

Population, volumes and loads (Water) Table: **A2** Winter 000 A2.1 2dp Population supplied during the reporting year in SW's area of supply. Include Data Definition: population served by bulk supplies received. The population should be obtained from the most recent ONS or local authority estimates, or SW's update of these estimates. **Processing** Input field Rule: Field Type: Input **Previous** Ofwat 07 Ref: WICS 06 Ref: References: 000 A2.2 Summer 2dp Population (winter) supplied during the reporting year in SW's area of supply Data Definition: plus the holiday and tourist population defined below. The holiday and tourist population can be obtained from the tourist board estimates of the number of bed spaces available for non-residents. Except where there is firm evidence to the contrary, SW should use a population based on a 2/3rds occupancy rate for the peak summer month. Note that the resultant figure will be additional to the resident population. Exclude any allowance for daily commuters. **Processing** Input field Rule: Field Type: Input **Previous** Ofwat 07 Ref: WICS 06 Ref: A1.72 References:

**Base Information** 

Section: A

| A2.3                    | Population of unmeasured household properties  | 000           | 2dp       |
|-------------------------|--|---------------|-----------|
| Data Definition:        | Population (winter) supplied during the report year occupying unmeasured household properties. |               |           |
| Processing<br>Rule:     | Input field  |               |           |
| Field Type:             | Input  |               |           |
| Previous<br>References: | Ofwat 07 Ref: T7, L31 WICS 06  | Ref:          | A1.73     |
|                         |  |               |           |
| A2.4                    | Population of measured household properties  | 000           | 2dp       |
| Data Definition:        | Population (winter) supplied during the report year o household properties.                    | ccupying meas | sure      |
| Processing<br>Rule:     | Input field  |               |           |
| Field Type:             | Input  |               |           |
| Previous<br>References: | Ofwat 07 Ref: T7, L32 WICS 06  | Ref:          | A1.74     |
|                         |  |               |           |
| A2.5                    | Household population connected to the water service  | 000           | 2dp       |
| Data Definition:        | Population supplied during the report year occupying   | household pr  | operties. |
| Processing<br>Rule:     | The sum of lines A2.3 and A2.4   |               |           |
| Field Type:             | Calculated   |               |           |
| Previous<br>References: | Ofwat 07 Ref: - WICS 06  | Ref:          | A1.75     |

| A2.6                    | Water treated at own works for own customers   | MI/d                            | 3dp                         |
|-------------------------|--|---------------------------------|-----------------------------|
| Data Definition:        | The volume of water treated by SW at its own water treatment works for its own customers. Excludes treatment of bulk supply imports and treated bulk supply exports.   |                                 |                             |
| Processing<br>Rule:     | Input field  |                                 |                             |
| Field Type:             | Input  |                                 |                             |
| Previous<br>References: | Ofwat 07 Ref: T10, L33 WICS 06   | Ref:                            | -                           |
| A2.7                    | Distribution input treated water   | MI/d                            | 3dp                         |
| Data Definition:        | Distribution input is the average amount of potable we distribution system and supplied to customers within expected to be equal to metered distribution input. Supplied to accompanying commentary the calculation used to detail the commentary the calculation used the calcula | SW's area of s<br>W should expl | supply. It is<br>ain in the |
| Processing<br>Rule:     | Input field  |                                 |                             |
| Field Type:             | Input  |                                 |                             |
| Previous<br>References: | Ofwat 07 Ref: T10, L30 WICS 06   | Ref:                            | A2.38                       |
|                         |  |                                 |                             |
| A2.8                    | Bulk supply imports  | MI/d                            | 3dp                         |
| Data Definition:        | Volume of water imported from outside Scottish Wat supplies. Include treated and untreated.  | er's service ar                 | ea in bulk                  |
| Processing<br>Rule:     | Input field  |                                 |                             |
| Field Type:             | Input  |                                 |                             |
| Previous<br>References: | Ofwat 07 Ref: T10, L32 WICS 06   | Ref:                            | A2.41                       |

| A2.9                    | Bulk supply exports   | MI/d | 3dp           |
|-------------------------|---|------|---------------|
|                         |   |      |               |
| Data Definition:        | Volume of water exported outside Scottish Water's service area in bulk supplies. Include treated and untreated. |      |               |
| Processing<br>Rule:     | Input field   |      |               |
| Field Type:             | Input   |      |               |
| Previous                | Ofwat 07 Ref: T10, L33 WICS 06  | Ref: | A2.42         |
| References:             |   |      |               |
|                         |   |      |               |
| A2.10                   | Net distribution input - treated water (water put into supply)  | MI/d | 3dp           |
| Data Definition:        | The amount of potable water put into supply having a through imports and reductions arising from exports.       |      | any additions |
| Processing<br>Rule:     | The sum of A2.7 and A2.8 less A2.9  |      |               |
| Field Type:             | Calculated  |      |               |
| Previous<br>References: | Ofwat 07 Ref: - WICS 06   | Ref: | New line      |

| A2.11 | Unmeasured household volume of water delivered (including losses) | MI/d | 3dp |
|-------|---|------|-----|
|-------|---|------|-----|

