Sustainable Diversion Limit Compliance Statement for 2021-2022

Inspector-General of Water Compliance

**September 2023**

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Inspector-General of Water Compliance  
GPO Box 3090 Canberra ACT 2601

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# The purpose of the Inspector-General of Water Compliance is to ensure various government bodies, water managers and users in the Murray-Darling Basin comply with their obligations under the Water Act 2007 and the Basin Plan 2012 and drive governments and water managers to uphold high standards of integrity and performance.

Sustainable Diversion Limits (SDLs) commenced from 1 July 2019. With the legislative amendments to the Commonwealth *Water Act 2007* (the Act) and the *Basin Plan 2012* (Basin Plan), in August 2021, the Inspector-General of Water Compliance (Inspector-General) was established, and I became responsible for responding to SDL compliance. This is my second SDL compliance statement since establishment.

The SDLs and compliance with these limits are essential to the implementation and operation of the Basin Plan. Under the Act, SDLs provide for the establishment and enforcement of environmentally sustainable limits on the volume of surface water and groundwater that may be taken from Basin water resources. In effect, SDLs are the amount of water that can be taken from rivers and aquifers for towns, industry, and farmers.

I have reviewed the 2021-2022 Registers of Take as provided by the Murray-Darling Basin Authority (MDBA)[[1]](#footnote-2) and indicated in Table *1* and Table 2, and note all 55 SDL resource units in the registers of take are compliant (refer to Figure 1 and Figure 2). This is a positive result for Basin Plan SDL compliance for the second year in a row.

The 55 compliant SDL resource units (19 surface water and 36 groundwater) are managed through the 13 water resource plans across Queensland, South Australia, Victoria, and the Australian Capital Territory.

As there were no SDL resource units in excess of the SDL compliance threshold, there were no reports of a reasonable excuse or action plans provided by Queensland, South Australia, Victoria, or the Australian Capital Territory.

The Basin Plan recognises that where incomplete water recovery by the Commonwealth is for reasons beyond the Basin State’s control, it is adjusted in the Registers of Take[[2]](#footnote-3). Adjustments to the Registers of Take were made by the MDBA for eleven surface water SDL resource units, and two groundwater SDL resource units for incomplete water recovery.

I welcome the continued achievement of SDL compliance in Queensland, South Australia, Victoria, and the Australian Capital Territory.

On [2 June 2022, I gave a public speech](https://www.igwc.gov.au/media-releases/transcript-hon-troy-grant-inspector-general-water-compliance-2022-river-reflections-conference-2-june-2022) which called out the failure of the New South Wales Government to deliver water resource plans. The evidence is now in that during 2021-2022, New South Wales failed to deliver the outstanding obligations and commitments to the Basin Plan. Therefore, the 2021-2022 SDL compliance assessment does not include New South Wales’s 54 SDL resource units (10 surface water and 44 groundwater). The 20 water resource plans in New South Wales were not accredited or operating in the 2021-2022 water accounting year, an absence for the third year in a row since the commencement of SDL compliance.

Across the Basin, New South Wales was responsible for 56.8 per cent of the water take in 2021-2022; that’s the lion’s share of water consumed from the Murray-Darling Basin.

Despite having no accredited water resource plans in 2021-2022, New South Wales have self-assessed non-compliance in two SDL resource units, the Barwon-Darling watercourse, and Gwydir surface water (refer to Appendix 1 for more detail).

SDL compliance requires the rules and methods identified and accredited in a water resource plan to manage water take for the SDL resource units. Without water resource plans, New South Wales is subject to a lower level of accountability under the Basin Plan than the other four Basin States.

This statement should be read in conjunction with the MDBA Sustainable Diversion Limit Registers of Take 2021-2022 report published on the MDBA website.

I am currently finalising a Sustainable Diversion Limit Compliance Framework which will detail to the public my enhanced approach moving forward to this critically important annual task. I plan to publish this Framework in October 2023.

I encourage all Basin State Governments to continue to closely monitor and manage water usage within the Sustainable Diversion Limits as this is a key obligation of the Basin Plan.

