## Welcome to your CDP Water Security Questionnaire 2019

### **W0.** Introduction

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

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

Husky Energy Inc. ("Husky" or the "Company") is an integrated energy company based in Calgary, Alberta and its common shares are publicly traded on the Toronto Stock Exchange under the symbol HSE. The Company operates in Canada, the United States and the Asia Pacific region with Upstream and Downstream business segments.

#### W-CH0.1a

#### (W-CH0.1a) Which activities in the chemical sector does your organization engage in?

Bulk organic chemicals

#### 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, 2018	December 31, 2018

### W<sub>0.3</sub>

#### (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?

Yes

### W0.6a

#### (W0.6a) Please report the exclusions.

Exclusion	Please explain
Asia Pacific Operations	Water data for this region is not currently consolidated at the corporate level. Water withdrawals and discharges at Husky-operated Asia Pacific activities (drilling and completions) are expected to be immaterial to the Company's overall water metrics.
Retail Operations	Retail operations are a mix of corporate and franchised locations. Water withdrawals and discharges at these facilities are expected to be immaterial to the Company's overall water metrics.
Rainwater, domestic use	These sources are not consistently tracked and are therefore not included for the purpose of consistency. Domestic and rainwater consumption are expected to be immaterial to overall water consumption.
Divested facilities	Water data is not accounted for after operational control has been transferred.

## **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	Good quality freshwater is an integral part of Husky's onshore operations and facilities. It is used in operational processes where alternatives are not feasible or economic, and therefore it is vital. Upstream, the Company's primary use of freshwater is at its thermal projects in Saskatchewan. The primary downstream uses of freshwater are at the Lima Refinery and the Husky Lloydminster Upgrader. Freshwater dependency is expected to decrease in the future for the Lima Refinery, remain steady at the Husky Lloydminster Upgrader, and increase at the Saskatchewan thermal projects where overall production will also increase. Freshwater is also important to Husky's indirect operations. The Company accounts for freshwater used by contractors conducting indirect drilling and completion operations – these sources are important to executing exploration and development. Freshwater volumes for onshore drilling and completions are expected to remain steady over the next several years as Husky executes its development plan.
Sufficient amounts of recycled, brackish and/or produced water available for use	Vital	Important	Recycled, brackish, and produced water is used in a variety of processes at Husky including offshore and onshore production. The largest user of recycled industrial water is the Sunrise Energy Project, of produced water are Sunrise and the Tucker Thermal Projects, and of brackish water are the offshore Atlantic operations and the onshore Tucker Thermal Project. These water sources are considered vital and are being utilized as the best alternative. Non-freshwater use is expected to remain consistent for future Husky operations, except at the Lima Refinery where it is expected to increase when a new water recycle process is brought online in 2019. Contractors conducting indirect completions operations use recycled produced water and flowback water to supplement water source needs for hydraulic fracturing, and therefore this water is important to indirect operations. These volumes are expected to remain steady over the next year.

## 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	76-99	Husky uses its Environmental Performance Reporting System (EPRS) to organize and store water withdrawal volumes for compliance, corporate reporting and to inform water management. Water withdrawal volumes for upstream, downstream, and chemical processes are collected via SCADA interface or operator input to corporate data systems on, at minimum, a daily basis and are stored in the EPRS system on a monthly basis. Water withdrawal volumes for drilling, completion, and construction activities are tracked at the site level on a daily basis, and input to corporate data systems by site representatives.
Water withdrawals – volumes from water stressed areas	76-99	Husky uses its Environmental Performance Reporting System (EPRS) to organize and store water withdrawal volumes, in both water stressed and non-water stressed areas, for compliance, corporate reporting and to inform water management. Water withdrawal volumes for upstream, downstream, and chemical processes are collected via SCADA interface or operator input to corporate data systems on at minimum a daily basis and are stored in the EPRS system on a monthly basis. Water withdrawal volumes for drilling, completion, and construction activities are tracked at the site level on a daily basis, and input to corporate data systems by site representatives.
Water withdrawals – volumes by source	76-99	The source of water is tracked for each water withdrawal recorded, at the same frequency (this may be at minimum a daily or monthly frequency). If a water source changes, methods are in place to update automated data systems with the correct water source. Where water volumes are input manually, the water source is required with each volume entry, which is tracked on a daily basis.
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	100	Produced water volumes are collected in Husky's corporate data system. Volumes are collected via SCADA interface or operator input, on at minimum a daily basis.
Water withdrawals quality	1-25	Water quality is measured at the water source selection stage of a project to guide water management decisions, identify regulatory requirements, and process design. Following that, source water quality is monitored on an ongoing basis if there is a process need or a regulatory need, with varying frequency. Regulatory needs are typically on an annual basis.
Water discharges – total volumes	76-99	Husky uses its Environmental Performance Reporting System (EPRS) to organise and store water discharge volumes for compliance, corporate reporting and to inform water management. Water

		discharge volumes for upstream and downstream processes are collected via SCADA interface or operator input to corporate data systems on, at minimum, a daily basis and stored in EPRS on a monthly basis. Water discharge volumes for drilling, completion, and construction activities are tracked at the site level on a daily basis, and input to corporate data systems by site representatives.
Water discharges – volumes by destination	76-99	The destination of water is tracked for each water discharge recorded, at the same frequency that the discharge volume is recorded (at minimum, a daily or monthly basis). Where water discharge volumes are input manually, the discharge destination is required with each volume entry.
Water discharges – volumes by treatment method	100	Husky treats water that is discharged from its facilities into regulated water bodies. Discharged treated water is tracked at the facilities on, at minimum, a daily basis and volumes are stored in EPRS on a monthly basis. The remaining water discharges are to deep well disposal and have minimal to no treatment following oil separation.
Water discharge quality – by standard effluent parameters	76-99	Husky has several facilities that discharge water to regulated surface water. These facilities manage water data quality and frequency according to their regulatory requirements. Some non-regulated parameters are also measured for the purposes of treatment system operation but are not reported externally.
Water discharge quality – temperature	76-99	Husky has several facilities that discharge water to regulated surface water. These facilities manage water data quality parameter measurements and frequency according to their regulatory requirements. Some non-regulated parameters are also measured for the purposes of treatment system operation but are not reported externally.
Water consumption – total volume	76-99	Water data for withdrawal and discharge volumes are tracked in Husky data systems on a minimum daily basis and are stored in EPRS on a monthly basis. These are used to determine water consumption.
Water recycled/reused	76-99	Husky tracks use of recycled water at thermal production facilities, conventional oil facilities, and in drilling and completion operations. Recycled water volumes for upstream and downstream processes are collected via SCADA interface to corporate data systems on at minimum a daily basis and are stored monthly EPRS. Water recycle volumes for drilling, completion, and construction activities are tracked at the site level on a daily job basis, and input to corporate data systems by site representatives.
The provision of fully-functioning, safely managed WASH services to all workers	100	Husky provides Water, Sanitation, and Hygiene (WASH) services for all workers, in accordance with Occupational Health and Safety requirements in all of its operating areas.

### 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	110,195	Lower	This volume primarily decreased due to divestment of conventional upstream assets in Western Canada where produced water volumes were high. This volume is expected to decrease in the next year with the implementation of a water recycling facility at the Lima Refinery, and increase in the next few years with the start up of new thermal facilities in Saskatchewan.
Total discharges	102,577	Lower	This volume primarily decreased due to divestment of conventional upstream assets in Western Canada where groundwater disposal volumes were high. This volume is expected to remain steady in the next few years with the decrease in discharge at the Lima Refinery (due to recycle) being offset by the start of new thermal facilities in Saskatchewan which have deep well disposal volumes.
Total consumption	7,617	Lower	This volume primarily decreased due to divestment of conventional upstream assets in Western Canada. This volume is expected to decrease in the next year with the implementation of a water recycle facility at the Lima Refinery, and increase in the next few years after that with the start of new thermal facilities in Saskatchewan.

### 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 -	98,498	Lower	Reduction primarily due to divestment of some upstream conventional assets in
upstream			Western Canada that had large produced water volumes. This volume is expected to
			increase in the next few years with the start of new thermal facilities in Saskatchewan.

Total discharges – upstream	94,874	Lower	Reduction primarily due to divestment of some upstream conventional assets in Western Canada that had large injection volumes. This volume is expected to increase in the next few years with the start of new thermal facilities in Saskatchewan.
Total consumption – upstream	3,624	Much higher	Increased primarily due to divestment of some upstream conventional assets in Western Canada that had large injection volumes (included in discharge) relative to withdrawal volumes. The consumption value is only about 5% of withdrawals and discharges, so the percent change in consumption is more influenced by minor changes in either of these values. This volume is expected to increase in the next few years with the start of new thermal facilities in Saskatchewan.
Total withdrawals - downstream	10,614	Lower	Reduction primarily due to decreased withdrawal at the Lima Refinery associated with decreased throughput. Future downstream withdrawal volumes are expected to decrease as the water recycling facility at Lima becomes fully operational.
Total discharges – downstream	7,704	Higher	Increase primarily due to higher discharge at the Lima Refinery. Future downstream withdrawal volumes are expected to decrease as the water recycling facility at Lima becomes fully operational.
Total consumption – downstream	2,911	Much lower	Reduction primarily due to the Lima Refinery where withdrawals decreased (associated with decreased throughput) and discharges increased. Future downstream consumption volumes are expected to decrease as the water recycling facility at Lima becomes fully operational.

## W-1.2d

## (W-1.2d) Provide the proportion of your total water withdrawals sourced from water stressed areas

% withdrawn	Comparison with previous	Identification tool	Please explain
from stressed	year		
areas			
0.33%	About the same	WRI Aqueduct	Assessed using the WRI Aqueduct Physical Risk Quantity map. Husky defined "stressed areas" as areas with high to extremely high physical risk quantity on this map. The calculation includes freshwater withdrawals only in the numerator and denominator. This is Husky's second year of measurement against the Aqueduct Physical Risk criteria. Husky updated the method of assessing this value in 2018, and therefore the comparison with the previous year reflects how this number compares relative to the value for 2017 obtained

	using the updated methodology. Previous assessments (prior to 2017) were based
	primarily on local regulatory designations of water quantity risk.

