SASB STANDARDS

Now part of IFRS Foundation

Water Utilities & Services

Sustainability Accounting Standard

INFRASTRUCTURE SECTOR

Sustainable Industry Classification System® (SICS®) IF-WU

Under Stewardship of the International Sustainability Standards Board

INDUSTRY STANDARD | VERSION 2023-12

IFRS Sustainability

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ABOUT THE SASB STANDARDS

As of August 2022, the International Sustainability Standards Board (ISSB) of the IFRS Foundation assumed responsibility for the SASB Standards. The ISSB has committed to maintain, enhance and evolve the SASB Standards and encourages preparers and investors to continue to use the SASB Standards.

IFRS S1 *General Requirements for Disclosure of Sustainability-related Financial Information* (IFRS S1) requires entities to refer to and consider the applicability of disclosure topics in the SASB Standards when identifying sustainability-related risks and opportunities that could reasonably be expected to affect an entity's prospects. Similarly, IFRS S1 requires entities to refer to and consider the applicability of metrics in the SASB Standards when determining what information to disclose regarding sustainability-related risks and opportunities.

In June 2023, the ISSB amended climate-related topics and metrics in the SASB Standards to align them with the industry-based guidance accompanying IFRS S2 *Climate-related Disclosures*. In December 2023, the ISSB amended the non-climate-related topics and metrics in connection with the International Applicability of SASB Standards project.

Effective Date

This version 2023-12 of the Standard is effective for all entities for annual periods beginning or after January 1, 2025. Early adoption is permitted for all entities.

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INTRODUCTION

Overview of SASB Standards

The SASB Standards are a set of 77 industry-specific sustainability accounting standards ("SASB Standards" or "Industry Standards"), categorised pursuant to the Sustainable Industry Classification System® (SICS®).

SASB Standards include:

1. **Industry descriptions** – which are intended to help entities identify applicable industry guidance by describing the business models, associated activities and other common features that characterise participation in the industry.

2. **Disclosure topics** – which describe specific sustainability-related risks or opportunities associated with the activities conducted by entities within a particular industry.

3. **Metrics** – which accompany disclosure topics and are designed to, either individually or as part of a set, provide useful information regarding an entity's performance for a specific disclosure topic.

4. **Technical protocols** – which provide guidance on definitions, scope, implementation and presentation of associated metrics.

5. **Activity metrics** – which quantify the scale of specific activities or operations by an entity and are intended for use in conjunction with the metrics referred to in point 3 to normalise data and facilitate comparison.

Entities using the SASB Standards as part of their implementation of ISSB Standards should consider the relevant ISSB application guidance.

For entities using the SASB Standards independently from ISSB Standards, the *SASB Standards Application Guidance* establishes guidance applicable to the use of all Industry Standards and is considered part of the Standards. Unless otherwise specified in the technical protocols contained in the Industry Standards, the guidance in the SASB Standards Application Guidance applies to the definitions, scope, implementation, compilation and presentation of the metrics in the Industry Standards.

Historically, the *SASB Conceptual Framework* set out the basic concepts, principles, definitions and objectives that guided the SASB Standards Board in its approach to setting standards for sustainability accounting.

Use of the Standards

SASB Standards are intended to aid entities in disclosing information about sustainability-related risks and opportunities that could reasonably be expected to affect the entity's cash flows, its access to finance or cost of capital over the short, medium or long term. An entity determines which Industry Standard(s) and which disclosure topics are relevant to its business, and which associated metrics to report. In general, an entity should use the SASB Standard specific to its primary industry as identified in SICS® . However, companies with substantial business in multiple SICS® industries should refer to and consider the applicability of the disclosure topics and associated metrics in additional SASB Standards.

The disclosure topics and associated metrics contained in this Standard have been identified as those that are likely to be useful to investors. However, the responsibility for making materiality judgements and determinations rests with the reporting entity.

Industry Description

Water Utilities & Services industry entities own and operate water supply and wastewater treatment systems (generally structured as regulated utility businesses) or provide operational and other specialised water services to system owners (usually market-based operations). Water supply systems include the sourcing, treatment and distribution of water to residences, businesses and other entities such as governments. Wastewater systems collect and treat wastewater, including sewage, greywater, industrial waste fluids and stormwater runoff, before discharging the resulting effluent back into the environment.

Note: The scope of the Water Utilities & Services (IF-WU) industry excludes water services categorised as infrastructure design and development. These activities fall within the Engineering & Construction Services (IF-EC) industry.

SUSTAINABILITY DISCLOSURE TOPICS & METRICS

Table 1. Sustainability Disclosure Topics & Metrics

TOPIC	METRIC	CATEGORY	UNIT OF MEASURE	CODE
Energy Management	(1) Total energy consumed, (2) percentage grid electricity and (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	IF-WU-130a.1
Distribution Network Efficiency	Water main replacement rate [1]	Quantitative	Rate	IF-WU-140a.1
	Volume of non-revenue real water losses	Quantitative	Thousand cubic metres (m^3)	IF-WU-140a.2
Effluent Quality Management	Number of incidents of non-compliance associated with water effluent quality permits, standards, and regulations	Quantitative	Number	IF-WU-140b.1
	Discussion of strategies to manage effluents of emerging concern	Discussion and Analysis	n/a	IF-WU-140b.2
Water Affordability & Access	Average retail water rate for (1) residential, (2) commercial, and (3) industrial customers	Quantitative	Rate	IF-WU-240a.1
	(1) Number of residential customer water disconnections for non-payment, (2) percentage reconnected within 30 days [2]	Quantitative	Number, Percentage (%)	IF-WU-240a.3
	Discussion of impact of external factors on customer affordability of water, including the economic conditions of the service territory	Discussion and Analysis	n/a	IF-WU-240a.4
Drinking Water Quality	Number of incidents of non-compliance associated with drinking water quality standards and regulations [3]	Quantitative	Number	IF-WU-250a.1
	Discussion of strategies to manage drinking water contaminants of emerging concern	Discussion and Analysis	n/a	IF-WU-250a.2

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[1] Note to **IF-WU-140a.1** – The entity shall discuss the use of and challenges associated with planned and corrective maintenance in its distribution system.

[2] Note to **IF-WU-240a.3** – The entity shall discuss how policies, programmes and regulations affect the number and duration of residential customer disconnections.