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The Hon. Troy Grant

Inspector-General of Water Compliance

4 September 2023

Figure 1 Map of Surface water SDL compliance

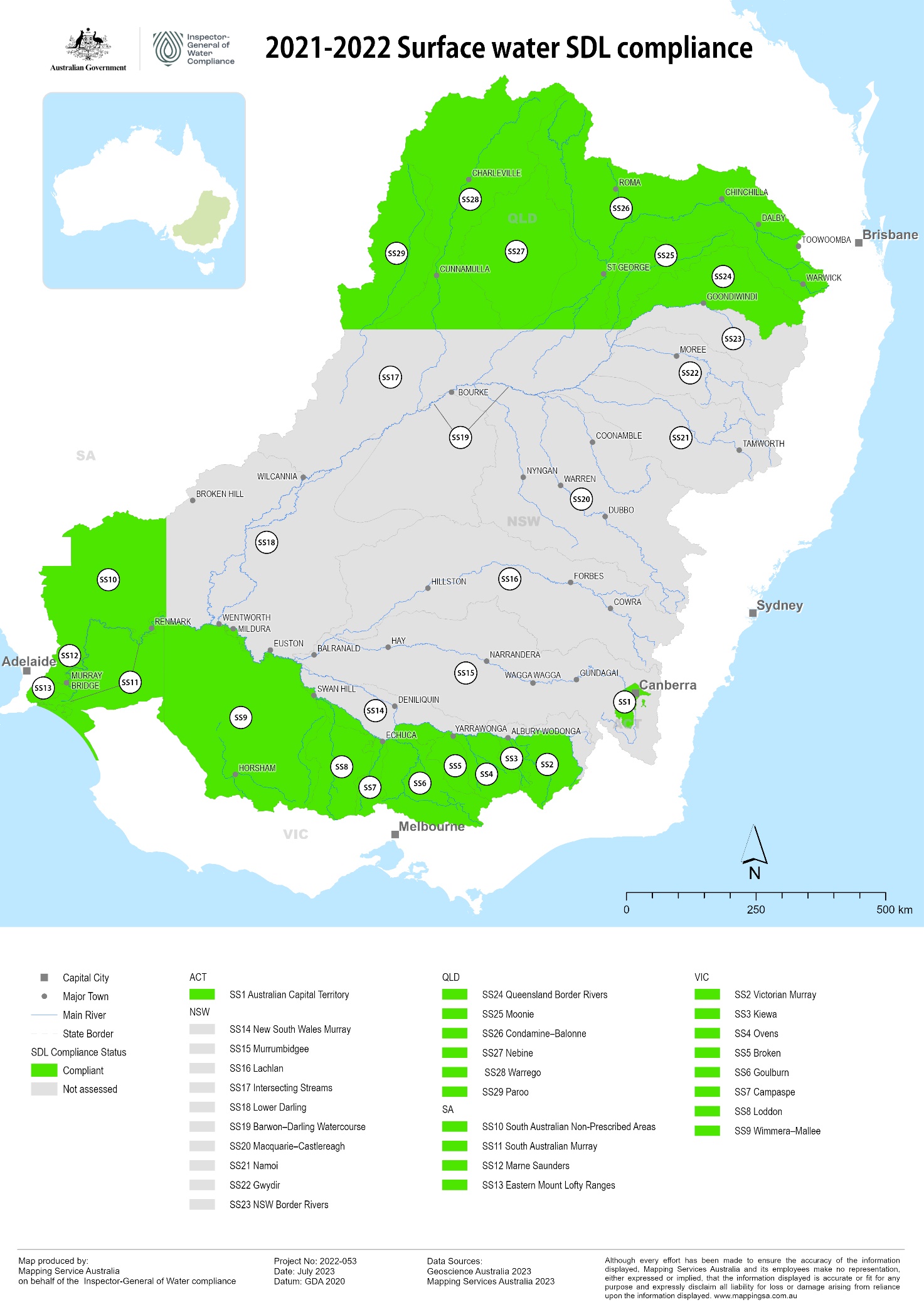


Figure 2 Map of Groundwater SDL compliance

A map of the Murray- Darling Basin , in Australia showing the groundwater SDL Compliance status of regions within Basin States (New South Wales, Queensland, Australian Capital Territory, Victoria and South Australia) for water year 2021- 2022. Regions which are compliant are shaded in green and regions which have not been assessed are shaded in grey. In the Australian Capital Territory, there is one region in total, which is compliant, which is called 'GS52 Australian Capital Territory (Groundwater)'. In New South Wales there are 44 regions which have all not been assessed. This includes 'GS10 Adelaide Fold Belt MDB', 'GS11 Bell Valley Alluvium', 'GS12 Belubula Alluivium', 'GS13 Billabong Creek Alluvium', 'GS14 Castlereagh Alluvium', 'GS15 Coolaburragundy- Talvragar Alluvium', 'GS16 Cudgegong Alluvium', 'GS17 Gunnedah- Oxley Basin MDB', 'GS18 Inverell Basalt', 'GS19 Kanmantoo Fold Belt MDB', 'GS20 Lachlan Fold Belt MDB', 'GS21 Lake George Alluvium', 'GS22 Liverpool Ranges Basalt MDB', 'GS23 Lower Darling Alluvium', 'GS24 Lower Gwydir Alluvium', 'GS25 Lower Lachlan Alluvium', 'GS26 Lower Macquarie Alluvium', 'GS27a Lower Murray Shallow Alluvium', 'GS27b Lower Murray deep Alluvium', GS28a Lower Murrumbidgee Shallow Alluvium', 'GS28b Lower Murrumbidgee Deep Alluvium', 'GS29 Lower Namoi Alluvium', 'GS30 Manilla Alluviu', 'GS31 Mid-Murrumbidgee Alluvium', 'GS32 NSW Border Rivers Alluvium', 'GS33 NSW Border Rivers Tributary Alluvium', 'GS34 NSW GAB Surat Shallow', 'GS35 NSW GAB Warrego Shallow, 'GS36 NSW GAB Central Shallow', 'GS37 New England Fold Belt MDB', 'GS38 Oaklands Basin', 'GS39 Orange Basalt', 'GS40 Peel Valley Alluvium', 'GS41 Sydney Basin MDB', 'GS42 Upper Darling Alluvium', 'GS43 Upper Gwydir Alluvium', 'GS44 Upper Lachlan Alluvium', ' GS45 Upper Macquarie Alluvium', 'GS47 Upper Namoi Alluvium', 'GS48 Upper Namoi Tributary Alluvium', 'GS49 Warrumbungle Basalt', 'GS50 Western Porous Rock', 'GS51 Young Granite'. There were 15 regions in Queensland, which were all compliant. This includes 'GS53 Condamine Fracture Rock', 'GS54 Queensland Border Rivers Alluvium', 'GS56 Queensland MDB: deep', 'GS57 Sediments above the Great Artesian Basin: Border Rivers- Moonie', 'GS58 Sediments above the Great Artesian Basin: Condamine- Balonne', 'GS60 Sediments above the Great Artesian Basin: Warrego-Paroo-Nebine', 'GS61a St George Alluvium: Condamine-Balonne (shallow)', 'GS61b St George Alluvium: Condamine-Balonne (deep)', 'GS62 St George Alluvium: Moonie', 'GS63 St George Alluvium: Warrego-Paroo-Nebine', 'GS64a Upper Condamine Alluvium (central Condamine Alluvium)', 'GS64b Upper Condamine Alluvium (Tributaries)', 'GS65 Upper Condamine Basalts', 'GS66 Warrego Alluvium'. In South Australia all 13 regions are compliant. This includes 'GS1a Angas Berner (Quaternary Sediments)', 'GS1b Angas Bremer (Murray Group Limestone)', 'GS2 Eastern Mount Lofty Ranges', 'GS3a Mallee (Pilocene Sands)', 'GS3b Mallee (Murray Group Limestone)', 'GS3c Mallee (Renmark Group)', 'GS4a Mame Saunders (Fractured Rock)', 'GS4b Mame Saunders (Murray Group Limestone)', 'GS4c Marne Saunders (Renamark Group)', 'GS5a Peake-Roby-Sherlock (unconfined)', 'GS5b Peake-Roby-Sherlock (confined)', 'GS6 SA Murray' and 'GS7 SA Murray Salt Interception Schemes'. In Victoria there are 7 different regions, which are all compliant. This includes regions 'GS8a Goulburn-Murray: Shepparton Irrigation Region', 'GS8b Goulburn-Murray: Highlands', 'GS8c Goulburn-Murray: Sedimentary Plain', 'GS8d Goulburn-Murray: deep', 'GS9a Wimmera-Mallee: Highlands', 'GS9b Wimmera-Mallee: Sedimentary Plain', 'GS9c Wimmera-Mallee: deep'. 

