

W0. Introduction

W0.1

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

Suncor is an integrated energy company headquartered in Calgary, Alberta, Canada. The company is strategically focused on developing one of the world's largest petroleum resource basins – Canada's Athabasca oil sands. In addition, Suncor and its affiliates explore for, acquire, develop, produce and market crude oil and natural gas in Canada and internationally; the company transports and refines crude oil, and markets petroleum and petrochemical products primarily in Canada. The company also conducts energy trading activities focused principally on the marketing and trading of crude oil, natural gas, power and byproducts. Suncor also operates a renewable energy business as part of its overall portfolio of assets.

W-OG0.1a

(W-OG0.1a) Which business divisions in the oil & gas sector apply to your organization?

- Upstream
- Downstream

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 2017	December 31 2017

W0.3

(W0.3) Select the countries/regions for which you will be supplying data.

- Canada
- United States of America

W0.4

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

- CAD

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?

- No

W1. Current state

W1.1

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

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital	Important	Water is an integral component of Suncor's operations to extract, upgrade and refine our oil and gas products. Our operations use fresh water, saline water, recycled wastewater and industrial storm water run-off for water make-up. The primary use of fresh water in Suncor operations is for utilities. Suncor has developed models and tools used to anticipate future trends in areas such as energy efficiency, water consumption, air emissions and land disturbance. In furtherance of Suncor's goal to continue to improve environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level. Suncor is currently working to establish a new water goal that builds on our ambition to use water more effectively. We anticipate this to be a multi-year, iterative and collaborative process with indigenous and non-indigenous communities close to our operations.
Sufficient amounts of recycled, brackish and/or produced water available for use	Vital	Important	In 2017, about 91% of the water used by our Extraction operations was recycled tailings water. Produced water in thermal in situ oil sands facilities primarily consists of condensed steam injected for oil recovery. The hot oil/water emulsion is treated to separate the oil for sales and to reuse the water for steam. Reuse rates at Suncor in situ facilities are in excess of 98%. Our Edmonton refinery's primary water supply is reused municipal waste water from the local treatment facility. We anticipate continued monitoring of the watersheds will help us adapt and continue to take appropriate actions to reduce our water footprint. Suncor has developed models and tools used to anticipate future trends in areas such as energy efficiency, water consumption, air emissions and land disturbance. The goal to continue to improve environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.

W1.2

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

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	100%	Total water withdrawal volumes are measured and monitored at our operating facilities as a regulatory requirement. We also publicly disclose water performance including annual withdrawal volumes in our Report on Sustainability. This helps us to track and report our withdrawal volumes for better performance and also to increase transparency with our stakeholders. Suncor complies with provincial and federal regulatory standards for water monitoring which typically requires monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.
Water withdrawals – volumes from water stressed areas	Not relevant	Per the severe water stress index in the World Wildlife Fund (WWF) Water Risk Filter tool, Suncor does not currently operate in water stressed areas. The Water Risk Filter tool uses a risk assessment based on physical risk (ie. scarcity, pollution, impact on ecosystem and supplier's water risks), regulatory risk and reputational risk. The Commerce City Refinery was evaluated as a level 3 out of 5 on the severe water stress index, which indicates a future potential risk for water stress in the Mississippi River Basin.
Water withdrawals – volumes by source	100%	Total water withdrawal volumes by source are metered at all of our operating facilities. As a regulatory requirement, we report the volumes we withdraw from each source. We also publicly disclose water performance including annual withdrawal volumes in our Report on Sustainability. This aids with performance tracking and increases transparency with our stakeholders. Suncor complies with provincial and federal regulatory standards for water monitoring which typically requires monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.
Produced water associated with your metals & mining sector activities - total volumes	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes	100%	Produced water in thermal in situ oil sands facilities primarily consists of condensed steam injected for oil recovery. The hot oil/water emulsion is treated to separate the oil for sales and to reuse the water for steam. Reuse rates at Suncor in situ facilities are in excess of 98%. Total produced water volumes are measured and monitored at Suncor In-Situ facilities. As a regulatory requirement, we report the volumes we withdraw to regulatory agencies. Suncor complies with provincial and federal regulatory standards for water monitoring which typically requires monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.
Water withdrawals quality	51-75	Suncor measures and monitors our surface water withdrawal quality. The monitored quality is aligned with water discharge quality effluent parameters. Suncor complies with provincial and federal regulatory standards for water monitoring which typically requires monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.
Water discharges – total volumes	100%	The total water discharge volumes are measured and monitored. We are required to report to the regulators the volume of water we discharge (return) back to the environment. Suncor also reports this volume annually to our stakeholders in our Report on Sustainability. Suncor complies with provincial and federal regulatory standards for water monitoring which typically requires monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.
Water discharges – volumes by destination	100%	The total water discharge volumes by destination are measured and monitored. We are required to report to the regulators the volume of water we discharge (return) back to the environment and where we discharge the water. Suncor complies with provincial and federal regulatory standards for water monitoring which typically requires monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.
Water discharges – volumes by treatment method	100%	The water discharge volumes by treatment method are both measured and monitored. We are required to report this information to the regulators. Suncor complies with provincial and federal regulatory standards for water monitoring which typically requires monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.
Water discharge quality – by standard effluent parameters	100%	Suncor measures and monitors our water discharge quality effluent parameters. We are regulated in our operating approvals on the quality of water we discharge back to the environment. This requires that we analyze for specific parameters and report these results to the regulators on a monthly and/or annual basis. We also report effluent water quality annually to our stakeholders in Suncor's Report on Sustainability for our Oil Sands Mining and Downstream Refining and Supply operations.
Water discharge quality – temperature	Not monitored	Suncor measures and monitors our water discharge quality effluent parameters required by regulators and those parameters do not include the water temperature.
Water consumption – total volume	100%	Suncor measures and monitors our water consumption volumes for all of our facilities. We report these volumes annually to our stakeholders in our Report on Sustainability. Suncor complies with provincial and federal regulatory standards for water monitoring which typically requires monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.
Water recycled/reused	100%	Suncor measures and monitors our water consumption volumes for all of our facilities. Suncor complies with provincial and federal regulatory standards for water monitoring which typically requires monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Suncor's operations are in developed countries which all have requirements for worker health and safety as well as water and sanitation provision. Monitoring is required at both the global/national level and at the facility level as per national policies and standards for WASH. The standards cover: water quality, water quantity, water facilities and access to water, wastewater treatment and disposal and other environmental issues.

W1.2b

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

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	105145	Much lower	Suncor previously operated a lubricants business in Mississauga, Ontario, which was sold on February 1, 2017. The 2017 performance data reflects this sale. In 2017, precipitation at Suncor upstream oil sands facilities was much lower than 2016, which resulted in a significant difference in the amount of runoff discharged from the industrial runoff outfalls. In 2017, the Sarnia Refinery withdrew less water than 2016 due to reduced cooling water requirements, lower precipitation and no large-scale maintenance events. In 2017, the Montreal Refinery water withdrawal was slightly higher than 2016 due to an increase in fire water network consumption related events and fire training. The 2017 water withdrawal volume for other sites were comparable to 2016 performance. Suncor has developed models and tools used to anticipate future trends in areas such as energy efficiency, water consumption, air emissions and land disturbance. In furtherance of Suncor's goal to continue to improve environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level. The reported figures satisfy the equation: $W = D + C$ Where, W= total withdrawals D= total discharges C= total consumption Total withdrawals does not include produced/processed water in this case. Produced water in thermal in situ oil sands facilities primarily consists of condensed steam injected for oil recovery. The hot oil/water emulsion is treated to separate the oil for sales and to reuse the water for steam. Reuse rates at Suncor in situ facilities are in excess of 98%.
Total discharges	65990	Much lower	In 2017, lower water discharge volumes were mainly due to the sale of the Lubricants business and is no longer included in Suncor reported volumes. In addition, lower runoff volumes collected and discharged in the Fort McMurray area, and lower seawater discharged due to decreased production rates at Terra Nova contributed to lower total water discharge volumes. As per CDP guidance, total water discharges include fresh surface water and seawater. Suncor has developed models and tools used to anticipate future trends in areas such as energy efficiency, water consumption, air emissions and land disturbance. In furtherance of Suncor's goal to continue to improve environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level. The reported figures satisfy the equation: $W = D + C$ Where, W= total withdrawals D= total discharges C= total consumption
Total consumption	39154	Much lower	In 2017, lower water consumption volumes were mainly due to the sale of the Lubricants business and is no longer included in Suncor reported volumes. Consumed volumes are attributed primarily to tailings and deep well disposal of boiler blowdown. There was a significant decrease in water consumption at Oil Sands as a result of higher production rates and more efficient water usage in operations (2017 Oil Sands production recovered to the level before 2016 wild fire). In 2017, water consumption at the Terra Nova offshore production facility was lower due to decreased production rates. In 2017, water consumption for the Montreal Refinery was higher than 2016 due to the increase in fire water network consumption related events and fire training. Suncor has developed models and tools used to anticipate future trends in areas such as energy efficiency, water consumption, air emissions and land disturbance. In furtherance of Suncor's goal to continue to improve environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level. The reported figures satisfy the equation: $W = D + C$ Where, W= total withdrawals D= total discharges C= total consumption

W-OG1.2c

(W-OG1.2c) In your oil & gas sector operations, what are the total volumes of water withdrawn, discharged, and consumed – by business division – and what are the trends compared to the previous reporting year?

	Volume (megaliters /year)	Comparison with previous reporting year %	Please explain
Total withdrawals - Upstream	57401	Lower	In 2017, precipitation at Suncor upstream oil sands facilities was lower than 2016. This resulted in a significant difference in the amount of runoff water discharged from the industrial runoff outfalls.
Total discharges – Upstream	24297	Lower	In 2017, lower water discharge volumes are due to reduced runoff volumes collected and discharged in the Fort McMurray area. In addition, there was reduced seawater discharge due to decreased production rates at Terra Nova offshore production facility.
Total consumption – Upstream	33104	Much Lower	A significant decrease in Oil Sands Base Plant water consumption was due to a higher extraction recycle rate in 2017. In 2017, Upstream oil sands facilities recovered from the 2016 wild fire and production and water use efficiency returned to the levels seen prior to fire. In 2017, water consumption at the Terra Nova offshore production facility was lower due to decreased production rates.
Total withdrawals - Downstream	47743	Much Lower	Suncor previously operated a lubricants business in Mississauga, Ontario, which was sold on February 1, 2017. The 2017 performance data reflects this sale. In 2017, the Sarnia Refinery withdrew less water than 2016 due to the following: 1. Less cooling water required in operations with cooler than typical ambient temperatures in 2017. 2. Lower annual precipitation than previous years and thus less storm water collecting in the process units resulting in reduced volumes sent to the wastewater treatment plant. 3. There were no large maintenance events requiring additional water to clean out the units. In 2017, the Montreal Refinery water withdrawals were slightly higher than 2016 due to the increase in fire water network consumption related events and fire training.
Total discharges – Downstream	41693	Much Lower	Suncor previously operated a lubricants business in Mississauga, Ontario, which was sold on February 1, 2017. The 2017 performance data reflects this sale. In 2017, the refineries had steady water discharge compared with 2016.
Total consumption – Downstream	6050	Much Lower	Suncor previously operated a lubricants business in Mississauga, Ontario, which was sold on February 1, 2017. The 2017 performance data reflects this sale. In 2017, the Sarnia Refinery water consumption was lower than 2016 due to the following: 1. Less cooling water required in operations with cooler than typical ambient temperatures in 2017; 2. Lower annual precipitation than previous years and thus less storm water collecting in the process units resulting in reduced volumes sent to the wastewater treatment plant. 3. There were no large maintenance events requiring additional water to clean out the units. In 2017, the Montreal Refinery water withdrawals were slightly higher than 2016 due to the increase in fire water network consumption related events and fire training.
Total withdrawals – Chemicals	<Not Applicable>	<Not Applicable>	<Not Applicable>
Total discharges – Chemicals	<Not Applicable>	<Not Applicable>	<Not Applicable>
Total consumption – Chemicals	<Not Applicable>	<Not Applicable>	<Not Applicable>
Total withdrawals – Other business division	<Not Applicable>	<Not Applicable>	<Not Applicable>
Total discharges – Other business division	<Not Applicable>	<Not Applicable>	<Not Applicable>
Total consumption – Other business division	<Not Applicable>	<Not Applicable>	<Not Applicable>

