



Licence WU67 Monthly Environmental Flow Report September 2022

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1. Introduction

Icon Water holds a Licence to Take Water under the Water Resources Act 2007 – Licence Number WU67.

Under Licence Number WU67 clause C1, it is a requirement to provide the following information to the Environment Protection Authority (EPA) by the 15th day of each month.

2. Compliance Analysis and Operational Interactions

Table 1 - Notes relating to the reporting month Environmental Flow releases

| Reservoir | Notes |
|-----------|---|
| Corin | <p>Corin Dam spilled throughout September.</p> <p>Planned release variation was changed to +/-25% on 20 September to minimise dislodgement of Macquarie Perch eggs in downstream reaches.</p> <p>Releases were at licence requirements throughout September.</p> |
| Bendora | <p>Bendora Dam spilled throughout August.</p> <p>Planned release variation was changed to +/-25% on 20 September to minimise dislodgement of Macquarie Perch eggs in downstream reaches.</p> <p>Releases were at licence requirements throughout September.</p> |
| Cotter | <p>Cotter Dam spilled throughout September.</p> <p>The bi-monthly riffle release was achieved by spillway flow.</p> <p>Releases were at licence requirements throughout September.</p> |
| Googong | <p>Googong Dam spilled throughout September.</p> <p>The bi-monthly riffle release was achieved by spillway flow.</p> <p>The Googong mini-hydro generator operated up to 24 September and was offline for the remainder of the month.</p> <p>Releases above licence requirements while the mini-hydro was operating.</p> |

Table 2 – Notes relating to abstraction from Murrumbidgee River

| | |
|------------------------------|---|
| Mt MacDonald river gauge | Not applicable, natural river flows. |
| Murrumbidgee abstraction | There was no Murrumbidgee River abstraction for consumption in September. |
| Murrumbidgee To Cotter Eflow | M2C did not operate in September. |
| Murrumbidgee to Googong | M2G did not operate in September. |
| Angle Crossing river gauge | Not applicable, natural river flows. |

3. Environmental Release Data

The environmental flow release requirements for the current month (a combination of requirements) are detailed in Table 3.

Table 3 – Current month Environmental Flow releases (Total for month in ML)

| | Corin | Bendora | Cotter | Googong |
|--|--------|---------|--------|---------|
| Previous month's shortfall (-) or Excess (+) * | 198.4 | 310 | | |
| Monthly 75% of the 80 th %tile ML # | 1984 | 3100 | | |
| Additional release required? | No | No | No | No |
| Current month's release target | 2043.6 | 2940 | 465 | 310 |

Note: * Excess carried forward is capped at 10% of the current month's base flow.

Shortfall carried forward is 100% of the amount of water under released.

Under stage 1 or greater water restrictions, targets flow change to a predetermined base flow.

Daily totals in Table 4 to Table 7 are reported as the 24-hour average from midnight to midnight. Operational changes to environmental flow releases occur during business hours, and therefore the value reported may be slightly different to the target flow on the day the flow is changed. This is particularly evident for large changes in flow e.g. the riffle and pool flushes as the flow is averaged for the day.

The actual daily flows, in megalitres per day (ML/d), from each reservoir are detailed in Table 4 to Table 7 together with the water produced at the water treatment plants (WTP) in Table 10.

Table 8 provides more detail with respect to environmental flows provided below Cotter Dam. The e-flows are made up of two components: water released from the Cotter Dam and water being pumped from Murrumbidgee River to below Cotter Dam. This is to satisfy the requirements set out by ACT EPA and Federal Department of the Environment for the operation of the Enlarged Cotter Dam.

Table 9 provides flow details for the operations of the Murrumbidgee to Googong pipeline. It details daily flows through the high lift pumps station as well as daily flows in the Murrumbidgee River at Angle crossing. This is to demonstrate compliance with the requirements set out by ACT EPA, Federal Department of the Environment and NSW Department of Planning.

Table 10 also details the quantity of treated water that has been transferred to Googong reservoir from Stromlo WTP.