Table 1: 2021-2022 Surface water accounts from Registers of Take

| State | SDL resource unit | SDL resource unit code | SDL | Annual Permitted Take | Annual Actual Take | Annual Balance | Cumulative Balance Start of 2021‑22 | Cumulative Balance End of 2021-22 | HEW Adjustment | Adjusted Cumulative Balance End of 2021‑22 | SDL Compliance threshold (-20% of SDL) | SDL Excess (Yes/ No) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| QLD | Queensland Border Rivers | SS24 | 363.6 | 559.1 | 279.7 | 279.4 | 55.8 | 335.2 | 0.00 | 335.2 | -72.7 | No |
| QLD | Moonie | SS25 | 89.9 | 128.1 | 58.0 | 70.1 | 55.5 | 125.6 | 0.00 | 125.6 | -18.0 | No |
| QLD | Condamine-Balonne | SS26 | 919.0 | 1572.8 | 1314.7 | 258.1 | 1.37 | 259.4 | 4.15 | 263.6 | -183.8 | No |
| QLD | Nebine | SS27 | 17.1 | 17.5 | 15.8 | 1.71 | 10.7 | 12.4 | 0.00 | 12.4 | -3.41 | No |
| QLD | Warrego | SS28 | 55.5 | 68.2 | 41.1 | 27.2 | 40.8 | 68.0 | 0.00 | 68.0 | -11.1 | No |
| QLD | Paroo | SS29 | 11.8 | 10.9 | 10.9 | 0.08 | 0.15 | 0.23 | 0.00 | 0.23 | -2.36 | No |
| ACT | Australian Capital Territory | SS1 | 53.4 | 28.4 | 14.8 | 13.6 | 13.0 | 26.6 | 3.10 | 29.7 | -10.7 | No |
| VIC | Victorian Murray | SS2 | 1319.8 | 1284.8 | 1171.9 | 112.9 | 66.8 | 179.7 | 14.9 | 194.6 | -264.0 | No |
| VIC | Kiewa | SS3 | 27.7 | 26.0 | 21.1 | 4.92 | 7.49 | 12.4 | 0.00 | 12.4 | -5.54 | No |
| VIC | Ovens | SS4 | 85.8 | 80.6 | 71.2 | 9.39 | 15.9 | 25.3 | -0.09 | 25.2 | -17.2 | No |
| VIC | Broken | SS5 | 49.0 | 40.4 | 39.3 | 1.13 | 2.41 | 3.54 | 0.00 | 3.54 | -9.80 | No |
| VIC | Goulburn | SS6 | 1278.0 | 1155.8 | 927.1 | 228.7 | 362.7 | 591.4 | 4.27 | 595.7 | -255.6 | No |
| VIC | Campaspe | SS7 | 111.7 | 77.0 | 57.3 | 19.7 | 11.7 | 31.4 | 0.74 | 32.1 | -22.3 | No |
| VIC | Loddon | SS8 | 127.7 | 107.1 | 78.9 | 28.2 | 8.78 | 37.0 | 0.00 | 37.0 | -25.5 | No |
| VIC | Wimmera-Mallee (surface water) | SS9 | 76.1 | 71.7 | 47.9 | 23.8 | 24.0 | 47.8 | 0.00 | 47.8 | -15.2 | No |
| SA | South Australian Murray | SS11 | 542.2 | 647.6 | 609.0 | 38.6 | -7.91 | 30.7 | -13.6 | 17.1 | -108.4 | No |
| SA | South Australian Non-Prescribed Areas | SS10 | 55.2 | 55.2 | 23.3 | 31.9 | 31.9 | 63.7 | 0.00 | 63.7 | -11.0 | No |
| SA | Marne-Saunders | SS12 | 3.00 | 2.37 | 1.56 | 0.81 | 0.50 | 1.31 | 0.00 | 1.31 | -0.60 | No |
| SA | Eastern Mount Lofty Ranges | SS13 | 28.3 | 27.4 | 15.5 | 11.9 | 12.3 | 24.2 | 0.00 | 24.2 | -5.66 | No |
| Total | | | **5214.8** | **5961.0** | **4799.0** | **1162.0** | **713.8** | **1875.8** | **13.5** | **1889.3** | **-1043.0** |  |
| VIC | Goulburn-Broken-Campaspe-Loddon |  | 1566.4 | 1380.3 | 1102.6 | 277.7 | 385.6 | 663.4 | 5.02 | 668.4 | -313.3 | No |
| VIC | Victorian Murray-Kiewa-Ovens |  | 1433.3 | 1391.4 | 1264.2 | 127.2 | 90.2 | 217.4 | 14.8 | 232.2 | -286.7 | No |

