Release notes

National urban water utility performance reporting framework: Indicators and definitions handbook

Released: January 2018

History

From the inception of the *National urban performance reporting framework* in 2006 until the 2013 the urban indicators and definitions handbook was released annually by the National Water Commission. In addition to the indicator definitions the handbook was used to document information pertinent to each reporting year.

Following its transition to the Bureau in 2013 the requirements of the reporting framework were documented in a reporting memo, issued to utilities in preparation for their annual reporting.

The memo has continued to reference the 2013-14 handbook which has, until now, remained unchanged.

About this release

This release of the National urban water utility performance reporting framework: Indicators and definitions handbook (the Handbook):

- ✔ standardises the presentation of indicators, indicator names and units and introduces a concise definition for each indicator
- ✔ standardises the presentation of derived indicators
- ✔ synchronises the water resource indicators (W indicators) with the reporting requirements of the Commonwealth's Water Regulations 2008, Category 7 – Information about urban water management.
- ✔ introduces the concept of practice notes to provide cross indicator supporting notes on key topics

With the exception of the changes to the W indicators, the migration of the indicators to the new handbook has focused on providing clear definitions and supporting notes to assist utilities in reporting.

If you believe that any indicator (excluding W indicators) has materially changed in the way it has been defined in the new Handbook please contact the Bureau of Meteorology (urbanwater@bom.gov.au) or your jurisdictional coordinator.

Future releases

The handbook is reviewed regularly to ensure the definitions, calculations, and examples are interpreted and applied consistently.

Summary of Changes

Standardised indicator presentation

Each indicator now has a code, a name, a concise definition, a set of supporting notes and where applicable a clear derivation (see the example below).

Indicator	**A6**—Number of properties served per km of sewer main
Definition	The average number of properties connected to the sewer network per kilometre of sewer main (properties/km).
	Mains and channels includes: ✔ all trunk, pressure, and reticulation mains ✔ wastewater and stormwater mains and excludes: ✘ property connection sewers ✘ conduits and pipelines downstream from the treatment plant.
Derivation	**A6** = (C8 x 1000) / A5 = ([C8—Total number of connected properties: wastewater] x 1000) / [A5—Length of sewer mains and channels]

W indicators

The most significant changes to the indicator set, reflected in this handbook, are those to the water resources indicators (W indicators).

The W indicators have been simplified and reduced in number. This has been achieved by simplifying the conceptual model underpinning these indicators.

The revised model removes the separation of potable and non-potable volumes and simplifies the end use classifications to residential and non-residential.

It is noted that in a number of cases changes to the definition of W indicators will materially impact the time series and the inter-annual comparison of indicators.

In these cases the historic time series will be archived and the W indicators will be transitioned to a new coding system in 2018 to clearly delineate between the old indicators and the new ones.

Deleted indicators

- **W3.2—Volume of water sourced from desalination of groundwater**

  The indicator was deleted in 2014–15. All water sourced from groundwater should be reported under W2 regardless of its treatment.

- **W3.3—Volume of water sourced from desalination of surface water such as dams, rivers or irrigation channels**

  The indicator was deleted in 2014–15. All water sourced from groundwater should be reported under W2 regardless of its treatment.

- **W3—Volume of water sourced from desalination**

  The indicator was deleted in 2014–15. Only W3.1 is required to track the volume of water sourced from the desalination of marine or estuarine waters.

- **W4—Volume of water sourced from recycling**

  The indicator has been deleted because of its complex definition. The subjective inclusion of recycled water based on potable substitution has seen inconsistent reporting under W4.

- **W5.1—Volume of potable water received from bulk supplier**

  W5.2—Volume of non-potable water received from bulk supplier

  The indicators W5.1 and W5.2 have been deleted as the revised indicator set no longer separates potable and non-potable volumes. These indicators have been merged into W5.3.

