



## **SCOTTISH WATER**

**Water Industry Commission for Scotland (WICS) ANNUAL RETURN 2024/25**

### **Section H – Asset Inventory**

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## Section H – Asset Inventory

## **1 Table H1: Summary**

## 1.1 Overview

Section H reports the number of infrastructure and non-infrastructure assets in the Scottish Water inventories that were operational on 21 March 2025. The data is extracted near the end of March rather than the last day in March to allow time to process and complete relevant quality checks. In comparison, Section E tables report assets that were operational at any time during the year, so assets that were operational during the year but decommissioned before year end will appear in Section E but not in Section H. The exceptions to this are combined sewer overflows, sewers and water mains assets that are only reported if they are operational at the end of the year due to the frequency of status changes that occur making tracking changes throughout the year overly complex.

Section H also reports the gross and net modern equivalent asset values (MEAV) for each site level asset class e.g. Water Treatment Works (WTW). The MEAV is calculated using an asset related cost algorithm matched to asset data at unit level for non-infrastructure assets and individual pipe level for infrastructure assets. Units are a collection of equipment that perform a process based on the Ellipse asset hierarchy structure. The MEAV for each unit are summed to give the site MEAV. When the MEAV for a site is built up, all units present at that point in time (as at year-end) are priced using cost models. Then an allowance for inflation, using the Consumer Price Index, is added and then on-costs, e.g. contractor overheads, are added. The relevant sites are summed to give the total Gross MEAV for the asset class. The Net MEAV is calculated for non-infrastructure assets based on the Gross MEAV and the proportion of the assets remaining life by its expected overall life.

Net MEAV = Gross MEAV x Asset remaining life / Expected overall asset life. The MEAV has been recalculated for all assets and is influenced by:

- Inflation indexing
- Changes in inventory between end of March 2024 to end of March 2025
- The assessment of on-costs
- The allocation of assets and units to cost models
- The application of a capital project rebate

Table H1 is a summary table of Tables H2 to H6. The gross valuation is dominated by the infrastructure (H3 & H4) valuation of £106.413 billion, comprising 86.8% of the total.

The non-infrastructure (H2 & H5) valuation is £15.996 billion, which is 13.0% of the total valuation with the remaining £193.156 million (0.2%) allocated to Support Services (H6) such as vehicles and IT equipment.

Sewer structures have a variance of 21%. The change is largely due to the development of cost models for valuing line H4.4 (Other sewer structures). This replaces the estimated unit value used previously. The cost model uses the design capacity (m3) of the storage tank to calculate a MEAV. The number of storage tanks has also increased in AR25.

The MEAV has remained largely consistent with AR24 with the primary change being driven by inflation with a 1.95% increase in CPI. There are no cost models for sustainable urban drainage systems, so continue to be reported with zero value.

The confidence grades for the majority of asset types MEAV remains the same, however line H4.4 Other Sewer Structures has moved from D5 to B4 with the use of a design capacity

based cost model. The details of each change to confidence grades are detailed in the Performance Trends Section 1.2.

### 1.1.1 Lines H1.1-H1.13 - Asset Inventory

In AR25 Scottish Water reported gross asset inventory valuation is £122.602 billion. The breakdown by asset type is provided in Table 1 below. The gross valuation is dominated by the infrastructure valuation of £106.413 billion, comprising 86.8% of the total. The non-infrastructure total valuation is £15.996 billion, which is 13.0% of the total valuation. Support services valuation is £193.156 million representing 0.2% of the gross asset inventory valuation.

**Table 1: Gross asset inventory valuation by asset type.**

| Asset Type                    | AR24 Gross MEAV (£m) | % of Total | AR25 Gross MEAV (£m) | % of Total |
|-------------------------------|----------------------|------------|----------------------|------------|
| Water Non-Infrastructure      | 7366.7               | 0.062      | 7549.6               | 0.0616     |
| Water Infrastructure          | 23360.5              | 0.196      | 23881.3              | 0.1948     |
| Wastewater Infrastructure     | 79947.3              | 0.671      | 82531.3              | 0.6732     |
| Wastewater Non-Infrastructure | 8287                 | 6.95%      | 8446.4               | 0.0689     |
| Support Services              | 195.3                | 0.16%      | 193.2                | 0.16%      |
| Total                         | 119,156.9            | 100%       | 122601.7             | 100%       |

Table 2 below shows the change in the total gross asset valuation of Scottish Water assets from AR24 to AR25 by asset category.

**Table 2: Change in the total gross asset valuation of Scottish Water assets from AR24 to AR25 by asset category.**

| Line Ref | Asset Category                               | AR24 Gross MEAV (£m) | % of Total | AR25 Gross MEAV (£m) | % of Total | Change (£m) | % Change |
|----------|----------------------------------------------|----------------------|------------|----------------------|------------|-------------|----------|
| H1.1     | Water treatment works                        | 4,186.7              | 3.5%       | 4,258.5              | 3.5%       | 71.8        | 1.7%     |
| H1.2     | Water storage                                | 2,765.4              | 2.3%       | 2865.7               | 2.3%       | 100.3       | 3.6%     |
| H1.3     | Water pumping stations                       | 414.6                | 0.3%       | 425.4                | 0.3%       | 10.8        | 2.6%     |
| H1.4     | Water resources                              | 4,473.7              | 3.8%       | 4556.0               | 3.7%       | 82.3        | 1.8%     |
| H1.5     | Water mains                                  | 18,886.9             | 15.9%      | 19325.4              | 15.8%      | 438.5       | 2.3%     |
| H1.6     | Sewers                                       | 77,846.4             | 65.3%      | 80106.5              | 65.3%      | 2,260.2     | 2.9%     |
| H1.7     | Sewer structures                             | 1,465.7              | 1.2%       | 1773.2               | 1.4%       | 307.5       | 21.0%    |
| H1.8     | Sea outfalls                                 | 635.2                | 0.5%       | 651.5                | 0.5%       | 16.3        | 2.6%     |
| H1.09    | Sustainable Urban Drainage                   | 0.0                  | 0.0%       | 0.0                  | 0.0%       | 0.0         | 0%       |
| H1.10    | Sewage pumping stations                      | 1765.8               | 1.5%       | 1786.8               | 1.5%       | 21.0        | 1.2%     |
| H1.11    | Sewage treatment works                       | 6,091.0              | 5.1%       | 6220.9               | 5.1%       | 129.9       | 2.1%     |
| H1.12    | Sludge treatment facilities by disposal type | 430.2                | 0.4%       | 438.6                | 0.4%       | 8.4         | 2.0%     |

| Line Ref | Asset Category   | AR24 Gross MEAV (£m) | % of Total | AR25 Gross MEAV (£m) | % of Total | Change (£m) | % Change |
|----------|------------------|----------------------|------------|----------------------|------------|-------------|----------|
| H1.13    | Support services | 195.3                | 0.2%       | 193.2                | 0.2%       | -2.1        | -1.1%    |
|          | Total            | 119,156.9            | 100%       | 122,601.7            | 100%       | 3,444.8     | 2.9%     |

