

DATA TABLE COMMENTARY – PRT56 WATER RESOURCES



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TABLE RES1 - Water resources asset and volumes data3

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RES.1 Water from impounding reservoirs

The 2022/23 value matches our [Annual Performance Report Data Tables 2023](#) in Table 5A (0 MI/d). Portsmouth Water does not have impounding reservoirs and therefore the value is zero.

RES1.2 Water from pumped storage reservoirs

The 2022/23 value matches our [Annual Performance Report Data Tables 2023](#) in Table 5A (0 MI/d). However, Portsmouth Water does have a 135 million litre capacity pumped storage reservoir, which receives all water from our single river abstraction. For this reason, from 2023/24, data that was previously reported in RES1.3 is now reported in RES 1.2.

The 2022/23 value for RES1.3 matches our [Annual Performance Report Data Tables 2023](#) in Table 5A (20.34 MI/d). It is calculated that 11.40 MI/d was for Portsmouth Water customers (equalling the 2022/23 value for CW4.24), with 8.94 MI/d linked to our western bulk export to Southern Water (the total river abstraction was 20.34 MI/d). The future need for river abstraction for our own customers is assumed to be consistent with CW4.24.

Sensitivity testing presented within our Revised Draft WRMP24 (Appendix 1C) supports the view that Southern Water should be able to cap the annual average import to the west at 2.5 MI/d. Southern Water and Portsmouth Water have agreed the need to cap exports in a normal year for WFD no deterioration reasons. However, in 2025-26 and 2026-27, the WRMP sensitivity testing indicates an additional 9.1 MI/d and 9.9 MI/d, respectively, will be needed in the west.

The values in RES1.2 represent the sum of the above two components i.e. river water (via storage reservoir) for Portsmouth Water customers and river water (via storage reservoir) for the Southern Water bulk supply.

RES1.3 Water from river abstractions

The 2022/23 value for RES1.3 matches our [Annual Performance Report Data Tables 2023](#) in Table 5A (20.34 MI/d). However, in line with the narrative for RES1.2, the values for 2023/24 and beyond are reported as zero.

RES1.4 Water from groundwater works, excluding managed aquifer recharge (MAR) water supply schemes

The 2022/23 value matches our [Annual Performance Report Data Tables 2023](#) in Table 5A (180.76 MI/d).

The total forecast raw water abstractions for our supply area have been calculated based on the PR24 rebased Distribution Input (CW5.38), PR24 Southern Water bulk supply assumptions (CW4.54) and future NAV related exports (CW5 workings v2.xlsx), plus a WRMP allowance of 2.4 MI/d for raw water losses. This results in raw water abstracted values of 185.47 MI/d in 2023/24, 183.61 MI/d in 2024/25, 181.53 MI/d in 2025/26, 180.72 MI/d in 2026/27, 178.59 MI/d in 2027/28, 174.87 MI/d in 2028/29 and 175.98 MI/d in 2029/30.

Row RES1.2 (pumped storage reservoir) has been subtracted from the total raw water abstractions above to derive the groundwater abstractions in RES1.4.

RES1.5 Water from artificial recharge (AR) water supply schemes

Portsmouth Water does not have any AR water supply schemes and therefore the value is zero. No new AR schemes are planned for AMP8.

RES1.6 Water from aquifer storage and recovery (ASR) water supply schemes

Portsmouth Water does not have any ASR water supply schemes and therefore the value is zero. No new water ASR schemes are planned for AMP8.

RES1.7 Water from saline abstractions

Portsmouth Water does not have any saline abstractions and therefore the value is zero. No new saline abstraction schemes are planned for AMP8.

RES1.8 Water from water reuse schemes

Portsmouth Water does not have any water reuse schemes and therefore the value is zero. No new water reuse schemes are planned for AMP8.

RES1.9 Number of impounding reservoirs sources

Portsmouth Water does not have impounding reservoirs and therefore the value is zero. No new impounding reservoirs are planned for AMP8.

RES1.10 Number of pumped storage reservoirs sources:

The 2022/23 value matches our [Annual Performance Report Data Tables 2023](#) in Table 5A ('0'). However, Portsmouth Water does have a 135 million litre capacity pumped storage reservoir, which receives all water from our single river abstraction. For this reason, from 2023/24, we are reporting one pumped storage reservoir.