**Data Definition:** 

Estimated average volume of potable water delivered to unmeasured household properties and charged at standard rates. This is to include supply pipe leakage. If SW's estimate of the per capita consumption of unmeasured household properties excludes supply pipe leakage, an estimate of this leakage must be made and included in this line for comparative purposes.

This estimate should include supply pipe leakage from void and exempt properties. The method of estimation must be set out and supported in the commentaries. Exclude miscellaneous use, this is reported in lines A2.15 to A2.17 inclusive.

Processing

Input field

Rule:

Field Type: Input

Previous References: Ofwat 07 Ref:

T10, L4

WICS 06 Ref:

A2.1

| A2.12 | Measured household volume of water delivered (including losses) | MI/d | 3dp |
|-------|---|------|-----|
|       |   |      |     |

Data Definition:

Average volume of potable water delivered to measured household properties. This is to include supply pipe leakage and meter under-registration. SW should clearly report any amendments to actual metered consumption records to provide the requested water delivered information.

Amendments may be necessary to take account of billing periods different from the report year. Meter under-registration has also been identified as a problem which SW may need to take into account, and adjust records if necessary.

If records are adjusted this should be clearly reported in the commentaries along with evidence to support the need for any changes. Where meter underregistration is a problem SW should specify the class of meters involved and the percentage error assumed.

Any meter under-registration included in the total should also be reported in lines A2.32 and A2.33. Exclude miscellaneous use, this is reported in lines A2.15 to A2.17 inclusive.

Processing

Input field

Rule:

Field Type: Input

Previous References: Ofwat 07 Ref:

T10, L1

WICS 06 Ref:

A2.5

| A2.13                   | Unmeasured non-household volume of water delivered (including losses)  | MI/d           | 3dp            |
|-------------------------|--|----------------|----------------|
| Data Definition:        | Estimated volume of potable water delivered to unmeasured non-household properties. This is to include supply pipe leakage. If SW's estimate of the per capita consumption of unmeasured non-household properties excludes supply pipe leakage, an estimate of this leakage must be made and included in this line for comparative purposes.  The method of estimation must be set out and supported in the commentaries. Exclude miscellaneous use, this is reported in lines A2.15 to A2.17 inclusive. |                |                |
| Processing<br>Rule:     | Input field  |                |                |
| Field Type:             | Input  |                |                |
| Previous<br>References: | Ofwat 07 Ref: T10, L5 WICS 06  | Ref:           | -              |
|                         |  |                |                |
| A2.14                   | Measured non-household volume of water delivered (including losses)  | MI/d           | 3dp            |
| Data Definition:        | Volume of potable water delivered to measured non-household properties. This is to include supply pipe leakage and meter under-registration. SW should clearly report any amendments to actual metered consumption records to provide the requested water delivered information.   |                |                |
|                         | Amendments may be necessary to take account of billing periods different from the report year. Meter under-registration has also been identified as a problem that SW may need to take into account, and adjust records if necessary.  |                |                |
|                         | If records are adjusted this should be clearly reported with evidence to support the need for any changes.   | l in the comme | entaries along |
|                         | Where meter- under-registration is a problem SW should specify the class of meters involved and the percentage error assumed. Any meter under-registration included in the total should also be reported in line A2.45. Exclude miscellaneous use, this is reported in lines A2.15 to A2.33 inclusive.   |                |                |
| Processing<br>Rule:     | Input field  |                |                |
| Field Type:             | Input  |                |                |

Ofwat 07 Ref:

Previous

References:

WICS 06 Ref:

