



River Murray Weekly Report

For the week ending Wednesday, 27 April 2022

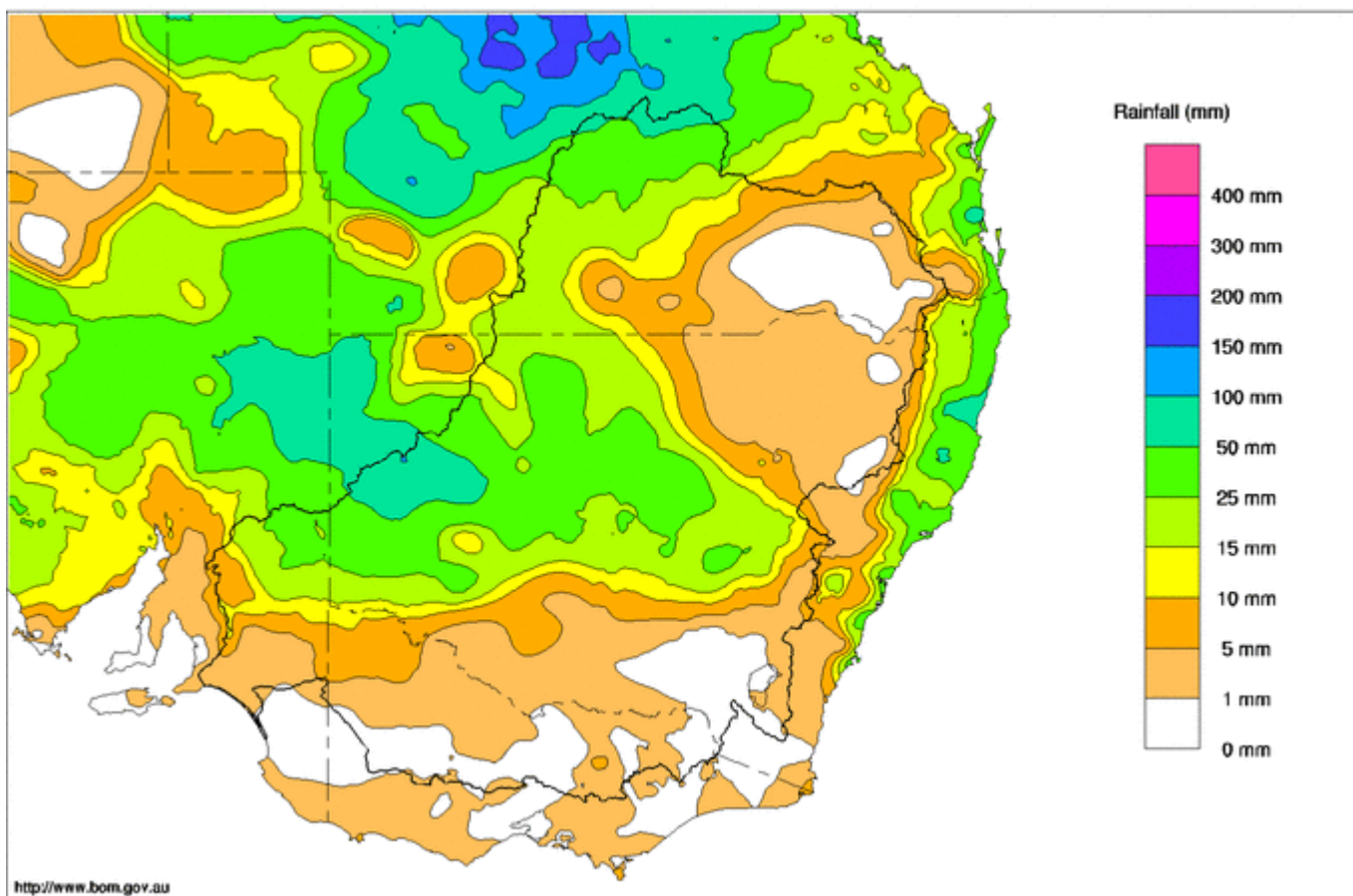
Trim Ref: D22/10644

Rainfall and inflows

Rainfall was varied across the Murray-Darling Basin this week (Map 1). Significant rainfall totals were recorded in central and western NSW and QLD. Highest totals included 48 mm at Menindee lakes and 25 mm at Bourke, on the Darling River catchment. Further south in Victoria, Mildura recorded 8mm.