A summary of the asset categories that had a variance greater than +/- £200m or +/- 30% in any one asset category is contained in Table 3 below.

**Table 3: Summary of the changes incorporating a variance greater than +/- £200m or +/- 30% in any one asset category.**

| Asset Category   | Change (£m) | % Change |
|------------------|-------------|----------|
| Water mains      | 438.51      | 2.3      |
| Sewers           | 2,260.15    | 2.9      |
| Sewer structures | 307.48      | 21.0     |
| Total            | 3,006.15    |          |

The total net value of the Scottish Water non-infrastructure asset inventory (including support services depreciable assets) is £4.437 billion. The changes to the net valuation by asset category between AR24 and AR25 are outlined in Table 4 below.

**Table 4: Changes in net valuation by asset category.**

| Line Ref | Asset Category                               | AR24 Net MEAV (£m) | % of Total | AR25 Net MEAV (£m) | % of Total | Change (£m)   | % Change    |
|----------|----------------------------------------------|--------------------|------------|--------------------|------------|---------------|-------------|
| H1.1     | Water treatment works                        | 1,158.512          | 25.6       | 1,137.465          | 25.6       | -21.05        | -1.8        |
| H1.2     | Water storage                                | 891.564            | 19.7       | 886.297            | 20.0       | -5.27         | -0.6        |
| H1.3     | Water pumping stations                       | 141.323            | 3.1        | 140.339            | 3.2        | -0.98         | -0.7        |
| H1.10    | Sewage pumping stations                      | 635.792            | 14.0       | 603.580            | 13.6       | -32.21        | -5.1        |
| H1.11    | Sewage treatment works                       | 1,512.945          | 33.4       | 1,489.254          | 33.6       | -23.69        | -1.6        |
| H1.12    | Sludge treatment facilities by disposal type | 77.105             | 1.7        | 76.329             | 1.7        | -0.78         | -1.0        |
| H1.13    | Support services                             | 109.176            | 2.4        | 103.935            | 2.3        | -5.24         | -4.8        |
|          | <b>Total</b>                                 | <b>4,526.417</b>   | <b>100</b> | <b>4,437.198</b>   | <b>100</b> | <b>-89.22</b> | <b>-2.0</b> |

**Line H1.1** Water treatment works Short AP and Med AP Net MEAV has decreased by 18% and 9% respectively. This is due to ageing water treatment works moving to higher depreciation bands.

**Line H1.11** Sewage treatment works Short AP and Med AP Net MEAV has decreased by 12% and 9% respectively. This is due to ageing sewage treatment works moving to higher depreciation bands.

## 1.2 Data

The data for the non-infrastructure asset inventory is extracted from the Works & Asset Management system (Ellipse) whereas the infrastructure inventory is extracted from the Geospatial Information system (GIS). The cost models are provided by the Scottish Water internal costing team. R2309 cost models have been used and costs inflated using CPI.

The residual life method used to estimate the life expectancy of the assets remains the same as previous years and therefore has had no impact on significant changes in the Gross or Net Value of element categories. However, there have been some material changes to the element category values but these are in line with the overall changes, due to new cost models, inflation or changes to the asset stock as described later against the relevant lines.

The confidence grades for Table H1 are assessed individually considering the proportion of each asset as opposed to defaulting to the lowest value in Tables H2-H6. The confidence grades for the asset stock remain unchanged from AR24.

Some figures within the commentary may be subject to rounding; this will account for minor variances. The reason for the variances is that the level below the summary tables uses calculations to provide more detailed information.

## 2 Table H2: Water Non-Infrastructure

### 2.1 Overview

Table H2 provides information on the water non-infrastructure asset inventory. The gross asset valuation for AR25 has increased to £7.550 billion. This represents an increase of £183m, equivalent to 2.47%, of which +1.95% is the direct result of inflation and changes to the asset stock (0.52%). There has been a reduction of nine sites but the additional units and site data improvements have resulted in an overall increase.

Table H2 has three subsections: water treatment works, water storage and water pumping stations. The greatest change in the Gross MEAV within each subsection is:

- Water treatment works has a 8.3% increase in Gross MEAV reported in **Line H2.8** GW3 treatment works. This increase is due to inflation, additional units, site data improvements and the addition of one site.
- Water storage has a 4.6% increase in Gross MEAV reported in **Line H2.10** Water towers. This increase is due to inflation, additional units and site data improvements.
- Water pumping stations has an 7.5% increase in Gross MEAV reported in **Line H2.12** Source. This increase is due to inflation, additional units and site data improvements.

As described in Table H1, the number of assets reported in the Section H differ to those in the Section E due to the inclusion of assets which have been operational during the year for Section E and the end of year only status of assets included in Section H.

The confidence grades for MEAV have remained the same as AR24, given that the data quality level has been sustained but not improved.

### 2.2 Performance Trends

#### 2.2.1 Lines H2.1-H2.8 Water Treatment Works

The number of Water Treatment Works reported for AR25 is 226. This is the same as AR24. The details of the changes in Water Treatment Works due to sites being added or removed in AR25 are shown in Table 5 below.