[3] Note to **IF-WU-250a.1** – The entity shall describe notable instances of violation of jurisdictional drinking water quality standards or the World Health Organization (WHO) Guidelines for Drinking-water Quality.

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TOPIC	METRIC	CATEGORY	UNIT OF MEASURE	CODE
End-Use Efficiency	Percentage of water utility revenue from rate structures designed to promote conservation and revenue resilience	Quantitative	Percentage (%)	IF-WU-420a.1
	Customer water savings from efficiency measures, by market [4]	Quantitative	Cubic metres (m^3)	IF-WU-420a.2
Water Supply Resilience	Total water sourced from regions with High or Extremely High Baseline Water Stress; percentage purchased from a third party	Quantitative	Thousand cubic metres (m^3), Percentage (%)	IF-WU-440a.1
	Volume of recycled water delivered to customers	Quantitative	Thousand cubic metres (m^3)	IF-WU-440a.2
	Discussion of strategies to manage risks associated with the quality and availability of water resources	Discussion and Analysis	n/a	IF-WU-440a.3
Network Resiliency & Impacts of Climate Change	Wastewater treatment capacity located in 100-year flood zones	Quantitative	Cubic metres (m^3) per day	IF-WU-450a.1
	(1) Number and (2) volume of sanitary sewer overflows (SSO) and (3) percentage of volume recovered	Quantitative	Number, Cubic metres (m^3), Percentage (%)	IF-WU-450a.2
	(1) Number of unplanned service disruptions and (2) customers affected, each by duration category [5]	Quantitative	Number	IF-WU-450a.3
	Description of efforts to identify and manage risks and opportunities related to the impact of climate change on distribution and wastewater infrastructure	Discussion and Analysis	n/a	IF-WU-450a.4

Table 2. Activity Metrics

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Number of: (1) residential, (2) commercial, and (3) industrial customers served, by service provided[6]	Quantitative	Number	IF-WU-000.A

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[4] Note to **IF-WU-420a.2** – The entity shall discuss customer efficiency measures that are required by regulations for each of its relevant markets.

[5] Note to **IF-WU-450a.3** – The entity shall discuss notable service disruptions such as those that affected a significant population or those of extended duration.

[6] Note to **IF-WU-000.A** – The number of customers served shall be defined as the number of individual service agreements for water or wastewater services at single properties. An individual may own more than one property and be counted as a customer more than once. The entity may disclose additional customer types if such customer types exist that are outside the scope of customer types described above. The disclosure of the number of customers by customer type shall additionally be disaggregated by the number of customers (in each customer type) provided with water services, and separately, provided with wastewater services. The entity additionally may disclose the number of customers (in each customer type) by other types of services.

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ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Total water sourced, percentage by source type[7]	Quantitative	Cubic metres (m^3), Percentage (%)	IF-WU-000.B
Total water delivered to: (1) residential, (2) commercial, (3) industrial, and (4) all other customers[8]	Quantitative	Thousand cubic metres (m^3)	IF-WU-000.C
Average volume of wastewater treated per day, by (1) sanitary sewer, (2) stormwater, and (3) combined sewer	Quantitative	Cubic metres (m^3) per day	IF-WU-000.D
Length of (1) water mains and (2) sewer pipe	Quantitative	Kilometres (km)	IF-WU-000.E

[7] Note to **IF-WU-000.B** – Water sourced shall be disclosed by the direct source through which the entity obtains water, as classified by the following water source types: groundwater, surface water, ocean water, recycled water, water purchased from third parties, or other sources.

[8] Note to **IF-WU-000.C** – The amount of water delivered includes drinking water, industrial process water and recycled water.

Energy Management

Topic Summary

Entities in the Water Utilities & Services industry consume significant amounts of energy for the withdrawal, conveyance, treatment, and distribution or discharge of potable water and wastewater. Typically, an entity's largest operating cost after purchased water, chemicals, labour and utility operating costs is energy use. Purchased grid electricity is the most common energy input. In more remote locations, entities may use on-site generation to power equipment. The inefficient use of purchased grid electricity creates environmental externalities, such as increased Scope 2 greenhouse gas emissions. Environmental regulations may affect the future grid energy mix, resulting in price increases. Additionally, climate change is expected to impact grid reliability and affect the availability of water resources. As a result, water utility energy intensity may increase in the future as water resource access becomes more difficult. Alternative water treatment, such as recycling and desalination, also can require more energy. Together with decisions about the use of alternative fuels, renewable energy and on-site electricity generation, energy efficiency can influence both the cost and the reliability of the energy supply.

Metrics

IF-WU-130a.1. (1) Total energy consumed, (2) percentage grid electricity and (3) percentage renewable

1 The entity shall disclose (1) the total amount of energy it consumed as an aggregate figure, in gigajoules (GJ).

1.1 The scope of energy consumption includes energy from all sources, including energy purchased from external sources and energy produced by the entity itself (self-generated). For example, direct fuel usage, purchased electricity, and heating, cooling and steam energy are all included within the scope of energy consumption.

1.2 The scope of energy consumption includes only energy directly consumed by the entity during the reporting period.

1.3 In calculating energy consumption from fuels and biofuels, the entity shall use higher heating values (HHV), also known as gross calorific values (GCV), which are measured directly or taken from the Intergovernmental Panel on Climate Change (IPCC).

2 The entity shall disclose (2) the percentage of energy it consumed that was supplied from grid electricity.

2.1 The percentage shall be calculated as purchased grid electricity consumption divided by total energy consumption.

3 The entity shall disclose (3) the percentage of energy it consumed that was renewable energy.

3.1 Renewable energy is defined as energy from sources that are replenished at a rate greater than or equal to their rate of depletion, such as geothermal, wind, solar, hydro and biomass.

3.2 The percentage shall be calculated as renewable energy consumption divided by total energy consumption.

3.3 The scope of renewable energy includes renewable fuel the entity consumed, renewable energy the entity directly produced and renewable energy the entity purchased, if purchased through a renewable power purchase agreement (PPA) that explicitly includes renewable energy certificates (RECs) or Guarantees of Origin (GOs), a Green-e Energy Certified utility or supplier programme, or other green power products that explicitly include RECs or GOs, or for which Green-e Energy Certified RECs are paired with grid electricity.

3.3.1 For any renewable electricity generated on-site, any RECs and GOs shall be retained (not sold) and retired or cancelled on behalf of the entity for the entity to claim them as renewable energy.