Murray-Darling Rainfall Totals (mm) Week Ending 27th April 2022

Australian Bureau of Meteorology



Map 1: Murray-Darling Basin rainfall for the week ending Wednesday 27 April 2022. Source: Bureau of Meteorology.

Streamflow recessions were observed across the upper Murray, following rises from rainfall in the previous week. Up stream of Hume Dam, the River Murray at Jingellic receded to 4,300 ML/day, while downstream of Hume Dam, inflows to the Murray from the Kiewa River, recorded at Bandiana, reached 1,300 ML/day before receding to 450 ML/day. On the Ovens River, Wangaratta peaked near 1,300 ML/day and is currently 720 ML/day. Streamflow's are expected rise again over the coming week with the BoM [8-day rainfall outlook](#) forecasting rainfall totals of 25 to 50 millimetres across the upper Murray catchments.



River Murray Weekly Report

Specific information about flows at key locations can be found at the MDBA's [River Murray data](#) webpage. Up-to-date river data for sites in the Basin can also be found on:

- BoM's [website](#)
- WaterNSW's WaterInsights [website](#)
- Victoria's DELWP water monitoring [website](#)
- South Australia's Water Data [website](#)
- Queensland's [Water Monitoring Information Portal](#)



Photo 1 - Basin divide near Mt Twynam, NSW Snowy Mountains (Photo – Andrew Bishop)

River operations

- Lowering Lake Mulwala at Yarrawonga to begin next week
- Continued releases from the Menindee Lakes to manage airspace
- Unregulated inflows from the Murrumbidgee River continue

Hume Dam operations update

The volume of water in Hume Dam has remained relatively steady around 86%, with increased inflows and reduced releases due to continued reduction in downstream irrigation demands.

Further forecast rainfall across irrigation areas has continued to suppress irrigation demands across the River Murray system and only low releases are expected to continue at Hume Dam for the remainder of the irrigation season. The BoM are [currently forecasting](#) wetter than average conditions to persist in the upper Murray catchment in May to July. As such, Hume Dam storage is expected to remain stable or gradually increase over the coming weeks. Soil moisture levels in the upper catchment are close to average for this time of year, however with storages close to full the potential for another spill remains. Looking further ahead, the MDBA is also considering the possible need to actively reduce the storage ahead of winter if conditions turn wet and provide additional inflow or suppress irrigation demands. Further updates on these plans will be provided to river communities in the coming months including via future weekly reports.

River Murray Weekly Report



Photo 2 – View towards Mt Tate and the Basin divide above Guthega Pondage, NSW Snowy Mountains (Photo – Andrew Bishop)

Unregulated flows

Flows continue to remain unregulated along the lower Darling system. These inflows to the River Murray plus rain and subsequent lower demand, have resulted in flows above operational requirements from Swan Hill downstream to the South Australian (SA) border. As such, unregulated flows are now available in the Murray from Swan Hill downstream to the SA border.

River operators will continue to monitor rainfall forecasts, tributary inflows and system demands and provide updated advice on unregulated flows. Information on access to Murray supplementary water licences in NSW is available from [WaterNSW Water insights](#). General information on River Murray unregulated flows can be accessed on the MDBA [webpage](#).

Water quality impacts

WaterNSW advise the **red alert** for **blue-green algae** for Menindee Lakes at Lake Wetherell and Pamamaroo Inlet has reduced to an **amber alert**. **Amber alerts** remain current at several locations along the lower Darling, the River Murray, and the Edward Wakool system. In the Murrumbidgee a **red alert** remains current for Yanga Lake at Regatta Beach. Information about blue-green algae, including alert locations, is available through [Goulburn-Murray Water](#), [WaterNSW](#) and [Water quality | Murray-Darling Basin Authority \(mdba.gov.au\)](#).

River operations

Over the last week active storage decreased by 43 GL to 7,779 GL (91% capacity).

At **Dartmouth Reservoir**, the [storage](#) increased by 6 GL to 3,600 GL (93% capacity). The release, measured at Colemans gauge, is currently targeting 500 ML/day and expected to continue targeting this minimum rate for the coming weeks. To receive additional information on planned Mitta Mitta flows, subscribe to receive the MDBA's flow advice's [here](#).