- **W14.1—Volume of potable bulk water exports**

  W14.2—Volume of non-potable bulk water exports

  The indicators W14.1 and W14.2 have been deleted as the revised indicator set no longer separates potable and non-potable volumes. These indicators have been merged into W14.3.

- **W8.1—Volume of potable water supplied – residential**

  W8.2—Volume of non-potable water supplied – residential

  The indicators W8.1 and W8.2 have been deleted as the revised indicator set no longer separates potable and non-potable volumes. These indicators have been merged into W8.3.

- **W9.1—Volume of potable water supplied – commercial, municipal and industrial**

  W9.2—Volume of non-potable water supplied – commercial, municipal and industrial

  The indicators W9.1 and W9.2 have been deleted as the revised indicator set no longer separates potable and non-potable volumes. These indicators have been merged into W8.3.

- **W10—Volume of water supplied – other**

  The indicator has been deleted as the revised indicator set adopts a simplified residential/non-residential partitioning of volumes. Other uses are now reported under W9.3.

- **W10.2—Volume of non-potable water supplied – other**

  The indicator W10.2 has been deleted as the revised indicator set no longer separates potable and non-potable volumes. Non-potable water supplied for other uses is now captured under W9.3.

- **W10.3—Volume of water supplied – managed aquifer recharge**

  W10.4—Volume of water supplied – agricultural irrigation

  The indicators W10.3 and W10.4 have been deleted as the revised indicator set adopts a simplified residential/non-residential partitioning of volumes. Managed aquifer recharge and agricultural supply from the urban water supply system (excludes water sourced from recycling or stormwater) is now reported under W9.3.

- **W22—Volume of recycled water supplied – agricultural**

  W24—Volume of recycled water supplied – on-site

  W25—Volume of recycled water supplied – other

  The indicators W22, W24 and W25 have been deleted as the revised indicator set adopts a simplified residential/non-residential partitioning of volumes. Agricultural, on-site and other uses, excluding manage aquifer recharge are now reported under W21.

- **W11.1—Total urban potable water supplied**

  W11.2—Total urban non-potable water supplied

  The indicators W11.1 and W11.2 have been deleted as the revised indicator set no longer separates potable and non-potable volumes.

- **W28—Total volume of urban stormwater discharges from a stormwater discharge point**

  W28.1—Volume of urban stormwater supplied to other infrastructure operators

  W28.2—Volume of urban stormwater received from other infrastructure operators

  W28.3—Volume of urban stormwater used for managed aquifer recharge

  The indicators W28, W28.1, W28.2 and W28.3 were deleted in 2014–15. The indicators were deleted because of their relevance to the scope of the Urban NPR.

- **C5—Population receiving sewage services**

  The indicator was an estimated value, without a standardised methodology. Utilities provide an accurate estimation of their customer base through indicator C8.

- **E4—Percent of sewage volume treated that was compliant**

  The definition of compliance in each jurisdiction differs. This limits the value of this indicator for national comparison.

- **E5—Number of sewage treatment plants compliant at all times**

  The definition of compliance in each jurisdiction differs. This limits the value of this indicator for national comparison.

- **E6—Public disclosure of your sewage treatment plant's performance**

  Public disclosure is now common place and the indicator is no longer seen to be relevant.

- **E7—Compliance with environmental regulator - sewerage**

  The definition of compliance in each jurisdiction differs. This limits the value of this indicator for national comparison.

- **IE13/E13—Sewer overflows reported to the environmental regulator**

  The regulatory requirement to report overflows varies between jurisdictions. This limits the value of this indicator for national comparison.

- **P1.1—Free water allowance – water**

  The indicator "P1.1—Free water allowance" has been removed from the indicator set and any free water allowances should be captured as the first step of the tariff structure and associated with a $0 price.

- **P1.8–P1.11 Usage charge 6th to 9th step**

  A reduction in the number of steps used by utilities in their tariff structures means these steps are no longer required for their characterisation.