Table 2. 2021- 2022 Groundwater accounts from the Registers of Take

| State | SDL resource unit | SDL resource unit code | SDL | Annual Permitted Take | Annual Actual Take | Cumulative Permitted Take 2020-2021 | Cumulative Actual Take 2020-2021 | Adjustments for incomplete water recovery (cumulative) | 20% of SDL | Cumulative Permitted Take 2021-2022 | Cumulative Actual Take 2021-2022 | SDL Compliance Threshold | SDL Excess |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| QLD | Queensland Border Rivers Alluvium | GS54 | 14.0 | 14.0 | 9.03 | 28.0 | 24.6 | 0.00 | 2.80 | 42.0 | 33.6 | 44.8 | No |
| QLD | Queensland Border Rivers Fractured Rock | GS55 | 10.5 | 10.5 | 8.83 | 21.0 | 17.8 | 0.00 | 2.10 | 31.5 | 26.6 | 33.6 | No |
| QLD | Sediments above the Great Artesian Basin: Border Rivers-Moonie | GS57 | 46.9 | 46.9 | 0.52 | 93.8 | 1.03 | 0.00 | 9.38 | 140.7 | 1.54 | 150.1 | No |
| QLD | St George Alluvium: Moonie | GS62 | 0.69 | 0.69 | 0.02 | 1.38 | 0.04 | 0.00 | 0.14 | 2.07 | 0.06 | 2.21 | No |
| QLD | Condamine Fractured Rock | GS53 | 1.48 | 1.48 | 0.63 | 2.96 | 1.33 | 0.00 | 0.30 | 4.44 | 1.96 | 4.74 | No |
| QLD | Queensland MDB: deep | GS56 | 100.0 | 100.0 | 0.00 | 200.0 | 0.00 | 0.00 | 20.0 | 300.0 | 0.00 | 320.0 | No |
| QLD | Sediments above the Great Artesian Basin: Condamine–Balonne | GS58 | 18.1 | 18.1 | 0.44 | 36.2 | 0.89 | 0.00 | 3.62 | 54.3 | 1.33 | 57.9 | No |
| QLD | St George Alluvium: Condamine–Balonne (shallow) | GS61a | 27.7 | 27.7 | 0.34 | 55.4 | 0.88 | 0.00 | 5.54 | 83.1 | 1.22 | 88.6 | No |
| QLD | St George Alluvium: Condamine–Balonne (deep) | GS61b | 12.6 | 12.6 | 11.7 | 25.2 | 23.2 | 0.00 | 2.52 | 37.8 | 34.9 | 40.3 | No |
| QLD | Upper Condamine Alluvium (Central Condamine Alluvium) | GS64a | 46.0 | 46.0 | 25.2 | 92.0 | 86.4 | 0.95 | 9.20 | 138.0 | 111.6 | 148.1 | No |
| QLD | Upper Condamine Alluvium (Tributaries) | GS64b | 40.5 | 40.5 | 25.2 | 81.0 | 55.2 | 5.91 | 8.10 | 121.5 | 80.4 | 135.5 | No |
| QLD | Upper Condamine Basalts | GS65 | 79.0 | 79.0 | 46.9 | 158.0 | 99.6 | 0.00 | 15.8 | 237.0 | 146.5 | 252.8 | No |
| QLD | Sediments above the Great Artesian Basin: Warrego–Paroo–Nebine | GS60 | 99.2 | 0.74 | 0.74 | 1.47 | 1.48 | 0.00 | 19.8 | 2.21 | 2.22 | 22.0 | No |
| QLD | St George Alluvium: Warrego–Paroo–Nebine | GS63 | 24.6 | 0.08 | 0.08 | 0.16 | 0.16 | 0.00 | 4.92 | 0.25 | 0.24 | 5.17 | No |
| QLD | Warrego Alluvium | GS66 | 10.2 | 0.77 | 0.77 | 1.53 | 1.54 | 0.00 | 2.04 | 2.30 | 2.31 | 4.34 | No |
| ACT | Australian Capital Territory (groundwater) | GS52 | 3.16 | 3.16 | 0.32 | 6.32 | 0.97 | 0.00 | 0.63 | 9.48 | 1.28 | 10.1 | No |
| VIC | Goulburn-Murray: Shepparton Irrigation Region | GS8a | 244.1 | 244.1 | 41.4 | 488.2 | 203.3 | 0.00 | 48.8 | 732.3 | 244.7 | 781.1 | No |
| VIC | Goulburn-Murray: Highlands | GS8b | 68.7 | 68.7 | 14.0 | 137.4 | 28.7 | 0.00 | 13.7 | 206.1 | 42.7 | 219.8 | No |
| VIC | Goulburn-Murray: Sedimentary Plain | GS8c | 223.0 | 223.0 | 75.4 | 446.0 | 228.4 | 0.00 | 44.6 | 669.0 | 303.8 | 713.6 | No |
| VIC | Goulburn-Murray: deep | GS8d | 20.0 | 20.0 | 1.11 | 40.0 | 2.28 | 0.00 | 4.00 | 60.0 | 3.39 | 64.0 | No |
| VIC | Wimmera-Mallee: Highlands | GS9a | 2.75 | 2.75 | 0.98 | 5.50 | 2.05 | 0.00 | 0.55 | 8.25 | 3.03 | 8.80 | No |
| VIC | Wimmera-Mallee: Sedimentary Plain | GS9b | 186.9 | 186.9 | 7.77 | 373.8 | 14.4 | 0.00 | 37.4 | 560.7 | 22.2 | 598.1 | No |
| VIC | Wimmera-Mallee: deep | GS9c | 20.0 | 20.0 | 0.70 | 40.0 | 0.13 | 0.00 | 4.00 | 60.0 | 0.83 | 64.0 | No |
| SA | Mallee (Pliocene Sands) | GS3a | 41.4 | 41.4 | 0.00 | 82.8 | 0.00 | 0.00 | 8.28 | 124.2 | 0.00 | 132.5 | No |
| SA | Mallee (Murray Group Limestone) | GS3b | 63.6 | 63.6 | 34.7 | 127.2 | 72.2 | 0.00 | 12.7 | 190.8 | 106.9 | 203.5 | No |
| SA | Mallee (Renmark Group) | GS3c | 2.00 | 2.00 | 0.00 | 4.00 | 0.00 | 0.00 | 0.40 | 6.00 | 0.00 | 6.40 | No |
| SA | Peake–Roby–Sherlock (unconfined) | GS5a | 3.41 | 3.41 | 0.19 | 6.82 | 0.38 | 0.00 | 0.68 | 10.2 | 0.57 | 10.9 | No |
| SA | Peake–Roby–Sherlock (confined) | GS5b | 2.58 | 2.58 | 0.92 | 5.16 | 1.99 | 0.00 | 0.52 | 7.74 | 2.91 | 8.26 | No |
| SA | SA Murray | GS6 | 64.8 | 64.8 | 1.80 | 129.6 | 3.60 | 0.00 | 13.0 | 194.4 | 5.40 | 207.4 | No |
| SA | SA Murray Salt Interception Schemes | GS7 | 28.6 | 28.6 | 13.2 | 57.2 | 28.6 | 0.00 | 5.72 | 85.8 | 41.8 | 91.5 | No |
| SA | Angas Bremer (Quaternary Sediments) | GS1a | 1.09 | 0.25 | 0.00 | 0.50 | 0.00 | 0.00 | 0.22 | 0.75 | 0.00 | 0.97 | No |
| SA | Angas Bremer (Murray Group Limestone) | GS1b | 6.57 | 6.57 | 0.95 | 13.1 | 2.56 | 0.00 | 1.31 | 19.7 | 3.52 | 21.0 | No |
| SA | Eastern Mount Lofty Ranges | GS2 | 38.5 | 38.5 | 11.2 | 77.0 | 20.4 | 0.00 | 7.70 | 115.5 | 31.6 | 123.2 | No |
| SA | Marne Saunders (Fractured Rock) | GS4a | 2.09 | 2.09 | 0.45 | 4.18 | 1.07 | 0.00 | 0.42 | 6.27 | 1.53 | 6.69 | No |
| SA | Marne Saunders (Murray Group Limestone) | GS4b | 2.38 | 2.34 | 1.19 | 4.68 | 2.51 | 0.00 | 0.48 | 7.02 | 3.69 | 7.50 | No |
| SA | Marne Saunders (Renmark Group) | GS4c | 0.50 | 0.50 | 0.00 | 1.00 | 0.00 | 0.00 | 0.10 | 1.50 | 0.00 | 1.60 | No |