**Table 5: Changes in reported Water Treatment Works due to removals or additions.**

| Plant No  | Site                        | AR25 Status | WIC H Grade | Band |
|-----------|-----------------------------|-------------|-------------|------|
| WTW000831 | CRAIGHEAD WTW 2021 NJ496405 | Added       | 8           | 2    |
| WTW000493 | CRAIGHEAD WTW 1974 NJ497405 | Removed     | 4           | 2    |

Craighead WTW (WTW000831) replaced Craighead WTW (WTW000493) with a corresponding change to the WIC grade from 4 to 8. There were no other changes to the WIC H Grades for these assets.

**Line H2.8** GW3 Treatment works increased from £163.636 million to £177.246 million. In addition to inflation, the primary change in valuation is due to the addition of Craighead WTW with a valuation of £9.7m

The confidence grade for the asset stock remains the same as for AR24, A2, as the data quality level has been sustained but not improved.

The gross asset valuation for WTW for AR25 has increased from £4.187 billion to £4.258 billion due to inflation.

The confidence grade for the asset valuation has remained at B4 for **Lines H2.3, H2.5 and H2.6** and C4 for **Lines H2.2, H2.4, H2.7 and H2.8** due to the data quality level has been sustained but not improved.

## 2.2.1 Lines H2.9-H2.10 Water Storage

The number of Water Storage Assets reported for AR25 is 1,285. This is a net decrease of 11 assets from AR24 as a result of the removal of 16 service reservoirs, offset by the addition of 5 service reservoirs. These are listed in Table 6 below.

**Table 6: Changes to reported Water Storage Assets due to additions and removals.**

| Plant No  | Site                               | AR25 Status | WIC H Grade | Band |
|-----------|------------------------------------|-------------|-------------|------|
| TWS003740 | DALWHINNIE CWT TWS 2020 NN635862   | Added       | 9           | 0    |
| TWS003745 | KERSE NEW DSR NS425131             | Added       | 9           | 2    |
| TWS003756 | STONEBRIDGE A CWT NF773321         | Added       | 9           | 1    |
| TWS003757 | STONEBRIDGE B CWT NF773321         | Added       | 9           | 1    |
| TWS003762 | CAMPS MTU DSR NS998223             | Added       | 9           | 0    |
| TWS002101 | REDCRAIGS DSR 1905 NT074926        | Removed     | 9           | 0    |
| TWS000182 | COCHNO NO.2 C.WT.                  | Removed     | 9           | 2    |
| TWS000186 | COCHNO DIR NS496738                | Removed     | 9           | 2    |
| TWS000425 | KERSE DSR NS425131                 | Removed     | 9           | 2    |
| TWS000452 | KILMUN DSR 2000 NS169821           | Removed     | 9           | 2    |
| TWS000750 | WHITEHOUSE DSR 1995 NR806601       | Removed     | 9           | 0    |
| TWS000921 | STONEBRIDGE CWT 1 1960 NF771321    | Removed     | 9           | 0    |
| TWS001333 | CLATT TILLYANGUS DSR 1966 NJ528251 | Removed     | 9           | 0    |
| TWS001612 | DALWHINNIE DSR 1965 NN633852       | Removed     | 9           | 0    |
| TWS001839 | FOULA SOUTH CWT 1981 HT969377      | Removed     | 9           | 0    |
| TWS003508 | STORNOWAY CWT 2 NB415374           | Removed     | 9           | 1    |
| TWS003517 | STORNOWAY CWT 1 NB416374           | Removed     | 9           | 1    |
| TWS002250 | RHENIGIDALE DSR 2005 NB227018      | Removed     | 9           | 0    |
| TWS003750 | CRAIGHEAD CWT 1975 TWS NJ497405    | Removed     | 9           | 0    |
| TWS000185 | COCHNO NO.5 TWS                    | Removed     | 9           | 2    |
| TWS000181 | COCHNO DSR NS495737                | Removed     | 9           | 3    |

There were no changes to the WIC H Grades for these assets. Data cleansing has continued, adding and rationalising tanks at unit level, resulting in updated valuations for sites which already exist. The following site change occurred due to improvements in data quality of the site design capacity:

- TWS003758 SILVERBURN DSR 2 NT204602 shifted from band 0 to band 2 due to an updated design capacity (previously infilled)

The confidence grade for the asset stock remains the same as for AR24, A2, as the data quality level has been sustained but not improved.

The gross asset valuation for Water Storage for AR25 increased from £2.765 billion to £2.866 billion due to inflation and ongoing cleansing work related to tanks.

The cleansing of tanks has involved the addition of tanks cells so it aligns with the data requirements of the Management Approach. This has lead to tanks being added to already operational sites.

The confidence grade for the asset valuation has remained at B4, as the data quality level has been sustained but not improved.

## 2.2.1 Lines H2.11-H2.13 Water Pumping Station

The number of Water Pumping Station assets reported for AR25 is 783. This is a net increase of two assets from AR24, as a result of the following changes:

- Intake (RWP): One (1) added, two (2) removed – net change of -1
- Booster (TWP): Six (6) added, three (3) removed – net change of 3

The affected sites are listed below in Table 7.

**Table 7: Changes to reported Water Pumping Stations due additions and removals.**

| Plant No  | Site                                 | AR25 Status | WIC H Grade | Band |
|-----------|--------------------------------------|-------------|-------------|------|
| RWP000262 | CRAIGHEAD RWP NJ496405               | Added       | 11          | 2    |
| TWP001404 | HARESHAWMUIR RD BOOSTER TWP NS490431 | Added       | 13          | 0    |
| TWP001409 | CASTLEVIEW AIRTH TWP NS895877        | Added       | 13          | 1    |
| TWP001419 | WEST LINTON DOLPHINTON TWP NT101463  | Added       | 13          | 1    |
| TWP001421 | ACHNAHANAIID BRAES TWP NG506379      | Added       | 13          | 1    |
| TWP001427 | ELLON HIGH TWP NJ944332              | Added       | 13          | 0    |
| TWP001432 | NEILSTON CRAIG TWP NS475562          | Added       | 13          | 1    |
| RWP000013 | COMPENSATION RWP NS247721            | Removed     | 11          | 3    |
| RWP000932 | MAUKINHILL RWP 2000 NS285743         | Removed     | 11          | 3    |
| TWP000003 | ALBERT PIER P.S.                     | Removed     | 13          | 3    |
| TWP000086 | DOUGLIEHILL TWP NS318739             | Removed     | 13          | 3    |
| TWP001102 | BUCKIEBURN TWP NS752851              | Removed     | 13          | 1    |

There were no changes to the WIC H Grades for these assets. The following site change occurred due to improvements in data quality of the site design capacity:

- RWP000931 DRYMEN ROAD RWP 2008 NS503937 moved from band 5 to band 0.
- TWP000506 AUCHTERHOUSE TWP1980 NO345386 moved from band 2 to band 1.

