

# Network Environmental Performance Measures and Guide 2024 – Summary

The following tables are a summary of the network environmental performance measures for drinking water and wastewater.

These tables are for guidance purposes only and are included in section 1.13 of the [Network Environmental Performance Measures and Guide 2024](#). See this document for more details.

## Key:

O = Report measures at an organisation level

N = Report measures at network level

**Note:** \*Some measures only need to be reported by councils or council-controlled organisations (CCOs) but not by government departments or the New Zealand Defence Force.

## Drinking Water Measures

Outcome	Performance Measure	Ref. code	Data points (and units of measure, where applicable)	Report at
General asset information	Drinking water network information	D-A1	Number of drinking water networks	O
		D-A2	Number of drinking water treatment plants	O
		D-A3	Number of reservoirs	O
		D-A4	Number of pump stations	O
		D-A5	Total length of drinking water pipe (km)	O
		D-A6	Number of drinking water abstraction points	N
		D-A7	Drinking water network source type	N
Environmental and public health is protected	Drinking water network connections	D-EH1	Number of residential connections in the drinking water network	N
		D-EH2	Number of non-residential connections in the drinking water network	N
		D-EH3	Total population served by the drinking water network	N
	Volume of water abstracted (m <sup>3</sup> /year)	D-EH4	Water supplied to the drinking water network	N
		D-EH5	Water imported from other suppliers	O
		D-EH6	Water exported to other suppliers	O
		D-EH7	Non-residential water use	O
	Resource consent compliance	D-EH8	Number of resource consents that are held	N
		D-EH9	Type(s) of resources consent	N
		D-EH10	Resource consent reference number(s)	N
		D-EH11	Expiry dates for resource consent(s)	N
		D-EH12	Have consent conditions been met for rate of take and volume of abstraction	N
		D-EH13	Consented rate of take for each abstraction point (L/s)	N
		D-EH14	Maximum daily consented volume of water-take (m <sup>3</sup> /day)	N
		D-EH15	Maximum annual consented volume of water-take (m <sup>3</sup> /year)	N
		D-EH16	Failure to meet resource consent conditions - provide comments	N
			D-EH17	Sludge (tonnes/year)

	Drinking water treatment byproducts	D-EH18	Backwash water (m <sup>3</sup> /year)	N
		D-EH19	Screenings (tonnes/year)	N
		D-EH20	Disposal route	N
	Fish passage and screening	D-EH21	Has an assessment been made for all water-takes whether fish passage is impeded within a natural water body	N
		D-EH22	Have operational or management processes been put in place to prevent fish ingress	N
Services are reliable	Fault attendance and resolution	D-R1	Median hours to attend to an urgent fault	O
		D-R2	Median hours to attend to a non-urgent fault	O
		D-R3	Median hours to resolve an urgent fault	O
		D-R4	Median hours to resolve a non-urgent fault	O
	System interruptions	D-R5	Number of planned interruptions	O
		D-R6	Number of third-party incidents	O
		D-R7	Number of unplanned interruptions	O
		D-R8	Number of urban service connections that experience an unplanned interruption for longer than eight hours	O
	Asset condition	D-R9	% of pipes that have received a condition grading	O
		D-R10	% of pipes in poor or very poor condition	O
		D-R12	Average age of water pipes	O
		D-R13	% of above-ground assets that have received a condition grading	O
		D-R14	% of above-ground assets in poor or very poor condition	O
	Water pressure	D-R15	Average system pressure (kPa)	N
		D-R16	Are there set pressure levels of service?	N
		D-R17	Reference level of pressure (kPa, if set)	N
		D-R18	Number of properties below reference level of pressure	N
	Water restriction days	D-R19	Number of days that water restrictions were applied	O
		D-R20	Proportion of affected connections	O
	Sufficient firefighting water is available	D-R21	Have you adopted the FENZ Code of Practice (SNZ PAS 4509:2008)?	O
		D-R22	% of fire hydrants tested in the previous five years	O
	Resources are used efficiently	Drinking water network water losses	D-RE1	Estimated total drinking water network water loss (m <sup>3</sup> /year)
D-RE2			Current annual real loss (CARL)	N
D-RE2b			Optional: Unavoidable Annual Real Losses (UARL)	N
D-RE3			Infrastructure Leakage Index (ILI)	N
Use of water resources		D-RE4*	Median residential water consumption (L/day/connection)	N
		D-RE5	Do you have a water conservation education programme in place?	O
		D-RE6*	Number of residential connections with water meters	O
		D-RE7*	Number of non-residential connections with water meters	O
		D-RE8	Number of abstraction points with water meters installed	O
		D-RE9	Frequency that water abstraction meters are calibrated/verified (years)	O
D-RE10	Number of water abstraction meters connected to telemetry systems	O		

