

Performance Indicators for Local Water Utilities

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Agenda

- Introduction
- Feedback on additional NSW-specific indicators
- Feedback on set of key performance indicators
- Key questions

Context

- Under the Town Water Risk Reduction Program’s Roadmap to an improved regulatory framework for local water utilities (2021), the department committed to developing, in consultation with the local water utility sector, an improved performance monitoring framework for local water utilities.
- Section 8 of the Regulatory and Assurance Framework expects LWUs to report on the annual indicators.
- The data is used to publicly report on performance, analyse performance trends for each LWU and provides a measure of performance of LWUs relative to others.
- The data will continue to be reported on the website (see picture).
- The rationalised indicator set will replace the existing set and commence in the 24/25 water year.

Indicator Group - Indicator SubGroup - Indicator Name Select Nominal or CPI Value Select LWU Select one or multiple Year(s)

Charges and bills - Typical developer charges - Typical Developer Charge (next reporting year) - W&S Nominal Value Weighted Median (All)

Typical Developer Charge (next reporting year) - W&S

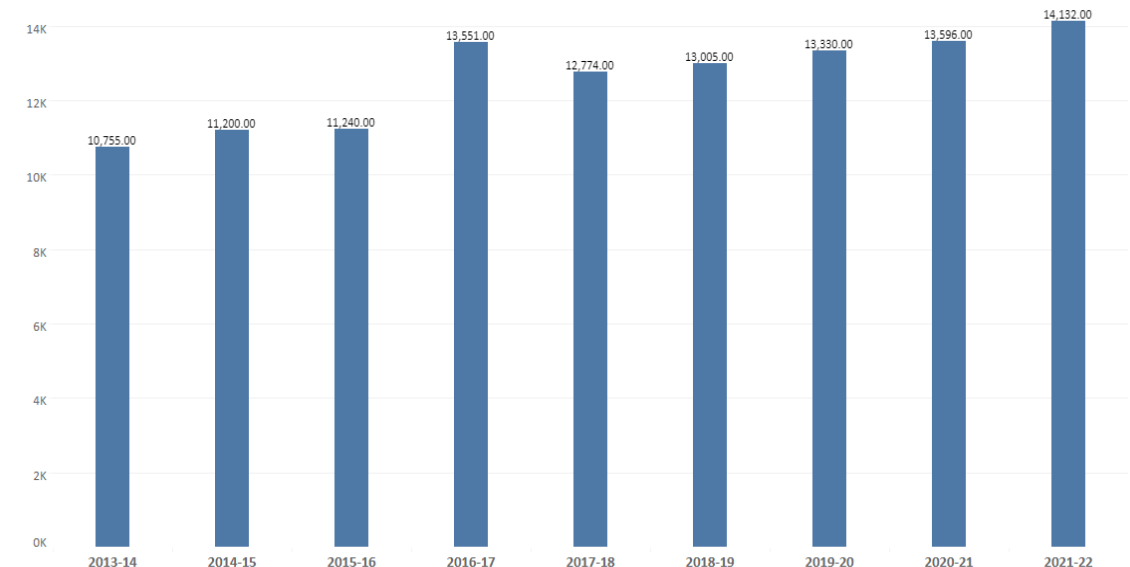
Units: \$/ET

Sum of water and sewerage Typical Developer Charges.

The weighted median is the median of the available validated data for the indicator with the number of connected properties applied as weights.

The national median is the median of available data from the latest national performance report. The included data is only for the LWUs with more than 10,000 connected properties.

The data shows the nominal value of the selected report year



<https://water.dpie.nsw.gov.au/local-water-utilities/local-water-utility-performance>

How was the rationalised set developed?

- Developed in collaboration with members of the Town Water Risk Reduction Program’s Performance Monitoring Focus Group, which included stakeholders such as LWUs, LGNSW, Water Directorate and other NSW agencies such as NSW Health and Office of Local Government.
- The “NPR Plus” approach - The rationalised indicator set consists of:
 - **National Performance Report (NPR)** indicators
 - **Australian Bureau of Statistics (ABS)** indicators
 - additional **NSW-specific indicators**.
- The department also developed and proposes a shorter list of **key performance indicators** to focus reporting and benchmarking products on key performance information for utilities and their customers.