The confidence grade for the asset stock remains the same as for AR24, A3, as the data quality level has been sustained but not improved.

The asset valuation for Water Pumping Stations for AR25 increased from £414.615 million to £425.400 million primarily due to inflation.

The confidence grade for the asset valuation has remained at B4, as the data quality level has been sustained but not improved.

## **2.3 Data**

Ellipse is the data source for the inventory data. The valuations utilise the R2309 cost models. Confidence grades are detailed in Performance Trends - Section 2.2 where relevant.

Data has been improved in the inventory for tanks so that investment can be better managed through the Management Approach however this detail has not changed the confidence in the asset inventory or valuation as reported in the Annual Return as the data is at a higher level of the asset hierarchy.

There is no forecast data for Table H2.

### 3 Table H3: Water Infrastructure

#### 3.1 Overview

Table H3 provides information on the water infrastructure asset inventory. The gross asset valuation for AR25 has increased to £23.881 billion. This represents an increase of 2.2% which is due to inflation and a small increase in asset stock. There is little change from AR24 in the asset numbers and length reported in Table H3.

Table H3 has two subsections: water resources and water mains. The greatest change in the Modern Equivalent Asset Value (MEAV) within each subsection is:

- Dams and impounding reservoirs MEAV has increased by £48.3m (2.7%) due to inflation and a minor change to the asset stock.
- Mains other MEAV has increased by £2.7m (3.6%) due to inflation and an increase in asset length.

There is a difference in the way sites are reported between Section H and Section E. The sources in Table E4 are only included if they are direct sources, as per the definitions document, as the lines report the distribution input from each source in columns 110-140, therefore indirect sources are omitted. Section E also only reports assets that are operational (including emergency assets) during the year. Table H3 reports all assets that are operational, emergency, out of service or work in progress (as classified in the Works & Asset Management system (Ellipse), at the end of the year. As such this table will not include assets that were operational during the year but removed prior to year-end. Note that **Line H3.3** - raw water aqueducts are infrastructure assets that are sourced from the Scottish Water Geospatial Information system (GIS) and have no equivalent asset in Table E4.

As methods and cost models are unchanged from AR24r, the confidence grades remain the same. Each confidence grade is detailed in Performance Trends - Section 3.2.

## 3.2 Performance Trends

### H3.1 Water Resources – Dams & Impounding Reservoirs

The number of Dams & Impounding Reservoirs reported for AR25 is 199. This is the same as AR24. One asset has been mothballed and another became operational as shown in Table 9

**Table 9: Changes to reported Dams & Impounding Reservoirs due to additions and removals.**

| Plant No  | Site                | AR25 Status | WIC H Grade |
|-----------|---------------------|-------------|-------------|
| DIR000321 | CLUNAS DIR NH863460 | Added       | 14          |
| DIR000162 | LOGAN DIR NS745361  | Removed     | 14          |

The confidence grade for the asset stock remains the same as for AR24, C4, as the data quality level has been sustained but not improved.

The asset valuation for Dams & Impounding Reservoirs for AR25 increased, due to inflation, from £1.79 billion to £1.84 billion. Calculation of the MEAV for Dams and Impounding Reservoirs is based on extrapolation of historic costs from 2007 due to insufficient data being available to produce a cost model.

The confidence grade for the asset valuation remains the same as for AR24, C4, as the data quality has been sustained but not improved.

### H3.2 Water Resources – Raw Water Intakes

The number of Raw Water Intakes reported for AR25 is 264, which is one more than AR24. There are six added sites and five have been removed, as shown in Table 10.

**Table 10: Changes to reported Raw Water Intakes due additions and removals.**

| Plant No  | Site                             | AR25 Status | Design Capacity |
|-----------|----------------------------------|-------------|-----------------|
| RWI001078 | LOCH FADA BENBECULA RWI 2019     | Added       | 0.791           |
| RWI001081 | ALLT BLAIRNAMARROW RWI 2024      | Added       | 0.791           |
| RWI001082 | LOCH LANGABHAT RWI NB531545      | Added       | 0.791           |
| RWI001083 | LOCHINVAR LOCH RWI 1969 NX659852 | Added       | 0.791           |
| RWI001079 | LOCH REE RWI NX105698            | Added       | 0.791           |
| RWI001080 | GARWALD WATER RWI NT231002       | Added       | 0.791           |
| RWI000628 | TOUCH HILLS RWI NS737913         | Removed     | 0.791           |
| RWI000107 | GRYFFE TUNNEL RWI NS282746       | Removed     | 0.1             |
| RWI000693 | LOCH FADA BENBECULA RWI NF791535 | Removed     | 0.791           |
| RWI000712 | BADENTINAN RWI NJ281568          | Removed     | 0.791           |
| RWI000562 | BOARDHOUSE RWI 1955 HY270255     | Removed     | 9.49            |

The confidence grade for the asset stock remains the same as for AR24, C5, as the data quality has been sustained but not improved.

The asset valuation for Raw Water Intakes for AR25 increased, due to inflation, from £28.65 million to £29.21 million. Calculation of the MEAV for Raw Water Intakes is calculated using a model based on extrapolation of historic costs from 2007 due to insufficient project data costs being available.

The confidence grade for the asset valuation remains the same as for AR24, C5, as the data quality has been sustained but not improved.