T10, L2

| A2.15                   | Water taken unbilled - legally   | MI/d   | 3dp   |  |
|-------------------------|--|--|-------|--|
|                         |  |  |       |  |
| Data Definition:        | Water taken legally unbilled; this should include all water supplied to customers for legitimate purposes which is unbilled. None of this should have been included in the breakdown of water delivered to billed customers.             |  |       |  |
|                         | . It can include public supplies for which no charge is made (some sewer flushing etc), uncharged church supplies, fire training and fire-fighting supplies where these are not charged irrespective of whether or not they are metered. |  |       |  |
|                         | , <del>-</del>   | SW should comment on any significant volumes. SW should explain in the accompanying commentary the calculation used to derive this figure. |       |  |
| Processing<br>Rule:     | Input field  |  |       |  |
| Field Type:             | Input  |  |       |  |
| Previous<br>References: | Ofwat 07 Ref: T10, L21 WICS 06   | Ref:   | A2.34 |  |
|                         |  |  |       |  |
| A2.16                   | Water taken unbilled - illegally   | MI/d   | 3dp   |  |
| Data Definition:        | Water taken illegally unbilled. Illegally taken water should only be reported here and included in the water delivered total if it is based on actual occurrences using sound and auditable identification and recording procedures.     |  |       |  |
|                         | These procedures must be set out in the commentaries. If it is not based on these it should be classified as distribution losses. SW should explain in the accompanying commentary the calculation used to derive this figure.           |  |       |  |
| Processing<br>Rule:     | Input field  |  |       |  |
| Field Type:             | Input  |  |       |  |

Previous

References:

T10, L22

Ofwat 07 Ref:

WICS 06 Ref:

A2.35

| -                       |  |                | •            |  |
|-------------------------|--|----------------|--------------|--|
| A2.17                   | Water taken unbilled - Distribution System<br>Operational Use (DSOU)   | MI/d           | 3dp          |  |
| Data Definition:        | Distribution system operational use; water knowingly used by SW to meet its statutory obligations, particularly those relating to water quality.  This includes, amongst other things, service reservoir cleaning, mains flushing/air scouring, swabbing, draining networks, discharges to control pH or other chemical parameters. SW should explain in the accompanying commentary the calculation used to derive this figure. |                |              |  |
| Processing<br>Rule:     | Input field  |                |              |  |
| Field Type:             | Input  |                |              |  |
| Previous<br>References: | Ofwat 07 Ref: T10, L20 WICS 06   | Ref:           | A2.33        |  |
|                         |  |                |              |  |
| A2.18                   | Net consumption (including supply pipe losses)   | MI/d           | 3dp          |  |
| Data Definition:        | The amount of potable water delivered to customers customer supply pipe leakage.   | , unbilled and | lost through |  |
| Processing<br>Rule:     | The sum of lines A2.11 to A2.17 inclusive  |                |              |  |
| Field Type:             | Calculated   |                |              |  |
| Previous<br>References: | Ofwat 07 Ref: - WICS 06  | Ref:           | New line     |  |
|                         |  |                |              |  |
| A2.19                   | Distribution losses (including trunk mains and service reservoirs)   | MI/d           | 3dp          |  |
| Data Definition:        | Distribution losses represent the losses on SW's potable water distribution system, i.e. Excluding supply pipe leakage, which is the customer's responsibility.  |                |              |  |
| Processing<br>Rule:     | A2.10 minus A2.18  |                |              |  |
| Field Type:             | Calculated   |                |              |  |
| Previous                | Ofwat 07 Ref: T10 L29 WICS 06  | Ref:           | A2.36        |  |

References:

| A2.20                   | Cutomer - supply pipe losses  | MI/d | 3dp      |
|-------------------------|---|------|----------|
| Data Definition:        | Scottish Water's estimate of total leakage through customers' supply pipes. This should be consistent with the information provided in Table A2.  |      |          |
| Processing<br>Rule:     | Input field   |      |          |
| Field Type:             | Input   |      |          |
| Previous<br>References: | Ofwat 07 Ref: - WICS 06   | Ref: | -        |
|                         |   |      |          |
| A2.21                   | Overall water balance (sum of line A2.16 to A2.18 = A2.1 1)   | -    | -        |
| Data Definition:        | Confidence grade grading for the overall water balance  | ce.  |          |
| Processing<br>Rule:     | Input field   |      |          |
| Field Type:             | Input   |      |          |
| Previous<br>References: | Ofwat 07 Ref: T10, L34 WICS 06  | Ref: | A2.40    |
|                         |   |      |          |
| A2.22                   | Total leakage (pre-LLE adjustment)  | MI/d | 3dp      |
| Data Definition:        | Scottish Water's overall estimate of water losses before MLE reconciliation. It shall set out its estimate of DMA losses (including its estimate of supply pipe losses), trunk mains and service reservoir losses.  Scottish Water should explain the basics for this estimate to include how it has assessed specific losses (such as those arising from valves, fittings and structural defects) and its assumptions. |      |          |
| Processing<br>Rule:     | Input field   |      |          |
| Field Type:             | Input   |      |          |
| Previous<br>References: | Ofwat 07 Ref: - WICS 06   | Ref: | New line |