3.3.2 For renewable PPAs and green power products, the agreement shall explicitly include and convey that RECs and GOs be retained or replaced and retired or cancelled on behalf of the entity for the entity to claim them as renewable energy.

3.3.3 The renewable portion of the electricity grid mix that is outside of the control or influence of the entity is excluded from the scope of renewable energy.

3.4 For the purposes of this disclosure, the scope of renewable energy from biomass sources is limited to materials certified to a third-party standard (for example, Forest Stewardship Council, Sustainable Forest Initiative, Programme for the Endorsement of Forest Certification, or American Tree Farm System), materials considered eligible sources of supply according to the *Green-e Framework for Renewable Energy Certification, Version 1.0* (2017) or Green-e regional standards, or materials eligible for an applicable jurisdictional renewable portfolio standard.

4 The entity shall apply conversion factors consistently for all data reported under this disclosure, such as the use of HHVs for fuel usage (including biofuels) and conversion of kilowatt hours (kWh) to GJ (for energy data including electricity from solar or wind energy).

5 The scope of disclosure includes all water, wastewater, and stormwater operations and services.

5.1 The entity may categorise out its disclosures by water, wastewater or stormwater services.

Distribution Network Efficiency

Topic Summary

Water utilities develop, maintain and operate complex interconnected infrastructure networks that include extensive pipelines, canals, reservoirs and pump stations. Distribution networks may lose significant volumes of water (called 'non-revenue water' because it is a distributed volume of water not reflected in customer billings). This water is lost primarily because of infrastructure failures and inefficiencies, such as leaking pipes and service connections. Non-revenue real water losses may impact financial performance, raise customer rates, and squander water and other resources such as energy and treatment chemicals. Conversely, improvements to infrastructure and operating processes may limit non-revenue losses, increase revenue and reduce costs. Efficiently directing operational and maintenance expenses or capital expenditures to distribution systems including primarily pipeline and service connection repair, refurbishment, or replacement may improve entity value and provide strong investment returns.

Metrics

IF-WU-140a.1. Water main replacement rate

1 The entity shall disclose its water main replacement rate for the distribution system(s) it owns or operates.

  1.1 The distribution system includes all water utility components for the distribution of finished or potable water to customers or other users. This includes the distribution of water for non-potable uses, including fire suppression.

2 The percentage shall be calculated as the total length of pipe replaced during the reporting period divided by the total length of water mains in its distribution system.

  2.1 The scope of water main replacements includes complete main replacements, as well as rehabilitations or renewals that substantially extend the life of the water main.

  2.2 The scope of water main replacements excludes water main repairs.

3 The scope of disclosure is limited to water operations and services (wastewater and stormwater services are excluded).

Note to **IF-WU-140a.1**

1 The entity shall describe the use of, and challenges associated with, planned and corrective maintenance in its distribution system, where:

  1.1 Corrective maintenance is defined as all maintenance undertaken after asset failure.

  1.2 Planned maintenance is defined as all regular maintenance activities undertaken in advance of asset failure.

2 Relevant challenges to describe may include the impacts of corrosion and soil properties on pipe materials (for example, cast iron, ductile iron, polyvinyl chloride and wood), the entity's ability to finance maintenance and replacement through rate adjustments, and the age of the current distribution network.

IF-WU-140a.2. Volume of non-revenue real water losses

1 The entity shall disclose the volume, in cubic metres, of non-revenue real water losses from the distribution system.

1.1 Non-revenue real water losses are defined as the physical water losses, which are not billed and produce no revenue, from the pressurised system and storage tanks up to the point of customer consumption, which is the customer meter for those utilities that meter their customers. In unmetered systems, the delineation is the point at which the customer becomes responsible for customer service connection piping maintenance and repairs. Real losses include leakage from mains and service connections and storage tank overflows.

2 The entity shall calculate the amount of non-revenue real water losses according to applicable jurisdictional laws or regulations when such loss occurs.

3 The scope of disclosure is limited to water operations and services (wastewater and stormwater services are excluded).

4 If applicable jurisdictional laws or regulations do not exist, the entity shall calculate the volume of real losses according to voluntary initiatives.

5 The entity may disclose the technique(s) employed to measure non-revenue water from real losses and the amount calculated according to each technique employed.

Effluent Quality Management

Topic Summary

Water and wastewater treatment facilities produce effluent that may pose risks to the environment and human health. Effluent includes residuals and solids that consist of chemicals used in the treatment process and contaminants removed from raw water or wastewater inputs. Facilities discharge treated effluent into surface water or pump it into groundwater. Potential environmental impacts vary depending on the treatment and disposal process. Additionally, consumers and regulators are becoming increasingly concerned by substances that may not be treated by wastewater facilities, such as endocrine disrupting chemicals (EDCs). Because of the environmental risks associated with effluent, treatment facilities are subject to extensive environmental regulations to control and monitor their impact. As public and regulatory scrutiny of effluent quality increases with emerging concerns about some potentially harmful substances, entities may need to innovate to ensure effluent is not harmful to the environment or human health. Effluent discharges exceeding jurisdictional limits may result in significant regulatory penalties, and frequent or severe episodes may jeopardise a utility's social licence to operate. Entities can avoid the financial consequences of poor effluent quality management through infrastructure and equipment planning, maintenance and operations, as well as the deployment of appropriately trained and experienced labour.

Metrics

IF-WU-140b.1. Number of incidents of non-compliance associated with water effluent quality permits, standards, and regulations

1 The entity shall disclose the total number of instances of non-compliance with water effluent permits, standards and regulations, including violations of technology-based standards and exceedances of quantity or quality-based standards.

2 The scope of the disclosure includes incidents governed by water effluent quality standards and associated jurisdictional statutory permits and regulations, including the discharge of a hazardous substance, failure to monitor wastewater effluent, or effluent limit exceedances (for example, waste allocation or whole effluent toxicity).

2.1 For the purposes of this disclosure, any violations of applicable jurisdictional laws or regulations associated with drinking water quality standards shall be limited to non-compliance with effluent requirements.

3 The scope of the disclosure shall only include incidents of non-compliance that resulted in formal enforcement actions.

3.1 Formal enforcement actions are defined as governmental actions that address a violation or threat of violation of water quantity or quality laws, regulations, policies or orders, and can result in administrative penalty orders, administrative orders and judicial actions, among others.