### H3.3 Water Resources – Raw Water Aqueducts

The total length of Raw Water Aqueducts in this reporting year is 1,662.33km. This is a decrease of 16.5 km from AR24. The reduction is mainly due to the abandonment of raw mains at the now demolished Purdomstone Reservoir near Lockerbie:

|             |           |                                                                        |
|-------------|-----------|------------------------------------------------------------------------|
| 6.9         | km        | 7" Cast iron raw main from Purdomstone Reservoir now Abandoned in AR25 |
| 4.9         | km        | 6" Cast iron raw main from Purdomstone Reservoir now Abandoned in AR25 |
| 4.8         | Km        | 6" Cast iron raw main from Purdomstone Reservoir now Abandoned in AR25 |
| <b>16.6</b> | <b>Km</b> | <b>Total</b>                                                           |

The confidence grade for the asset stock remains the same as for AR24, B2, as the data quality level has been sustained but not improved.

The asset valuation for Raw Water Aqueducts has increased from £2.65 billion to £2.68 billion. The valuation has mainly increased due to inflation offset by the reduction in total asset length.

Approximately 8.6% (142.6km) of the total length of Raw Water Aqueducts required the diameter to be estimated based on infill methods. The pipe diameter is required to produce an asset valuation. The confidence grade for the asset valuation remains the same as for AR24, B2, as the data quality level has been sustained but not improved

### H3.4 Water Mains – Mains Potable

The total length of Potable Mains in this reporting year is 49,384.94km. This is an increase of 160.5km from AR24.

The confidence grade for the asset stock remains the same as for AR24, A2, as the data quality level has been sustained but not improved.

The asset valuation for this reporting year has increased from £15.813 billion to £16.170 billion. The valuation has increased due to inflation and a small increase in the total length of mains.

The diameter of a main is required to produce an asset valuation. Approximately 0.3% (149.6km) of the total length of Potable Mains required the diameter to be estimated using infill methods.

The accuracy of the confidence grade for the asset valuation remains at B3, as in AR24, as the data quality level has been sustained but not improved.

### **H3.5 Mains Other**

The total length of Mains Other in this reporting year is 147.5km. This is an increase of 1.3km from AR24, which is an 0.9% increase in length.

The confidence grade for the asset stock remains the same as for AR24, A3, as the data quality level has been sustained but not improved.

The asset valuation for this reporting year has increased from £74.7 million to £77.4 million. This is due to the increase in inflation and asset length.

The accuracy of the confidence grade for the asset valuation remains at B3, as in AR24, as the data quality has been sustained but not improved.

### **H3.6 Communication Pipes (Lead)**

The total number of Communication Pipes (Lead) in this reporting year is 47,154, equivalent to 2.5% of total communication pipes. This is a decrease of 1,521 from AR24 due to both the planned and opportunistic removal of lead pipes from our network.

Scottish Water bases its understanding of the number of lead communication pipes in the network on a statistical survey which estimated the number at approximately 4% of total number of communication pipes in 2010. Each subsequent year this estimate is reduced based on the activity on our network to remove lead communication pipes. We aim to refine the estimate by using a risk assessment approach to target water quality sampling in areas likely to have lead communication pipes. We are also undertaking pilot projects for the replacement of lead communication and supply pipes in Tighnabruaich, Kyle of Lochalsh and a Dynamic Mechanical Analysis (DMA) in Edinburgh which will help confirm or refine our estimates.

The confidence grade for the asset stock remains the same as for AR24, B4, as the data quality has been sustained but not improved.

The asset valuation for this reporting year has decreased from £74.83 million to £73.91 million due to the reduction in the number of assets offset by the increase in inflation.

The confidence grade for the asset valuation has remained the same as for AR24, B4, as the data quality has been sustained but not improved.

### **H3.7 Communication Pipes (Other)**

The total number of Communication Pipes (Other) in this reporting year is 1,818,362. This is an increase of 14,064 from AR24 due to new housing and commercial developments being connected to our network.

The confidence grade for the asset stock remains the same as for AR24, B4, as the data quality level has been sustained but not improved.

The asset valuation for this reporting year has increased from £2.774 billion to £2.850 billion. The valuation has increased due to the increase in inflation and the increase in the number of pipes.

The confidence grade for the asset valuation has remained the same as for AR24, B4, as the data quality level has been sustained but not improved.

### **H3.8 Water Meters**

The total number of Water Meters in this reporting year is 137,970. This is a slight decrease of 104 (0.1%) from AR24.

The confidence grade for the asset stock remains the same as for AR24, A3, as the data quality level has been sustained but not improved.

The asset valuation for this reporting year has increased from £150.76 million to £153.51 million. The valuation has increased due to the increase in inflation offset by the reduction in the number of assets.

The confidence grade for the asset valuation has remained the same as for AR24, B3, as the data quality has been sustained but not improved.

### **3.3 Data**

Data sources and confidence grades are detailed in Performance Trends - Section 3.2 where relevant.

There have been no notable data improvement programmes in AR25.

There are no forecast data for Table H3.

#### **4 Table H4: Wastewater Infrastructure**

## 4.1 Overview

Table H4 provides information on the wastewater infrastructure asset inventory. The gross asset valuation for AR25 has increased to £82.531 billion. This represents an increase of 3.2% caused primarily by the increase in inflation.

Table H4 has four subsections: sewers, sewer structures, sea outfalls and sustainable drainage systems. The greatest change within each subsection is:

- Sewers has a 2.9% increase in gross MEAV reported in **Line H4.1** Sewers. This increase is due to inflation and a slight increase in sewer length.
- Sewer structures have a 64.8% increase in gross MEAV reported in **Line H4.4** Other sewer structures. This increase is due to a new cost model using out-turn costs, inflation and a 34.6% increase in the asset stock.
- Sea outfalls have a 3.3% increase in gross MEAV reported in **Line H4.5** Short Sea outfalls. This increase is due to inflation and changes to the asset stock.
- Sustainable urban drainage system assets have a 26.4% increase in number of assets reported. This increase is due to new assets being installed throughout the year. Scottish Water does not currently have an appropriate cost model to calculate the MEAV for sustainable urban drainage systems so gross MEAV is excluded from this table submission. Note net MEAV would not be applied to this asset type because infrastructure assets are assumed not to depreciate.

As methods and cost models are largely unchanged from AR24, the confidence grades remain the same for assets and all MEAV except for Line H4.4 which has moved from D5 to B4 due to the inclusion of a new cost model. Each confidence grade is detailed in Performance Trends - Section 4.2.