RES1.11 Number of river abstractions sources

The 2022/23 value matches our [Annual Performance Report Data Tables 2023](#) in Table 5A ('1'). However, Portsmouth Water has a 135 million litre capacity pumped storage reservoir, which receives all water from our single river abstraction. For this reason, from 2023/24, we are reporting zero river abstraction sources. No new river abstractions are planned for AMP8.

RES1.12 Number of groundwater works excluding managed aquifer recharge (MAR) water supply schemes

The 2022/23 value matches our [Annual Performance Report Data Tables 2023](#) in Table 5A ('20'). Within our Revised Draft WRMP24 we assume that all of our groundwater sources are available to us in future years. Therefore the number of sources remains at '20' in the future.

RES1.13 Number of artificial recharge (AR) water supply schemes

The 2022/23 value matches our [Annual Performance Report Data Tables 2023](#) in Table 5A ('0'). Portsmouth Water does not have any AR water supply schemes or planned AMP8 schemes and therefore the value is zero.

RES1.14 Number of aquifer storage and recovery (ASR) water supply schemes

The 2022/23 value matches our [Annual Performance Report Data Tables 2023](#) in Table 5A ('0'). Portsmouth Water does not have any ASR water supply schemes or planned AMP8 schemes and therefore the value is zero.

RES1.15 Number of saline abstraction schemes

The 2022/23 value matches our [Annual Performance Report Data Tables 2023](#) in Table 5A ('0'). Portsmouth Water does not have any saline abstractions or planned AMP8 schemes and therefore the value is zero.

RES1.16 Number of reuse schemes

The 2022/23 value matches our [Annual Performance Report Data Tables 2023](#) in Table 5A ('0'). Portsmouth Water does not have any water reuse schemes or planned AMP8 schemes and therefore the value is zero.

RES1.17 Total number of sources

This is an automatically calculated row based on RES1.1.9 to 1.16.

RES1.18 Total number of water reservoirs

The 2022/23 value matches our [Annual Performance Report Data Tables 2023](#) in Table 5A ('1'). Portsmouth Water has a 135 million litre capacity pumped storage reservoir, which receives all water from our single river abstraction. No other raw water reservoirs are planned for AMP8.

RES1.19 Total volumetric capacity of water reservoirs

The 2022/23 value matches our [Annual Performance Report Data Tables 2023](#) in Table 5A ('135'). Portsmouth Water has a 135 million litre capacity pumped storage reservoir, which receives all water from our single river abstraction. No other raw water reservoirs are planned for AMP8.

RES1.20 Total number of intake and source pumping stations

The 2022/23 value matches our [Annual Performance Report Data Tables 2023](#) in Table 5A ('21'). It is based on RES1.17 and is not forecast to change.

RES1.21 Total length of raw water abstraction mains and other conveyors

The 2022/23 value matches our [Annual Performance Report Data Tables 2023](#) in Table 5A ('6,100'). The value is not forecast to change.

RES1.22 Total length of raw water abstraction mains and other conveyors

The 2022/23 value matches our [Annual Performance Report Data Tables 2023](#) in Table 5A ('25.39'). The value is not forecast to change.

RES1.23 Average pumping head – raw water abstraction

The 2022/23 value matches our [Annual Performance Report Data Tables 2023](#) in Table 5A (' 28.56'). The value is not forecast to change.

RES1.24 Energy consumption - water resources (MWh)

The 2022/23 value matches our [Annual Performance Report Data Tables 2023](#) in Table 5A ('11,215.446'). The value is not forecast to change.

RES1.25 Total number of raw water abstraction imports

The 2022/23 value matches our [Annual Performance Report Data Tables 2023](#) in Table 5A ('0'). The value is not forecast to change in line with our Revised Draft WRMP24.

RES1.26 Water imported from 3rd parties to raw water abstraction systems

The 2022/23 value matches our [Annual Performance Report Data Tables 2023](#) in Table 5A ('0'). The value is not forecast to change in line with our Revised Draft WRMP24.

RES1.27 Total number of raw water abstraction exports

The 2022/23 value matches our [Annual Performance Report Data Tables 2023](#) in Table 5A ('0'). The value is not forecast to change in line with our Revised Draft WRMP24.

RES1.28 Water exported to 3rd parties from raw water abstraction systems

The 2022/23 value matches our [Annual Performance Report Data Tables 2023](#) in Table 5A ('0'). The value is not forecast to change in line with our Revised Draft WRMP24.