4 Violations shall be disclosed, regardless of their measurement method or frequency. These include violations for:

4.1 continuous discharges, with limitations, standards and prohibitions that are generally expressed as maximum daily, weekly and monthly averages; and

4.2 non-continuous discharges, with limitations that are generally expressed in terms of frequency, total mass, maximum rate of discharge and mass or concentration of specified pollutants.

IF-WU-140b.2. Discussion of strategies to manage effluents of emerging concern

1 The entity shall discuss its strategy for managing unregulated effluents that are associated with emerging concerns from the public, regulators or others regarding their potential effects on human health or the environment.

1.1 Effluents of emerging concern may include pharmaceutical residues, personal care products, flame retardants, detergents, pesticides, hormones and other compounds including those that disrupt the endocrine system.

2 The entity shall describe its approach to identifying and managing effluents of emerging concern including whether management is characterised by a hazard-based, risk-based or alternative approach.

2.1 A hazard-based approach to effluent management is defined as the process of identifying and managing effluents based on the toxicological characteristics of effluent composition as they relate to human health and the environment, including specific exposure routes (for example, oral, dermal or inhalation) and dosages (quantities) of a substance required to cause an adverse effect.

2.2 A risk-based approach to effluent management is defined as the process of managing effluents by integrating effluent hazard information with an assessment of effluent exposure (route, frequency, duration and magnitude) to assess the probability and magnitude of the exposure harming a given population.

2.3 Other approaches may include the mixed use of hazard- and risk-based approaches depending on the specific effluent, product category, business segment, operating region or intended product user.

3 Relevant actions to discuss include, if relevant:

3.1 the practices employed to determine and monitor effluents of emerging concern, including a discussion of the contaminants of emerging concern in the effluent stream that are being monitored and any thresholds the entity may have developed to define a maximum acceptable concentration of such effluents; and

3.2 the use of pre-treatment requirements among industrial customers.

4 Relevant wastewater treatment processes include conventional wastewater treatment and advanced wastewater treatment technologies such as granular activated carbon, ozonation, advanced oxidation, membrane treatment, or investments in research and development of treatment technologies or methods for emerging contaminants.

5 The entity shall describe the risks or opportunities associated with the potential for emerging contaminants to become subject to effluent regulations.

5.1 Relevant information to discuss includes:

5.1.1 the identification of the emerging contaminants the entity anticipates may become subject to future regulation;

5.1.2 the entity's current ability to treat or manage such contaminants;

5.1.3 the potential associated risks (for example, fines, challenges to community relations and the costs associated with compliance); and

5.1.4 the potential associated opportunities (for example, infrastructure expansions or new treatment methods).

Water Affordability & Access

Topic Summary

Reliable clean water access is considered a basic human right in most jurisdictions. Affordable pricing and sufficient access are essential components of this right. Thus, structuring water rates in a way that the community perceives to be fair is an important part of the operations and functions of entities in the Water Utilities & Services industry. Entities that collaborate with regulators to implement rate structures that are well-received by the communities they service may be better able to maintain financial stability and take advantage of opportunities for growth—especially because of the widespread underfunding of water infrastructure in many regions. Entities that use rate mechanisms that inhibit access to water through prohibitive costs or otherwise, may face community opposition. Entities should ensure fair pricing and access, as well as rates that can adequately fund infrastructure over the long term, provide safe drinking water and wastewater treatment, and receive appropriate returns on capital.

Metrics

IF-WU-240a.1. Average retail water rate for (1) residential, (2) commercial, and (3) industrial customers

1 The entity shall disclose its average retail water rate per 1 cubic metre (m^3) of water delivered to customers.

1.1 The entity shall calculate its average retail water rate as the total revenue directly resulting from water delivered to retail customers divided by the corresponding amount of water delivered (in 1 cubic metre increments).

2 The entity shall disclose its average retail water rate separately for each type of customer, classified as (1) residential, (2) commercial and (3) industrial.

2.1 The scope of each customer type shall be consistent with the entity's financial reporting.

2.2 Each customer type shall be disclosed as an aggregate for all customers within that respective customer type.

2.2.1 If the entity's financial reporting combines commercial and industrial customers into one category, then the entity may combine the commercial and industrial customer types.

2.2.2 The entity may disclose sub-classifications of customer types. For example, in addition to the average retail water rate for commercial customers, the entity may provide further disclosures by small commercial customers and large commercial customers.

3 The scope of the disclosure is limited to water operations and services (wastewater and stormwater services are excluded).

4 The entity may disclose additional customer types if such customer types exist outside the scope of the customer types described above. For example, the entity may disclose the average water rate for agricultural customers.

IF-WU-240a.3. (1) Number of residential customer water disconnections for non-payment, (2) percentage reconnected within 30 days

1 The entity shall disclose (1) the total number of water disconnections among residential customers during the reporting period that resulted from non-payment.

1.1 A disconnection is defined as the entity, or its service provider, intentionally terminating a customer's access to water.

1.2 Disconnections occurring for more than one reason shall be included if non-payment (or under-payment) is a contributing cause of the disconnection.

2 The entity shall disclose (2) the percentage of disconnections that are reconnected within 30 days.

2.1 A reconnection is defined as the entity, or its service provider, intentionally reinstating a customer's access to water, which was previously disconnected.

2.1.1 Reconnections may occur for reasons including bill payment, the establishment of a bill payment plan or the use of a bill-assistance programme.

2.2 The percentage shall be calculated as the number of residential customers previously disconnected, which were reconnected within 30 days of the date of the disconnection, divided by the total number of residential customers disconnected during the reporting period as a result of non-payment.

2.3 The scope of disclosure may include reconnections that occur after the end of the reporting period, but the entity shall not double-count reconnections for more than one discrete reporting period.

3 The scope of disclosure is limited to water operations and services (wastewater and stormwater services are excluded).

Note to **IF-WU-240a.3**

1 The entity shall discuss how policies, programmes and regulations affect the number and duration of residential customer disconnections.

1.1 Policies include those that govern the conditions under which the entity may (or may not) disconnect residential customers.

1.2 Programmes include those administered by jurisdictions, utility commissions or entities designed to improve the affordability of water among residential customers or reduce the number or duration of residential customer disconnections.

1.3 Regulations include those enforced by jurisdictions, utility commissions or entities designed to improve the affordability of water among residential customers or reduce the number or duration of residential customer disconnections.