## **4.2 Performance Trends**

### **H4.1 Sewers**

The total length of Sewers in this reporting year is 55,200.1km. This is an increase of 510.5km from AR24. The increase is due to new sewers and new sewer laterals. The reported length of laterals is 20,255.6km, an increase of 227.6km since AR24. The reported lateral length comprises 3,622.2km derived directly from GIS and 16,633.4km estimated from the difference in connection numbers times an average length of lateral.

The confidence grade for the asset stock remains the same as for AR24, B2, as the data quality level has been sustained but not improved.

The asset valuation for this reporting year has increased from £77.128 billion to £79.370 billion. The valuation has increased due to the length of new sewers commissioned and the increase in inflation.

The confidence grade for the asset valuation has remained the same as for AR24, B4, as the data quality level has been sustained but not improved.

### **H4.2 Sewers – Sewage and Sludge Pumping Mains**

The total length of Sewage and Sludge Pumping Mains in this reporting year is 1,469.0km. This is an increase of 26.5km from AR24.

The confidence grade for asset stock remains the same as for AR24 at A4, as the data quality level has been sustained but not improved.

The asset valuation for this reporting year has increased from £718.483 million to £736.505 million. The valuation has increased due to the length of the mains commissioned and the increase in inflation.

The confidence grade for the asset valuation has remained the same as for AR24, B3, as the data quality level has been sustained but not improved.

### **H4.3 Combined sewer and emergency overflows**

The number of combined sewer and emergency overflows in the report year is 4,226, an increase of 143 from AR24. This increase in AR25 is mainly a result of the ongoing data cleansing and identification work, which has added several overflows located at wastewater treatment works that were previously not recorded individually in Scottish Water's Ellipse system.

The confidence grade for asset stock remains the same as for AR24 at A3, as the data quality level has been sustained but not improved.

The asset valuation for this reporting year increased from £1,112.2 million to £1,194.2 million. The valuation has increased due to the increase in the number being reported and the increase in inflation.

The confidence grade for the asset valuation has remained the same as for AR24, B4, as the data quality level has been sustained but not improved.

#### **H4.4 Other Sewer Structures**

The number of Other Sewer Structures is 576, which is an increase of 148 from AR24. This figure has been taken from the Works & Asset Management system (Ellipse) and reflects the increase in the number of sewer storage tanks being built. There has been a reduction in the number of structures in Band 1 and an increase in Band 2 due to the establishment of the volume used where an actual value is unknown. The infill design capacity (vol m<sup>3</sup>) was changed from 30 to 145 based on the median of the known values held for storage tanks. The confidence grade for the asset stock remains at B3.

The asset valuation for this reporting year increased from £353.502 million to £579.004 million. The valuation has increased due to a new cost model, the increase in inflation and in asset stock. Scottish Water developed an improved cost model to calculate MEAV based on the asset information held in the Works & Asset Management system (Ellipse) and using out-turn costs.

The confidence grade for the asset valuation has improved from D5 to B4, as the cost model is partly based on project costs from Gate 110, at which stage a project is reaching delivery, and therefore more representative of the final cost.

#### **4.2.1 Lines H4.5 and H4.6 - Sea Outfalls: Short and Long Sea Outfalls**

Short Sea Outfall categories have decreased by 7 to 1,181 in AR25 and long sea outfall numbers have remained at 55.

The confidence grade for asset stock remains the same as for AR24, B2, as the data quality level has been sustained but not improved.

The asset valuation for both outfall types has increased from £635.177 million to £651.515 million due to inflation and changes to the asset stock.

The confidence grade for the asset valuation has remained the same as for AR24, B4, as the data quality level has been sustained but not improved.

#### **4.2.2 Lines H4.7-H4.11 - Sustainable Drainage Systems (SUDS)**

The total number of Sustainable Urban Drainage Systems in AR25 is 598 which is an increase of 125 from AR24. This increase is solely due to new assets being installed.

The volume (m<sup>3</sup>) data was sourced from the Ellipse Works & Asset Management system for SUDS sites to designate size bands to the asset stock. 30% of the 598 reported SUDS sites were populated with capacities from this source and the remainder were designated with the median of known volumes, 700m<sup>3</sup>, which put them into Size Band 2.

The confidence grade for asset stock remains at A3 to reflect the number of volumes infilled as there is uncertainty in the correct banding of SUDS rather than the total number.

Scottish Water does not currently have an appropriate cost model to assess MEAV for SUDS assets therefore zero MEAV figures are reported.

### **4.3 Data**

Data sources and confidence grades are detailed in Performance Trends - Section 4.2 where relevant.

Improvements have been made to the cost model for **Line H4.4**.

There were no notable data improvement programmes in AR25. There are no forecast data for Table H4.

## **5 Table H5: Wastewater Non-Infrastructure**

## 5.1 Overview

Table H5 provides information on the wastewater non-infrastructure asset inventory. The gross asset valuation for AR25 has increased to £8.446 billion. This represents an increase of £159m equivalent to 1.92%, of which +1.95% is the direct result of inflation and -0.03% is the direct result of changes to the inventory.

Table H5 has three subsections: sewage pumping stations, sewage treatment works and sludge treatment facilities by disposal type. The greatest change in the MEAV within each subsection is:

- Sewage pumping stations have a 1.26% increase in Gross MEAV for **Line H5.1** Sewage pumping stations (in-line). This increase is due to inflation and offset by changes in the inventory.
- Sewage treatment works have a 2.88% increase in Gross MEAV for **Line H5.3** - cess & septic tanks. This increase is due to inflation and changes in the inventory.
- Sludge treatment facilities by disposal type has a 1.97% increase in Gross MEAV for **Line H5.8** Sludge treatment – liquid disposal. Both lines have increased due to inflation.

As described in Table H1, the number of assets reported in the Section H differ to those in the Section E due to the inclusion of assets which have been operational during the year for Section E and the end of year only status of assets included in Section H.

The confidence grades for MEAV have remained the same as AR24, given the data quality level has been sustained but not improved.

## 5.2 Performance Trends

### 5.2.1 Lines H5.1 and H5.2 - Sewage Pumping Stations

The total number of SPSs (Sewage Pumping Stations) in this reporting year is 2,348. This is an increase of 35 from AR24. The affected sites are listed in Table 11 below.

