices at the completion of the WAMC price review in 2021.

Due to uncertainty over short-term inflation forecasts in the current economic downturn we have chosen to display customer bill impacts in 2021-22 dollars, rather than nominal dollars. It is common practice to adopt the Reserve Bank of Australia mid-range inflation target rate of 2.5% to convert current dollars to nominal dollars. We consider that applying an inflation rate of 2.5% will over-state the likely short-term bill impact on customers in the current economic cycle where inflation is likely to be lower.

We have prepared the tables below to show the impact of 5% annual price increases in small, medium and high usage scenarios. We have combined entitlement and usage prices to show users the likely total bill impact they will face under the usage scenarios.

The assumptions for calculating customer bill impacts are:

- Small general security usage – 100ML entitlement and 60% usage
- Medium general security usage – 500ML entitlement and 60% usage, and
- Large general security usage – 1000ML entitlement and 60% usage.

Bill impacts for Regulated Rivers

Table 15. Bill impacts for regulated rivers - Two-part tariff (\$2020-21)

	2020-21	2021-22	2022-23	2023-24	2024-25	Bill impact p.a.
Small usage (100ML of entitlements)						
Border	335	352	369	388	407	5%
Gwydir	246	258	271	285	299	5%
Namoi	383	403	423	444	466	5%
Peel	553	580	609	640	672	5%
Lachlan	258	271	285	299	314	5%
Macquarie	282	296	311	326	343	5%
Murray	220	231	243	255	267	5%
Murrumbidgee	197	207	218	229	240	5%
North Coast	764	802	843	885	929	5%
Hunter	440	462	486	510	535	5%
South Coast	653	686	720	756	794	5%
Medium usage (500ML of entitlements)						
Border	1,674	1,758	1,846	1,938	2,035	5%
Gwydir	1,230	1,292	1,356	1,424	1,495	5%
Namoi	1,917	2,013	2,113	2,219	2,330	5%
Peel	2,763	2,901	3,046	3,199	3,358	5%
Lachlan	1,291	1,356	1,423	1,494	1,569	5%
Macquarie	1,410	1,481	1,555	1,632	1,714	5%
Murray	1,100	1,155	1,213	1,273	1,337	5%
Murrumbidgee	987	1,036	1,088	1,143	1,200	5%
North Coast	3,821	4,012	4,213	4,423	4,644	5%
Hunter	2,202	2,312	2,428	2,549	2,677	5%

	2020-21	2021-22	2022-23	2023-24	2024-25	Bill impact p.a.
South Coast	3,266	3,429	3,601	3,781	3,970	5%
Large usage (1000ML of entitlements)						
Border	3,348	3,515	3,691	3,876	4,070	5%
Gwydir	2,460	2,583	2,712	2,848	2,990	5%
Namoi	3,834	4,026	4,227	4,438	4,660	5%
Peel	5,526	5,802	6,092	6,397	6,717	5%
Lachlan	2,582	2,711	2,847	2,989	3,138	5%
Macquarie	2,820	2,961	3,109	3,265	3,428	5%
Murray	2,200	2,310	2,426	2,547	2,674	5%
Murrumbidgee	1,974	2,073	2,176	2,285	2,399	5%
North Coast	7,642	8,024	8,425	8,847	9,289	5%
Hunter	4,404	4,624	4,855	5,098	5,353	5%
South Coast	6,532	6,859	7,202	7,562	7,940	5%

Bill impacts for Unregulated Rivers

Table 16. Bill impacts for unregulated rivers - One-part tariff (\$2021-21)

	2020-21	2021-22	2022-23	2023-24	2024-25	Bill impact p.a.
Small usage (100ML of entitlements)						
Border	478	502	527	553	581	5%
Gwydir	478	502	527	553	581	5%
Namoi	478	502	527	553	581	5%
Peel	478	502	527	553	581	5%
Lachlan	560	588	617	648	681	5%
Macquarie	560	588	617	648	681	5%
Murray	685	719	755	793	833	5%