W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	74682	Much lower	Suncor previously operated a lubricants business in Mississauga, Ontario, which was sold on February 1, 2017 and the data reflects this sale. In 2017, precipitation at Suncor upstream oil sands facilities was much lower than 2016, which resulted in a significant difference in the amount of runoff discharged from the industrial runoff outfalls. In 2017, the Sarnia Refinery withdrew less water than 2016 due to reduced cooling water requirements, lower precipitation and no large-scale maintenance events. In 2017, the Montreal Refinery water withdrawal was slightly higher than 2016 due to an increase in fire water network consumption related events and fire training. Suncor has developed models and tools used to anticipate future trends in areas such as water consumption. In furtherance of Suncor's goal to continue to improve environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level
Brackish surface water/seawater	Relevant	22324	Lower	There was a decrease in seawater withdrawal for injection at the Terra Nova site, due to lower production in 2017. Suncor has developed models and tools used to anticipate future trends in areas such as energy efficiency, water consumption, air emissions and land disturbance. In furtherance of Suncor's goal to continue to improve environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.
Groundwater – renewable	Not relevant	<Not Applicable>	<Not Applicable>	Suncor does not use renewable groundwater in operations. Suncor has developed models and tools used to anticipate future trends in areas such as energy efficiency, water consumption, air emissions and land disturbance. In furtherance of Suncor's goal to continue to improve environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.
Groundwater – non-renewable	Relevant	2262	About the same	Groundwater withdrawals remained about the same. Suncor has developed models and tools used to anticipate future trends in areas such as energy efficiency, water consumption, air emissions and land disturbance. In furtherance of Suncor's goal to continue to improve environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.
Produced water	Not relevant	<Not Applicable>	<Not Applicable>	Produced water in thermal in situ oil sands facilities primarily consists of condensed steam injected for oil recovery. The hot oil/water emulsion is treated to separate the oil for sales and to reuse the water for steam. As a result of high recycle rates (>98%), the produced water volume of 38 million m3 is not a new withdrawal from a surface or groundwater source. Suncor upstream Firebag and MacKay River In-Situ operations were steady in 2017 and the performance had no significant change from 2016. In 2017, produced water recycling rate was 96.1% at our Firebag in-situ operations and 99.6% at our MacKay River in-situ operations. Suncor has developed models and tools used to anticipate future trends in areas such as energy efficiency, water consumption, air emissions and land disturbance. In furtherance of Suncor's goal to continue to improve environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook.
Third party sources	Relevant	5877	About the same	Suncor's water withdrawal from municipal and other organizations was steady for 2017 compared with 2016. Suncor has developed models and tools used to anticipate future trends in areas such as energy efficiency, water consumption, air emissions and land disturbance. In furtherance of Suncor's goal to continue to improve environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.

W1.2i

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water	Relevant	50205	Much lower	In 2017, lower water discharge volumes were mainly due to the sale of the Lubricants business and are no longer included in Suncor reported volumes. Additionally, the decrease in fresh surface water discharge was due to decreased discharges at the Oil Sands Base, Firebag and MacKay River sites, with lower rainfall volumes (i.e. surface runoff) collected. Suncor has developed models and tools used to anticipate future trends in areas such as energy efficiency, water consumption, air emissions and land disturbance. In furtherance of Suncor's goal to continue to improve environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.
Brackish surface water/seawater	Relevant	15785	Lower	In 2017, decreased brackish seawater discharge was due to lower production rates at the Terra Nova site located on the east coast of Canada. Suncor has developed models and tools used to anticipate future trends in areas such as energy efficiency, water consumption, air emissions and land disturbance. In furtherance of Suncor's goal to continue to improve environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.
Groundwater	Not relevant	<Not Applicable>	<Not Applicable>	Suncor does not discharge groundwater in operations. Suncor has developed models and tools used to anticipate future trends in areas such as energy efficiency, water consumption, air emissions and land disturbance. In furtherance of Suncor's goal to continue to improve environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.
Third-party destinations	Not relevant	<Not Applicable>	<Not Applicable>	Suncor does not discharge water to third-party destinations in operations. Suncor has developed models and tools used to anticipate future trends in areas such as energy efficiency, water consumption, air emissions and land disturbance. In furtherance of Suncor's goal to continue to improve environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.

W1.2j

(W1.2j) What proportion of your total water use do you recycle or reuse?

	% recycled and reused	Comparison with previous reporting year	Please explain
Row 1	2-10	Higher	In 2017, Suncor's upstream recycled and reused water rate was slightly higher than 2016. The higher recycle rate was due to the increased Oil Sands production rates. The plant operated more efficiently and extraction had higher water recycle rates. In 2017, lower water discharge volumes were mainly due to the sale of the Lubricants business and are no longer included in Suncor reported volumes. The performance at Suncor refineries was about the same as 2016. Suncor has developed models and tools used to anticipate future trends in areas such as energy efficiency, water consumption, air emissions and land disturbance. In furtherance of Suncor's goal to continue to improve environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.

W-OG1.2j

(W-OG1.2j) What proportion of your total water use do you recycle or reuse in your operations associated with the oil & gas sector?

	% recycled and reused	Comparison with previous reporting year	Please explain
Upstream	51-75	Higher	In 2017, Suncor's upstream recycled and reused water rate was slightly higher than 2016. The higher recycle rate was due to the increased Oil Sands production rates. The plant operated more efficiently and extraction had higher water recycle rates. Suncor has developed models and tools used to anticipate future trends in areas such as energy efficiency, water consumption, air emissions and land disturbance. In furtherance of Suncor's goal to continue to improve environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.
Downstream	1-25	About the same	In 2017, lower water discharge volumes were mainly due to the sale of the Lubricants business and are no longer included in Suncor reported volumes. The performance at Suncor refineries was about the same as 2016. Suncor has developed models and tools used to anticipate future trends in areas such as energy efficiency, water consumption, air emissions and land disturbance. In furtherance of Suncor's goal to continue to improve environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.
Chemicals	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other business division	<Not Applicable>	<Not Applicable>	<Not Applicable>

W-OG1.3

(W-OG1.3) Do you calculate water intensity for your activities associated with the oil & gas sector?

Yes

W-OG1.3a

(W-OG1.3a) Provide water intensity information associated with your activities in the oil & gas sector.

Business division

Upstream

Water intensity value

2.1

Numerator: water aspect

Total withdrawals

Denominator: unit of production

Barrel of oil equivalent

Comparison with previous reporting year

Much lower

Please explain

In 2017, precipitation at Suncor's upstream oil sands facilities was much lower than 2016, which resulted in a significant difference in the amount of runoff discharged from the industrial runoff outfalls. This metric is used to monitor our water use and success of process optimization strategies (ie. recycling, reuse, return strategies).

Business division

Upstream

Water intensity value

1.72

Numerator: water aspect

Total water consumed

Denominator: unit of production

Barrel of oil equivalent

Comparison with previous reporting year

Much lower

Please explain

There was a significant decrease in Oil Sands Base Plant water consumption due to higher extraction recycle rates in 2017. Upstream oil sands facilities recovered from 2016 wild fire impact and the production returned to the level before fire. The plant operated more efficiently with higher production. This metric is used to monitor our water use and success of process optimization strategies (ie. recycling, reuse, return strategies).

Business division

Downstream

Water intensity value

1.37

Numerator: water aspect

Total withdrawals

Denominator: unit of production

Barrel of oil equivalent

Comparison with previous reporting year

Much lower

Please explain

Suncor previously operated a lubricants business in Mississauga, Ontario, which was sold on February 1, 2017. The 2017 performance data reflects this sale. The water withdrawal intensity for Lubricants was 29.2 m3 water/m3 product for 2016. This metric is used to monitor our water use and success of process optimization strategies (ie. recycling, reuse, return strategies).

Business division

Downstream

Water intensity value

0.22

Numerator: water aspect

Total water consumed

Denominator: unit of production

Barrel of oil equivalent

Comparison with previous reporting year

Much lower

Please explain

Suncor previously operated a lubricants business in Mississauga, Ontario, which was sold on February 1, 2017. 2017 performance data reflects this sale. The water consumption intensity for Lubricants was 7.6 m3 water/m3 product for 2016. This metric is used to monitor our water use and success of process optimization strategies (ie. recycling, reuse, return strategies).

W1.4

(W1.4) Do you engage with your value chain on water-related issues?

No, we do not engage on water with our value chain

W1.4d

(W1.4d) Why do you not engage with any stages of your value chain on water-related issues and what are your plans?

	Primary reason	Please explain
Row 1	Important but not an immediate business priority	Suncor has prioritized water risk assessments with the goal of capturing the largest issues early and launching appropriate mitigation. Suncor is working on a pilot project to assess our supply chain risks and opportunities with a focus on policies, targets, management systems and risk management. Including water related risks.

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 total financial impact.

Country/Region

Canada

River basin

Mackenzie River

Type of impact driver

Regulatory

Primary impact driver

Regulatory uncertainty

Primary impact

Other, please specify (Future long-term financial liability)

Description of impact

Provincial and Federal governments have not yet developed comprehensive guidance or regulations to effectively support sustainable operation or final closure of tailings management facilities within the Athabasca watershed. This uncertainty has not allowed operators to fully develop sustainable water management plans. Suncor's water strategy for oil sands operations is based around reducing water use and reusing water optimized against a deterioration of circulating water quality.

Primary response

Engage with regulators/policymakers

Adopt water efficiency, water re-use, recycling and conservation practices Engage with local communities Engage with NGOs/special interest groups Engage with regulators/policymakers Improve alignment of our public policy influencing activity with our water stewardship commitments Increase investment in new technology Establish site-specific targets Other - Promote best practice and awareness

Total financial impact

Description of response

Suncor, in coordination with other major operators in the watershed, has ongoing technical and policy discussions on integrated water and tailings management at the provincial and federal levels. Regulatory uncertainty on sustainable water management and reclamation and closure planning for major operators remains challenging.