What are we seeking feedback on?

We are seeking feedback on:

- the proposed additional **NSW-specific indicators** that are part of the full list of rationalised NSW performance indicators:
 - Indicators with **green text** represent those which the focus group **recommends for inclusion**
 - Indicators with **blue text** represent those that the focus group **recommends but require further consideration**.
- the proposed list of **key performance indicators**.

Note that any **NPR or ABS indicators** are out of scope of the review.

The NPR indicator set is based on the recommended revised indicator set developed by the National Performance Reporting Framework Indicator Review, due to be published by the Bureau of Meteorology (BoM) in the coming weeks, and will also start in the 24/25 water year.

Seeking feedback on additional NSW-specific indicators

Theme 1 – Contextual information

Indicators	Comments
<p><u>Population Indicators:</u> NSW1 – Estimated population receiving wastewater services NSW2 – Estimated population receiving recycled water services</p>	<ul style="list-style-type: none">• We propose NSW1 and NSW 2 to understand service coverage on a population basis, as opposed to a per connection basis.
<p><u>Connections Indicators</u> NSW3 – Number of residential properties not connected: water supply NSW4 – Service coverage residential properties: water supply NSW5 – Number of residential properties not connected: wastewater NSW6 – Service coverage residential properties: wastewater</p>	<ul style="list-style-type: none">• We propose NSW3 to NSW6 to obtain data on the service coverage for residential properties for water supply and wastewater separately.• We seek particular feedback on the capacity of utilities to report on NSW6, especially county councils that do not have access to full property information.

Theme 2 – Customer and communities

Indicators	Comments
<p><u>Complaints Indicators:</u></p> <p>NSW_B1 – Number of billing and account complaints: water supply</p> <p>NSW_B2 – Number of billing and account complaints: sewerage</p> <p>NSW_B3 - Number of billing and account complaints per 1,000 properties complaints: water supply</p> <p>NSW_B4 - Number of billing and account complaints per 1,000 properties complaints: sewerage</p> <p>NSW_B5 – Number of other complaints: water supply</p> <p>NSW_B6 – Number of other complaints: sewerage</p>	<ul style="list-style-type: none">• We propose NSW_B1, NSW_B2 , NSW_B5 and NSW_B6 to collect information on billing and account complaints for water supply and wastewater separately.• We propose NSW_B3 and NSW_B4 to provide a point of comparison between NSW_B1 and NSW_B2.• This will enable us to derive total complaints indicators for water supply and sewerage.

...Theme 2 – Customer and communities

Indicators	Comments
<p><u>Customer Satisfaction Indicators:</u></p> <p>NPR and NSW_B7 – Customer perceptions: value for money</p> <p>NPR and NSW_B8 – Customer perceptions: reputation in the community</p> <p>NPR and NSW_B9 – Customer perceptions: level of trust</p> <p>NPR and NSW_B10 – Customer perceptions: overall satisfaction</p>	<ul style="list-style-type: none">• NPR and NSW_B7 to NPR and NSW_B10 are considered for inclusion under the National Performance Reporting.• Further work is expected on the details of these indicators as well as the types of utilities that might be asked to report on them.• We seek feedback on such indicators to inform our input into these considerations.

Theme 3 – Assets and Operations

Indicators	Comments
<p><u>Treatment plants indicators:</u></p> <p>NSW_B11 – Number of water treatment plants providing partial or other treatment</p> <p>NSW_B12 – Number of water or wastewater treatment plants providing recycled water</p>	<ul style="list-style-type: none"> We propose NSW_B11 and NSW_B12 to collect more information on water and wastewater treatment plants, in addition to the NPR indicators on water treatment plants providing full treatment (A1) and the number of wastewater treatment plants (A4). We seek feedback on the inclusion of these indicators.
<p><u>Reliability Indicators:</u></p> <p>NSW8 – Average duration of a planned interruption: drinking water supply</p> <p>NSW9 – Number of planned interruptions: drinking water supply</p> <p>NSW10 – Number of planned interruptions per 1,000 properties: drinking water supply</p> <p>NSW11 – Ratio of planned and unplanned interruptions: drinking water supply</p>	<ul style="list-style-type: none"> We propose NSW8 to NSW11 to collect performance information on planned interruptions, in addition to NPR indicators on unplanned interruptions. NSW11 will enable us to better understand the level of proactive (or reactive) management of this asset.