# Appendix 1

## SDL compliance in New South Wales

Compliance with SDLs commenced on 1 July 2019. It was expected, through the Basin Plan, that all Basin States would have the 33 water resource plans accredited and operating before this time to manage and comply with the 109 SDLs.

By end of June 2022 New South Wales had not achieved accreditation for their 20 water resource plans, despite several proposed water resource plans being submitted, withdrawn and deadlines continuously missed.

For the second year in a row since the establishment of the Inspector-General, SDL compliance, SDL non-compliance or claims for reasonable excuse in New South Wales cannot be assessed. Consequently, there is no ability to formally respond to action plans as they relate to water take in excess of SDL compliance thresholds and there is no ability to enforce SDLs in New South Wales.

The MDBA has prepared interim Registers of Take[[3]](#footnote-4) for the 54 SDL resource units, through a bilateral agreement with New South Wales, as was the case in 2020-2021 and 2019-2020. Although these interim registers provide some insight to how New South Wales may be tracking with SDLs, the bilateral agreement is not the legislative tool which can be used to determine and enforce SDL compliance in New South Wales.

Determining compliance with the Basin Plan occurs by considering rules contained inside an accredited water resource plan. When a water resource plan is in place, the full legal suite of monitoring, risk assessment, and compliance tools such as inquiries, audits, and investigations are available to undertake compliance and enforcement.