Country/Region

Canada

River basin

Mackenzie River

Type of impact driver

Reputation & markets

Primary impact driver

Increased stakeholder concern or negative stakeholder feedback

Primary impact

Brand damage

Description of impact

Several of our stakeholder groups remain concerned about our water allocation from the Athabasca River during low flow periods. The Government of Alberta released the Lower Athabasca Regional Plan (LARP) Surface Water Quantity Management Framework (SWQMF) in 2015 (to manage and restrict industry water withdraw from the river during low flow events). Suncor's water license for the Oil Sands Base facility (and three other operators) is grandfathered under the new regulation due to the design and age of our facilities Irrespective Suncor publicly agreed if a low flow event occurred, Suncor would reduce water withdrawal rates at our Base facility by 50%. At the newer Fort Hills facility Suncor will manage water as determined by the LARP SWQMF and will reduce withdrawals to zero, if required.

Primary response

Other, please specify (Promote best practice and awareness)

Adopt water efficiency, water re-use, recycling and conservation practices Engage with local communities Engage with NGOs/special interest groups Improve alignment of our public policy influencing activity with our water stewardship commitments Other - Promote best practice and awareness

Total financial impact

Description of response

In meeting the requirements under the LARP Surface Water Quantity Management Framework Suncor, in coordination with other major Oil Sands Mining operators in the Lower Athabasca watershed committed to an Oil Sands Water Sharing Agreement which is developed annually. Our OS Base Facility is allowed water under the SWQMF to meet its operational needs and the Fort Hills project was designed to incorporate operational needs if water withdrawal was limited by the framework. There are no ongoing cost requirements to meet the SWQMF.

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?

No

W3. Procedures

W-OG3.1

(W-OG3.1) How does your organization identify and classify potential water pollutants associated with its activities in the oil & gas sector that may have a detrimental impact on water ecosystems or human health?

Potential pollutants of concern are identified and monitored as per our approval conditions (i.e. Alberta's *Environmental Protection and Enforcement Act* or the US Environmental Protection Agency). Suncor also identifies and classifies potential water pollutants through Environmental Impact Assessments (EIAs) that are completed for projects, along with regional monitoring and reporting requirements. During an EIA, all potentially detrimental pollutants are identified and managed throughout the life of the project. Additionally, Suncor follows the Canadian Council of Ministers of the Environment (CCME) Environmental Quality Guidelines for all upstream authorizations. The method used to identify potential water pollutants is based on established reporting and monitoring standards, along with published research on baseline and/or natural levels of pollutants in the regions where we operate.

Potentially impacted parties could include:

- Communities in the region of operation
- Municipalities
- Employees
- Wildlife and aquatic species

The potential water-related impacts on ecosystems and human health caused by potential pollutants are managed through risk assessments along with established monitoring and reporting requirements. Impacts are assessed in terms published toxicity levels or baseline metrics. Water sources/water supplies in regions of operations are monitored regularly to test for various metrics (pollution). Suncor is continuing work on a pilot project to assess our supply chain sustainability risk and opportunity with a focus on policy, targets, management systems and risk management covering environmental, social and human rights.

W-OG3.1a

(W-OG3.1a) For each business division of your organization, describe how your organization minimizes the adverse impacts on water ecosystems or human health of potential water pollutants associated with your oil & gas sector activities.

Potential water pollutant	Business division	Description of water pollutant and potential impacts	Management procedures	Please explain
Hydrocarbons	Upstream Downstream	I.e. Natural gas and fuels / petroleum products Upstream impacts: the potential for spills into water bodies near the operation where hydrocarbons are used and/or extracted/produced/refined. Downstream impacts: water contamination (groundwater) from pump malfunction or underground storage of hydrocarbons The scale and magnitude is dependent upon various factors, such as the size, location, concentration, etc. of the pollutant (hydrocarbon).	Compliance with effluent quality standards Measures to prevent spillage, leaching and leakages Community/stakeholder engagement Emergency preparedness Other, please specify (monitoring)	Suncor complies with effluent quality standards in each region of operation established by the regulator. We are required to report all spills as per approval conditions. The Environmental Health and Safety department has Spill Response Plans and Policies in place for each business unit, where applicable. The Stakeholder relations group is required to contact and inform key stakeholders that are relevant in situations where they may be or are potentially impacted. Crisis management and communications preparedness is controlled by the Environmental Health and Safety Group. They maintain a risk registry, which is part of the Suncor's Operational Excellence Management System. The management team is made up of members from the executive leadership team with various roles that tie different business areas together. Each functional business area also has a response team with defined roles and responsibilities.
Chemicals	Upstream Downstream	I.e. Metals Upstream and Downstream: chemical pollutants from each business unit would have similar impacts on water ecosystems and human health. The scale and magnitude is dependent upon various factors, such as the size, location, concentration, etc. of the pollutant (chemical).	Compliance with effluent quality standards Measures to prevent spillage, leaching and leakages Community/stakeholder engagement Emergency preparedness	Suncor complies with National Pollutant Release Inventory Reporting (NPRI) Standards. The Stakeholder relations group is required to contact and inform key stakeholders that are relevant in situations where they may be or are potentially impacted. The Environmental Health and Safety department has Spill Response Plans and Policies in place for each business unit where applicable. Crisis management and communications preparedness is controlled by the Environmental health and Safety Group of Suncor. They maintain a risk registry, which is part of the Operation Excellence Management System. The management team is made up of members from the executive leadership team with various roles that tie different business areas together. Each functional business area also has a response team with defined roles and responsibilities.
Drilling fluids	Upstream	I.e. Synthetic-based fluid Upstream: potential leaching into groundwater/aquifer and contaminating water The scale and magnitude is dependent upon various factors, such as the size, location, concentration, etc. of the pollutant (chemical).	Compliance with effluent quality standards Measures to prevent spillage, leaching and leakages Community/stakeholder engagement Emergency preparedness	Suncor is required to describe drilling fluids in project applications (i.e. Environmental Protection and Enhancement Act under the Provincial Regulator). The regulation also requires an operator to describe drilling fluid, waste disposal and surface runoff management. The Environmental Health and Safety department has Spill Response Plans and Policies in place for each business unit where applicable. Crisis management and communications preparedness is controlled by the Environmental health and Safety Group of Suncor. They maintain a risk registry, which is part of the Operational Excellence Management System. The management team is made up of members from the executive leadership team with various roles that tie different business areas together. Each functional business area also has a response team with defined roles and responsibilities.

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.

Direct operations

Coverage

Full

Risk assessment procedure

Water risks are assessed as part of other company-wide risk assessment system

Frequency of assessment

Annually

How far into the future are risks considered?

>10 years

Type of tools and methods used

Tools on the market
Enterprise Risk Management
Other

Tools and methods used

WWF-DEG Water Risk Filter
ISO 31000 Risk Management Standard
Internal company methods

Comment

Suncor completed a comprehensive water risk assessment for all operations to assess risks such as stakeholder expectations, watershed issues and operational water use. Suncor's tools and methods include Strategic Issues Management Process, Enterprise Risk Management, Materiality Review and the WWF Water Risk Filter. We also participate in regional watershed initiatives to understand long-term watershed risks around water use and quality to inform our own corporate water strategy.

Supply chain

Coverage

Partial

Risk assessment procedure

Other, please specify (Water/sustainability supplier risks)

Frequency of assessment

Not defined

How far into the future are risks considered?

Unknown

Type of tools and methods used

Other

Tools and methods used

Other, please specify (supplier sustainability supplemental/RFP)

Comment

Suncor is working on a pilot project to assess our supply chain risks and opportunities with a focus on policies, targets, management systems and risk management. Including water related risks.

Other stages of the value chain

Coverage

None

Risk assessment procedure

<Not Applicable>

Frequency of assessment

<Not Applicable>

How far into the future are risks considered?

<Not Applicable>

Type of tools and methods used

<Not Applicable>

Tools and methods used

<Not Applicable>

Comment

W3.3b

(W3.3b) Which of the following contextual issues are considered in your organization's water-related risk assessments?

	Relevance & inclusion	Please explain
Water availability at a basin/catchment level	Relevant, always included	Suncor has developed models and tools that allow us to understand available water quantity and quality at the local level. This analysis involves risk assessment, sustainability forecasting and some business unit/regional level scenario analysis, which helps inform future business planning. However, these models/tools are being developed to capture basin level projections that would better inform local water risks. Suncor has evaluated water availability (total water withdrawal per capita) using the WWF Water Risk Filter. Suncor participated in the Athabasca River Basin initiative that is a basin wide collaborative effort to create a common understanding of the water management system, issues and opportunities across the Athabasca River Basin.
Water quality at a basin/catchment level	Relevant, always included	Suncor has developed models and tools that allow us to understand available water quantity and quality at the local level. This analysis involves risk assessment, sustainability forecasting and some business unit/regional level scenario analysis, which helps inform future business planning. However, these models/tools are being developed to capture basin level projections that would better inform local water risks. Suncor has evaluated water quality (water quality index) using the WWF Water Risk Filter.
Stakeholder conflicts concerning water resources at a basin/catchment level	Relevant, always included	Suncor actively engages with stakeholders with regards to water resources and these issues/risks are part of identified risks. Operational changes to water systems at sites which trigger regulatory applications require stakeholder consultation as part of the review. Suncor includes stakeholder assessment and forecasting with regards to water resources at the local level in the ERM process. Suncor participated in the Athabasca River Basin initiative that is a basin wide collaborative effort to create a common understanding of the water management system, issues and opportunities across the Athabasca River Basin.
Implications of water on your key commodities/raw materials	Not relevant, included	We recognize that some of our material commodity inputs (e.g. natural gas, hydrogen) and agricultural feedstock (e.g. corn for ethanol production) may benefit from being further assessed for their water risks – we expect to further evaluate those as part of our next phase of sustainability integration into our business. Future scenario planning is being, however current information/tools have limitations for long term predictions. Suncor is working on a pilot project to assess our supply chain risks and opportunities with a focus on policies, targets, management systems and risk management. Including water related risks.
Water-related regulatory frameworks	Relevant, always included	All of Suncor's operational sites have an operating regulatory approval with limits which typically require monthly and annual reporting to regulatory agencies. Our enterprise risk management system (ERM) and strategic issues management process (SIMP) identify changes to water policy and regulations that are further evaluated for operational / business impacts. Suncor monitors future potential regulatory changes at the federal, provincial/state, and municipal level to understand how these changes could impact operations. Suncor also monitors regulations in other jurisdictions and evaluates potential impacts, timing and risk.
Status of ecosystems and habitats	Relevant, always included	Suncor monitors and assesses ecosystem impacts in the watersheds in which it operates in on a local level. Our enterprise risk management system (ERM) and strategic issues management process (SIMP) identify and helps manage ecosystem and habitat water related risks. For some operational sites there is greater and more extensive basin impact monitoring. In the Athabasca watershed, Suncor contributed to a regional monitoring of cumulative effects program that spends \$50M dollars per year monitoring impact on the ecosystem. Suncor is a member of a number of watershed planning and advisory committees (WPACs) that evaluate long terms changes to the watershed and advises on potential management actions. Within the Athabasca watershed, Suncor is currently participating in a long-term Athabasca Watershed Basin Initiatives led by WaterSMART Solutions Ltd.
Access to fully-functioning, safely managed WASH services for all employees	Relevant, always included	For all of Suncor's sites we have WASH services for all employees. Suncor's operations are in developed countries which all have requirements for worker health and safety as well as water and sanitation provision. Monitoring is required at both the global/national level and at the facility level as per national policies and standards for WASH. The standards cover: water quality, water quantity, water facilities and access to water, wastewater treatment and disposal and other environmental issues.
Other contextual issues, please specify	Please select	

W3.3c

(W3.3c) Which of the following stakeholders are considered in your organization's water-related risk assessments?