Theme 4 – Finance and Pricing

Indicators	Comments
<p><u>Tariff Indicators:</u></p> <p>Residential tariffs</p> <p>Tariff structure, Usage charge and fixed charge – Residential drinking water supply, wastewater services and recycled water</p> <p>Non residential tariffs</p> <p>Tariff structure, Usage charge and fixed charge – Non-Residential drinking water supply, wastewater services and recycled water</p> <p>Developer charges</p> <p>Typical developer charges for water supply and sewerage</p>	<ul style="list-style-type: none">• We propose a tariff data input tool to collect tariff and billing data to cater for different tariff structures. This will allow the utility to provide the tariff data relevant to its pricing structure.• It would be based off the NPR data input tool but would be modified to collect tariff data for all towns, not just the major town as the NPR suggests.• This will enable the department to calculate and report tariff indicators based on a weighted average of all town centres.

...Theme 4 – Finance and Pricing

Indicators	Comments
<p>...<u>Tariff Indicators:</u></p> <p>Trade waste pricing</p> <p>Trade Waste Annual Fee – Category 1 to Category 3</p> <p>Trade Waste Excess Mass Charge (EMC) – BOD, Oil and Grease, SS</p> <p>Trade Waste Usage Charge – Category 2</p> <p>Trade Waste Non-Compliance Usage Charge – Category 2</p> <p>Trade Waste Reinspection Fee – Category 1/2/3</p> <p>Bulk water export tariffs</p> <p>Tariff for export of drinking water, recycled water and raw water</p>	<ul style="list-style-type: none">• We seek feedback on whether the whole proposed trade waste pricing set is required or whether there are some key indicators for public reporting.

..Theme 4 – Finance and Pricing

Indicators	Comments
<p><u>Revenue Indicators:</u></p> <p>NSW12 – Revenue received for usage charges – water supply: retail – drinking and non-drinking water supplied to residential customers</p> <p>NSW13 – Revenue received for usage charges – water supply: retail – drinking and non-drinking water supplied to non-residential customers</p> <p>NSW14 – Revenue received from developer charges (cash) – water supply</p> <p>NSW15 – Revenue received from developer contributions (non-cash) – water supply</p> <p>NSW16 – Revenue from developer charges (cash): sewerage</p> <p>NSW17 – Revenue from developer contributions (non-cash): sewerage</p> <p>NSW18 – Community service obligation (subsidies provided by government): water supply</p> <p>NSW19 – Community service obligation (subsidies provided by government): sewerage</p>	<ul style="list-style-type: none">• We propose NSW12 and NSW13 to collect information on residential and non-residential usage charges separately.• NSW14 to NSW17 are proposed to collect information on developer charges separately for water supply and sewerage functions.• NSW 18 and NSW19 are proposed to collect information on the community service obligations for water supply and sewerage separately.• NPR Indicators on usage charges, developer charges and community service obligations do not collect this information separately.

....Theme 4 – Finance and Pricing

Indicators	Comments
<p><u>Financial Performance Indicators:</u> NSW20 – Operating performance ratio – water supply NSW21 – Operating performance ratio: wastewater</p>	<ul style="list-style-type: none">• NSW20 and NSW21 are proposed as key performance indicators not covered under NPR.• These will not be an additional reporting burden for LWUs as they will be obtained from the annual financial statements reported to OLG.
<p><u>Valuation Indicators:</u> NSW22 – Water supply infrastructure replacement cost NSW23 – Sewer infrastructure replacement cost NSW24 – Water supply infrastructure written down value NSW25 – Sewer infrastructure written down value</p>	<ul style="list-style-type: none">• NSW22 to NSW25 are proposed as key infrastructure valuation indicators not covered under NPR.• These will not be an additional reporting burden for LWUs as they will be obtained from the annual financial statements reported to OLG.