River Murray Weekly Report

Hume Reservoir storage increased by 5 GL to 2,580 GL (86% capacity). The release reduced to 2,500 ML/day this week, as observed and forecast rainfall meant irrigation demands remained low. Over the coming week, the release is expected to remain low and will be managed in response to downstream irrigation demands and weather conditions.

Lake Mulwala is currently at 124.81 m AHD within the normal operating range (124.6 to 124.9 m AHD). Diversions to Mulwala Canal remained low, averaging 550 ML/day. At Yarrawonga Main Channel, diversions varied between 90 and 310 ML/day. Downstream of **Yarrawonga Weir**, the release gradually reduced from 7,500 ML/day to 5,500 ML/day and is expected to continue reducing to 4,000 ML/day over the coming week.

After extensive consultation with the local community, landholders and businesses, the Murray–Darling Basin Authority, in partnership with Goulburn-Murray Water, have confirmed the scheduled **lowering of the Lake Mulwala level** to help reduce invasive waterweed will commence from next week, depending on observed rainfall in the coming days. Lowering the lake provides the best means of controlling the highly invasive water weed *Egeria densa* and is a practice that occurs every 3 to 5 years. More information will be available in future editions of the Weekly report and a media release can be [found here](#).

Flow through the **Kolety** (pronounced Kol-etch)/**Edward River** and **Gulpa Creek** offtakes have averaged around 1,300 ML/day and 240 ML/day respectively over the last week. Releases from the Edward Escape to the Kolety/Edward River reduced to 150 ML/day, as irrigation diversions to Wakool Canal reduced following rainfall over the irrigation areas. Over the previous week, diversions into Yallakool Creek reduced from 400 ML/day to 200 ML/day, similarly the Colligen Creek receded from 500 ML/day to 240 ML/day. WaterNSW is delivering flow pulses on behalf of environmental water holders to benefit native fish and riparian vegetation along the Wakool River and Yallakool, Colligen, and Niemur creeks. The release downstream of **Stevens Weir** averaged 930 ML/day.

On the lower **Goulburn River**, the flow measured at [McCoys Bridge](#) is currently around 1,100 ML/day and forecast to remain around this rate as environmental water holders target a higher autumn base flow. The recent higher flow rates targeted environmental outcomes in the lower Goulburn River and further downstream along the River Murray, including to entice golden and silver perch to move into the Goulburn River. For more information, see the Goulburn-Broken CMA [website](#). Information regarding opportunities for allocation trade between the Goulburn and Murray Valleys is available at the Victorian water register [website](#) and the [Goulburn-Murray Water website](#).

At **Torrumbarry Weir** the pool is steady, targeting the full supply level. The [diversion](#) to **National Channel** reduced from 800 ML/day to the current rate of 500 ML/day. Releases from Torrumbarry Weir averaged 6,300 ML/day this week and are forecast to recede towards 4,000 ML/day by early May, following reduced releases upstream.

Inflows from the **Murrumbidgee River**, measured at [Balranald](#), averaged around 3,500 ML/day and, without further rainfall, are forecast to recede over the coming week to around 1,600 ML/day.

At **Menindee Lakes**, the storage increased by 57 GL and is currently at 1,906 GL (110% capacity). Upstream of Menindee Lakes, heavy rainfall over recent weeks/months in southern Queensland and northern NSW has resulted in higher flows across the Barwon Darling River system. WaterNSW [latest update](#) forecasts a further 600 – 1,000 GL inflow to the Menindee lakes system by the end of June. More information is available from the WaterNSW WaterInsight [website](#).

Releases to the lower Darling River (measured at Weir 32) increased from 9,000 ML/day to 10,600 ML/day over the past week. WaterNSW are increasing releases at Weir 32 to hold steady at around 12,000 ML/day for approximately four weeks, before being gradually reduced back to the minimum flow target (assuming a drier outlook). Releases from Lake Cawndilla (part of Menindee Lakes) into the Great Darling Anabranch remained around 1,800 ML/day this week and will do so for the next nine weeks, for the purposes of managing airspace in response to forecast inflows. Downstream on the lower Darling at Burtundy, the flow increased to around 8,400 ML/day and will increase over the coming week with higher Weir 32 releases.

The flow downstream of **Wentworth Weir** is currently 19,500 ML/day and expected to increase slightly over the coming week.