## W-1.2h

### (W-1.2) Provide total water withdrawal by data source

Source	Relevance	Volume (megaliters/ year)	Comparison with previous reporting year	Please Explain
Fresh surface water, including rainwater, water from wetlands, rivers and lakes	Relevant	27,042	About the same	Husky's withdrawals from fresh surface water bodies are critical to operations, and highly regulated. In addition to meeting regulatory compliance, measurement of these volumes informs Husky's water management decisions. Volumes remained approximately the same because assets acquired or divested did not withdraw significant volumes of fresh surface water, and no major process changes were implemented where assets use fresh surface water. This volume is expected to increase in the next few years with the planned start up of new thermal plants in Saskatchewan.
Brackish surface water/seawater	Relevant	14,873	About the same	Husky seawater withdrawals are critical to offshore operations, where produced water is limited and there is no other accessible water source. Measurement of this volume informs ongoing offshore water management. The 2018 volume remained about the same due to offsetting trends of increased cooling and decreased injection due to the <i>SeaRose</i> floating production, storage and offloading (FPSO) vessel being shut-in for a period in 2018. These volumes are expected to remain relatively steady, however it is difficult to predict the cooling requirements.
Groundwater- renewable	Relevant	4,130	Lower	Husky groundwater withdrawals are critical to operations. For example, the Tucker Thermal Project sources brackish water from a deep groundwater aquifer. In addition to meeting regulatory compliance, measurement of these volumes informs Husky's water management decisions. The overall volume of groundwater withdrawal decreased with less groundwater (about 1 million m³) being used for both downstream and upstream operations and drilling. This volume is not expected to change significantly in the next few years based on Husky's current development plans. Groundwater is obtained from aquifers at depths ranging from 4 m to 650 m, with varying water quality from fresh to saline. Due to the variation in definition of renewable versus non-renewable, all groundwater withdrawals are reported as renewable.

Groundwater- non- renewable	Relevant	0	About the same	Groundwater is obtained from aquifers at depths ranging from 4 m to 650 m, with varying water quality from fresh to saline. Due to the variation in definition of renewable versus non-renewable, all groundwater withdrawals are reported as renewable.
Produced water	Relevant	63,692	Much lower	Produced water is inherent to the extraction of hydrocarbons, and its measurement enables regulatory compliance and informs water management. For example, produced water is important to Husky's operations at the Sunrise Energy Project, Tucker Thermal Project, and at the Wainwright Waterflood Project, all of which use produced water for oil production. This value is much lower in 2018 resulting from divestment of some conventional assets in Western Canada where produced water withdrawals were significant. This volume is expected to increase in the next few years with the start up of new thermal projects in Saskatchewan.
Third party sources	Relevant	458	About the same	Third-party sources are important to Husky's operations, and measurement of the volume supports water management. This value represents wastewater obtained from another operator for use at the Sunrise Energy Project. This volume remained about the same in 2018 when operationally, oil production increased, and recycled volumes also increased (therefore reducing the source water intensity). This volume is expected to remain steady over the next few years.

## W-1.2i

## (W-1.2i) Provide total water discharge data by destination

Destination	Relevance	Volume (megaliters /year)	Comparison with previous reporting year	Please explain
Fresh surface water	Relevant	5,219	Higher	Discharge to fresh surface water is highly regulated. The largest volume of discharge to surface water for Husky occurs at the Lima Refinery. Volumes increased in 2018 in part due to a longer operating period for the Superior Refinery as compared to 2017. Volumes are expected to decrease in 2019 due to the start up of the water recycling facility at the Lima Refinery.
Brackish surface water/seawater	Relevant	14,032	Higher	Some volumes of discharged seawater are regulated for Husky's offshore Atlantic operations. Volumes are tracked for regulatory compliance and to inform water management decisions. There was an increase in the amount of seawater withdrawn and discharged at Husky's offshore operations, due to a normal variation in equipment cooling requirements.

				This volume is expected to increase in several years when the West White Rose Project comes on production.
Groundwater	Relevant	83,326	Much lower	Measurement of water volumes disposed of in deep groundwater formations are critical to many upstream projects, including the Saskatchewan thermal projects, Sunrise Energy Project, and the Tucker Thermal Project. Volumes are tracked for regulatory compliance and to inform water management, in particular, water reuse opportunities. The decrease in 2018 is primarily due to a decrease in disposal volumes resulting from divestment of some upstream conventional assets in Western Canada. This volume is expected to increase in the next few years, reflecting new thermal projects in Saskatchewan and new deep well disposal at the Lima Refinery.
Third-party destination	Not relevant	<not applicable=""></not>	<not applicable=""></not>	Less than 1% of Husky's upstream operational wastewater is sent to a third party for deep well disposal. This volume is not accounted for and is offset by wastewater Husky receives from other operators, which are included in overall discharge volumes.

# 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	26-50	About the same	Husky's recycling of produced water at two of its thermal operations results in a reduction in the use of fresh groundwater, industrial wastewater, and brackish groundwater. Husky's recycling of flowback water at hydraulic fracturing sites reduces the use of fresh surface and groundwater. Husky does not consistently track recycle volumes at downstream facilities. Husky anticipates this value will remain steady or decrease over the next few years, based on the start-up of planned thermal projects in Saskatchewan.

## 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?

Business division	% recycled or reused	Comparison with previous reporting year	Please explain
Upstream	26-50	About the same	Husky's recycling of produced water at two of its thermal operations results in a reduction in the use of fresh groundwater, industrial wastewater, and brackish groundwater. Husky's recycling of flowback water at hydraulic fracturing sites reduces the use of fresh surface and groundwater. Husky anticipates this value will remain steady or decrease over the next few years, based on the start-up of planned thermal projects in Saskatchewan.
Downstream	Less than 1%	About the same	The percentage of water reused or recycled in Husky's downstream operations remained about the same in 2018 because there were no significant process changes or expansions at downstream facilities. Husky does not consistently track internal water recycling such as steam condensate recycle at its downstream facilities. Husky anticipates this value to increase significantly over the next few years as a new water recycling facility is commissioned at the Lima Refinery.
Chemicals	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Other	<not applicable&gt;</not 	<not applicable=""></not>	<not applicable=""></not>

### W-CH1.3

(W-CH1.3) Do you calculate water intensity for your activities in the chemical sector?  $_{\rm Yes}$ 

### W-CH1.3a

(W-CH1.3a) For your top five products by production weight/volume, provide the following water intensity information associated with your activities in the chemical sector.

Product type	Product name	Water intensity value	Numerator: Water aspect	Denominator: Unit of production	Comparison with previous reporting year	Please explain
Bulk organic chemicals	Fuel Ethanol	3.6	Freshwater withdrawals	m3	About the same	The intensity of water withdrawal to fuel ethanol produced is relatively consistent year to year and remained about the same due to consistent production. The water intensity value is used to confirm water process efficiency. The intensity is represented as m³ water withdrawn/m³ fuel ethanol produced. Water intensity for ethanol production is expected to remain relatively consistent throughout the next few years.

## W-OG1.3

(W-OG1.3) Do you calculate water intensity for your activities associated with the oil & gas sector?  $_{\rm Yes}$ 

## W-OG1.3a

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

Business division	Water intensity value			Comparison with previous reporting year	Please explain
Upstream	1.09	Total freshwater withdrawals	Other, please specify (m³ of oil equivalent production)	About the same	Husky uses fresh water intensity metrics on a project basis to assess fresh water efficiency and to inform water management. This is also tracked and assessed annually through the Husky Operational Integrity Management System (HOIMS) Environmental Reporting and Action Planning initiative and through the Water Management Critical Competency Network. The intensity is represented as m³ water withdrawn/ m³ oil equivalent production. The intensity remained relatively consistent as there were no major water efficiency initiatives implemented at operations using freshwater. This value may increase in the next few years with the addition of new

Business division	Water intensity value		Denominator: unit of production	Comparison with previous reporting year	Please explain
					thermal projects in Saskatchewan. Husky is assessing technologies that could improve freshwater efficiency in thermal operations to mitigate this increase. Husky's main focus on freshwater withdrawal reductions is in downstream operations, specifically the Lima Refinery where a new water recycling process is being implemented.
Downstream	0.68	Total freshwater withdrawals	Other, please specify (m³ of crude oil throughput)	About the same	Husky uses fresh water intensity metrics on a facility basis to assess fresh water efficiency. This value is typically steady at Husky's refineries and upgrader, except when major process changes are made that impact water use. The metric is assessed annually through the Water Management Critical Competency Network. The intensity is represented as m³ water withdrawn/ m³ oil throughput. The 2017 downstream intensity value was incorrect; the corrected value for 2017 is 0.68, which is the same as the 2018 value. The intensity was about the same as there was no major process change made at downstream facilities that would impact freshwater intensity. The downstream freshwater intensity value will decrease with implementation of a water recycling process at the Lima Refinery in 2019.

## W1.4

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

Yes, our suppliers

Yes, our customers or other value chain partners

### W1.4a

(W1.4a) What proportion of suppliers do you request to report on their water use, risks and/or management information and what proportion of your procurement spend does this represent?

#### Row 1

#### % of suppliers by number

1-25% (100% of new suppliers)

### % of total procurement spend

4.7%

#### Rationale for this coverage

Husky uses a supplier pre-qualification and qualification questionnaire that requires all new suppliers to submit their company sustainability information for Husky's review. In the questionnaire, suppliers are asked whether they disclose their water-related information specifically to CDP.

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

Impact: In the questionnaire, suppliers are asked whether they disclose their water-related information specifically to CDP. They are also asked if they comply with all applicable environmental laws and regulations, which include water-related regulations within their jurisdiction. Suppliers become aware that Husky is interested in their water management disclosure related to their operations. The company uses the information to understand the Environmental, Social and Governance (ESG) maturity of potential suppliers.

Measure of success: New suppliers completing the questionnaire.

#### Comment

100% of new suppliers contracted in 2018.

4.7% = new suppliers contracted in 2018, over 2018's total procurement spend.

### W1.4b

(W1.4b) Provide details of any other water-related supplier engagement activity.

### Type of engagement

Onboarding & compliance

#### **Details of engagement**

Requirement to adhere to our code of conduct regarding water stewardship and management

#### % of suppliers by number

1-25

#### % of total procurement spend

1-25

#### Rationale for the coverage of your engagement

Husky focuses on supply chain aspects that have the most immediate potential to impact water, such as hauling services that convey fluids to and from Husky facilities.

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

Impact: Suppliers become aware that Husky has environmental stewardship requirements.

Measure of success: Reduced incidents impacting water that are related to hauling.

#### Comment

### W1.4c

#### (W1.4c) What is your organization's rationale and strategy for prioritizing engagements with customers or other partners in its value chain?

