# **Evergy, Inc. - Water Security 2023**



### W0. Introduction

#### W<sub>0.1</sub>

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

Evergy is a public utility holding company incorporated in 2017 and headquartered in Kansas City, Missouri. Evergy operates primarily through the following wholly-owned direct subsidiaries listed below.

Evergy Kansas Central, Inc. (Evergy Kansas Central) is an integrated, regulated electric utility that provides electricity to customers in the state of Kansas. Evergy Kansas Central has one active wholly-owned subsidiary with significant operations, Evergy Kansas South, Inc. (Evergy Kansas South).

Evergy Metro, Inc. (Evergy Metro) is an integrated, regulated electric utility that provides electricity to customers in the states of Missouri and Kansas.

Evergy Missouri West, Inc. (Evergy Missouri West) is an integrated, regulated electric utility that provides electricity to customers in the state of Missouri.

Evergy Kansas Central, Evergy Kansas South, Evergy Metro, and Evergy Missouri West conduct business in their respective service territories using the name Evergy. The Evergy Companies assess financial performance and allocate resources on a consolidated basis (i.e., operate in one segment). Evergy serves approximately 1,648,100 customers located in Kansas and Missouri. Customers include approximately 1,442,200 residences, 199,600 commercial firms and 6,300 industrial companies, municipalities, and other electric utilities. Evergy is significantly impacted by seasonality with approximately one-third of its retail revenues recorded in the third quarter.

Responses to all sections of this Survey do not include details on our financial performance. Details on our financial performance can be found on our investor website and in our public filings available through the U.S. Securities and Exchange Commission (SEC). Materiality and its relevant definition as used in this Survey, and our ESG materiality review process, is different than the definition used in the context of filings with the SEC. Issues deemed material for purposes of this Survey and for purposes of determining our ESG strategies may not be considered material for SEC reporting purposes.

#### W-EU0.1a

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

Electricity generation

Transmission

Distribution

### 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	6235	37.38	25176504
Lignite	0	0	0
Oil	685	4.11	114201
Gas	4145	24.85	2758307
Biomass	8	0.05	54463
Waste (non-biomass)	0	0	0
Nuclear	1219	7.3	8443041
Fossil-fuel plants fitted with carbon capture and storage	0	0	0
Geothermal	0	0	0
Hydropower	60	0.36	163154
Wind	4326	25.93	15645108
Solar	4	0.02	6596
Marine	0	0	0
Other renewable	0	0	0
Other non-renewable	0	0	0
Total	16682	100	52361193

### 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

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### 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
Non-generation facilities (administration buildings, warehouses, etc.)	Evergy owns over 910 properties while less than 30 of them are related to the direct generation of power. The non-generation facilities include administrative buildings, substations, warehouses and maintenance buildings. The non-generation facilities account for less than one percent of Evergy's 2022 total water use. The scope of this disclosure includes 11 coal fired generation units and 30 combustion turbine (CT) units. The coal and CT units are spread across 13 site locations. Of the thirteen sites (facilities) included in the survey, 6 are CT facilities, 6 steam turbine, and 1 nuclear. Evergy understands the importance of water as a resource and has evaluated the future availability of the resource in a 2022 assessment. Evergy's Water Resiliency Assessment evaluated the future resiliency of water in Evergy's service territory, as well as the region where coal is sourced for our coal-fired generation.
Solar, wind, combustion turbine facilities that do not utilize water for power generation.	Evergy owns and operates four wind sites that do not utilize water for power generation. In addition, 5 of the 11 natural gas combustion turbine sites, owned by Evergy, do not utilize water for the power generation process. Therefore, these five facilities are excluded from the water survey. The scope of this survey is specific to sites that Evergy has both ownership and operational control. Evergy has partial ownership of Stateline, a combined cycle facility in Missouri, and a contractual agreement with Crossroads Energy Center, a combustion turbine facility in Mississippi. Other entities not affiliated with Evergy operate both of these partially-owned facilities and Evergy employees do not conduct the day-to-day operations; as a result, they are excluded from this response As outlined in the company's Integrated Resource Plan, Evergy is planning to add 3,700 MW of renewable generation and retire more than 2,000 MW of coal-based fossil generation by 2035.

### 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 Ticker symbol	EVRG

### 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.

	importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital	Important	Primary use of water in direct operations: Evergy has facilities that rely on river water and cooling lakes as part of their once-through cooling system. The majority of water is returned for use downstream. The availability of water for cooling is vital to the operations of the facility. For Evergy's other coal generation facilities, water availability is also vital, but the volume of water needed is less due to the facilities' ability to recycle water multiple times in the cooling system. Through Evergy's Water Resilience Assessment (WRA), forecasts from the World Resource Institute Aqueduct tool were utilized to understand future water risk, which projected that four facilities will be at 'high' or 'extremely high' overall water risk due to the potential impact of drought. Overall water risk is dependent on physical risk quantity and quality, and regulatory/ reputational risk. Future Outlook: Our Integrated Resource Plan outlines our intent to add ~3 gigawatts (GW) of renewable generation and retire ~2 GW of coal over the next decade. While Evergy only consumes a small portion of the water it diverts, the path toward further reduction of coal generation will drive reductions in the need for large volumes of water. Primary use of water in indirect operations is focused on coal supplied to coal-fired generation facilities which comes from the Southern Powder River Basin. Based on Evergy's WRA, this region is at increased risk for drought periods. Historical droughts ranged from 2-3 years; projected droughts are 4-5 years and the severity of drought will remain the same. The United States Army Corps of Engineer Climate Hydrology Assessment Tool projects that this region may also experience a significant increase in streamflow. Future Outlook: Coal supply is important for Evergy's coal-fired generation sites; however, as Evergy continues to invest in renewable generation and further reduce coal generation, reliance on water associated with the region will reduce.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	Primary use of water in direct operations: Evergy has many facilities that utilize recycled process water as a water supply source, which reduces the amount of water diverted from fresh water sources. "Important" was chosen because some facilities rely on closed loop systems for operations and compliance. However, if recycled process water is not available, water would be diverted from freshwater resources to continue operations. Use of cooling towers to recycle water reduces both the water diversion and discharge. Recycled water is used at latan Generating Station and at Hawthorn Generating Station. Both facilities rely on the Missouri River and latan also utilizes groundwater. Through recycling, the water diverted by these facilities is reduced. Recycled water is used at Lawrence and water for these systems comes from the Kansas River so if quantities of recycled water decreased, the supply could be made up by the river. Recycled water is utilized at Jeffrey for make-up water in the bottom ash and scrubber systems. In addition, two of Evergy's facilities also utilize cooling lakes which recycle all water between the lake and the facility and relies on evaporation from the lake for cooling. Future Outlook: Evergy will continue recycling water in the manner that has been done historically and consider ways to increase water recycling. Primary use of water in indirect operations and importance rating rationale: Evergy's main focus of indirect water use is the water utilized for coal suppliers. "Important" was selected because the availability of water for the supply chain is impactful to Evergy's ability to generate and supply power. Evergy's generation fleet is comprised of various electric generation methods, rather than just coal, which is why "vital" was not selected. Future Outlook: As renewable generation is added to Evergy's fleet, the use of coal will decrease, decreasing reliance on water associated with the coal supply chain.

### 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	100%	Monthly	Kansas (KS) Department of Agriculture (KDA) Division of Water Resources (DWR) regulates water withdrawals. Withdrawals in KS from ground and surface water, and large volumes of stormwater runoff are permitted with volume and rate limitations. KDA DWR has metering requirements for ground and surface water pumping. Evergy's meters are state approved and inspected. For Missouri facilities, water withdrawal volumes are based on metering, pump hours, flow rate, or engineering methods.	Our methodology and scope are consistent with our reporting obligations for the Kansas Department of Agriculture (KDA) Division of Water Resources (DWR), which regulates water withdrawal volumes in the state of Kansas. This means that withdrawals in Kansas from groundwater, surface water, and significant volumes of stormwater runoff are permitted with volume and flow rate limitations. KDA DWR also has metering requirements for groundwater and surface water pumping. Evergy's meters are state-approved and determine our withdrawal volumes. For Missouri facilities, water withdrawal volumes are based on metering, pump hours and flow rate, or engineering methods. Both Kansas and Missouri require annual reporting of water withdrawal for facilities considered to be major water users.
Water withdrawals – volumes by source	100%	Monthly	Surface and groundwater sources are metered or calculated based on pump information. Stormwater runoff is based on watershed area precipitation, with an appropriate runoff coefficient. For combustion turbine (CT) sites, we source water from groundwater or a local municipality. It is metered for the CT sites, and we use local municipality meter readings (received through invoices) to determine monthly volume use for all sites that use municipality water for electric generation.	
Entrained water associated with your metals & mining and/or coal sector activities - total volumes [only metals and mining and coal sectors]	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Water withdrawals quality	26-50	Other, please specify (Monthly for two facilities, as needed for operations and permit renewals at other large generation facilities.)		Sites that utilize municipal water receive water quality information annually. Other generation sites periodically collect incoming water quality information for projects or operations. Data collection may occur if there is an elevated pollutant in a discharge stream, for evaluating water treatment processes, or for permit renewals.

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	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water discharges – total volumes	100%	Other, please specify (Depending on the discharge frequency and volume of water, the requirement of monitoring flow is variable ranging from daily, weekly, monthly, or even quarterly.)	Methods include pump run times and flow rates, weir heights, and online flow monitoring. The other four facilities are combustion turbine (CT) sites that utilize an insignificant amount of water compared to the coal-fired and nuclear facilities and did not discharge water during 2022.	All generation facilities that discharge wastewater into the environment are monitored as required for the NPDES program through both the state of Kansas and Missouri. Of the facilities in scope, nine discharge and the volume of the discharge is measured and/or calculated by methods appropriate and approved under the state issued NPDES permit. Hutchinson, Ralph Green, Greenwood, and South Harper do not discharge water offsite.
Water discharges – volumes by destination	100%	Other, please specify (Water discharge volumes are collected based on frequency requirements in the site specific NPDES permits, which range from daily to quarterly.)	All Evergy generation facilities that discharge wastewater back into the environment are permitted to do so under the CWA. Through the permitting process and to meet permit requirements, the receiving stream of the discharges is considered to apply appropriate effluent limitations. All discharges are released back to surface water and require periodic monitoring through the NPDES program.	The only other routes that wastewater leaves our generation facilities are through evaporation and seepage.
Water discharges – volumes by treatment method	100%	Other, please specify (All thirteen energy centers under the scope of this disclosure that discharge water do so under the NPDES program. Site specific NPDES permits require variable flow monitoring such as daily, weekly, and monthly.)	The permitting process requires disclosure of treatment methods for the particular wastewater streams that flow into the outfall.	Four energy centers did not discharge water during 2022. These sites include Greenwood, Hutchinson, Ralph Green, and South Harper. The facilities that discharged during 2022 include one nuclear facility, two combustion turbine sites, and six thermal generation sites. All these facilities have varying levels of wastewater treatment systems in place to meet effluent limitations as required by their specific NPDES permit.
Water discharge quality – by standard effluent parameters	100%	Other, please specify (Monitoring frequency is also variable based on outfall from daily up to quarterly monitoring and sampling.)	For the nine Evergy facilities that discharged water in 2022, discharges were monitored, as required, by their site-specific NPDES permit. Each outfall that discharges facility water has set parameters and monitoring frequency that is determined by state regulatory agencies through the NPDES permit renewal process. Outfall parameters vary based on permit requirements. Example parameters include total suspended solids, metals-such as copper and iron, nutrients-such as phosphorus and nitrogen.	Visual inspections can also be required to look for foaming, oil sheen, and discoloration of water. The data associated with the effluent monitoring is submitted to respective state agencies for review. Discharges did not occur at Hutchinson, Greenwood, Ralph Green, and South Harper during 2022.
Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)	100%	Other, please specify (Monitoring frequency is also variable based on outfall from daily up to quarterly monitoring and sampling.)	For the nine Evergy facilities that discharged water in 2022, discharges were monitored, as required, by their site-specific NPDES permit. Each outfall that discharges facility water has set parameters and monitoring frequency that is determined by state regulatory agencies through the NPDES permit renewal process. Outfall parameters vary based on permit requirements. Example parameters include total suspended solids, metals-such as copper and iron, nutrients-such as phosphorus and nitrogen.	Visual inspections can also be required to look for foaming, oil sheen, and discoloration of water. The data associated with the effluent monitoring is submitted to respective state agencies for review. Discharges did not occur at Hutchinson, Greenwood, Ralph Green, and South Harper during 2022.
Water discharge quality – temperature	100%	Other, please specify (For once-through cooling outfalls, temperature data is required to be collected daily. For other outfalls, temperature is collected less frequently.)	Of facilities that discharged in 2022, all of them had at least one discharging outfall where temperature data was collected.	Of final outfalls located at the facilities that discharged in 2022, 54% of the outfalls are monitored for temperature. The other streams have not been determined to cause temperature rise; therefore, are not currently identified as needing to be monitored. Some discharging facilities have not been determined to cause a temperature rise and are not required to monitor for temperature under the NPDES permit. However, each of these facilities monitors specific outfalls for temperature.
Water consumption – total volume	100%	Monthly	Consumption is calculated on a site-specific basis as each facility utilizes different water sources such as rivers, lakes, and groundwater. Water returns are measured through the NPDES program administered onsite. For combustion turbine facilities that use considerably less water, water use is considered to encompass all consumption since they recycle it through reuse or irrigation.	For the thirteen facilities listed in this disclosure, both incoming and discharging water tracking occurs. The information is presented based on volume consumed but also the rate of water consumed per megawatt hour of electricity supplied.
Water recycled/reused	26-50	Monthly	Data is calculated and allows the flows per month to be tracked. LaCygne and Wolf Creek: all outfalls, which discharge to the company owned lakes for reuse, are tracked under NPDES. Lawrence: The recycled water is tracked from the supply pit back to the air quality control system. Hawthorn: Processes are calculated and tracked using run times of the systems. latan: currently tracks ions throughout the system, which also includes flows.	In 2022, water recycling/reuse occurred in 46% of facilities noted in this disclosure.
The provision of fully- functioning, safely managed WASH services to all workers		Continuously	Evergy relies on regulated municipalities to provide potable water to our facilities rather than treating water inhouse as we recognize the importance of this resource. With Evergy relying on regulated municipalities to provide potable water, the method for measurement is documenting the expectation that all employees have access to this resource.	All Evergy's facilities have safe and clean water available for Evergy personnel and visitors. The evaluation of providing safe and clean water is completed as new facilities are established (frequency) by Evergy.