Table 4 - Monthly Environmental Flow release data for Corin dam

| SUM | 410730 Gingera (unverified) | 410730 Gingera (verified) | Environmental flow release below Corin Date | Daily base flow | Additional release (pool / riffle) | Planned +/- 50% release regime | Calculated Natural Flow. (Unverified) | Calculated Natural Flow. (Verified) | Adjusted daily base flow. EOM = Revised monthly target | 410752 Corin D/S (Unverified) | 410752 Corin D/S (Verified) | EOM Excess (+) / Shortfall (-) to carry forward | EOM Correction to 410730, Verified Vs unverified | EOM Correction to 410752, Verified Vs unverified | Comments |
|-----------------------------------|--------------------------------|---------------------------------|--|--------------------|--|---|--|--|---|-------------------------------------|-----------------------------------|---|--|--|---|
| | | | | | | | | | | | | | | | |
| Previous months adjustment | | | | | | | | | -276.0 | | | | | | |
| | 220.90 | 222.6 | Thu 1-Sep-22 | 92.00 | | 46.0 | 315.5 | 317.9 | 92.0 | 346.59 | 348.2 | | | | |
| | 213.59 | 215 | Fri 2-Sep-22 | 92.00 | | 46.0 | 305.1 | 307.1 | 92.0 | 336.97 | 340.9 | | | | |
| | 205.32 | 207.1 | Sat 3-Sep-22 | 92.00 | | 46.0 | 293.3 | 295.8 | 92.0 | 319.72 | 322.7 | | | | |
| | 199.07 | 200.2 | Sun 4-Sep-22 | 92.00 | | 46.0 | 284.3 | 285.9 | 92.0 | 304.23 | 304.2 | | | | rating table extrapolated for 410752 |
| | 192.6 | 194.1 | Mon 5-Sep-22 | 92.00 | | 46.0 | 275.1 | 277.2 | 92.0 | 298.4 | 298.4 | | | | rating table extrapolated for 410752 |
| | 186.4 | 187.4 | Tue 6-Sep-22 | 92.00 | | 46.0 | 266.2 | 267.7 | 92.0 | 287.0 | 287 | | | | |
| | 189.8 | 185.1 | Wed 7-Sep-22 | 92.00 | | 46.0 | 271.1 | 264.4 | 92.0 | 281.9 | 281.9 | | | | |
| | 223.8 | 223.8 | Thu 8-Sep-22 | 92.00 | | 138.0 | 319.7 | 319.7 | 92.0 | 344.4 | 347.1 | | | | |
| | 384.0 | 384 | Fri 9-Sep-22 | 92.00 | | 138.0 | 548.5 | 548.5 | 92.0 | 492.97 | 498.2 | | | | |
| | 295.7 | 295.7 | Sat 10-Sep-22 | 92.00 | | 138.0 | 422.3 | 422.3 | 92.0 | 459.08 | 460 | | | | |
| | 259.2 | 259.2 | Sun 11-Sep-22 | 92.00 | | 138.0 | 370.2 | 370.2 | 92.0 | 399.7 | 397.8 | | | | |