Husky undertakes several water related initiatives endorsed through its Corporate Water Standard, such as contributing to joint industry value chain water management initiatives and water research. For example, at the Sunrise Energy Project, Husky collaborates with nearby oil sands operators on water recycling processes. Specifically, Husky uses process affected water (PAW) from one operator's tailings ponds, and basal McMurray groundwater that is in contact with bitumen mined by the operation of an adjacent oil sands mining project. This initiative demonstrates excellent collaboration with nearby operators. The agreements that have been put in place are mutually beneficial to the operators involved. This project won the Husky CEO Award of Excellence for Corporate Responsibility. Husky prioritizes water stewardship engagement with value chain partners where there is a major risk posed by exposure to regulatory changes, water quality and water quantity issues. Success of these engagements is measured by meeting regulatory obligations, disposal limitations and stakeholder commitments.

# **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	basin	Type of impact driver	Primary impact driver	Primary Impact	Description of impact	Primary Response	Total financial impact	Description of response
United States of America		Reputation and markets	Increased stakeholder concern or negative stakeholder feedback	to adopt/deploy new	In April 2018, an incident at the Superior Refinery resulted in the use of aqueous film forming foam (AFFF) to extinguish a fire. The AFFF contained Perfluorooctane sulfonate (PFOS) and Perfluorooctanoic acid (PFOA) compounds, which was collected in surface runoff water at the site. The Company is proactively treating runoff water to remove AFFF. The impact was not substantive in cost based on the Husky Corporate Risk Matrix.	Water-related capital expenditure	2,700,000	Emergency Response was activated and regulatory authorities and potential local stakeholders were notified when the incident occurred. Offsite discharge of impacted water was rapidly contained and collected for treatment. Regulatory authorities were notified immediately, and potential local stakeholders were notified. The refinery has been shut in and is being rebuilt. Water treatment has been proactively implemented to remove AFFF from runoff water. Water samples collected from Newton Creek post-incident are comparable to baseline samples collected prior to the incident under normal operating conditions where there are trace amounts of PFOS and PFOA. Estimated financial impact primarily results from water treatment system design, installation, and operation, and environmental monitoring for 2018. Partially as a result of this incident, Husky is reassessing preferred AFFF products for facilities.
Canada	Atlantic Ocean	Physical	Pollution Incident	Reduciton or disruption in production capacity	In November 2018, during the re-start of the SeaRose FPSO following a shut-down, a flowline connector failure resulted in the release of 250 m³ of oil into the ocean. Husky shut down operations, isolated the cause and immediately commenced delineation and remediation efforts.	Pollution abatement and control measures	N	Emergency Response was activated and regulatory authorities and potential local stakeholders were notified when the leak was identified. The SeaRose FPSO was shut in for the balance of the year and into 2019 to prevent further leakage and a delineation and spill recovery program was conducted. Production resumed in 2019 after the flowline was repaired. The financial impact was not material.
Canada	North Saskatche wan	Physical	Pollution incident	Impact on company assets	In July 2018, a release of produced water was detected from a Husky pipeline in Saskatchewan, resulting in produced water entering the Englishman River. Husky isolated the pipeline and commenced delineation and remediation efforts, including extensive land excavation and monitoring of the river. The impact was not substantive in cost, based on Husky Corporate Risk Matrix.	Pollution abatement and control measures	8,500,000	Emergency Response was activated and regulatory authorities and potential local stakeholders were notified when evidence of the leak was identified. The pipeline was shut in to prevent further leakage and a delineation and remediation program began immediately to address impacted soil, groundwater and impacts to the Englishman River. The pipeline was repaired and tested prior to recommissioning. Estimated financial impact includes response and remediation costs.
Canada		Reputation and markets	Increased stakeholder concern or negative stakeholder feedback	to	In October 2018, an incident at the Winnipeg Pounders Emulsion Facility resulted in the use of aqueous film forming foam (AFFF) to extinguish a fire. The AFFF contained Perfluoroalkyl Substances (PFAS), which was collected in surface runoff water at the site. Remediation efforts have been under way to address impacted soil and surface runoff. The impact was not substantive in cost, based on Husky Corporate Risk Matrix.	Water-related capital expenditure	1,000,000	Emergency Response was activated and regulatory authorities and potential local stakeholders were notified when the incident occurred. A delineation and remediation effort began to address impacted soil and surface runoff. Runoff water with AFFF was proactively shipped to disposal or treated onsite. Estimated financial impact includes surface water management costs for 2018-2019. Partially as a result of this incident, Husky is reassessing preferred AFFF products for facilities.
Canada	North Saskatche wan River	Physical	Flooding	Impact on company assets	In spring 2018 ice jams caused flooding and eventual ice block flow on the shoreline, damaging some of Husky's water source infiltration wells. The impact was not substantive in cost, based on Husky Corporate Risk Matrix.	Water-related capital expenditure	250,000	As a result of the spring flooding, a water source well had to be decommissioned.  Numerous other water source wells and related equipment required repair. The cost of these activities from the financial impact.

### 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?

Yes, fines Other – regulatory suspension

### W2.2a

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

Total number of fines	Total value of fines	% of total facilities/operations associated	Number of fines compared to previous reporting year	Comment
15	\$7500	0.04	Higher	The Lima Refinery had 15 violations.  Procedures have been put in place to ensure the violations were addressed and remedied.  Background for the % metric: Based on the Corporate Responsibility definition, there are 2,365 facilities across the Company, ranging from single well batteries to large complex refineries.

W2.2b Provide details for all significant fines, enforcement orders, and/or penalties for water-related regulatory violations in the reporting year, and your plans for resolving them.

Type of penalty	Financial value of penalty	Country/Region	River basin	Type of incident	Description of penalty, incident, regulatory violation, significance and resolution
Other – Regulatory Suspension	-	Canada	Atlantic Ocean	Other:Failure to follow Ice Management Plan	Production operations on the SeaRose FPSO vessel were suspended for nine days in 2018. This was a regulatory suspension resulting from the Company failing to follow its Ice Management Plan during an ice incursion incident in 2017.  The Company addressed findings to the satisfaction of regulators, including conducting a comprehensive review of ice management and emergency response plans with improvements made.

### **W3. Procedures**

#### W-CH3.1

(W-CH3.1) How does your organization identify and classify potential water pollutants associated with its activities in the chemical sector that could have a detrimental impact on water ecosystems or human health?

Potential water pollutants associated with Husky's ethanol plants are identified through processes, standards, regulations, and monitoring programs. Chemicals on site are identified and labelled in accordance with the Workplace Hazardous Materials Information System (WHMIS) and Transportation of Dangerous Goods (TDG) requirements, and chemical safety data sheets are available on site to advise of response actions. Husky participates in the Government of Canada's Chemicals Management Plan, which provides an inventory of chemicals used in operations.

### W-CH3.1a

(W-CH3.1a) Describe how your organization minimizes adverse impacts of potential water pollutants on water ecosystems or human health. Report up to ten potential pollutants associated with your activities in the chemical sector.

Potential water pollutant	Value chain stage	Description of water pollutant and potential impacts	Management procedures	Please explain
Nitrogen	Direct operations	Lloydminster Ethanol Plant: Nitrogen and phosphorous discharged in the water from the plant are considered to be valuable nutrients for agricultural purposes. This water is spread as fertilizer on the land adjacent to the plant. There is a potential detriment to soil quality if excessive concentrations are present.  Minnedosa Ethanol Plant: No potential impacts	Other, please specify Monitoring	Soil quality monitoring
Phosphorous	Direct operations	Lloydminster Ethanol Plant: Nitrogen and phosphorous discharged in the water from the plant are considered to be valuable nutrients for agricultural purposes. This water is spread as fertilizer on the land adjacent to the plant. There is a potential detriment to soil quality if excessive concentrations are present.  Minnedosa Ethanol Plant: No potential impacts	Other, please specify Monitoring	Soil quality monitoring

#### 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 water pollutants associated with Husky's exploration, development, production, transportation, upgrading, and refining (hydrocarbons, produced water, drilling fluids, completion fluids) are identified through processes, standards, regulations, and monitoring programs. Chemicals on site are identified and labelled in accordance with the Workplace Hazardous Materials Information System (WHMIS) and Transportation of Dangerous Goods (TDG) requirements, and Safety Data Sheets are available on site to advise response actions in case of any incidents. Husky participates in the Government of Canada's Chemicals Management Plan, which provides an inventory of chemicals used in operations. Husky is also required to identify and report hydraulic fracturing chemicals to regulatory databases. Husky conducts groundwater monitoring and sampling programs at facilities across its operations, including thermal oil production facilities, gas plants, refineries, pipeline terminals, and the Lloydminster Upgrader. The major chemicals assessed in these programs are similar across operations (hydrocarbons, salts, metals), with some local differences (for example, naphthenic acids are monitored at the Sunrise Energy Project and Tucker Thermal Project, while these are not contaminants of concern at the refineries).

Surface or shallow groundwater may be impacted by releases of these chemicals; potential ecosystem and human health impacts depend on the receptors present and risks are assessed in greater detail in the event of a release. Most chemicals have regulatory guidelines for concentrations in surface water and groundwater based on toxicological studies; monitoring results are assessed in the context of these guidelines.