	Relevance & inclusion	Please explain
Customers	Relevant, always included	As part of Suncor's Water Management-Stakeholder Engagement Plans, customers are considered as a component of overall water risk assessment. A potential risk that has been considered in this assessment is reputational risk (part of the Enterprise Risk Management process) on Suncor's brand with regards to water has been evaluated as a component of the overall water risk assessment file. Customers are informed of water-related risks through the annual Report on Sustainability and various third-party Environmental Social and Governance (ESG) disclosure platforms.
Employees	Relevant, always included	As part of Suncor's Water Management-Stakeholder Engagement Plans, the evaluation includes employee impact on execution of water management on-site. This included aspects of roles and accountability, complexity and experience. Employees are informed of water-related risks through the annual Report on Sustainability and various third-party Environmental Social and Governance (ESG) disclosure platforms.
Investors	Relevant, always included	As part of Suncor's Water Management-Stakeholder Engagement Plans, investors or investment organizations have been identified as stakeholders as part of our risk assessment framework. Investors are informed of water-related risks through the annual Report on Sustainability and various third-party Environmental Social and Governance (ESG) disclosure platforms.
Local communities	Relevant, always included	As part of Suncor's Water Management-Stakeholder Engagement Plans, local communities have been identified and included in Suncor's water risk assessment for the majority of our operational sites. Local communities located in regions where we operate are consulted prior to and throughout a project. Consultation covers a broad set of issues, water-related issues and risks included. We aim to inform local communities of the water-related risks and the processes we have in place to mitigate these. Communities are also informed of water-related risks through the annual Report on Sustainability and various third-party Environmental Social and Governance (ESG) disclosure platforms.
NGOs	Relevant, always included	NGOs have been identified and included in Suncor's water risk assessment for the majority of our operational sites. Primary areas of focus are related to cumulative impacts of industrial development, with emphasis on low flow water withdrawal of the Athabasca River and water issues as they relate to tailings management. Suncor continues to discuss opportunities with NGOs related to priority areas.
Other water users at a basin/catchment level	Relevant, always included	Some other local water users have been identified as stakeholders that do not fall into the major categories. These would include parties who depend on the same basin/catchment from where we withdrawal water for our operations.
Regulators	Relevant, always included	Regulators have been identified and included in Suncor's water risk assessment for the majority of our major operational sites. Outside of water risk assessment, Suncor has extensive contact with regulators about all our operations. Environmental data typically requires monthly and annual reporting to regulatory agencies.
River basin management authorities	Relevant, always included	Suncor collaborates with river basin management authorities, our operations in North America have to follow government jurisdictions for the specific basins. They are not authorities, but what we term as a council of all watershed users.
Statutory special interest groups at a local level	Relevant, always included	Indigenous communities have been identified as key stakeholders and included in Suncor's overall water risk assessment. In some cases, concerns with fossil fuel development amongst Indigenous communities stems from the value attributed to natural water sources, and the cumulative impacts on industry on local watersheds. Suncor is building ongoing relationships with Indigenous communities through a corporate Social Goal. Suncor is also part of the Athabasca Watershed Council, which is a multi-stakeholder working group to bring together management plans and strategies for the Athabasca specifically.
Suppliers	Relevant, sometimes included	Suncor is working on a pilot project to assess our supply chain risks and opportunities with a focus on policies, targets, management systems and risk management. Including water related risks.
Water utilities at a local level	Relevant, sometimes included	Water utilities at a local level are evaluated as part of water risk assessments at this time as part of each projects Environmental Impact Assessment (EIA). Anticipated effects on the environment of a proposed development or project are measured and design measures or other relevant mitigation measures are used to reduce or avoid those effects (ie. resource use, water quality/availability and environmental setting).
Other stakeholder, please specify	Relevant, sometimes included	Multi-stakeholder organizations such as Ceres, have been identified as stakeholders as part of our risk assessment framework. Suncor has had workshops with multiple stakeholders on the development of our post-2015 Sustainability Goals including future water goal development.

W3.3d

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

Suncor has an established Enterprise Risk Management Program and an Operational Excellence Management System both of which support effective and efficient risk management across the organization. This requires ongoing identification, assessment, treatment and monitoring of risks inherent to our assets, activities and operations. Our risk management program is aligned with the ISO 31000 Risk management. The guidelines provide principles, a framework and a process for managing risk. Our risk management practice is governed by our Risk Management Policy, and supported through tools such as Risk Management Standards and a Risk Matrix to effectively identify and assess risk across the enterprise. Principal risks are generally considered those that have the potential to materially impact our ability to meet or support our business strategy, which can be assessed on a short-term (1-3 years) or long-term (> 10 years) horizon. Once identified, risks are assessed and evaluated in terms of magnitude of impact and likelihood using a risk-matrix tool. This allows employees to consistently assess risks and evaluate the consequence and likelihood of risk events. It also helps assign different levels of residual risk based on the following health and safety, environment, regulatory, reputational and financial impact. To ensure holistic development and sustainment of physical assets, we incorporate environmental and social aspects such as water use, air emissions, energy use, human rights, stakeholder and Aboriginal relations into new projects. Screening assessments help translate relevant social or environmental impacts as potential project risks. For example, climate change implications are considered early in the asset development process, which ensures climate change risks and opportunities are well understood. From a decision-making perspective, this process allows asset development options to be analyzed from both a technical and sustainability perspective.

W4. Risks and opportunities

W4.1

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

Yes, only within our direct operations

W4.1a

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

Suncor uses an enterprise-wide risk management system (ERM) to assess and define risk. Like most ERM systems it uses a matrix that determines the consequence of a risk and the likelihood of it occurring. There are six (6) consequence and likelihood categories. The ERM assigns risks a ranking from I to IV for economic, environmental and social. Social is further broken down into Health & Safety, Reputation and Regulatory with guidance. Suncor defines substantive risks that are ranked at II or I; To define substantive change for the purpose of this assessment; an economic value of \$10M was used. This includes direct financial costs and lost opportunity value (LOV).

W4.1b

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

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	10	100	

W4.1c

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

Country/Region

Canada

River basin

Mackenzie River

Number of facilities exposed to water risk

3

% company-wide facilities this represents

26-50

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

% company's annual electricity generation that could be affected by these facilities

<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities

26-50

% company's total global revenue that could be affected

Please select

Comment

These facilities make up our primary oil sands operations and include our oil sands base plant and mine, as well as our In Situ operations; Firebag and MacKay River.

Country/Region

Canada

River basin

St. Lawrence

Number of facilities exposed to water risk

4

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

% company's annual electricity generation that could be affected by these facilities

<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities

26-50

% company's total global revenue that could be affected

Please select

Comment

These facilities make up the majority of our Refining & Marketing operations and include our Sarnia Refinery, Montreal Refinery, Montreal Sulphur Plant and Ethanol Plant.

Country/Region

Canada

River basin

Nelson River

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

% company's annual electricity generation that could be affected by these facilities

<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities

1-25

% company's total global revenue that could be affected

Please select

Comment

This facility is one of the refineries included in our Refining & Marketing operations; Edmonton Refinery.

Country/Region

Canada

River basin

Other, please specify (Atlantic Ocean)

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

% company's annual electricity generation that could be affected by these facilities

<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities

1-25

% company's total global revenue that could be affected

Please select

Comment

This facility is our off shore operation; situated off the east coast of Canada, we operate the Terra Nova Floating Production Storage and Offloading vessel.

Country/Region

United States of America

River basin

Mississippi River

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

% company's annual electricity generation that could be affected by these facilities

<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities

1-25

% company's total global revenue that could be affected

Please select

Comment

This facility is one of the refineries included in our Refining & Marketing operations; Commerce City Refinery.

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/Region

Canada

River basin

Mackenzie River

Type of risk

Regulatory

Primary risk driver

Regulatory uncertainty

Primary potential impact

Increased operating costs

Company-specific description

There is currently a lack of clarity around regulatory requirements governing the return of oil sands process affected water (OSPW) back to the watershed during both operations and final closure. The lack of certainty increases risk to the accuracy of long-term closure plans and the ability to manage both quantity and quality of water during the operational phase of a project.

Timeframe

More than 6 years

Magnitude of potential impact

High

Likelihood

Unlikely

Potential financial impact

1000000000

Explanation of financial impact

There could be increased costs associated with the potential for additional water containment facilities and water treatment processes.

Primary response to risk

Engage with regulators/policymakers

Engage with regulators/policymakers Increased investment in new technology Improve monitoring

Description of response

Work with the provincial and federal governments to ensure policy and regulation tools and mechanisms are in place to allow for the release of treated tailings water and help identify and fill gaps as required. Suncor along with 6 other operators has been engaging both Federal and Provincial technical and policy leaders for years to drive discussion towards certainty of regulatory tools for water return to the Athabasca River. Suncor and the other operators through Canada's Oil Sands Innovation Alliance have also been operating projects that will provide technical input into the development of a policy framework.

Cost of response**Explanation of cost of response**

There is significant ongoing investment focused on optimizing water reduction and recycling opportunities, reducing the amount of water retained in tailings and confirming technical understanding and managing all water related impacts.

Country/Region

Canada

River basin

Mackenzie River

Type of risk

Regulatory

Primary risk driver

Regulatory uncertainty

Primary potential impact

Increased operating costs

Company-specific description

Suncor's oil sands base plant has to reduce excess water contained in tailings ponds without the option to be able to return the water back to the watershed.

Timeframe

More than 6 years

Magnitude of potential impact

High

Likelihood

Very unlikely

Potential financial impact

1000000000

Explanation of financial impact

There could be increased costs associated with the potential for additional water containment facilities and for extending the timeframe reclamation activities.

Primary response to risk

Other, please specify (Infrastructure investment)

Description of response

Suncor planned and developed a tactical water containment strategy that includes 3 phases of projects to reduce on site water in tailings ponds by 2018. There are roughly 18 projects covered by the 3 phases that are expected to achieve the required reduction in water.

Cost of response

400000000

Explanation of cost of response

These projects reduce or reuse water on site. The cost for the containment strategy is ~\$400M of infrastructure investment. The execution of this strategy has resulted in a

reduction of oil sands water withdrawal by 58% since 2007. There is significant ongoing investment focused on optimizing water reduction and recycling opportunities, reducing the amount of water retained in tailings and confirming technical understanding and managing all water related impacts.

Country/Region

United States of America

River basin

Mississippi River

Type of risk

Regulatory

Primary risk driver

Regulation of discharge quality/volumes

Increased water stress Regulation of discharge quality/volumes

Primary potential impact

Increased operating costs

Company-specific description

There is a potential for water related stress at the Commerce City Refinery. The potential impact of these risks will likely lead to higher operating costs in the long term. The site is also making improvements to the wastewater treatment system to meet incoming regulations for specific contaminants.

Timeframe

1 - 3 years

Magnitude of potential impact

High

Likelihood

More likely than not

Potential financial impact

500000000

Explanation of financial impact

There could be increased costs associated with water regulations in the area of operation.

Primary response to risk

Other, please specify (Infrastructure investment)

Establish site-specific targets Infrastructure investment

Description of response

Suncor's Commerce City Refinery would have to build a new treatment facility and update water permits in the area of operations.

Cost of response

6000000

Explanation of cost of response

Suncor is undertaking a process that provides correct definition-assessment of this water risk. As this process progresses understanding of the potential issues, the impact and mitigation will be determined. Costs associated with definition have been estimated at \$6M for the facility.

W4.2c

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

	Primary reason	Please explain
Row 1	Evaluation in progress	Water risks are considered as a part of supplier sustainability risk in Suncor's supplier sustainability supplemental associated with RFP's. Sustainability of our supply chain is under evaluation overall and we are working on a pilot project to assess our supply chain risks and opportunities with a focus on policies, targets, management systems and risk management.

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

Efficiency

Primary water-related opportunity

Improved water efficiency in operations

Company-specific description & strategy to realize opportunity

Suncor's tactical water strategy for oil sands and in situ has resulted in a major improvement in water efficiency. All the projects executed reduced water use or make large quantities of water available for reuse. There is a Water Strategy Leadership Team that focuses on an integrated water management strategy for the site that addresses excess water stored in tailings and establishes water management principles and guidelines for water management. Ongoing collaboration with CanmetENERGY and Alberta Innovates to evaluate the Direct Contact Steam Generation (DCSG) pilot project at MacKay River to co-inject CO2 with steam. This process has the potential to reduce greenhouse gas emissions and water requirements as well as reduce the required equipment and land requirement by removing the need for an OTSG.

Estimated timeframe for realization

>6 years

Magnitude of potential financial impact

Low-medium

Potential financial impact

Explanation of financial impact

The improvement in water efficiency essentially allows Suncor to consistently use less than half of our annual water license allotment from the Athabasca River. Continuous improvement measures leverage an economic incentive to use less water.

Type of opportunity

Other

Primary water-related opportunity

Other, please specify (Collective active innovation)

Company-specific description & strategy to realize opportunity

Suncor has been a leader in improving collaboration among industry peers through organizations such as COSIA. The SAGD produced water treatment pilot project with COSIA involves testing new water treatment technologies at Suncor's MacKay River steam assisted gravity drainage facility. There is a potential to improve the reliability and efficiency of in situ water treatment operations in an effort to reduce water usage and GHG emissions.

Estimated timeframe for realization

>6 years

Magnitude of potential financial impact

Medium-high

Potential financial impact

Explanation of financial impact

Suncor's own water R&D as well as the technology sharing by 13 oil sands companies on water R&D is laying the foundation for further breakthroughs for the region on environmental performance. For water alone there have been 237 technology contributions with an estimated value of \$217 million.

W5. Facility-level water accounting

W5.1

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

Facility reference number

Facility 1

Facility name (optional)

Oil Sands Base Plant

Country/Region

Canada

River basin

Mackenzie River

Latitude

57.0033

Longitude

-111.4661

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

Upstream

Total water withdrawals at this facility (megaliters/year)

32984

Comparison of withdrawals with previous reporting year

Lower

Total water discharges at this facility (megaliters/year)

7599

Comparison of discharges with previous reporting year

Lower

Total water consumption at this facility (megaliters/year)

25384

Comparison of consumption with previous reporting year

Lower

Please explain

In 2017, the extraction recycle rate at the Oil Sands Base Plant was higher than 2016 . In 2017, Upstream oil sands facilities recovered from the 2016 wild fire impact and production returned to levels seen prior to the fire. The plant operates more efficiently with higher production rates. In 2017, precipitation at Suncor upstream oil sands facilities was much lower than 2016, which resulted in a significant difference in the amount of runoff discharged from the industrial runoff outfalls.

Facility reference number

Facility 2

Facility name (optional)

In Situ Firebag

Country/Region

Canada

River basin

Mackenzie River

Latitude

57.2297

Longitude

-110.8325

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

Upstream

Total water withdrawals at this facility (megaliters/year)

1820

Comparison of withdrawals with previous reporting year

Lower

Total water discharges at this facility (megaliters/year)

912

Comparison of discharges with previous reporting year

Lower

Total water consumption at this facility (megaliters/year)

908

Comparison of consumption with previous reporting year

About the same

Please explain

Suncor upstream Firebag In-Situ operations water withdrawals and discharges were slightly lower, overall performance in 2017 did not have a significant change compared to 2016.

Facility reference number

Facility 3

Facility name (optional)

In Situ MacKay River

Country/Region

Canada

River basin

Mackenzie River

Latitude

57.03347

Longitude

-111.88712

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

Upstream

Total water withdrawals at this facility (megaliters/year)

266

Comparison of withdrawals with previous reporting year

Lower

Total water discharges at this facility (megaliters/year)

0

Comparison of discharges with previous reporting year

Much lower

Total water consumption at this facility (megaliters/year)

266

Comparison of consumption with previous reporting year

Lower

Please explain

Suncor upstream MacKay River In-Situ operations water withdrawals, discharges and consumption were slightly lower, but overall performance in 2017 did not have a significant change compared to 2016.

Facility reference number

Facility 4

Facility name (optional)

Montreal Refinery

Country/Region

Canada

River basin

St. Lawrence

Latitude

45.50806

Longitude

-73.57111

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

Downstream

Total water withdrawals at this facility (megaliters/year)

6171

Comparison of withdrawals with previous reporting year

Higher

Total water discharges at this facility (megaliters/year)

5060

Comparison of discharges with previous reporting year

About the same

Total water consumption at this facility (megaliters/year)

1111

Comparison of consumption with previous reporting year

Much higher

Please explain

In 2017, the Montreal Refinery water withdrawal was slightly higher than 2016 due to an increase in fire water network consumption related events and fire training.

Facility reference number

Facility 5

Facility name (optional)

Sarnia Refinery

Country/Region

Canada

River basin

St. Lawrence

Latitude

42.9306

Longitude

-82.4433

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

Downstream

Total water withdrawals at this facility (megaliters/year)

32735

Comparison of withdrawals with previous reporting year

Lower

Total water discharges at this facility (megaliters/year)

32735

Comparison of discharges with previous reporting year

Lower

Total water consumption at this facility (megaliters/year)

0

Comparison of consumption with previous reporting year

About the same

Please explain

In 2017, the Sarnia Refinery withdrew less water than 2016 due to : 1. Less cooling water required in operations with cooler than typical ambient temperatures in 2017. 2. Lower annual precipitation than previous years and thus less storm water collecting in the process units resulting in reduced volumes sent to the wastewater treatment plant. 3. There were no large maintenance events requiring additional water to clean out the units.

Facility reference number

Facility 6

Facility name (optional)

Renewables - St. Clair Ethanol Plant

Country/Region

Canada

River basin

St. Lawrence

Latitude

42.9294

Longitude

-82.4381

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

Downstream

Total water withdrawals at this facility (megaliters/year)

1069

Comparison of withdrawals with previous reporting year

About the same

Total water discharges at this facility (megaliters/year)

122

Comparison of discharges with previous reporting year

About the same

Total water consumption at this facility (megaliters/year)

946

Comparison of consumption with previous reporting year

About the same

Please explain

Suncor's downstream St. Clair Ethanol Plant operations overall performance in 2017 did not have a significant change compared to 2016.

Facility reference number

Facility 7

Facility name (optional)

Edmonton Refinery

Country/Region

Canada

River basin

Nelson River

Latitude

53.55558

Longitude

-113.33275

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

Downstream

Total water withdrawals at this facility (megaliters/year)

3968

Comparison of withdrawals with previous reporting year

About the same

Total water discharges at this facility (megaliters/year)

1285

Comparison of discharges with previous reporting year

About the same

Total water consumption at this facility (megaliters/year)

2683

Comparison of consumption with previous reporting year

About the same

Please explain

Suncor's downstream Edmonton Refinery operations overall performance in 2017 did not have a significant change compared to 2016.

Facility reference number

Facility 8

Facility name (optional)

Terra Nova FPSO

Country/Region

Canada

River basin

Other, please specify (Atlantic Ocean)

Latitude

46.2831

Longitude

-48.2851

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

Upstream

Total water withdrawals at this facility (megaliters/year)

22332

Comparison of withdrawals with previous reporting year

Lower

Total water discharges at this facility (megaliters/year)

15785

Comparison of discharges with previous reporting year

Lower

Total water consumption at this facility (megaliters/year)

6546

Comparison of consumption with previous reporting year

Lower

Please explain

In 2017, water consumption and discharge volumes at the Terra Nova offshore production facility were lower due to decreased production rates.

Facility reference number

Facility 9

Facility name (optional)

Commerce City Refinery

Country/Region

United States of America

River basin

Mississippi River

Latitude

39.80168

Longitude

-104.94698

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

Downstream

Total water withdrawals at this facility (megaliters/year)

2870

Comparison of withdrawals with previous reporting year

About the same

Total water discharges at this facility (megaliters/year)

1720

Comparison of discharges with previous reporting year

About the same

Total water consumption at this facility (megaliters/year)

1150

Comparison of consumption with previous reporting year

Higher

Please explain

Cooling towers in Plant 1 were shut down in 2016 for over a month for a turnaround, resulting in reduced water use during this period. There was also an increase in water consumption in early 2017 due to a faulty valve lineup. In addition, the average temperature in the Denver area in 2017 was higher than in 2016, presumably resulting in higher rates of evaporation from the cooling towers, thereby increasing water consumption.

Facility reference number

Facility 10

Facility name (optional)

Montreal Sulphur Plant

Country/Region

Canada

River basin

St. Lawrence

Latitude

45.639381

Longitude

-73.515457

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

Downstream

Total water withdrawals at this facility (megaliters/year)

160

Comparison of withdrawals with previous reporting year

About the same

Total water discharges at this facility (megaliters/year)

0

Comparison of discharges with previous reporting year

About the same

Total water consumption at this facility (megaliters/year)

160

Comparison of consumption with previous reporting year

About the same

Please explain

Suncor's downstream Montreal Sulphur Plant operations overall performance in 2017 did not have a significant change compared to 2016.

W5.1a

(W5.1a) For each facility referenced in W5.1, provide withdrawal data by water source.

Facility reference number

Facility 1

Facility name

Oil Sands Base Plant

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

32134

Brackish surface water/seawater

0

Groundwater - renewable

0

Groundwater - non-renewable

850

Produced water

0

Third party sources

0

Comment

Facility reference number

Facility 2

Facility name

In Situ Firebag

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

981

Brackish surface water/seawater

0

Groundwater - renewable

0

Groundwater - non-renewable

764

Produced water

Third party sources

74.5

Comment

Produced water in thermal in situ oil sands facilities primarily consists of condensed steam injected for oil recovery. The hot oil/water emulsion is treated to separate the oil for sales and to reuse the water for steam. As a result of high recycle rates (>98%), the produced water volume of 38 million m3 is not a new withdrawal from a surface or groundwater source.