.....Theme 4 – Finance and Pricing

Indicators	Comments
<p><u>Finance Indicators:</u></p> <p>NSW_B13 – Own source operating revenue ratio</p> <p>NSW_B14 – Cash expense cover ratio</p> <p>NSW_B15 – Debt service cover ratio</p> <p>NSW_B16 – Debt service ratio</p> <p>NSW_B17 – Asset renewal ratio</p> <p>NSW_B18 – Asset maintenance ratio (actual maintenance/required maintenance)</p> <p>NSW_B19 – Infrastructure backlog ratio</p>	<ul style="list-style-type: none">• We seek feedback on the inclusion NSW_B13 to NSW_B19 to improve reporting on financial performance.• These indicators will not be an additional reporting burden for LWUs as they will be obtained from the annual financial statements reported to OLG.

.....Theme 4 – Finance and Pricing

Indicators	Comments
<p>...<u>Finance Indicators</u>:</p> <p>NSW_B20 – Agreed service level gap (annual)</p> <p>NSW_B21 – Agreed service level gap (annual) assets</p> <p>NSW_B22 – Asset renewal ratio (actual/planned)</p> <p>NSW_B23 – Asset maintenance ratio (planned/unplanned)</p> <p>NSW_B24 – Cost to deliver minimum service level</p> <p>NSW_B25 – LWU ability to fund minimum service levels.</p>	<ul style="list-style-type: none">• We seek feedback on the inclusion of these additional sustainability indicators NSW_B20 to NSW_B25.• They explore the “annual service level gap” between the actual spend on service delivery and expenditure planned for in (adjusted) strategic planning to deliver agreed service levels.• Adding these indicators could significantly add to the reporting burden for LWUs as these indicators are not currently collected on a systematic basis across the sector.

Theme 5 – Public Health and Environment



Indicators	Comments
<p><u>Water quality risk management indicators:</u></p> <p>NSW26 – Annual review of drinking water quality systems in accordance with NSW Health requirements</p> <p>NSW_B26 – Performance against critical control points in the drinking water quality systems</p>	<ul style="list-style-type: none">• We propose NSW26 to learn if utilities undertake an annual review of their systems.• We are considering adding NSW_B26 in future to measure performance against critical control points (CCPs) in the drinking water quality systems.• We seek feedback on the design, scope, definition, and collection mechanism for NSW_B26 (for example, this indicator might require online monitoring in real time of CCPs compliance).
<p>NSW27 – Non-compliance with EPA sewerage treatment plant (STP) licence requirements</p>	<ul style="list-style-type: none">• We propose NSW27 as a key environmental impact indicator not covered under the NPR.• Provided by EPA• This is envisaged as a utility-wide indicator that aggregates data from individual sewerage systems. An additional indicator could ask for the individual system in which the non-compliance occurred.

Theme 6 – Water Resources

Indicators	Comments
<p><u>Supply and Exports</u></p> <p>NSW28 – Volume of drinking water, excluding recycled water, supplied to residential customers</p> <p>NSW29 – Volume of non-drinking water, excluding recycled water, supplied to residential customers</p> <p>NSW30 – Volume of drinking water, excluding recycled water, supplied to non-residential customers</p> <p>NSW31 – Volume of non-drinking water, excluding recycled water, supplied to non-residential customers</p>	<ul style="list-style-type: none">• We propose NSW28 to NSW31 to collect separate data on volume of drinking and non-drinking water supplied to residential and non-residential customers.• NPR and ABS indicators on water supply only collect information on the total of NSW28 to NSW31, which can be derived from adding these indicators.

...Theme 6 – Water Resources

Indicators	Comments
<p><u>...Supply and Exports</u></p> <p>NSW32 – Volume of unbilled authorised consumption (metered and unmetered)</p>	<ul style="list-style-type: none">• We propose to add NSW32 indicator to complete the set of non-revenue water indicators; that is:<ul style="list-style-type: none">➤ ABS(Q22a) – Apparent losses (ABS (Q22a))➤ Real losses (ABS(Q22b))➤ Unbilled authorised consumption (NSW32)• This would allow us to derive NPR indicator on Non-revenue water.