It is acknowledged that New South Wales has state-based water sharing plans that are progressively being updated, to include an assessment of compliance with the SDLs, but without the accredited water resource plan there is no assurance the suggested state-based rules are all encompassing and able to be implemented to ensure SDLs can be met over the long-term.

The New South Wales Department of Planning and Environment have indicated the amendments required for their water resource plans and the proposed resubmission dates on their website at [Water Resource Plans - status - Water in New South Wales (nsw.gov.au)](https://www.industry.nsw.gov.au/water/plans-programs/water-resource-plans/drafts).

Seven groundwater water resource plans have been accredited in New South Wales. Five water resource plans were accredited during the 2022-2023 year and two during the 2023-2024 year, and therefore not included in the 2021-2022 SDL compliance assessment. Refer to Table 5. New South Wales accredited water resource plans.

The situation in New South Wales is deeply concerning, particularly as there are an increasing number of areas on the interim SDL accounts pointing to an SDL excess beyond the SDL compliance threshold, specifically, the Barwon-Darling watercourse by 40%, Gwydir surface water by 21% and the Murrumbidgee is trending toward the SDL compliance threshold at 18% SDL exceedance.

Table 3 Summary of cumulative balances in the interim Registers of Take for the Barwon-Darling watercourse SDL resource unit since 2019-2020[[4]](#footnote-5)

|  |  |  |  |
| --- | --- | --- | --- |
| **Barwon-Darling** | **2019-2020** | **2020-2021** | **2021-2022** |
| **Cumulative balance** | -49.2 GL (-28%) | -66.9 GL (-38%) | -71.1 GL (-40%) |

For the third consecutive year the Barwon-Darling watercourse SDL resource unit had an SDL excess beyond the SDL compliance threshold (-20%) based on interim registers. If a water resource plan was in place for this area, then a reasonable excuse and action plan would be expected for assessment by the Inspector-General and an enforcement response would be considered.

Table 4 Summary of cumulative balances in the interim Registers of Take for the Gwydir surface water SDL resource unit since 2019-2020[[5]](#footnote-6)

|  |  |  |  |
| --- | --- | --- | --- |
| **Gwydir** | **2019-2020** | **2020-2021** | **2021-2022** |
| **Cumulative balance** | -5.19 GL (-1 %) | -61.1 GL (-12%) | -111.8 GL (-21%) |

The Gwydir SDL resource unit is, for the first time, also in excess of the SDL compliance threshold based on interim registers. If a water resource plan was in place for this area, then a reasonable excuse and action plan would be expected to assess SDL compliance and appropriateness of the action plan.

If there was an accredited water resource plan in the Barwon-Darling or the Gwydir, New South Wales would have to demonstrate that the rules for annual water take have been applied consistent with the operation of the water resource plan, any growth in use is being managed, and provide an action plan to reduce any excess to sustainable levels. As it currently stands, there is inequity in the level of scrutiny that applies to New South Wales because they are late with their water resource plans. It isn’t a fair playing field across the Basin until all water resource plans are accredited.

During 2021-2022 New South Wales enacted state compliance mechanisms to curtail water use in the Gwydir surface water area (namely [LTAAEL compliance](https://www.industry.nsw.gov.au/water/allocations-availability/tracking-surface-water/ltaael-compliance-results)). Despite this approach an excess was indicated on the interim registers.

Following the 2021-2022 compliance year, New South Wales commenced floodplain harvesting licensing reforms to assist with the management of growth in water use. Although the effects of these reforms are not likely to be seen on the SDL accounts until the 2023-2024 water accounting year.

The Murrumbidgee SDL resource unit is, for the first time, in exceedance of the SDL with a reported -18% cumulative balance based on the interim register. While not in excess of the SDL compliance threshold (-20%), it is currently very close. The Murrumbidgee is the largest water using SDL resource unit in the Murray-Darling Basin. If a water resource plan were in place for this area, then further explanation would be expected to understand the drivers of the exceedance. Exceedances are expected to be monitored and proactively managed, where possible, before reaching an SDL excess.

The Basin Plan currently requires that once a water resource plan is accredited and operational, the register of take commences with a cumulative balance of zero. This means that any debits or credits on the interim registers for New South Wales are not carried forward.

The absence of accredited water resource plans and the cumulative level of take is not a reflection on any individual New South Wales water user or their level of individual water licence compliance. Nor is it a reflection of the individual water use compliance and enforcement activities of the independent New South Wales Natural Resources Access Regulator. Throughout the Basin, water access right holders are lawfully able to take water within the conditions of their water access entitlements. The responsibility lies with the Basin State agency to manage all forms of water use and diversions within the SDLs.

The Inspector-General strongly recommends that the New South Wales Minister:

1. Ensure the use of water is authorised within the SDLs set by the Basin Plan;
2. Ensure delivery of water resource plans capable of accreditation as an absolute urgent priority. This includes arrangements for managing floodplain harvesting within the sustainable limit. Taking a risk-based approach, the Barwon Darling, Gwydir and Murrumbidgee surface water areas are prioritised for submission to the MDBA for assessment;
3. Rigorously assess and enforce New South Wales water sharing plan take limits in accordance with New South Wales water management law. LTAAELs are an important water management tool, particularly in the absence of accredited water resource plans and SDL compliance assessment. To add rigour to the LTAAEL compliance process, the process could be actively and independently overseen and assured;
4. Direct urgent resolution to the meter calibration issues affecting Barwon-Darling water take measurement accuracy, as promised[[6]](#footnote-7) in 2021 and 2022 by the New South Wales Department of Planning and Environment; and
5. Deliver on commitments made by the New South Wales government to the MDBA to implement the Basin Plan and Murray-Darling Basin water reforms, including the review and amendment of water sharing plans to support the submission of water resource plans, which are fit for accreditation, update models to ensure well informed baseline diversion limits and LTAAEL compliance, and implement existing and new licensing reforms.