RES1.29 Water resources capacity (measured using water resources yield)

The 2022/23 value matches our [Annual Performance Report Data Tables 2023](#) in Table 5A ('201.02'). It is consistent with the figure used in our 'Risk of severe restriction in a drought 2022/23' ODI calculation.

The Deployable Outputs (DO) for our WRMP19 were calculated using an Excel based Water Resource Zone (WRZ) that excluded a representation of Portsmouth Water's network (unlike the latest Pywr WRZ models used for WRMP24).

The WRMP19 DO calculation excluded Network Plus constraints and our DOs are not constrained by treatment capacity. The individual source DO profiles have not changed since WRMP19. Therefore, for Portsmouth Water, the Draft/Final WRMP19 DOs (WRMP reference 7FP) equal the PR24 Water Resources Capacity.

The 1 in 200 year DO / water resources capacity was forecast to be 206.82 MI/d in 2022-23, 206.79 MI/d in 2023-24, 219.25 MI/d in 2024-25, 219.22 MI/d in 2025-26, 219.18 MI/d in 2026-27, 219.15 MI/d in 2027-28, 219.11 MI/d in 2028-29 and 242.08 MI/d in 2029-30.

The above values provide a baseline and have been revised downwards where necessary for forecast scheme under-achievement. With respect to planned schemes, the total benefit of our AMP7 groundwater schemes was assessed to be 7.8 MI/d between 2020-21 and 2023-24, and then 20.3 MI/d from 2024-25. In the last year of AMP8 (2029-30) the total benefit of schemes increased to 43.3 MI/d owing to utilisation of Havant Thicket Reservoir.

Following the delivery of the Source H scheme (a 2 MI/d benefit) the 2022-23 and 2023-24 water resources capacity is adjusted downwards by 5.8 MI/d, resulting in a water resources capacity of 201.02 MI/d in 2022-23 and 200.99 MI/d in 2023-24.

We are forecasting the delivery of the Source C and O schemes in 2024-25 (providing 5.8 MI/d benefit), although we have now confirmed that the Source J scheme is no longer feasible (which would have provided 12.5 MI/d benefit). Therefore the water resources capacity for 2024-25 through to 2028-29 is adjusted downwards by 12.5 MI/d.

The Havant Thicket Reservoir scheme will no longer be ready for 2029-30 (as we are now accommodating a component of Southern Water's proposed water recycling scheme). Therefore the water resources capacity for 2029-30 is adjusted downwards by 35.5 MI/d (12.5 + 23.0).

RES1.30 Total number of impounding reservoirs assets

Portsmouth Water does not have impounding reservoirs and therefore the value is zero.

RES1.31 Total number of new eels/fish entrainment screens

We have one eels/fish entrainment screen for our river source. No future additional screens are planned within AMP7 or AMP8. Therefore values are zero.

RES1.32 Total number of new eels/fish passes

No future additional eels/fish passes are planned within AMP7 or AMP8. Therefore values are zero.

RES1.33 Total number of new wetlands

No future new wetlands are planned within AMP7 or AMP8. Therefore values are zero.

RES1.34 Total area of new wetlands

No future new wetlands are planned within AMP7 or AMP8. Therefore values are zero.

RES1.35 Total number of Investigations (WINEP/NEP) Desk based Only

As the WINEP Schemes are intended to include multiple surveys, and/or monitoring locations, and/or complex modelling water (RES1.37), this target is 0.

RES1.36 Total number of investigations; (WINEP/NEP) survey, monitoring or simple modelling

As the WINEP Schemes are intended to include multiple surveys, and/or monitoring locations, and/or complex modelling water (RES1.37), this target is 0.

RES1.37 Total number of investigations; (WINEP/NEP) multiple surveys, and/or monitoring locations, and/or complex modelling water

The data in this row represent in-year completions. They are not cumulative numbers of investigations. There were 7 WINEP WR and catchments schemes completed in 2022/23. There are 11 safeguard zone schemes due for completion in 2025, although these may be extended to 2029. There are 9 WINEP Water Resources and Environmental Destination schemes require completing by December 2026.

RES1.38 Total number of investigations; (WINEP/NEP)

Cumulative of RES1.35 to RES1.37.

RES1.39 Additional line 1; water resources cost driver

Not required.

RES1.40 Additional line 2; water resources cost driver

Not required.

RES1.41 Additional line 3; water resources cost driver

Not required.



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