IF-WU-240a.4. Discussion of impact of external factors on customer affordability of water, including the economic conditions of the service territory

1 The entity shall describe the external factors that cause, or are reasonably likely to cause, a significant change in the affordability of water among the entity's retail customers.

1.1 External factors are defined as influences outside the entity's direct control.

1.2 The scope of external factors includes factors that directly affect current or future water rates, or factors that affect customers' current or future ability to pay water bills (with no direct effect on water rates).

1.3 External factors may include geography, climate, weather, regulations, public policy and public purpose programmes, regardless of whether such factors directly relate to affordability.

1.4 At a minimum, external factors shall include the prevailing economic conditions in the service territory.

1.4.1 The entity may disclose the median household income, poverty rates, employment rates or other quantitative or qualitative data describing the economic conditions of the service territory.

2 For each external factor, in addition to a description, the entity shall briefly describe:

2.1 the frequency and magnitude with which the factor affects water affordability for the entity's customers; and

2.2 the trend in how the factor affects water affordability for the entity's customers.

3 The entity shall describe the risks and opportunities that may arise from the external factors.

3.1 Risks may include customer non-payment of water bills, cost recovery uncertainty, reputational value, and regulations, public policy and public purpose programmes that may generate adverse financial consequences.

3.2 Opportunities may include customer growth, capital investment opportunities, reputational value regulations, public policy and public purpose programmes that may generate positive financial effects.

4 The scope of the disclosure includes the affordability of water for all retail customers within the entity's service territory, which may include residential, commercial, industrial and agricultural customers.

4.1 The entity may prioritise low-income residential customers in its disclosures.

5 The scope of the disclosure is limited to water operations and services (wastewater and stormwater services are excluded).

6 The entity may describe how its average rates, average bills or customer disconnections compare to other utilities in the industry.

Drinking Water Quality

Topic Summary

Entities in the industry must ensure that drinking water conforms to health regulations, satisfies customer expectations and is supplied reliably. To protect human health, entities must protect water sources from contamination, which also may reduce treatment processes and costs for entities. Comprehensive treatment processes are designed, developed and maintained to meet water quality standards, and the finished water output is monitored routinely for compliance and safety. Natural disasters, such as forest fires and flooding, may also affect water quality. Overall, entities invest significant resources to deliver safe drinking water consistently to customers. Failure to ensure adequate water quality may result in regulatory fines, litigation, increased operating costs or capital expenditures, reputational risk, and asset or business seizure.

Metrics

IF-WU-250a.1. Number of incidents of non-compliance associated with drinking water quality standards and regulations

1 The entity shall disclose the total number of instances of non-compliance with applicable jurisdictional drinking water quality laws or regulations.

1.1 The scope of the disclosure shall only include incidents of non-compliance that resulted in formal enforcement actions.

1.1.1 Formal enforcement actions are defined as governmental actions that address a violation or threat of violation of drinking water quality standards, regulations, laws, policies or orders, and can result in administrative penalty orders, administrative orders and judicial actions, among others.

1.1.2 The scope of the disclosure includes non-compliance with standards and regulations related to water quality testing, timely reporting of water quality results and public communication.

2 The entity shall disclose the applicable jurisdictional laws or regulations used to define instances of non-compliance.

3 The entity may disaggregate the number of incidents of non-compliance into relevant categories aligned with applicable jurisdictional requirements. Such categories could include incidents involving substances of concern, classifications identified by applicable law or regulation, by region or by the level of severity (as gauged by the potential risks to or actual effects on human health).

Note to **IF-WU-250a.1**

1 The entity shall describe notable instances of violation of jurisdictional drinking water quality standards or the World Health Organization (WHO) *Guidelines for Drinking-water Quality*.

1.1 Notable instances include the most serious and acute contamination events that pose risks to human health and require customer notification with 24 hours (notification may be broadcast by local media), those that affected a significant number of customers or those occurring over an extended duration.

1.2 The entity shall describe how it defines 'a significant number of customers' and 'an extended duration' for purposes of reporting this disclosure.

2 For such violations, the entity should provide:

2.1 description and cause of the violation;

2.2 the population affected by the disruption;

2.3 the costs associated with resolving the violation;

2.4 actions taken to mitigate potential for future violations; and

2.5 any other significant outcomes (for example, legal proceedings or related fatalities).

3 The entity shall describe its compliance with jurisdictional drinking water quality standards or the WHO *Guidelines for Drinking-water Quality*, including any opportunities or challenges that such standards or the WHO *Guidelines for Drinking-water Quality* may present.

IF-WU-250a.2. Discussion of strategies to manage drinking water contaminants of emerging concern

1 The entity shall discuss its strategy for managing unregulated drinking water contaminants that are associated with emerging concerns from the public, regulators or others regarding their potential effects on human health or the environment.

1.1 The scope of the disclosure excludes contaminants currently subject to maximum contaminant level (MCL), maximum residual distribution level (MRDL) or treatment technique (TT) regulations.

1.2 Drinking water contaminants of emerging concern include those identified by the World Health Organization (WHO) *Guidelines for Drinking-Water Quality*, such as pharmaceutical residuals, personal care products, flame retardants, detergents, pesticides, hormones and other compounds including those that disrupt the endocrine system.

2 The entity shall describe its approach to identifying and managing drinking water contaminants of emerging concern including whether management is characterised by a hazard-based, risk-based or alternative approach.

2.1 A hazard-based approach to contaminant management is defined as the process of identifying and managing the prevalence of contaminants based on their toxicological characteristics, including specific exposure routes (for example, oral, dermal or inhalation) and dosages (amounts) of a substance required to cause an adverse effect.

2.2 A risk-based approach to contaminant management is defined as the process of managing the prevalence of contaminants by integrating contaminant hazard information with an assessment of exposure (route, frequency, duration and magnitude) to assess the probability and magnitude of harm to a given populations.

2.3 Other approaches may include the mixed use of hazard and risk-based approaches depending on the specific contaminant, product category, business segment, operating region, or intended product user.

3 Relevant actions to discuss include the practices employed to determine and monitor contaminants of emerging concern, including a discussion of the contaminants of emerging concern that are being monitored, and any thresholds the entity may have internally developed to define a maximum acceptable concentration of such contaminants.

4 Relevant drinking water treatment processes and strategies include conventional drinking water treatment and advanced drinking water treatment technologies such as granular activated carbon, ozonation, ultraviolet disinfection, membrane treatment, or investments in research and development of treatment technologies for emerging contaminants.