# Appendix 2

Table 5. New South Wales accredited water resource plans[[7]](#footnote-8)

|  |  |  |  |
| --- | --- | --- | --- |
| Water Resource Plan | Date accredited | SDL resource units | SDL Compliance |
| NSW Border Rivers Alluvium (GW18) | 19 September 2022 | NSW Border Rivers Alluvium (GS32)  NSW Border Rivers Tributary Alluvium (GS33) | 2023-2024 |
| NSW MDB Fractured Rock (GW11) | 15 November 2022 | Adelaide Fold Belt MDB (GS10)  Kanmantoo Fold Belt MDB (GS19)  Lachlan Fold Belt MDB (GS20)  Orange Basalt (GS39)  Young Granite (GS51)  Inverell Basalt (GS18)  Liverpool Ranges Basalt MDB (GS22)  New England Fold Belt MDB (GS37)  Warrumbungle Basalt (GS49) | 2023-2024 |
| Macquarie-Castlereagh Alluvium (GW12) | 21 December 2022 | Bell Valley Alluvium (GS11)  Castlereagh Alluvium (GS14)  Coolaburragundy–Talbragar Alluvium (GS15)  Cudgegong Alluvium (GS16)  Lower Macquarie Alluvium (GS26)  Upper Macquarie Alluvium (GS45) | 2023-2024 |
| NSW MDB Porous Rock (GW6) | 21 December 2022 | Western Porous Rock (GS50)  Gunnedah‑Oxley Basin MDB (GS17)  Sydney Basin MDB (GS41)  Oaklands Basin (GS38) | 2023-2024 |
| Darling Alluvium (GW7) | 22 June 2023 | Upper Darling Alluvium (GS42)  Lower Darling Alluvium (GS23) | 2023-2024 |
| Lachlan Alluvium (GW10) | 15 August 2023 | Belubula Alluvium (GS12)  Lower Lachlan Alluvium (GS25)  Upper Lachlan Alluvium (GS44) | 2024-2025 |
| Murray Alluvium (GW8) | 15 August 2023 | Billabong Creek Alluvium (GS13)  Lower Murray Shallow Alluvium (GS27a)  Lower Murray Deep Alluvium (GS27b)  Upper Murray Alluvium (GS46) | 2024-2025 |

# Appendix 3

Table 6 and Table 7 below indicate the dates when information is due for submission to the MDBA and the timing of when it was received by the Office of the Inspector-General for surface water and groundwater respectively.

Table 6. Timing of receival for SDL compliance information - Surface Water

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **State** | **Report date as per Water Act (s. 71)** | **Extension date given by MDBA** | **First data submission** | **Final data submission** | **Received by Inspector-General** |
| **Queensland** | 31 October 2022 | n/a | 31 October 2022 | 11 January 2023 | 12 December 2023  8 March 2023  11 April 2023 |
| **New South Wales** | 31 October 2022 | 30 November 2022  16 December 2022 | 16 December 2022 | 20 March 2023  12 May 2023 | 21 December 2022  11 April 2023  12 May 2023[[8]](#footnote-9) |
| **Australian Capital Territory** | 31 October 2022 | n/a | 9 November 2022 | 15 December 2022 | 21 December 2022  8 March 2023  11 April 2023 |
| **Victoria** | 31 October 2022 | 20 January 2023 | 21 February 2023 | 24 March 2023 | 27 February 2023  11 April 2023 |
| **South Australia** | 31 October 2022 | 30 November  16 December 2022 | 16 December 2022 | 17 March 2023 | 21 December 2022  11 April 2023 |

Table 7. Timing of receival for SDL compliance information - Groundwater

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **State** | **Report date as per Water Act (s. 71)** | **Extension given by MDBA** | **First data submission** | **Final data submission** | **Received by Inspector-General** |
| **Queensland** | 31 October 2022 | n/a | 31 October 2022 | 11 January 2023 | 12 December 2022  11 April 2023 |
| **New South Wales** | 31 October 2022 | n/a | 31 October 2022 | 9 March 2023 | 12 December 2022  11 April 2023 |
| **Australian Capital Territory** | 31 October 2022 | n/a | 9 November 2022 | 15 December 2022 | 8 March 2023  11 April 2023 |
| **Victoria** | 31 October 2022 | n/a | 31 October 2022 | 22 February 2022 | 27 February 2023 v1  11 April 2023 |
| **South Australia** | 31 October 2022 | n/a | 31 October 2022 | 16 December 2022 | 21 December 2022  11 April 2023 |

The Registers of Take report[[9]](#footnote-10) was provided by the MDBA to the Inspector-General, for the purposes of undertaking the SDL compliance assessment, on 8 March and again on 12 May 2023, after the identification of a data correction.

# Glossary

**Act**

*Water Act 2007* (Commonwealth)

**Basin Plan**

*Basin Plan 2012* (Commonwealth)

**Basin State**

Basin State is defined in the Water Act and means New South Wales, Victoria, Queensland, South Australia, and the Australian Capital Territory[[10]](#footnote-11). Basin States have obligations relating to SDL compliance reporting and action plans under s 71 of the Water Act and Chapter 6 of the Basin Plan.