River Murray Weekly Report

The [storage](#) at **Tar-ru/Lake Victoria** reduced by 25 GL this week to 54% capacity. Inflows and outflows from Tar-ru/Lake Victoria are being managed to operate the storage volume in accordance with the Lake Victoria Operating Strategy (LVOS) as specified in the [Objectives and Outcomes for River Operations in the River Murray System](#). The LVOS aims to stabilize the lake foreshore and protect cultural heritage sites by encouraging the growth of native vegetation. To help achieve this, operations aim to reduce the length of time the foreshore vegetation is inundated. The storage level will be managed to maximise water availability by the end of the current unregulated flow event.

The flow to **South Australia** averaged 21,600 ML/day this week. Additional Dilution Flow (ADF) to South Australia continues to be triggered. The current unregulated flows into South Australia mean that no additional releases from storage are needed to meet ADF at the current point in time. For information on ADF and the ADF triggers please refer to [Objectives and Outcomes for River Operations in the River Murray System](#) (pages 79-80).

The **Lower Lakes** 5-day average water level is 0.66 m AHD. Barrage releases are continuing to pass unregulated flows to the Coorong and out to the Southern Ocean. For further information on barrage releases and South Australia's Entitlement flow, see the South Australian Department for Environment and Water Weekly [Department for Environment and Water | Barrage flow data available at the click of a button.](#)

For media inquiries contact the Media Officer on 02 6279 0141

ANDREW KREMOR

A/g Executive Director, River Management



Australian Government



River Murray Weekly Report

Water in Storage

Week ending Wednesday 27 Apr 2022

| MDBA Storages | Full Supply Level (m AHD) | Full Supply Volume (GL) | Current Storage Level (m AHD) | Current Storage | | Dead Storage (GL) | Active Storage (GL) | Change in Total Storage for the Week (GL) |
|---------------------------|------------------------------|----------------------------|----------------------------------|-----------------|------------|----------------------|------------------------|--|
| | | | | (GL) | % | | | |
| Dartmouth Reservoir | 486.00 | 3 856 | 482.02 | 3 600 | 93% | 71 | 3 529 | +6 |
| Hume Reservoir | 192.00 | 3 005 | 189.79 | 2 580 | 86% | 23 | 2 557 | +5 |
| Lake Victoria | 27.00 | 677 | 24.22 | 367 | 54% | 100 | 267 | -25 |
| Menindee Lakes | | 1 731* | | 1 906 | 110% | (480 #) | 1 426 | +57 |
| Total | | 9 269 | | 8 453 | 91% | -- | 7 779 | +43 |
| Total Active MDBA Storage | | | | | | | 91% ^ | |

Major State Storages

| | | | | | | |
|----------------------|-------|-------|-----|-----|-------|-----|
| Burrinjuck Reservoir | 1 026 | 986 | 96% | 3 | 983 | +12 |
| Blowering Reservoir | 1 631 | 1 543 | 95% | 24 | 1 519 | +15 |
| Eildon Reservoir | 3 334 | 2 575 | 77% | 100 | 2 475 | -1 |

* Menindee surcharge capacity – 2050 GL

** All Data is rounded to nearest GL **

NSW has sole access to water when the storage falls below 480 GL. MDBA regains access to water when the storage next reaches 640 GL.

^ % of total active MDBA storage

Snowy Mountains Scheme

Snowy diversions for week ending 26 Apr 2022

| Storage | Active Storage (GL) | Weekly Change (GL) | Diversions (GL) | This Week | From 1 May 2021 |
|------------------------|---------------------|--------------------|------------------|-----------|-----------------|
| Lake Eucumbene - Total | 1 846 | n/a | Snowy-Murray | +7 | 623 |
| Snowy-Murray Component | 891 | n/a | Tooma-Tumut | +2 | 317 |
| Target Storage | 1 340 | | Net Diversion | 5 | 306 |
| | | | Murray 1 Release | +11 | 998 |