- **P2.1—Average annual residential water supplied**

  Unnecessary duplication, W12 informs the reader about the volume of water supplied.

- **P3.1—Number of meter readings per annum – water**

  The indicator is no longer seen to be relevant for national bench marking.

- **P3.2—Number of bills per annum – water**

  The indicator is no longer seen to be relevant for national bench marking.

- **P6.1—Number of bills per annum – sewerage**

  The indicator is no longer seen to be relevant for national bench marking.

- **H2—Number of zones where microbiological compliance was achieved**

  "*H3—The Percentage of the population where microbiological compliance was achieved*" is seen as the more relevant metric.

- **H6—Risk-based drinking water management plan**

  Duplicates information captured in H5.

- **H7—Public disclosure of drinking water performance**

  Public disclosure is now common place and the indicator is no longer seen to be relevant.

Clarified definitions

- **W1—Volume of water sourced from surface water**

  Definition clarified as the gross volume of water taken by the utility. Aligned definition so that the reported volume is based on the metered inflow of raw water to WTPs or metered extraction of raw water where it is supplied directly into the urban system without treatment. Water returned to surface water is now also reported separately under W31. W1 now includes surface water taken into desalination plants. This volume was historically reported separately under, the now deprecated, indicator W3.3 (Volume of water sourced from desalination of surface water such as dams, rivers or irrigation channels).

- **W2—Volume of water sourced from groundwater**

  Definition clarified as the gross volume of water taken by the utility and includes aquifers subject to managed aquifer recharge.

- **W13—Volume of water supplied – environment**

  Renamed "*W13—Volume of water returned as environmental flows from outside of the urban water supply system*". The revised name and definition clarifies that it is an environmental release from outside of the urban water supply system. Environmental releases from the urban supply are captured in W31.

- **W18.2—Volume of wastewater received from other service providers**

  Renamed "*W18.2—Volume of wastewater received from other service providers or operational areas within the urban wastewater system*". The revised indicator explicitly aligns the indicator across both the Bureau's Category 7 urban water information requirements and the NPR framework. The revised definition clarifies that the indicator covers transfers from organisations and other operational areas outside of the reporting region.

- **W18.1—Volume of wastewater exported to other service providers**

  Renamed "*W18.1— Volume of wastewater exported to other service providers or operational areas within the urban wastewater system* ". The revised indicator explicitly aligns the indicator across both the Bureau's Category 7 urban water information requirements and the NPR framework. The revised definition clarifies that the indicator covers transfers to organisations and other operational areas outside of the reporting region.

- **W18.5—Volume of treated effluent outflow from wastewater treatment plants**

  The revised definition clarifies that outflow is measured after any recirculation within the treatment process.

- **W29—Volume of treated sewage disposals**

  Renamed "*W29—Volume of treated wastewater disposals* " and modified to exclude treated and untreated losses and spills from the wastewater system to facilitate alignment between the indicator across both the Bureau's Category 7 urban water information requirements and the NPR framework.

- **W6—Volume of bulk recycled water purchased**

  Renamed "*W6—Volume of recycled water received from other service providers or operational areas within the urban water supply system* ". The revised indicator explicitly aligns the indicator across both the Bureau's Category 7 urban water information requirements and the NPR framework. The revised definition clarifies that the indicator covers transfers from organisations and other operational areas outside of the reporting region.

- **W15—Volume of bulk recycled water exports**

  Renamed "*W15—Volume of recycled water exported to other service providers or operational areas within the urban water supply system* ". The revised indicator explicitly aligns the indicator across both the Bureau's Category 7 urban water information requirements and the NPR framework. The revised definition clarifies that the indicator covers transfers to organisations and other operational areas outside of the reporting region.

- **W21—Volume of recycled water supplied – commercial, municipal and industrial**

  Renamed "*Volume of recycled water supplied to non-residential customers* ". The revised indicator reflects the adoption of a single residential/non-residential split.

- **W7—Total volume of water sourced**

  The change to the method of estimating the total volume of water sourced addresses two issues:

  i.) the use of the inconsistently interpreted W4 to represent recycled water.

  ii.) the double counting of bulk recycled water imports through their explicit inclusion in the bulk water imports term W5 (bulk recycled water purchased, W6, is a component of W5) and their implicit inclusion in the recycled water sourced term W4 (which is the sum of residential, industrial, commercial and municipal recycled water and the potable substitution component of on-site use and agribusiness).

  Under the revised definition of W7:

  i.) any potential double counting of bulk recycled water purchases has been removed;

  ii.) all agricultural use of recycled water, regardless of potable substitution, is included;

  iii.) all on-site use, regardless of potable substitution, is included; and

  iv.) all environmental releases are excluded.

- **W5—Volume of water received from bulk suppliers**

  Renamed "*W5—Total volume of water received from other service providers or operational areas within the urban water system*". The revised indicator explicitly aligns the indicator across the Bureau's Category 7 urban water information requirements and the NPR framework. The revised definition clarifies that the indicator covers transfers from organisations and other operational areas outside of the reporting region.

  W5 no longer includes stormwater received from other service providers or operational areas. Historical data shows that stormwater transfers between utilities are uncommon.

- **W14—Volume of water exported to other service providers**

  Renamed "*W14—Total volume of water exported to other service providers or operational areas within the urban water supply system* ". The revised indicator explicitly aligns the indicator across both the Bureau's Category 7 urban water information requirements and the NPR framework. The revised definition clarifies that the indicator covers transfers to organisations and other operational areas outside of the reporting region.

  W14 no longer includes stormwater exported to other service providers or operational areas. Historical data shows that stormwater transfers between utilities are uncommon.

  W8—Volume of water supplied – residential

  The historical derivation of W8 using a "component of W28" presents a challenge for its consistent evaluation. The indicator has been renamed "*W8—Total volume of water supplied to residential customers*". The explicit definition of W28.4 now means that W8 can be derived from whole indicators.

- **W9—Volume of water supplied to non-residential customers**

  The historical derivation of W9 using a "component of W28" presents a challenge for its consistent evaluation. The indicator has been renamed "*W9—Total volume of water supplied to non-residential customers*". The explicit definition of W28.5 now means that W9 can be derived from whole indicators.

  Under the revised definition of W9 all unbilled authorised consumption, unauthorised consumption and real and apparent losses from the potable and non-potable urban water supply system (excludes recycled and urban stormwater systems) are included.

- **W11—Total volume of urban water supplied**

  The move to a simplified residential/non-residential end-use model makes it impossible to separate agricultural use. W11 now includes the volume of water supplied to agriculture.

- **W28.4—Volume of water sourced from urban stormwater**

  Renamed "*W28.4—Volume of urban stormwater supplied to residential customers* ". The revised indicator explicitly aligns stormwater with the residential/non-residential breakdown adopted.

- **F8—Community service obligations ratio**

  F21—Dividend payout ratio

  F22—Net debt to equity ratio

  F30—Net profit after tax ratio

  While defined as a ratio, the 2013-14 handbook derivation for indicators F8, F21, F22 and F30 were derived as percentages. To support constancy in reporting the derivations for these indicators now align with their definition as ratios.

IE1—Volume of wastewater only treated to a primary level

The definition of IE1, and consequently E1, has been clarified as pertaining to only the volume of wastewater receiving primary. Wastewater that then goes on to receive secondary or tertiary treatment is not included.

IE2—Volume of wastewater only treated to a secondary level

The definition of IE2, and consequently E2, has been clarified as pertaining to only the volume of wastewater receiving primary. Wastewater that then goes on to receive tertiary treatment is not included.

IE9—Net greenhouse gas emissions: water supply

IE10—Net greenhouse gas emissions: wastewater

IE11—Net greenhouse gas emissions: other

IE12—Total net greenhouse gas emissions

The definition of IE9, IE10 IE11 and IE12 has been clarified to refer to net greenhouse gas emission. Consequently, the derived indicators E9, E9.1, E10, E10.1, E11, E11.1 and E12 and E12.1 have also been updated to reflect this clarification.

F26—Capital works grants: water supply

F27—Capital works grants: wastewater

The definition of a capital works grants in indicators F26 and F27 has been clarified to include both specific and non-specific projects.

New indicators

W5.3—Volume of water, excluding recycled water, received from other service providers or operational areas within the urban water supply system.

The new indicator, W5.3, merges W5.1 and W5.2.This merger removes the potable/non-potable divide and explicitly aligns the indicator across both the Bureau's Category 7 urban water information requirements and the NPR framework. The revised definition clarifies that the indicator covers transfers from organisations other than bulk utilities.

W14.3—Volume of water, excluding recycled water, exported to other service providers or operational areas within the urban water supply system

The new indicator W14.3 merges W14.1 and W14.2. This merger removes the potable/non-potable divide and the revised definition explicitly aligns the indicator across both the Bureau's Category 7 urban water information requirements and the NPR framework. The revised definition clarifies that the indicator covers transfers to organisations other than bulk utilities.

W8.3—Volume of water supplied to non-residential customers

The new indicator W8.3 merges W8.1 and W8.2. This merger removes the potable/non-potable divide, conforms to the residential/non-residential disaggregation model and explicitly aligns the indicator across both the Bureau's Category 7 urban water information requirements and the NPR framework.

- **W9.3—Volume of water supplied to non-residential customers**

  The new indicator W9.3 merges W 9.1 and W 9.2, W10.1 and W10.2. This merger removes the potable/non-potable divide, conforms to the residential/non-residential disaggregation model and explicitly aligns the indicator across both the Bureau's Category 7 urban water information requirements and the NPR framework.

  Unbilled authorised consumption, unauthorised consumption and real and apparent losses from the non-potable system are a component of W9.3 but cannot be explicitly resolved. Unbilled authorised consumption, unauthorised consumption and real and apparent losses from the potable system are also reported as a standalone indicator under W10.1

- **W28.5—Volume of urban stormwater supplied to non-residential customers**

  Added to capture the non-residential breakdown of urban stormwater supplied.

- **W30— Volume of wastewater losses and spills**

  W30 captures treated and untreated losses and spills from the wastewater treatment system. This separation facilitates alignment between the Bureau's Category 7 urban water information requirements and the NPR framework.

- **W31—Volume of water returned to surface water or groundwater from the urban water supply system**

  W31 is a new indicator to account for the return of potable water back to surface water and managed aquifer recharge.

- **P1.3a–P1.7a Upper bound of usage: step 1–step 5**

  The intent of indicator "P1—Tariff structure: water supply" is to capture the pricing structure used by the utility for water pricing. In most cases the actual pricing steps have not been provided by utilities when reporting P1. The addition of indicators P1.3a–P1.7a explicitly address this issue. These indicators capture the volumetric range of the pricing tariff structure in a readably accessible data structure.

  The indicator "P1.1—Free water allowance" has been removed from the indicator set and any free water allowances should be captured as the first step of the tariff structure and associated with a $0 price.

- **H4a—Total number of zones**

  The indicator "H4a—Total number of zones" has been introduced to facilitate the numerical capture of zone based chemical compliance data.

  Historically data provided for the indicator "H4—Number of zones where chemical compliance was achieved" was in the form of text specifying the number of compliant zones out of the total number of zones (e.g. 23 of 24).

  From 2017–18 onwards the number of complaint zones should be reported against Indicator H4 and the total number of zones reported against "H4a—Total number of zones". *For example:*

pre 2017–18	*H4 = "23 of 24" or "23/24"*
2017–18 onwards	*H4 =23*
	H4a = 24