5 The entity shall discuss its monitoring practices, including efforts to reliably detect contaminants and collect occurrence data.

5.1 The entity may describe its communication to customers regarding monitoring efforts and occurrence data.

6 The entity shall describe the risks or opportunities associated with emerging contaminants that have received a preliminary or positive regulatory determination or health advisory under applicable jurisdictional laws or regulations.

6.1 Relevant information to discuss includes:

6.1.1 the identification of the emerging contaminants the entity anticipates may become subject to future regulation;

6.1.2 the entity's current ability to treat or manage such contaminants; and

6.1.3 the potential risks (for example, fines, challenges to community relations and the costs associated with compliance) and opportunities (for example, infrastructure expansions or new treatment methods).

End-Use Efficiency

Topic Summary

Consumer level water efficiency and conservation—whether a product of government mandates, environmental consciousness or demographic trends—is increasingly important for long-term resource availability and the financial performance of the water supply segment of the industry. How utilities work with regulators to mitigate revenue declines while increasing end-use resource efficiency may be financially material. Water efficiency mechanisms, including rate decoupling, may ensure that a utility's revenue can adequately cover its fixed costs and provide the desired level of returns regardless of sales volume, while incentivising customers to conserve water. Efficiency mechanisms can align utilities' economic incentives with environmental and social interests, including improved resource efficiency, lower rates and increased capital investments in infrastructure. Water utilities may manage rate mechanism impacts through positive regulatory relations, forward-looking rate cases that incorporate efficiency and a strong execution of efficiency strategy.

Metrics

IF-WU-420a.1. Percentage of water utility revenue from rate structures designed to promote conservation and revenue resilience

1 The entity shall disclose the percentage of water utility revenue from rate structures designed to promote conservation and revenue resilience.

1.1 The scope of rate structures designed to promote conservation and revenue resilience is limited to rate structures explicitly and intentionally designed to:

1.1.1 Financially incentivise customers to reduce water consumption or improve water efficiency

1.1.2 Improve the revenue resilience of the water utility, primarily in circumstances of declining average customer water use or improving average customer water efficiency

1.2 The scope of rate structures that are designed to promote conservation and revenue resilience includes revenue decoupled rate structures.

1.2.1 Revenue decoupled rate structures are defined as a rate adjustment mechanism that separates the utility's fixed cost recovery from the volume sold, and the utility's revenue is collected based on the regulatory determined revenue requirement.

1.2.2 Revenue decoupled rate structures may also be referred to as 'revenue regulation' or 'revenue cap regulation' in which the regulator sets up an allowed revenue requirement and adjusts collections to achieve allowed, or 'target', revenue irrespective of actual sales.

1.2.3 Additional guidance on the scope of revenue decoupled rate structures is contained inAlternative Regulation and Ratemaking Approaches for Water Companies,The Brattle Group, September 23, 2013.

1.3 The scope of rate structures designed to promote conservation and revenue resilience may include rate structures that contain a lost revenue adjustment mechanism (LRAM).

1.3.1 Rate structures that contain an LRAM are defined as volumetric rates that contain a mechanism allowing the entity to recover revenues lost directly resulting from water conservation, water efficiency, or demand side management programmes the entity directly manages or implements.

1.3.2 Additional guidance on the scope of revenue decoupled rate structures is contained in *Alternative Regulation and Ratemaking Approaches for Water Companies*, The Brattle Group, September 23, 2013.

1.3.3 The scope of LRAM includes mechanisms that allow the estimation of lost revenue based on the programmes' actual impacts, but it excludes lost revenue from planned or forecast programmes' impacts (as described in *Alternative Regulation and Ratemaking Approaches for Water Companies*, The Brattle Group, September 23, 2013).

1.4 The scope of rate structures designed to promote conservation and revenue resilience excludes straight fixed variable rate design, absent other rate mechanisms explicitly designed to promote conservation.

2 The percentage shall be calculated as the regulated water utility revenue from rate structures designed to promote conservation and revenue resilience divided by total regulated water utility revenue.

3 The scope of disclosure is limited to water operations and services (wastewater and stormwater services are excluded).

IF-WU-420a.2. Customer water savings from efficiency measures, by market

1 The entity shall disclose the total volume of water savings, in cubic metres, from water efficiency measures installed or otherwise supported by the entity during the reporting period for each of its markets.

1.1 Markets are defined as those operations subject to distinct public utility regulatory oversight.

2 Water savings shall be defined according to the gross savings approach as the changes in water consumption or demand that result from programme-related actions taken by participants in an efficiency programme, regardless of why they participated.

2.1 The entity should list those markets where it reports water savings on a net savings basis, and thus may be different from the figures disclosed here.

2.1.1 Net water savings are defined as changes in consumption specifically attributable to a water efficiency programme that would not otherwise have happened without the programme.

3 Water savings shall be calculated on a gross basis, but consistent with the methodology set forth in jurisdictional evaluation, measurement, and verification (EM&V) regulations when such savings occur.

4 If jurisdictional regulations do not exist, the entity shall calculate water savings in a manner consistent with the measurement and verification methods outlined by Efficiency Valuation Organisation's (EVO) *International Performance Measurement and Verification Protocol: Concepts and Options for Determining Energy and Water Savings, Volume 1* (IPM&V Protocol).

5 The entity shall consider the EVO IPM&V Protocol and jurisdictional regulations as normative references, thus any updates made year-on-year shall be considered updates to this guidance.

6 The scope of disclosure is limited to water operations and services (wastewater and stormwater services are excluded).

Note to **IF-WU-420a.2**

1 The entity shall describe customer efficiency measures required by regulations for each of its relevant markets, including a discussion of:

1.1 The amount or percentage of water savings from efficiency measures required by regulations for each market

1.2 Instances of non-compliance with water savings obligations

1.2.1 In such instances, the entity shall disclose the difference between the water savings delivered and the amount required by the regulation.

1.3 Water savings delivered that exceed those required by regulations that resulted in the entity receiving energy efficiency performance incentives, including the value of any such incentives

2 The entity shall describe the forms of regulation in each market that allow for or incentivise water efficiency, including a discussion of the benefits, challenges and financial effects associated with such regulations.