Facility reference number

Facility 3

Facility name

In Situ MacKay River

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

2

Brackish surface water/seawater

0

Groundwater - renewable

0

Groundwater - non-renewable

264

Produced water

Third party sources

0

Comment

Produced water in thermal in situ oil sands facilities primarily consists of condensed steam injected for oil recovery. The hot oil/water emulsion is treated to separate the oil for sales and to reuse the water for steam. As a result of high recycle rates (>98%), the produced water volume of 38 million m3 is not a new withdrawal from a surface or groundwater source.

Facility reference number

Facility 4

Facility name

Montreal Refinery

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

5989

Brackish surface water/seawater

0

Groundwater - renewable

0

Groundwater - non-renewable

0

Produced water

0

Third party sources

182

Comment

Facility reference number

Facility 5

Facility name

Sarnia Refinery

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

32504

Brackish surface water/seawater

0

Groundwater - renewable

0

Groundwater - non-renewable

0

Produced water

0

Third party sources

227

Comment

Facility reference number

Facility 6

Facility name

Renewables - St. Clair Ethanol Plant

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Brackish surface water/seawater

0

Groundwater - renewable

0

Groundwater - non-renewable

0

Produced water

0

Third party sources

1069

Comment

Facility reference number

Facility 7

Facility name

Edmonton Refinery

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

2332

Brackish surface water/seawater

0

Groundwater - renewable

0

Groundwater - non-renewable

0

Produced water

0

Third party sources

1636

Comment

Facility reference number

Facility 8

Facility name

Terra Nova FPSO

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Brackish surface water/seawater

22324

Groundwater - renewable

0

Groundwater - non-renewable

0

Produced water

4609

Third party sources

8

Comment

Facility reference number

Facility 9

Facility name

Commerce City Refinery

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

80

Brackish surface water/seawater

0

Groundwater - renewable

0

Groundwater - non-renewable

380

Produced water

0

Third party sources

2410

Comment

Facility reference number

Facility 10

Facility name

Montreal Sulphur Plant

Fresh surface water, including rainwater, water from wetlands, rivers and lakes

131

Brackish surface water/seawater

0

Groundwater - renewable

0

Groundwater - non-renewable

0

Produced water

0

Third party sources

29

Comment

W5.1b

(W5.1b) For each facility referenced in W5.1, provide discharge data by destination.

Facility reference number

Facility 1

Facility name

Oil Sands Base Plant

Fresh surface water

7599

Brackish surface water/Seawater

0

Groundwater

0

Third party destinations

0

Comment

Facility reference number

Facility 2

Facility name

In Situ Firebag

Fresh surface water

912

Brackish surface water/Seawater

0

Groundwater

0

Third party destinations

0

Comment

Facility reference number

Facility 3

Facility name

In Situ MacKay River

Fresh surface water

0

Brackish surface water/Seawater

0

Groundwater

0

Third party destinations

0

Comment

Facility reference number

Facility 4

Facility name

Montreal Refinery

Fresh surface water

5060

Brackish surface water/Seawater

0

Groundwater

0

Third party destinations

0

Comment

Facility reference number

Facility 5

Facility name

Sarnia Refinery

Fresh surface water

32735

Brackish surface water/Seawater

0

Groundwater

0

Third party destinations

0

Comment

Facility reference number

Facility 6

Facility name

Fresh surface water

122

Brackish surface water/Seawater

0

Groundwater

0

Third party destinations

0

Comment

Facility reference number

Facility 7

Facility name

Edmonton Refinery

Fresh surface water

1285

Brackish surface water/Seawater

0

Groundwater

0

Third party destinations

0

Comment

Facility reference number

Facility 8

Facility name

Terra Nova FPSO

Fresh surface water

0

Brackish surface water/Seawater

15785

Groundwater

0

Third party destinations

0

Comment

Facility reference number

Facility 9

Facility name

Commerce City Refinery

Fresh surface water

1720

Brackish surface water/Seawater

0

Groundwater

0

Third party destinations

0

Comment

Facility reference number

Facility 10

Facility name

Montreal Sulphur Plant

Fresh surface water

0

Brackish surface water/Seawater

0

Groundwater

0

Third party destinations

0

Comment

W5.1c

(W5.1c) For each facility referenced in W5.1, provide the proportion of your total water use that is recycled or reused, and give the comparison with the previous reporting year.

Facility reference number

Facility 1

Facility name

Oil Sands Base Plant

% recycled or reused

51-75%

Comparison with previous reporting year

Higher

Please explain

In 2017, the extraction recycle rate at the Oil Sands Base Plant was higher than 2016 (2017 91.7% vs. 2016 85.9%). In 2017, Upstream oil sands facilities recovered from the 2016 wild fire impact and production returned to levels seen prior to the fire. The plant operates more efficiently with higher production rates.

Facility reference number

Facility 2

Facility name

In Situ Firebag

% recycled or reused

76-99%

Comparison with previous reporting year

About the same

Please explain

Operations remained consistent with last year.

Facility reference number

Facility 3

Facility name

In Situ MacKay River

% recycled or reused

76-99%

Comparison with previous reporting year

About the same

Please explain

Operations remained consistent with last year.

Facility reference number

Facility 4

Facility name

Montreal Refinery

% recycled or reused

2-10%

Comparison with previous reporting year

About the same

Please explain

Operations remained consistent with last year.

Facility reference number

Please select

Facility name

Sarnia Refinery

% recycled or reused

2-10%

Comparison with previous reporting year

About the same

Please explain

Operations remained consistent with last year.

Facility reference number

Facility 6

Facility name

Renewables - St. Clair Ethanol Plant

% recycled or reused

2-10%

Comparison with previous reporting year

About the same

Please explain

Operations remained consistent with last year.

Facility reference number

Facility 7

Facility name

Edmonton Refinery

% recycled or reused

2-10%

Comparison with previous reporting year

About the same

Please explain

Operations remained consistent with last year.

Facility reference number

Facility 8

Facility name

Terra Nova FPSO

% recycled or reused

None

Comparison with previous reporting year

About the same

Please explain

Operations remained consistent with last year.

Facility reference number

Facility 9

Facility name

Commerce City Refinery

% recycled or reused

2-10%

Comparison with previous reporting year

About the same

Please explain

Operations remained consistent with last year.

Facility reference number

Facility 10

Facility name

Montreal Sulphur Plant

% recycled or reused

None

Comparison with previous reporting year

About the same

Please explain

Operations remained consistent with last year.

W5.1d

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

Water withdrawals – total volumes

% verified

76-100

What standard and methodology was used?

This data is assured by Ernst & Young LLP as part of the publication of Suncor's 2018 Report on Sustainability. Their limited assurance procedures were planned and performed in accordance with the ISAE 3000. Suncor complies with provincial and federal regulatory standards for water monitoring which typically require monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.

Water withdrawals – volume by source

% verified

Not verified

What standard and methodology was used?

This data is not subject to assurance by a third-party independent assurer but does undergo internal review as part of our quality assurance for publication in our Report on Sustainability. Suncor complies with provincial and federal regulatory standards for water monitoring which typically require monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.

Water withdrawals – quality

% verified

Not verified

What standard and methodology was used?

This data isn't subject to assurance by a third-party independent assurer, but does undergo internal review as part of quality assurance. Suncor monitors water withdrawal quality, which is aligned with water discharge effluent parameters. Suncor complies with provincial and federal regulatory standards for water monitoring which typically require monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and boundaries consistent with best practices.

Water discharges – total volumes

% verified

Not verified

What standard and methodology was used?

This data is not subject to assurance by a third-party independent assurer but does undergo internal review as part of our quality assurance for publication in our Report on Sustainability. Suncor complies with provincial and federal regulatory standards for water monitoring which typically require monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.

Water discharges – volume by destination

% verified

Not verified

What standard and methodology was used?

This data is not subject to assurance by a third-party independent assurer but does undergo internal review as part of our quality assurance for publication in our Report on Sustainability. Suncor complies with provincial and federal regulatory standards for water monitoring which typically require monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.

Water discharges – volume by treatment method

% verified

Not verified

What standard and methodology was used?

This data is not subject to assurance by a third-party independent assurer but does undergo internal review as part of our quality assurance for publication in our Report on Sustainability. Suncor complies with provincial and federal regulatory standards for water monitoring which typically require monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.

Water discharge quality – quality by standard effluent parameters

% verified

Not verified

What standard and methodology was used?

This data is not subject to assurance by a third-party independent assurer but does undergo internal review as part of our quality assurance for publication in our Report on Sustainability. Suncor complies with provincial and federal regulatory standards for water monitoring which typically require monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.

Water discharge quality – temperature

% verified

Not verified

What standard and methodology was used?

Water discharge quality temperature is monitored at certain facilities, but is not subject to assurance by a third-party independent assurer.

Water consumption – total volume

% verified

Not verified

What standard and methodology was used?

This data is not subject to assurance by a third-party independent assurer but does undergo internal review as part of our quality assurance for publication in our Report on Sustainability. Suncor complies with provincial and federal regulatory standards for water monitoring which typically require monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.

Water recycled/reused

% verified

Not verified

What standard and methodology was used?

Water recycled/reused volumes are not subject to assurance by a third-party independent assurer, but do undergo internal review as part of our quality assurance for publication in our Report on Sustainability. Suncor complies with provincial and federal regulatory standards for water monitoring which typically require monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.

W6. Governance

W6.1

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

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

W6.1a

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

	Scope	Content	Please explain
Row 1	Company-wide	Description of water-related performance standards for direct operations Company water targets and goals Commitments beyond regulatory compliance Commitment to water-related innovation Commitment to water stewardship and/or collective action Other, please specify (Principles/EHS policy)	In 2007 Suncor established a publicly disclosed sustainability water goal for the corporation. Publicly stated goals are intended to drive changes in work place culture and behaviors when combined with processes for goal translation, goal stewardship, development of water risk assessments and tools; and asset development execution models that include environmental net effect evaluation prior to concept selection. Suncor is currently working to establish a new water goal that builds on our ambition to use water more effectively. We anticipate this to be a multi-year, iterative and collaborative process with indigenous and non-indigenous communities close to our operations. Suncor has a publicly available Environment, Health and Safety policy statement. Suncor also uses four principles to guide our integrated water management approach: 1. Shared value of water 2. Watershed management 3. Reduce-Reuse-Return 4. Integrated options analysis

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) of the individual(s) on the board with responsibility for water-related issues.