		<b>D-RE11</b>	Days for which a complete telemetry dataset has been recorded	0
	<b>Energy efficiency</b>	<b>D-RE12*</b>	Electricity use	0
		<b>D-RE13*</b>	Energy use from other fuels	0
		<b>D-RE14*</b>	Energy generation	0
	<b>Alternative water use</b>	<b>D-RE15</b>	Volume of recycled water supplied to residential customers	0
		<b>D-RE16</b>	Volume of recycled water supplied to non-residential customers	0
		<b>D-RE17</b>	Volume of recycled water supplied to managed aquifer recharge	0
		<b>D-RE18</b>	Volume of urban stormwater reused in network	0
<b>Services are resilient</b>	<b>Critical assets</b>	<b>D-RL1</b>	Have you undertaken an assessment to identify critical assets? Provide comments about your critical assets?	0
	<b>Emergency response planning and preparedness</b>	<b>D-RL2</b>	Has an emergency response plan been developed? Provide comments about your disaster response plan	0
		<b>D-RL3</b>	Has a business continuity plan been developed? Provide comments about your business continuity plan	0
		<b>D-RL4</b>	Date the emergency response plan was last reviewed.	0
		<b>D-RL5</b>	Date the business continuity plan was last reviewed.	0
		<b>D-RL6</b>	Date when an emergency response exercise was last conducted.	0
		<b>D-RL7</b>	Date when a business continuity plan exercise was last conducted.	0
	<b>Water security</b>	<b>D-RL8</b>	Do you have a strategic plan to address future changes in water supply demand. Provide comments.	0
	<b>Water restrictions</b>	<b>D-RL9</b>	Number of days that outdoor water use was restricted across each network.	0
		<b>D-RL10</b>	Number of days that outdoor water use was banned across the network.	0
		<b>D-RL11</b>	Were other restrictions imposed across the network. Provide comments about why restrictions were imposed.	0
<b>Services are economically sustainable</b>	<b>Actual Expenditure (for the reporting period)</b>	<b>D-ES1</b>	Total capital expenditure relating to drinking water by:	0
		<b>D-ES1a</b>	<ul style="list-style-type: none"> <li>meeting additional demand</li> </ul>	0
		<b>D-ES1b</b>	<ul style="list-style-type: none"> <li>replacing existing assets, improving the level of service</li> </ul>	0
		<b>D-ES2</b>	Total operating expenditure relating to drinking water	0
	<b>Forecast expenditure (for the next reporting period)</b>	<b>D-ES3</b>	Total forecast drinking water capital expenditure	0
		<b>D-ES4</b>	Total forecast operational expenditure	0
	<b>Revenue (for the reporting period*)</b>	<b>D-ES5</b>	Total revenue received, relating to drinking water	0

## Wastewater Static Measures – reported for the first year as at 1 July 2024

Outcome	Performance Measure	Ref. code	Data points (and units of measure, where applicable)	Report at	
General asset information	Wastewater network information	W-A1	Number of wastewater pump stations	O	
		W-A2	Total length of wastewater pipes (km)	O	
		W-A3	Total length of combined wastewater and stormwater pipes (km)	O	
		W-A4	Total length of pressured wastewater pipes (km)	O	
		W-A5	Total length of vacuum wastewater pipes (km)	O	
	Wastewater treatment	W-A8	Number of wastewater treatment plants	O	
		W-A9	Wastewater treatment process(es)	N	
		W-A10	Treated wastewater discharge receiving environment	N	
	Environmental and public health is protected	Wastewater network connections	W-EH1*	Number of residential connections in the wastewater network to gravity sewers	O
			W-EH2*	Number of residential connections in the wastewater network to pressure sewers	O
W-EH3*			Number of residential connections in the wastewater network to vacuum sewers	O	
W-EH4*			Number of non-residential connections in the wastewater network to gravity sewers	O	
W-EH5*			Number of non-residential connections in the wastewater network to pressure sewers	O	
W-EH6*			Number of non-residential connections in the wastewater network to vacuum sewers	O	
W-EH7*			Total population served by the wastewater network	O	
Resource consents compliance		W-EH8	Number of resource consents held for wastewater treatment plant	N	
		W-EH9	Type of resource consent(s)	N	
		W-EH10	Resource consent reference number(s)	N	
		W-EH11	Resource consent expiry date(s)	N	
		W-EH12	Consent status(s)	N	
		W-EH13	Wastewater overflow regulation approach(s) under local regional plan	N	
		W-EH14	Number of consents held for wastewater overflows in the network	N	
		W-EH15	Resource consent reference numbers for wastewater overflows	N	
		W-EH16	Resource consent expiry date for wastewater overflows	N	
Wastewater overflows		W-EH27	Are overflows recorded through verbal reports?	O	
		W-EH28	Are overflows recorded through SCADA monitoring?	O	
		W-EH29	Are overflows calculated through hydraulic models?	O	
		W-EH30	Are overflows calculated through calibrated hydraulic models?	O	
Inflow and infiltration		W-EH36	Wastewater treatment plant - peak to nominal flow ratio	N	
		W-EH37	What design standards do you use for calculating the capacity of wastewater network?	N	
		W-EH38	Levels of service for preventing wastewater overflows due to stormwater ingress	N	
Trade waste		W-EH39	Number of trade waste consents	O	
Services are resilient		Critical assets	W-RL1	Have you undertaken an assessment to identify critical wastewater assets?	O