| | 251.4 | 251.4 | Mon 12-Sep-22 | 92.00 | | 138.0 | 359.1 | 359.1 | 92.0 | 381.1 | 381.2 | | | | |
| | 242.9 | 242.9 | Tue 13-Sep-22 | 92.00 | | 138.0 | 346.9 | 346.9 | 92.0 | 372.6 | 373 | | | | |
| | 226.4 | 226.4 | Wed 14-Sep-22 | 92.00 | | 138.0 | 323.4 | 323.4 | 92.0 | 350.8 | 350.8 | | | | |
| | 244.0 | 244 | Thu 15-Sep-22 | 92.00 | | 46.0 | 348.5 | 348.5 | 92.0 | 360.5 | 360.5 | | | | |
| | 273.2 | 273.2 | Fri 16-Sep-22 | 92.00 | | 46.0 | 390.2 | 390.2 | 92.0 | 403.3 | 402 | | | | |
| | 353.8 | 353.8 | Sat 17-Sep-22 | 92.00 | | 46.0 | 505.3 | 505.3 | 92.0 | 458.5 | 461.1 | | | | |
| | 469.1 | 469.1 | Sun 18-Sep-22 | 92.00 | | 46.0 | 670.0 | 670.0 | 92.0 | 553.00 | 549.6 | | | | |
| | 453.9 | 453.9 | Mon 19-Sep-22 | 92.00 | | 46.0 | 648.3 | 648.3 | 92.0 | 560.55 | 558.5 | | | | |
| | 395.3 | 395.3 | Tue 20-Sep-22 | 92.00 | | 69.0 | 564.6 | 564.6 | 92.0 | 521.66 | 518.7 | | | | Planned releases to +/-25% to minimise dislodgement of Macquarie Perch eggs in downstream reaches |
| | 372.5 | 372.5 | Wed 21-Sep-22 | 92.00 | | 69.0 | 532.0 | 532.0 | 92.0 | 496.77 | 500.9 | | | | |
| | 378.3 | 378.3 | Thu 22-Sep-22 | 92.00 | | 115.0 | 540.3 | 540.3 | 92.0 | 502.64 | 502.4 | | | | |
| | 362.1 | 362.1 | Fri 23-Sep-22 | 92.00 | | 115.0 | 517.2 | 517.2 | 92.0 | 489.60 | 493.6 | | | | |
| | 360.2 | 360.2 | Sat 24-Sep-22 | 92.00 | | 115.0 | 514.5 | 514.5 | 92.0 | 484.61 | 482.6 | | | | |
| | 314.4 | 314.4 | Sun 25-Sep-22 | 92.00 | | 115.0 | 449.1 | 449.1 | 92.0 | 443.31 | 440.4 | | | | |
| | 291.1 | 291.1 | Mon 26-Sep-22 | 92.00 | | 115.0 | 415.8 | 415.8 | 92.0 | 412.73 | 412.7 | | | | |
| | 320.0 | 320 | Tue 27-Sep-22 | 92.00 | | 115.0 | 457.1 | 457.1 | 92.0 | 447.66 | 446.1 | | | | |
| | 444.7 | 444.7 | Wed 28-Sep-22 | 92.00 | | 115.0 | 635.2 | 635.2 | 92.0 | 525.54 | 526 | | | | |
| | 445.3 | 445.3 | Thu 29-Sep-22 | 92.00 | | 48.0 | 636.0 | 636.0 | 92.0 | 566.54 | 567.9 | | | | |
| | 385.5 | 385.5 | Fri 30-Sep-22 | 92.00 | | 48.0 | 550.6 | 550.6 | 92.0 | 509.39 | 509.2 | | | | |
| SUM | 9,154.50 | 9158.3 | | 2760.0 | | 0.0 | 2557.0 | 13075.4 | 13080.8 | 2484.0 | 12711.7 | 12723.6 | 198.4 | 0.0% | 0.1% |