3 Relevant policy mechanisms to discuss may include:

3.1 Deferral decoupling

3.2 Current period decoupling

3.3 Single fixed variable rates

3.4 Lost revenue adjustments

3.5 Water efficiency feebates

4 The entity may describe incentives it has developed for its customers that promote end-use efficiency, which may include dynamic pricing, water efficiency rebates, and other measures to subsidise customer water efficiency.

5 The entity may describe voluntary initiatives in which it has participated to manage end-user water efficiency.

Water Supply Resilience

Topic Summary

Water supply systems obtain water from groundwater and surface water sources. Water supplies either may be accessed directly or purchased from a third party, often a government entity. Water scarcity, water source contamination, infrastructure failures, regulatory restrictions, competing users and overconsumption by customers are all factors that may jeopardise sufficient water supply access. These issues, combined with an increasing risk of extreme and frequent drought conditions because of climate change, may result in inadequate supplies or mandated water restrictions. The related financial impacts may manifest in diverse ways, depending on rate structure, but are most likely to impact entity value through decreased revenue. Water supply challenges also may increase the price of purchased water, which could result in higher operating costs. Failures of critical infrastructure such as aqueducts and canals, which could result from events such as earthquakes, can present catastrophic risks to customers of the water supply system and could inflict untold financial consequences. Entities may mitigate water supply risks (and the resulting financial risks) through diversification of water supplies, sustainable withdrawal levels, technological and infrastructure improvements, contingency planning, positive relations with regulators and other major users, as well as rate structures.

Metrics

IF-WU-440a.1. Total water sourced from regions with High or Extremely High Baseline Water Stress; percentage purchased from a third party

1 The entity shall disclose the amount of fresh water, in thousands of cubic metres, sourced from all sources in regions with High (40–80%) or Extremely High (>80%) Baseline Water Stress.

1.1 Water sources include surface water (including water from wetlands, rivers, lakes and oceans), groundwater and wholesale water purchased from a third party.

1.2 Fresh water may be defined according to the local laws and regulations where the entity operates. If no legal definition exists, fresh water shall be considered to be water that has less than 1,000 parts per million of dissolved solids.

1.3 Water obtained from a water utility in compliance with jurisdictional drinking water regulations can be assumed to meet the definition of fresh water.

1.4 High or Extremely High Baseline Water Stress shall be classified by the World Resources Institute's (WRI) Water Risk Atlas tool, Aqueduct.

2 The entity shall disclose the percentage of fresh water sourced in regions with High or Extremely High Baseline Water Stress that was purchased from a third party.

2.1 The percentage shall be calculated as the amount of fresh water sourced in regions with High or Extremely High Baseline Water Stress (in thousands of cubic metres) purchased from a third party divided by the total amount of fresh water sourced in regions with High or Extremely High Baseline Water Stress (in thousands of cubic metres).

IF-WU-440a.2. Volume of recycled water delivered to customers

1 The entity shall disclose the volume, in cubic metres, of water recycled and delivered to its customers.

2 Recycled water shall be defined as wastewater treated to meet specific water quality criteria with the intention of being used for a range of purposes, which may include:

2.1 Potable reuse, such as direct augmentation of the drinking water supply and indirect augmentation of a drinking water source when an environmental buffer precedes drinking water treatment

2.2 Non-potable reuse, such as recreational landscape irrigation, agricultural reuse, industrial process reuse and environmental reuse (for example, wetland enhancement and groundwater recharge)

3 The amount of recycled water delivered shall be calculated as the amount of water that meets the quality standards for approved uses of recycled water as set forth through applicable jurisdictional laws or regulations where the recycling occurs.

IF-WU-440a.3. Discussion of strategies to manage risks associated with the quality and availability of water resources

1 The entity shall identify and describe its significant risks associated with the quality and availability of, and access to, water resources, including a discussion of its strategies to manage such risks.

1.1 Relevant information to provide may include:

1.1.1 Environmental constraints such as water resources in water-stressed regions, drought, interannual or seasonal variability, severe weather events, risks from the impacts of climate change, and any impacts or risks associated with contaminated sources.

1.1.2 Regulatory, infrastructure and financial constraints such as reliance on essential infrastructure to obtain water, risk of regulatory restrictions to obtaining sufficient water or the entity's ability to obtain and retain water rights, permits and allocations, and stakeholder perceptions and concerns related to water sources (for example, those from local communities, non-governmental organisations and regulatory agencies).

1.1.3 How risks may vary by water source including surface water (including water from wetlands, rivers, lakes and oceans), groundwater, rainwater or wholesale water supplies.

2 The entity shall include a description of the potential impacts these risks may have on its operations and the time line over which such risks are expected to manifest.

2.1 Impacts may include those associated with costs, revenue, liabilities, continuity of operations, access to water and reputation.

3 The entity shall provide a discussion of its short- and long-term strategy or plans to manage these risks, including, when relevant:

3.1 Diversification of water sources

3.2 Contingency planning in the event of critical infrastructure failure

3.3 The use of alternative, watershed-based approaches to align overall infrastructure decisions with overall watershed goals

3.4 The scope of its strategy, plans or targets, such as whether they pertain differently to different business units (for example, residential versus industrial), geographies or regulatory frameworks (for example, rate structures or mandated water-use restrictions)

3.5 The activities and investments established to manage water sourced from areas of water stress or scarcity and any risks or limiting factors that might affect the ability to address water scarcity

3.6 The efforts to secure and retain reliable long-term water supplies through senior water rights, permits, or allocations, including the entity's ability to secure water (for example, through purchase from a third party) should sufficient allocations be unavailable

4 Disclosure of strategies, plans and infrastructure investments shall be limited to activities that were active or reached completion during the reporting period.

5 The entity shall discuss if its management of water scarcity results in any additional lifecycle impacts or trade-offs including trade-offs in land use (for example, development of water storage facilities such as reservoirs), energy consumption, and greenhouse gas (GHG) emissions and why the entity chose these practices despite lifecycle trade-offs.

Network Resiliency & Impacts of Climate Change

Topic Summary

Climate change may create uncertainty for water supply systems and wastewater systems because of potential impacts on infrastructure and operations. Climate change may result in increased water stress, more frequent severe weather events, reduced water quality and rising sea levels that could impair utility assets and operations. Water supply and wastewater disposal are basic services for which maintaining operational continuity is of utmost importance. The increasing frequency and severity of storms challenge water and wastewater treatment facilities, and these factors can affect service continuity. Intense precipitation may result in sewage volumes that exceed treatment facility capacity resulting in the release of untreated effluent. Minimising current and future risks of service disruptions and improving service quality may require additional capital expenditures and operational expenses. As the likelihood of extreme weather events increases, entities that address these risks through redundancies and strategic planning may better serve customers and improve performance.