## 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	Petroleum hydrocarbons ranging from C1 to C60+. Petroleum hydrocarbons are handled at all of Husky's upstream and downstream facilities. Accidental release of hydrocarbons into surface or groundwater during handling could result in dissolved or non-aqueous phase hydrocarbons in water. These have the potential to negatively impact aquatic species and/or human health, if the chemical is present at concentrations above regulated guideline values, and if receptors are present (aquatic species, human interaction with the waterbody, drinking water intakes, etc.). The magnitude of these impacts can be minor and long term at low concentrations, to major and immediate at high concentrations.  Metals, trace elements and salts in hydrocarbons. Dissolved metals, trace elements and salts transferred from hydrocarbons to water during hydrocarbon extraction and/or processing have the potential to negatively impact aquatic species and/or human health if present at concentrations above guideline values.	Compliance with effluent quality standards Measures to prevent spillage, leaching and leakages Emergency preparedness Other, please specify	Management procedures include secondary containment of storage vessels; operational procedures to ensure the integrity of hydrocarbon handling and storage equipment; spill response procedures, reporting, and preparedness to prevent or mitigate impacts to water bodies; regulated and unregulated environmental monitoring programs at facilities; the Husky environmental auditing program; standard operating procedures developed under the Husky Operational Integrity Management System (HOIMS); well servicing standard operating procedures, and the job/task safety permitting. These initiatives are endorsed under the Husky Operational Integrity Management System (HOIMS). Specifically, HOIMS Element 8 outlines the governance, assurance and processes around planning and responsible operations to ensure stringent and consistent environmental performance, including water-related issues. The effectiveness of these procedures is measured and evaluated through the HOIMS Environmental Reporting and Action Planning Process, and the HuskySafe incident reporting and tracking system. HuskySafe provides data that can be compared to pre-set goals and targets, allowing Husky to evaluate its performance.
Other, please specify Produced Water	Upstream	Produced water contains high levels of salts, metals and trace elements. Water with levels of salts exceeding regulated guidelines can negatively impact vegetation, with impacts ranging from minor to major based on the concentration of salts present. Dissolved metals and trace elements in produced water have the potential to negatively impact aquatic species and/or human health, if present at concentrations above guideline values, with impacts ranging from minor to major based on the concentration of dissolved metals and trace elements present. Produced water is mostly handled by upstream operations, where it is produced with hydrocarbons, and then separated and disposed of before refining or upgrading. There is a risk of release during handling of the produced water in upstream operations.	Measures to prevent spillage, leaching and leakages Emergency preparedness Other, please specify	Management procedures include secondary containment of storage vessels; operational procedures to ensure the integrity of produced water handling and storage equipment; spill response procedures, reporting, and preparedness to prevent or mitigate impacts to water bodies; regulated and unregulated environmental monitoring programs at facilities; the Husky environmental auditing program; standard operating procedures developed under the Husky Operational Integrity Management System (HOIMS); well servicing standard operating procedures, and the job/task safety permitting program. Many of these initiatives are endorsed under the Husky Operational Integrity Management System (HOIMS). Specifically, HOIMS Element 8 outlines the governance, assurance and processes around planning and responsible operations to ensure stringent and consistent environmental performance, including water-related issues. Impacts are measured and evaluated through the HOIMS Environmental Reporting and Action Planning Process, and the HuskySafe incident reporting and tracking system. HuskySafe provides data that can be compared to pre-set goals and targets, allowing Husky to evaluate its performance.
Chemicals	Upstream Downstream	Numerous chemicals are used in the exploration (upstream), extraction (upstream), transportation (upstream and downstream), and processing (downstream) of hydrocarbons. These include chemicals used in upstream hydraulic fracturing (e.g. biocides, corrosion inhibitors, or friction reducers) that are at risk of being released to natural water bodies during onsite handling and transportation. An example of a chemical present at upstream and downstream operations is glycol, which could be a risk if released in an uncontrolled manner to local water bodies.  Accidental release of chemicals to surface or groundwater during handling in upstream and downstream operations could result in dissolved or non-aqueous phase chemicals in water. These have the potential to negatively impact aquatic species and/or human health, if the chemical is present at concentrations above guideline values, and if receptors are present (aquatic species, human interaction with the waterbody, etc.). Magnitude of impact will vary with the concentration of the chemical released, and may vary from minor and long term to major and immediate.	Measures to prevent spillage, leaching and leakages Emergency preparedness Other, please specify	Management procedures include secondary containment of storage vessels; operational procedures to ensure the integrity of chemical handling and storage equipment; spill response procedures, reporting, and preparedness to prevent or mitigate impacts to water bodies; regulated and unregulated environmental monitoring programs at facilities; the Husky environmental auditing program; standard operating procedures developed under the Husky Operational Integrity Management System (HOIMS); well servicing standard operating procedures, and the job/task safety permitting program. Many of these initiatives are endorsed under the Husky Operational Integrity Management System (HOIMS). Specifically, HOIMS Element 8 outlines the governance, assurance and processes around planning and responsible operations to ensure stringent and consistent environmental performance, including water-related issues. Impacts are measured and evaluated through the HOIMS Environmental Reporting and Action Planning Process, and the HuskySafe incident reporting and tracking system. HuskySafe provides data that can be compared to pre-set goals and targets, allowing Husky to evaluate its performance.

## W3.3

#### (W3.3) Does your organization undertake a water-related risk assessment?

Yes, water-related risks are assessed

## W3.3a

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

Value chain stage	Coverage	Risk assessment procedure	Frequency of assessment	How far into the future are risks considered?	Type of tools and methods used	Tools and methods used	Comment
Direct Operations	Full	Water risks are assessed as a standalone issue	Annually	6 to 10 years	Enterprise Risk Management International methodologies Databases	Regional government databases	Husky conducts an annual preliminary assessment of water-related risks for all of its operations. Material water-related risks are identified in accordance with the Company's Corporate Water Standard and Water Risk Assessment Procedure. Facilities deemed to be potentially at higher risk are prioritized for a more detailed water risk assessment. The Company's Corporate Risk Matrix includes environmental, reputational, financial, legal, regulatory, and health and safety aspects.
Supply chain	Partial	Water risks are assessed as a standalone issue	Not defined	1 to 3 years	Other	Internal company methods	Overall this is not currently an issue or a priority for Husky. However, Husky does assess supply chain water risks for specific operations, where warranted. As an example, Husky relies on third-party disposal facilities for hydraulic fracturing operations. These facilities can have capacity issues in areas of hydraulic fracturing. Husky considers this in assessing options to mitigate the cost of this risk. Also, refer back to previous supply chain comments in Section 1.4.
Other stages of the value chain	Partial	Water risks are assessed as a standalone issue	Not defined	6 to 10 years	Other	Internal company methods	Water risk assessments for other operators within our industry are assessed as they relate to touchpoints with Husky's operations. For example, Husky relies on agreements with neighbouring producers for water supply for the Sunrise Energy Project. Water risks for these operators are assessed as part of the Sunrise water risk assessment process.

## 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	These aspects are subject to regulatory scrutiny in Husky's operating areas and are considered in risk assessments.  Husky utilizes internal company knowledge, published literature, government databases, and WRI Aqueduct data.  Facility locations are assessed against the water risk database designation of water availability.
Water quality at a basin/catchment level	Relevant, always included	These aspects are subject to regulatory scrutiny in Husky's operating areas and are considered in risk assessments. Husky utilizes internal company knowledge, published literature, government databases, and regulatory permits. As an example, detailed historical water quality data has been collected in cases where risks depend on these factors. Water quality is important with respect to technical feasibility of water source, for example, brackish groundwater may have high availability in Saskatchewan but is not a feasible source for steam generation for these smaller facilities (5,000 and 10,000 bpd). Water quality in surface water bodies influence conditions of water discharge permits such as at the Lima Refinery, where selenium and phosphorous are parameters of concern.
Stakeholder conflicts concerning water resources at a basin/catchment level	Relevant, always included	Stakeholder values and concerns (and conflicts) are included in risk assessments. For example, in the North Saskatchewan River water risk assessment, a stakeholder matrix was prepared as a tool to track stakeholders with interest in Husky's water management performance, and to evaluate if Husky's existing strategies and communication adequately address their interests.
Implications of water on your key commodities/raw materials	Relevant, not included	Implications of water on key commodities/raw materials are evaluated annually. Husky has not experienced significant impacts from realization of water risk on key commodities/raw materials. The Company manages water aspects of third-party services at its sites (for example, on drilling and completions operations). An assessment of Husky's supply chain suggested that supplies for which steel is an important input (e.g. well casings, process equipment). However, the World Steel Association indicates that the overall water consumption associated with steel manufacturing is relatively low, at 1.6 to 3.3 m³ per tonne of steel produced. (Water Management in the Steel Industry, World Steel Association, 2015). As such, further assessment of water-related risk for Husky's supply chain was not considered in 2018. An assessment of potential supply chain risk is undertaken annually, and elements of the supply chain thought to be potentially at elevated risk are highlighted for further assessment.
Water-related regulatory frameworks	Relevant, always included	Regulatory aspects are one of the fundamental criteria evaluated in risk assessments. For example, the Water Conservation Policy and associated guidelines significantly affect freshwater licensing in Alberta. Freshwater licensing is a requirement for the water used in steam generation at Saskatchewan thermal facilities. The potential for regulatory changes at a local, provincial or federal level are included in risk assessments based on internal Company methods for monitoring regulatory changes, which includes a regulatory monitoring committee and internal communications

		protocols. Husky engages with regulators on an ongoing basis (both directly and through industry associations such as the Canadian Association of Petroleum Producers) to help anticipate these potential changes. Where regulatory change cannot be clearly anticipated (e.g. in the long term), different scenarios are evaluated for their potential impact on operations.
Status of ecosystems and habitats	Relevant, always included	Biophysical context for operations is included in risk assessments (for example, impacts to riparian environments related to water use). Federal and regional government databases are utilized, in addition to international databases including WRI Aqueduct. The Species at Risk Public Registry is used to identify species sensitivity near facilities using or discharging water. For example, trumpeter swan nesting areas can be present near hydraulic fracturing operations in Northern Alberta.
Access to fully-functioning, safely managed WASH services for all employees	Relevant, always included	Providing access to WASH services for all employees is a minimum standard for all operations. Husky has a Water Supply Integrity Program designed to ensure water supply for staff is of a suitable quality.
Other contextual issues, please specify		

## 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, included	Husky's reputational risk with respect to water is considered. Customers are informed of water-related risks through the annual Environmental, Social and Governance (ESG) report.
Employees	Relevant, always included	Employees provide local knowledge and operational expertise when conducting risk assessments. Employees are engaged through risk assessment workshops, invitations to participate in a formal interdisciplinary network for knowledge exchange related to water (The Water Management Critical Competency Network), intranet communication of risk assessment results, and a social web platform open to all employees where water risks are discussed.
Investors	Relevant, always included	The perspective of investors is important to Husky and is a consideration when conducting risk assessments. Husky monitors external standards of disclosure, including the CDP Water response, to ensure its risk assessment and management process keeps pace with best practice and emerging investor expectations. Husky receives investor inquiries about how water risks are identified and managed. Husky responds to these inquiries, which inform its water risk assessment and disclosure.