Major Diversions from Murray and Lower Darling (GL) *

| New South Wales | This Week | From 1 July 2021 | Victoria | This Week | From 1 July 2021 |
|---------------------------|-------------|------------------|---------------------------------|------------|------------------|
| Murray Irrig. Ltd (Net) | 4.3 | 797 | Yarrowonga Main Channel (net) | 1.4 | 180 |
| Wakool Sys Allowance | 0.9 | 25 | Torrumbarry System + Nyah (net) | 0 | 330 |
| Western Murray Irrigation | 0.0 | 25 | Sunraysia Pumped Districts | 0.2 | 103 |
| Licensed Pumps | 3.9 | 256 | Licensed pumps - GMW (Nyah+u/s) | 0.6 | 33 |
| Lower Darling | 12.6 | 327 | Licensed pumps - LMW | 2.2 | 430 |
| TOTAL | 21.7 | 1430 | TOTAL | 4.4 | 1076 |

* Figures are derived from actual and estimates where data is unavailable. Please note that not all data may have been available at the time of creating this report. ** All data above is rounded to nearest 100 ML for weekly data and nearest GL for cumulative data

Flow to South Australia (GL)

* Flow to SA will be greater than normal entitlement for this month due to unregulated flow and environmental flows.

| | | |
|------------------------|---------|-----------------|
| Entitlement this month | 135.0 * | |
| Flow this week | 151.0 | (21 600 ML/day) |
| Flow so far this month | 575.0 | |
| Flow last month | 649.4 | |

Salinity (EC) (microSiemens/cm at 25° C)

| | Current | Average over the last week | Average since 1 August 2021 |
|-------------------------|---------|----------------------------|-----------------------------|
| Swan Hill | 90 | 90 | 80 |
| Euston | - | - | - |
| Red Cliffs | - | - | 140 |
| Merbein | 150 | 150 | 150 |
| Burtundy (Darling) | 330 | 380 | 350 |
| Lock 9 | 260 | 260 | 200 |
| Lake Victoria | 260 | 250 | 160 |
| Berri | 240 | 230 | 210 |
| Waikerie | 240 | 240 | 230 |
| Morgan | 240 | 240 | 230 |
| Mannum | 280 | 290 | 240 |
| Murray Bridge | 300 | 310 | 250 |
| Milang (Lake Alex.) | 370 | 360 | 470 |
| Poltalloch (Lake Alex.) | 330 | 330 | 350 |
| Meningie (Lake Alb.) | 1 380 | 1 370 | 1 440 |
| Goolwa Barrages | 410 | 460 | 730 |



River Levels and Flows

Week ending Wednesday 27 Apr 2022

| River Murray | Minor Flood Stage (m) | Gauge Height | | Flow (ML/day) | Trend | Average Flow this Week (ML/day) | Average Flow last Week (ML/day) |
|----------------------------------|--------------------------|--------------|------------|------------------|-------|------------------------------------|------------------------------------|
| | | local (m) | (m AHD) | | | | |
| Khancoban | - | - | - | 2 000 | F | 1 360 | 4 290 |
| Jingellic | 4.0 | 1.70 | 208.22 | 4 260 | R | 3 770 | 5 750 |
| Tallandoon (Mitta Mitta River) | 4.2 | 1.52 | 218.41 | 800 | F | 850 | 870 |
| Heywoods | 5.5 | 1.86 | 155.49 | 2 480 | F | 3 470 | 8 400 |
| Doctors Point | 5.5 | 1.92 | 150.39 | 3 430 | F | 5 080 | 10 180 |
| Albury | 4.3 | 1.03 | 148.47 | - | - | - | - |
| Corowa | 4.6 | 1.40 | 127.42 | 5 100 | F | 6 460 | 10 470 |
| Yarrowonga Weir (d/s) | 6.4 | 1.04 | 116.08 | 5 980 | F | 6 860 | 7 590 |
| Tocumwal | 6.4 | 1.78 | 105.62 | 7 210 | F | 7 750 | 8 160 |
| Torrumbarry Weir (d/s) | 7.3 | 2.15 | 80.69 | 6 200 | F | 6 290 | 5 010 |
| Swan Hill | 4.5 | 1.35 | 64.27 | 7 000 | R | 6 440 | 4 360 |
| Wakool Junction | 8.8 | 3.25 | 52.37 | 9 130 | R | 8 450 | 6 330 |
| Euston Weir (d/s) | 9.1 | 2.13 | 43.97 | 12 360 | R | 11 630 | 10 760 |
| Mildura Weir (d/s) | - | - | - | 11 880 | F | 10 640 | 11 380 |
| Wentworth Weir (d/s) | 7.3 | 3.82 | 28.58 | 19 510 | R | 18 390 | 17 650 |
| Rufus Junction | - | 5.43 | 22.36 | 22 400 | R | 21 190 | 20 810 |
| Blanchetown (Lock 1 d/s) | - | 1.45 | - | 21 190 | R | 20 650 | 20 290 |
| Tributaries | | | | | | | |
| Kiewa at Bandiana | 2.8 | 0.97 | 154.20 | 460 | F | 810 | 500 |
| Ovens at Wangaratta | 11.9 | 8.04 | 145.72 | 720 | F | 950 | 570 |
| Goulburn at McCoys Bridge | 9.0 | 1.57 | 92.99 | 1 120 | R | 1 030 | 920 |
| Edward at Stevens Weir (d/s) | 5.5 | 1.21 | 80.98 | 930 | F | 930 | 780 |
| Edward at Liewah | - | 1.90 | 57.28 | 1 190 | F | 1 280 | 1 530 |
| Wakool at Stoney Crossing | - | 1.63 | 55.12 | 990 | R | 890 | 500 |
| Murrumbidgee at Balranald | 5.0 | 3.45 | 59.41 | 3 260 | F | 3 430 | 3 490 |
| Barwon at Mungindi | 6.1 | 5.06 | - | 4 840 | F | 6 840 | 10 070 |
| Darling at Bourke | 9.0 | 7.52 | - | 21 980 | R | 21 110 | 19 480 |
| Darling at Burtundy Rocks | - | 4.22 | - | 8 410 | R | 8 100 | 6 970 |