**Table 11: Changes to reported Sewage pumping stations due additions and removals.**

| Plant No  | Site                                        | AR25 Status | WIC<br>Grade | H | Band |
|-----------|---------------------------------------------|-------------|--------------|---|------|
| SPS000421 | SPRINGHILL FARM 2 WWPS NS673647             | Added       | 29           | 1 |      |
| SPS003053 | SMITHSTONE WWPS NS723750.                   | Added       | 29           | 1 |      |
| SPS003638 | MARYKIRK GRAMPIAN VIEW WWPS<br>NO684658     | Added       | 29           | 1 |      |
| SPS003682 | BRIDGE OF EARN OUDENARDE WWPS<br>NO138179   | Added       | 29           | 2 |      |
| SPS003766 | NERSTON VILLAGE WWPS NS645569.              | Added       | 29           | 1 |      |
| SPS003842 | INVERURIE URYSIDE ROAD WWPS NJ779223        | Added       | 29           | 1 |      |
| SPS003859 | LEVEN FOREST PATH WWPS NO379021             | Added       | 29           | 1 |      |
| SPS004085 | CALDERWOOD WWPS 2013 NT089687               | Added       | 29           | 3 |      |
| SPS004094 | ALYTH SPRINGBAN WWPS 2012 NO252484          | Added       | 29           | 1 |      |
| SPS004104 | STANDHILL FARM WWPS 2013 NS967674           | Added       | 29           | 2 |      |
| SPS004108 | LOCHANS WWTW WWPS 2013 NX068565             | Added       | 30           | 1 |      |
| SPS004120 | CONDORRAT MAIN RD WWPS NS724721             | Added       | 29           | 1 |      |
| SPS004135 | MALLACE AVENUE WWPS 2004 NS948686           | Added       | 29           | 1 |      |
| SPS004144 | LINWOOD HILLMAN ROAD WWPS NS454636          | Added       | 29           | 1 |      |
| SPS004200 | ABERDEEN BLAIRS WWPS 2014 NJ881013          | Added       | 29           | 1 |      |
| SPS004213 | WALLYFORD WWPS 2015 NT369724                | Added       | 29           | 1 |      |
| SPS004333 | NEWMILNS MILL ROAD WWPS 2016                | Added       | 29           | 1 |      |
| SPS004351 | WHITEFIELD TER WWPS 2017 NS623781           | Added       | 29           | 1 |      |
| SPS004381 | WALLYFORD SALTERS RD WWPS 2017<br>NT365715  | Added       | 29           | 2 |      |
| SPS004384 | EAST OVERTON FARM WWPS 1 2017<br>NS711450   | Added       | 29           | 1 |      |
| SPS004385 | EAST OVERTON FARM WWPS 2 2017<br>NS710457   | Added       | 29           | 1 |      |
| SPS004392 | CAMBUSLANG BUTTERCUP CRES WWPS              | Added       | 29           | 2 |      |
| SPS004422 | ORMISTON LIMEYLANDS ROAD WWPS<br>NT406695   | Added       | 29           | 1 |      |
| SPS004437 | INVERNESS MERKINCH PL WWPS 2020<br>NH657460 | Added       | 29           | 1 |      |
| SPS004438 | ABERLADY MEADOWSIDE WWPS 2018<br>NT460794   | Added       | 29           | 1 |      |
| SPS004467 | LIVINGSTON CAWBURN RD WWPS 2<br>NT066697    | Added       | 29           | 1 |      |
| SPS004481 | GLASGOW GREENLEES RD WWPS 2019<br>NS637590  | Added       | 29           | 1 |      |

| Plant No  | Site                                     | AR25 Status | WIC Grade | Band |
|-----------|------------------------------------------|-------------|-----------|------|
| SPS004514 | BUSBY CARTSIDE DRIVE WWPS 2020 NS580567  | Added       | 29        | 1    |
| SPS004526 | CARRBRIDGE CRANNICH PARK WWPS 2 2019     | Added       | 29        | 1    |
| SPS004527 | LENZIE BLACKLAND PLACE WWPS NS663714     | Added       | 29        | 1    |
| SPS004534 | KIRKCALDY KINGDOM PRK WWPS 2019 NT298944 | Added       | 29        | 1    |
| SPS004535 | MILTON SHIELDAIG ROAD SPS NS589699       | Added       | 29        | 1    |
| SPS004561 | GARLIESTON HARBOUR WWPS NX480462         | Added       | 29        | 1    |
| SPS004610 | GLASGOW BURNFIELD RD WWPS NS553656       | Added       | 29        | 1    |
| SPS004619 | WINCHBURGH LOWER TRANSFER WWPS NT091744  | Added       | 30        | 3    |
| SPS004620 | WINCHBURGH UPPER TRANSFER WWPS NT091746  | Added       | 30        | 3    |
| SPS004630 | LINWOOD PHOENIX PARK WWPS NS457643       | Added       | 29        | 1    |
| SPS004633 | ABERNETHY NEWBURGH RD WWPS NO193167      | Added       | 29        | 1    |
| SPS003026 | WINCHBURGH WWPS NT092744                 | Removed     | 30        | 2    |
| SPS004016 | LONGMAN STORM WWPS 1 NH665469            | Removed     | 29        | 3    |
| SPS004017 | LONGMAN STORM WWPS 2 NH665469            | Removed     | 29        | 3    |

The following site change occurred due to improvements in data quality of the site design capacity:

- SPS000907 PERSLEY SLUDGE WWPS NJ908097 moved from band 1 to band 2.
- SPS003715 SPRINGFIELD QUAY WWPS 2007 NS579647 moved from band 1 to band 3.
- SPS003919 THE SIDINGS WWPS NS682649 moved from band 1 to band 2
- SPS004454 WHITEHILLS LOW SHORE WWPS 2003 NJ654654 moved from band 1 to band 2.

The confidence grade for asset stock remains the same as for AR24, A3, as the data quality level has been sustained but not improved.

The gross asset valuation for this reporting year has increased from £1.766 billion to £1.787 billion. The valuation has increased primarily due to inflation and minor changes in the inventory. In addition, an adjustment was made to the methodology to ensure kiosk dimensions were converted for use in the cost models.