Theme 7 – Workforce and work health and safety



Indicators	Comments
<p><u>Workforce indicators:</u></p> <p>NSW33, NSW34 and NSW35 – Total workforce – water supply, sewerage and both</p> <p>NSW36 – Total LWU workforce full time equivalent (FTE) – water supply and sewerage</p> <p>NSW37 – Age profile across roles (FTE) – water supply and sewerage</p> <p>NSW38– Number of water treatment operators (FTE)</p> <p>NSW39 – Number of trained water treatment operators (FTE)</p> <p>NSW40 – Number of water treatment operators in training</p> <p>NSW41 – Number of sewage treatment operators (FTE)</p> <p>NSW42 – Number of trained sewage treatment operators (FTE)</p> <p>NSW43 – Number of trained sewage treatment operators (FTE)</p> <p>NSW44 – Number of network operators (FTE) – water supply and sewerage</p> <p>NSW45 – Number of trained network operators (FTE) – water supply and sewerage</p> <p>NSW46 – Number of network operators in training – water supply and sewerage</p>	<ul style="list-style-type: none">• We propose adding these indicators (NSW33 to NSW46) to capture information on the level of professional qualification to inform sector-wide initiatives to improve the acquisition and retention of qualifications.• Required to be reported to the department by the utility so will add to the reporting burden.

...Theme 7 – Workforce and work health and safety

Indicators	Comments
<p><u>Qualification indicators:</u></p> <p>NSW47 – Number of Cert II Water Operations</p> <p>NSW48 – Number of Cert III Water Operations</p> <p>NSW49 – Number of Cert IV Water Operations</p> <p>NSW50 – Number of staff you would like to put through a Cert III Water Operations qualification in the next 3 years – water supply and sewerage</p> <p>NSW51 – Number of qualified engineers (FTE) – water supply and sewerage</p> <p>NSW52 – Number of engineers registered – water supply and sewerage</p>	<ul style="list-style-type: none">• We propose adding NSW47 to NSW52 to capture information on the level of professional qualification to inform sector-wide initiatives to improve the acquisition and retention of qualifications.• Required to be reported to the department by the utility so will add to the reporting burden.

....Theme 7 – Workforce and work health and safety

Indicators	Comments
<p><u>Diversity Indicators:</u></p> <p>NSW53 – Staff who identify as Aboriginal and/or Torres Strait Islander – water supply and sewerage</p> <p>NSW_B27 – Female LWU workforce (FTE)</p> <p>NSW_B28 – Total LWU workforce headcount identifying as Aboriginal and/or Torres Strait Islander</p> <p>NSW_B29 – Total Council workforce headcount identifying as Aboriginal and/or Torres Strait Islander</p>	<ul style="list-style-type: none">• We propose adding NSW53 to collect information on the workforce participation of Aboriginal and/or Torres Strait Islander persons.• We are considering additional indicators on workforce diversity (NSW_B27 to NSW_B29) and seek feedback on these indicators and any other appropriate indicators.• Required to be reported to the department by the utility so will add to the reporting burden.

.....Theme 7 – Workforce and work health and safety



Indicators	Comments
<p><u>WHS Indicators:</u></p> <p>NSW_B30 – Injuries (fatality, permanent disability, or time loss of one or more days) – water supply</p> <p>NSW_B31 – Days lost due to injuries (FTE) – water supply</p> <p>NSW_B32 – Incidents including injuries – water supply</p> <p>NSW_B33 – High Potential Incidents – water supply</p> <p>NSW_B34 – Injuries (fatality, permanent disability or time loss of one or more days) – sewerage</p> <p>NSW_B35 – Days lost due to injuries (FTE) – sewerage</p> <p>NSW_B36 – Incidents including injuries – sewerage</p> <p>NSW_B37 – High Potential Incidents – sewerage</p>	<ul style="list-style-type: none">• We are considering additional WHS indicators NSW_B30 to NSW_B37 to capture information that would help inform sector-wide initiatives to improve WHS.• Required to be reported by utility so will add to the reporting burden.