| | | |
|------------------------|-------|-------|
| Natural Inflow to Hume | 3 650 | 2 810 |
|------------------------|-------|-------|

(i.e. Pre Dartmouth & Snowy Mountains scheme)

Weirs and Locks Pool levels above or below Full Supply Level (FSL)

| Murray | FSL (m AHD) | u/s | d/s | | FSL (m AHD) | u/s | d/s |
|--------------------|-------------|--------|-------|-----------------------|-------------|-------|-------|
| Yarrowonga | 124.90 | -0.09 | - | No. 7 Rufus River | 22.10 | +0.42 | +3.10 |
| No. 26 Torrumbarry | 86.05 | -0.00 | - | No. 6 Murtho | 19.25 | -0.02 | +1.15 |
| No. 15 Euston | 47.60 | +0.05 | - | No. 5 Renmark | 16.30 | -0.00 | +1.06 |
| No. 11 Mildura | 34.40 | +0.02 | +0.32 | No. 4 Bookpurnong | 13.20 | +0.05 | +1.93 |
| No. 10 Wentworth | 30.80 | -39.80 | +1.18 | No. 3 Overland Corner | 9.80 | +0.04 | +1.28 |
| No. 9 Kulnine | 27.40 | +0.05 | +0.76 | No. 2 Waikerie | 6.10 | +0.04 | +1.34 |
| No. 8 Wangumma | 24.60 | +0.07 | +1.30 | No. 1 Blanchetown | 3.20 | +0.06 | +0.70 |