| A2.23                   | Water balance closing error   | %               | 1dp   |
|-------------------------|---|-----------------|-------|
| Data Definition:        | The calculated reconciliation error between "top down" and "bottom up" leakage assessment in terms of distribution input. |                 |       |
| Processing<br>Rule:     | (A2.18 plus A2.19 minus A2.22) divided by A2.10 as a percentage   |                 |       |
| Field Type:             | Calculated  |                 |       |
| Previous<br>References: | Ofwat 07 Ref: - WICS 06   | Ref:            | -     |
|                         |   |                 |       |
| A2.24                   | MLE adjustment  | MI/d            | 3dp   |
| Data Definition:        | The adjustment volume arising from the MLE reconci document the basis for this reconciliation as set out i                |                 |       |
| Processing<br>Rule:     | Input field   |                 |       |
| Field Type:             | Input   |                 |       |
| Previous<br>References: | Ofwat 07 Ref: - WICS 06   | Ref:            | -     |
|                         |   |                 |       |
| A2.25                   | Total leakage (post-MLE adjustment)   | MI/d            | 3dp   |
| Data Definition:        | Unadjusted volume of water losses with the MLE reco   | onciliation app | lied. |
| Processing<br>Rule:     | The addition of lines A2.22 and A2.24   |                 |       |
| Field Type:             | Calculated  |                 |       |
| Previous<br>References: | Ofwat 07 Ref: - WICS 06   | Ref:            | -     |

| A2.26                   | Volume of non-potable water delivered  | MI/d        | 3dp             |
|-------------------------|--|-------------|-----------------|
| Data Definition:        | Volume of water delivered to non-household properties that is non-potable  |             |                 |
| Processing<br>Rule:     | Input field  |             |                 |
| Field Type:             | Input  |             |                 |
| Previous<br>References: | Ofwat 07 Ref: T10, L25 WICS 06   | Ref:        | A2. 17          |
| A2.27                   | Per capita consumption (unmeasured household - excluding s/pipe leakage)   | l/h/d       | 2dp             |
| Data Definition:        | Estimated per capita consumption of household propunmeasured water. This figure applies to billed unmeand excludes underground supply pipe leakage. Undeleakage is any loss of water from the underground su | asured dome | stic properties |
| Processing<br>Rule:     | Input field  |             |                 |
| Field Type:             | Input  |             |                 |
| Previous<br>References: | Ofwat 07 Ref: T10, L12 WICS 06   | Ref:        | A2.4            |
|                         |  |             |                 |
| A2.28                   | Per capita consumption (measured household - excluding s/pipe leakage)   | l/h/d       | 2dp             |
| Data Definition:        | Estimated per capita consumption of measured hous applies to billed measured household properties and supply pipe leakage.   |             | _               |
| Processing<br>Rule:     | Input field  |             |                 |
| Field Type:             | Input  |             |                 |
| Previous<br>References: | Ofwat 07 Ref: T10, L13 WICS 06   | Ref:        | A2.8            |

| A2.29                   | Meter under-registration (measured households) (included in water delivered)   | MI/d         | 3dp       |
|-------------------------|--|--------------|-----------|
| Data Definition:        | Average volume of meter under-registration included in line A2.12. Any report volume against this item should be supported by evidence in the commentaries. SW should also specify the class of meter involved and the percentage error assumed. NB: Meter under-registration is the tendency of meters to under-record flows, particularly low flows. |              |           |
| Processing<br>Rule:     | Input field  |              |           |
| Field Type:             | Input  |              |           |
| Previous<br>References: | Ofwat 07 Ref: T10,L18 WICS 06  | Ref:         | A2.7      |
|                         |  |              |           |
| A2.30                   | Meter under-registration (measured non-<br>households) (included in water delivered)   | MI/d         | 3dp       |
| Data Definition:        | Average volume of meter under-registration included against this item should be supported by evidence in should also specify the class of meter involved and thassumed.  | the commenta | aries. SW |
| Processing<br>Rule:     | Input field  |              |           |
| Field Type:             | Input  |              |           |

T10, L19

WICS 06 Ref:

A2.21

Previous

References:

Ofwat 07 Ref: