Eversource Energy - Water Security 2023

W0. Introduction

W0.1

(W0.1) Give a general description of and introduction to your organization.

Eversource Energy (NYSE: ES) operates New England's largest energy delivery system. Eversource is committed to safety, reliability, environmental leadership and stewardship for its 4.4 million electric, natural gas and water customers in Connecticut, Massachusetts and New Hampshire. Sustainability is an integral part of Eversource's operations and strategy. Eversource is a public utility holding company. Its utility subsidiaries are The Connecticut Light and Power Company, NSTAR Electric Company, Public Service Company of New Hampshire, NSTAR Gas Company, Eversource Gas Company of Massachusetts, Yankee Gas Services Company and Aquarion Company (Aquarion). Eversource is engaged primarily in the energy and water delivery business. As we do not own generation aside from 70 MW of solar, we do not utilize water for generation activities. Rather, our water use is focused on consumption at our facilities and our water utility Aquarion which provides water services to approximately 237,000 residential, commercial, industrial, municipal and fire protection and other customers in 72 towns and cities in Connecticut, Massachusetts and New Hampshire, with approximately 92% of Aquarion's customers based in Connecticut. We have continued to grow our water distribution business through acquisitions, including the completion of the Torrington Water Company acquisition in Connecticut, and have filed with the Massachusetts Department of Public Utilities a request for approval to acquire Pinehills Water Company.

Aquarion obtains its water supplies from owned surface water sources (reservoirs) and groundwater supplies (wells) with an annual supply capacity of approximately 133 million gallons per day, as well as water purchased from other water suppliers. Approximately 98% of our annual production is self-supplied and processed at nine surface water treatment plants and numerous well stations, which are all located in Connecticut, Massachusetts, and New Hampshire. The capacities of Aquarion's sources of supply, and water treatment, pumping and distribution facilities, are considered sufficient to meet the present requirements of customers under normal conditions. On occasion, drought declarations are issued for portions of our service territories in response to extended periods of dry weather conditions.

Eversource is committed to the protection of water resources through conservation, water quality management and water saving technologies. Our water delivery subsidiary, Aquarion Company, administers conservation programs to ensure that local water supplies remain sufficient for critical needs such as human consumption and fire protection. Long-range initiatives are underway to ensure the reliability of our sources of supply into the future. Aquarion's reservoirs are surrounded by more than 22,000 acres of forest, which serve as both a critical safeguard and an invaluable resource. In 2022, we continued assessing the condition of our watershed forests as part of an ongoing effort to increase forest resilience by improving various forest management activities. We conduct site inspections and monitor land use activities and water quality at locations throughout our watershed and aquifer areas; in 2022, we conducted more than 6,000 inspections. With climate change as one of the greatest challenges facing the globe, we know timely action and innovative solutions are vitally important. Changing weather patterns due to climate change have made it necessary to plan for more severe weather events across our service territory. Additionally, more extreme temperatures increase customer demand on our systems.

More frequent and more intense storms may lead to:

• Increased coastal erosion and damage to infrastructure.

• Increased levels of various contaminants to our reservoirs due to high volume run-off.

• Increased operating costs due to storm damage, additional treatment of contaminants and employee resources.

• Increased periods of dry weather may lead to falling reservoir and groundwater levels, which could impact water availability and quality.

Our commitment to leading in sustainability, including taking action to address climate change, is outlined throughout our Eversource Sustainability Report, which is attached and available online at https://www.eversource.com/content/docs/default-source/community/eversource-2022-sustainability-report.pdf

Safe Harbor Statement: References and forward-looking statements in this CDP Water Security Questionnaire including discussions of risks and opportunities are based on our best assessments and expectations related to Eversource's current and future performance related to climate-change. The responses to questions in this filing should not be given undue reliance pursuant to the terms described in Eversource's Safe Harbor Statement Under the Private Securities Litigation Reform Act of 1995 provided in our 2022 Annual Report on Form 10-K.

W-EU0.1a

(W-EU0.1a) Which activities in the electric utilities sector does your organization engage in?

Electricity generation
Transmission
Distribution
Other, please specify (Eversource provides transmission and distribution of electricity and distribution of natural gas. We own 70 MW of solar generation. The most significant impacts to our water footprint come from water utility, Aquarion Water Company (AWC).)

While Eversource operates New England's largest energy delivery system through its electric and natural gas services, the most significant impacts to the Company's water footprint come from its water utility subsidiary, Aquarion Water Company (AWC). This is particularly true since Eversource divested in all fossil-fuel based generation as of 2018. 99% of water withdrawal and use is associated with the water utility business.

W-EU0.1b

(W-EU0.1b) For your electricity generation activities, provide details of your nameplate capacity and the generation for each technology.

	Nameplate capacity (MW)	% of total nameplate capacity	Gross electricity generation (GWh)
Coal – hard	0	0	0
Lignite	0	0	0
Oil	0	0	0
Gas	0	0	0
Biomass	0	0	0
Waste (non-biomass)	0	0	0
Nuclear	0	0	0
Fossil-fuel plants fitted with carbon capture and storage	0	0	0
Geothermal	0	0	0
Hydropower	0	0	0
Wind	0	0	0
Solar	70	100	83
Marine	0	0	0
Other renewable	0	0	0
Other non-renewable	0	0	0
Total	0	0	0

W0.2

(W0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date
Reporting year	January 1 2022	December 31 2022

W0.3

(W0.3) Select the countries/areas in which you operate.

United States of America

W0.4

(W0.4) Select the currency used for all financial information disclosed throughout your response.

USD

W0.5

(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.

Companies, entities or groups over which operational control is exercised

W0.6

(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?

Yes

W0.6a

(W0.6a) Please report the exclusions.

Exclusion	Please explain
Data related to Aquarion's contract operations is excluded.	This consists of one contract to run a wastewater treatment plant for New Hartford, CT which is owned by the municipality. The operation is unique in that is a contract operation (not owned by Aquarion) and a wastewater facility (Aquarion's owned utility assets are potable water assets). We have excluded this contract operation from our CDP disclosure to provide clarity. Reported potable water use at the New Hartford wastewater facility for calendar year 2022 is 206,492 gallons, or less than 1% of the total reported in our disclosure and the facility treated and discharged 14.628 million gallons of wastewater, or less than 1% of the reported discharges in our disclosure.
Potable water use at locations with low occupancy such as Eversource substations and gate stations is not included in this disclosure.	The contribution of potable water at our low-occupancy locations is not significant to our overall water footprint. These low-occupancy locations generally have few, if any, employees assigned to the sites and in many instances may not have potable water. Less than 1% of our total potable water use/discharge is attributable to these low-occupancy locations.

W0.7

(W0.7) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization.	Provide your unique identifier
Yes, a CUSIP number	CUSIP is 30040W108.

W1. Current state

W1.1

(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital	Vital	Eversource's drinking water: Primary use in direct operations: ES/AWC relies on good quality surface water and groundwater in sufficient volume to provide treated potable water to its customers. Primary use in indirect operations: Aquarion relies on the availability of third-party wholesale water in certain locations to supplement the distribution to our customers. Third-party or "purchased" water is less than 1.5% of our total production, however, is a vital asset for reliability and resilience in specific locations. Customers: the availability of good quality freshwater, for our direct and indirect uses specified above, is vital to our customers, and, hence, to our business. Aquarion continues to encourage conservation of resources and to pursue alternatives to the use of treated potable water for industrial uses such as equipment cooling. As a drinking water utility, sufficient amounts of good quality freshwater will remain vital for both direct and indirect uses to Aquarion's business.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Not important at all	Primary use in direct operations: ES/AWC relies on its own internally recycled water at various facilities. Sources of recycled water include surface water treatment processes, filter backwash, and online analyzer effluent. The water recycled from these processes makes up approximately 5.7% of the treated water that we distribute to our customers and results in an equivalent reduction in the volume of withdrawal required from our raw water sources. Retaining this supply of recycled water will remain important to Aquarion's business, for the purposes specified above. Primarily used in indirect operations: Aquarion does not indirectly rely on recycled, brackish or produced water. Future dependence on recycled water from our internal processes is to remain important for Aquarion for conservation of natural resources and efficient use of the raw water supply.

W1.2

(W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water withdrawals – total volumes	76-99	Continuously	The volume of water withdrawn from reservoirs and wells is measured with flow meters connected electronically to our data management system.	For the Eversource drinking water subsidiary, AWC, the volume of water withdrawn from reservoirs and wells is measured with the flow meters connected electronically to our data management system. Instantaneous flow, flow totals, and historic trends are updated every six seconds. Month-end data verification steps are in place to support monthly and annual reporting. Withdrawal volumes are reported annually to state regulatory authorities and for diversion reporting, where required. The water withdrawn for other Eversource locations is quantified for all major and regularly occupied facilities and operations. The total withdrawal volumes are also reported in the annual 2022 Eversource Sustainability Report (pg. 58).
Water withdrawals – volumes by source	76-99	Continuously	The volume of water withdrawn from reservoirs and wells is measured with flow meters connected electronically to our data management system.	The volumes of water withdrawn from the AWC reservoirs and wells are measured with flow meters connected electronically to our data management systems. Instantaneous flow, flow totals, and historic trends are updated every six seconds. Withdrawal volumes are reported annually in a water quality report prepared for each distribution system. The water withdrawn for Eversource's other major and regularly occupied facilities and operations is predominantly municipal water for typical potable uses. Additionally, the total withdrawal volumes are reported annually (see page 58 of our 2022 Eversource Sustainability Report).
Entrained water associated with your metals & mining and/or coal sector activities - total volumes [only metals and mining and coal sectors]	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water withdrawals quality	76-99	Other, please specify (Raw water quality is monitored for a wide range of parameters affecting treatment and compliance with the Safe Drinking Water Act. Some are continuous; daily, monthly, quarterly, annually and seasonal. AWC performed 180,293 tests of water in 2022.)	Parameters including pH and turbidity are monitored with inline analytical equipment that transmits data to an electronic data management system. Instantaneous data and historic trends are updated every six seconds. Parameters like VOCs are analyzed at the frequency required by SDWA at certified labs. Emerging contaminants like PFAS are sampled and reported voluntarily. Treated water is sampled for more than 100 compounds at varying frequencies and reported to our regulators and customers.	AWC performed 180,293 tests of water in 2022. Surface water reservoirs are sampled monthly during the summer and fall to assess raw water quality and optimize treatment to prevent harmful algal blooms. As raw water enters treatment facilities it is monitored for parameters to optimize treatment and assure compliance with the SDWA. Parameters, including pH and turbidity, are monitored with in-line analytical equipment that transmits data to our electronic data management system. Instantaneous data and historic trends are updated every six seconds. Other parameters, like VOCs, are analyzed at the frequency required by the SDWA at certified labs. Emerging contaminants like PFAS are sampled and results are made available online. Treated water is sampled for more than 100 compounds at varying frequencies and reported to our regulators and customers. Water Quality Reports are available at www.aquarionwater.com/water-quality/water-quality-reports.
Water discharges – total volumes	76-99	Other, please specify (Frequency varies by type of discharge)	Direct measurement based on flow volumes for tank and tanker trucks. Estimated calculations for tank draining and water main flushing per discharge event. Estimated discharge volumes from analytical instrumentation is calculated annually. Some discharges are measured on a continual basis via flow meters connected to our data management system.	The total volume of discharges for AWC includes directly measured flows from facilities, calculations based on tank and tanker truck volumes, and estimations from the discharge of water through tank draining, water main flushing, and water quality analytical equipment. Most of Aquarion's discharges are water discharged from our distribution system without flowing through a customer meter, which is calculated monthly. These discharges include leaks throughout the water systems, water used for flushing and flow tests, and theft. Other calculated volumes (flow from water main flushing, tanker truck haul discharge) are entered as work is performed. Estimated discharge volumes from analytical instrumentation is calculated annually. A small portion of the discharges are measured on a continuous basis where flow meters are connected electronically to our data management system, updating instantaneous and totalized flow data every six seconds.
Water discharges – volumes by destination	76-99	Other, please specify (Frequency varies by type of discharge)	Direct measurement based on flow volumes for tank and tanker trucks. Estimated calculations for tank draining and water main flushing per instance. Estimated discharge volumes from analytical instrumentation is calculated annually. Some discharges are measured on a continual basis via flow meters connected to our data management system.	For AWC, the volume of water discharged from the well stations, pump stations and treatment facilities is tracked by the discharge location and is measured or calculated. Discharge volumes are reported periodically to state regulatory authorities, where required.
Water discharges – volumes by treatment method	76-99	Other, please specify (Frequency varies by type of discharge)	Direct measurement based on flow volumes for tank and tanker trucks. Estimated calculations for tank draining and water main flushing per instance. Estimated discharge volumes from analytical instrumentation is calculated annually. Some discharges are measured on a continual basis via flow meters connected to our data management system.	The majority (>99.5%) of AWC discharges are discharged to the natural environment without treatment. These discharges include distribution system leakage, inline analyzer water (of potable drinking water quality) that is directed to the groundwater (or ground surface) and groundwater discharged to surface water from an interceptor well (0.41%). A small percentage (<0.05%) of total discharge volume from fire flow testing, flushing and tank draining is dechlorinated (category "Other"). 0.44% of our discharges from both Eversource and Aquarion are treated at municipal wastewater treatment facilities.
Water discharge quality – by standard effluent parameters	76-99	Other, please specify (Varies by parameter and permit requirements)	Standard wastewater methods generally specified by permit or regulation. Direct measurement by location and laboratory analysis as required by permit or regulation	For AWC, the quality of water discharged from the well stations, pump stations and treatment facilities is analyzed through in-line instrumentation, and/or periodic grab samples collected at the prescribed frequency, and analyzed for discharge parameters as required by permit or regulation. Results of these analyses are reported in compliance with applicable permits and regulations.
Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)	Less than 1%	Other, please specify (NA)	NA	AWC discharges are associated with treatment and distribution of public drinking water supply. AWC does not have water discharges that require analysis of priority substances
Water discharge quality – temperature	1-25	Other, please specify (Frequency varies by type of discharge)	Direct measurement by location.	Temperature is monitored at AWC surface water treatment locations; however, except for a small number of emergency generators that utilize water for cooling, the discharges are at ambient temperature and monitoring for temperature is not required by permit or regulation.
Water consumption – total volume	76-99	Monthly	Direct measurement by location.	Consumption of water at Eversource and Aquarion facilities is metered. While the meters are continuously recording flow, they are read monthly. Consumptive use is reported in our Sustainability Report.
Water recycled/reused	76-99	Continuously	Direct measurement via flow meters.	For AWC, the volume of recycled/reused water is measured on a continuous basis with the flow meters connected electronically to our data management system. Instantaneous flow, flow totals, and historic trends are updated every six seconds. Daily data is available. Month-end data verification steps are in place to support monthly and annual reporting.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Yearly	Health & Safety audits conducted in accordance with company policy.	The provision of fully functioning and safely managed WASH services to all workers is monitored through at a minimum of annual audits at office buildings and at the drinking water treatment sites, in accordance with the health & safety policies implemented across the company.

W1.2b

(W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, how do they compare to the previous reporting year, and how are they forecasted to change?

	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Please explain
Total withdrawals	125415.76	Higher	Mergers and acquisitions	Higher	Mergers and acquisitions	99% of the water withdrawn for Eversource is for the purposes of Aquarion's water distribution. These withdrawals are sourced from surface water reservoirs, groundwater from production wells, and the purchase of third-party water from similar water utilities. While demand varies with seasonal weather, they are reasonably consistent. 2022 was a drought year across our New England service area – demand for potable water was up. In addition, in 2022 we added more than 10,000 customers through acquisition of a neighboring water company. Our total withdrawals are higher than the prior reporting year. We work to manage demand through active conservation programs. As we grow our water business and add customers, we can anticipate total withdrawals to grow over time.
Total discharges	21280.35	Higher	Mergers and acquisitions	Higher	Mergers and acquisitions	For Aquarion, the total discharges are composed of discharges of water treatment wastewaters from our surface water treatment plants, inline instrumentation, tank draining, and discharge from remedial intercept wells. Additionally, Aquarion measures “Non-Revenue Water,” which represents water that is discharged from our distribution system without flowing through a customer meter. These discharges include leaks throughout the water systems, water used for flushing and flow tests, as well as theft. Aquarion monitors Non-Revenue Water as a KPI with monthly targets and reduction goals. In 2022 we added 10,000 customers through the acquisition of a water company. As we look to grow our water business and add customers, we anticipate total discharges to grow over time.
Total consumption	99.68	Lower	Increase/decrease in business activity	Lower	Increase/decrease in business activity	Water consumption represents the water used by all Eversource occupied facilities that do not treat and distribute water for the Aquarion business. Approximately 2.68 ML and 97ML of water was consumed at Aquarion and Eversource facilities, respectively. Due to consistent operational conditions, our total consumption remained similar to the previous reporting year. We have instituted a hybrid work schedule at Eversource facilities that may reduce water consumption over time.

W1.2d

(W1.2d) Indicate whether water is withdrawn from areas with water stress, provide the proportion, how it compares with the previous reporting year, and how it is forecasted to change.

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Identification tool	Please explain
Row 1	No	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	WRI Aqueduct	In June 2023, we used the Aqueduct online tool provided by the World Resources Institute to evaluate our operating locations in relation to the tool’s indicators of water stress and water depletion. The results indicate that the majority of the operating geography of Eversource’s subsidiary, Aquarion Water Company, are located within areas of “Low” or “Low to Medium” water stress. Aquarion does have facilities located in central and eastern Massachusetts, central and southern New Hampshire, and south-eastern Connecticut, in areas with “medium to high” water stress. These facilities represent less than 7% of Aquarion’s withdrawals. No facilities meet the definition of “High” (>40%) stress or depletion (>50%).

W1.2h

(W1.2h) Provide total water withdrawal data by source.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	102015.09	Higher	Mergers and acquisitions	The Eversource drinking water subsidiary, AWC, operates reservoirs in Connecticut and New York. This source is relevant because Aquarion withdraws fresh surface water from the reservoirs for treatment and subsequent distribution for drinking and other potable uses. Aquarion’s withdrawals are operated to meet the needs of the utility’s customers. 2022 was a drought year across our New England service area with below average rainfall. This results in an increase in demand. In 2022 we also acquired a system serving 10,000 customers using surface water as its source of supply.
Brackish surface water/Seawater	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	This source is not relevant because Eversource does not withdraw brackish surface water or seawater in its operations.
Groundwater – renewable	Relevant	21279.32	About the same	Please select	The Eversource drinking water subsidiary, AWC, operates potable water utility systems throughout the States of Connecticut, Massachusetts, and New Hampshire. This source is relevant because Aquarion withdraws renewable groundwater from its wells for treatment and subsequent distribution for drinking and other potable uses. 2022 was a drought year across our New England service area with below average rainfall. This results in an increase in demand. Aquarion’s withdrawals are operated to meet the needs of the utility’s customers.
Groundwater – non-renewable	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	This source is not relevant because Eversource does not withdraw non-renewable groundwater in its operations.
Produced/Entrained water	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	This source is not relevant because Eversource does not utilize produced water or entrained water in its operations.
Third party sources	Relevant	2121.35	Higher	Other, please specify (Increased demand and contaminated source of supply)	The Eversource drinking water subsidiary, AWC, operates potable water utility systems throughout the States of Connecticut, Massachusetts, and New Hampshire. This source is relevant because Aquarion purchases third-party water from other water utilities in order to supplement the potable water supply for subsequent distribution to our customers. Aquarion’s total withdrawals are fairly consistent annually and are operated to meet the needs of the utility’s customers; however, our withdrawals from third-party sources were higher due to the lack of rainfall in 2022 and increased demand for water, In addition, in our Millbury, MA system a well was taken off line due to PFAS contamination, resulting in an increase in purchased water from a neighboring utility to serve our customers. This interconnection with the adjacent community provides resilience to meet customer needs under various stressors.

W1.2i

(W1.2i) Provide total water discharge data by destination.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water	Relevant	91.27	Lower	Change in accounting methodology	The Eversource drinking water subsidiary, AWC, operates discharges to fresh surface water. These discharges are comprised of potable water from in line instrumentation, treated filter backwash, and raw groundwater from intercept wells containing salt impacts. Discharges are monitored and sampled in compliance with applicable permits and regulations. The volume has remained steady as these processes have not recently changed. There was a slight decrease from the previous reporting year due to accounting for discharges to groundwater instead of surface water at two locations with retention ponds. Future discharges may increase due to acquisitions.
Brackish surface water/seawater	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	The Eversource drinking water subsidiary, AWC, does not have any known discharges to brackish surface water or seawater.
Groundwater	Relevant	20982.08	Higher	Increase/decrease in business activity	The Eversource drinking water subsidiary, AWC, operates discharges to groundwater. These discharges are primarily comprised of potable water from in line instrumentation, and filter backwash directed to lagoon drying beds and underground infiltration structures. Discharges are monitored and sampled in compliance with applicable permits and regulations. In addition, leakage throughout the distribution system “non-revenue water” is accounted for as a groundwater discharge. NRW was up in 2022, partially explained by an increase in total production to meet customer demands. Future discharges may increase due to acquisitions.
Third-party destinations	Relevant	190.66	Higher	Mergers and acquisitions	The Eversource drinking water subsidiary, AWC, operates discharges to third-party destinations. These discharges are comprised of in-line instrumentation and filter backwash. Discharges are monitored and sampled in compliance with applicable permits and regulations. The volume has increased due to an acquisition that maintains a significant discharge to a third-party treatment plant. Future discharges are likely to decrease due to improvements currently under construction at the Aquarion Stamford Treatment Plant to recycle filter backwash water.

W1.2j

(W1.2j) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	Primary reason for comparison with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	The Eversource drinking water subsidiary, AWC, does not operate discharges requiring tertiary treatment.
Secondary treatment	Relevant	7.57	About the same	Please select	1-10	The Eversource drinking water subsidiary, AWC, operates discharges requiring secondary treatment in order to comply with state regulatory requirements. These discharges are generally characterized as finished potable water requiring chlorine removal before discharging to the environment. This volume is estimated.
Primary treatment only	Relevant	18.65	About the same	Please select	1-10	The Eversource drinking water subsidiary, AWC, operates discharges requiring only primary treatment. These discharges are generally characterized as filter backwash that is dewatered in open lagoons and drying beds, in accordance with regulations and/or permits promulgated by state environmental regulators.
Discharge to the natural environment without treatment	Relevant	21063.47	About the same	Please select	61-70	The Eversource drinking water subsidiary, AWC, operates discharges that do not require treatment before discharge, as they are finished potable water and filter backwash discharge that already meet state drinking water standards. The discharge is primarily to the ground surface for infiltration or to underground infiltration structures. The majority of this discharge is comprised of non-revenue water including leaks throughout the systems.
Discharge to a third party without treatment	Relevant	190.66	Higher	Mergers and acquisitions	100%	Eversource operates discharges to third parties (sanitary sewer). These discharges are generally characterized as water treatment waste water and sanitary wastes. General and individual permits are obtained, where required to meet state regulatory requirements.
Other	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	Not relevant

W1.2k

(W1.2k) Provide details of your organization’s emissions of nitrates, phosphates, pesticides, and other priority substances to water in the reporting year.

	Emissions to water in the reporting year (metric tonnes)	Category(ies) of substances included	List the specific substances included	Please explain
Row 1	26.6	Nitrates Phosphates Pesticides Priority substances listed under the EU Water Framework Directive	CuSO4 7.98 GCP peroxide-based 18.62	The Eversource drinking water subsidiary, AWC, treats drinking water reservoirs with aquatic pesticides to maintain water quality by controlling algae and invasive vegetation, The pesticide applications are performed by licensed applicators under state and federal permits and in accordance with the product labels. AWC’s goal is to utilize less CuSO4 in favor of the peroxide-based products.

W1.3

(W1.3) Provide a figure for your organization's total water withdrawal efficiency.

	Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
Row 1	9863085000	125415.76	78643.106735549	Increased efficiency

W-EU1.3

(W-EU1.3) Do you calculate water intensity for your electricity generation activities?

No, and we have no plans to do so in the next two years

W1.4

(W1.4) Do any of your products contain substances classified as hazardous by a regulatory authority?

	Products contain hazardous substances	Comment
Row 1	Yes	<Not Applicable>

W1.4a

(W1.4a) What percentage of your company's revenue is associated with products containing substances classified as hazardous by a regulatory authority?

Regulatory classification of hazardous substances	% of revenue associated with products containing substances in this list	Please explain
Federal Water Pollution Control Act / Clean Water Act (United States Regulation)	Less than 10%	The production of public water supply by Aquarion accounts for 2% of Eversource's total revenue. Public water supply conforming to the Safe Drinking Water Act contains pH adjusting and disinfectant chemicals (and by-products) that are on the Clean Water Act List of Hazardous Substances. The presence of these chemicals requires sampling of discharges, and de-chlorination in some instances. At locations receiving bulk delivery of these chemicals, Aquarion operates full-volume secondary containment structures exceeding regulatory requirements. Spill response plans are reviewed annually with Operations staff responsible for accepting deliveries and managing chemical feed systems.

W1.5

(W1.5) Do you engage with your value chain on water-related issues?

	Engagement	Primary reason for no engagement	Please explain
Suppliers	Yes	<Not Applicable>	<Not Applicable>
Other value chain partners (e.g., customers)	Yes	<Not Applicable>	<Not Applicable>

W1.5a

(W1.5a) Do you assess your suppliers according to their impact on water security?

Row 1

Assessment of supplier impact

Yes, we assess the impact of our suppliers

Considered in assessment

Supplier impacts on water availability

Number of suppliers identified as having a substantive impact

0

% of total suppliers identified as having a substantive impact

1-25

Please explain

We consider the water-related risks associated with our suppliers' activities to be insignificant. No suppliers have been identified as having a substantive impact on water availability.

W1.5b

(W1.5b) Do your suppliers have to meet water-related requirements as part of your organization's purchasing process?

	Suppliers have to meet specific water-related requirements	Comment
Row 1	Yes, suppliers have to meet water-related requirements, but they are not included in our supplier contracts	<Not Applicable>

W1.5c

(W1.5c) Provide details of the water-related requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance measures in place.

Water-related requirement
Other, please specify (Complying with regulatory requirement)

% of suppliers with a substantive impact required to comply with this water-related requirement
Less than 1%

% of suppliers with a substantive impact in compliance with this water-related requirement
Less than 1%

Mechanisms for monitoring compliance with this water-related requirement
Supplier self-assessment

Response to supplier non-compliance with this water-related requirement
Retain and engage

Comment
We consider the water-related risks associated with our suppliers' activities to be insignificant. No suppliers have been identified as having a substantive impact on water availability.
Over 90% of our vendors are considered active suppliers and registered in our management platform. Through this platform, we request that all suppliers accept the terms of our Supplier Code of Conduct, including the requirement to ensure all workers are aware of, understand, and strictly follow the letter and spirit of environmental protection laws and Eversource policies. Suppliers must be committed to environmental compliance, stewardship, leadership and accountability. Suppliers must be environmentally responsible in all business decisions and operations for or on behalf of Eversource. Suppliers must ensure Eversource procedures are strictly followed with respect to the environment of the communities Eversource serves. All suppliers must also adhere to our Eversource Environmental Policy.

W1.5d

(W1.5d) Provide details of any other water-related supplier engagement activity.

Type of engagement
Information collection

Details of engagement
Collect water management information at least annually from suppliers

% of suppliers by number
1-25

% of suppliers with a substantive impact
None

Rationale for your engagement
We encourage our suppliers to complete a detailed questionnaire through The Sustainability Project (TSP). Eversource currently targets our Supplier Relationship Management (SRM) suppliers to participate annually which includes reporting on environmental compliance and water conservation.

We also promote sustainable practices within our supply chain by establishing strategic relationships with responsible suppliers that are committed to and aligned with our sustainability principles. In 2022, we focused our supply chain goals on building capability, ensuring compliance with our code of conduct and facilitating ongoing training. As part of this work, we invited suppliers to attend our half-day Sustainability 101 Workshop, and supporting materials were bolstered including the development of a Supplier Sustainability Partner Guide. Over 150 participants representing our top suppliers (approximately 70% of spend) participated in the training session to further their understanding of sustainability, including the importance of addressing climate change and how this relates to doing business with Eversource.

Impact of the engagement and measures of success
We actively support industry-wide expansion of supply chain sustainability through participation in the Sustainable Supply Chain Alliance (“SSCA”). SSCA is a collaboration of utilities working together to advance sustainability best practices in utility supply chain activities and supplier networks. SSCA’s goal is to work with industry suppliers and other interested parties to improve environmental performance and advance sustainable business. Supplier RFP ESG questions seek to identify environmental improvement opportunities, any environmental compliance violations, and whether they publicly report voluntary goals. Scores for all awarded vendors are tracked on an ongoing basis to monitor progress and ensure supplier compliance with laws and regulations.

The program serves to:
• Understand supplier sustainability efforts
• Communicate our commitment to sustainability
• Screen to differentiate supplier choice if all else is equal
• Establish a baseline of supplier sustainability performance
• Enable tracking progress
• Encourage conversations on sustainability opportunities in our supply chain.
Responses to questions asked of suppliers in RFP's can be found on page 74 of Eversource's 2022 Sustainability Report. Success is measured and reported by % of suppliers meeting our standards in each sustainability area summarized above.
If a given vendor is found to be out of compliance with environmental regulations, including polices related to water, this would be considered grounds for pursuing corrective actions or potential termination of a contract depending on the severity of offense. Success is measured by compliance rates. By prioritizing this compliance, we have helped ensure that our entire supply chain meets our high standards for water stewardship
We also continue to encourage suppliers to complete a detailed questionnaire through The Sustainability Project (TSP).

Comment
No additional comments

W1.5e

(W1.5e) Provide details of any water-related engagement activity with customers or other value chain partners.

Type of stakeholder
Customers

Type of engagement
Education / information sharing

Details of engagement
Run an engagement campaign to educate stakeholders about your water-related performance and strategy

Rationale for your engagement
Our water withdrawal volume is directly linked to customer demands. Reducing customer demands reduces our withdrawal volume, which in turn improves the sustainability of the resource for customers and the natural environment, as well as improving the reliability of our infrastructure and reducing our carbon footprint. Decoupled rates in Connecticut, home to 93% of our customer base, allows us to pursue this important sustainability initiative and be stewards of the resource without eroding revenue.

Impact of the engagement and measures of success
The initial twice-weekly irrigation program established a goal of saving 360 million gallons annually (compared to a baseline of the 5-year average production prior to the implementation of the program). Success is measured in relation to this target. It has been met or exceeded each year. In 2022, the program was expanded in Connecticut and over time will extend throughout Aquarion’s service territory in Connecticut, with additional targets for water savings developed as the program matures. Achieving measurable results in our conservation programs is vital to ensure the sustainability of our water supply, the reliability and resilience of our infrastructure; reducing our carbon footprint; and our ability to mitigate the environmental impact of our water withdrawals (i.e., to allocate appropriate streamflow).

W2. Business impacts

W2.1

(W2.1) Has your organization experienced any detrimental water-related impacts?
Yes

W2.1a

(W2.1a) Describe the water-related detrimental impacts experienced by your organization, your response, and the total financial impact.