Local communities	Relevant, always included	Local communities may provide important insights into water risk (e.g. through data or observations about water availability), and as key stakeholders may also directly influence the Company's water risk. Local communities provide feedback to Husky's Saskatchewan thermal projects through open houses.
NGOs	Relevant, always included	Non-Governmental Organizations (NGOs) may influence the Company's water risk. This includes local groups (such as watershed planning and advisory councils) and provincial or national groups, any of which may influence policy or regulation. For example, Husky engages with the North Saskatchewan Watershed Alliance in Alberta. This group sets watershed management plans for the watershed upstream of Husky's Saskatchewan thermal operations, where reliable source water is vital.
Other water users at a basin/catchment level	Relevant, always included	Other water users may be influencers of water risk, particularly in areas of high competition for a limited resource, or where Husky's water use is perceived to be in conflict with other water user(s). For example, Husky engages and shares water data with local operators in the area of the Sunrise Energy Project through the COSIA Aquifer Working Group.
Regulators	Relevant, always included	Regulators may be influencers of water risk, particularly through regulating access to source and disposal options. The potential for regulatory changes at a local, provincial or federal level are included in risk assessments and are based on internal Company methods for monitoring regulatory changes, which includes a regulatory monitoring committee and internal communications protocols.
River basin management authorities	Relevant, always included	River basin management authorities may provide important insights into water risk (e.g. through data or observations about water availability), and as a key stakeholder may also directly influence the Company's water risk. For example, Husky engages with the North Saskatchewan Watershed Alliance in Alberta on a monthly basis through participation in the board. This group sets watershed management plans for the watershed upstream of Husky's Saskatchewan thermal operations, where reliable source water is vital.
Statutory special interest groups at a local level	Relevant, always included	Local special interest groups may provide important insights into water risk (e.g. through data or observations about water availability), and as key stakeholders may also directly influence the Company's water risk. As an example, for the Sunrise Energy Project, Husky made the commitment to local First Nations stakeholders that the project would not use the Athabasca River for process water sourcing.
Suppliers	Relevant, sometimes included	Husky understands that suppliers may be vulnerable to water risk. To date this has not resulted in detrimental effects, and based on an initial review has not been evaluated in detail as a substantive risk. However, this has been considered for specific operations. For example, Husky relies on third-party disposal facilities for hydraulic fracturing operations. These facilities can have capacity issues in areas of hydraulic fracturing, and Husky considers this in assessing options to mitigate the cost of this risk. Additionally, Husky manages water aspects of third-party services at its sites (for example, on drilling and completions operations).

Water utilities at a local	Relevant,	Where facilities are located in developed settlements, Husky considers local water utilities in water risk assessments. As an
level	always included	example, Husky collaborates and has an ongoing relationship (via meetings and contracts) with the City of Lloydminster on
		water delivery to the Husky Lloydminster Upgrader.
Other stakeholder, please		
specify		

### 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.

Husky conducts an annual preliminary assessment of water-related risks for all of its operations. Material water-related risks are identified in accordance with the Company's Corporate Water Standard and Water Risk Assessment Procedure. Facilities deemed to be potentially at higher risk are prioritized for a more detailed water risk assessment within the year. The Company's Corporate Risk Matrix includes environmental, reputational, financial, legal, regulatory, and health and safety aspects. Tools used include government databases, international methods and databases, and internal processes. Outcomes of the risk assessment are used to develop the Water Management Plan for a facility/operation, which identifies specific risk mitigation actions with associated timelines and stewards. Where water risk assessments are conducted for potential developments, the results of the risk assessment inform water management decisions for the project (such as water sourcing or disposal).

## W4. Risks and opportunities

#### W4.1

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

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

### W4.1a

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

Husky's enterprise risk management program supports decision-making via comprehensive and systematic identification and assessment of risks that could materially impact the Company's results. Through this framework, the Company builds risk management and mitigation into strategic planning and operational processes for its business units through the adoption of standards and best practices. Husky has developed an enterprise risk matrix to identify risks to its people, the environment, its assets and its reputation, and to systematically mitigate these risks to an acceptable level.

Husky defines substantive change as a financial impact to direct operations of greater than \$10 million dollars. The corporate risk register is revisited on at least an annual basis, while the matrix is evaluated every three years.

### 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	% company-wide	Comment
exposed to water risk	facilities this represents	
14		Based on the Husky Corporate Responsibility definition for a facility, Husky has approximately 2,365 facilities in Canada and the United States. Facilities may be as small as a single well battery, or as large as a refinery or an offshore production vessel.

## 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?

River Basin	of facilities exposed	% company- wide facilities this represents	global oil & gas production volume that could be affected by these	total global revenue that could	Comment
Other, please specify (Atlantic Ocean)	1	Less than 1%	1-25	1-25	Based on the Husky Corporate Responsibility definition for a facility, Husky has approximately 2,365 facilities in Canada and the United States. Facilities may be as small as a single well battery, or as large as a refinery or offshore production vessel. Calculations are based on gross revenue.
Other, please specify (North Saskatchewan River)	10	Less than 1%	1-25	1_25	Based on the Husky Corporate Responsibility definition for a facility, Husky has approximately 2,365 facilities in Canada and the United States. Facilities may be as small as a single well battery, or as large as a refinery or offshore production vessel. Calculations based on gross revenue.
Other, please specify (Athabasca River)	1	Less than 1%	1-25	1-25	Based on the Husky Corporate Responsibility definition for a facility, Husky has approximately 2,365 facilities in Canada and the United States. Facilities may be as small as a single well battery, or as large as a refinery or offshore production vessel. Calculations based on gross revenue.
Other, please specify (Maumee River)	1	Less than 1%	26-50	26-50	Based on the Husky Corporate Responsibility definition for a facility, Husky has approximately 2,365 facilities in Canada and the United States. Facilities may be as small as a single well battery, or as large as a refinery or offshore production vessel. Calculations based on gross revenue.
Other, please specify (Lake Superior)	1	Less than 1%	1-25	1-25	Based on the Husky Corporate Responsibility definition for a facility, Husky has approximately 2,365 facilities in Canada and the United States. Facilities may be as small as a single well battery, or as large as a refinery or offshore production vessel. Calculations based on gross revenue.
	Other, please specify (Atlantic Ocean) Other, please specify (North Saskatchewan River) Other, please specify (Athabasca River) Other, please specify (Maumee River) Other, please specify (Maumee River)	River Basin  of facilities exposed to water risk  Other, please specify (Atlantic Ocean)  Other, please specify (North Saskatchewan River)  Other, please specify (Athabasca River)  Other, please specify (Maumee River)	River Basin  Number of company-wide facilities exposed to water risk  Other, please specify (Atlantic Ocean)  Other, please specify (North Saskatchewan River)  Other, please specify (Athabasca River)  Other, please specify (Maumee River)  Other, please specify (Maumee River)  Other, please specify (Maumee River)  Other, please specify (Lake 1 Less than 1%	River Basin  of facilities exposed to water risk  Other, please specify (Atlantic Ocean)  Other, please specify (North Saskatchewan River)  Other, please specify (Athabasca River)  Other, please specify (Maumee River)  Other, please specify (Maumee River)  Other, please specify (Maumee River)  I Company-wide facilities this represents the facilities the facilities this represents the facilities the facilit	River Basin  River

## 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	River Basin	Type of risk	Primary risk driver	Primary potential impact	Company-specific description		Magnitude of	Likelihood	Potential financial impact	Explanation of financial impact	Primary response	Description of response	Cost of response	Explanation of cost of response
Canada	Other, please specify (Atlantic Ocean)	Physical	olner,	Reduction or disruption in production capacity	Risk Description: Husky operates in some of the harshest environments in the world, including the offshore Atlantic region at the White Rose field. Climate change is expected to increase severe weather conditions, including winds, flooding, and variable temperatures that are contributing to the melting of northern ice and increased iceberg activity. The Company has a number of policies to protect people, equipment, and the environment in the event of extreme weather conditions and adverse ice conditions. Risk Effects: Icebergs and pack ice off the coast of Newfoundland and Labrador may affect Husky's offshore facilities, necessitating temporary operational shut downs, or potentially causing damage to equipment, spills, asset damage and human impacts.	Current up to 1 year	Medium	Very unlikely	\$100,192,680	The potential consequences of a severe weather or icerelated event to Husky's offshore operations include possible production disruptions, spills, asset damage and human impacts. While this is mitigated through the methods described in this table, the potential production disruption from a two-month period of disconnection due to ice for the <i>SeaRose</i> vessel could result in \$100,192,680 in deferred revenues. This estimate is based on 2018 average daily production numbers of 17,400 boe (net equity share) and 2018 average gross revenue per barrel of \$95.97, as published in Husky's 2018 Annual Report. (17,400 boe x 60 days X \$95.97/boe = \$100,192,680)	Other, please specify (Annual monitoring and management)	Husky's Atlantic region business unit has a robust ice management program that uses a range of resources, including advanced detection, monitoring and management. Ice monitoring is facilitated through fixed-wing fligh reconnaissance, satellite imagery processing and offshore supply vessel reconnaissance. Monitoring data is processed in georeferenced format and ice drift is predicted using established software developed by the National Research Council and the Canadian Ice Service. In 2018 Husky began working with Google to understand if existing iceberg trajectory predictions could be enhanced with data science, specifically creating machine learning models to improve our prediction of iceberg movement offshore Newfoundland. In 2018 Husky initiated a project with Lixar to create multiple supervised machine-learning models to predict the accuracy of forecasted wave heights and wind speeds for offshore Newfoundland.  Supply vessels alter the trajectory of icebergs through various methods as needed. During ice season, Husky owned, operated and/or contracted offshore facilities are assigned ice observers, providing 24-hour coverage. Regular ice surveillance flights usually commence in February and continue throughout iceberg season. Husky maintains a series of ad-hoc relationships with contractors, providing for the quick mobilization of additional resources as required.	\$6,200,000	The cost of the Company's ice monitoring and management activities was approximately \$6.2 million in 2018. This is a variable annual cost.
Canada	Other, please specify (North Saskatche wan River)	Regulator y		Increased operating	Potential for increased water recycling requirement in Saskatchewan. Processing facilities at Husky's Saskatchewan thermal plants would need significant capital upgrades to allow for increased water recycling.	Unknown	High	Unknown	\$330,000,000	Costs would be variable, and relative to the amount of recycling that is mandated. A single new facility requiring minor (<5%) water recycling could represent a one-time financial impact of \$500K plus increases in annual operating costs. Retrofitting all existing facilities for significant amounts of recycling could represent a financial impact >\$330 million (>\$30 million per plant in capital costs; operating costs would be additional to this).	Adopt water efficiency, water re-use, recycling and conservation practices	Husky is increasing water efficiency at its new Saskatchewan thermal facilities through implementation of an acidification process that improves boiler blowdown recycle. The Company is also preparing for possible changes to regulations by (1) engaging with regulators to anticipate planned changes; (2) evaluating water risk at the facility level for all heavy oil operations; (3) characterizing produced water variability and research of water recycling technology.		The cost for implementing the acid injection process at each new facility is estimated at \$1.7 million capital cost at each plant.