Table 5 - Monthly Environmental Flow release data for Bendora dam

| SUM | 410730 Gingera (unverified) | 410730 Gingera (verified) | Environmental flow release below Bendora Date | Daily base flow | Additional release (pool / riffle) | Planned +/- 50% release regime | Calculated Natural Flow. (Unverified) | Calculated Natural Flow. (Verified) | Adjusted daily base flow. EOM = Revised monthly target | 410747 Bendora D/S (Unverified) | 410747 Bendora D/S (Verified) | EOM Excess (+) / Shortfall (-) to carry forward | EOM Correction to 410730 , Verified Vs unverified | EOM Correction to 410747 , Verified Vs unverified | Comments |
|-----------------------------------|-----------------------------------|---------------------------------|---|--------------------|---|---|--|--|---|--|--|---|--|--|--|
| Previous months adjustment | | | | | | | | | -432.0 | | | | | | |
| | 220.90 | 222.6 | Thu 1-Sep-22 | 144.00 | | | 72.0 | 486.0 | 489.7 | 144.0 | 444.60 | 412.9 | | | |
| | 213.59 | 215 | Fri 2-Sep-22 | 144.00 | | | 72.0 | 469.9 | 473.0 | 144.0 | 423.88 | 395.2 | | | |
| | 205.32 | 207.1 | Sat 3-Sep-22 | 144.00 | | | 72.0 | 451.7 | 455.6 | 144.0 | 407.43 | 382.4 | | | |
| | 199.07 | 200.2 | Sun 4-Sep-22 | 144.00 | | | 72.0 | 438.0 | 440.4 | 144.0 | 370.89 | 353.7 | | | |
| | 192.6 | 194.1 | Mon 5-Sep-22 | 144.00 | | | 72.0 | 423.8 | 427.0 | 144.0 | 349.2 | 336 | | | |
| | 186.4 | 187.4 | Tue 6-Sep-22 | 144.00 | | | 72.0 | 410.1 | 412.3 | 144.0 | 303.7 | 326.7 | | | |
| | 189.8 | 185.1 | Wed 7-Sep-22 | 144.00 | | | 216.0 | 417.6 | 407.2 | 144.0 | 288.0 | 313.4 | | | |
| | 223.8 | 223.8 | Thu 8-Sep-22 | 144.00 | | | 216.0 | 492.4 | 492.4 | 144.0 | 336.8 | 349.8 | | | |
| | 384.0 | 384 | Fri 9-Sep-22 | 144.00 | | | 216.0 | 844.8 | 844.8 | 144.0 | 566.65 | 523 | | | |
| | 295.7 | 295.7 | Sat 10-Sep-22 | 144.00 | | | 216.0 | 650.5 | 650.5 | 144.0 | 686.64 | 609.7 | | | |
| | 259.2 | 259.2 | Sun 11-Sep-22 | 144.00 | | | 216.0 | 570.2 | 570.2 | 144.0 | 571.0 | 532.2 | | | |
| | 251.4 | 251.4 | Mon 12-Sep-22 | 144.00 | | | 216.0 | 553.1 | 553.1 | 144.0 | 503.0 | 481.9 | | | |
| | 242.9 | 242.9 | Tue 13-Sep-22 | 144.00 | | | 216.0 | 534.4 | 534.4 | 144.0 | 484.6 | 466.9 | | | |
| | 226.4 | 226.4 | Wed 14-Sep-22 | 144.00 | | | 72.0 | 498.1 | 498.1 | 144.0 | 436.4 | 432.2 | | | |
| | 244.0 | 244 | Thu 15-Sep-22 | 144.00 | | | 72.0 | 536.8 | 536.8 | 144.0 | 421.0 | 417.7 | | | |
| | 273.2 | 273.2 | Fri 16-Sep-22 | 144.00 | | | 72.0 | 601.0 | 601.0 | 144.0 | 492.4 | 472.5 | | | |
| | 353.8 | 353.8 | Sat 17-Sep-22 | 144.00 | | | 72.0 | 778.4 | 778.4 | 144.0 | 581.4 | 535.8 | | | |
| | 469.1 | 469.1 | Sun 18-Sep-22 | 144.00 | | | 72.0 | 1032.0 | 1032.0 | 144.0 | 834.43 | 714.9 | | | |
| | 453.9 | 453.9 | Mon 19-Sep-22 | 144.00 | | | 72.0 | 998.6 | 998.6 | 144.0 | 932.40 | 798.4 | | | |
| | | | | | | | | | | | | | | | Planned releases to +/-25% to minimise dislodgement of Macquarier Perch eggs in downstream reaches |
| | 395.3 | 395.3 | Tue 20-Sep-22 | 144.00 | | | 108.0 | 869.7 | 869.7 | 144.0 | 854.01 | 745.4 | | | |
| | 372.5 | 372.5 | Wed 21-Sep-22 | 144.00 | | | 180.0 | 819.5 | 819.5 | 144.0 | 806.57 | 700 | | | |
| | 378.3 | 378.3 | Thu 22-Sep-22 | 144.00 | | | 180.0 | 832.3 | 832.3 | 144.0 | 844.05 | 736 | | | |
| | 362.1 | 362.1 | Fri 23-Sep-22 | 144.00 | | | 180.0 | 796.6 | 796.6 | 144.0 | 819.91 | 713.8 | | | |
| | 360.2 | 360.2 | Sat 24-Sep-22 | 144.00 | | | 180.0 | 792.4 | 792.4 | 144.0 | 801.68 | 701 | | | |
| | 314.4 | 314.4 | Sun 25-Sep-22 | 144.00 | | | 180.0 | 691.7 | 691.7 | 144.0 | 740.22 | 657.9 | | | |
| | 291.1 | 291.1 | Mon 26-Sep-22 | 144.00 | | | 180.0 | 640.4 | 640.4 | 144.0 | 660.83 | 598.2 | | | |
| | 320.0 | 320 | Tue 27-Sep-22 | 144.00 | | | 180.0 | 704.0 | 704.0 | 144.0 | 636.84 | 615.4 | | | |
| | 444.7 | 444.7 | Wed 28-Sep-22 | 144.00 | | | 75.0 | 978.3 | 978.3 | 144.0 | 785.87 | 749.2 | | | |
| | 445.3 | 445.3 | Thu 29-Sep-22 | 144.00 | | | 75.0 | 979.7 | 979.7 | 144.0 | 955.83 | 902 | | | |
| | 385.5 | 385.5 | Fri 30-Sep-22 | 144.00 | | | 75.0 | 848.1 | 848.1 | 144.0 | 863.90 | 822.5 | | | |
| SUM | 9,154.50 | 9158.3 | | 4320.0 | 0.0 | 3969.0 | 20139.9 | 20148.3 | 3888.0 | 18204.3 | 16796.7 | 310.0 | 0.0% | -7.7% | |