Country/Area & River basin

United States of America	Other, please specify (New England Regional River Basins)

Type of impact driver & Primary impact driver

Chronic physical	Declining water quality

Primary impact
Increased operating costs

Description of impact
Groundwater contamination incidents, such as inadequate road salt storage upgradient of drinking water wells and the prevalence of PFAS in groundwater, result in increased operating expense for AWC. In the first example, sodium enters the aquifer in concentrations not suitable for drinking water, requiring an interceptor well to be installed and operated to control the plume and utilize the supply source. The presence of PFAS above regulatory limits require that we abandon sources of supply, explore opportunities to obtain or install additional sources of supply, and/or install treatment systems. There is an opportunity cost for the capital required to install the treatment infrastructure. We currently estimate this at $290 million dollars total (or an annualized capital cost of $14 million). PFAS treatment will result in ongoing maintenance/power expense and replacement/disposal expense. Our planning level estimate to treat all sources to comply with USEPA's proposed MCL exceeds $5M annually. These detrimental impacts are mitigated by our regulatory framework and the costs are generally recoverable. However, there is an opportunity cost associated with our capital plan and ability to invest in aging infrastructure. The anticipated ongoing expenses present a challenge in maintaining affordable service for our customers.

Primary response
Other, please specify (Implement treatment solutions, seek interconnections, abandon sources)

Total financial impact
290000000

Description of response
The discovery of groundwater contamination by regulated and emerging contaminants results in the need to abandon sources of supply, seek additional sources of supply and/or the installation of treatment systems that require both capital investment and ongoing power and maintenance operating expense.
When encountering groundwater contamination or responding to new/revised regulatory requirements related to man-made groundwater contaminants, several alternatives are explored, including: abandoning sources of supply where redundant supplies exist; installing new sources of supply wells to replace contaminated supplies; establishing interconnections with abutting water systems; and installing treatment systems. Capital costs are fixed, one-time costs. Our estimated capital cost to comply with the proposed Maximum Contaminant Levels (MCLs) for PFAS is $290M. Purchasing wholesale water
from neighboring utilities and operating new treatment systems are ongoing, recurring expenses. Our regulatory framework allows recovery for the prudent capital and expense costs related to the treatment of drinking water for public water supply. However, this poses a threat to affordability. AWC does not track the incremental costs of treatment systems or purchased water stemming from man-made contamination separately from costs associated with treating naturally occurring organic and inorganic substances that require treatment or removal to comply with all aspects of the Safe Drinking Water Act.

W2.2

(W2.2) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

	Water-related regulatory violations	Fines, enforcement orders, and/or other penalties	Comment
Row 1	Yes	Fines, but none that are considered as significant Enforcement orders or other penalties but none that are considered as significant	In calendar year 2022 Aquarion received one fine related to an incident in 2021, as well as several Tier 2 and Tier 3 violations, mostly related to the timeliness of sampling, reporting or notifications. We track all violations and work to ensure processes are in place to prevent deficiencies.

W2.2a

(W2.2a) Provide the total number and financial value of all water-related fines.

Row 1

Total number of fines
1

Total value of fines
13500

% of total facilities/operations associated
0.01

Number of fines compared to previous reporting year
Higher

Comment
In 2022 Aquarion received a fine for a violation that occurred in 2021 from Massachusetts drinking water regulators relative to a chemical feed system malfunction that did not significantly impact operations.

W3. Procedures

W3.1

(W3.1) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health?

	Identification and classification of potential water pollutants	How potential water pollutants are identified and classified	Please explain
Row 1	Yes, we identify and classify our potential water pollutants	Water pollutants may be released from activities associated with Eversource's electric companies such as accidents caused by equipment impacts or storm damages. AWC takes delivery of, stores and handles drinking water treatment chemicals that may pollute the environment should an uncontrolled release occur. Spill plans are reviewed annually. Bulk deliveries are made within containment structures. Aquarion's Spill Reporting and Response Plan Standard Operating Procedures provide guidance to staff for addressing releases, which includes identification of the chemical released and mandated reporting for State and Federal Reportable Quantities. When a spill occurs, the appropriate regulatory agencies are notified, and any environmental impacts are remedied in accordance with local, state, and federal requirements. Water quality is assessed for all systems and potential acquisitions. Raw water quality affects treatment costs and has a potential to result in treatment upsets, leading to reputational risks and/or adverse regulatory outcomes. Raw water quality may also impact growth opportunities. Surface water supplies are tested upstream and in reservoir. Surface and groundwater sources are tested throughout the treatment process and in the distribution system to assure conformance with treatment standards and limits. Periodic grab samples and inline analytical instrumentation are used to monitor for a variety of parameters throughout the treatment process.	<Not Applicable>

W3.1a

(W3.1a) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.

Water pollutant category
Inorganic pollutants

Description of water pollutant and potential impacts
Fuels, insulating fluids, and drinking water treatment chemicals used in our operations can pollute surface and ground water should a release occur. Our drinking water utility relies on ground water and surface water to provide potable water to its customers and can be impacted by releases of fuels and chemicals to the environment (by third parties). Examples include leaking underground storage tanks that pollute groundwater aquifers which requires either the abandonment of sources of supply or additional treatment in order to meet Safe Drinking Water standards; commonly used lawn chemicals which runoff into reservoirs resulting in algae blooms and an overabundance of organic matter. This requires additional reservoir management activities and increases treatment plant flocculant dosing – raising treatment costs. It can also result in an increase in customer complaints. Commercial products, like PFAS can become so prevalent in the environment through normal use that treatment standards are necessitated, adding to treatment plant cost and complexity.

Value chain stage
Direct operations

Actions and procedures to minimize adverse impacts
Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience
Beyond compliance with regulatory requirements
Industrial and chemical accidents prevention, preparedness, and response
Requirement for suppliers to comply with regulatory requirements
Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

Please explain
To prevent releases from our own operations, spill plans are reviewed annually; bulk deliveries are made within containment structures. Aquarion's Spill Reporting and Response Plan Standard Operating Procedures provide guidance to staff for addressing releases, including listing treatment chemicals and the State and Federal Reportable Quantities for releases. When a spill occurs, the appropriate regulatory agencies are notified, and any environmental impacts are remedied in accordance with local, state, and federal requirements.

We monitor our raw water and finished water in order to optimize treatment; patrol and inspect our watersheds and aquifer areas to protect our sources of supply; and ensure compliance with the Safe Drinking Water Act in order to prevent pollution from impacting sources when possible and ensure our treatment processes are removing contaminants to comply with the Safe Drinking Water and protect public health.

W3.3

(W3.3) Does your organization undertake a water-related risk assessment?
Yes, water-related risks are assessed

W3.3a

(W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.

Value chain stage
Direct operations

Coverage
Full

Risk assessment procedure
Water risks are assessed as part of an established enterprise risk management framework

Frequency of assessment
Annually

How far into the future are risks considered?
More than 6 years

Type of tools and methods used
Enterprise risk management

Tools and methods used
COSO Enterprise Risk Management Framework

Contextual issues considered
Water availability at a basin/catchment level
Water quality at a basin/catchment level
Impact on human health
Water regulatory frameworks

Stakeholders considered
Customers
Employees
Investors
Local communities
Regulators
Water utilities at a local level
Other, please specify (Legislators)

Comment
Eversource uses a COSO Enterprise Risk Management framework for assessment of risks, which is designed to identify, describe and assess risks in terms of their impact to the business. Strategic, reputational, operations, customer, financial, environmental, and safety risks are assessed in terms of the likelihood and consequence should the impact occur. An annual assessment exercise is performed and quarterly review meetings are held for risk owners to review and update the status, mitigation, and management of the risks.

Value chain stage
Supply chain

Coverage
Full

Risk assessment procedure
Water risks are assessed as part of an established enterprise risk management framework

Frequency of assessment
More than once a year

How far into the future are risks considered?
More than 6 years

Type of tools and methods used
Enterprise risk management

Tools and methods used
COSO Enterprise Risk Management Framework

Contextual issues considered
Implications of water on your key commodities/raw materials

Stakeholders considered
Suppliers
Other, please specify (Vendors, Customers)

Comment
Eversource uses a COSO Enterprise Risk Management framework for assessment of risks, which is designed to identify, describe and assess risks in terms of their impact to the business. Strategic, reputational, operations, customer, financial, environmental, and safety risks are assessed in terms of the likelihood and consequence should the impact occur. An annual assessment exercise is performed and quarterly review meetings are held for risk owners to review and update the status, mitigation, and management of the risks. During supply chain risk assessment workshops, risks to our supply chain and availability of suppliers in the event of a flood are discussed.

W3.3b

(W3.3b) Describe your organization's process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.

	Rationale for approach to risk assessment	Explanation of contextual issues considered	Explanation of stakeholders considered	Decision-making process for risk response
Row 1	Eversource continually identifies, assesses and responds to risks including water-related risks within our direct operations and in our supply chain, through our dedicated COSO-aligned Enterprise Risk Management (ERM) program looking at short-, medium- and long-term time horizons. Risks are presented to the Board of Trustees as part of the annual operating plan as well as the Board's annual strategic planning session. Our ERM program applies a well-defined, enterprise-wide methodology designed to allow our executives to quantify, identify, categorize, prioritize, and mitigate the principal risks to the Company. The ERM program is integrated with other assurance functions throughout the Company, including compliance, auditing, and insurance. Risks identified during the ERM process have formal, actionable, measurable mitigation plans, are monitored on a regular basis, and are reported to the Risk Committee and Executive management quarterly and semi-annually, respectively. ERM also reports regularly to the Finance Committee on the activities of the Company's Risk Committee, which consists of senior officers and is responsible for ensuring that the Company is managing its principal enterprise-wide risks, as well as other key risk areas such as operations, environmental, information technology, compliance and business continuity. Through this process, we use the outcomes of the risk assessment to inform our Company decision-making process.	Particularly for our water utility, AWC, contextual issues that are assessed include water availability and water quality to ensure that we can continue to supply the service to our water customers that they expect. Any potential regulatory risks and impacts to local communities from our operations are also assessed to ensure that we are addressing and managing any identified risks. In addition to known risks, the ERM program identifies emerging risks through participation in benchmarking groups both within and outside the utility industry, discussions with management, and in consultation with outside advisers. Our management then analyzes the risks to determine materiality, likelihood and impact, and develops mitigation strategies. Climate change is considered a risk accelerator and driver of many of our top enterprise risks which have formal, actionable mitigation plans associated with them including the risk of rising water levels.	Stakeholders include customers, supply chain partners, investors, and the public at large. During supply chain risk assessment workshops, risks to our supply chain and availability of suppliers in the event of extreme weather (such as flooding) are discussed.	The top enterprise-wide and business level risks are identified using a comprehensive cross functional analysis working with key officers and employees of each organization, including their support functions, within the Company and are monitored throughout the year by the Company's Risk Committee.

W4. Risks and opportunities

W4.1

(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes, only within our direct operations

W4.1a

(W4.1a) How does your organization define substantive financial or strategic impact on your business?

Eversource's Board of Trustees oversees the Company's comprehensive operating and strategic planning. The operating plan, which is reviewed and formally approved by the Board in February following review by the Finance Committee, consists of the goals and objectives for the year, key performance indicators, and financial forecasts. The strategic planning process consists of short-, medium- and long-term corporate objectives, specific strategies to achieve those goals, and plans designed to implement each strategy.

The Enterprise Risk Management (ERM) program is integrated with the annual operating and strategic planning processes to identify the key financial risks associated with the plan. These financial risks are presented to the Board of Trustees as part of both of the annual operating plan and at the Board's annual strategic planning session.

We define substantive for strategic impact as an impact that causes a major delay in the implementation of a strategic objective or inability to execute a strategic objective that impacts stock price. Our COSO-aligned ERM process considers both likelihood and impact on a 1-5 scale. We evaluate risks related to water each year both at our subsidiary level and the Eversource enterprise level. We define substantive as a risk scoring 4 (severe) or 5 (worst case) on the five-point scale of the ERM assessment process. Consistent with external reporting standards, approximately 5% of pre-tax income is considered substantive.

Considerations for impact include financial, strategic, reputation, operational, customers and environment/safety. Substantive financial and strategic impacts are those considered material to the Company including the ability to conduct normal operations, serve customers and deliver value to shareholders.

Financial impacts are considered against the annual budget and earnings per share guidance provided to the investing community. Strategic impacts are considered a major delay or inability to execute a strategic objective. Reputation is considered criticism that results in negative regulation/legislation action. Operational impacts are considered a significant, lengthy outage of our system.

Customer impacts are considered a significant, adverse impact to all customers' perception of Eversource. Environmental/Safety impacts are considered incidents resulting in irreparable damage to a person or the environment. We evaluate substantive risks related to climate change each year both at our subsidiary level and the Eversource enterprise level. In the context of climate-related risks this could include the cost to ensure system reliability and resiliency in the face of increasingly severe weather due to climate change, the strategic and financial impact of regulatory changes including regional carbon reduction goals, and strategic initiatives to help mitigate the impact of climate change and meet the evolving expectations of our stakeholders, such as clean energy investments, grid modernization and EV infrastructure.

W4.1b

(W4.1b) What is the total number of facilities exposed to water risks with the potential to have a substantive financial or strategic impact on your business, and what proportion of your company-wide facilities does this represent?

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	550	26-50	Eversource has identified approximately 4% of our electric substations and all of our AWC facilities that could be exposed to water risks, totalling approximately 550 locations.

W4.1c

(W4.1c) By river basin, what is the number and proportion of facilities exposed to water risks that could have a substantive financial or strategic impact on your business, and what is the potential business impact associated with those facilities?

Country/Area & River basin

United States of America	Other, please specify (Eversource considers all water basins across our New England operations when considering exposure to water risks)

Number of facilities exposed to water risk
500

% company-wide facilities this represents
26-50

Production value for the metals & mining activities associated with these facilities
<Not Applicable>

% company's annual electricity generation that could be affected by these facilities
Not applicable

% company's global oil & gas production volume that could be affected by these facilities
<Not Applicable>

% company's total global revenue that could be affected
1-10

Comment
In 2022, Aquarion represented about 2% of the total operating revenue from Eversource. Eversource has identified 4% of our electric substations that may be exposed to water risk. Under Eversource's flood mitigation strategy for its electrical infrastructure, the Company hardens its existing substations and facilities that are subject to flooding and implements the necessary solutions to mitigate the effects of severe weather and climate change. New substations and facilities are built using the latest standards complying with the National Electric Safety Code (NESC), FEMA, American Society of Civil Engineers (ASCE-24) and state and federal regulatory requirements. Eversource, in partnership with local universities, has developed a substation flood vulnerability model that provides forecasting capabilities at different time intervals as a severe weather event approaches any part of our service territory. This model is based on the most accurate HRRR NOAA precipitation forecast and the maximum inundation and flood level time series. The model can also assess flood-inundation risk at selected substations for synthetic extreme event scenarios including hurricane simulations in future climate conditions and sea-level rise projections.

W4.2

(W4.2) Provide details of identified risks in your direct operations with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Country/Area & River basin

United States of America	Other, please specify (New England Aquarion Water Company)

Type of risk & Primary risk driver

Chronic physical	Water scarcity

Primary potential impact
Constraint to growth

Company-specific description
Our water subsidiary, AWC, faces an inherent strategic risk related to adequacy of supply (i.e., water scarcity). Water scarcity risk is heightened by multiple factors. Consumer demands: demand currently exists in excess of available supply as defined by our Margin of Safety analyses for available supply in 12 of Aquarion's 84 systems. This pressure can be expected to increase due to climate change: we forecast both an increase in demand due to increasing temperatures and a potential for a decrease of available supply due to shifting rainfall and watershed recharge patterns. Regulatory constraints: the volume of withdrawals from the environment are regulated throughout New England. It is increasingly difficult to permit new sources of supply. In Connecticut, where the vast majority Aquarion's dams are located, impounded waterways are required to release minimum downstream flow. New regulations are being phased into effect over the next 1-5 years that will increase the volume of downstream releases required across our CT service territory, depleting the volume of supply in storage that is used to meet customer demands. The combination of factors may cause an increased likelihood of drought emergencies, water use restrictions, and reputational/brand damage and impact our ability to grow our water business.

Timeframe
4-6 years

Magnitude of potential impact
Medium-low

Likelihood
Likely

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
200000000

Potential financial impact figure - minimum (currency)
<Not Applicable>

Potential financial impact figure - maximum (currency)
<Not Applicable>

Explanation of financial impact
The impact has not been quantified financially. Given our regulatory framework and other mitigation strategies we consider this a strategic risk.

Primary response to risk
Increase capital expenditure

Description of response
AWC takes a multi-pronged approach to respond to water scarcity. We spend capital to develop additional sources of water supply, as well as improve distribution infrastructure to improve the reliability and resilience of water systems' ability to delivery water to customers. This includes increasing the capacity of existing infrastructure to transfer more water between systems and interconnecting adjacent systems. We focus on non-revenue water with internal KPIs to measure and manage this important indicator of the performance of our distribution systems. We work with regulators and environmental stakeholders to secure approvals for additional inter-basin transfers and we engage our customers with both voluntary and mandatory conservation programs. These programs are being expanded in the near term to cover more of our customer base and further climate-proof our water supplies. We strive to meet customer, regulator and stakeholder expectations by being stewards of water resources.

Cost of response
200000000

Explanation of cost of response
We are investing more than $200M to enhance our distribution system and improve supply adequacy for Southwest Fairfield Connecticut in addition to other smaller cost efforts, including our non-revenue water and conservation programs. The cost is estimated as all improvements have not been designed or completed. This would take into account transmission main and pumping improvements needed to increase the capacity of our distribution system to transfer water between basins, as well as the cost to bring a previously discontinued source of supply and treatment facility back on line to meet future demands.

Country/Area & River basin

United States of America	Other, please specify (New England area operations of Aquarion Water Company)

Type of risk & Primary risk driver

Acute physical	Other, please specify (Sudden catastrophic dam failure)

Primary potential impact
Other, please specify (Multiple impacts would occur including brand damage, closure of operations, fines, penalties and enforcement orders, increased operating costs, litigation, etc.)

Company-specific description
As a dam owner, our water subsidiary, AWC, faces an inherent risk related to dam failure. Sixteen of the company's dams are classified as high hazard, meaning a sudden failure would result in high economic losses and loss of life. Further, loss of an impoundment for a water utility results in a loss of storage (supply). While most systems have redundant storage, all systems rely on the combined storage volume to maintain supplies in excess of demand. Dam failure would result in loss of service. The number of affected dams is <5% of the total water company facilities (estimated 500) and an even smaller percentage of all enterprise-wide facilities, however meets our definition of a substantive financial risk based on an assumed cost exceeding $16M.

Timeframe
4-6 years

Magnitude of potential impact
High

Likelihood
Unlikely

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure - minimum (currency)
<Not Applicable>

Potential financial impact figure - maximum (currency)
<Not Applicable>

Explanation of financial impact
Not applicable

Primary response to risk
Greater due diligence

Description of response
Dams are a vital asset for our water subsidiary and managed as such. AWC manages an active dam inspection, maintenance and capital improvement program for dams. High hazard dams are inspected by qualified third-party engineers every other year. Emergency Action Plans are maintained and exercised for all high hazard dams. Operators and Watershed Maintenance staff visit high hazard dams routinely and document and communicate changes. Animal burrows, woody vegetation, erosion and other maintenance issues are managed by Watershed Maintenance staff who also mow dam slopes. State regulators provide active oversight of compliance with dam safety regulations. The five-year capital plan includes $34.7M in spending on dam rehabilitation in order to assure dams are stable under flooding conditions using the most current flood forecasting tools and methodology.

Cost of response
34700000

Explanation of cost of response
Our capital investment in the 5-year plan is currently $34.7M. The cost is estimated as all improvements have not been designed or completed. These costs include hydraulic and hydrologic studies, stability analyses, evaluation of alternative engineering solutions, design, permitting and construction. Multiple dams are included in the budget cycle at varying stages of the process.

Country/Area & River basin

United States of America	Other, please specify (New England area electric system operations)

Type of risk & Primary risk driver

Acute physical	Storm (including blizzards, dust and sandstorm)

Primary potential impact
Impact on company assets

Company-specific description
Severe weather, such as ice and snowstorms, tornadoes, micro-bursts, hurricanes, floods, droughts, and other natural disasters, may cause outages and property damage, which may require us to incur additional costs that may not be recoverable from customers.

Timeframe
1-3 years

Magnitude of potential impact
High

Likelihood
Virtually certain

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure - minimum (currency)
0

Potential financial impact figure - maximum (currency)
1379100000

Explanation of financial impact
Over the years, Eversource has experienced significant weather events in the form of tropical storms and hurricanes, floods, ice storms, blizzards, and nor'easters. As a result, Eversource suffers damage to its transmission and distribution system, causing customer outages and the incurrence costs to repair significant damage and restore customer service. Severe weather events in the New England area are increasing in frequency and creating high impact disruptions to the transmission and distribution system. Assessing damages, conducting repairs, and replacing equipment in substations that has been damaged can take over a week. The indirect cost, capital expenditure, loss in revenue and overall cost is dependent on equipment failures and the number of substations affected. In some instances, the cost for repairs can be deferred to a storm recovery mechanism if the storm meets specific criteria and qualifies for recovery under the jurisdiction of each state(s) regulatory approvals and requirements.