	2020-21	2021-22	2022-23	2023-24	2024-25	Bill impact p.a.
Murrumbidgee	908	953	1,001	1,051	1,104	5%
Far West	666	699	734	771	810	5%
North Coast	952	1,000	1,050	1,102	1,157	5%
Hunter	343	360	378	397	417	5%
South Coast	324	340	357	375	394	5%

Medium usage (500ML of entitlements)

Border	2,390	2,510	2,635	2,767	2,905	5%
Gwydir	2,390	2,510	2,635	2,767	2,905	5%
Namoi	2,390	2,510	2,635	2,767	2,905	5%
Peel	2,390	2,510	2,635	2,767	2,905	5%
Lachlan	2,800	2,940	3,087	3,241	3,403	5%
Macquarie	2,800	2,940	3,087	3,241	3,403	5%
Murray	3,425	3,596	3,776	3,965	4,163	5%
Murrumbidgee	4,540	4,767	5,005	5,256	5,518	5%
Far West	3,330	3,497	3,671	3,855	4,048	5%
North Coast	4,760	4,998	5,248	5,510	5,786	5%
Hunter	1,715	1,801	1,891	1,985	2,085	5%
South Coast	1,620	1,701	1,786	1,875	1,969	5%

Large usage (1000ML of entitlements)

Border	4,780	5,019	5,270	5,533	5,810	5%
Gwydir	4,780	5,019	5,270	5,533	5,810	5%
Namoi	4,780	5,019	5,270	5,533	5,810	5%
Peel	4,780	5,019	5,270	5,533	5,810	5%
Lachlan	5,600	5,880	6,174	6,483	6,807	5%
Macquarie	5,600	5,880	6,174	6,483	6,807	5%

	2020-21	2021-22	2022-23	2023-24	2024-25	Bill impact p.a.
Murray	6,850	7,193	7,552	7,930	8,326	5%
Murrumbidgee	9,080	9,534	10,011	10,511	11,037	5%
Far West	6,660	6,993	7,343	7,710	8,095	5%
North Coast	9,520	9,996	10,496	11,021	11,572	5%
Hunter	3,430	3,602	3,782	3,971	4,169	5%
South Coast	3,240	3,402	3,572	3,751	3,938	5%

Table 16. Bill impacts for unregulated rivers - Two-part tariff (\$2021-21)

	2020-21	2021-22	2022-23	2023-24	2024-25	Bill impact p.a.
Small usage (100ML of entitlements)						
Border	379	398	418	439	461	5%
Gwydir	379	398	418	439	461	5%
Namoi	379	398	418	439	461	5%
Peel	379	398	418	439	461	5%
Lachlan	444	466	489	514	539	5%
Macquarie	444	466	489	514	539	5%
Murray	517	542	570	598	628	5%
Murrumbidgee	676	709	745	782	821	5%
Far West	565	593	623	654	687	5%
North Coast	755	793	832	874	917	5%
Hunter	258	271	284	298	313	5%
South Coast	264	278	292	306	321	5%
Medium usage (500ML of entitlements)						
Border	1,896	1,991	2,090	2,195	2,305	5%
Gwydir	1,896	1,991	2,090	2,195	2,305	5%

	2020-21	2021-22	2022-23	2023-24	2024-25	Bill impact p.a.
Namoi	1,896	1,991	2,090	2,195	2,305	5%
Peel	1,896	1,991	2,090	2,195	2,305	5%
Lachlan	2,218	2,329	2,445	2,568	2,696	5%
Macquarie	2,218	2,329	2,445	2,568	2,696	5%
Murray	2,583	2,712	2,848	2,990	3,140	5%
Murrumbidgee	3,378	3,547	3,724	3,910	4,106	5%
Far West	2,824	2,965	3,113	3,269	3,433	5%
North Coast	3,774	3,963	4,161	4,369	4,587	5%
Hunter	1,289	1,353	1,421	1,492	1,567	5%
South Coast	1,322	1,388	1,458	1,530	1,607	5%

Large usage (1000ML of entitlements)