Table 6 - Monthly Environmental Flow release data for Cotter dam

| SUM | Environmental flow release below Cotter Date | Daily base flow | Additional release (pool / riffle) | EOM = Revised monthly target | 410700 | 410700 | EOM Excess (+) / Shortfall (-) | EOM Correction to 410700, Verified Vs unverified | Comments |
|-----------------------------------|--|-----------------|------------------------------------|------------------------------|-------------------------|-----------------------|--------------------------------|--|-------------------------|
| | | | | | Cotter D/S (Unverified) | Cotter D/S (Verified) | | | |
| Previous months adjustment | | | | | 0.0 | | | | |
| | Thu 1-Sep-22 | 15 | | 15.0 | 651.09 | 591.9 | | | |
| | Fri 2-Sep-22 | 15 | | 15.0 | 600.80 | 542.7 | | | |
| | Sat 3-Sep-22 | 15 | | 15.0 | 567.08 | 510.3 | | | |
| | Sun 4-Sep-22 | 15 | | 15.0 | 524.94 | 470.8 | | | |
| | Mon 5-Sep-22 | 15 | | 15.0 | 487.19 | 435.7 | | | |
| | Tue 6-Sep-22 | 15 | | 15.0 | 411.33 | 411.3 | | | |
| | Wed 7-Sep-22 | 15 | | 15.0 | 393.77 | 393.8 | | | |
| | Thu 8-Sep-22 | 15 | | 15.0 | 438.39 | 438.4 | | | |
| | Fri 9-Sep-22 | 15 | | 15.0 | 763.20 | 763.2 | | | |
| | Sat 10-Sep-22 | 15 | | 15.0 | 992.94 | 989.5 | | | |
| | Sun 11-Sep-22 | 15 | | 15.0 | 907.78 | 906.8 | | | |
| | Mon 12-Sep-22 | 15 | 100 | 100.0 | 777.99 | 775 | | | Riffle release achieved |
| | Tue 13-Sep-22 | 15 | | 15.0 | 722.43 | 719.2 | | | |
| | Wed 14-Sep-22 | 15 | | 15.0 | 665.83 | 662.7 | | | |
| | Thu 15-Sep-22 | 15 | | 15.0 | 638.96 | 636 | | | |
| | Fri 16-Sep-22 | 15 | | 15.0 | 711.19 | 708.5 | | | |
| | Sat 17-Sep-22 | 15 | | 15.0 | 797.49 | 791.3 | | | |
| | Sun 18-Sep-22 | 15 | | 15.0 | 1189.82 | 1186 | | | |
| | Mon 19-Sep-22 | 15 | | 15.0 | 1272.13 | 1263 | | | |
| | Tue 20-Sep-22 | 15 | | 15.0 | 1212.26 | 1203 | | | |
| | Wed 21-Sep-22 | 15 | | 15.0 | 1102.83 | 1097 | | | |
| | Thu 22-Sep-22 | 15 | | 15.0 | 1098.77 | 1090 | | | |
| | Fri 23-Sep-22 | 15 | | 15.0 | 1083.67 | 1076 | | | |
| | Sat 24-Sep-22 | 15 | | 15.0 | 1093.90 | 1081 | | | |
| | Sun 25-Sep-22 | 15 | | 15.0 | 1028.69 | 1014 | | | |
| | Mon 26-Sep-22 | 15 | | 15.0 | 928.95 | 921.5 | | | |
| | Tue 27-Sep-22 | 15 | | 15.0 | 920.79 | 904.8 | | | |
| | Wed 28-Sep-22 | 15 | | 15.0 | 1423.33 | 1404 | | | |
| | Thu 29-Sep-22 | 15 | | 15.0 | 1713.77 | 1701 | | | |
| | Fri 30-Sep-22 | 15 | | 15.0 | 1530.48 | 1516 | | | |
| SUM | | 450.0 | 100.0 | 535.0 | 26651.79 | 26204.4 | 25669.4 | -1.7% | |