Canada	Other, please specify (Athabasc a River)	Physical	Increase d water scarcity	or disruption in	Husky is reliant on third- party access agreements to source water for the Sunrise Energy Project. With the local competition for water sources, unplanned changes in the access agreements could impact water sourcing and therefore oil production.		Medium	Unlikely	\$10,000,000		Engage with suppliers	In 2018, Husky updated the Water Management Plan for the Sunrise Energy Project. Actions were identified to mitigate potential loss of water source. In 2019, Husky is engaging with industry peers on water management collaboration for mutual benefit and to mitigate future water sourcing risk.	100000	Estimated cost of updates to Water Management Plan for the facility; includes technical assessment and identification of water source mitigations.
United States of America	Other, please specify (Maumee River)	Regulator y		Increased operating costs	At the Lima Refinery, a heavier crude slate (enabled by the Crude Oil Flexibility Project beginning around the end of 2019) and stringent water discharge criteria for selenium and phosphorous will result in a requirement for new water treatment processes to be implemented. This results in increased capital costs to address the issue within the existing facility.		Medium	More likely than not	\$70,000,000	The cost of constraining the crude slate so that process wastewater meets discharge requirements is difficult to estimate, so is included here as the same cost of the mitigation. In addition to the loss of crude slate flexibility, it would include the cost of fines, environmental impacts, and reputational impacts associated with exceeding criteria.	Increase investment in new technology	Technology - Transitioning to water efficient and low water intensity technologies and products at the Lima Refinery. Sanction additional water treatment infrastructure (such as Reverse Osmosis Units) to ensure this risk is addressed through treatment and significant reduction of effluent discharged to river.	\$70,000,000	Additional water treatment infrastructure is being implemented as part of the Crude Oil Flexibility project at the Lima Refinery. The cost indicated represents an estimate of the water treatment and disposal facilities and is a one-time cost.
United States of America	Other, please specify (Lake Superior)	Regulator y	Regulatio n of discharge quality	Increased operating costs	At the Superior Refinery, more stringent regulated guidelines for chlorine, mercury, and phosphorous discharge are expected.	1-3 years	Medium	More likely than not	\$10,000,000	The cost of constraining the crude slate so that process wastewater meets discharge requirements is difficult to estimate, but is expected to exceed \$10 million. In addition to the loss of crude slate flexibility, additional cost would include fines, environmental impacts, and reputational impacts associated with exceeding criteria.	Increased capital	Diversion of discharge to publicly owned Treatment Works (POTW) for additional tertiary treatment that addresses the discharge criteria.	\$ 1,000,000	Capital cost of tie- to POTW

## W4.2a

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

Country	River Basin	Stage of value chain	Type of risk	Primary risk driver	Primary potential impact	Company-specific description	Timeframe	Magnitude of potential financial impact	Likelihood	Potential financial impact	Explanation of financial impact	Primary response to risk	Description of response	Cost of response	Explanation of cost of response
Canada	Other, please specify (Athabasca River)	Other, please specify (Operations)	Physical	Increased water scarcity	Reduction or disruption in production capacity	Husky is reliant on third- party access agreements for source water at the Sunrise Energy Project. With the local competition for water sources, unplanned changes in the access agreements could impact water sourcing and therefore oil production by the Sunrise Energy Project.		Medium	Unlikely	10000000	The state of the s	Other, please specify (Engage with suppliers)	Continue to engage with industry peers on plans, collaborate for mutual benefit, continue to update the facility Water Security Plan to ensure mitigation alternatives are updated.	100000	Estimated cost of updates to Water Security Plan for the facility; includes technical assessment and identification of water source mitigations.

## 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	Primary water-related opportunity	Company-specific description & strategy to realize opportunity	timeframe for		Potential financial impact	Explanation of financial impact
Efficiency	Improved water efficiency in operations	Water sourcing and treatment is a factor in Husky's oil sands and heavy oil project costs, including projects such as the Sunrise Energy Project and Saskatchewan thermal projects, including, Bolney, Pikes Peak, Pikes Peak South, Paradise Hill, Rush Lake, Rush Lake 2, Sandall, Edam East, Edam West and Vawn. Husky employs both corporate and business unit teams to research technology that could reduce costs for water sourcing, treatment and disposal. As an example of the strategy in action, an acid injection process is being implemented at new thermal facilities in Saskatchewan to increase recycling of waste from once through steam generators (OTSGs). New produced water recycling technologies are in the process of being assessed for Saskatchewan thermal projects.	1 to 3 years	Low-medium	13,000,000	Cost savings associated with implementing new technologies for water sourcing, treatment and disposal are difficult to quantify. This is largely due to the type and scale of technology that would be implemented. As an example, increasing source water efficiency by 5% at a Saskatchewan thermal facility could mitigate water source limitations, meaning a resulting increase in production by 1.3% and associated increase in gross revenues by \$12,900,000/yr based on 2018 data. As another example, implementing partial produced water recycle at Saskatchewan thermal facilities is expected to lead to a lower disposal requirement, which could result in reduced capital costs – each disposal well is approximately \$500,000.
Efficiency	Cost savings	Work to mitigate regulatory barriers to the efficient use of lower quality water sources at the Sunrise Energy Project through communication with regulatory authorities and demonstration of issues using operational data.	Current - up to 1 year	High	177000000	Husky uses process affected water and groundwater that is in contact with bitumen as sources for steam generation at the Sunrise Energy Project. The chemical nature of these waters causes significant difficulties in water treatment and water recycling. Regulations in

Type of opportunity	Primary water-related opportunity	Company-specific description & strategy to realize opportunity	Estimated timeframe for realization	Magnitude of potential financial impact	Potential financial impact	Explanation of financial impact
						Alberta limit the amount of water that can be disposed at thermal insitu projects such as Sunrise, and therefore discourage water recycling. As Sunrise uses lower quality water as an alternative to fresh water sources, maximum water recycling is a detriment to facility infrastructure. Based on a technical case, regulators increased the amount of disposal water allowed at Sunrise. The alternative would be to implement low liquid discharge (LLD) in the form of a mechanical vapour compression (MVC) evaporator on the blowdown stream. This option comes with high capital investment (approximately \$90 million) and an increase in CO2 emissions. Operating costs are expected to average \$8 million per year, including evaporator energy consumption cost, fixed costs including maintenance, supplies, operations labour, connection fees, and CO2 emissions. Husky estimates the before-tax net present cost of this investment to be between \$123 million and \$177 million over the life of the project.

# 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.

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Facility reference number	Facility name	Country	River Basin	Latitude	Longitude	Oil & gas sector business division	Total water withdrawals (megaliters/year) at this facility	Comparison of withdrawals with previous reporting year	Total water discharges (megaliters/ye ar) at this facility	Comparison of discharges with previous reporting year	Total water consumption (megaliters/y ear) at this facility	Comparison of consumption with previous reporting year	Please explain
Facility 1	SeaRose FPSO	Canada	Atlantic	46.7904	-48.0163	Upstream	17,142	About the same	17,142	About the same	0	About the Same	No significant change in withdrawals or discharges at this facility.
Facility 2	Bolney Thermal Plant	Canada	North Saskatchew an River	53.527242	-109.35453	Upstream	6,629	About the Same	6,505	About the Same	124	About the same	No significant change in withdrawals or discharges at this facility. The consumption is negligible (~2%) in the context of the total withdrawal and discharge volumes
Facility 3	Edam East Thermal Plant	Canada	North Saskatchew an River	53.121674	-108.757994	Upstream	3,561	Lower	3,556	Lower	5	About the same	Facility was ramping up in 2017 and withdrawals and discharges have now decreased in 2018. The consumption is negligible (<1%) in the context of the total withdrawal and discharge volumes.
Facility 4	Edam West Thermal Plant	Canada	North Saskatchew an River	53.10030616	-108.9257125	Upstream	1,861	About the same	1,853	About the same	8	About the same	No significant changes in withdrawals or discharges at this facility in 2018. The consumption is negligible (~1%) in the context of the total withdrawal and discharge volumes.
Facility 5	Paradise Hill Thermal Plant	Canada	North Saskatchew an River	53.606028	-109.447917	Upstream	1,686	About the Same	1,652	About the Same	34	About the same	No significant change in withdrawals or discharges at this facility. The consumption is negligible (~2%) in the context of the total withdrawal and discharge volumes.
Facility 6	Pikes Peak South Thermal Plant	Canada	North Saskatchew an River	53.207526	-109.37079	Upstream	3,763	About the Same	3,785	About the Same	-22	About the same	No significant change in withdrawals or discharges at this facility. The consumption is negligible (<1%) in the context of the total withdrawal and discharge volumes.
Facility 7	Pikes Peak Thermal Plant	Canada	North Saskatchew an River	53.279019	-109.364955	Upstream	2,253	Lower	2,205	Lower	48	Lower	The plant was ramping down to be decommissioned in 2019, resulting in decreased withdrawal and discharge volumes. The consumption is negligible (~2%) in the context of the total withdrawal and discharge volumes.
Facility 8	Rush Lake 2 Thermal Plant	Canada	North Saskatchew an River	53.105661	-108.984934	Upstream	965	This is the first year of operations	963	This is the first year of operations	2	This is the first year of operations	This is the first year of operations.
Facility 9	Rush Lake Thermal Plant	Canada	North Saskatchew an River	52.842646	-109.804696	Upstream	3,263	About the Same	3,267	About the Same	-4	About the same	No significant change in withdrawals or discharges at this facility. The consumption is negligible (<1%) in the context of the total withdrawal and discharge volumes.
Facility 10	Sandall Thermal Plant	Canada	North Saskatchew an River	53.399636	-109.438052	Upstream	1,486	About the Same	1,448	About the Same	38	About the same	No significant change in withdrawals or discharges at this facility. The consumption is negligible (~3%) in the context of the total withdrawal and discharge volumes.

Facility reference number	Facility name	Country	River Basin	Latitude	Longitude	Oil & gas sector business division	Total water withdrawals (megaliters/year) at this facility	Comparison of withdrawals with previous reporting year	Total water discharges (megaliters/ye ar) at this facility	Comparison of discharges with previous reporting year	Total water consumption (megaliters/y ear) at this facility	Comparison of consumption with previous reporting year	Please explain
Facility 11	Vawn Thermal Plant	Canada	North Saskatchew an River	53.114462	-108.641652	Upstream	4,205	About the Same	4,178	About the Same	27	About the same	No significant change in withdrawals or discharges at this facility. The consumption is negligible (~1%) in the context of the total withdrawal and discharge volumes.
Facility 12	Sunrise Energy Project	Canada	Athabasca River	57.25165856	-110.9886306	Upstream	12,787	Higher	12,644	Higher	143	About the same	There was an increase in oil production at this facility in 2018, resulting in higher withdrawals and discharges. The consumption is negligible <1%) in the context of the total withdrawal and discharge volumes.
Facility 13	Lima Refinery	USA	Maumee River	40.7220682	-113.8858196	Downstream	7,147	About the Same	4,770	Higher	2,377	Lower	There was a significant increase in discharge at this facility in 2018, resulting in lower consumption.
Facility 14	Superior Refinery	USA	Lake Superior	46.6903595	-92.0709248	Downstream	355	Much Higher	223	Much Higher	133	Much Higher	A significant increase due to 2017 parameters only including one month (following purchase) and 2018 volumes including four months.