Border	3,792	3,982	4,181	4,390	4,609	5%
Gwydir	3,792	3,982	4,181	4,390	4,609	5%
Namoi	3,792	3,982	4,181	4,390	4,609	5%
Peel	3,792	3,982	4,181	4,390	4,609	5%
Lachlan	4,436	4,658	4,891	5,135	5,392	5%
Macquarie	4,436	4,658	4,891	5,135	5,392	5%
Murray	5,166	5,424	5,696	5,980	6,279	5%
Murrumbidgee	6,756	7,094	7,448	7,821	8,212	5%
Far West	5,648	5,930	6,227	6,538	6,865	5%
North Coast	7,548	7,925	8,322	8,738	9,175	5%
Hunter	2,578	2,707	2,842	2,984	3,134	5%
South Coast	2,644	2,776	2,915	3,061	3,214	5%

Bill impacts for Groundwater sources

Table 17. Bill impacts for groundwater sources- One-part tariff (\$2021-21)

	2020-21	2021-22	2022-23	2023-24	2024-25	Bill impact p.a.
Small usage (100ML of entitlements)						
Inland	699	734	771	809	850	5%
Murrumbidgee	464	487	512	537	564	5%
Coastal	505	530	557	585	614	5%
Medium usage (500ML of entitlements)						
Inland	3,495	3,670	3,853	4,046	4,248	5%
Murrumbidgee	2,320	2,436	2,558	2,686	2,820	5%
Coastal	2,525	2,651	2,784	2,923	3,069	5%
Large usage (1000ML of entitlements)						
Inland	6,990	7,340	7,706	8,092	8,496	5%
Murrumbidgee	4,640	4,872	5,116	5,371	5,640	5%
Coastal	5,050	5,303	5,568	5,846	6,138	5%

Table 18. Bill impacts for groundwater sources- Two-part tariff (\$2021-21)

	2020-21	2021-22	2022-23	2023-24	2024-25	Bill impact p.a.
Small usage (100ML of entitlements)						
Inland	574	602	633	664	697	5%
Murrumbidgee	381	400	420	441	463	5%
Coastal	373	392	412	432	454	5%
Medium usage (500ML of entitlements)						
Inland	2,869	3,012	3,163	3,321	3,487	5%
Murrumbidgee	1,904	1,999	2,099	2,204	2,314	5%
Coastal	1,867	1,960	2,058	2,161	2,269	5%
Large usage (1000ML of entitlements)						
Inland	5,738	6,025	6,326	6,642	6,975	5%

	2020-21	2021-22	2022-23	2023-24	2024-25	Bill impact p.a.
Murrumbidgee	3,808	3,998	4,198	4,408	4,629	5%
Coastal	3,734	3,921	4,117	4,323	4,539	5%

Floodplain harvesting tariffs

We are currently working towards the scheduled creation of floodplain harvesting licences by mid 2021 in the following valleys:

- Barwon–Darling
- Border
- Gwydir
- Macquarie, and
- Namoi.

The activities relating to administering floodplain harvesting licences are incremental to the activities undertaken for other licence administration and are strongly correlated to the level of water take. Therefore, we propose to maintain the approach taken by IPART at the 2016 Determination that floodplain harvesting licences are charged as water take only licences.

We propose to continue the approach for setting water management prices in the floodplain harvesting valleys that was accepted by IPART in the 2016 WAMC pricing review. Under the accepted approach, floodplain harvesting management costs and volume forecasts are added to regulated rivers, except for the Far West, where forecasts are added as unregulated. There are no regulated Far-West valleys. This will ensure the price paths of the relevant valleys reflect the presence of floodplain harvesting management costs and volumes.

The 2016 Determination set inclusive and exclusive floodplain harvesting prices due to the uncertainty over timing. For the 2021 regulatory period we propose a single set of water take prices, as shown in the tables above, to reflect the introduction of these licences before (or in the early stages of) the 2021 regulatory period. Our water take forecasts and cost recovery calculations include these forecasts from the date we expect licences to commence in each valley.

Our approach to floodplain harvesting and volume forecasts is outlined more fully in Detailed Paper H – Licences and volumes.