Position of individual	Please explain
Other, please specify (Board/ Executive Board)	One of the Board's major duties is to review with management Suncor's mission, objectives and goals and the strategies and plans for achieving them. The Board also monitors Suncor's progress toward its strategic goals and plans, and revises Suncor's direction where warranted. The Board oversees Suncor's Enterprise Risk Management Program (the "ERM Program"). In accordance with this program, the CEO and senior management undertake an entity-wide process to identify, assess and mitigate significant risks. The Board undertakes an annual review of those risks identified by the ERM program as principal environmental risk. The Board monitors risk management actions for these risks throughout the year. In addition to Board oversight of risk management efforts, each principal risk is mapped to a Board Committee. Environmental issues are mapped to the Environment, Health, Safety and Sustainable Development Committee of the Board, and this committee receives quarterly reports from management.
Please select	

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

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance Overseeing acquisitions and divestiture Overseeing major capital expenditures Reviewing and guiding annual budgets Reviewing and guiding business plans Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy Reviewing and guiding corporate responsibility strategy Reviewing innovation/R&D priorities Setting performance objectives	One of the Board’s major duties is to review with management Suncor’s mission, objectives and goals and the strategies and plans for achieving them. The Board also monitors Suncor’s progress toward its strategic goals and plans, and revises Suncor’s direction where warranted. The Board oversees Suncor’s Enterprise Risk Management Program (the “ERM Program”). In accordance with this program, the CEO and senior management undertake an entity-wide process to identify, assess and mitigate significant risks. The Board undertakes an annual review of those risks identified by the ERM program as principal environmental risk. The Board monitors risk management actions for these risks throughout the year. In addition to Board oversight of risk management efforts, each principal risk is mapped to a Board Committee. Environmental issues are mapped to the Environment, Health, Safety and Sustainable Development Committee of the Board, and this committee receives quarterly reports from management. The board is also responsible for ensuring Suncor has an effective strategic planning process, and on an annual basis reviews Suncor’s annual business plan (including Suncor’s annual capital budget) and in doing so endorses the strategies reflected in Suncor’s long range plan. The Governance Committee provides assistance to the Board by annually assessing Suncor’s planning and budgeting process.

(W6.3) Below board level, provide the highest-level management position(s) or committee(s) with responsibility for water-related issues.

Name of the position(s) and/or committee(s)

Chief Sustainability Officer (CSO)

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

More frequently than quarterly

Please explain

The Chief Sustainability Officer (CSO) reports directly to the CEO and President of Suncor. They have a direct link to the Environmental, Health, and Safety and Sustainable Development (EHS&SD) Committee of the Board of Directors. The CSO is the highest-level management position below the board level where the most significant water-related issues ultimately are managed. He has a direct link to the EHS&SD Committee, which is a committee of the Board of Directors. The EHS&SD Committee is in place to monitor the effectiveness and integrity of Suncor's internal controls as they related to operational risks of the corporations physical assets, including water related risk, and other matters of the environment, health, safety and sustainable development. The Committee is also responsible for the review of the policies and practices of the Corporation respecting operational risks.

Name of the position(s) and/or committee(s)

Chief Operating Officer (COO)

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

More frequently than quarterly

Please explain

The Chief Operating Officer (COO) reports directly to the CEO and President of Suncor. He has a direct link to the Environmental, Health, and Safety and Sustainable Development (EHS&SD) Committee of the Board of Directors. The COO is the highest-level management position below the board level where the most significant water-related issues ultimately are managed. The COO would include all water-related issues in operational assessment. He has a direct link to the EHS&SD Committee, which reports to the Board of Directors. The EHS&SD Committee is in place to monitor the effectiveness and integrity of Suncor's internal controls as they related to operational risks of the corporations physical assets, including water related risk, and other matters of the environment, health, safety and sustainable development. The Committee is also responsible for the review of the policies and practices of the Corporation respecting operational risks.

W-FB6.4/W-CH6.4/W-EU6.4/W-OG6.4/W-MM6.4

(W-FB6.4/W-CH6.4/W-EU6.4/W-OG6.4/W-MM6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?

Yes

W-FB6.4a/W-CH6.4a/W-EU6.4a/W-OG6.4a/W-MM6.4a

(W-FB6.4a/W-CH6.4a/W-EU6.4a/W-OG6.4a/W-MM6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues?

	Who is entitled to benefit from these incentives?	Indicator for incentivized performance	Please explain
Monetary reward	Chief Sustainability Officer (CSO) Other, please specify • Other, Facility Managers • Other, Business Unit Managers • Other, Corporate Executive Team	Reduction of water withdrawals Water-related community project	All employees eligible for our annual incentive program are linked to overall corporate and business performance targets including sustainability and environmental metrics. These provide a clear line of sight to Suncor's overall environmental performance. A portion of the total direct compensation of management is provided in variable performance contingent pay designed to reward business performance and increasing shareholder return. Annual incentives are linked to overall corporate and Business Unit performance. An example of this would include Suncor's Oil Sands Base plant set an operational goal to reduce fresh river water withdrawal, which was achieved in 2017. The CSO has also set an annual goal to develop a new enterprise-wide water goal. Suncor is currently working to establish a new water goal that builds on our ambition to use water more effectively. We anticipate this to be a multi-year, iterative and collaborative process with indigenous and non-indigenous communities close to our operations.
Recognition (non-monetary)	Chief Sustainability Officer (CSO) Other, please specify • Other, Facility Managers • Other, Business Unit Managers • Other, Corporate Executive Team	Reduction of water withdrawals Water-related community project	All employees eligible for our annual incentive program are linked to overall corporate and business performance targets including sustainability and environmental metrics. These provide a clear line of sight to Suncor's overall environmental performance. A portion of the total direct compensation of management is provided in variable performance contingent pay designed to reward business performance and increasing shareholder return. Annual incentives are linked to overall corporate and Business Unit performance. An example of this would include Suncor's Oil Sands Base plant set an operational goal to reduce fresh river water withdrawal, which was achieved in 2017. The CSO has also set an annual goal to develop a new enterprise-wide water goal. Suncor is currently working to establish a new water goal that builds on our ambition to use water more effectively. We anticipate this to be a multi-year, iterative and collaborative process with indigenous and non-indigenous communities close to our operations.
Other non-monetary reward	Chief Sustainability Officer (CSO) Other, please specify • Other, Facility Managers • Other, Business Unit Managers • Other, Corporate Executive Team	Reduction of water withdrawals Water-related community project	All employees eligible for our annual incentive program are linked to overall corporate and business performance targets including sustainability and environmental metrics. These provide a clear line of sight to Suncor's overall environmental performance. A portion of the total direct compensation of management is provided in variable performance contingent pay designed to reward business performance and increasing shareholder return. Annual incentives are linked to overall corporate and Business Unit performance. An example of this would include Suncor's Oil Sands Base plant set an operational goal to reduce fresh river water withdrawal, which was achieved in 2017. The CSO has also set an annual goal to develop a new enterprise-wide water goal. Suncor is currently working to establish a new water goal that builds on our ambition to use water more effectively. We anticipate this to be a multi-year, iterative and collaborative process with indigenous and non-indigenous communities close to our operations.

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, funding research organizations
- Yes, other

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?

Suncor uses a process called Strategic Issues Management Process (SIMP) to manage direct and indirect activities seeking to influence policies to ensure they are consistent with our water policy and/or commitments. SIMP is a coordinated, anticipatory approach for identifying, monitoring and managing the key environmental, economic, and social issues considered most critical to Suncor and its external stakeholders.

Suncor's production currently requires water use, and there is global concern about how water is used and managed. The current water focus is on integrated water management (water use, water withdrawal and water return).

SIMP is comprised of subject matter experts, including representation from engineering/scientific knowledge, government relations, Stakeholder and Aboriginal Relations, Policy advisors and Communications experts. Through this forum the SIMP group is able to effectively communicate priority issues and consistently approach them from a policy perspective, while aligning with our internal water policies/commitments. The SIMP Water group meets regularly (bi-monthly), or as needed when water issues emerge.

W7. Business strategy

W7.1

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

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	21-30	Suncor has developed models/ tools used to anticipate future trends in areas such as energy efficiency, water consumption and recycle, air emissions and land disturbance. Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level. Suncor also uses an annual price planning assumption (PPA) process, which summarizes Suncor's rationale for long-run pricing assumptions and is used in the business plan and all economic evaluations. Outlooks for water prices and other economic related factors inform long term business objectives. Our water management focus includes: 1.Optimising water reduction and recycling opportunities while balancing the net environmental impact and associated costs of both 2.Ongoing management of our water from tailings/ management of water in closure activities Suncor's Operational Excellence strategic goals are implemented through the goal setting and business planning processes, through which the organization confirms, adjusts and aligns its business direction. Those processes include review of long term business plans, establishment of capital and operating budgets, and goals translation. The intent is to establish the requirements for setting goals or targets and to develop associated business plans. Implementation of these requirements is intended to assist in ensuring expected contributions, priorities and deliverables are understood and followed throughout the organization.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	21-30	Suncor has developed models/ tools used to anticipate future trends in areas such as energy efficiency, water consumption, air emissions and land disturbance. Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level. Suncor also uses an annual price planning assumption (PPA) process, which summarizes Suncor's rationale for long-run pricing assumptions and is used in the business plan and all economic evaluations. Outlooks for water prices and other economic related factors inform long term business objectives. Our water management focus includes: 1.Optimising water reduction and recycling opportunities while balancing the net environmental impact and associated costs of both 2.Ongoing management of our water from tailings/ management of water in closure activities Suncor's Operational Excellence strategic goals are implemented through the goal setting and business planning processes, through which the organization confirms, adjusts and aligns its business direction. Those processes include review of long term business plans, establishment of capital and operating budgets, and goals translation. The intent is to establish the requirements for setting goals or targets and to develop associated business plans. Implementation of these requirements is intended to assist in ensuring expected contributions, priorities and deliverables are understood and followed throughout the organization.
Financial planning	Yes, water-related issues are integrated	> 30	Suncor has developed models/ tools used to anticipate future trends in areas such as energy efficiency, water consumption, air emissions and land disturbance. Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level. Suncor uses an annual price planning assumption (PPA) process, which summarizes Suncor's rationale for long-run pricing assumptions and is used in the business plan and all economic evaluations out to 2040. Outlooks for water prices and other economic related factors inform long term business objectives. Our water management focus includes: 1.Optimising water reduction and recycling opportunities while balancing the net environmental impact and associated costs of both. 2.Ongoing management of our water from tailings/ management of water in closure activities. Suncor's Operational Excellence strategic goals are implemented through the goal setting and business planning processes, through which the organization confirms, adjusts and aligns its business direction. Those processes include review of long term business plans, establishment of capital and operating budgets, and goals translation. The intent is to establish the requirements for setting goals or targets and to develop associated business plans. Implementation of these requirements is intended to assist in ensuring expected contributions, priorities and deliverables are understood and followed throughout the organization.

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?

	Water-related CAPEX (+/- % change)	Anticipated forward trend for CAPEX (+/- % change)	Water-related OPEX (+/- % change)	Anticipated forward trend for OPEX (+/- % change)	Please explain
Row 1					Suncor's accounting system is not setup organizationally to attribute CAPEX and OPEX figures to water from across the company that meets the definitions provided by CDP in the guidance document. As such, any numbers Suncor would produce would be an estimate subject to significant error and not useful for a year over year comparison.