Primary response to risk
Other, please specify (Hardening infrastructure and substations subject to damage from severe weather)

Description of response
We have developed a robust resiliency plan to improve our system's ability to withstand severe weather patterns. This includes installing new and stronger infrastructure (utility poles, wires and related system equipment), usage-based asset replacements, new standards for planning and operations, and targeted vegetation management.

Transmission infrastructure is designed to withstand a wide variety of severe weather conditions and we proactively replace assets before they become damaged. We deploy drones to inspect infrastructure where access is difficult to safely and quietly identify issues that might otherwise go undetected. We then prioritize replacement of aging wood and steel lattice structures with new steel structures capable of withstanding winds of 120 mph or more. These upgrades improve the grid's resiliency and also support higher capacity conductors capable of integrating additional clean energy generation as it comes online. All improvements are completed in alignment with policymakers to develop resiliency solutions that are also cost-effective for our customers.

Under Eversource's flood mitigation strategy for its electrical infrastructure, the Company hardens its existent substations and facilities that are subject to flooding and implements the necessary solutions to mitigate the effects of severe weather and climate change. New substations and facilities are built using the latest standards complying with the NESC, FEMA, ASCE-24 and state and federal regulatory requirements. In addition, the Company in partnership with universities has developed a substation flood vulnerability model that provides forecasting capabilities at different time intervals as a severe weather event approaches any area of our service territory. This model is based on the most accurate HRRR NOAA precipitation forecast and the maximum inundation and flood level time series. The model can also assess flood-inundation risk at selected substations for synthetic extreme event scenarios including hurricane simulations in future climate conditions and sea-level rise projections.

Cost of response

Explanation of cost of response

Costs can only be estimated based on expected prices to repair and replace equipment during normal operations, however emergent repairs and equipment replacements after a severe/catastrophic event can be significantly higher due to the availability of resources and equipment.

Storm cost deferrals relate to costs incurred for storm events at CL&P, NSTAR Electric and PSNH that each company expects to recover from customers. A storm must meet certain criteria to qualify for deferral and recovery with the criteria specific to each state jurisdiction and utility company. Once a storm qualifies for recovery, all qualifying expenses incurred during storm restoration efforts are deferred and recovered from customers. Costs for storms that do not meet the specific criteria are expensed as incurred.

As a case study multiple tropical and severe storms over the past several years have caused extensive damage to Eversource's electric distribution systems resulting in significant numbers and durations of customer outages, along with significant pre-staging costs. Storms in 2022 that qualified for future recovery resulted in deferred storm restoration costs and pre-staging costs totalling $399 million at Eversource, including $163 million at CL&P, $181 million at NSTAR Electric, and $55 million at PSNH. Management believes that all of these storm costs were prudently incurred and meet the criteria for specific cost recovery.

W4.2c

(W4.2c) Why does your organization not consider itself exposed to water risks in its value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact?

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	We have identified water related risks in our supply chain but they do not meet our criteria to be considered a substantive risk. However, as with all identified risks, we have implemented mitigation strategies to minimize any potential impact. Given AWCs position in the value chain, we believe the greatest risks to Eversource are associated with our direct operations for this business rather than risks to the value chain.

W4.3

(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes, we have identified opportunities, and some/all are being realized

W4.3a

(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.

Type of opportunity

Markets

Primary water-related opportunity

Expansion into new markets

Company-specific description & strategy to realize opportunity

Eversource and AWC have a goal to expand the footprint of the water business. Since 2011, Aquarion has closed 28 transactions, adding approximately 31,000 customer connections (~10% growth). This includes 10,000 customers added in 2022. We actively pursue opportunities to meet with water utilities and municipalities to discuss purchases of their system and manage an active pipeline of opportunities. We track our progress through KPIs that are reported to both Aquarion and Eversource leadership. The water utility market is highly fragmented with large numbers of small systems. Aquarion's growth strategy is focused on systems that serve greater than 1,000 customers, with a goal for each acquisition to be accretive to earnings and provide net benefits to customers.

Estimated timeframe for realization

More than 6 years

Magnitude of potential financial impact

Low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

1

Potential financial impact figure – maximum (currency)

16000000

Explanation of financial impact

Given the size of AWC compared to the rest of Eversource, the financial impact in the near term is expected to be low.

W5. Facility-level water accounting

W5.1

(W5.1) For each facility referenced in W4.1c, provide coordinates, water accounting data, and a comparison with the previous reporting year.

Facility reference number
Facility 1

Facility name (optional)
All Aquarion facilities that could be exposed to water risks

Country/Area & River basin

United States of America	Other, please specify (Eversource considers all water basins in New England operation when considering exposures to water risks)

Latitude
41.206179

Longitude
-73.285885

Located in area with water stress
No

Primary power generation source for your electricity generation at this facility
Not applicable

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
123294.41

Comparison of total withdrawals with previous reporting year
About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
102015.09

Withdrawals from brackish surface water/seawater
0

Withdrawals from groundwater - renewable
21279.32

Withdrawals from groundwater - non-renewable
0

Withdrawals from produced/entrained water
0

Withdrawals from third party sources
2121.35

Total water discharges at this facility (megaliters/year)
21166.61

Comparison of total discharges with previous reporting year
About the same

Discharges to fresh surface water
91.27

Discharges to brackish surface water/seawater
0

Discharges to groundwater
20982.08

Discharges to third party destinations
93.27

Total water consumption at this facility (megaliters/year)
2.68

Comparison of total consumption with previous reporting year
About the same

Please explain
We aggregated all of our water utility facilities, as the impacts would be similar for all. Operational conditions are similar to last year, therefore, direct water measurements are similar to last year.

Facility reference number
Facility 2

Facility name (optional)
Eversource substations identified that could be exposed to water risks

Country/Area & River basin

United States of America	Other, please specify (Eversource considers all water basins in New England operation when considering exposures to water risks))

Latitude
42.409784

Longitude
-71.121869

Located in area with water stress
Yes

Primary power generation source for your electricity generation at this facility
Not applicable

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
0

Comparison of total withdrawals with previous reporting year
About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
0

Withdrawals from brackish surface water/seawater
0

Withdrawals from groundwater - renewable
0

Withdrawals from groundwater - non-renewable
0

Withdrawals from produced/entrained water
0

Withdrawals from third party sources
0

Total water discharges at this facility (megaliters/year)
0

Comparison of total discharges with previous reporting year
About the same

Discharges to fresh surface water
0

Discharges to brackish surface water/seawater
0

Discharges to groundwater
0

Discharges to third party destinations
0

Total water consumption at this facility (megaliters/year)
0

Comparison of total consumption with previous reporting year
About the same

Please explain
The responses to this question for “facility 2” reflect an aggregated disclosure for all substations that may have water risks associated with flooding hazards. Water consumption at substations is generally limited to modest use of potable water and only at a small number of locations, therefore this data is not tracked and considered to be de minimis.

W5.1a

(W5.1a) For the facilities referenced in W5.1, what proportion of water accounting data has been third party verified?

Water withdrawals – total volumes

% verified
Not verified

Verification standard used
<Not Applicable>

Please explain
At this time we do not undergo third party verification for any water data.

Water withdrawals – volume by source

% verified
Not verified

Verification standard used
<Not Applicable>

Please explain

Water withdrawals – quality by standard water quality parameters

% verified
Not verified

Verification standard used
<Not Applicable>

Please explain

Water discharges – total volumes

% verified
Not verified

Verification standard used
<Not Applicable>

Please explain

Water discharges – volume by destination

% verified
Not verified

Verification standard used
<Not Applicable>

Please explain

Water discharges – volume by final treatment level

% verified
Not verified

Verification standard used
<Not Applicable>

Please explain

Water discharges – quality by standard water quality parameters

% verified
Not verified

Verification standard used
<Not Applicable>

Please explain

Water consumption – total volume

% verified
Not verified

Verification standard used
<Not Applicable>

Please explain

W6. Governance

W6.1

(W6.1) Does your organization have a water policy?

Yes, we have a documented water policy that is publicly available

W6.1a

(W6.1a) Select the options that best describe the scope and content of your water policy.

	Scope	Content	Please explain
Row 1	Company-wide	Description of business dependency on water Description of business impact on water Commitment to align with international frameworks, standards, and widely-recognized water initiatives Commitment to prevent, minimize, and control pollution Commitment to reduce water withdrawal and/or consumption volumes in direct operations Commitment to reduce water withdrawal and/or consumption volumes in supply chain Commitment to stakeholder education and capacity building on water security Commitment to water stewardship and/or collective action Commitment to the conservation of freshwater ecosystems Commitments beyond regulatory compliance Reference to company water-related targets Acknowledgement of the human right to water and sanitation Recognition of environmental linkages, for example, due to climate change	Our policies pertaining to water are embedded in relevant company-wide environmental policies, including our Eversource Environmental Policy and Eversource's Human Rights Policy, as well as Aquarion's Environmental Policy, (available at aquarionwater.com/environment), These policies are publicly available to clearly communicate our commitment and goal to ensure water availability, water conservation and water quality through comprehensive water management to both internal and external stakeholders. Additionally, as stated in our Supplier Code of Conduct, all suppliers must adhere to our Eversource Environmental Policy, which says "We recognize our role in water management and strive to protect water quality, reduce water use in our own operations, and work with customers to implement conservation programs to ensure that critical needs continue to be met." The Aquarion Environmental Policy expresses our business's dependency on water, as the environmental resource that serves as the commodity we provide to our water utility customers. As stated in the policy: "We recognize that environmental protection and the efficient use of resources are vital for sustaining our success because they enable us to continue providing valuable services to our customers and communities." As stewards of the environment, we promote sustainable practices and habitat management. This includes actively monitoring reservoir ecosystems throughout our AWC. We have a long history of monitoring the quality of the water in our watershed and reservoirs to optimize treatment, including mapping the presence and density of invasive aquatic plants in all our Aquarion reservoirs. Moreover, meeting or surpassing compliance with all applicable environmental regulations is central to our sustainability commitments and demonstrates the respect we have for our stakeholders' fundamental human rights to natural resources such as clean water. We affirm the human right to water and sanitation, and we cite this commitment in Eversource Energy's Human Rights Policy. Finally, as described in our 2022 Sustainability Report, "maintaining water quality and availability" was considered material in 2022 to the company's sustainability strategy. The scope and boundary of the material topics have been aligned with Sustainable Development Goals. Water materiality has been mapped to SDG 6, "Clean Water Sanitation" and "SDG 9 Industry, Innovation and Practice."

W6.2

(W6.2) Is there board level oversight of water-related issues within your organization?

Yes

W6.2a

(W6.2a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for water-related issues.