Table 7 - Monthly Environmental Flow release data for Googong dam

| SUM | 410781 Upstream Googong (Unverified) | 410781 Upstream Googong (Verified) | Environmental flow release below Googong Date | Daily base flow | Additional release (pool / riffle) | Calculated Natural Flow. (Unverified) | Calculated Natural Flow. (Verified) | EOM = Revised monthly target | 410760 Wickerslac (Unverified) | 410760 Wickerslac (Verified) | EOM Excess (+) / Shortfall (-) | EOM Correction to 410781, Verified Vs unverified | EOM Correction to 410760, Verified Vs unverified | Comments |
|-----------------------------------|---|---|---|--------------------|---|--|--|---|--------------------------------------|------------------------------------|---|---|---|---------------------------|
| Previous months adjustment | | | | | | | | | | | | | | |
| | 244.96 | | Thu 1-Sep-22 | 10.00 | | 313.5 | | 10.0 | 354.60 | 350.2 | | | | |
| | 228.67 | | Fri 2-Sep-22 | 10.00 | | 292.7 | | 10.0 | 330.04 | 325.6 | | | | |
| | 224.17 | | Sat 3-Sep-22 | 10.00 | | 286.9 | | 10.0 | 310.21 | 306 | | | | |
| | 205.41 | | Sun 4-Sep-22 | 10.00 | | 262.9 | | 10.0 | 264.03 | 260.3 | | | | rating table extrapolated |
| | 198.21 | | Mon 5-Sep-22 | 10.00 | | 253.7 | | 10.0 | 239.34 | 236.1 | | | | rating table extrapolated |
| | 192.64 | | Tue 6-Sep-22 | 10.00 | | 246.6 | | 10.0 | 226.39 | 222.1 | | | | |
| | 187.2 | | Wed 7-Sep-22 | 10.00 | | 239.6 | | 10.0 | 209.48 | 205 | | | | |
| | 197.6 | | Thu 8-Sep-22 | 10.00 | | 253.0 | | 10.0 | 215.39 | 210.8 | | | | |
| | 412.1 | | Fri 9-Sep-22 | 10.00 | | 527.5 | | 10.0 | 327.25 | 320.9 | | | | |
| | 459.5 | | Sat 10-Sep-22 | 10.00 | | 588.1 | | 10.0 | 611.59 | 602.1 | | | | |
| | 354.9 | | Sun 11-Sep-22 | 10.00 | | 454.3 | | 10.0 | 573.63 | 564.6 | | | | |
| | 284.2 | | Mon 12-Sep-22 | 10.00 | 100 | 363.8 | | 100.0 | 458.10 | 453.2 | | | | |
| | 245.43 | | Tue 13-Sep-22 | 10.00 | | 314.1 | | 10.0 | 377.87 | 377.9 | | | | |
| | 219.94 | | Wed 14-Sep-22 | 10.00 | | 281.5 | | 10.0 | 326.83 | 326.8 | | | | |
| | 210.82 | | Thu 15-Sep-22 | 10.00 | | 269.9 | | 10.0 | 291.15 | 291.1 | | | | |
| | 238.2 | | Fri 16-Sep-22 | 10.00 | | 304.9 | | 10.0 | 291.57 | 291.6 | | | | |
| | 255.9 | | Sat 17-Sep-22 | 10.00 | | 327.5 | | 10.0 | 282.54 | 282.5 | | | | |
| | 285.7 | | Sun 18-Sep-22 | 10.00 | | 365.7 | | 10.0 | 375.74 | 375.7 | | | | |
| | 245.6 | | Mon 19-Sep-22 | 10.00 | | 314.3 | | 10.0 | 342.24 | 342.2 | | | | |
| | 203.1 | | Tue 20-Sep-22 | 10.00 | | 260.0 | | 10.0 | 282.16 | 282.2 | | | | |
| | 185.8 | | Wed 21-Sep-22 | 10.00 | | 237.8 | | 10.0 | 236.65 | 236.7 | | | | |
| | 196.1 | | Thu 22-Sep-22 | 10.00 | | 251.0 | | 10.0 | 194.97 | 195 | | | | |
| | 221.49 | | Fri 23-Sep-22 | 10.00 | | 283.5 | | 10.0 | 166.32 | 166.3 | | | | |
| | 265.37 | | Sat 24-Sep-22 | 10.00 | | 339.7 | | 10.0 | 181.29 | 181.3 | | | | |
| | 319.29 | | Sun 25-Sep-22 | 10.00 | | 408.7 | | 10.0 | 126.09 | 126.1 | | | | |
| | 269.20 | | Mon 26-Sep-22 | 10.00 | | 344.6 | | 10.0 | 176.40 | 176.4 | | | | |
| | 250.09 | | Tue 27-Sep-22 | 10.00 | | 320.1 | | 10.0 | 196.50 | 196.5 | | | | |
| | 1317.38 | | Wed 28-Sep-22 | 10.00 | | 1686.2 | | 10.0 | 359.16 | 359.2 | | | | |
| | 2374.18 | | Thu 29-Sep-22 | 10.00 | | 3039.0 | | 10.0 | 1869.92 | 1870 | | | | |
| | 1323.28 | | Fri 30-Sep-22 | 10.00 | | 1693.8 | | 10.0 | 2184.14 | 2184 | | | | |
| SUM | 11816.4 | 0.0 | | 300.0 | 100.0 | 15125.0 | 0.0 | 390.0 | 12381.6 | 12318.4 | 198.4 | -100.0% | -0.5% | |