Gayini (Nimmie-Caira)

Sustainable Diversion Limit Adjustment Mechanism scheme

As part of the Murray-Darling Basin Plan, DPIE Water is developing supply and efficiency measure projects to help recover water for the environment and for productive use. The Gayini Nimmie Caira project is a supply measure under the Sustainable Diversion Limit Adjustment Mechanism scheme.

The Murray-Darling Basin Plan sets sustainable diversion limits (SDL), which state how much water can be used in the Murray-Darling Basin, while leaving enough water for the environment.

The SDL limits the amount of water that can be extracted from the Basin to ensure that there is sufficient water in the system to maintain the environmental health of the Murray-Darling Basin, while considering the social and economic impacts of water recovery.

The Australian Government has committed to recovering the additional 2,750 GL of water for the environment through a combination of licence buybacks and water recovery and efficiency projects.

To provide flexibility, the Basin Plan also includes a mechanism to adjust the SDL. If the environmental outcomes targeted in the Basin Plan can be achieved with less water, more water can remain in the system for other users, including irrigated agriculture.

An SDL adjustment can be achieved through either supply measures or efficiency measures. A supply measure is a project that allows equivalent environmental outcomes to be achieved with less water. An efficiency measure is a project that recovers additional water for the environment through improving the efficiency of irrigation or water delivery.

The Gayini Nimmie-Caira project

The Gayini Nimmie-Caira project is a supply measure under the SDL adjustment scheme. The project has involved purchasing a property, Gayini, in the Nimmie-Caira area of the lower Murrumbidgee River system and reconfiguring the existing water delivery infrastructure to supply water to an important wetland in the Murrumbidgee Valley. The ecological benefits expected from this project will allow the SDL to be adjusted by 20-50 GL, instead of buying back water licences for the equivalent amount to achieve policy objectives. The project also has benefits for indigenous engagement and participation and sustainable development.

A consortium led by The Nature Conservancy, represented by the Nari Nari Tribal Council, now controls the ongoing management and future stewardship of Nimmie-Caira. It manages the operation of water infrastructure (owned by WAMC) to enable the delivery of designed flow events and the passage of large floods, while ordering environmental water and coordinating environmental watering events is the responsibility of NSW's Environment, Energy and Sciences and the Commonwealth Environmental Water Office (CEWO) in association with the Murrumbidgee Environmental Water Advisory Group.

Managing water infrastructure operations includes routine maintenance of water infrastructure such as clearing vegetation from embankments and channels, as well as upkeep of regulators and other structures. In addition, the Nari Nari Tribal Council ensures that water-dependent environmental assets are maintained, and vegetation is not overgrazed or cleared so that it can respond to water during environmental water flows or natural flood events.

Proposed WAMC charge and rationale

To date, the CEWO has paid WaterNSW for its water management activities and Bulk Water charges. This included the management of the Nimmie-Caira infrastructure. When the ownership of the Nimmie-Caira infrastructure was transferred from WNSW to WAMC (in 2017) WAMC took over the responsibility for the ongoing maintenance and management, for which it entered into an agreement with the Nari Nari Tribal Council. The Nari Nari Tribal Council will charge WAMC for undertaking this work.

We propose that WAMC water management charges for the licence holders in the Murrumbidgee Valley are calculated to recover the costs due to be paid to the Nari Nari Tribal Council through existing fixed and variable charges.

Allocating costs to users within the Murrumbidgee Valley applies the impactor-pays principle reflecting that environmental releases are required within the valley to mitigate against water used by other licence holders. In addition, the Murrumbidgee Valley users receive

considerable benefits, through the potential for increased water allocations, due to more efficient use of environmental water. The costs will be included in activity code W07-01, therefore 80% of the costs are allocated to users (according to the principle of impactor-pays) and 20% to the government to reflect the wider benefits to the community generated by the project.

Efficient costs

We propose that WAMC water management charges are set to recover to efficient costs we pay to the Nari Nari Tribal Council as owners and managers of the assets

We have yet to receive a breakdown of the efficient costs of managing water infrastructure from the Nari Nari Tribal Council. These costs will be provided to IPART prior to 1 September 2020 to allow for adequate stakeholder engagement about this proposed charge.