Position of individual or committee	Responsibilities for water-related issues
Chief Executive Officer (CEO)	Eversource's Chairman of the Board, President and Chief Executive Officer has overall responsibility for managing the company's business strategy, including issues related to the environment and water security. This position reports to the Board of Trustees, which both as a whole and through its Committees is responsible for the oversight of the Company's risk management processes and programs, along with comprehensive operating and strategic planning and environmental matters such as those concerning water management.
Board-level committee	The Governance, Environmental and Social Responsibility (GESR) Committee of the Board of Trustees of Eversource is responsible for oversight of the Company's management of ESG matters. We amended our GESR Committee Charter in 2022 to reflect the increased oversight and attention being devoted to ESG and climate matters by that Committee. As stated in the GESR Committee Charter, Trustees serving on the GESR Committee shall have sufficient knowledge and familiarity in the areas of corporate ESG practices and policies, including issues such as climate change, social justice, and transparency expectations to discharge the duties and responsibilities of the Committee. The GESR Committee oversees the Company's climate, environmental, human capital management and social responsibility strategy, programs, policies, risks, targets and performance, as well as related public reporting, in coordination with other Committees or the Board as necessary or appropriate. Climate and environmental oversight includes water-related issues.
Board-level committee	The Eversource Board of Trustees Finance Committee is responsible for oversight of Eversource's Enterprise Risk Management (ERM) Program, which utilizes a well-defined enterprise-wide methodology designed to allow executives to identify, categorize, prioritize, and mitigate principal risks to the Company. In addition to known risks, the ERM program identifies emerging risks and considerations, including those related to water security. Per our 2023 Proxy Statement in 2022, the Board reviewed key strategic projects, including our water customer growth initiative. This included the October 2022 purchase of The Torrington Water Company, adding about 10,200 customers, and November execution of a purchase and sale agreement to acquire the Pinehills Water Company which will add about 2,700 customers upon closing.

W6.2b

(W6.2b) Provide further details on the board's oversight of water-related issues.

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring progress towards corporate targets Overseeing acquisitions, mergers, and divestitures Reviewing and guiding risk management policies Reviewing and guiding strategy	Per page 20 of our 2023 Proxy Statement, in 2022 our GESR Committee met 5 times, the Finance Committee met 4 times our Board held 7 meetings, and with Committees held a total of 27 meetings during which they reviewed and discussed performance reports, Company plans and prospects, and any immediate issues. The Board's GESR Committee oversees Eversource's climate, environmental, human capital management and social responsibility strategy, programs, policies, risks, targets and performance, as well as related public reporting. They meet at least three times per year, including an annual review of progress against climate-related Company goals. Our ERM program is overseen by the Finance Committee. Management identifies and analyzes known and emerging risks, including those related to water security, to determine materiality, likelihood and impact, and develops mitigation strategies. The findings are discussed with the Finance Committee and full Board, including reporting on an individual risk-by-risk basis on how issues are being measured and managed. Pages 14-20 of our 2022 Annual Report identifies risk factors, including impacts from severe weather, regulatory compliance and water availability and quality. Our Board implements and monitors performance metrics while guiding strategy and major plans of action to mitigate the impact of climate change and pursue opportunities to strengthen our infrastructure. All Board Committee Chairs report to the Board following Committee meetings to discuss comprehensive operating and strategic planning, including long-term objectives, specific strategies to achieve goals, and plans to implement each strategy. The operating plan, consisting of goals and objectives for the year, key performance indicators and financial forecasts, was reviewed and approved by the Board in February 2022. Per our 2023 Proxy Statement in 2022, one financial performance goal was to advance key strategic projects, including our water customer growth initiative. The goal was achieved through the October 2022 purchase of The Torrington Water Company, adding about 10,200 customers, and November execution of a purchase and sale agreement to acquire the Pinehills Water Company which will add about 2,700 customers upon closing.

W6.2d

(W6.2d) Does your organization have at least one board member with competence on water-related issues?

	Board member(s) have competence on water-related issues	Criteria used to assess competence of board member(s) on water-related issues	Primary reason for no board-level competence on water-related issues	Explain why your organization does not have at least one board member with competence on water-related issues and any plans to address board-level competence in the future
Row 1	Yes	Pages 13-15 of our 2023 Proxy Statement highlight our Board of Trustees selection process and the qualifications, skills and experience we seek. Our GESR Committee and the Board annually review the skills and qualifications that they determine are necessary for the proper oversight of the Company by the Trustees in furtherance of their fiduciary duties. The Committee and the Board remain focused on ensuring that the individual and collective abilities of the Trustees continue to meet the changing needs of the Company and its constituencies. The Board is committed to nominating individuals who satisfy the applicable criteria for outstanding service to our Company and who together comprise the appropriate and diverse Board composition in light of evolving business demands. The Board evaluates the effectiveness of each Trustee in contributing to the Board's work and the potential contributions of each new nominee. Risk Management Experience: As outlined on page 15 of our Proxy Statement, 11 of our 12 trustees have experience in the understanding and evaluation of the most significant risks we face, and in applying that experience to the Company's short- and long-term strategy, enabling them to provide the experience and leadership to provide effective oversight of risk management processes, including those related to water-related issues. ESG Experience: As outlined on page 15 of our Proxy Statement, 10 of our 12 trustees have experience in the understanding of ESG to manage our sustainability practices, including environmental, social and governance matters and continue our commitment to improving our environmental performance and reducing the potential negative impacts of our operations on the environment.	<Not Applicable>	<Not Applicable>

W6.3

(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).

Name of the position(s) and/or committee(s)
Chief Operating Officer (COO)

Water-related responsibilities of this position
Managing water-related risks and opportunities
Managing water-related acquisitions, mergers, and divestitures

Frequency of reporting to the board on water-related issues
More frequently than quarterly

Please explain
Management broadly considers our business model, the utility industry, the global and local economy, climate change, and the current political and economic environment to identify risks. In 2022, Eversource's Chairman of the Board, President and CEO reported directly to the Board of Trustees. He oversaw the Company's leadership team including the Chief Financial Officer, Executive Vice President, Corporate Relations and Sustainability and Environmental Affairs, and the Executive Vice President, Customer Experience and Energy Strategy. These individuals oversaw the management of climate-related risks and opportunities collaborate closely on ERM, including those related to water security. Progress was reported to our Board on a regular basis, including items such as climate change, regulatory developments, environmental compliance, and strategy development. Additionally, our financial performance goal was to advance key strategic projects, including our water customer growth initiative.

W6.4

(W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?

	Provide incentives for management of water-related issues	Comment
Row 1	No, and we do not plan to introduce them in the next two years	No additional comments

W6.5

(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?
Yes, direct engagement with policy makers
Yes, trade associations
Yes, funding research organizations

W6.5a

(W6.5a) What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?

The company's legislative agenda is developed with input from Aquarion's senior management team, who provides monthly updates to the leadership team during meetings scheduled to review progress on major business initiatives. This process assures internal alignment. Aquarion participates actively in the CT Water Works Association, maintaining a board seat. In cases where Aquarion's position is not in alignment with the association or its membership, Aquarion will use its board seat to voice its position in an attempt to reach agreement among members.

W6.6

(W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?
Yes (you may attach the report - this is optional)
Eversource 2023-proxy-statement 3-24-23.pdf
Eversource 2022-annual-report 2-13-23.pdf

W7. Business strategy

W7.1

(W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	11-15	With a water utility subsidiary as part of our business, water-related issues, including opportunities to grow the business, water availability and quality, are integrated in the establishment of long-term objectives, strategies, and financial planning. These are overseen by the Company's management and reported to the Board of Trustees. Comprehensive operating and strategic planning, including long-term objectives, specific strategies to achieve goals, and plans to implement each strategy are reviewed at Board meetings. The operating plan, consisting of goals and objectives for the year, key performance indicators and financial forecasts, was reviewed and approved by the Board in Feb. 2022.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	11-15	With a water utility subsidiary as part of our business, water-related issues, including opportunities to grow the business, water availability and quality, are integrated in the establishment of long-term objectives, strategies, and financial planning. These are overseen by the Company's management and reported to the Board of Trustee's. Comprehensive operating and strategic planning, including long-term objectives, specific strategies to achieve goals, and plans to implement each strategy are reviewed at Board meetings. The operating plan, consisting of goals and objectives for the year, key performance indicators and financial forecasts, was reviewed and approved by the Board in Feb. 2022.
Financial planning	Yes, water-related issues are integrated	16-20	Our comprehensive operating and strategic planning consist of short-, medium- and long-term corporate objectives, specific strategies to achieve those goals, and plans designed to implement each strategy. Our ERM program is integrated with the annual operating and strategic planning processes to identify the key financial risks associated with the plan, including water-related risks. These risks are presented to the Board of Trustees as part of the annual operating plan and at the annual strategic planning session. Considerations include financial, strategic, reputation, operational, customers and environment/safety. Physical risks from climate change may result from sea level rise and shifting weather conditions, such as changes in precipitation, more frequent and severe storms, droughts, and floods. These risks may result in customers' energy and water usage increasing or decreasing depending on the duration and magnitude of the changes, degradation of water quality/quantity, and our ability to reliably deliver to customers. To address this, we are pursuing the following actions: • Working with regulators to gain approval for new programs that will improve system resiliency such as flood proofing, and other system hardening measures; • Implementing a grid modernization plan to enhance our electric distribution infrastructure to improve resiliency and reliability • Implementing programs to address risks that may impact water availability and water quality

W7.2

(W7.2) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?

Row 1

Water-related CAPEX (+/- % change)

7.6

Anticipated forward trend for CAPEX (+/- % change)

10.8

Water-related OPEX (+/- % change)

6

Anticipated forward trend for OPEX (+/- % change)

8

Please explain

Our water related CAPEX is investment in water infrastructure by AWC. We are increasing this investment in order to ensure the reliability of our water infrastructure to best serve our customers. Actual CAPEX for 2021 and 2022 are $144.2M and &155.3M respectively. Forecast CAPEX for 2023 is $172M. OPEX is the total operating expense incurred to run the drinking water subsidiary (i.e., power, payroll, etc.). Actual OPEX for 2021 and 2022 were $100.2M and $106.2M respectively. Increasing forward trends reflect both inflation and the growth of our business (such as the 2022 acquisition of Torrington Water Company). We work to contain operating costs to keep the cost of service down for our customers.

W7.3

(W7.3) Does your organization use scenario analysis to inform its business strategy?