Note:

410781 Upstream Googong verified data is provided every second month.

Table 8 – Monthly flow data for Cotter River Environmental Flows

| Date | Cotter River e-flows below Cotter Dam | | Comments |
|---------------|--|--|----------|
| | E-flow sourced from Murrumbidgee via M2C | E-flow sourced from Cotter Dam release/spill | |
| Thu 1-Sep-22 | 0.0 | 591.9 | |
| Fri 2-Sep-22 | 0.0 | 542.7 | |
| Sat 3-Sep-22 | 0.0 | 510.3 | |
| Sun 4-Sep-22 | 0.0 | 470.8 | |
| Mon 5-Sep-22 | 0.0 | 435.7 | |
| Tue 6-Sep-22 | 0.0 | 411.3 | |
| Wed 7-Sep-22 | 0.0 | 393.8 | |
| Thu 8-Sep-22 | 0.0 | 438.4 | |
| Fri 9-Sep-22 | 0.0 | 763.2 | |
| Sat 10-Sep-22 | 0.0 | 989.5 | |
| Sun 11-Sep-22 | 0.0 | 906.8 | |
| Mon 12-Sep-22 | 0.0 | 775 | |
| Tue 13-Sep-22 | 0.0 | 719.2 | |
| Wed 14-Sep-22 | 0.0 | 662.7 | |
| Thu 15-Sep-22 | 0.0 | 636 | |
| Fri 16-Sep-22 | 0.0 | 708.5 | |
| Sat 17-Sep-22 | 0.0 | 791.3 | |
| Sun 18-Sep-22 | 0.0 | 1186 | |
| Mon 19-Sep-22 | 0.0 | 1263 | |
| Tue 20-Sep-22 | 0.0 | 1203 | |
| Wed 21-Sep-22 | 0.0 | 1097 | |
| Thu 22-Sep-22 | 0.0 | 1090 | |
| Fri 23-Sep-22 | 0.0 | 1076 | |
| Sat 24-Sep-22 | 0.0 | 1081 | |
| Sun 25-Sep-22 | 0.0 | 1014 | |
| Mon 26-Sep-22 | 0.0 | 921.5 | |
| Tue 27-Sep-22 | 0.0 | 904.8 | |
| Wed 28-Sep-22 | 0.0 | 1404 | |
| Thu 29-Sep-22 | 0.0 | 1701 | |
| Fri 30-Sep-22 | 0.0 | 1516 | |
| Total | 0.0 | 26204.4 | |