Lower Lakes FSL = 0.75 m AHD

Lake Alexandrina average level for the past 5 days (m AHD) 0.66

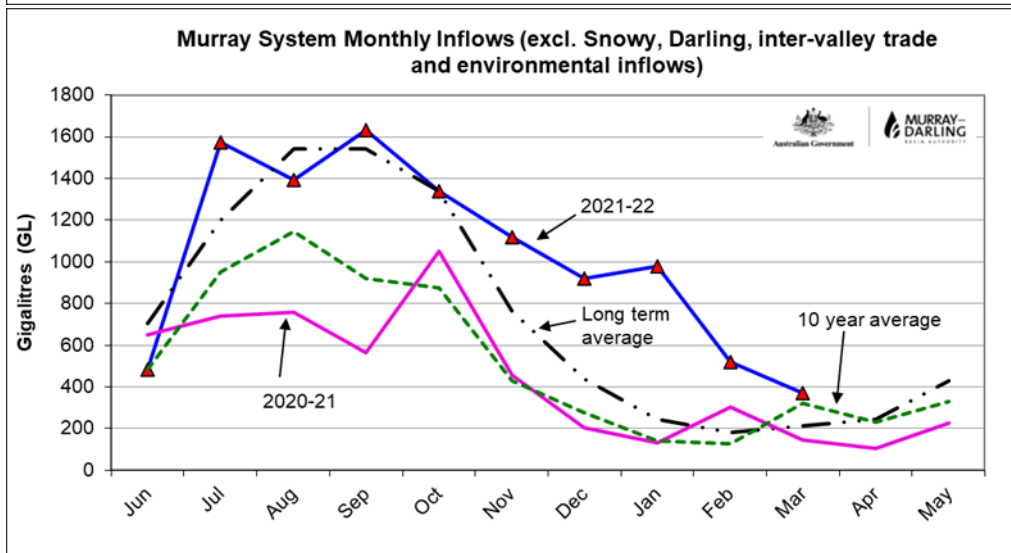
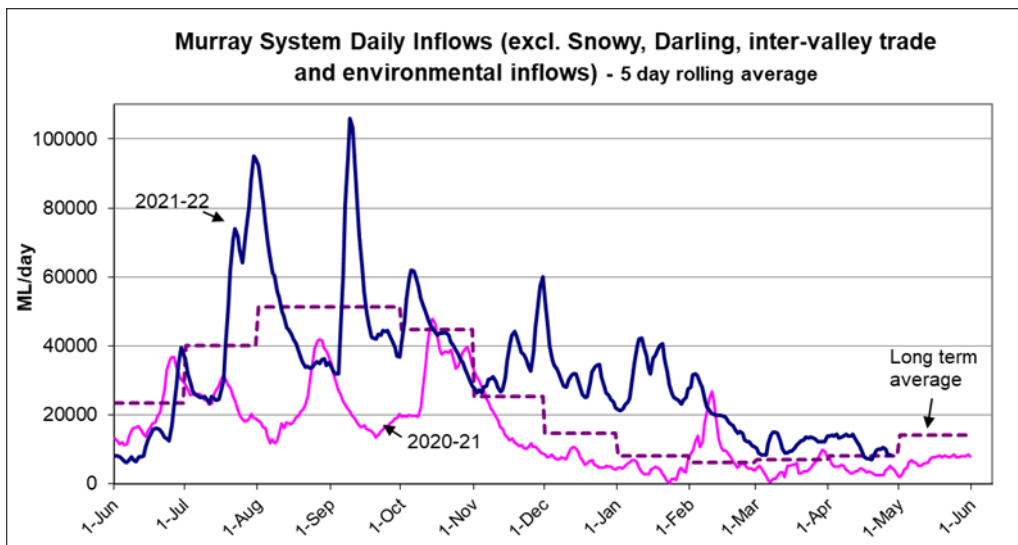
Barrages

Fishways at Barrages

| | Openings | Level (m AHD) | No. Open | Rock Ramp | Vertical Slot 1 | Vertical Slot 2 | Dual Vertical Slots |
|----------------|--------------|---------------|----------|-----------|-----------------|-----------------|---------------------|
| Goolwa | 128 openings | 0.80 | 3 | - | Open | Open | - |
| Mundoo | 26 openings | 0.61 | 4 | - | - | - | Open |
| Hunters Creek | - | - | - | - | Open | - | - |
| Boundary Creek | 6 openings | - | 1 | - | Open | - | - |
| Ewe Island | 111 gates | - | 12 | - | - | - | Open |
| Tauwichee | 322 gates | 0.68 | 35 | Open | Open | Open | - |

AHD = Level relative to Australian Height Datum, i.e. height above sea level





State Allocations (as at 27 Apr 2022)

NSW - Murray Valley

| | |
|------------------|------|
| High security | 100% |
| General security | 110% |

Victorian - Murray Valley

| | |
|------------------|------|
| High reliability | 100% |
| Low reliability | 100% |

NSW – Murrumbidgee Valley

| | |
|------------------|------|
| High security | 100% |
| General security | 100% |

Victorian - Goulburn Valley

| | |
|------------------|------|
| High reliability | 100% |
| Low reliability | 0% |

NSW - Lower Darling

| | |
|------------------|------|
| High security | 100% |
| General security | 100% |

South Australia – Murray Valley

| | |
|---------------|------|
| High security | 100% |
|---------------|------|

NSW : <https://www.industry.nsw.gov.au/water/allocations-availability/allocations/summary>

VIC : <http://nvrn.net.au/seasonal-determinations/current>

SA : [Department for Environment and Water | Current allocations](#)