## Wastewater Continuous Measures – reported for the year ending 30 June 2025

Outcome	Performance Measure	Ref. code	Data points (and units of measure, where applicable)	Report at
General asset information	Wastewater network information	W-A6	Wastewater imported for treatment from other wastewater network(s) (m <sup>3</sup> /year)	O
		W-A7	Wastewater exported for treatment by another wastewater network (m <sup>3</sup> /year)	O
	Wastewater treatment	W-A11	Volume of wastewater treated at treatment plant (average dry weather and peak flows) (m <sup>3</sup> /year)	N
		W-A12	Volume of trade waste at treatment plant	N
		W-A13	Volume of septage imported for treatment (m <sup>3</sup> /year)	N
		W-A14	Volume of treated wastewater applied to land (m <sup>3</sup> /year)	N
Environmental and public health is protected	Wastewater overflows	W-EH21	Number of overflows caused by blockages	O
		W-EH22	Number of times that wastewater overflows were caused by plant failure or equipment damage	O
		W-EH23	Number of times that wastewater overflows were caused by capacity being exceeded in the wastewater network	O
		W-EH24	Number of times that wastewater overflows were caused by capacity being exceeded in combined wastewater and stormwater pipes/networks	O
		W-EH25	Number of wastewater overflows resulting from causes not identified above	O
		W-EH26*	Number of wastewater overflows on private properties attributable to service provider.	O
		W-EH31	Number of hours where the treatment plant processes are fully bypassed (hours)	O
	Trade waste	W-EH40	Number of times that Trade waste consents were breached	O
		W-EH41	Describe any actions undertaken due to trade waste consent holders breaching consent conditions	O
Services are reliable	Fault attendance and resolution	W-R1	Median time (hours) to attend to a fault	O
		W-R2	Median time (hours) to resolve a fault	O
	Systems interruption	W-R7	Number of planned interruptions	O
		W-R8	Number of third-party incidents	O
	Asset conditions	W-R14	% of wastewater pipes that have received a condition grading	O
		W-R15	% of wastewater pipes in poor or very poor condition	O
		W-R16	Average age of wastewater pipes (years)	O
		W-R17	% of the wastewater pipes that have had CCTV inspections carried out in the last five years	O
		W-R18	% of above-ground assets that have received a condition grading	O
W-R19	% of above-ground assets in poor or very poor condition	O		
Resources are used efficiently	Energy efficiency	W-RE1	Electricity use (kWh)	N
		W-RE2	Energy use from other fuels (GJ)	N
	Process emissions	W-RE4	Wastewater treatment wetland emissions (tCO <sub>2</sub> e/yr)	N
		W-RE5	Wastewater effluent disposal emissions (tCO <sub>2</sub> e/yr)	N

		<b>W-RE6</b>	Wastewater sludge treatment emissions (tCO <sub>2</sub> e/yr)	N
		<b>W-RE7</b>	Wastewater sludge disposal emissions (tCO <sub>2</sub> e/yr)	N
	<b>Biosolids</b>	<b>W-RE9</b>	Production of biosolids (m <sup>3</sup> )	N
		<b>W-RE10</b>	% of dry solids in biosolids	N
		<b>W-RE11</b>	% disposal of biosolids to onsite stockpile ratio	N
		<b>W-RE12</b>	Disposal of biosolids in year to landfill (tonnes)	N
		<b>W-RE13</b>	Disposal of biosolids composting and reuse (tonnes)	N
		<b>W-RE14</b>	Disposal of biosolids to other routes (tonnes)	N
		<b>W-RE15</b>	Last year plant/pond was desludged (if applicable)	N