W7.3

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

	Use of climate-related scenario analysis	Comment
Row 1	Yes	We used three scenarios defined by IHS Markit as the basis for the development of the Suncor corporate wide climate related scenarios. The IHS Markit Autonomy, Rivalry and Vertigo scenarios have been modified to fit our unique circumstances/needs. Suncor has developed models and tools that allow us to understand available water quantity and quality at the local level. This analysis involves risk assessment, sustainability forecasting and some business unit/regional level scenario analysis, which helps inform future business planning. However; these models/tools are being developed to capture basin level projections that would better inform local water risks. Suncor is actively working on understanding and integrating water related scenario analysis in our corporate climate-related scenario analysis, which will help inform business strategy.

W7.3a

(W7.3a) Has your organization identified any water-related outcomes from your climate-related scenario analysis?

No

W7.4

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

Row 1

Does your company use an internal price on water?

Yes

Please explain

Suncor's Operational Excellence strategic goals are implemented through the goal setting and business planning processes, through which the organization confirms, adjusts and aligns its business direction. Those processes include review of long term business plans, establishment of capital and operating budgets, and goals translation. The intent is to establish the requirements for setting goals and targets and to develop associated business plans. Implementation of these requirements is intended to assist in ensuring expected contributions, priorities and deliverables are understood and followed throughout the organization. Suncor uses an annual Price Planning Assumption (PPA) process, which summarizes Suncor's rationale for long-run pricing assumptions and is used in the business plan and all economic evaluations. Suncor is also developing tools that look specifically at the trade-off between water and other environmental issues.

W8. Targets

W8.1

(W8.1) Describe your approach to setting and monitoring water-related targets and/or goals.

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Company-wide targets and goals Business level specific targets and/or goals Site/facility specific targets and/or goals Basin specific targets and/or goals	Targets are monitored at the corporate level Goals are monitored at the corporate level	Suncor is currently in the process of developing a new water goal. We met our target for the previous corporate Water Goal. Site and/or facility level targets/goals are influenced by Canada's oil Sands Innovation Alliance (COSIA) for Oil Sands and In Situ projects. Technologies and innovative ideas are generated through COSIA that are specific to water to increase efficiency across the oil and gas industry. (https://www.cosia.ca/initiatives/water) Basin specific targets and goals are addressed through multi-stakeholder working groups that Suncor is a part of the Lower Athabasca Regional Plan (LARP), including the Athabasca Watershed Council.

W8.1a

(W8.1a) Provide details of your water targets that are monitored at the corporate level, and the progress made.

Target reference number

Target 1

Category of target

Water withdrawals

Level

Site/facility

Primary motivation

Water stewardship

Description of target

Suncor's Oil Sands Base plant set an operational goal to reduce fresh river water withdrawal. River Water import to the site is very influential to overall tailings containment and the business objective to reduce fresh water withdrawal, which was achieved in 2017.

Quantitative metric

% reduction of water withdrawals from surface water

Baseline year

2015

Start year

2017

Target year

2017

% achieved

100

Please explain

Suncor Oil Sand Base plant set out two key areas of opportunity for reducing fresh river water intake in the reporting year. Both projects were completed and are delivering full benefit. Fresh water consumption at Oil Sands Base Plant reduction in 2017 is due to a focus on optimizing our wastewater recycle. This included modifications and improvements to our industrial wastewater system that were implemented in 2017. The fresh water consumption in 2016 increased due to the forest fires impacting the industrial recycle rates and the unplanned Upgrader 2 turnaround 2016 was also extended by more than one month due to the forest fires.

W8.1b

(W8.1b) Provide details of your water goal(s) that are monitored at the corporate level and the progress made.

Goal

Other, please specify (Reducing fresh water consumption)

Level

Company-wide

Motivation

Water stewardship

Description of goal

We committed to reducing our company-wide fresh water consumption by 12% by 2015 (as compared to 2007).

Baseline year

Start year

End year

Progress

Suncor strives to continuously improve our water performance. We successfully met that goal with fresh water consumption 27% lower than our 2007 usage in 2015.

Goal

Other, please specify (Improving water use efficiency)

Level

Business activity

Motivation

Water stewardship

Description of goal

Suncor is working with Canadian Oil Sands Innovation Alliance (COSIA) to achieve the COSIA water goals. The first goal is to reduce freshwater use intensity by 50 per cent by 2022 for in situ projects.

Baseline year

2012

Start year

2012

End year

2022

Progress

There are a number of areas COSIA members are focusing on to deliver this 50% reduction: 1. Improving water treatment processes. 2. Improving steam generation efficiency. 3. Reducing boiler blowdown waste and improving disposal techniques.

Goal

Other, please specify (Improving water use efficiency)

Level

Business activity

Motivation

Water stewardship

Description of goal

Suncor is working with Canadian Oil Sands Innovation Alliance (COSIA) to achieve the COSIA water goals. The second goal is to reduce the net water use intensity from the Athabasca River and its tributaries by 30 per cent by 2022 for mining projects. This 30 per cent reduction is intended to be achieved while adhering to sustainable water management principles of 'reduce-reuse-return' for all mine sites.

Baseline year

2012

Start year

2012

End year

2022

Progress

This 30% reduction is intended to be achieved while adhering to sustainable water management principles of 'reduce-reuse-return' for all mine sites, more specifically: 1. Optimising water reduction and recycling opportunities while balancing the net environmental impact and associated costs of both. 2. Reducing the amount of water retained in tailings. 3. Confirming the technical basis for returning treated water to the Athabasca River while meeting all environmental and regulatory requirements. 4. Understanding and managing the cumulative effects on the Athabasca River watershed. 5. Further improving the knowledge and understanding of pit lakes. 6. Specific challenges and opportunities – Salts.

W9. Linkages and trade-offs

W9.1

(W9.1) Has your organization identified any linkages or tradeoffs between water and other environmental issues in its direct operations and/or other parts of its value chain?

Yes

W9.1a

(W9.1a) Describe the linkages or tradeoffs and the related management policy or action.

Linkage or tradeoff

Tradeoff

Type of linkage/tradeoff

Increased GHG emissions

Description of linkage/tradeoff

Increased water recycling and a smaller water footprint could lead to more complex water treatment unit processes, which would cause higher energy usage and increased GHG emissions. These could be quantified via emissions reporting.

Policy or action

Suncor includes requirements as part of its asset development execution model to consider net environmental effects as well as potential social impact of development options. The objective is to have environment, social and economics considered prior to concept selection. Water quality/quantity, energy/GHG, air emissions, waste, land impacts/risks are part of the evaluation. There has not been a change in the measured impact of the trade-off in the reporting year.

Linkage or tradeoff

Tradeoff

Type of linkage/tradeoff

Other, please specify (Increased maintenance/reliability costs)

Description of linkage/tradeoff

Increased water recycling could degrade circulating water quality leading to increased scaling and corrosion rates and potentially operating performance, and increased maintenance and reliability costs.

Policy or action

Suncor includes requirements as part of its asset development execution model to consider net environmental effects as well as potential social impact of development options. The objective is to have environment, social and economics considered prior to concept selection. Water quality/quantity, energy/GHG, air emissions, waste, land impacts/risks are part of the evaluation. There has not been a change in the measured impact of the trade-off in the reporting year.

Linkage or tradeoff

Tradeoff

Type of linkage/tradeoff

Increased energy use

Description of linkage/tradeoff

Using saline water for oil sands and in situ water makeup requirement could result in reduced water efficiency, increased volume of wastewater disposal, overall higher energy use and increased land disturbance for well and pipeline infrastructure.

Policy or action

Suncor includes requirements as part of its asset development execution model to consider net environmental effects as well as potential social impact of development options. The objective is to have environment, social and economics considered prior to concept selection. Water quality/quantity, energy/GHG, Air emissions, waste, land impacts/risks are part of the evaluation. There has not been a change in the measured impact of the trade-off in the reporting year.

Linkage or tradeoff

Tradeoff

Type of linkage/tradeoff

Increased wastewater treatment

Description of linkage/tradeoff

The need for water return leads to an increase in wastewater treatment. Wastewater treatment allows for water to be returned to the source, but requires a significant amount of energy.

Policy or action

Suncor includes requirements as part of its asset development execution model to consider net environmental effects as well as potential social impact of development options. The objective is to have environment, social and economics considered prior to concept selection. Water quality/quantity, energy/GHG, Air emissions, waste, land impacts/risks are part of the evaluation. There has not been a change in the measured impact of the trade-off in the reporting year.

W10. Verification

W10.1

(W10.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1d)?

No, we do not currently verify any other water information reported in our CDP disclosure

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.

[Advisories] Forward-Looking Statements: These responses contain certain forward-looking statements and forward-looking information (collectively, forward-looking statements) based on Suncor's current expectations, estimates, projections and assumptions that were made by Suncor in light of information available at the time these responses were prepared. Some of the forward-looking statements may be identified by words like "expected", "will", "estimated", "could", "anticipates", "intended", "may", "forecast", "potential", "strategy", "goal", "objective", "outlook", "target" and similar expressions. Forward-looking statements in these responses include references to: Suncor's models and tools to anticipate future trends and sustainability planning forecast; Suncor's goal to improve environmental performance; Suncor's work to establish a new water goal and the timing thereof, and Suncor's ambition to use water more effectively; the expectation that continued monitoring of the watersheds in which Suncor operates will help the company adapt and continue to take appropriate actions to reduce its water footprint; Suncor's goal of capturing the largest water-related issues early and launching appropriate mitigation; Suncor's pilot project to assess supply chain risks and opportunities; the next phase of sustainability integration into Suncor's business; potential impacts of regulations; potential impact of water risks to the company's business, including the potential timing, financial impact and cost to respond; Suncor's strategies, plans and focuses relating to water; expectations relating to technologies, including potential benefits; Suncor's water management focus; Suncor striving to continuously improve water performance; and COSIA's water goals and focus. Forward-looking statements are not guarantees of future performance and involve a number of risks and uncertainties, some that are similar to other oil and gas companies and some that are unique to our company. Suncor's actual results may differ materially from those expressed or implied by our forward-looking statements and you are cautioned not to place undue reliance on them. Suncor's Management's Discussion & Analysis for the second quarter of 2018 and its most recently filed Annual Information Form/Form 40-F, Annual Report to Shareholders and other documents it files from time to time with securities regulatory authorities describe the risks, uncertainties, material assumptions and other factors that could influence actual results and such factors are incorporated herein by reference. Copies of these documents are available without charge from Suncor or by referring to the company's profile on SEDAR at sedar.com or EDGAR at sec.gov. Except as required by applicable securities laws, Suncor disclaims any intention or obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. BOEs: Certain natural gas volumes have been converted to barrels of oil equivalent (boe) on the basis of one barrel to six thousand cubic feet. Any figure presented in boe may be misleading, particularly if used in isolation. A conversion ratio of one barrel of crude oil or natural gas liquids to six thousand cubic feet of natural gas is based on an energy equivalency conversion method primarily applicable at the burner tip and does not necessarily represent a value equivalency at the wellhead. Given that the value ratio based on the current price of crude oil as compared to natural gas is significantly different from the energy equivalency of 6:1, utilizing a conversion on a 6:1 basis may be misleading as an indication of value.

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	Director in Outreach and Disclosure at Suncor Energy.	Environment/Sustainability manager

W11.2

(W11.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].

No

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	Public or Non-Public Submission	I am submitting to
I am submitting my response	Public	Investors

Please confirm below

I have read and accept the applicable Terms