**Bridging the gap**

The long-term average sustainable diversion limits for the Basin surface water SDL resource units are 10,945 GL per year[[11]](#footnote-12). This reflects a reduction of 2,680 GL per year from the estimates of the baseline diversion limits (estimated total consumptive use prior to commencement of the Basin Plan). The target of 2,680 GL/year is ‘bridging the gap’ between the baseline diversion limits and the sustainable diversion limit. Supply and constraints projects that improve river management practices for environmental water delivery, contribute to ‘bridge the gap’. The ‘bridging the gap’ target has not been met and is referred to as **Incomplete water recovery.**

Under ‘Bridging the Gap’ there is also a remaining target for groundwater of 38.45 GL per year in Upper Condamine Alluvium (Central Condamine Alluvium) and Upper Condamine Alluvium (Tributaries).

**Cumulative balance**

For surface water SDL resource units, each year the actual take is subtracted from the permitted take to generate a debit (where actual take is more than permitted take) or a credit (where actual take is less than permitted take). Over time, these debits and credits generate a **cumulative balance**. The **surface water SDL compliance threshold** is when the cumulative balance for an SDL resource unit is a debit equal to or greater than 20% of the SDL.

**Exceedance**

The term ‘exceedance’ to refer to circumstances where the Registers of Take records actual take that exceeds permitted take (cumulatively) but has not reached the SDL compliance threshold of 'excess'.

**Excess**

The term ‘excess’ has a specific meaning in the Basin Plan[[12]](#footnote-13):

For **surface water** SDL resource units, an excess occurs when the **cumulative balance** on the relevant Register is a debit amount equal to or greater than 20% of the SDL.

For **groundwater** SDL resource units, in any accounting period up to 2028, an excess occurs when the sum of actual take for all years since 2019 is greater than the sum of permitted take for those years, plus 20% of the SDL. For accounting periods after 2028, an excess occurs if the average annual take over the previous 10 years exceeds the average permitted take over that period.

**Incomplete water recovery**

The water recovery targets are for the purpose of 'bridging the gap' and recover water for the environment. Any unrecovered water (incomplete water recovery) remains in the consumptive entitlements and may be available and used as annual actual take (AAT). Therefore, the Registers of take are adjusted to credit the surface water cumulative balance and added to the compliance trigger for groundwater, to not affect the States compliance with the SDLs due to incomplete water recovery.

**LTAAEL**

**Long-term Average Annual Extraction Limit** - The LTAAEL is a definition, rather than a fixed number, used in New South Wales, in inland surface water regulated river water sharing plans and the Barwon-Darling Unregulated River water sharing plan. Models are used to test what would have happened based on infrastructure, level of development and rules in place for entitlements and environmental water as of 1999/2000[[13]](#footnote-14).

**SDL compliance threshold**

The point at which the Register for an SDL resource unit records an ‘excess’ (see definition of excess above). Once the SDL compliance threshold is reached, certain obligations and actions under the Water Act and Basin Plan are triggered.[[14]](#footnote-15)

1. Sustainable Diversion Limit Registers of Take report 2021-2022 [↑](#footnote-ref-2)
2. *Basin Plan 2012* (Cth) s 6.11(5); s 6.12C(4)(b). [↑](#footnote-ref-3)
3. 2021-22 Sustainable Diversion Limit Accounts, Murray‒Darling Basin Authority 2023, Appendix B [↑](#footnote-ref-4)
4. 2021-22 Sustainable Diversion Limit Accounts, Murray-Darling Basin Authority, 2023, Table 3 [↑](#footnote-ref-5)
5. 2021-22 Sustainable Diversion Limit Accounts, Murray-Darling Basin Authority, 2023, Table 4 [↑](#footnote-ref-6)
6. [Work plan for SDL compliance make-good actions in the Barwon-Darling – updated August 2022 (nsw.gov.au)](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0008/524582/NSW-make-good-actions-Barwon-Darling-August-2022.pdf) and [New South Wales workplan for SDL compliance make-good actions in the Barwon-Darling SDL resource unit - June 2021 (mdba.gov.au)](https://www.mdba.gov.au/sites/default/files/publications/nsw-make-good-actions-barwon-darling-watercourse.pdf) – accessed 3 August 2023 [↑](#footnote-ref-7)
7. [Water Resource Plans - status - Water in New South Wales (nsw.gov.au)](https://www.industry.nsw.gov.au/water/plans-programs/water-resource-plans/drafts) accessed 10th July 2023 [↑](#footnote-ref-8)
8. An error was identified in the Murrumbidgee data. The Inspector-General was notified of the issue by email 28 April. Updated s 71 report and Registers of Take report were provided on 12 May 2023. [↑](#footnote-ref-9)
9. 2021-22 Sustainable Diversion Limit Accounts, Murray‒Darling Basin Authority 2023 [↑](#footnote-ref-10)
10. *Water Act 2007* (Cth) section 4 [↑](#footnote-ref-11)
11. *Basin Plan 2012* section 6.04 Note [↑](#footnote-ref-12)
12. *Basin Plan 2012* section 6.12(1) (for surface water); section 6.12C(2) (for groundwater) [↑](#footnote-ref-13)
13. [Extraction limits - how the extraction limits work and differences - August 2021 (nsw.gov.au)](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0016/400606/Extraction-limits.pdf) [↑](#footnote-ref-14)
14. *Water Act 2007* (Cth) section 71; Basin Plan 2012 section 6.12(3), (5) (surface water); section 6.12C(3), (5) (ground water) [↑](#footnote-ref-15)