The confidence grade for the asset valuation has remained at B4, as the data quality level has been sustained but not improved.

## 5.2.2 Lines H5.3 to H5.7 - Sewage Treatment Works (STWs)

The total number of STWs (Wastewater Treatment Works) in this reporting year is 1,840. This is a decrease of 1 from AR24. The affected sites are listed in Table 12 below.

**Table 12: Changes to reported Sewage Treatment Works due additions and removals.**

| Plant No  | Site                            | AR23 Status | WIC H Grade | Band |
|-----------|---------------------------------|-------------|-------------|------|
| STW003831 | WINCHBURGH WWTW NT091745        | Added       | 34          | 0    |
| STW003834 | NEWMILL MEADOWS RATHEN SEP WWTW | Added       | 32          | 0    |
| STW002257 | WINCHBURGH WWTW NT092745        | Removed     | 35          | 4    |
| STW000330 | GLENGAP SEP NX652594            | Removed     | 31          | 0    |
| STW003838 | NETHERMAINS SEP WWTW NS310421   | Removed     | 31          | 0    |

The following site change occurred due to improvements in data quality of the site design capacity:

- STW003731 DERVAIG WWTW 2008 NM435515 moved from band 2 to band 1

The confidence grade for asset stock remains the same as for AR24, A2, as the data quality level has been sustained but not improved.

The gross asset valuation for this reporting year has increased from £6.091 billion to £6.222 billion. The valuation has increased primarily due to inflation and minor changes to the inventory.

The confidence grade for the asset valuation has remained the same at B4, as the data quality level has been sustained but not improved.

### 5.2.3 Lines H5.8 and H5.9 Sludge Treatment Facilities

The total number of sludge treatment facilities in AR25 is 22. This has been no change to the number of reported sites from AR24 therefore there is nothing to report in Table 13.

**Table 13: Changes to reported Sludge Treatment Facilities due additions and removals.**

| Plant No | Site | AR25 Status | WIC H Grade | Band |
|----------|------|-------------|-------------|------|
|          |      |             |             |      |

The confidence grade for the asset stock remains the same as for AR24, A2, as the data quality level has been sustained but not improved.

The gross asset valuation for AR25 has increased from £430.209 million to £438.619 million. The valuation has increased due to inflation.

The confidence grade for the asset valuation has remained at B4, as the data quality level has been sustained but not improved.

### **5.3 Data**

Data sources and confidence grades are detailed in Performance Trends - Section 5.2 where relevant.

There are no forecast data for Table H5.

## 6 Table H6: Support Services

### 6.1 Overview

Table H6 provides information on the support services asset inventory. The gross asset valuation for AR25 has decreased to £193.156 million. This represents a decrease of 1.1% which is mainly the result of decreases in the plant asset base. Inflation is not applied to these asset types.

The greatest change is shown in **Line H6.4**, with a decrease in the number of plant assets, offset by an increase in the number of vehicle assets, producing a 3.3% decrease in the gross MEAV to £76.958 million.

### 6.2 Performance Trends

#### 6.2.1 Lines H6.1 and H6.2 - Offices & laboratories, Depots & Workshops

There have been no changes to offices, laboratories, depots and workshops for AR25 therefore Table 14 is blank.

Table 14: Added / Removed Offices H6.1

| Office | Area (m <sup>2</sup> ) | Added / Removed |
|--------|------------------------|-----------------|
|        |                        |                 |

The confidence grade of **Line H6.1** remains at B2 for AR24, and the confidence grade of **Line H6.2** remains at B3, as the data quality level has been sustained but not improved.

The asset valuation for the reporting year has remained the same as for AR24 at £58.381 million for Offices & Laboratories. For Depots & Workshops it has remained the same at £13.564 million.

The confidence grade for the asset valuation remains the same as for AR24, C4, as the data quality level has been sustained but not improved.

#### **Line H6.4 Vehicle & Plant**

The value of Vehicles (band 1) and Plant (band 2) reported in Line H6.4 has decreased from £79.560 million to £76.958 million, due to a reduction in the number of plant assets despite an increase in the number of vehicles.

The confidence grade remains the same as for AR24, B3, as the data quality level has been sustained but not improved.

### Line H6.5 Telemetry Systems

The number of Telemetry sites in AR25 is 5,184, which is an increase of 84 from AR24. The gross MEAV has increased to £23.795 million as a result of the increase in numbers. The net MEAV has increased from £2.957 million to £4.281 million. In the Ellipse asset inventory system, install dates have been added to previously reported sites that did not have dates and new telemetry has been installed during the year (76 telemetry sites with install dates between AR24 and AR25). As many of the telemetry installations were in recent years, the net value is calculated is based on a high percentage of the gross value. If there is no date the net value is assumed to be 20% of the gross value. The new install date information therefore resulted in the increase in the net MEAV as a more accurate value could be calculated

The confidence grade for the asset stock remains the same as for AR24, A2, as the data quality level has been sustained but not improved. The confidence grade for the asset valuation remains the same as for AR24, B3, as the data quality level has been sustained but not improved.

### Line H6.6 Information Systems

Laptops (band 1) have increased from 4,383 to 4,514. Servers (band 3) remain unchanged at 249.

The confidence grade for the asset stock remains the same as for AR24, A2, as the data quality level has been sustained but not improved.

The asset valuation for this reporting year has slightly increased from £4.706 million to £4.791 million.

The confidence grade for the asset valuation remains the same as for AR24, B2, as the data quality level has been sustained but not improved.

### Line H6.7 Other Non-Operational Assets

There have been no changes to the total number of Other Non- operational assets, 35, therefore Table 15 is blank.

**Table 15: Added / Removed Other Non-operational Assets H6.7**

| Asset Name | Building Type | Added / Remove |
|------------|---------------|----------------|
|            |               |                |

The confidence grade for the asset stock has remained the same as for AR24, B3, as the data quality level has been sustained but not improved.

The confidence grade for the asset valuation has remained the same as for AR24, C4, as the data quality level has been sustained but not improved.

## 6.3 Data

Data sources and confidence grades are detailed in the commentary where relevant.

There are no forecast data for Table H6.