Metrics

IF-WU-450a.1. Wastewater treatment capacity located in 100-year flood zones

1 The entity shall disclose the capacity, in cubic metres per day, of its wastewater treatment facilities located in 100-year flood zones.

1.1 100-year flood zones are defined as land areas subject to a 1% greater chance of flooding in any given year. Such areas also may be referenced as being subject to the 1% annual chance flood, the 1% annual exceedance probability flood or the 100-year flood.

1.1.1 Examples of 100-year flood zones may include coastal flood plains, flood plains along major rivers and areas subject to flooding from ponding in low-lying areas.

2 The scope of disclosure shall include all the entity's wastewater treatment facilities located in 100-year flood zones.

IF-WU-450a.2. (1) Number and (2) volume of sanitary sewer overflows (SSO) and (3) percentage of volume recovered

1 The entity shall disclose the (1) number of sanitary sewer overflows (SSO) originating from sewer systems under the entity's operational control.

1.1 SSOs are defined as overflows, spills, releases or diversions of wastewater from a sanitary sewer system.

1.2 If regulations do not require reporting of SSOs, the entity shall disclose the calculation methodology or combination of methodologies used. Relevant methods may include:

1.2.1 Duration and flow rate comparison method

1.2.2 Upstream lateral connections method

1.2.3 Continuous flow metering

2 The entity shall disclose the (2) volume, in cubic metres, of SSOs originating from sewer systems under the entity's operational control.

2.1 The volume of SSOs shall be calculated according to the methodologies used for regulatory reporting in the corresponding jurisdiction.

3 The entity shall report the (3) percentage of SSOs recovered, by volume.

3.1 The percentage shall be calculated as the volume, in cubic metres, of sewage discharged to the environment through SSOs that was recovered, divided by the total amount of sewage discharged to the environment through SSOs.

3.2 The recovered volume is defined as the amount of sewage discharged that was captured and returned to the sanitary sewer system, private lateral or collection system.

3.3 The volume of SSOs recovered shall be calculated according to the methodologies used for regulatory reporting in the corresponding jurisdiction.

3.4 If regulations do not require reporting the recovery of SSOs, the entity shall disclose the calculation methodology or combination of methodologies used. Relevant methods may include:

3.4.1 Measured volume method

3.4.2 Visual estimation method

4 The entity may describe programmes and initiatives including those programmes overseen by applicable jurisdictional legal or regulatory authorities and those the entity has developed internally to reduce the number and volume of SSOs and to mitigate such occurrences.

IF-WU-450a.3. (1) Number of unplanned service disruptions and (2) customers affected, each by duration category

1 The entity shall disclose the (1) number of unplanned service disruptions to its drinking water supply services and (2) the total number of customers affected by such disruptions.

1.1 An unplanned service disruption shall be defined according to the applicable jurisdictional laws or regulations where the disruption occurred.

1.2 In cases when regulations to define disruptions do not exist, disruptions shall be considered as incidents of complete water shutoff, low flow restrictions, boil-water advisories and water main flushing, and they exclude those incidents when a reduction of service occurs, but normal activities (for example, dishwashing, showering, laundry washing and toilet flushing) are maintained.

1.3 The scope of unplanned service disruptions shall be limited to those disruptions that were not planned or scheduled and those disruptions exceeding the scheduled duration of disruption.

1.3.1 A scheduled disruption shall be defined according to local regulations where the disruption occurred. If such regulations do not exist, a scheduled disruption shall be considered a disruption for which the entity has provided a minimum of 24 hours advanced notification.

1.4 Customers are defined as the number of individual service agreements for water services at single properties, where an individual may own more than one property and be counted as a customer more than once.

2 The entity shall disclose the number of unplanned service disruptions and the number of customers affected, by the length of duration category.

2.1 The length of duration categories is under four hours, between four and 12 hours, or 12 hours or more.

2.2 The duration of a disruption is defined as the time taken for all unplanned or emergency corrective activities by all utility employees and contractors working for the utility after discovery of an unplanned service disruption.

3 The scope of disclosure is limited to water operations and services (wastewater and stormwater services are excluded).

4 The entity may separately disclose the number of disruptions that were intentionally planned or scheduled by the entity, the number of customers affected, and the duration of those disruptions.

Note to **IF-WU-450a.3**

1 The entity shall discuss notable service disruptions such as those that affected a significant number of customers or those of extended duration.

2 For such disruptions, the registrant should provide:

2.1 Description and cause of the service disruptions

2.2 The costs associated with the service disruptions

2.3 Actions taken to mitigate the potential for future service disruptions

2.4 Any other significant outcomes (for example, legal proceedings)

IF-WU-450a.4. Description of efforts to identify and manage risks and opportunities related to the impact of climate change on distribution and wastewater infrastructure

1 The entity shall describe its efforts to identify and manage risks and opportunities associated with climate change-related impacts on its water distribution and wastewater infrastructure.

1.1 Risks include, among others, threats to the entity's physical infrastructure resulting from climate change-related events (for example, rising sea levels, increasing storm intensity and impacts of drought) that could result in service disruption(s).

1.2 Opportunities include the need for infrastructure improvements within the entity's current service area and the opportunity to expand its services through the water infrastructure.

2 The entity shall describe how it identifies and prioritises the potential for risks to, and vulnerabilities of, its water distribution and wastewater infrastructure.

2.1 Relevant risks and vulnerabilities to describe may include those relating to the age, geographical location and physical qualities of the entity's distribution infrastructure.

2.2 Relevant efforts to discuss include involvement in climate change adaptation and mitigation programmes.

3 The entity shall describe its efforts to manage the risks and opportunities associated with its water distribution and wastewater infrastructure including, but not limited to, infrastructure development, current storm tracking, global gridded climate models and the use of redundant systems to assure service continuity.

4 The scope of disclosure includes all water, wastewater, and stormwater operations and services.

4.1 The entity may categorise its disclosures by water, wastewater or stormwater services.

5 The entity may describe its efforts to manage risks and opportunities associated with its distribution network in the context of the rate case and rate making political environment, including the effects on the entity's ability to expand, maintain and enhance the resiliency of its distribution network.

SASB STANDARDS

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