Table 9 – Monthly flow data for Murrumbidgee to Googong

| Date | M2G Flow | Comments |
|---------------|-----------------|-----------------|
| Thu 1-Sep-22 | 0.0 | |
| Fri 2-Sep-22 | 0.0 | |
| Sat 3-Sep-22 | 0.0 | |
| Sun 4-Sep-22 | 0.0 | |
| Mon 5-Sep-22 | 0.0 | |
| Tue 6-Sep-22 | 0.0 | |
| Wed 7-Sep-22 | 0.0 | |
| Thu 8-Sep-22 | 0.0 | |
| Fri 9-Sep-22 | 0.0 | |
| Sat 10-Sep-22 | 0.0 | |
| Sun 11-Sep-22 | 0.0 | |
| Mon 12-Sep-22 | 0.0 | |
| Tue 13-Sep-22 | 0.0 | |
| Wed 14-Sep-22 | 0.0 | |
| Thu 15-Sep-22 | 0.0 | |
| Fri 16-Sep-22 | 0.0 | |
| Sat 17-Sep-22 | 0.0 | |
| Sun 18-Sep-22 | 0.0 | |
| Mon 19-Sep-22 | 0.0 | |
| Tue 20-Sep-22 | 0.0 | |
| Wed 21-Sep-22 | 0.0 | |
| Thu 22-Sep-22 | 0.0 | |
| Fri 23-Sep-22 | 0.0 | |
| Sat 24-Sep-22 | 0.0 | |
| Sun 25-Sep-22 | 0.0 | |
| Mon 26-Sep-22 | 0.0 | |
| Tue 27-Sep-22 | 0.0 | |
| Wed 28-Sep-22 | 0.0 | |
| Thu 29-Sep-22 | 0.0 | |
| Fri 30-Sep-22 | 0.0 | |
| Total | 0.0 | |

Table 10 – Monthly water production data and water transferred to Googong reservoir

| Day | Stromlo WTP ML | | | Googong WTP ML | Transfer from SWTP to Googong res. |
|--------------|----------------|----------|---------------|----------------|------------------------------------|
| | M'bidgee | Cotter | Bendora | | |
| 1 | 0.0 | 0.0 | 104.7 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 103.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 99.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 102.4 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 106.5 | 0.0 | 0.0 |
| 6 | 0.0 | 0.0 | 109.0 | 0.0 | 0.0 |
| 7 | 0.0 | 0.0 | 104.3 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 108.6 | 0.0 | 0.0 |
| 9 | 0.0 | 0.0 | 110.5 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 110.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 110.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 116.6 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 110.2 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 107.7 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 113.3 | 3.9 | 0.0 |
| 16 | 0.0 | 0.0 | 114.9 | 18.5 | 0.0 |
| 17 | 0.0 | 0.0 | 70.7 | 52.4 | 0.0 |
| 18 | 0.0 | 0.0 | 60.0 | 47.2 | 0.0 |
| 19 | 0.0 | 0.0 | 59.8 | 53.8 | 0.0 |
| 20 | 0.0 | 0.0 | 65.6 | 54.1 | 0.0 |
| 21 | 0.0 | 0.0 | 74.3 | 73.3 | 0.0 |
| 22 | 0.0 | 0.0 | 12.4 | 104.1 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 110.3 | 0.0 |
| 24 | 0.0 | 0.0 | 0.0 | 110.5 | 0.0 |
| 25 | 0.0 | 0.0 | 0.0 | 104.3 | 0.0 |
| 26 | 0.0 | 0.0 | 0.0 | 106.2 | 0.0 |
| 27 | 0.0 | 0.0 | 0.0 | 109.2 | 0.0 |
| 28 | 0.0 | 0.0 | 0.0 | 106.7 | 0.0 |
| 29 | 0.0 | 0.0 | 0.0 | 105.3 | 0.0 |
| 30 | 0.0 | 0.0 | 0.0 | 106.3 | 0.0 |
| Total | 0.0 | 0 | 2073.5 | 1266.1 | 0.0 |

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