## W5.1a

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

Facility reference number	Facility name	Fresh surface water	Brackish surface water/Seawater	Groundwater	Third party sources	Produced/Entrained Water
Facility 1	SeaRose FPSO		14,873			2,269
Facility 2	Bolney Thermal Plant	3,107				3,522
Facility 3	Edam East Thermal Plant	2,014				1,547
Facility 4	Edam West Thermal Plant	1,027				833
Facility 5	Paradise Hill Thermal Plant	811				875
Facility 6	Pikes Peak South Thermal Plant	1,989				1,774
Facility 7	Pikes Peak Thermal Plant	1,217				1,036
Facility 8	Rush Lake 2 Thermal Plant	678				287
Facility 9	Rush Lake Thermal Plant	1,944				1,319
Facility 10	Sandall Thermal Plant	857				629
Facility 11	Vawn Thermal Plant	2,265				1,940
Facility 12	Sunrise Energy Project	14		1,387	458	11,350
Facility 13	Lima Refinery	5,292		1,855		
Facility 14	Superior Refinery	355				

## W5.1b

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

Facility reference number	Facility name	Fresh surface water	Brackish surface water/Seawater	Groundwater	Third party destinations	Comment
Facility 1	SeaRose FPSO		14,032	3,110		
Facility 2	Bolney Thermal Plant			6,505		
Facility 3	Edam East Thermal Plant			3,556		
Facility 4	Edam West Thermal Plant			1,853		
Facility 5	Paradise Hill Thermal Plant			1,652		
Facility 6	Pikes Peak South Thermal Plant			3,785		
Facility 7	Pikes Peak Thermal Plant			2,205		
Facility 8	Rush Lake 2 Thermal Plant			963		
Facility 9	Rush Lake Thermal Plant			3,267		
Facility 10	Sandall Thermal Plant			1,448		
Facility 11	Vawn Thermal Plant			4,178		
Facility 12	Sunrise Energy Project			12,644		
Facility 13	Lima Refinery	4,770				
Facility 14	Superior Refinery	223				

## 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 name	% recycled or reused	Comparison with previous reporting year	Please explain
Facility 1	SeaRose FPSO	None		Water is not recycled at this facility

Facility reference number	Facility name	% recycled or reused	Comparison with previous reporting year	Please explain
Facility 2	Bolney Thermal Plant	1-3%	About the same	Blowdown water is recycled and offsets freshwater use.
Facility 3	Edam East Thermal Plant	1-3%	About the same	Blowdown water is recycled and offsets freshwater use.
Facility 4	Edam West Thermal Plant	None	About the same	Water is not recycled at this facility
Facility 5	Paradise Hill Thermal Plant	None	About the same	Water is not recycled at this facility
Facility 6	Pikes Peak South Thermal Plant	1-3%	About the same	Blowdown water is recycled and offsets freshwater use.
Facility 7	Pikes Peak Thermal Plant	None	About the same	Water is not recycled at this facility
Facility 8	Rush Lake 2 Thermal Project	Less than 1%	This is our first year of measurement	Blowdown water is recycled and offsets freshwater use.
Facility 9	Rush Lake Thermal Plant	1-3%	About the same	Blowdown water is recycled and offsets freshwater use.
Facility 10	Sandall Thermal Plant	1-3%	About the same	Blowdown water is recycled and offsets freshwater use.
Facility 11	Vawn Thermal Plant	1-3%	About the same	Blowdown water is recycled and offsets freshwater use.
Facility 12	Sunrise Energy Project	76-99%	About the same	Produced water is reinjected.
Facility 13	Lima Refinery	Not monitored	About the same	Husky does not consistently track internal water recycling such as steam condensate recycle at Downstream facilities; this volume is also expected to be minor.
Facility 14	Superior Refinery	Not monitored	About the same	Husky does not consistently track internal water recycling such as steam condensate recycle at Downstream facilities; this volume is also expected to be minor. Superior Refinery discontinued operations following a fire in April 2018.

## **W5.1d**

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

Water aspect	% verified	What standard and methodology was used?
Water withdrawals – total volumes	Not verified	External auditor provided limited assurance on this number. Also, internal verification and assurance.
Water withdrawals – volume by source	Not verified	Internal verification and assurance
Water withdrawals – quality	Not verified	Internal verification and assurance
Water discharges – total volumes	Not verified	Internal verification and assurance
Water discharges – volume by destination	Not verified	Internal verification and assurance
Water discharges – volume by treatment method	Not verified	Internal verification and assurance
Water discharge quality – quality by standard effluent parameters	Not verified	Internal verification and assurance
Water discharge quality – temperature	Not verified	Internal verification and assurance
Water consumption – total volume	Not verified	Internal verification and assurance
Water recycled/reused	Not verified	Internal verification and assurance

## **W6. Governance**

## **W6.1**

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

Yes, we have a documented water policy, but it is not 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	Companywide	Description of business dependency on water Description of business impact on water Description of water-related performance standards for direct operations Reference to international standards and widely-recognized water initiatives Company water targets and goals Commitments beyond regulatory compliance Commitment to water-related innovation Commitment to water stewardship and/or collective action Recognition of environmental linkages, for example, due to climate change	The Husky Corporate Water Standard applies to the entire Company and is approved by the Chief Operating Officer. The Standard outlines the expectation for every facility to conduct a water risk assessment and develop a water management plan. It acknowledges the human right to water. It describes both the business dependency on water, such as oil production and refining needs, and describes business impact on water, such as resulting impacts to water availability from Husky's use or to water quality from inadvertent releases. The Standard references international standards in setting expectations for water risk assessments. Risk assessments are expected to consider environmental linkages. Targets and goals are included, to ensure objectives are met. The Standard outlines that regulatory compliance is the minimum expectation, and that the Company, as a responsible water steward, expects to exceed the minimum expectation. The Water Management Critical Competency Network is endorsed under the Standard.

Acknowledgement of the human
right to water and sanitation

## **W6.2**

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

Yes

## W6.2a

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

Position of individual	Please explain
Board Level Committee	The Chair of the Health, Safety and Environment ("HS&E") Committee of the Board of Directors is responsible for the oversight of water-related issues as part of the committee's mandate to assist the Board by reviewing, reporting and making recommendations on the Corporation's policies, management systems and programs with respect to HS&E issues. The Committee regularly reviews elements of Husky's enterprise risk matrix, which includes both water availability and potential impacts to water. A number of water related risks are identified on Husky's enterprise risk matrix. No water related risk was escalated for review by the Board in 2018. The Committee is chaired by an independent director, meets at least semi-annually and advises and reports to the Co-Chairs of the Board and the Board on a regular basis as is responsibly appropriate.

## W6.2b

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

	Frequency that water- related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Rov 1	Scheduled - some meetings	Reviewing and guiding major plans of action Reviewing and guiding risk management policies	The Health, Safety and Environment ("HS&E") Committee of the Board of Directors meets at least semi-annually with the mandate to assist the Board by reviewing, reporting and making recommendations on the Corporation's policies, management systems and programs with respect to HS&E issues. Husky includes water-related issues as part of its definition of HS&E. The Committee's mandate lays out specific duties as follows:

strat Revi envi Revi corp strat Revi annu Revi	rironmental policies viewing and guiding porate responsibility ritegy viewing and guiding rual budgets viewing and guiding long ge plans	<ol> <li>Review the Corporation's HS&amp;E policy, management systems and programs and any significant policy contraventions.</li> <li>Review the Corporation's HS&amp;E audit program and significant findings.</li> <li>Review compliance with governmental orders, conduct of litigation and other proceedings relating to HS&amp;E matters.</li> <li>Review actions and initiatives undertaken to mitigate HS&amp;E risk and/or HS&amp;E matters having the potential to affect the Corporation's activities, plans, strategies or reputation. Oversee the Corporation's risk management framework and related processes in relation to HS&amp;E matters.</li> <li>Review the Corporation's environmental remediation program.</li> <li>Monitor the relationship with regulatory authorities and others outside the Corporation (including joint venture partners, neighbouring property owners, stakeholders and shareholders) on HS&amp;E issues.</li> <li>Act in an advisory capacity to the Board</li> <li>Carry out such other responsibilities as the Board may, from time to time, set forth.</li> <li>Advise and report to the Co-Chairs of the Board and the Board, relative to the duties and responsibilities set out above, from time to time, set in such detail as is responsibly appropriate.</li> </ol>
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### W6.3

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

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

Other, please specify
COO and Executive HSE Committee

### Responsibility

Both assessing and managing water-related risks and opportunities

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

Half-yearly

### Please explain

Water-related issues are managed by the Executive Health, Safety and Environment Committee (EHSEC). It is the highest-level management committee, with a mandate to provide executive level oversight and strategic direction for all critical health, safety and environmental issues, including water-related issues. This committee consists of members of senior management (Vice-President and above), and is chaired by the Chief Operating Officer, who holds ultimate accountability for management of, and reporting on, water-related issues to the Board. The EHSEC maintains elements of the enterprise risk matrix related to health, safety and environment, including water-related risk. The enterprise risk matrix is maintained by the Risk and Compliance Committee, which reports the matrix on a quarterly basis to the Audit Committee of the Board of Directors, at least semi-annually to the Health, Safety and Environment Committee of the Board of Directors.

### 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?

No, and we do not plan to introduce them in the next two years

### **W6.5**

(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?

Yes, direct engagement with policy makers

Yes, trade associations

Yes, funding research organizations

#### W6.5a

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

Key individuals in the business units and supporting service groups that are involved in water management issues are engaged through the Water Regulatory Monitoring Committee and the Water Management Critical Competency Network. The Company's positions on water-related issues are clearly communicated to policy makers either directly or through participation in industry association working groups within the jurisdictions where the Company operates. Husky's Government Relations department works with Company representatives involved in water policy engagement to ensure that policy advocacy activities are aligned. Inconsistencies within advocacy activities (both internal, and with industry associations) are addressed individually on an ad-hoc basis.

## **W6.6**

(W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?