	Use of scenario analysis	Comment
Row 1	Yes	Building on a solid foundation of our carbon neutrality goal, in November 2022 we proudly committed to adopting aggressive measures that support deep, cross-sector carbon reductions through a science-based target (SBT) with a transition plan that aligns with a 1.5°C world. This target will be grounded in the most current climate science and recommendations for limiting global warming in collaboration with the Science Based Targets initiative (SBTi.) In 2022 we completed a Scope 3 screening analysis and an internal transition plan to demonstrate that we could meet a target that aligns with an 1.5°C world. In 2023, the scenario analysis and plan will be updated and presented to the SBTi for validation, followed by releasing details of the transition plan to the public. Climate-related scenario analysis also reviews weather/water-related outcomes, such as the identification of the impacts of severe weather including drought and possible changes in regulations and customer water use.

W7.3a

(W7.3a) Provide details of the scenario analysis, what water-related outcomes were identified, and how they have influenced your organization's business strategy.

	Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
Row 1	Other, please specify (We use an internal storm and flood prediction tool for analysis.)	Qualitative and quantitative analysis as it relates to the increased frequency and severity of storms due to climate change is performed through our innovative partnership with University of Connecticut (UConn) on the Eversource Energy Center. Through science-based solutions, including high-resolution weather and outage forecasting and 3-D aerial and ground imagery we are improving the delivery of reliable power and enhanced risk management in extreme weather by predicting a storm's impact and the locations of outages to proactively dispatch crews before storms arrive.	Our Eversource climate-related scenario analysis resulted in water-related outcomes including the identification of the impacts of severe weather impacts including drought and possible changes in regulations and customer water use. For example, MA Electric has identified substations that could be at risk for flooding during extreme storm activity. Our long-term substation flood mitigation strategy examines predictive modeling methods and reviews existing 100- and 500-year flood levels from FEMA studies to better assess flooding risk to substation infrastructure. This data is incorporated into future electrical system planning and substation asset strategy and design, including adding enhanced substation elevation margins for sea level rise. From regulatory perspective, for our water customers, conservation measures imposed by the communities we serve could impact water usage.	Our MA Electric operations team is using the results to implement projects to storm proof the most at-risk substations. Aquarion has expanded water conservation programs and limits irrigation in areas where reservoirs are at risk of being stressed by drought.

W7.4

(W7.4) Does your company use an internal price on water?

Row 1

Does your company use an internal price on water?

No, but we are currently exploring water valuation practices

Please explain

No additional comments

W7.5

(W7.5) Do you classify any of your current products and/or services as low water impact?

	Products and/or services classified as low water impact	Definition used to classify low water impact	Primary reason for not classifying any of your current products and/or services as low water impact	Please explain
Row 1	Yes	Our water subsidiary, AWC implements a growing conservation program that helps achieve low water impact, including the sale of rain barrels; widespread conservation messaging in multiple formats (website, tv, print, radio and digital platforms) and enforces a mandatory twice-weekly irrigation schedule in many towns in its service area. This program began in systems where seasonal peaks of water consumption by customers stress local water resources. There are plans in place to expand the program to cover the majority of customers, regardless of water supply-demand ratios in the individual water systems. In 2022 AWC sought and received approval to implement an inclining block rate in CT (which will impact 92% of our customer base). An inclining block rate is designed to provide affordability for basic water consumption needs while providing a price signal to encourage conservation for customers with above average consumption.	<Not Applicable>	No additional comments

W8. Targets

W8.1

(W8.1) Do you have any water-related targets?

Yes

W8.1a

(W8.1a) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories.

	Target set in this category	Please explain
Water pollution	Yes	<Not Applicable>
Water withdrawals	Yes	<Not Applicable>
Water, Sanitation, and Hygiene (WASH) services	Yes	<Not Applicable>
Other	Yes	<Not Applicable>

W8.1b

(W8.1b) Provide details of your water-related targets and the progress made.

Target reference number
Target 1

Category of target
Other, please specify (Drinking Water Quality)

Target coverage
Business division

Quantitative metric
Other, please specify (Measures the number of Notices of Violation (NOVs) of water quality standards issued by state health regulators that result in fines, penalties, or Tier 1 customer notifications.)

Year target was set
2022

Base year
2022

Base year figure
0

Target year
2022

Target year figure
0

Reporting year figure
0

% of target achieved relative to base year
<Calculated field>

Target status in reporting year
Achieved

Please explain
This target is reset each fiscal year and is measured for all business units of AWC and monitored at the Corporate level. The target is zero. Measures the number of Notices of Violation (NOVs) of water quality standards issued by state health regulators that result in fines, penalties, or Tier 1 customer notifications. Violations incurred in newly acquired systems are not counted for a period of three years to provide time for identification and correction of compliance deficiencies. While Aquarion received Tier 2 and 3 violations for schedule and paperwork discrepancies, no violations were received that met the definition to be counted in 2022.

Target reference number
Target 2

Category of target
Other, please specify (Drinking Water Quality)

Target coverage
Business division

Quantitative metric
Other, please specify (Water Quality Complaints)

Year target was set
2022

Base year
2022

Base year figure
1044

Target year
2022

Target year figure
928

Reporting year figure
928

% of target achieved relative to base year

100

Target status in reporting year
Achieved

Please explain
This is a fiscal year target and is measured for all business units of Aquarion and monitored at the Corporate level. It measures the sum of all Water Quality complaints logged by company representatives in the following categories: Taste & Odor, Appearance complaints of unknown cause, Chemical quality and Biological quality. Excluded from this sum are complaints from Chlorination Initiative small systems that are directly attributed to chlorination (Chemical Quality and Taste & Odor). This exclusion is in effect for a period of 1 year following chlorination of a given system. Excluded from this sum are complaints from Chlorination Initiative small systems that are directly attributed to chlorination (Chemical quality and Taste & Odor). This exclusion is in effect for a period of 1 year following chlorination of the given system.

In 2022, Aquarion recorded 928 water quality complaints that meet the above definition against an upper limit target of no more than 1044.

Target reference number
Target 3

Category of target
Other, please specify (Customer Engagement)

Target coverage
Business division

Quantitative metric
Other, please specify (Service Quality Complaints)

Year target was set
2022

Base year
2022

Base year figure
2684

Target year
2022

Target year figure
1877

Reporting year figure
1877

% of target achieved relative to base year
100

Target status in reporting year
Achieved

Please explain
This is a fiscal year target and is measured for all business units of Aquarion and monitored at the Corporate level. The sum of all customer complaints logged by company representatives in the following categories: High Bill Investigations, Pressure Issues, Meter Issues, Outages, Property Damage, and General Service. Measurement periods are monthly and year-to-date. In 2022 Aquarion recorded 1877 complaints in this category against an upper limit target of no more than 2684.

Target reference number
Target 4

Category of target
Water consumption

Target coverage
Business division

Quantitative metric
Reduction in total water consumption

Year target was set
2021

Base year
2021

Base year figure
4559

Target year
2022

Target year figure
5437

Reporting year figure
4559

% of target achieved relative to base year
0

Target status in reporting year
Expired

Please explain
This target is a trailing twelve-month average and is measured for all business units of Aquarion and monitored at the Corporate level. Non-Revenue Water (NRW) is the difference between the amount of water a utility produces and the amount of water it can account for in sales. NRW is presented in terms of volume and as a percentage. This measure provides strategic feedback on stakeholder management given the regulatory interest in non-revenue water and on sustainability efforts as the primary cause of non-revenue water is leakage. It also provides diagnostic feedback on the business processes impacting and controlling non-revenue water. The overall goal is to maintain NRW below 15% to meet stakeholder expectations. For 2022 the targets for NRW were 4559 MG and 15.1%. Actuals were 5437 MG and 17.0% (the targets were not met).

Target reference number
Target 5

Category of target
Community engagement

Target coverage
Other, please specify (Community Engagement)

Quantitative metric
Other, please specify (Paving Coordination - Absolute increase in investment in community engagement initiatives)

Year target was set
2022

Base year
2022

Base year figure
0

Target year
2022

Target year figure
2500000

Reporting year figure
2400000

% of target achieved relative to base year
96

Target status in reporting year
Revised

Please explain
This target is specific to the Connecticut business of Aquarion and is reset each financial year. It is monitored at the corporate level. The amount of water main replaced annually in Connecticut is significant as a portion of the over capital budget and in total miles of main replaced. Construction costs in CT exceed those in NH and MA. Main replacement is evaluated and prioritized using many factors, primarily age, condition, and break history. Coordinating projects with local municipalities' road paving schedules, when possible, provides cost savings and enhances our community engagement/stakeholder relations. Where towns are planning road paving projects in the near term and we are planning a main replacement in the near term, we agree to a coordinated schedule and to pay a portion of the paving cost instead of bearing the full cost of re-paving the road, as we do when no such coordination occurs. We are measuring the total paving dollars spent on coordinated projects. In 2022 we completed $2.4M in paving through coordinated projects versus a target of $2.5M.

W9. Verification

W9.1

(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?
No, we are waiting for more mature verification standards and/or processes

W10. Plastics

W10.1

(W10.1) Have you mapped where in your value chain plastics are used and/or produced?

	Plastics mapping	Value chain stage	Please explain
Row 1	Not mapped – and we do not plan to within the next two years	<Not Applicable>	We utilize plastic piping but do not produce plastics.

W10.2

(W10.2) Across your value chain, have you assessed the potential environmental and human health impacts of your use and/or production of plastics?

	Impact assessment	Value chain stage	Please explain
Row 1	Not assessed – and we do not plan to within the next two years	<Not Applicable>	AWC does not directly assess environmental and health impacts of plastics. However, AWC does ensure that HDPE piping in our supply chain is NSF61 approved for drinking water applications.

W10.3

(W10.3) Across your value chain, are you exposed to plastics-related risks with the potential to have a substantive financial or strategic impact on your business? If so, provide details.

	Risk exposure	Value chain stage	Type of risk	Please explain
Row 1	Not assessed – and we do not plan to within the next two years	<Not Applicable>	<Not Applicable>	AWC is not exposed to plastics-related risks that would have a substantive financial or strategic impact.

W10.4

(W10.4) Do you have plastics-related targets, and if so what type?

	Targets in place	Target type	Target metric	Please explain
Row 1	No – and we do not plan to within the next two years	<Not Applicable>	<Not Applicable>	Plastic does not represent a significant impact on our business.

W10.5

(W10.5) Indicate whether your organization engages in the following activities.

	Activity applies	Comment
Production of plastic polymers	No	
Production of durable plastic components	No	
Production / commercialization of durable plastic goods (including mixed materials)	No	
Production / commercialization of plastic packaging	No	
Production of goods packaged in plastics	No	
Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services)	No	

W11. Sign off

W-FI

(W-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

W11.1

(W11.1) Provide details for the person that has signed off (approved) your CDP water response.

	Job title	Corresponding job category
Row 1	Manager, Sustainability	Environment/Sustainability manager

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website.

Yes, CDP may share our Main User contact details with the Pacific Institute

Please confirm below

I have read and accept the applicable Terms