### W-EU1.2a

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### (W-EU1.2a) For your hydropower operations, what proportion of the following water aspects are regularly measured and monitored?

	% of sites/facilities/operations measured and monitored	Please explain
Fulfilment of downstream environmental flows	Not relevant	While Evergy has a purchased power agreement with a hydroelectric generation station, Evergy does not own nor operate a hydroelectric facility.  Therefore, Evergy does not measure and monitor the operations of the facility that is accounted for in Section 0 question W-EU0.1b.
Sediment loading	Not relevant	While Evergy has a purchased power agreement with a hydroelectric generation station, Evergy does not own nor operate a hydroelectric facility.  Therefore, Evergy does not measure and monitor the operations of the facility that is accounted for in Section 0 question W-EU0.1b.
Other, please specify	Not relevant	While Evergy has a purchased power agreement with a hydroelectric generation station, Evergy does not own nor operate a hydroelectric facility.  Therefore, Evergy does not measure and monitor the operations of the facility that is accounted for in Section 0 question W-EU0.1b.

### 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	Comparison	Drimary	Five-	Primary	Please explain
	(megaliters/year)	with previous reporting year	reason for comparison with previous reporting year	year	reason for forecast	
Total withdrawals	1202186	About the same	Other, please specify (Similar operations to previous year)	Lower	Other, please specify (Investment in renewable generation, such as solar and wind, water withdrawals and discharges will decrease due to these sources of generation not relying on water.)	The figure reported in the volume column includes all Evergy's power generation facilities that utilize process water. Water withdrawals include surface, significant impounded stormwater, groundwater, as well as any municipal water utilized for electric generation process. Of the water withdrawn, approximately 88% was utilized for once-through cooling processes. 96.4% of the water withdrawn was for supporting coal-fired generation facilities. Future Outlook: As renewable generation increases, such as solar and wind, water withdrawals and discharges will decrease due to these sources of generation not relying on water. Dependence on water is expected to decrease as we work toward our climate goals that include retirements within our fossil fuel fired generation fleet.
Total discharges	1141409	About the same	Other, please specify (Similar operations to previous year)	Lower	Other, please specify (Investment in renewable generation, such as solar and wind, water withdrawals and discharges will decrease due to these sources of generation not relying on water.)	The figure reported in the volume column includes all power generation facilities that discharged process wastewater during 2022. Although the scope of the survey includes thirteen generating facilities, four of the facilities did not discharge water during 2022. The facilities that did discharge included: One nuclear facility, Wolf Creek, that discharged water from the cooling lake boundary into the downstream creek. This water discharge only accounted for 0.03% of the water discharges. Six steam generating facilities accounted for the majority of the water discharges at 99.99% of Evergy's total discharge. Of the six facilities, three utilize once-through cooling which accounts for a significant portion of the total discharges. Once-through discharges were 94.19% of Evergy's total water discharges. Two combustion turbine sites utilized a small portion of total water for evaporative cooling, their portion of discharge is insignificant at 0.004% of Evergy's total discharges during 2022. Evaporative coolers for CTs typically are only needed during warm months and do not operate year-round. Future Outlook: As renewable generation increases, such as solar and wind, water withdrawals and discharges will decrease due to these sources of generation not relying on water. Dependence on water is expected to decrease as we work toward our climate goals that include retirements within our fossil fuel fired generation fleet.
Total consumption	57529	About the same	Other, please specify (Similar operations to previous year)	Lower	Other, please specify (Investment in renewable generation, such as solar and wind, water withdrawals and discharges will decrease due to these sources of generation not relying on water.)	Water consumption accounts for approximately 4.8% of the total water that is withdrawn for Evergy's generating facilities. For this survey, Evergy used this definition for water consumption: "Amount of freshwater consumed for use in thermal generation." "Freshwater" includes water sourced from fresh surface water, groundwater, rainwater, and fresh municipal water and does not include recycled, reclaimed, or gray water. Water consumption is defined as water that is not returned to the original water source after being withdrawn, including evaporation to the atmosphere." To achieve water tracking based on the above definition of water consumption, site specific water equations were developed for each energy center. Each site's configuration, data availability, and water compliance tracking obligations were considered to develop the most representative equation for tracking water consumption. The need for site specific equations was due to not all discharge streams being continuously monitored. Therefore, using one data point a month to calculate an estimated daily discharge may cause over or under estimation. For sites that use cooling lakes, a cooling lake evaporative model is used to calculate forced evaporation caused from the operation of the facility. Evergy's Kansas facilities utilizing surface water, groundwater, and impounded stormwater must have water rights. The discharges, that account for pass-through stormwater, at LaCygne, Jeffrey and Wolf Creek facilities, that have company-owned lakes, all have water rights to impound stormwater; and stormwater associated with these facilities are calculated and considered a 'withdrawal'. For all other Kansas facilities that have stormwater runoff and discharge the stormwater, this water is not considered a 'withdrawal'. Since Evergy does not have the right to impound and beneficially reuse the water.

(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	previous	Primary reason for comparison with previous reporting year	Five- year forecast		Identification tool	Please explain
Row 1	/ No	<not Applicable &gt;</not 	<not Applicable&gt;</not 	<not Applicable&gt;</not 	<not Applicab le&gt;</not 	<not Applicab le&gt;</not 	WRI Aqueduct	Evergy conducted a WRA that utilized climate change tools and databases such as WRI and Water Risk Atlas, the U.S. Army Corps of Engineers' Climate Hydrology Assessment Tool, the National Oceanic and Atmospheric Administration's Climate Explorer Tool, and the U.S. Drought Monitor. The assessment reviewed the generation facilities that relied upon freshwater resources rather than a municipality. For this specific question, the WRI Aqueduct was utilized to understand the current and future (2030 and 2040) water availability for each site. The tool was applied to the watersheds where Evergy's power generation sites are located. The tool was also applied to the Powder River Basin in Wyoming, where Evergy sources the coal for power generation. Both baseline and future scenario analyses were applied to the water basins where Evergy has generation operations. The data was reviewed for both the Representative Concentration Pathway (RCP)4.5 and 8.5 emission scenarios. These RCPs were chosen to align with a scenario limiting global warming to 2°C (3.6°F) (RCP4.5) and a scenario where there are increased physical risks due to extremely high emissions (RCP8.5). Using these scenarios is also considered best practice, as it can show the worst case (more conservative) approach as well as a lower emissions scenario. The optimistic scenario is considered "stable economic development and carbon emissions peaking and declining by 2040." The optimistic scenario is in alignment with a RCP8.5. A mid-century timeframe was chosen to align with the design life of existing energy infrastructure. WRI defines baseline water stress to be "defined as the ratio of total water withdrawals to available renewable surface and groundwater supplies. Water withdrawals include domestic, industrial, irrigation, and livestock consumptive water users and large dams on downstream water availability." Higher values of this ratio indicate water stress as there is more compelition among water users. Low water stress is measured with a ratio of less than 10

# 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	1184159	About the same	Other, please specify please (KS) River and company owned lakes are the main water bodies that are relied upon. Water withdrawn from the KS metered with a state approved meter to comply with state regulations. Water withdrawn from the MO River is metered at the discharge of the stream since no losses occur in the facility as it is only for cooling purposes. To calculate the rainwater that impounds at Jeffrey, LaCygne, and Wolf Creek facilities, precipitation and the surface area of the watershed is used. At LaC and Wolf Creek, the Soil Conservation Service runoff curve method estimates runoff into the lake. Future Outlook: The amore fresh surface water withdrawn will depend on precipitation and runoff into Evergy's lakes. For facilities that do not impound stormwater, fresh water withdrawn is expected to remain the same.	
Brackish surface water/Seawater	Not relevant	<not applicable=""></not>	<not Applicable&gt;</not 	<not Applicable&gt;</not 	"Not relevant" was chosen because Evergy's operations are not located near, nor withdraw water from, brackish or seawater sources.
Groundwater – renewable	Relevant	11992	About the same	Other, please specify (Similar operations to previous year)	Groundwater wells exist for utilization at Evergy's Jeffrey, latan, Gordon Evans and Lake Road facilities. The location of the groundwater wells for latan and Lake Road is close to the Missouri River while the Jeffrey wells are close to the Kansas River. Gordon Evans, which utilized 120 megaliters during 2022 is the only generating facility that utilized groundwater that was not near a large surface body of water that interacts with the water supply. Future Outlook: The amount of groundwater withdrawn should stay relatively the same or slightly increase in future years. This is due to Jeffrey's wells coming back online for use. The increased use of the groundwater wells at Jeffrey, which are located next to the Kansas River, will support decreased surface water withdrawals for the facility.
Groundwater – non-renewable	Not relevant	<not applicable=""></not>	<not Applicable&gt;</not 	<not Applicable&gt;</not 	"Not Relevant" was chosen because Evergy's operations do not withdraw from nonrenewable groundwater sources.
Produced/Entrained water	Not relevant	<not applicable=""></not>	<not Applicable&gt;</not 	<not Applicable&gt;</not 	"Not Relevant" was chosen because Evergy's operations do not withdraw from produced/entrained water.
Third party sources	Relevant	1299	About the same	Other, please specify (Similar operations to previous year)	Seven of Evergy's generation facilities source process water from a third-party source. Of those, four are CT facilities and three are steam generating units. For CT sites, the water is used as make up for the evaporative cooler systems. For steam generation sites, municipal water is used in a variety of ways such as for wash water, boiler makeup, and fire protection. Future Outlook: The amount of water utilized from third-party sources is expected to stay relatively consistent in future years. Overall, third-party sources make up an insignificant portion of Evergy's water for generation activities.

### W1.2i

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

	Relevance		Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water	Relevant	1141409	About the same	Other, please specify (Similar operations to previous year)	During 2022, water was discharged from nine of Evergy's facilities. Under the NPDES program, Evergy has gathered and maintained flow information for each permitted outfall. This is the second year that Evergy has summarized NPDES discharges to determine the total volume of water discharged to fresh surface water. "Relevant" chosen as discharge into fresh surface water accounts for 99.99% of Evergy's process water discharges. Of total discharge, the majority is exclusive to the once-through cooling systems located at latan, Hawthorn and Lake Road facilities, which are sourced from and returned to the Missouri River. Other major freshwater discharges are returned to the Kansas River (Jeffrey and Lawrence), North Sugar Creek (LaCygne) and Wolf Creek (Wolf Creek). Future Outlook: As renewable generation increases; withdrawals and discharges will decrease due to these sources of generation not relying on water.
Brackish surface water/seawater	Not relevant	<not applicable=""></not>	<not Applicable&gt;</not 	<not Applicable&gt;</not 	"Not Relevant" was chosen because Evergy facilities do not discharge to brackish surface water/sea water sources. This is not expected to change.
Groundwater	Not relevant	<not applicable=""></not>	<not Applicable&gt;</not 	<not Applicable&gt;</not 	"Not Relevant" was chosen since Evergy facilities do not utilize disposal wells nor discharge to groundwater sources. This is not expected to change.
Third-party destinations	Relevant	11.53	About the same	Other, please specify (Similar operations to previous year)	Of nine facilities that discharged during 2022, only two of them send process wastewater to a third-party destination. These facilities include Lake Road and Hawthorn. The other energy centers rely on discharges through their NPDES permits rather than a third-party destination. For Hawthorn, the volume of third-party discharge water is based on a water balance study. For Lake Road, the volume of third-party discharge water is based on meter readings from the third party. Future Outlook: Discharge to third parties is expected to remain approximately the same in future years. Total discharge to third-party destinations is insignificant compared to the total water discharged to fresh surface 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		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	Relevant	77.77	About the same	Other, please specify (Similar operations to previous year)	11-20	Tertiary wastewater treatment occurs for the Flue-Gas Desulfurization (FGD) wastewater at Jeffrey. This applies to 11-20% of the facilities since only nine facilities discharged during 2022. The FGD water goes through a physical, chemical, and biological treatment process before being recycled back into the cooling tower water. The constructed wetland system at Jeffrey was specially designed for treatment of the FGD wastewater to treat for metals and nutrients. This approach has historically been successful in treatment of wastewater to comply with the permit effluent limitations under the NPDES program. However, to meet future compliance under NPDES, this wastewater stream will be recycled and ultimately be zero-liquid discharge so this level of treatment will cease after the new zero liquid discharge system is online by the end of 2025.
Secondary treatment	Relevant	3.63	About the same	Other, please specify (Similar operations to previous year)	11-20	Secondary treatment occurs at LaCygne (this one facility accounts for 11.11% of facilities) through their two-cell discharging lagoon system. The domestic wastewater for the facility is treated through primary and secondary treatment methods. The outfall associated with this system is permitted under the NPDES program and undergoes periodic monitoring as stipulated in the site-specific permit.
Primary treatment only	Relevant	66371.92	Lower	Other, please specify (Decrease in precipitation, leading to less stormwater runoff that has to be treated.)	71-80	Primary treatment occurs at many Evergy sites through onsite pond systems. Of the nine facilities that discharged during 2022, seven of them utilized primary treatment prior to discharging. Facilities that utilize coal have onsite coal pile runoff ponds to capture and allow sedimentation of any stormwater that hits the coal pile. In addition, many of the sites with a landfill have stormwater and/or a leachate pond associated with that system to allow for sedimentation of solids. Prior to release of water in these ponds, Evergy personnel test the pH, and they perform neutralization treatment as needed. All water discharged from point sources is done under site specific NPDES permits. Therefore, Evergy monitors the wastewater and will adjust treatment as needed to maintain compliance with state and federal regulations. Prior to stormwater and plant wash water entering onsite ponds for sedimentation, most stormwater runoff is routed through onsite oil/water separators to further assist in treatment.
Discharge to the natural environment without treatment	Relevant	1075036.71	Higher	Increase/decrease in business activity	51-60	Of the volume reported, 99.65% is exclusively once-through cooling water that is discharged to the natural environment without treatment. It is monitored and/or limited under the NPDES program for flow and temperature. No other effluent limitations are placed on these once-through cooling outfalls as no additional pollutants of concern have been identified. The remaining 0.35% not reported is from cooling tower, boiler, and evaporative cooler blowdown water which is also monitored under the NPDES program but has additional limitations than the once-through cooling water.
Discharge to a third party without treatment	Relevant	11.53	About the same	Other, please specify (Similar operations to previous year)	21-30	Two of the nine facilities that discharged during 2022 sent untreated process wastewater to a third-party for treatment. Based on two of the nine facilities sending untreated wastewater, the 21-30% category was selected for untreated process wastewater. The water going to third-party sources must meet local requirements.
Other	Not relevant	<not applicable=""></not>	<not Applicable&gt;</not 	<not applicable=""></not>	<not applicable=""></not>	"Not Relevant" was chosen as we do not have additional levels of treatment to report.

### W1.2k

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

	water in the	Category(ies) of substances included	List the specific substances included	Please explain
Row 1		Nitrates Phosphates Pesticides Priority substances listed under the EU Water Framework Directive	Evergy monitors releases of certain constituents to waters as required under site specific NPDES permits. Where applicable, per the NPDES permitting authority, Evergy tests for nitrates, phosphates, and some priority substances such as lead and nickel.	Evergy monitors releases of certain constituents to waters as required under site specific NPDES permits. This monitoring includes some constituents considered priority pollutants; however, Evergy's monitoring is periodic and not continuous, comprehensive, or frequent enough to calculate overall tonnage contribution to waterways.

### W1.3

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

		Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
Row	5859100	1202187	4873.701013	As Evergy continues to invest in renewable generation and as coal units are retired in conjunction with the company's Integrated Resource Plan, the water
1	000			withdrawal volume will decrease over time, Evergy's total water withdrawal efficiency is expected to remain relatively the same due to a similar generation fleet as 2022, resulting in a similar amount of water withdrawal.

### W-EU1.3

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

Yes

### W-EU1.3a

### (W-EU1.3a) Provide the following intensity information associated with your electricity generation activities.

Water intensity value (m3/denominator)	water	Denominator	Comparison with previous reporting year	Please explain
1.09	Total water consumption	MWh	About the same	Internally, Evergy tracks gallons per megawatt hour (MWh) by individual generation facility for monthly reviews. The monthly review of this information is disseminated to Environmental and Generation management. This information is used to track water conservation management and inform facilities on their water use. An individual plant review of this information is more beneficial and actionable to both Environmental and Generation management as this level of detail is needed to address any potential water issues and conservation opportunities. For this CDP metric, net generation is Evergy's entire fleet including generation that does not rely on water such as wind and solar. However, this metric is in alignment with what Evergy does internally. Evergy will continue to look at consumption fleet wide versus just on an individual facility basis. Future Outlook: As renewable generation increases, such as solar and wind, water withdrawals and discharges will decrease due to these sources of generation not relying on water. Dependence on water is expected to decrease as we work toward our climate goals that include retirements within our fossil fuel fired generation fleet. As the transition to renewables continues, the water intensity value is likely to decrease.
22.95	Total water withdrawals	MWh	About the same	Total water withdrawals per MWh was selected as it provides insight on the impacted water, even though not consumed, by Evergy for electric generation. For this metric, the net generation is comprehensive of Evergy's entire fleet. This includes generation that does not rely on water such as wind and solar. This will be beneficial in future years' analysis to understand overall impact to water resources. Evergy historically has focused on consumption internally but has recently incorporated water withdrawals into data collection. Future Outlook: As reflected in our most recent Integrated Resource Plan, we expect to retire coal generation units in the future and add new renewable generation sources which don't rely on water; as result, we expect water withdrawals to decrease in the future. As the transition away from water intensive generation continues, the water withdrawal intensity is likely to decrease in tandem.

### 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	No	

### 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>	<not applicable=""></not>
Other value chain partners (e.g., customers)	Yes	<not applicable=""></not>	<not applicable=""></not>

#### W1.5a

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

#### Row 1

#### Assessment of supplier impact

No, we do not currently assess the impact of our suppliers, but we plan to do so within the next two years

#### Considered in assessment

<Not Applicable>

#### Number of suppliers identified as having a substantive impact

<Not Applicable>

#### % of total suppliers identified as having a substantive impact

<Not Applicable>

#### Please explain

Evergy is currently evaluating assessments and potential requirements for suppliers regarding sustainability.

#### 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
	Evergy has language in place in our Request For Pricing (RFP) templates outlining our expectations of suppliers regarding water use, and expect to add it to contract language within the next two years.

### W1.5d

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

#### Type of engagement

Innovation & collaboration

#### **Details of engagement**

Encourage/incentivize innovation to reduce water impacts in products and services

### % of suppliers by number

1-25

#### % of suppliers with a substantive impact

<Not Applicable>

### Rationale for your engagement

Evergy attends Electric Utility Industry Sustainable Supply Chain Alliance's (EUISSCA) annual conference which brings member utilities and supplier affiliate members (some of which are also current Evergy suppliers) together to hear from leading experts on sustainability and water-related challenges, best practices, and trends. Utilities and suppliers have the opportunity to discuss topics and services together in ways that promote innovation and collaboration across the utility industry and prioritize engagement with suppliers on sustainability topics. Common themes include topics like zero waste, circular supply chain efforts, and supplier partnerships focused on conserving water in upstream raw material processing. Breakout sessions focused on the potential to help build resilience to water-related impacts have been a staple of these engagements. Current and potential suppliers are incentivized to join the conference and meetings with Evergy suppliers and decision makers to present their goods/services that address sustainable best practices. The 2022 conference was able to make a return to its in-person format in Phoenix, offering a large platform for collaboration; over 200 members and supplier affiliates were in attendance.

#### Impact of the engagement and measures of success

Impact: Working to get Evergy into this setting allows for valuable alignment of water and sustainability related goals. Success is measured by the number of affiliate supplier members that join EUISSCA, with higher numbers indicating success (as this increases the opportunity and potential for engagement). The resulting impact of more suppliers becoming members of EUISSCA is that more suppliers become engaged with Evergy and other utilities on sustainability and water-related topics. Evergy then has the potential to be exposed to more innovations and opportunities for collaboration with peer utilities and suppliers on water-related topics. Some of these topics include water reduction in coal handling and circular economy/zero waste efforts which reduce water use in upstream manufacture of raw materials. In addition, member suppliers are able to be a part of EUISSCA's monthly supplier highlights. Each month, a supplier is chosen to give a presentation to all of EUISSCA members on a conference call. This has proven lucrative for the suppliers and productive for utilities (including Evergy) as they glean increased information and awareness to top goods and services that are focused on addressing water and other sustainability related challenges. This supports Evergy's efforts to enhance water resilience to stay aware of innovative water-related products and services being offered and developed by suppliers that we can consider for incorporation into our operations.

#### Commen

Evergy is a member of the EUISSCA which leads the industry in enhancing and promoting supply chain sustainability practices across utilities and suppliers. Evergy's 1-25% of suppliers engaged is 26-50% of Evergy's total procurement spend.

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

#### Type of stakeholder

Other, please specify (Peer water users/Suppliers )

#### Type of engagement

Education / information sharing

#### **Details of engagement**

Educate and work with stakeholders on understanding and measuring exposure to water-related risks

Other, please specify (Encourage stakeholders to work collaboratively with other users in their river basins toward sustainable water management)

#### Rationale for your engagement

Evergy engages with partners within the water value chain. The rationale and strategy for engagement with key stakeholders are to focus on stakeholders that rely on the same water resources as Evergy. Evergy does this through collaboration with other major water users and water-related committees. Evergy's Jeffrey, Lawrence, and LaCygne facilities are members Water Assurance District (WADs). These WADs are comprised of major water users along the specified rivers that financially contribute to have upstream storage of water in reservoirs. This engagement assists Evergy in securing water supply during periods of drought. In addition to the WAD, Evergy employees are members of water Regional Advisory Committees (RACs). In KS, there are fourteen RACs that focus on basin specific goals such as nutrient loading, reservoir sedimentation, and streambank stabilization. By employees being members of RACs in key basins, they are able to engage with several stakeholders in the community on water related topics. Some Evergy facilities acquire water through the Water Marketing Program (Program) in Kansas. The Program allows facilities to buy water directly from state-controlled reservoirs. Evergy actively engages with and serves as an advisory member to the Kansas Public Water Supply Committee that reports to the Kansas Water Authority. Participation with this committee allows Evergy to contribute to and be aware of factors influencing water availability and pricing within the Program.

#### Impact of the engagement and measures of success

The measure of success in this partnership is the successful management of the available water resources and the assurance of water availability during drought conditions.

#### 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	Mississippi River
United States of America	INISSISSIPPI NIVEI

#### Type of impact driver & Primary impact driver

Acute physical	Flood (coastal, fluvial, pluvial, groundwater)
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#### **Primary impact**

Impact on company assets

#### **Description of impact**

Historic flooding along the Missouri River has impacted planning and operations of latan Generating Station. In 2019, Evergy's latan Generation Station became completely surrounded by flood waters. Typical water elevation along the Missouri River near latan is 6ft-12ft, while during this time it was at 32.07°. This flooding was not an isolated event as latan has experienced flooding in previous years as well. In 2019, the duration of the flooding was 2.5 weeks.

#### **Primary response**

Develop flood emergency plans

#### **Total financial impact**

1800000

#### **Description of response**

In response to flooding, latan Generating Station has implemented a flood response plan which is utilized when deemed appropriate by plant personnel based on National Weather Service and United States Geological Survey (USGS) data and forecasts. The plan lays out actions to protect the station, personnel, and the surrounding environment in the event of a flood emergency. The effectiveness of the plan is proven from the events of the 2019 flood and the plant's swift return to service once the flooding event had ended.

#### Country/Area & River basin

### Type of impact driver & Primary impact driver

Acute physical	Drought	
	9	

#### **Primary impact**

Impact on company assets

### **Description of impact**

Historic low flow in the Missouri river during the winter of 2022 along with riverbed degradation created an inability for our latan and Hawthorn generation stations to withdraw adequate water from the river.

#### Primary response

Other, please specify (Installation of new equipment)

# Total financial impact

4000000

#### Description of response

Modifications to intake equipment were designed and implemented to allow water withdraw at lower river elevations experienced during drought and low river flow events.

#### 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	No	<not applicable=""></not>	

### 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	potential water pollutants	For any company facility that is discharging water offsite directly to the environment (not back to a municipality) the site holds a National Pollutant Discharge Elimination System (NPDES) permit. To obtain a NPDES permit under the CWA, Evergy must characterize the wastewater streams leaving the facilities and monitor them for pollutants. Evergy provides water samples using approved EPA test methods to the state regulating agencies who then identify any pollutants that need to be regulated. In addition to pollutants being discovered through comprehensive sampling, it is also determined from Federal Regulations (40 CFR Subpart 423) that are specific to the steam electric power generating industry and state specific requirements. In addition, the test methods associated with each individual pollutant are also regulated by these agencies to ensure test results are accurate. Evergy provides tests results to respective regulatory agencies and works closely with them to determine which pollutants should have effluent limitations and be tested more frequently as part of the NPDES permit. The pollutants that are monitored frequently are done so based on known industry-specific pollutants that are integrated into the Effluent Limitation Guidelines (ELG), knowledge of the classification of the type of wastewater, and the characteristics of the receiving stream. Common pollutant categories that are monitored include temperature, solids, metals, and nutrients.	ble>

#### 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

Oil

#### Description of water pollutant and potential impacts

Hydrocarbons are found within oils and fuels that are used at generation sites. They are a concern to water due to being mostly insoluble. When oils and fuels enter waterways, they float on the surface of the water and have the potential to negatively impact aquatic life and human health. Hydrocarbons may also be considered detrimental to human health or the environment at higher concentrations.

#### 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

Industrial and chemical accidents prevention, preparedness, and response

Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

Other, please specify (Recycling)

#### Please explain

Evergy has many systems in place to prevent oil from entering waterways. Under the CWA, Evergy is required to comply with effluent limitations, and conduct routine monitoring, which includes oil and grease. In addition to monitoring, Evergy's priority is to prevent oils from reaching waterways. The Spill Prevention Control and Countermeasures (SPCC) program, required for any facility with 1,320 or more gallons of oil, is implemented across Evergy. Each piece of equipment that can hold more than 55 gallons of oil is in the program. The program includes a site-specific plan that lists each oil filled piece of equipment and the associated containment, flow path, and spill prevention techniques. To manage spills, spill kits are located at all facilities and include materials to contain and clean up the spill. Employees are trained on this program and for sites that have significant amounts of oil, an established contract with an oil spill removal organization (OSRO) exists. Facilities that have the capacity to hold over one million gallons of oil are also subject to Facility Response Plan (FRP) requirements. This regulatory program requires more planning and onsite drills to prepare the facility for proper response to oil spills. Success of these programs are measured through facility NPDES oil and grease sample results, inspection findings by our environmental specialists, the facility's response to spills, and engagement in drills and training. We strive for 100% compliance.

#### Water pollutant category

Other, please specify (Coal combustion residuals)

#### Description of water pollutant and potential impacts

Coal Combustion Residuals (CCR) are defined as fly ash, bottom ash, boiler slag, and flue gas desulfurization materials generated from burning coal to make electricity. CCRs are regulated as non-hazardous solid waste under the Resource Conservation and Recovery Act. CCR contains mostly silicon, iron, and aluminum with trace amounts of mercury, cadmium, and arsenic among other metals. These pollutants can have negative impacts on human health and the environment when concentration levels are above standards. Evergy complies with the Federal CCR Regulation.

#### 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

Implementation of integrated solid waste management systems

Industrial and chemical accidents prevention, preparedness, and response

Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

Other, please specify (Recycling)

#### Please explain

Evergy has four operating coal-fired generation sites and three decommissioned sites that manage CCR in surface impoundments and landfills. These facilities are subject to numerous federal and state regulatory programs covering solid waste management and wastewater treatment and discharge. To reduce risk of leaching or leakage and as required under the Federal CCR regulation, Evergy routinely monitors for groundwater impacts. In 2021, Evergy ceased the use of surface impoundments for active CCR management. All impoundments have initiated closure and are in process of CCR removal or closure in place. All CCR materials generated at active sites today are disposed of in dry landfills to reduce risk of future groundwater impacts. As of 2021, all Evergy facilities have discontinued the wet disposal of coal ash. Evergy manages a public facing website that contains information related to CCR management and groundwater monitoring. Evergy engages with stakeholders and, as appropriate, holds public meetings to discuss any groundwater impacts resulting in the need for corrective action.

### Water pollutant category

Other, please specify (Radiation)

#### Description of water pollutant and potential impacts

Radiation is considered a water pollutant because it can ionize and break chemical bonds. Nuclear power plants use radioactive material to generate heat to produce electricity. Release risk of this radioactive material is small. However, at Wolf Creek Nuclear Operations Center (WC) the radiological environmental monitoring program (REMP) ensures that a release would quickly be detected. The Kansas Department of Health and Environment (KDHE) performs an independent, but similar program. In addition, WC regularly hosts emergency training exercises and provides an educational calendar to area residents.

#### Value chain stage

Direct operations

#### Actions and procedures to minimize adverse impacts

Industrial and chemical accidents prevention, preparedness, and response

#### Please explain

To reduce release risk of radioactive material, diverse and redundant barriers and systems are in place. For example, multiple sources of onsite power exist for pumps and motors. Additionally, water samples are collected at regular frequencies. Eighteen on site, twelve off-site, and eight cooling lake perimeter ground water wells are sampled each quarter for lodine 131, Gross Beta, and Tritium. Surface water in the cooling lake and adjacent John Redmond Reservoir is sampled monthly for Gamma Spec and Tritium. Drinking water is sampled at the water treatment facility in Burlington and Iola for Gamma Spec, Gross Beta, Iodine 131, and Tritium. Fish tissue from the cooling lake and John Redmond Reservoir is sampled twice annually for Gamma Spec and Tritium. KDHE monitors a similar suite of parameters at a similar frequency. To comply with license requirements, WC produces an annual report based on sample results for the Nuclear Regulatory Commission (NRC), KDHE, and for the public. Additionally, all effluents from the plant are sampled and treated prior to discharge. The WC Ground Water Monitoring Program and REMP are audited every two years by internal quality assurance and the NRC. The REMP conducts an annual land census to ensure residents new to the area are provided with appropriate educational materials. WC provides an annual REMP update to the Coffey County Commission. The cooling lake is open to public access and a radiation education brochure is available to anglers.

#### Water pollutant category

Other, please specify (Thermal pollution)

#### Description of water pollutant and potential impacts

Elevated temperatures in cooling water discharges may negatively impact aquatic life in the effluent receiving stream. This is dependent upon temperature and the duration of exposure.

#### Value chain stage

Direct operations

Other, please specify (Downstream of direct operations)

#### Actions and procedures to minimize adverse impacts

Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

Other, please specify (Recycling)

#### Please explain

Thermal pollution is applicable to our facilities that utilize once-through cooling systems that discharge directly to rivers. This includes three of Evergy's coal-fired facilities – latan, Hawthorn and Lake Road. The other coal facilities utilize cooling towers or cooling lakes where thermal pollution has not been determined to be a concern. For the once-through cooling sites, both the flow rate and temperature of the effluent and the receiving stream are monitored. Evergy uses this data to determine if the effluent is causing a five-degree temperature rise or causing the river temperature to rise above ninety-degrees Fahrenheit. This level of impact has been determined to be potentially significant to aquatic life by regulating agencies. This data is gathered daily as required by the site specific NPDES permits. The Hawthorn facility has a ten-year schedule of compliance to achieve the five degree and ninety-degree limits. At latan, the once-through cooling unit is currently subject to and has complied with the five-degree temperature change and has until 2027 to achieve the ninety-degree temperature limit. Lake Road has two streams that are subject to temperature monitoring and reporting and has had no prior issues meeting the temperature limitations to protect aquatic life in the Missouri River. The Hawthorn site will continue to monitor the Missouri River and impact of temperature to determine if additional studies are warranted over the next few years.

# 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

Not defined

### How far into the future are risks considered?

More than 6 years

#### Type of tools and methods used

Tools on the market

Enterprise risk management

#### Tools and methods used

WRI Aqueduct

#### Contextual issues considered

Water availability at a basin/catchment level Water quality at a basin/catchment level Water regulatory frameworks

#### Stakeholders considered

Customers

Employees

Investors

Local communities

NGOs

#### Comment

Evergy conducted a Water Resilience Assessment (WRA) in early 2022 to understand current and future water related risks. The WRA utilized the output of the World Resource Institute (WRI) Aqueduct tool to understand which Evergy facilities are currently or are projected to be in areas of water-related risks. The study forecasted water related risks out more than six years and the information will assist both Environmental Services and Generation management in understanding risks and which facilities potentially need to be focused on risk mitigation. Due to the large and diverse footprint of Evergy's sites, the study is conducted at an individual basin level to yield the most representative facility conditions. Ultimately the information from this assessment will be beneficial for facilities to continue to have reliable and cost-effective operations.

#### Value chain stage

Supply chain

#### Coverage

Partial

### Risk assessment procedure

Water risks are assessed as a standalone issue

#### Frequency of assessment

Not defined

#### How far into the future are risks considered?

More than 6 years

#### Type of tools and methods used

Tools on the market

Enterprise risk management

### Tools and methods used

WRI Aqueduct

#### Contextual issues considered

Water availability at a basin/catchment level

#### Stakeholders considered

Customers

Employees Investors

Local communities

Cumpliara

Suppliers

#### Comment

Evergy conducted a WRA in early 2022 to understand current and future water related risks. The WRA utilized the output of the WRI Aqueduct tool. In addition to Evergy's generation footprint, the study also considered the Power River Basin where Evergy sources their coal. This information will be beneficial in understanding if there are current or projected coal supply issues, due to water-related issues, for our coal-fired generation facilities

### W3.3b

	Rationale for approach to risk	Explanation of contextual issues considered	Explanation of stakeholders considered	Decision-making process for risk response
	assessment			
Rown	are identified through engagement with various stakeholders . Evergy employs two processes to identify water related risk:	For water risks not related to company compliance, Environmental Services focuses on identifying risks such as water quality concerns and water availability. This evaluation and identification of risk is continual and tracked using monthly water quality trending and tracking of water source availability. When a risk is determined to potentially impact operations the concern is elevated to Generation leadership at the plant level and Environmental Services leadership. Mitigation actions are determined and may include modifying operations.	The Director, Environmental Services reviews and approves the water related environmental risk register. When water related risks are evaluated, a number of stakeholders are considered. Stakeholders include but are not limited to employees, customers, communities, regulators, and upstream and downstream water users as we recognize that water is a shared resource. By understanding water is a shared resource for a variety of stakeholders who depend on it for everyday life and business vitality, we consider both the risk associated with the quantity and the quality of water. To help us understand the varying viewpoints, needs, and issues with water in our service area, several of our employees have a role within the state of Kansas' Regional Advisory Committees (RACs) that are facilitated by the Kansas Water Office (KWO). The KWO has established fourteen regional planning areas. The RACs advise the KWO on local water-related issues and serves as a link to the public. The RACs consist of members representing industry, agriculture, conservation, public water supply, fish and wildlife, and several other areas. Through this engagement, Evergy is able to gain perspective related to water risk from multiple stakeholder viewpoints.	Each compliance obligation is evaluated to determine the probability of the risk occurring. This is based on a scale of 1 to 5 with 5 being the highest probability. Next, the risk is rated based on the relative significance of such impact to the company, also using a scale of 1 to 5 with 5 being the highest impact. The multiplication of the likelihood and impact scores determines the risk score for each specific water compliance obligation. Following the completion of risk identification and scoring, all environmental risks, including water, are ranked and those with the highest relative risk are elevated and require written risk mitigation plans. Additionally, the top-ranking risks are presented to the executive team along with the Board of Directors. To help with the decision making of water-related risks. Evergy completed a company-wide WRA in 2022. For this assessment, one of the tools used to assess water risk in Evergy's footprint was the WRI Aqueduct tool. The WRI tool will assist Evergy's Environmental Services and Generation management in understanding potential water related risks. The results from this assessment will aid in future mitigation planning. In response to the output the WRA, Evergy will determine which sites need water availability planning, flood planning, and consider how best to minimize overall water-related risks.

### 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, both in direct operations and the rest of our value chain

### W4.1a

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

Evergy utilizes an Enterprise Risk Management (ERM) framework that aligns top business risks with management responsibilities, and ultimately Board of Director (Board) level oversight of these risks. The Board is responsible for the oversight of all major risks (as well as mitigation plans) including strategic, financial, operational, and compliance risks. The Board has delegated some specific risk oversight responsibility to its committees, as provided in the committee charters. At least once each year, the full Board receives a report from management of key risks and related mitigation plans following an extensive and iterative management analysis. Management also incorporates risks and mitigations into its regular presentations to the Board.

Evergy's ERM process is not conducted with an eye toward avoiding all risk, but rather with a goal of enhancing its ability to identify and appropriately mitigate risks across current and future business strategies. Evergy believes this ERM process is important because it provides a structure to identify risks and related mitigation activities. In addition, it provides the framework to report to the Board on top risks including water risks.

Evergy uses potential likelihood and impact parameters during our risk assessment discussions. For 2022, there were 5 categories of impact: Minor (1), Moderate (2) Significant (3), Major (4) and Critical (5) and likelihood of Remote (1), Rare (2), Possible (3), Likely (4) and Probable (5). These categories have various financial, operational (includes customer and employee impacts), compliance (includes health and safety impacts), reputational and security thresholds base on the impact and likelihood of an event. Risk owners annually review and rank each risk based on impact and likelihood of the risk event occurring. The impact is then multiplied by the likelihood to get a total risk score.

For example: Critical impact with a Probable likelihood (5x5=25) would have a financial threshold of greater than \$40 million. These may or may not be interdependent. For example, we could have a risk that has an impact of greater than \$40 million but has no operational or compliance impact. A few Critical level examples are provided below for each category:

- · Operational thresholds for the Critical score would include items such as: inability to serve majority of customer base or high-profile service territory for an extended period of time (i.e. greater than 5 days) or loss of material generating capacity for an extended period of time (i.e. greater than 500 MW for greater than 12 months.)
- · Compliance threshold examples for the Critical score level would include items such as: material fines, sanctions, indictments, allegations or proceedings from compliance violations, pervasive health hazards, significant injuries or fatalities to employees or customers.
- · Reputational threshold examples for the Critical score level would include: material impact to Evergy's trustworthiness in the market place or national negative headlines for prolonged period of time.
- · Security threshold examples for the Critical score level would include: cybersecurity incident resulting in the loss of ability to control the bulk electric system or privileged access credentials are compromised.

To calculate the top business risks, the risks with the highest total calculated score (substantial risks) are flagged. ERM considers a risk substantial if the total score (likelihood x impact) is 15 or above, resulting in a potential financial impact of \$10 million to greater than \$40 million. A second view is then utilized to determine what the top risks are collectively. This approach considers all risks and the impact they can have to the company when combined, thus each risk is assigned a classification to allow for the risks to be grouped together to provide an enterprise-wide view of the key risks. Examples of classification categories include (but are not limited to): Business Continuity & Resiliency, Culture, Customer Expectations, Cybersecurity, Environmental Social and Governance (ESG), and Regulatory & Legislative. An average between the count and total score is then calculated in determining the top business risks.

Materiality and its relevant definition as used in responses to third-party reports including CDP, and our ESG materiality review process, is different than the definition used in the context of filings with the SEC. Issues deemed material for purposes of responding to third-party reports and for purposes of determining our ESG strategies may not be considered material for SEC reporting purposes.

#### 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?

	number of facilities exposed	% company- wide facilities this represents	Comment
Rov 1	4	Less than 1%	Evergy owns in excess of 900 separate properties including generation facilities, administrative buildings, substations, and warehouses. Four generation facilities have been projected to have extremely high and high risk water stress in 2030 and 2040 due to the potential impact of drought based on the World Resource Institute (WRI) Aqueduct outputs. When compared to all 910 facilities considered part of Evergy's operations, these four facilities represent less than 1% of Evergy's total facilities. When comparing to all Evergy's electric generation sources, including Power Purchase Agreements, the four facilities account for 7.4% of all the electric generation sites. The four facilities are Gordon Evans Energy Center (Gordon Evans), Hutchinson Energy Center (Hutchinson), Jeffrey Energy Center (Jeffrey) and Lawrence Energy Center (Lawrence). These facilities accounted for approximately 29.5% of the total net generation in 2022 and withdrew 2.9% of the total water withdrawn during 2022 for electric generation. Gordon Evans and Hutchinson are combustion turbine (CT) generation shile both Jeffrey and Lawrence are coal-fired steam generation facilities. With Jeffrey and Lawrence being coal-fired generation sites, they rely on large volumes of water for operations compared to the CT sites. Based on Evergy's most recent Integrated Resource Plan, Lawrence is expected to cease coal operations in 2028; as a result, the volume of water withdrawn for operations at the site is expected to be significantly reduced.

#### 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	Mississippi River

#### Number of facilities exposed to water risk

4

### % company-wide facilities this represents

Less than 1%

#### 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

26-50

#### % 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

Unknown

#### Comment

Evergy does not disclose revenues from individual energy centers. Four energy centers are exposed to substantive water related risk. These include two coal-fired and two gas fired CT stations. Each of these energy centers can be substantively affected by drought.

#### 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	Mississippi River
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#### Type of risk & Primary risk driver

Acute physical
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### Primary potential impact

Impact on company assets

#### Company-specific description

Projected increases in the frequency and intensity of extreme precipitation events indicate the potential for an increase in the risk of inland flooding, particularly for generation facilities located near surface water bodies (e.g., rivers, lakes, ponds). Potential impacts from increased flooding can range from nuisance flooding in employee parking lots and local roadways to flooding of infrastructure and facilities. Flooding has the potential to damage infrastructure and interrupt energy production, which could impact the ability to provide energy to customers and create financial risks.

#### Timeframe

Current up to one year

#### Magnitude of potential impact

Medium-low

#### Likelihood

More likely than not

### Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

### Potential financial impact figure (currency)

16000000

## Potential financial impact figure - minimum (currency)

<Not Applicable>

### Potential financial impact figure - maximum (currency)

<Not Applicable>

### **Explanation of financial impact**

The financial impact is based on the impact of flooding that occurred in 2011, along the Missouri River. The flooding caused an estimated \$16 million (2011 dollars) impact due to coal conservation activities. This resulted in increased fuel expenses and purchased power expenses and reduced wholesale sales.

#### Primary response to risk

Develop flood emergency plans

### **Description of response**

latan is currently the only Evergy facility considered high risk for flooding impact. There is a site level flood emergency response plan that is implemented when the National Weather Service and United States Geological Survey (USGA) information forecasts flooding conditions.

#### Cost of response

1800000

#### **Explanation of cost of response**

During a 2019 flooding event, flood plan response cost approximately \$1.8 million at latan.

#### Country/Area & River basin

United States of America Mississippi River
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#### Type of risk & Primary risk driver

Chronic physical	Dependency on water intensive energy sources

#### **Primary potential impact**

Closure of operations

#### Company-specific description

Evergy's coal-generation facilities and Wolf Creek Nuclear Operations Center (Wolf Creek) facility are the most water intensive generation resources within Evergy's fleet. The coal facilities accounted for 96.4% of Evergy's water withdrawals and 70.1% of the water consumed during 2022. Wolf Creek, accounted for 3.6% of Evergy's 2022 water withdrawals and 29.8% of consumption. During 2022, Evergy's gas facilities accounted for less than 0.02% of the water withdrawals and approximately 0.07% of the water consumed. The coal facilities and Wolf Creek rely on either a large river or lake as a water body source, primarily for cooling purposes. Of the coal-facilities, the once-through cooling facilities are the most water dependent as they do not recycle cooling water. This includes Hawthorn, latan and Lake Road which all rely on the Missouri River as the cooling source. The Missouri River Basin covers a large geographic footprint and is a major tributary to the Mississippi River basin. Flows within the rivers are managed by the United States Army Corps of Engineers (USACE). Factors that influence the flow of the Missouri River include precipitation, temperature, and upstream consumption. An additional factor impacting Evergy is the riverbed degradation that lowers the elevation of the Missouri River bottom. This requires more flows to achieve the same elevation year after year. The uncertainty of climate factors (precipitation and temperature), flow management decisions of the USACE, and riverbed degradation rate impose risk to facilities along the Missouri River. There is potential risk that future flows may be insufficient for the needs of our facilities to continue to operate prior to their expected end of life date. However, Evergy has recently conducted a Water Resilience Assessment (WRA) to investigate the risk further and is actively working on projects to become more resilient during periods of water constraints. As reflected in Evergy's Integrated Resource Plan, we expect to invest in new generation and redu

#### Timeframe

More than 6 years

#### Magnitude of potential impact

Medium-low

#### 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**

The amount of financial impact cannot be accurately determined due to the high level of uncertainty and variability in costs. The cost is highly variable to the duration and the location of water-related issues.

### Primary response to risk

Increase investment in new technology

#### **Description of response**

Through 2032, as outlined in the company's Integrated Resource Plan, Evergy is planning to add ~3,000 MW of renewable generation to our generation portfolio. The renewable additions will be a combination of solar and wind resources. These resources, combined with planned coal retirements, will result in lower emissions and less reliance on water-intensive resources and lower overall water use. In addition to transitioning to less water intensive generation methods, Evergy is actively considering improving water resilience with its current assets. For example, both the latan and Hawthorn intake structures, along the Missouri River, are being engineered to have lower pump suction levels to accommodate for the increased variability of flows within the river. This will allow the facilities to continue to run during low-flow conditions and mitigate risk of riverbed degradation.

### Cost of response

4000000

#### **Explanation of cost of response**

The cost of response is reflective of Evergy's efforts to lower the Missouri River intake pump suctions for the once-through cooling units at both latan and Hawthorn. Lowering the pump suctions will help support the facilities to remain online when the Missouri River has low-flow conditions.

#### Country/Area & River basin

### Type of risk & Primary risk driver

Chronic physical	Declining water quality

#### **Primary potential impact**

Increased operating costs

#### Company-specific description

Evergy relies on fresh surface and groundwater for cooling, boiler make-up, washdown water, air quality control systems, and many more uses at its generation facilities. The decline in incoming water quality has the potential to increase the cost of treating the water to an acceptable quality for facility use. Declining water quality factors include an increase in total suspended solids and increased temperatures. The increase in temperature of water coming into the facility can create inefficiencies in energy generation that could impact operations.

#### **Timeframe**

More than 6 years

#### **Magnitude of potential impact**

I OW

#### 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**

The quality of water coming into Evergy's facilities is influenced by the upstream management of the basin and climate conditions (precipitation and drought). The amount of financial impact has not been determined due to the high level of uncertainty and variability in the factors that influence water quality.

#### Primary response to risk

Adopt water efficiency, water reuse, recycling and conservation practices

#### **Description of response**

To reduce water quality risks, Evergy looks for ways to become more efficient with water resources. Long-term strategies such as investing in more renewables and reducing the use of coal generation will reduce reliance on incoming water. In the short-term, facilities are looking at water recycling and conservation practices to reduce dependency, thus reduce water quality risk. For water temperatures, the coal-fired facilities use a mix of cooling methods that include lakes, cooling towers, and once-through systems. Evergy's mitigation response also includes securing additional upstream water, stored in reservoirs, for the Kansas facilities. The release of the additional storage can assist in improving water quality for both solids and temperature.

#### Cost of response

200000

#### **Explanation of cost of response**

The cost of response is measured by Evergy's annual payment to WAD. Being a member of the WAD, Evergy's Jeffrey, Lawrence and LaCygne facilities have access to upstream water reservoir storage. The upstream water can be released to assist with increasing the water quality by increasing the river flows.

### Country/Area & River basin

United States of America	Mississippi River

### Type of risk & Primary risk driver

Regulatory	Regulation of discharge guality/volumes
negulatory	Regulation of discharge quality/volumes

### **Primary potential impact**

Increased compliance costs

#### Company-specific description

The costs associated with water compliance have the potential to increase if the water quality coming into the facility declines. Evergy's generation facilities are permitted to discharge water under the National Pollutant Discharge Elimination System (NPDES) program and each outfall has limitations set by the authorizing agency. The authorizing agency sets limits on the wastewater stream classification, wastewater analysis results, and the receiving stream. As the quality of the receiving stream declines, there is potential for the effluent limits to become harder to achieve, thus increasing costs. For example, temperature is considered a pollutant under the NPDES program. As the receiving water bodies' temperature increases, Evergy will have to consider how to comply with the regulatory limit of the receiving stream. Both discharge temperature and temperature increase limitations exist for all Evergy's once-through cooling facilities as these parameters have been determined to be the threshold for having a potentially significant impact to aquatic life by the regulating agencies. In addition to thermal limitations, Evergy will continue achieving effluent limitations of the pollutants listed in each site-specific NPDES permit.

#### Timeframe

Current up to one year

### Magnitude of potential impact

Medium-low

#### Likelihood

About as likely as not

#### 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**

The quality of water incoming to Evergy's facilities is influenced by the upstream management of the basin and climate conditions (precipitation and drought). The amount of financial impact has not been determined due to the high level of uncertainty and variability in the factors that influence water quality. This uncertainty also exists due to regulatory uncertainty as permit limitations may change with the change in receiving water conditions.

#### Primary response to risk

Improve monitoring

#### **Description of response**

Within Evergy's internal Environmental Services department, the water group focuses on water compliance under the NPDES program. Water samples are tracked and reviewed using site specific NPDES permit and limitations. This data is reviewed twice, once when it is received by Environmental Services and a second detailed review takes place prior to the monthly submissions to the applicable regulatory agency. During the detailed review, business analytic tools are used to trend water quality for each pollutant for each outfall. This trending makes it easier for Evergy Environmental Services to identify when pollutants are increasing, near limits, or there are anomalies from historical data. By doing this, Environmental Services can provide feedback to each generation site to help assist in ongoing compliance. Evergy Environmental Services is also in communication with regulatory agencies to collaborate on any compliance related concerns to assist in meeting permit expectations.

#### Cost of response

100000

#### **Explanation of cost of response**

Annual cost of staff to enable monitoring and trending to appropriately respond to changing water conditions.

#### W4.2a

(W4.2a) Provide details of risks identified within your value chain (beyond 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	Mississippi River

#### Stage of value chain

Supply chain

#### Type of risk & Primary risk driver

Drought	
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#### **Primary potential impact**

Supply chain disruption

#### Company-specific description

Evergy sources coal for the generation sites from the Powder River Basin (PRB) region. This region was reviewed during Evergy's WRA and the United States Bureau of Reclamation Drought Dashboard is projecting an increase in drought duration for this region. As Evergy invests in new renewable generation resources and reduces the share of coal generation, the reliance on coal resources will continue to decrease; thus, decreasing water-related supply chain disruption.

#### **Timeframe**

More than 6 years

#### **Magnitude of potential impact**

Low

#### 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**

Evergy's coal is supplied from the PRB in Wyoming. Evergy's WRA identified there is a potential for increased drought duration for this region. The amount of financial impact cannot be determined due to the high level of uncertainty and variability in cost and in the extent and duration of a potential supply disruption. However, we monitor our coal supply and have a variable generation portfolio. As Evergy invests in new renewable generation and reduces the share of coal generation, consistent with the company's Integrated Resource Plan our reliance on the PRB region will decrease.

#### Primary response to risk

Direct ope	erations	Increase investment in new technology	
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#### **Description of response**

Through 2032, as outlined in the company's Integrated Resource Plan, Evergy is planning to add nearly 3,000 MW of renewable generation to our generation portfolio. The renewable additions will be a combination of solar and wind resources. These resources, combined with planned coal retirements, will enable the company to meet its water-related objectives by transitioning to less water-intensive resources, while also reducing emissions. Investing in new, less water intensive generation sources will create less dependency on water resources, including in the PRB region.

#### Cost of response

#### **Explanation of cost of response**

The amount of response cannot be precisely determined.

### 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

Resilience

#### Primary water-related opportunity

Resilience to future regulatory changes

#### Company-specific description & strategy to realize opportunity

Evergy has ownership of substantial water rights in its service territory at locations that previously had facilities to generate electricity but have since been retired. In the State of Kansas, water is a real property right limited based on availability and required to be utilized and maintained to retain ownership. Water availability in southern Kansas is limited to current water right holders in many areas due to inability to obtain new rights. With the changing landscape of electricity generation and advancement of technology, the availability of these rights for future use is a substantial opportunity. Due to this opportunity, Evergy has modified its company's water strategies to protect and maintain these rights. To maintain these rights while considering what future opportunities are available, Evergy may consider placing the rights into short term conservation agreements.

#### Estimated timeframe for realization

More than 6 years

#### Magnitude of potential financial impact

Unknown

#### 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**

The financial impact cannot be precisely determined.

#### 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)

Gordon Evans Energy Center (Gordon Evans)

#### Country/Area & River basin

United States of America

Mississippi River

#### Latitude

37.79044

### Longitude

-97.52227

# Located in area with water stress

No

#### Primary power generation source for your electricity generation at this facility

Gas

### Oil & gas sector business division

<Not Applicable>

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

120.31

# Comparison of total withdrawals with previous reporting year

Higher

## 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

120.31

#### Withdrawals from groundwater - non-renewable

0

#### Withdrawals from produced/entrained water

0

#### Withdrawals from third party sources

Λ

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

40 E2

#### Comparison of total discharges with previous reporting year

. .....

#### Discharges to fresh surface water

40 62

#### Discharges to brackish surface water/seawater

Ω

#### Discharges to groundwater

^

### Discharges to third party destinations

0

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

5 21

#### Comparison of total consumption with previous reporting year

Lower

#### Please explain

Gordon Evans water withdrawal from groundwater wells is metered, as required by the Kansas Department of Agriculture, Division of Water Resources (DWR). The meters are from a state-approved list and are maintained in alignment with the DWR requirements. Water discharge at the facility is measured and documented once per month, in accordance with the site-specific National Pollutant Discharge Elimination System (NPDES) permit. Monthly discharge measurement is not a completely accurate representation of daily discharges. In addition, the discharge includes stormwater that is not owned by Evergy per DWR. Therefore, withdrawal minus discharges does not provide an accurate representation of water consumption. Therefore, Evergy has installed timing meters on the evaporative coolers and a water meter on the reverse osmosis (RO) feed to the units to enhance accuracy in measurement and overall water accounting. The timing meters track the duration that the evaporative coolers were used for each unit and this data can be multiplied by the design evaporative rate to calculate water consumed. The RO unit water is 100% consumed and added to the facility's total water consumption volume. This consumption methodology is more representative of the water utilized and not discharged to the environment for readily available use.

### Facility reference number

Facility 2

#### Facility name (optional)

Hutchinson Energy Center (Hutchinson)

### Country/Area & River basin

United States of America

Mississippi River

### Latitude

38.09206

#### Longitude

-97.873

#### Located in area with water stress

No

### Primary power generation source for your electricity generation at this facility

Gas

### Oil & gas sector business division

<Not Applicable>

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

3.46

### Comparison of total withdrawals with previous reporting year

Highe

# 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

3.46

#### Withdrawals from groundwater - non-renewable

0

### Withdrawals from produced/entrained water

#### Withdrawals from third party sources

0

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

Λ

#### Comparison of total discharges with previous reporting year

About the same

#### Discharges to fresh surface water

Λ

### 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)

3 46

#### Comparison of total consumption with previous reporting year

Higher

#### Please explain

Hutchinson water withdrawals are metered on each individual groundwater well as required by the DWR. The meters are from a state-approved list and are maintained in alignment with the DWR requirements. At Hutchison, no water is discharged as the site does not hold an NPDES permit. Therefore, all water withdrawal is consumed onsite.

#### Facility reference number

Facility 3

#### Facility name (optional)

Jeffrey Energy Center (Jeffrey)

### Country/Area & River basin

United States of America

Mississippi River

#### Latitude

39.281385

#### Longitude

-96.109951

### Located in area with water stress

No

### Primary power generation source for your electricity generation at this facility

Coal - hard

#### Oil & gas sector business division

<Not Applicable>

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

28861.6

### Comparison of total withdrawals with previous reporting year

Lower

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

28861.6

### 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)

4467.77

### Comparison of total discharges with previous reporting year

Lower

#### Discharges to fresh surface water

4467 77

#### Discharges to brackish surface water/seawater

0

### Discharges to groundwater

Λ

#### Discharges to third party destinations

0

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

10000 50

### Comparison of total consumption with previous reporting year

Higher

#### Please explain

Jeffrey water withdrawals occur through the intake on the Kansas River and through stormwater runoff accumulated in Evergy owned lakes. Jeffrey also has groundwater wells that are used to withdraw water. Water withdrawals from the Kansas River and groundwater wells are metered in accordance with DWR requirements. These sources feed Jeffrey's two raw water lakes which provide water to the facility. The discharges, permitted under the NPDES program, occur through two main outfalls, one going directly to the Kansas River and the other discharge from a lake that discharges to a creek, ultimately leading to the Kansas River. Water consumption at Jeffrey is calculated by summing inputs to the facility including, raw water lake pumps and stormwater runoff. Discharges are subtracted from the inputs. Consumption is calculated from the lake pumps because water withdrawals from the Kansas River and groundwater are sent directly to these lakes and the public has access to the lakes. Therefore, Evergy does not account for water removal until the water leaves the lakes for use at the generation facility.

#### Facility reference number

Facility 4

#### Facility name (optional)

Lawrence Energy Center (Lawrence)

#### Country/Area & River basin

United States of America

Mississippi River

#### Latitude

39.00722

#### Longitude

-95.26952

### Located in area with water stress

No

### Primary power generation source for your electricity generation at this facility

Coal - hard

#### Oil & gas sector business division

<Not Applicable>

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

6395.29

### Comparison of total withdrawals with previous reporting year

Highe

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

6173.1

### Withdrawals from brackish surface water/seawater

0

### Withdrawals from groundwater - renewable

0

# Withdrawals from groundwater - non-renewable

-

# Withdrawals from produced/entrained water

### Withdrawals from third party sources

222.19

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

430.92

### Comparison of total discharges with previous reporting year

Highe

### Discharges to fresh surface water

430.92

### Discharges to brackish surface water/seawater

0

### Discharges to groundwater

#### Discharges to third party destinations

0

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

5964.37

### Comparison of total consumption with previous reporting year

Higher

#### Please explain

Lawrence withdraws water from the Kansas River and from municipal sources. Water withdrawn from the Kansas River is metered as required by DWR. Municipal water is also metered and Evergy utilizes monthly bills to determine overall usage. The discharges from the facility, permitted under the NPDES program, go directly back into the Kansas River. For Lawrence, water consumption is calculated by subtracting the discharges from the withdrawals as this methodology is in alignment with the facility's operational design.

#### 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

#### 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

76-100

#### Verification standard used

The Environmental Protection Agency (EPA) has approved analytical methods for water quality parameters. All water discharges that are sampled under the NPDES program align with these EPA approved methods that can be found under 40 CFR Chapter 1 Subpart D Part 136. To demonstrate alignment with these standards, the Missouri facilities and the third-party lab participate annually in a Discharge Monitoring Reporting Quality Assurance (DMRQA) study program that is administered by the EPA. The DMRQA is a verification process where labs are supplied samples to test and report back the results to an administrator to determine if the lab is accurately performing the test methods.

### Please explain

<Not Applicable>

#### 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.

Row Company- Description of wide wide business dependency on water and commitment to continue preserving and reducing our impact business dependency on water and acknowledges that water is an important shared dependency on water and acknowledges that water is an important shared resource among our customers and communities. The policy explains that our largest, most water dependent facilities are strategically located next to waterbodies that typi have significant water supply. In Evergy's water policy, we stress the company's commitment to water stewardship and disclose our water use, compliance with applicable	
Description of regulations, and reduction of dependency on water as renewable generation is implemented. The policy also expresses our commitment to engage with a variety of stakeh business impact on water commitment to such as government, businesses, and the communities that we serve. This is actively done through being involved in water related commitment to safely managed Water, Sanitation and Hygiene (WASH) in the workplace (WASH) in the workplace (WASH) in the workplace Commitment to water stewardship and/or collective action Reference to company water-related targets Recognition of emironmental linkages, for example, due to climate change of example, due to climate change of example, due to climate change and related companies renewable generation is implemented. The policy date serves such as renewable generation is implemented. The policy does not involved in water related targets Recognition of example, due to climate change and resolution of water systems impacting business partners through Evergy's water policy also acknowledges the linkage between climate change and erosion of water resources in general. In line with Evergy's broad expectations, the water policy relaterates our workplace commitment to water systems impacting the water policy related to muter systems impacting the water policy also acknowledges the linkage between climate change and erosion of water systems impacting the water policy also acknowledges the linkage between climate change and erosion of water systems impacting the water policy date policy also acknowledges the linkage between climate change and erosion of water systems impacting the water policy date policy also acknowledges the linkage between climate change and erosion of water systems impacting the water policy also acknowledges the linkage between climate change or workplace commitment to water systems impacting the water policy stems policy as a water policy for example, water policy also acknowledges the linkage between climate change or workplace commitment to wa	Row 1

### 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	Responsibilities for water-related issues
of	
individual	
or	
committee	
Board-level committee	Evergy's Nuclear, Power Supply, and Environmental (NPSE) Committee of the Board of Directors (Board) provides oversight of water related issues. Four Evergy Board members, including three independent directors, serve on the NPSE Committee. The NPSE Committee is responsible for: reviewing environmental policy and planning issues related to local, state, and federal air, water, electric, environmental, and waste matters; reviewing significant environmental reports that have been prepared by Evergy's management team before they are distributed externally; and reviewing Evergy's strategy and related risks, with respect to greenhouse gas and other air emissions, water use, and toxic emissions and waste. During each NPSE Committee meeting there is an environmental update presented by Evergy's Senior Vice President General Counsel and Corporate Secretary, a presentation by the Vice President of Generation on strategy and operations of the generation facilities, and a presentation by the Vice President-Chief Nuclear Officer which includes information on the plant's performance and periodically includes water related issues. Through these updates, the NPSE Committee has an opportunity to provide feedback and direction related to water topics. Previous decisions that have been made related to water topics include progress on the closure of coal generation sites which are the largest users and consumers of water in the fleet. Evergy's Finance Committee provides Board level oversight on capital requirements, capital structure, and capital allocation. This Committee impacts water use and strategy as it provides oversight on investment decisions including the capital allocations made to varying generation resources. The Committee meets at least quarterly. Evergy's Nominating, Governance, and Sustainability Committee oversees the effectiveness of Evergy's environmental, social and governance program and strategy and guides Evergy's corporate responsibility strategy.
Chief Executive Officer (CEO)	Evergy's Chief Executive Officer (CEO) has responsibility for water-related topics and reviews water-related issues on an ongoing basis as part of his role in overseeing members of Evergy's leadership team who are responsible for accounting and finance, legal and compliance, regulatory and policy, and operational activities. Water-related issues that are considered include compliance with surface and groundwater regulations, water availability, and strategic planning and execution of Evergy's generation transition. Water-related issues are discussed with the CEO as needed through individual meetings, meetings with the executive leadership team, discussions with individual Board members, and during full Board discussions.  Decisions that impact water include the resource planning assumptions and results from the Integrated Resource Plan (IRP) which impacts generation portfolio decisions and ultimately water use. The CEO is also updated on environmental compliance with current environmental regulations including water regulations and the status and planning for compliance with proposed environmental regulations including regulations that will have a water impact.

# W6.2b

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

	that water- related issues are a	Governance mechanisms into which water-related issues are integrated	Please explain
Rov 1	v Scheduled - all meetings	and performance Reviewing and guiding corporate responsibility strategy	The Board reviews and oversees Evergy's strategy, business plans, risk assessments and mitigation plans, and the resolution of critical issues as they arise. Several Board-level Committees engage on water-related issues. The Board receives regular reports from each Board committee that has responsibility for environmental and water-related matters. The Board and Board Committee meet at least quarterly. In addition, the Board has an annual strategy meeting that is heavily focused on resource planning and strategy. The Board and Board-level Committees monitor company performance, review and guide major plans of action, and review and guide the corporate strategy including the company's generation transition.  Evergy's Nuclear, Power Supply, and Environmental (NPSE) Committee of the Board of Directors (Board) provides Board level oversight of water related issues. Four Evergy Board members, including three independent directors, serve on the NPSE Committee. The NPSE Committee is responsible for reviewing environmental policy and planning issues related to local, state, and federal air, water, electric, environmental, and waste matters; reviewing significant environmental reports that have been prepared by Evergy's management team before they are distributed to the public; and reviewing Evergy's strategy and related risks, with respect to greenhouse gas and other air emissions, water use, and toxic emissions and waste.  During each NPSE Committee meeting there is an environmental update presented by Evergy's Senior Vice President General Counsel and Corporate Secretary, a presentation by the Vice President of Generation on strategy and operations of the generation facilities, and a presentation by the Vice President of Generation on strategy and operations of the generation facilities, and a presentation by the Vice President of Generation on strategy and operations of the generation facilities, and a presentation by the Vice President of Generation on strategy and operations of the generation facilities, and a pre

### W6.2d

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#### (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	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	Criteria to determine competency on water related issues is determined by educational and career experiences. Evergy has several Board members who are competent on water-related issues. Relevant Evergy Board member experience is comprised of a previous Chair of the United States Senate Energy and Natural Resources Committee who is now a policy advisor for a law and government relations firm that specializes in energy, environment and natural resources laws; several members who have nuclear and/or electric utility backgrounds; and members who have educational backgrounds in engineering. These experiences have aided in their understanding of water related issues within the electric utility industry. In addition, Board competencies that have been deemed important by the Board include an Environmental, Social and Governance (ESG) competency. The competency surrounding this topic is evaluated based on a Board member's relevant director experience, qualifications, attributes and skills related to ESG. This may include executive or Board experience at companies with sustainable business solutions or those that are seeking to disrupt the utility industry with renewable energy and storage solutions; academic, research, regulatory, legislative or consulting expertise in ESG matters; and executive or Board experience in developing diverse supply chains or diverse Boards of directors, management teams or employee workforces. All Evergy Board members consider themselves to be experienced to moderately experienced in ESG matters.	<not Applicable&gt;</not 	<not Applicable&gt;</not 

#### 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)

Other C-Suite Officer, please specify (Senior Vice Present General Counsel and Corporate Secretary, Vice President of Strategy and Long-Term Planning, and Vice President of Generation)

#### Water-related responsibilities of this position

Assessing future trends in water demand Assessing water-related risks and opportunities Managing water-related risks and opportunities

### Frequency of reporting to the board on water-related issues

Quarterly

#### Please explain

Senior Vice President (SVP) General Counsel and Corporate Secretary, Vice President (VP) of Strategy and Long-Term Planning (LTP), and VP of Generation are responsible for water related issues. The SVP General Counsel and Corporate Secretary provides quarterly updates to the Board through presentations to the NPSE Committee regarding water compliance and initiatives. Initiatives include opportunities with water availability, policy, and assessments. The assessments cover water-related topics surrounding both water quality and water quantity. The responsibility of the SVP General Counsel and Corporate Secretary is to oversee performance, provide direction, and mitigate risk associated with water compliance. Evergy's VP of Strategy and LTP and VP of Generation also carry water-related responsibility through understanding and mitigating risk, planning for future generation, overseeing generation performance, and providing direction on strategy and opportunities related to water.

# 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	
Row 1		Evergy's executive team and director level employees have a Long-Term Incentive Plan metric based on increasing megawatts of renewable generation by year end 2024 and by year end 2025. Renewable generation (solar and wind) does not utilize process water; therefore, achieving this incentive and being able to utilize more renewable generation will result in the reduction of both water withdrawals and the consumption of water.

### W6.4a

# (W6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues (do not include the names of individuals)?

	Role(s) entitled to incentive	Performance indicator	Contribution of incentives to the achievement of your organization's water commitments	Please explain
Monetary reward	Corporate executive team	Reduction of water withdrawals – direct operations Reduction in water consumption volumes – direct operations		Evergy's executive team has a new Long-term Incentive Plan metric based on total megawatts of renewables by year end 2024 and year end 2025. With renewable generation (solar and wind) not dependent on water, for generation of electricity, this metric is incentivizing the reduction of water withdrawals and water consumption.
	No one is entitled to these incentives	<not applicable=""></not>	<not applicable=""></not>	

#### 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?

Evergy's Environmental Services Department and Evergy's Government Affairs staff jointly develop plans and engage with internal and external stakeholders, including state and federal regulatory agencies, advisory groups, and the public. These Evergy departments are responsible for processes and commitments that ensure coordination with and consistent alignment to Evergy's water policy and water-related obligations. Specifically, Evergy's Environmental Services' water team often takes the lead on interpreting water related policy due to their strong engagement with advisory groups and Evergy's Government Affairs group often provides guidance and ensures consistency with water policy and regulatory requirements through engaging with Environmental Services.