Yes (Annual Information Form)

# **W7.** Business strategy

## **W7.1**

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

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	11-15	Water sourcing and discharge are critical to most of Husky's operations. Availability, reliability, regulatory, and stakeholder water issues are local. For example, in some of Husky's operating areas, water disposal capacity is abundant, while water sourcing is scarcer. Water availability and disposal capacity are fully integrated into Husky's long-term business plans for the Sunrise and Tucker facilities. Water supply and quality are fully integrated into objectives and business plans for the Saskatchewan thermal portfolio. Husky considers these aspects in assessing long term strategic objectives, including evaluation of significant capital investments or potential oil and gas asset acquisitions. This includes hydrogeologic and hydrologic assessment of water resources for future developments.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	11-15	Water sourcing and discharge are critical to most of Husky's operations. Availability, reliability, regulatory, and stakeholder water issues are local. For example, in some of Husky's operating areas, water disposal capacity is abundant, while water sourcing is scarcer. Husky considers these aspects in assessing long term strategy, including evaluation of potential oil and gas assets. This includes hydrogeologic and hydrologic assessment of water resources.
Financial planning	Yes, water-related issues are integrated	11-15	Capital is required to protect and remediate fresh water, identify and evaluate water sourcing and discharge options, and implement water storage and treatment technologies. The potential for increased capital expenditure has further motivated efforts to identify opportunities for increased water efficiency and continuous improvement in asset integrity. As an example, water-related infrastructure related to the Crude Oil Flexibility Project was included in the long- range plan for the Lima Refinery, and is included in the long-range plan for Saskatchewan thermal projects.

## 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)	Anticipated forward trend for OPEX (+/- % change)	Please explain
Row 1				The Company does not explicitly track water-related CAPEX and OPEX.

## 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	Husky has conducted qualitative climate scenario analysis with respect to GHG emissions. Husky has evaluated its operations in relation to emerging regulations that are based on international commitments. As part of its long-range planning process, the Company developed scenarios based on the assumed cost of carbon required to meet Canada's Nationally Determined Contributions and tested development projects for sensitivity to these prices in the short to medium-term time horizons. These time horizons were chosen based on established guidelines for reserves evaluation. This process was applied to Husky's Upstream and Downstream Canadian Operations. Results of this analysis were reported to senior management and the Board of Directors and factored into investment decisions.
		As a separate process, Husky considers potential changes in the status of water availability and ecosystems/habitats at a local level when they relate to the water management aspect being considered. The Company invests in research to better understand how water availability and ecosystem/habitats may change over time, which include climate aspects.

### W7.3a

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

### W7.3b

# (W7.3b) What water-related outcomes were identified from the use of climate-related scenario analysis, and what was your organization's response?

		Climate-related scenario(s)	Description of possible water-related outcomes	Company response to possible water-related outcomes
Ro 1	ow C	Other, please specify Internal	Limitations in water availability	Investment in climate-related water availability research to better predict potential availability issues.

## W7.4

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

#### Row 1

### Does your company use an internal price on water?

No, but we are currently exploring water valuation practices

#### Please explain

Water valuation is complex and there is limited guidance on establishing a methodology, particularly in the oil and gas industry. In the jurisdictions where Husky operates, extensive data or methodology around water valuation are not mature. Husky will continue to explore water valuation practices.

# **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	targets and goals Business level	Targets are monitored at the corporate level Goals are monitored at the corporate level	Targets and goals are outlined in Husky Corporate Water Standard, which has been endorsed by the Chief Operations Officer. The Company-wide and site-specific targets and goals were developed based on identification of water risks, and are evaluated on an annual basis.

## W8.1a

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

Target reference number	Category of target	Level	Primary motivation	Description of target		Baseline year	Start year	_	% achieved	Please explain
Target 1	Other, please specify (Water Management Plans)		Risk mitigation	assessments) identify water risks	Other, please specify (% of facilities with management plan)	2014	2014	2020	40	40% of all facilities identified that rely on water resources or have the potential to negatively impact water resources have documented water management plans. The priority has been on higher risk facilities with more complex water risks.

<u> </u>	Category of target	Level	Primary motivation	Description of target	Quantitative metric	Baseline year	Start year	_	% achieved	Please explain
Target 2	Water Pollution Reduction	Company- wide		Husky has an internal target for hydrocarbon spill recovery of 85%.	Other, please specify (percent hydrocarbon recovery)		2018	2018	0	Husky did not meet its internal target for hydrocarbon spill recovery in 2018.

# W8.1b

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

Goal	Level	Motivation	Description of goal	Baseline year	Start year	End year	Progress
Other, please specify (Facility Water Management Plans)	Company- wide	Risk mitigation	Husky completes water management plans. Water management plans (also referred to as water risk assessments) identify water risks and associated mitigations, and therefore are critical to water security. Annually, facilities that rely on water are identified, risks reviewed at a high level, and facilities are selected for detailed water risk assessment and mitigation. This is a Company-wide goal to allow prioritization of the highest risk facilities. This ensures the highest water risks are being addressed, which is important to Husky since a large portion of operations are dependent on water. A schedule is updated to track progress of water risk assessments.		2014	2020	A list of facilities that rely on water is generated, and progress in conducting water risk assessments is tracked against this list each year. Success is indicated by completion of risk assessments for the highest priority facilities on an annual basis, and for all facilities by 2020. Husky has now completed 40% of all water-reliant facilities.

# 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/trade- off	Type of linkage/tradeoff	Description of linkage/trade-off	Policy or action
Tradeoff	Increased GHG emissions	Treatment of lower-quality sources requires energy. Reducing consumption of freshwater may impact GHG and other air emissions. As an example, this is considered in assessing water efficiency in Husky's Saskatchewan thermal projects.	Husky assesses emission/energy consumption tradeoffs as part of water risk assessments, particularly in selecting water sourcing for new projects. The assessment can be influenced by competing regulatory frameworks. As an example, increases in emissions expected from supplemental water treatment of lower quality sources have been assessed to be low relative to emissions related to oncethrough steam generators for Saskatchewan thermal projects.
Tradeoff	Other, please specify (Land use)		Husky assesses land use tradeoffs as part of water risk assessments,
Linkage	Increased biodiversity	assessments, particularly in selecting water sourcing for	Husky assesses biodiversity linkages as part of water risk assessments.

## 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.

READER ADVISORIES See attached document regarding Forward-Looking Statements and Disclosure of Oil and Gas Information.

### 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	VP, Corporate Responsibility	Chief Sustainability Officer (CSO)				

### 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

#### **READER ADVISORIES**

#### Forward-Looking Statements and Information

Certain statements in this document are forward-looking statements and information (collectively "forward-looking statements"), within the meaning of applicable Canadian securities legislation, Section 21E of the United States Securities Exchange Act of 1934, as amended, and Section 27A of the United States Securities Act of 1933, as amended. The forward-looking statements contained in this document are forward-looking and not historical facts.

Some of the forward-looking statements may be identified by statements that express, or involve discussions as to, expectations, beliefs, plans, objectives, assumptions or future events or performance (often, but not always, through the use of words or phrases such as "will likely result", "are expected to", "will continue", "is anticipated", "is targeting", "estimated", "intend", "plan", "projection", "forecast", "quidance", "could", "may", "would", "aim", "vision", "goals", "objective", "target", "schedules" and "outlook"). In particular, forward-looking statements in this document include, but are not limited to, references to: general strategies regarding water-related matters; anticipated future dependency on, and changes in volumes of, freshwater and non-freshwater; anticipated changes to volumes of water withdrawn, discharged and consumed, in total and broken down into upstream and downstream; anticipated changes to volumes of water withdrawn and discharged, broken down by water source and destination, respectively; the anticipated proportion of total water use to be recycled or reused, broken down by business division; anticipated changes in water intensity for ethanol production; anticipated changes in freshwater intensity, broken down by business division; potential adverse impacts on water ecosystems or human health of potential water pollutants associated with the Company's oil and gas activities; the percentage of the Company's global oil and gas production volume and total global revenue that could be impacted by facilities exposed to water risks; anticipated timeframe, magnitude of potential impact, likelihood, potential financial impact, planned response strategy and anticipated cost of response strategy for identified water risks in the Company's direct operations and within its value chain that could have a substantive financial or strategic impact on the Company's business; anticipated water-related opportunities for the Company, and the strategy, estimated timeframe for realization, magnitude of potential financial impact and potential financial impact of each such opportunity; plans regarding the provision of incentives to C-suite employees and board members for the management of water-related issues; potential water-related outcomes identified from the use of climate-related scenario analysis; plans regarding water valuation practices; the Company's targets and goals related to water; and potential linkages and tradeoffs between water and other environmental issues in the Company's direct operations and other parts of its value chain.

Although the Company believes that the expectations reflected by the forward-looking statements presented in this document are reasonable, the Company's forward-looking statements have been based on assumptions and factors concerning future events that may prove to be inaccurate. Those assumptions and factors are based on information currently available to the Company about itself and the businesses in which it operates. Information used in developing forward-looking statements has been acquired from various sources, including third party consultants, suppliers and regulators, among others.

Because actual results or outcomes could differ materially from those expressed in any forward-looking statements, investors should not place undue reliance on any such forward-looking statements. By their nature, forward-looking statements involve numerous assumptions, inherent risks and uncertainties, both general and specific, which contribute to the possibility that the predicted outcomes will not occur. Some of these risks, uncertainties and other factors are similar to those faced by other oil and gas companies and some are unique to the Company.

The Company's Annual Information Form for the year ended December 31, 2018 and other documents filed with securities regulatory authorities (accessible through the SEDAR website www.sedar.com and the EDGAR website www.sec.gov) describe risks, material assumptions and other factors that could influence actual results and are incorporated herein by reference.

New factors emerge from time to time and it is not possible for management to predict all of such factors and to assess in advance the impact of each such factor on the Company's business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statement. The impact of any one factor on a particular forward-looking statement is not determinable with certainty as such factors are dependent upon other factors, and the Company's course of action would depend upon management's assessment of the future considering all information available to it at the relevant time. Any forward-looking statement speaks only as of the date on which such statement is made and, except as required by applicable securities laws, the Company undertakes no obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made or to reflect the occurrence of unanticipated events.

#### **Disclosure of Oil and Gas Information**

Unless otherwise indicated, production volumes provided represent the Company's working interest share before royalties.

The Company uses the term barrels of oil equivalent ("boe"), which is consistent with other oil and gas companies' disclosures, and is calculated on an energy equivalence basis applicable at the burner tip whereby one barrel of crude oil is equivalent to six thousand cubic feet of natural gas. The term boe is used to express the sum of the total company products in one unit that can be used for comparisons. Readers are cautioned that the term boe may be misleading, particularly if used in isolation. This measure is used for consistency with other oil and gas companies and does not represent value equivalency at the wellhead.

All currency is expressed in Canadian dollars unless otherwise indicated.