Seeking feedback on set of key performance indicators

Key Performance Indicators

- In addition to these indicators, a smaller set of **key performance indicators** is being proposed to develop and publish reporting and benchmarking products and dashboards.
- The purpose of this smaller set of key indicators is to focus the department's reporting and benchmarking on the key utility performance information critical for utilities and their customers.
- The inclusion of these indicators **will not pose an additional reporting burden** – they will be derived from existing sources e.g. NPR, ABS and proposed NSW indicators, ERIL score, financial statements, ABS ARIA + Score
- The proposed list consists of:
 - **Key drivers** to help analyse financial and operational performance of utilities
 - **Key performance indicators**

Key drivers of performance

Key Drivers of performance	Comments
Total number of connected properties – water services	Proxy of customers served. NPR C4
Total number of connected properties – wastewater services	Proxy of customers served. NPR C8
Remoteness score of councils	This is sourced from ABS ARIA + Score
Total volume of water supplied	NPR W11 Volume supplied per connection is a good driver of financial performance due to economies of scale effect.
Socio-economic score as calculated in the department’s eligible risks and issues list (ERIL) for the Safe and Secure Water Program	Sourced from DPE Water’s ERIL score
Total length of water mains	NPR A2 Helps normalising service interruption data for water mains.
Total length of sewer mains	NPR A5 Helps normalising service interruption data for sewer mains.

...Key performance indicators

Performance Indicators	Comments
<p>Financial</p> <ul style="list-style-type: none"> Total expenditure (capex + opex) per connected property Asset maintenance expenditure per connected property Asset renewal expenditure per connected property Revenue per connected property Operating Performance ratio (%) – water supply and wastewater Net profit after tax per connection Leverage ratio (debt/asset) 	<p>Derived from NPR indicators, proposed NSW-specific indicators and financial statements provided to OLG</p>
<p>Operational – Service reliability</p> <ul style="list-style-type: none"> Number of water main breaks, bursts, and leaks, per 100 km of water mains Number of property connection water supply breaks, bursts and leaks per 1,000 connected properties Number of sewerage mains breaks, leaks, and chokes per 100 km of sewerage mains Number of property connection sewer breaks and chokes per 1,000 connected properties Percentage of the population where microbiological compliance was achieved Percentage of the population provided with chemically compliant drinking water 	<p>Derived from NPR indicators and proposed NSW-specific indicators</p>

... Key performance indicators

Performance Indicators	Comments
<p>Operational – Customer</p> <p>Annual residential customer bill based on 200 KL per annum – water supply Annual residential customer bill based on 200 KL per annum – wastewater Total number of complaints per 1,000 connected properties</p>	<p>Derived from NPR indicators and proposed NSW-specific indicators</p>
<p>Operational – Water conservation and efficiency</p> <p>Real water losses per day – per service connections / per km of water mains Average volume of residential water supplied per property Average volume of recycled water supplied per property</p>	<p>Derived from NPR indicators and proposed NSW-specific indicators</p>

Key questions

Key questions

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1. We seek feedback on the capacity of LWUs to report “NSW 6 – Service coverage residential properties” – particularly county councils who don’t have access to this information.
 2. Additional Customer satisfaction indicators (NPR and NSW_B7 to NPR and NSW_B10)– considered for inclusion under NPR and we seek feedback on these to inform our consideration and input.
 3. Additional indicators on treatment plants (NSW_B11 and NSW_B12) – we seek feedback on whether we should collect data on plants that do not provide for full treatment, and plants that provide recycled water.
 4. Trade waste pricing indicators (NSW_G21 to NSW_G28) – is the whole set required or are there some key indicators for public reporting?
 5. Additional finance indicators:
 - NSW_B13 to NSW_B19 – we seek feedback on the inclusion of these to improve reporting on financial performance. There will not be an additional reporting burden as the data will be obtained from financial statements provided to OLG.
 - NSW_B20 to NSW_B25 – we seek feedback on the inclusion of these additional sustainability indicators. They would add an additional reporting burden for LWUs as they are not currently collected.
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...Key questions

7. Water quality and environmental risk management indicators:

- NSW27 – Non-compliance with EPA sewerage treatment plant (STP) licence requirements – should there be an additional - indicator to ask for the individual system in which the non-compliance occurred?
- NSW_B26 – Performance against critical control points in the drinking water quality systems – feedback on the design, scope, definition and collection mechanism

8. WHS and workforce indicators - We are seeking feedback on the inclusion of these and any other appropriate indicators.

- Workforce numbers and diversity (NSW33 to NSW46, NSW52, NSW 53, NSW_B27 to NSW_B29)
- Number of operators, trained operators, qualifications (NSW47 to NSW52)
- Work health and safety (NSW_B30 to NSW_B37) e.g. incidents, injuries