### 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)

https://investors.evergy.com/sec-filings/sec-filing/10-k/0001711269-23-000011

## W7. Business strategy

### W7.1

	Are water- related issues integrated?	Long- term time horizon (years)	Please explain
Long- term business objectives	Yes, water- related issues are integrated	16-20	Evergy is committed to delivering safe, reliable, affordable, and sustainable energy to customers. Evergy's strategic plan accelerates efforts to create a forward-thinking, customer-centric, and sustainable energy company. With an emphasis on grid modernization, generation transition, improved customer experience, and cost competitiveness, the plan intends to create benefits for customers, communities, stakeholders, and the environment. Targeted capital investments will improve grid reliability, reduce power restoration times, and increase overall grid resiliency, while enabling long-term and sustainable cost savings.
			Evergy evaluates water-related issues as part of its ongoing strategic planning processes to ensure we can continue to operate our generation facilities to provide reliable, affordable, and sustainable power. Risk evaluations inform Evergy's Task Force on Climate-Related Financial Disclosures report that was further supplemented by the risk analysis performed in Evergy's Integrated Resource Plan.
			Water-related issues were incorporated in our generation resource planning processes. Evergy's largest facilities that rely on water are strategically located in areas that typically have significant quantities of water. These facilities are adjacent to rivers or have large cooling lakes available to supply water. As a result, the long-term availability of water and the ability to meet Clean Water Act standards is a key input to our strategic planning process.
	Yes, water- related issues are integrated	16-20	An annual risk evaluation informed Evergy's TCFD report and was further supplemented by the risk analysis performed in Evergy's IRP. Evergy's IRP is completed every three years, with annual updates. It assesses resource planning taking into account numerous assumptions and risks over a 15-20 year planning horizon (which corresponds to the 16-20 year timeframe selected here). One of the assumptions is the impact of water-related issues on the company's long-term resource plan. In coordination with the annual IRP process, Evergy also develops annual and 5-year budgets, which are reviewed and updated annually. As part of this process, investments that may be needed to address water-related issues are included to ensure ongoing compliance and the reliable operations of our generating resources.
			This strategic resource planning process enables Evergy to execute on its long-term objectives for managing water-related risks.
			For example, Evergy's Water Resilience Assessment (WRA), which was conducted in 2022, concluded that Evergy's current fleet is not at significant water risk today, based on the World Resource Institute (WRI) Aqueduct analysis. However, the WRI future projections in 2030 and 2040 forecast overall water stress at four of Evergy's generation facilities due to potential impacts of drought. With the new WRA, Evergy will be looking to best understand how to incorporate the water-scenario tools into additional strategic planning efforts.
Financial planning	Yes, water- related	16-20	In addition to the long-term IRP planning noted above, Evergy also develops budgets, which are reviewed and updated annually. As part of this process, investments needed to address water-related issues are included to ensure ongoing compliance and reliable operations of our generating resources.
	issues are integrated		Our actions to comply with CWA requirements include studies and modifications to surface water intakes for impingement and entrainment of aquatic life, wastewater treatment changes, and upgrades to comply with effluent limitations guidelines and groundwater analysis.
			Examples: Evergy's financial planning process includes budgeting for water-related projects, the most significant of which include closure of ash ponds, groundwater monitoring networks and analysis, wastewater treatment upgrades to comply with effluent limitations, studies and modifications to surface water intakes to reduce impingement and entrainment of aquatic life, and conversion to dry-ash handling that previously relied on water for sluicing ash.
			Evergy has also initiated closure of all 13 Coal Combustion Residual surface impoundments. As the retirement of our coal-fired generation facilities continues, water-related projects and expenditures will likely decrease, as these facilities are the most water intensive. The reduction in generation from the water-intensive coal sites will be offset by the addition of renewable generation, as outlined in the company's IRP.

## 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)

-78

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

180

Water-related OPEX (+/- % change)

20

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

0

#### Please explain

CAPEX for water-related projects includes wastewater treatment system upgrades, ash pond closures, conversion to dry ash handling, groundwater monitoring system installations, and 316(b) compliance measures. These expenditures continued to decrease from 2021 to 2022 as projects ramp down at our coal-fired energy centers. Water related CAPEX is expected to increase in 2023, and then decrease again in 2024 as projects are completed. Water OPEX includes chemical treatment of process water, wastewater treatment, and water fees. OPEX costs are expected to remain consistent, as coal generation resources are expected to remain in place over the next two years; however, the cost of water treatment chemicals increased 20% from 2021 to 2022 due to demand & inflation.

### W7.3

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

		Comment
	scenario analysis	
Row 1	Yes	As part of its IRP noted above, Evergy incorporates a robust scenario analysis process to assess the completeness of its resource plan across a variety of future scenarios. In 2022, this included the analysis of 27 different macroeconomic scenarios and approximately 100 different potential resource plans. This process, and its relationship to climate scenario analysis, is described in Evergy's TCFD report. This analysis, informs Evergy's resource plan and its current goals to achieve net-zero carbon emission by 2045, assuming enabling technologies and supportive public policies are in place, with an interim target of reducing Scope 1 GHGs by 70% compared to 2005 levels in 2030.
		Evergy also conducted a WRA in 2022 which provided information on future water-risk related scenarios. This is Evergy's first time conducting a WRA and Evergy will be determining how this information informs business strategy moving forward.

# (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 Parameters, assumptions, analytical che		Description of possible water-related outcomes	Influence on business strategy
	scenario analysis			
	used			
Row 1	analysis	warming to 2°C (RCP4.5) and a scenario where there are increased physical risks due to extremely high emissions (RCP8.5). Using these scenarios is considered best practice, as it shows the worst-case approach and a lower emissions scenario. A		The water-related outcomes will drive discussion and planning on how best to mitigate water-related risks. Operational actions currently being taken are monthly tracking of water consumption for individual energy centers and modification of key river intakes to lower intake levels to become more water resilient. Through the water tracking and the newly completed WRA, Evergy has more information to make strategic water planning decisions such as how to manage the water rights in Kansas and participation in water marketing contracts through the Kansas Water Office.  The IRP was used to specifically assess water-related outcomes through Evergy's generation fleet transition away from coal. Findings from Evergy's WRA will be considered in future water and generation planning.  Evergy has carbon reduction goals of net-zero by 2045, assuming enabling technologies and supportive public policies are in place, and a 70%
		Evergy completes an IRP every three years that is subject to state regulatory Commission-approved rules in both Kansas and Missouri and includes robust scenario analysis. These analyses define Evergy's resource plan for the next 20 years. In addition to full triennial filings, Evergy also completes annual updates to incorporate changes in market conditions, among other factors. Climate scenarios are incorporated into the IRP analysis using critical uncertain factors that are combined to create quantitative and economic scenarios for analysis. CO2 restrictions represent the most direct climate-related input into the scenario analysis.		reduction in carbon emissions compared to 2005 levels through 2030. These goals, and Evergy's resource plan analysis, are informed by EPRI research and the Paris Climate Agreement and align with global CO2 pathways consistent with limiting warming to 2 Degrees Celsius (Figure 2, from Rose and Scott-2018). Please refer to 'Metrics and Targets' section of Evergy's TCFD report found here: evergy.com\TCFD.

#### 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, and we do not anticipate doing so within the next two years

#### Please explain

Evergy does not have an internal price on water, but is subject to paying for freshwater resources in Kansas (KS) through the KS Water Protection Fee. The KS Department of Agriculture, Division of Water Resources, requires Evergy to meter and/or quantify freshwater diverted from rivers and stormwater runoff. The state requires annual reporting of this information and applies a \$0.03 per 1,000-gallon price on water. Evergy backs up water rights with a paid membership in Water Assurance Districts which support water rights during drought with purchased storage in state controlled, federally owned reservoirs. Costs for membership in the districts vary and are considered in Evergy's long term plans.

Evergy may also contract direct reservoir storage through the KS Water Marketing Program. Fees associated with this program range from \$0.40 to \$0.50 per 1,000 gallons and vary. Some generation facilities also rely on municipal water to operate and these costs are considered in water price.

### 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		Primary reason for not classifying any of your current products and/or services as low water impact	Please explain
Row 1		For the production of electricity, low water impact is defined by quality and quantity. Criteria used to determine low water impact are electric generation sites that used no process water or an insignificant amount of water for operations on an annual basis. For this definition, an insignificant amount is considered to be when a generation site's water use is less than 0.01% of Evergy's total generation water withdrawn. This is in conjunction with having no direct impact to receiving streams by not discharging process wastewater offsite which is also needed in order to be considered to be low water impact generation.		Evergy's generation portfolio includes wind, solar and combustion turbine sites, all of which have significantly lower water impact than steam generation units. For wind and solar facilities, water use and impact to surrounding water bodies is negligible as there is no process wastewater involved nor discharge to surface or groundwater. For combustion turbine sites, water use is limited to evaporative coolers and reverse osmosis equipment which reduces Evergy's impact. Of the six combustion turbine facilities, four did not discharge during 2022. The two that discharged accounted for 0.006% of Evergy's total discharges. Therefore, these generation resources are considered to be low water impact due to both quality and quantity considerations.

### 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=""></not>
Water withdrawals	Yes	<not applicable=""></not>
Water, Sanitation, and Hygiene (WASH) services	Yes	<not applicable=""></not>
Other	Please select	<not applicable=""></not>

### W8.1b

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

### Target reference number

Target 1

#### **Category of target**

Water pollution

### Target coverage

Company-wide (direct operations only)

#### Quantitative metric

Other, please specify (% of discharges in compliance with permit limitations)

#### Year target was set

2000

### Base year

1999

### Base year figure

# Target year

2024

### Target year figure

# Reporting year figure

#### % of target achieved relative to base year

<Calculated field>

### Target status in reporting year

Underway

### Please explain

Target is based on 100% compliance with every NPDES permit limitation, for each water sample taken, at all locations. In 2022, a limited number of Evergy's samples of discharged water was in exceedance of the established NPDES limit. The number of samples that were outside of the NPDES requirements was approximately 0.17% of Evergy's overall NPDES samples, meaning that compliance was achieved for 99.83% of Evergy's sampled water discharges.

#### Target reference number

Target 2

### **Category of target**

Water withdrawals

#### Target coverage

Company-wide (direct operations only)

#### **Quantitative metric**

Other, please specify (Percent of generating facilities included in monthly water metric tracking)

#### Year target was set

2020

#### Base year

2019

#### Base year figure

#### **Target year**

2024

#### **Target year figure**

#### Reporting year figure

#### % of target achieved relative to base year

<Calculated field>

#### Target status in reporting year

Underway

#### Please explain

Target is for complete, comprehensive tracking of water withdraws and consumption at Evergy generation facilities on a monthly basis. To understand Evergy's real time impact on water resources, the company must have accurate data on water withdraws and consumption at all major water users. For Evergy, that represents the generation facilities. Previous efforts focused on annual updates of water metrics. Monthly metrics using data analytics is being developed to allow for the timely feedback necessary to include water considerations in operation and planning decisions.

This target reaches 100% when all Evergy generation facilities are included in monthly tracking of both water withdraws and consumption. As of the end of 2022, all water withdraw tracking is complete with routine monthly updates. Water consumption tracking is under development and partially complete with a target date in 2024 for full completion. This target completion will allow for the inclusion of timely feedback to support decisions regarding operations and planning. Target completion is expected to be achieved through additional investment in data gathering resources.

### Target reference number

Target 3

#### **Category of target**

Water, Sanitation and Hygiene (WASH) services

### **Target coverage**

Company-wide (direct operations only)

### Quantitative metric

Other, please specify (100% of employees have access to WASH services while on Evergy's sites. )

#### Year target was set

2022

### Base year

2020

### Base year figure

# Target year

2022

# Target year figure

### Reporting year figure

#### % of target achieved relative to base year

<Calculated field>

#### Target status in reporting year

Achieved

#### Please explain

100% of target achieved. Evergy provides access and consistently provides WASH services to individuals on Evergy's sites.

### W9. Verification

### (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
F	Row 1	Not mapped – and we do not plan to within the next two years	<not applicable=""></not>	

### 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=""></not>	

### 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>	<not applicable=""></not>	

#### 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>	<not applicable=""></not>	

### W10.5

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

	Activity applies	Comment
Production of plastic polymers	No	Evergy is an electric utility and does not produce/commercialize this listed product.
Production of durable plastic components	No	Evergy is an electric utility and does not produce/commercialize this listed product.
Production / commercialization of durable plastic goods (including mixed materials)	No	Evergy is an electric utility and does not produce/commercialize this listed product.
Production / commercialization of plastic packaging	No	Evergy is an electric utility and does not produce/commercialize this listed product.
Production of goods packaged in plastics	No	Evergy is an electric utility and does not produce/commercialize this listed product.
Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services)	No	Evergy is an electric utility and does not produce/commercialize this listed product.

# 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	President & CEO	Chief Executive Officer (CEO)

### 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.

No

### Please confirm below

I have read and accept the applicable Terms